



INTELLECTUAL CAPITAL



Value Creation Efficiency Index

	1996	2001
National Index (Republic of Croatia)	1.95	2.43
1. County of ZAGREB	1.98	2.63
2. County of KRAPINA-ZAGORJE	1.82	2.13
3. County of SISAK-MOSLAVINA	1.82	1.87
4. County of KARLOVAC	1.94	2.80
5. County of VARAŽDIN	1.92	2.27
6. County of KOPRIVNICA-KRIŽEVCI	2.08	2.14
7. County of BJELOVAR-BILOGORA	1.63	1.78
8. County of PRIMORJE-GORSKI KOTAR	1.55	2.28
9. County of LIKA-SENJ	1.11	0.00
10. County of VIROVITICA-PODRAVINA	1.66	1.85
11. County of POŽEGA-SLAVONIJA	1.65	2.00
12. County of SLAVONSKI BROD-POSAVINA	1.43	1.78
13. County of ZADAR	1.76	2.48
14. County of OSJEK-BARANJA	1.66	2.05
15. County of ŠIBENIK-KNIN	1.14	1.36
16. County of VUKOVAR-SRUEM	1.74	1.62
17. County of SPLIT-DALMACIJA	1.25	1.84
18. County of ISTR	1.66	2.70
19. County of DUBROVNIK-NERETVA	0.00	1.82
20. County of MEĐIMURJE	1.89	2.27
21. City of ZAGREB	2.28	2.72

**EFFICIENCY
IN
CROATIAN
ECONOMY**

Acknowledgements

Until now there have been only few IC - reports focusing on national intellectual capital, pioneered by Sweden's Intellectual Capital Balance Sheet, and followed by the Intellectual Capital Balance sheet of the State of Israel.

The Intellectual Capital Development in the Arab Region takes a somewhat different approach to national IC - reporting and so does this report. It is the first one to feature national IC - performance, namely its value creation efficiency.

It will be introduced to the public at the VI. World Con-

gress on Intellectual Capital, in Hamilton, Toronto, January 2003. We hope it will be passed around the world, encouraging and inspiring other nations to start reporting on their invisible wealth and its impact on national economy.

In order to complete this special issue dedicated to national value creation efficiency, extensive national and international collaboration was necessary. We would like to express our deepest gratitude to all who have invested their knowledge, skills, enthusiasm, time and money to make this report a success.

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Getting to Grips with Intellectual Capital



Dr David J. Skyrme

Intangible assets, such as knowledge and customer relationships, are more than ever the core assets that drive business success in today's challenging business climate. One of the main problems is that their very intangibility makes them difficult to measure. Unlike tangible resources where $1+1=2$, the nature of intellectual capital is such that $1+1$ could equal 5. Different combinations may result in much higher value than the sum of individual elements. Similarly, when knowledge is transferred to another person or organization, the originator has not lost it. These difficulties have led to a reluctance by the financial accounting community, which likes precision, to address the real need to measure the main sources of value for many companies. Another difficulty is that of understanding the interaction between the different elements of intellectual capital and how they contribute to a firm's financial results, in both the short-term and long-term. The last few years has therefore seen an upsurge in interest in getting to grips with measuring intellectual capital the difference between the book value of companies as measured by traditional financial measures, and the market value as expressed by share price.

The first methods to gain visibility

have been those that categorise intellectual capital into its basic components. A typical categorization is that of human capital (knowledge and expertise), structural capital (business processes, computer systems, organizational infrastructure) and customer capital (the value in ongoing business relationships). Some methods also separate out intellectual property, including patents, designs and copyrights. Another approach is to consider performance measurement systems, such as the balanced business scorecard and the EFQM (European Foundation for Quality Management) Excellence Model, and then introduce intellectual capital indicators into the relevant sections.

These methods are useful 'bottom up' approaches that help organizations gain wider appreciation of the elements of intellectual capital, and start the necessary processes behind their detailed assessment. They fail, however, to show the impact on financial results. This is where VAIC™ comes in. Deceptively simple in its formula, it requires detailed analysis and comparison of company figures, not always reported in accounts, and generally not to the same principles. It too, considers different components of value financial capital, human capital and structural capital but additionally introduces an efficiency coefficient, that show how well a company converts its intellectual capital into value added (the difference between revenue and inputs excluding human resources).

VAIC™ has now been applied

across a range of firms, and for different countries, including Croatia. Applied on a time series of data, it indicates to business managers and to policy makers how well they are converting intellectual resources into financial wealth, and whether their conversion performance is improving or deteriorating. Ante Pulic and his colleagues at the Austrian Intellectual Capital Research centre who have developed, refined and applied VAIC™, have therefore added an essential 'top down' tool to 'bottom up' tools of the pioneers like Edvinsson, Sveiby and others.

The whole field of intellectual capital measurement and its management is still relatively new. Accountants, business managers and policy makers have still to grapple with its concepts and detailed application. VAIC™ provides a helpful pointer to IC efficiency. It's a good place to start, before delving into the more detailed in-company assessments that the earlier methods address. Above all, it provides an essential link between intellectual capital and financial performance that should help to bring together the currently distinctive disciplines of finance and performance measurement.

David Skyrme is a world renowned knowledge management consultant and writer.

Among his many publications is the in-depth report 'Measuring the Value of Knowledge', published by Business Intelligence in 1999, and now being updated to include more recent developments such as VAIC™.

IC-Practice in Croatia

A few years ago, being an IC consultant in Croatia meant you were selling fog to fancy companies. Preoccupied with everyday business problems, the average Croatian manager just did not bother to learn about intangibles or how to manage and measure them. It was a real challenge to fight and change this attitude.

The Chamber of Economy was the first institution to anticipate the need of the business community to learn about knowledge and intellectual capital

management and to take action. In collaboration with the IC-Center an easy to read IC-booklet was published and has been distributed freely in order to create awareness. Furthermore the IC-Association within the Chamber was founded to provide a platform for IC-related activities. A web portal was set up to enable fast and easy communication and knowledge exchange throughout the country. Unfortunately there were only few members using this opportunity. In order to speed up things the Center has been engaged to visit all 20 counties and organize presentations and discussions on the IC-topic. I am proud to

say that our professional and social efforts have given visible results. Today, many Croatian businessmen comprehend IC-management is not a "whether" but a "how" question, and have thus started initiatives to manage Intellectual Capital in their own companies.



Intellectual Capital Center,
Ltd., Croatia
Karmen Jelcic, CEO

Comments of World Renowned Intellectual Capital Experts



Small countries with few natural resources can look towards the future with more confidence than the nations that base their wealth generation on commodities. Many of the

features that made the old commodity based economy successful are turned into factors that inhibit value generation in the new Knowledge-based economy. The growth of the Singaporeans' wealth since the 1970's compared to the simultaneous deterioration of the Australians' is a good illustration of the enormous power of knowledge to generate wealth compared to the old economy. To be "resource-rich" gets a new meaning when the energy and knowledge of people turn into the only resource of value.

Dr. Karl-Erik Sveiby
Father of Knowledge Management, Developer of Tango, the first knowledge business simulation



The dawn of the new millennium brings with it a brand new challenge for nations and firms. The old market drivers may have been manufacturing, land and capital, but the driver of the new era is intellectual capital efficiency. The number one priority for politicians and business executives moving forward should be the recognition, identification, measurement, benchmarking, development and harvesting of a nation's and its firms' intellectual capital. Human Capital is the pre-eminent antecedent for the intellectual wealth of a nation. As a nation's citizens codify their knowledge into the systems and processes of a country, those structural capital assets can then be renewed for the future by investing in research and development.

A feed back loop further develops a nation's human capital.

Dr. Nick Bontis
Director, Institute for Intellectual Capital, Chief Research Assistant & Professor, DeGroote School of Business, McMaster University



A new economic world order is forming - one based upon intellectual capital, not technology or finances per se. Therefore, developing mechanisms to effectively document and navigate progress are essential to creation of new wealth. A new Knowledge Value Proposition has emerged beyond the traditional measures of cost, quality and time. These complex, interdependent variables of economics, behavior and technology are fundamental to the sustainable vitality of companies, nations and society-as-a whole.

We live in an era of 'kaleidoscopic change.' It is not the speed of change of one variable, or the speed of change of multiple variables challenging today's management executives. It is the compounding effects of the speed of change of multiple variables creating a business landscape where old traditional policies and practices are not sufficient. Just as with a kaleidoscope, one may not know how the weight, shape or texture of pieces combines to form a new image. We do know is that there is no turning back. Executives are challenged to manage enterprises in a world where the economic rules have changed and the new ones have yet to be invented.

Today's companies measure success based upon cost, quality and time. However, as the marketplace becomes hyper



The ultimate goal of measurement, accounting, and information reporting system in business enterprises and at the level of industries and national economies is to enable executive policy makers to make better resource allocation decisions. Are enough resources going into employee training and development relative to purchases of new equipment and software, for example? Are investors willing to put new capital into worthy new business ventures that are intangibles intensive, at a reasonable cost of capital? Should governments provide stronger tax incentives

competitive, the performance metrics become more complex and intangible, the organization becomes more networked, people become more empowered and energized, processes become boundless and the enterprise will increasingly rely upon technology.

And as enterprises become more reliant on technology and its attendant complexity, they will become more dependent upon the knowledge and behavior of employees as well as other stakeholders both inside and external to the firm. Simultaneously, performance metrics will become more hidden, intangible related to what leading management philosophers have defined as intellectual capital. Therefore, the traditional value proposition of cost, quality and time although still very important is just not enough.

Modern value propositions then, must balance these complex, interdependent factors: performance, behavior and technology. A focus on one aspect will have an automatic effect on the other elements. Only a balance among the three in an innovation process enables an enterprise to be centered and capable of managing forward toward sustained prosperity. The knowledge movement has taken flight in every function, every industry and every corner of the globe developing and industrialized nations alike.

Debra M. Amidon, Founder and CEO of ENTOVATION International, Ltd., Creator of the "Global Knowledge Leadership Map"

to encourage even more investments in intangibles? Should governments invest in attracting foreign human capital?'

What we need now is a new system, or at least a parallel one to supplement the existing financial measures. What we currently have is a one-dimensional coordinate corporate latitude. What we urgently require is another co-ordinate corporate longitude. At present, we simply don't systematize the information we have to evaluate these issues. Relying on corporate latitude alone, we are lost in the fog at sea.

Leif Edvinsson, World's first Director of Intellectual Capital, CEO of Universal Networking Intellectual Capital

Value Creation: A Measure for Intellectual Capital Performance



Prof. dr. Ante Pulić

In 2001 the Financial Accounting Standards Board, (- FASB), one of the leading institutions defining accounting standards (together with the International Accounting Standards Board - IASB) published a special report: „Business

and Financial Reporting: Challenges from the New Economy”. The report is dealing with a problem raised by the IC - community, namely that the economy in 2000 is fundamentally different from the one in the 1950-ies and that traditional financial monitoring of business success does not - and can not monitor the moving force of business success, which is intellectual capital.

An international example backing up this statement would be “2002 GLOBAL 500”, published in the prestigious Fortune magazine (Aug. 19t11). The sixth place is held by Enron, which actually no longer exists.

A domestic example is the traditional ranking list published by “Privredni Vjesnik”, a Croatian business magazine. The twelfth rank of the “Corporate Success Leader 2001” is held by Brodosplit, generally known as a company with a long tradition of poor performance. Only in 2001 it recorded a loss exceeding 400 million kunas. Finally, Konzum, the biggest Croatian retail chain, is ranked at the fifth position, measured by income, 27th by achieved value added, and 271st by its value creation efficiency.

There are less and less doubts that the traditional indicators of business success, such as increase in total income, profit or cash flow, do not reflect the real business capacity of a company. Moreover, these indicators do not reveal whether companies create value or not, as we can talk about value creation only if a company is creating more than it has invested in resources, capital employed (physical and financial) and intellectual capital.

This “gap” is generated by new modes of value creation and out-dated evaluation of business success. Cases like Enron and World.com, partially also AOL, typical examples of American economy, are merely an example. The problem is that the existing criteria for business success, revenue and profit, do not cover the performance of intellectual capital, the key value creation factor of modern business.

in the mid 80-ies, there was a notion, for the first time, that the total market value of American economy exceeded twice the value of overall capital employed (physical and financial capital) in American companies. The difference between the market value and the value of physical and financial assets (book value) was referred to as intellectual capital. Recognizing the significance of this intangible resource for corporate and national economy, many companies, scientific institutions and regional and national policy makers started initiatives for researching, stimulating and measuring intangibles.

In Croatia many national, but also academic institutions have absolutely ignored the issue until recently. Believing that „If the problem is ignored, it will disappear” is part of the socialist heritage. The same attitude is shared by many successful Croatian businessmen.

On the other hand there are Croatian ‘oases’, where “knowledge” and its economically relevant form, intellectual capital, are recognized as an important value creation factor, which is vital for the future development of Croatian economy. It is there that all activities in the IC-field are not only encouraged but also supported. The main institutional oasis is the Croatian Chamber of Commerce and the “IC-Association” within. In the Croatian business practice one of the oases is “Uljanik”, one of the four largest shipyards in Croatia. It was the first Croatian company to introduce the position of intellectual Capital Director four years ago. No wonder that this shipyard is the only one in Croatia with no recorded loss, successfully competing on the global market.

These “oases” emanate the understanding of the importance to measure the performance and contribution of intellectual capital in order to manage that

resource more successfully. Since the objective is achieving maximum results with available resources, the management both corporate and government has to introduce new monitoring and measurement systems, which will indicate how successfully the resources, capital employed and intellectual capital have been utilized. Management must know whether value has been created or destroyed.

in this context, the ability of employees to transform their knowledge and skills into actions that create value is crucial. It is almost impossible to measure “knowledge and ability” of a company per se, but it is possible to measure the results of applied knowledge, the achieved value added, and the efficiency of this value creation. Practice has shown that information gained by measuring value creation efficiency can be essential for successful management of intellectual assets.

Guided by the notion that an explicit orientation towards value creation will be in the interest of modern Croatian economy, the Croatian Chamber of Commerce ordered the study “Value Creation Efficiency Analysis of Intellectual Capital in Croatian Counties”. This special issue features the highlights of the study.

This analysis is significant as it is the first one in Croatia to take value added and value creation efficiency as a criteria of business success. In May 2001, The Financial Times commented that “value added depicts in one of the purest possible ways how good a company is at turning ideas and physical goods into products and services that customers want to buy”. It is obvious that a measurement system, based on value added and value creation efficiency, sheds entirely new light on business or economy of a region or a nation.

In order to develop an economy which will create value successfully, Croatia’s primary objective is to raise the value creation efficiency of companies. This objective in mind, it has become an imperative to identify the value creation efficiency of each county and each economic sector. All the counties, industries and companies that have crucial influence on regional and national value creation were identified, as well as those destroying value.

VAIC™ Analysis by sectors: a moment to discharge some illusions

Illusion 1:

Croatian production is disappearing and its role in value creation is decreasing. Wrong, production is the strongest sector according to value creation. In 2001 the share of production, or manufacturing industry (as it is referred to by the Croatian financial agency FINA) amounted to 35% of total value added in the national economy. It is followed by Trade which covers 19% of share and Traffic and Connections with 15% share in national value creation. These three sectors have been creating almost 70% of the national economy's value creation. That share of 70%, remains unchanged throughout the entire analyzed period, from 1996 to 2001, which shows that these three sectors are crucial „value drivers” of Croatian economy and its stronghold.

Illusion 2:

One more year that tourism has not met the goals set by the Croatian Ministry of Tourism. The value creation efficiency analysis of this sector indicates that the share of tourism in total value creation of Croatian economy has been decreasing year after year. Gone are the illusions of a fast developing sector. It might be that the total of overnights, an old socialist indicator of business success in this sector, does not correspond to value creation. One thing is for sure: Value creation efficiency in



Tourism is at its lowest point since 1996, which is way under its value creation capabilities considering the resources. In order to improve business results in this sector, thorough analysis and cross-functional cooperation will be necessary.

Illusion 3:

Another illusion relates to Croatian agriculture. This sector has considerable political and social significance for Croatia, but its economic role has become gradually marginalized, since its share in total value creation has been constantly falling. Furthermore, if the share of this sector in 2001 is taken (about 2 billion kunas), and subtracted from the value created in forestry (Croatian Forests created more than 1 billion kunas), you can see that agriculture has created hardly 1 billion kunas of new value.

Results

Traditional indicators of business success, like revenue, profit or cash flow less and less reflect true business performance of companies as they do not indicate whether value has been created or not.

The analysis covers 56.987 legal subjects (companies), based on the data published in their annual reports, profit and loss accounts and balance sheets for the period 1997-2001, provided by FINA (state financial agency), department for technology, statistics, analysis and information.

The graph on the next page shows the main Features with regard to value creation in Croatian economy. The dark line, representing the growth of VA, clearly indicates that the growth of the achieved value has been constant. Overall Value creation efficiency (indicated by VAIC'M and the light line) also indicates a growing trend, which is much slower than value added.

The main reason for the slow growth in efficiency lies in the fact that there are only 4 counties in Croatia which perform more efficiently than the Croatian average. The remaining

The Value Creation Efficiency Analysis (powered by VAIC™)

This analysis is based on two key resources in each business: Capital Employed (physical and financial capital) and Intellectual Capital. Both are treated equally as investments and both are in the function of value creation.

The human capital of a company consists of all employees, their organization and their ability to create value that is evaluated on the market. A company can have the best qualification structure, i.e. intellectual potential, but if it creates little value with regard to its resources, its intellectual ability is low.

Therefore, in order to get a full and objective picture of business success, it is necessary to monitor not only the

performance of Capital Employed, but also the performance of Intellectual Capital. How can this be done?

Starting point for the VAICTM analysis is the business result: Value Added.

In this approach employee expenses are not calculated as input, in other words, they are not treated as cost, but as investment and therefore come into analysis as Human Capital. Employees invest their knowledge and skills into the company, which is to be evaluated on the market.

Value added is calculated as total revenue minus input (e.g. material, energy, service, in short, everything that comes from outside the company).

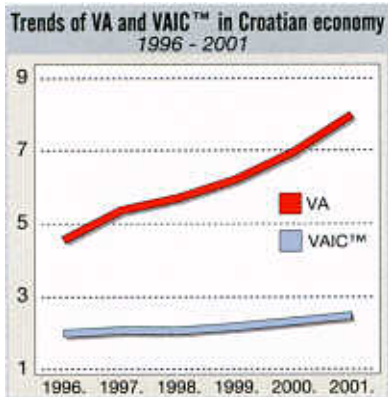
This value added is created by two key resources, Capital Employed (CE) and Intellectual Capital (IC). In order to calculate the efficiency of their value creation, each of these resources is related to the

achieved value added. Thereby we get the efficiency indicators: CEE - Capital Employed Efficiency, HCE - Human Capital Efficiency and SCE Structural Capital Efficiency. They indicate how much new value is created on each monetary unit invested in each of the resources.

By adding up the efficiency indicators, the result is VAIC'M (the Value Added Intellectual Coefficient), which is an indicator that reflects the company's "total efficiency" or its "intellectual ability". The higher the VAICTM indicator, the better management has utilized the existing potential.

What is the benefit of this measuring method?

It is focused on value creation, not cost control and takes intellectual capital, particularly human capital, into account. If we consider human capital to be the driving force of value creation in the new economy,



16 counties perform at efficiency levels which are below the average.

Moreover, the Capital of Croatia, Zagreb, as well as the other four counties (Istria, Primorje, Split-Dalmatia, Osijek-Baranja), three key sectors (industry, trade, transport) and 500 companies represent the value creation prime mover of Croatian economy. Taken separately by each of these criteria, 60 to 70% of value added have been created here.

Sixteen counties, which have value creation efficiency below the Croatian national average, actually do not create, but destroy value. At the forefront of this group are the County of Bjelovar, Međimurje and Varaždin. There are some other counties with obvious value creation potential, but these perform at low efficiency, which is mainly due to the lack of IC. These are the counties of Šibenik- Knin, Lika- Senj and Vukovar-Srijem.

it is a key resource and its ability to create value has to be measured and monitored. For example, if the analysis indicates that Human Capital Efficiency is 2.5, it means that each \$/E invested in employees creates 2.5 \$/E of new value. This is important information for everyone involved in the value creation process: management, shareholders, stakeholders, as well as employees.

Simple parameters of the VAIC™ methodology are easily understandable to managers, hence easily communicable. International benchmarking becomes easy as the VAICTM indicator is a relative one, not referring to the amount of value created but the efficiency (resources related to result).

What makes the Value creation efficiency analysis unique is that it can be applied on all levels of business activity: the macro-economic (national) level, the

Recommendation

The first priority of economic policy and management (business and political) should be to raise efficiency in the low efficiency regions.

Another important task is to raise value creation efficiency of the economy in the counties which have a greater value creation potential than actually realized.

Although they are still listed among the best, there is also reason for worries in other two counties, County of Istria (as 2001 the lowest VCE in the last 5 years has been recorded) and the county of Zadar (due to a fall in value creation efficiency)

The results of this analysis are probably not pleasing for many. Nevertheless, they should come to terms with business reality viewed from a new perspective. Ignoring the facts would be the worst thing to do.

The knowledge-based economy requires an open-minded approach to new ways of analyzing, measuring, evaluating and doing business.

Measurement is never done for its own sake, but always with the objective to provide better understanding of the situation and thus more effective and efficient utilization of resources, which is especially true for Intellectual capital. Raising the value creation efficiency is actually the cheapest way of ensuring prosperity of companies, regions and nations. The better this is understood in Croatia, the faster and safer will be the path to developing a healthy, globally focused economy.

meso - level (sectors), the microeconomic (company) level, even within a company.

All data needed for the VAIC™ analysis on macro level are included in standard balance sheets and business reports, hence additional research or data collection is not necessary.

Through VAICTM management can detect weak points of value creation quite precisely, at any level: national, regional, within an industry or a company. Control of value creation efficiency enables managers to leverage their company's potential and maximize its value.

However, it cannot provide a precise depiction of required changes in management of a company or an economy. VAICTM is just a tool for scanning value creation. Therefore it is best if combined with other IC/KM-management tools.

President of the Croatian Chamber of Economy, **Nadan Vidošević**



Trying to keep up with international trends, the Croatian Chamber of Economy has been actively supporting new methods and systems, which will help Croatian economy to meet the challenges of the new,

knowledge based economy. This unique analysis, conducted at national, regional and corporate level represents one of the key economic initiatives in our country, as it promotes an explicit orientation towards value creation and thus helps increase value creation efficiency of Croatian economy and its global competitiveness.

Vice-president of the Government of the Republic of Croatia, **Dr. Ante Simonić**



Knowledge management and Intellectual Capital Management are necessary tools for any company aiming at national and global competition. Today, no top management can afford "not to know what the company

knows", namely which knowledge, skills and abilities are at disposal and how they can be utilized best in order to achieve the company objectives and improve the business results. Only the companies which will use their intellectual resources most successfully will become global players. This is the reason why the "wise" management of "knowledge" presents a central, strategic issue.

Minister of the Croatian Ministry of Economy, **Dr. Ljubo Jurčić**



Knowledge and Capital Employed are the key production factors of the 21st century. As global economy has been facing an abundance of physical and financial capital (CE) on the one hand, and a

shortage of knowledge on the other hand, human work has become the dominant production factor. We are not talking about physical, manual labour, but experienced and well organized intellectual work. A concentration of such work and efforts produces superior intellectual energy, which represents the intellectual capital of a company. This is why the industries of the 21st century will be located at places with superior IC organization.

Importanne Zagreb Most Efficient Croatian Company

“Importanne”, creating 19,3 kn on each invested kuna, is followed by “Glas Istre” with 18,2 kn and “Nike” with 17,3 kn. Among the middle sized companies, TDR is leading with 13,7 kn and TP with 10,9 kn of new value

The objective of this survey is to provide a new view on the performance of top Croatian companies, focusing on their value creation and value creation efficiency. This analysis is based on the traditional ranking of top 400 Croatian companies, measured in terms of total revenue. These companies create 55% of total value added created in Croatian economy (and therefore create a framework for national economy.) The analysis covers a period of five years, clearly showing two kinds of companies: the ones constantly appearing among the best and those that “played only for one summer”, showing good results only in a short period. The survey shows the most successful companies in Croatia, creating value added most efficiently.

All the companies are grouped in three categories, based on three criteria: number of employees, mass of value added and value creation efficiency. There are several reasons for this choice. One being, that no matter how efficient a company is in creating value, it is irrelevant for the economy as a whole if it does not create a certain amount of value. The opposite is also true: if it creates a lot of value while operating at the threshold of efficiency, then it does not fulfill the criteria of this analysis either. Only a combination of all the three above mentioned criteria can provide an objective picture of the companies business success.

Efficiency according to size

	VAICTM
small	2,367
medium	2,174
big	2,562
Croatian average	2,433

The first group consists of the companies that employ more than 500 people and create value added exceeding 100.000.000 kn. (Pls. sec chart below)

In order to get a real picture of the economic strength of this category of companies, one should bear in mind the fact that these companies create almost 20% of total value added of the entire Croatian economy.

VIPNET d.o.o. (limited liability company) presents a “new entry” in grand style, became in 2000 it was still in the category of companies with average efficiency. However, since value added has grown four times in a year, this company can be considered extremely successful.

The fact that Zagrebačka pivovara (brewery) is presently holding the 4th position, even though it was ranked first in 2000, does not necessarily mean that it performed less efficiently than the previous year. Namely, in 2001 it raised its efficiency (VAICTM was 5,57 in 2000) but there are some companies which managed to improve their efficiency even more significantly, which is the reason for their current position.

Except for PBZ American Express d.o.o. and Hrvatska lutrija (lottery), all the other companies are more or less well known from previous years. Naturally, there has been some exchange of places among them: SIEMENS made the greatest leap forward, from 15th to 5th place, while FRANK (coffee) took the dramatic fall, from 9th to 17th place.

Nevertheless, all the companies among the top 20 can be considered successful. This year some of these companies, such as Zvijezda, Ericsson, Konstruktor-inženjering, Atlas and Karlovačka pivovara, have left the group of top 20 Croatian companies.

The second category consists of the companies with 250-500 employees which create more than 30.000.000 kn of value added. (Pls. see chart next page)

There has been no change at the top compared to the previous year: Tvornica duhana Rovinj (tobacco) and Tankerska plovodba d.d. just switched their places. The reason for this change is the fact that the Rovinj company has increased value creation, while Zadar decreased it.

In addition to the well-known and stable companies from this group (Končar, Pevec d.o.o., Kerum d.o.o., Našicecment, Jambo, d.o.o., and others) in 2001 there was another major «new entry»: AWT International trade and services. This company increased its value cre-

VAICTM Ranking	Revenue Ranking	Name of company	VA	VAICTM
1.	10.	Vip Net	779.771.140	8,45
2.	32.	Koka	138.346.157	7,54
3.	131.	PBZ American Express	154.758.667	7,32
A.	40.	Zagrebačka pivovara	403.306.628	6,54
5.	19.	Siemens	304.466.427	5,99
6.	4.	Pliva	2.101.604.663	5,47
7.	21.	Getro	125.526.330	5,29
8.	92.	Gavrilović	162.147.564	4,71
9.	3.	HT	4.375.301.049	4,68
10.	158.	Hrvatska lutrija	148.888.507	4,48
11.	58.	Belupo	230.335.894	4,44
12.	1.	INA	3.898.065.418	4,13
13.	89.	Vetropack straža	156.647.709	4,11
14.	80.	Jamnica	175.358.979	4,10
15.	7.	Vindija	123.667.302	3,91
16.	16.	Lura	405.025.044	3,73
17.	57.	Franck	201.649.959	3,71
18.	34.	Coca-Cola	326.978.807	3,71
19.	67.	Ledo	163.295.401	3,60
20.	29.	Dalmacijacement	208.469.596	3,25

ation more than twice, and it is exactly this 25% increase in efficiency that launched this company from the third place right to the very top of the group.

ABB, Alstor, HUP Zagreb and Velux are some of the well-known companies that fell out of this list.

The third category are the companies with under 250 employees which create more than 25.000.000 kn of value added. This group is specific due to the following characteristics: it shows the greatest oscillations, which is understandable, since these relatively small companies pop up over night but many of them disappear in the same manner. Another important feature is the fact that this group has always consisted of absolute record-holders in terms of efficiency, which operate at maximum profits on each kuna invested in business. It would be interesting to see what would happen if these companies were listed at the stock exchange. Here are the current results:

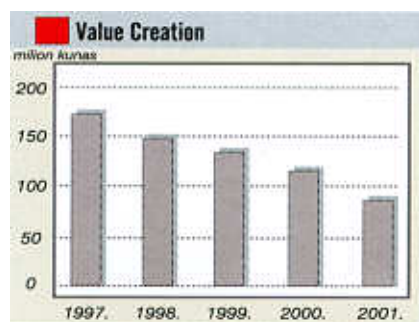
Importanne (shopping center) is a good example proving that it is possible to do business with outstanding efficiency in Croatia as well, since it has been holding the first position in this group for four years. The company has managed to double its value added compared to previous year, thereby increasing its overall efficiency. It should be noted that this company has always been on top position according to VC- efficiency, among the top 400.

Some renowned names have disappeared this year from the list: Wrigley Zagreb, Oktal pharma, Zubak auto, Citroen Hrvatska. Some of the surprisingly efficient companies are MI braća Pivac, **Plinacro** and Benetton Croatia.

Among the top 400 companies in terms of total income, especially interesting examples are the state-owned companies.

This group is very powerful indeed considering value creation, with a share of 14 % in total value added in 2001. But the greatest problem of this group is, shocking as it might sound, value creation inefficiency. Therefore let us examine Narodne Novine, a good example to illustrate this claim.

Here are the results 1997 - 2001.



Companies between 250 and 500 employees

VAIC™ Ranking	Revenue Ranking	Name of company	VA	VAIC™
1.	11.	Tvor. duhana Rovinj	556.545.440	13,72
2.	24.	Tankerska plovidba	380.888.808	10,89
3.	63.	Fliba	73.474.318	10,85
4.	37.	>ATW International	82.681.705	8,39
5.	106.	DM	68.329.919	7,33
6.	141.	Samoborka	124.828.658	7,33
7.	69.	Žito	81.463.771	7,31
8.	47.	KTC	55.151.832	7,04
9.	388.	Končar	42.244.757	5,84
10.	61.	Pevec	52.467.197	5,82
11.	79.	Kerum	41.572.207	5,81
12.	302.	Đuro Đaković	36.275.847	5,61
13.	126.	Tvor. duhana Zagreb	123.642.581	5,61
14.	108.	Našicecement	158.600.853	5,49
15.	168.	Jambo	39.191.475	5,36
16.	93.	Tommy Commerce	31.842.295	4,72 ;
17.	96.	Atlantic trade	39.963.999	4,66
18.	266.	Gradnja	46.371.563	4,55
19.	181.	Cedevita	93.055.243	4,49
20.	313.	Sladorana	60.913.250	3,85

We have highlighted this example because it shows that increasing the value creation efficiency of resources is essential for the state controlled companies as well as for the private ones. Further on, if we accept the fact that management of state-controlled companies does not lead in terms of efficiency, it should at least be committed to raising its VC-efficiency to the national average. Operating below average, they have a negative impact on the efficiency of the entire economy, which is actually contrary to the interests of their owner. According to the data collected by Fina, in

2001 there were about 57,000 entrepreneurs in Croatia, who managed to create almost 50 billion value. Only 1 per cent of these companies, namely the 570 biggest businesses, created approximately 60 per cent of value. All the other entrepreneurs (about 56,000) managed to create the rest, i.e. 32 billion kn.

There are few people who expected that the large companies would be more efficient in creating value added than the Croatian average, closely followed by small entrepreneurs, while the medium sized businesses proved to have the worst results.

Companies with under 250 employees

VAIC™ Ranking	Revenue Ranking	Name of company	VA	VAIC™
1.	259.	Importanne	47.994.481	19,35
2.	377.	Glas Istre	26.302.901	18,19
3.	397.	Nike	27.674.904	17,34
4.	351.	Lavčević	33.295.106	16,64
5.	290.	Eurotrade	35.914.731	13,10
6.	144.	Mesna ind. braće Pivac	67.755.224	11,24
7.	183.	Plinacro	177.024.318	10,78
8.	94.	Benetton Croatia	72.400.601	9,60
9.	83.	Peugeot Croatia	40.602.672	9,55
10.	248.	Ronhill	84.209.705	9,41
11.	62.	Oktal Pharma	63.078.054	9,36
12.	90.	Chromos agro	127.181.989	8,82
13.	175.	Končar	34.836.378	8,69
14.	163.	Alca Zagreb	42.821.058	8,02
15.	8.	P. Z. Auto	114.454.691	7,73
16.	64.	MedicalIntertrade	54.226.436	7,58
17.	193.	Stanić	28.856.283	7,20
18.	44.	Renault Croatia	47.006.720	7,05
19.	74.	Europapress holding	85.369.156	6,97
20.	107.	Roto - promet	27.956.580	6,77

Banking Sector's new Reality

It does not matter whether a bank is small or big, but whether it utilizes its resources, financial and intellectual capital efficiently

In the last few years, the situation in the banking sector has changed considerably.

Croatian banks, which were previously mainly in state ownership, have undergone a transformation into private ones, supported by Italian and Austrian-German capital. It is interesting to see the changes that have taken place due to that transformation.

Until 1999, when the transformation phase of the banking sector ended, there was a slight fall in value creation efficiency, to be followed by a considerable increase. Which banks are the drivers of the change?

There are over 40 banks in Croatia. As they are diversified institutions, with different profiles, they could be divided into three groups.

The first group consists of the banks disposing with a capital over 1.000.000.000 kn (135 mil. euro). There are only two of them.

Zagrebačka bank, disposing of twice the human capital (HC) and a third more of capital employed (CE), creates only 30% more value added (VA) than Privredna bank. The analysis also indicates that the efficiency of capital employed (CE) is quite similar in both banks, which leads to the conclusion that lower efficiency of Zagrebačka bank is due to its weaker utilization of human capital. In Privredna bank HC efficiency is 63% higher than its main competitor, Zagrebačka bank.

The second group is represented by banks with nominal capital of more than 100.000.000 kunas (13,5 mil. euro). Here are the top 10 among them:

From this group of banks Štedbanka should be highlighted, since this bank has been holding the first place according to overall value creation efficiency consecutive for six years. It is followed closely by Hypo Alpe Adria bank, which has been climbing the ladder and is presently holds the third position.

As this bank has its headquarters in Austria and operates in the neighbor-

	CE	HC	VA	VAIC™
Privredna banka:	2.767.558299	310.158.577	972.537.203	4,17
Zagrebačka banka	3.667.074.810	659.810.154	1.267.796.979	2,75
Štedbanka	273.508.692	5.425.568	29.771.607	6,41
Hypo Alpe Adria	413.553.000	49.762.000	193.392.000	5,10
Raiffeisenbank Austria	600.430.858	93.925.686	320.740.884	4,66
Cassa di Risparmio Trieste	140.899.378	9.045.424	31.385.011	4,40
Gospodarsko kred. Banka	103.215.230	7.406.394	24.745.660	4,28
Varaždinska banka	519.734.511	49.041.946	149.028.224	4,00
RiAdria banka	197.440.849	18.316.374	50.731.070	3,67
Erste & Steier. Banka	496.030.122	66.899.012	175.416.864	3,59
Splitska banka	625.612.201	121.959.585	291.827.773	3,44
Požeška banka	90.797.297	10.706.175	26.876.943	3,41
Imex banka	77.727.598	3.497.870	18.462.552	6,33
Požeška banka	90.797.297	10.706.175	26.876.943	3,41
Volksbank	99.105.182	22.672.435	48.138.821	3,14
Pril. banka Laguna	75.971.076	8.008.723	18.144.133	3,06
Partner banka	111.341.511	12.515.059	26.612.956	2,90
Croatia banka	129.262.960	39.991.244	74.784.587	2,91
Credo banka	68.230.907	7.332.706	13.318.020	2,46
Kvarner banka	65.375.604	6.661.925	11.712.858	2,37
Nava banka	48.160.316	3.937.950	6.381.238	2,14

ing countries (Italy, Slovenia, Bosna and Herzegovina), it was interesting to see in which country it has been doing best according to value creation efficiency.

Hypo Alpe Adria	VAIC™
Austria	4,50
Bosnia & Herz.	3,74
Croatia	5,10
Italy	5,03
Slovenia	2,65

As it can be noted, one bank can show very different efficiency levels. The Croatian group has been utilizing its resources best, and therefore achieved best value creation efficiency. It is followed by Italy, while the parent bank is ranked third with regard to efficiency. Anyway, top management of Hypo Alpe Adria Bank has new data at disposal, which can be used to increase the efficiency of the whole group.

The third group consists of the banks with stock capital under 100.000.000 kunas (13,5 mil. euro). In

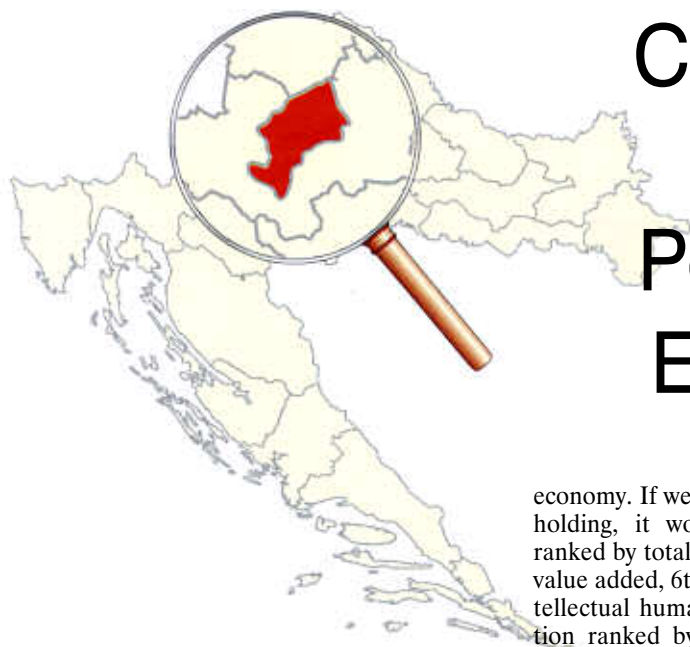
2001 there were 16 such banks in Croatia:

Imex bank, the second bank according to efficiency in Croatia, has been holding this ranking for five years. Like HypoAlpe-Adria banka, Volksbank is an Austrian bank with a branch in Slovenia and therefore suitable for international efficiency benchmarking.

Volksbank	VAIC™
Austria	2,21
Croatia	3,14
Slovenia	1,98

In Slovenia the value creation efficiency is the lowest, while in Croatia the highest (like Hypo Alpe Adria bank). In order to explain the high value creation efficiency of these banks in Croatia, it is important to mention that they have found a market desperately needing financial support, which was not available before. It will be interesting to monitor the development in the years to come, once the market has become saturated.

■ CITY OF ZAGREB



Companies Owned by the City Perform Below City Efficiency Average

Zagreb City's economy has a stronger value creation capability than the economy of all the other counties together. Moreover, it is even 12% more efficient compared to the Croatian value creation efficiency average. Therefore we can say that the economy of Zagreb is definitely the engine of Croatian economic development.

However, there is also the other side of the coin: In order to keep the value creation growth on national average, this economy needs enormous amounts of Capital Employed.

While in 2001 investment in Human Capital was just below the Croatian average, investment in Capital Employed doubled the average. Actually, with the exception of 1997 and 1998, the Capital Employed continuously exceeded the national average.

The companies owned by the City of Zagreb have an important role in its

economy. If we take them as one, large holding, it would take 4th position ranked by total income, 5th position by value added, 6th position by utilized intellectual human capital and 7th position ranked by invested Capital Employed.

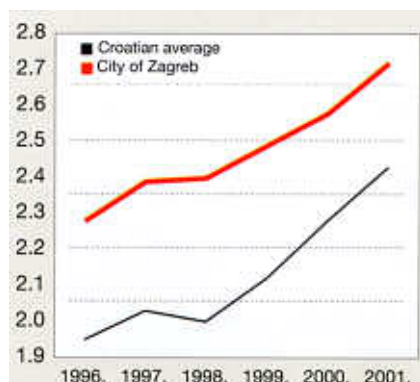
The crucial problem of this city "giant" is its low efficiency.

Since it operates far below the average, it actually jeopardizes and decreases

the success of the entire city economy. Just a hint about the city administration: if this "holding" managed to catch up with the average efficiency of other companies in Zagreb, it would create around 250 million kn more value added.

Let us turn to the brighter side of Zagreb's economy. Here is the list of the leaders according to value creation and value creation efficiency:

VAICTM Ranking	Ravenue Ranking	Name of company	VA
1.	10.	Importanne	47.994.481
2.	32.	Nike	27.674.904
3.	131.	Eurotrade	35.914.731
4.	40.	Plinacro	177.024.318
5.	19.	Peugeot Croatia	40.602.672
6.	4.	Oktal Pharma	63.078.054
7.	21.	Chromos agro	127.181.989
8.	92.	Končar-inženjering	34.836.378
9.	3.	VIPnet	779.771.140
10.	158.	AWT International	82.681.705
11.	58.	Alca Zagreb	42.821.058
12.	1.	P.Z. Auto	114.454.691
13.	89.	D M	68.329.919
14.	80.	PBZ American Express	154.758.667
15.	7.	Renault Croatia	47.006.720
16.	16.	Europapress holding	85.369.156
17.	57.	Roto-promet	27.956.580
18.	34.	Zagrebačka pivovara	403.306.628
19.	67.	Simens	304.466.427
20.	29.	Končar - generatori i motori	42.244.757
21.	29.	Tvor. duhana Zagreb	123.642.581
22.	29.	Pliva	2.101.604.663
23.	29.	HT	4.375.301.049
24.	29.	Atlantic trade	39.963.99
25.	29.	Cedevita	93.055.243
26.	29.	Hrvatska lutrija	148.888.507
27.	29.	I NA	3.898.065.418
28.	29.	Lura	405.025.044
29.	29.	Franck	201.649.959
30.	29.	Coca-Cola	326.978.807
31.	29.	Ledo	163.295.401



■ COUNTY OF KARLOVAC



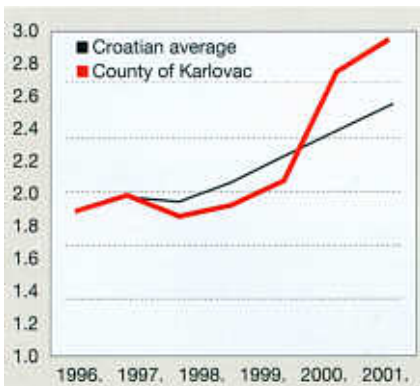
Economy of Ogulin, the Most Efficient One in the Whole Country



Which are the leading companies causing boom of Karlovac economy	
Bechtel	6,55
Wienberger-Ilovac	5,35
Wienberger-Cetera	4,43
Madig	3,21
Karlovačka pivovara	3,13
PPK Mesna industrija	2,42

Compared to the previous year and other counties, value added has grown almost three times faster than in the rest of Croatia. The human Capital has grown too, but this growth has been insignificant compared to Croatian average. On the other hand, the increase in financial capital was minor compared to the total CE rise in Croatia. (That means, that the enormous increase of value added as well as the VC-efficiency can be attributed to Intellectual Capital).

The details of the efficiency of economies of particular towns and municipalities are given in the chart.



This county developed gradually, from an average economy to a dynamic one with top efficiency in Croatia (2,8), which is mostly due to intellectual capacities.

Economy of Ogulin is the most efficient (index 5.9), and the second one by achieved value added.

Karlovac creates most value added, but the real problem lies in its efficiency, which is lower than the counties efficiency and the national average.

If the economy of Karlovac had reached the Croatian average, it would have created around 175.000.000 kn more value added. (This is actually a major issue, as it is here that approximately one half of the County's total value added is

created.)

In the future the stagnation to the efficiency of economy in the Karlovac county could prove to be a real problem, since it amounts to half of economy of the whole county.

The share of other towns and municipalities in value creation is smaller and therefore their significance for the county economy is smaller too. All of them perform below average efficiency.

The share of crafts and trades in the total value added is about 6%

County of Karlovac	VA	VAIC	County of Karlovac	VA	VAIC
Karlovac	783.645.977	2,036	Bosiljevo	8.348.109	2,171
Ogulin	666.161.569	5,905	Josipdol	7.200.716	2,238
Duga Resa	92.771.501	2,044	Netretić	4.616.910	2,087
Ozalj	31.502.984	1,785	Krnjak	1.555.634	2,302
Zakanje	23.907.932	2,002	Barilovići	896.029	2,086
Tounj	22.849.859	2,553	Rakovica	335.681	1,653
Slunj	11.748.309	0,000	Generalski Stol	315.544	1,808
Draganić	8.481.698	2,610	Plaski	287.803	1,274
Vojnić	8.406.684	1,698	Cetingrad	-219.883	0,000
Total:				1.672.827.491	2,803

■ COUNTY OF ISTRIA

The Fastest Increase in Value Creation Efficiency

Two towns create half of the total value added of this county, whereby Rovinj (4,9) is twice as efficient as Pula.



Ranking by efficiency:	
Tvornica duhana Rovinj	13,72
OMV Istrabenz	4,27
Plava la una	2,97
Jadranturist	2,67
Istraturist	2,54
Uljanik	2,22

Although lagging behind slightly in 2001, this county's economy doubled its value creation throughout the analyzed five years and it was the fastest one in increasing efficiency. Having started as an under average economy, it managed to reach the average in 1998, and then surpassed it with remarkable efficiency in 2000. The year 2001 was a period of stagnation, with all the relevant indexes below the Croatian average.

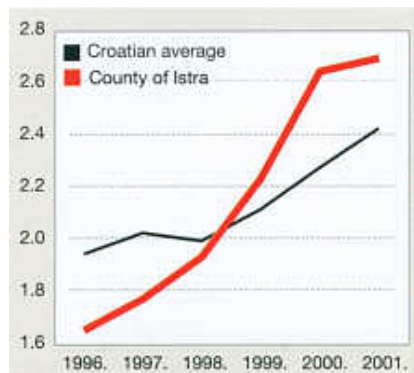
It could be elaborated in more detail what were the reasons for it. Presently we will just note that if the necessary moves and steps are not taken, the stagnation could continue. Pula and Rovinj are the moving force of economic poten-

tial of the County, since these two towns create almost 50% of regional value added. The problem lies in the fact that Rovinj (index 4,9) is twice as efficient as Pula (2,1). Therefore in 2001 the economy of Pula performed well below the Croatian average, thus causing a loss of value of approximately 200 million kn. Another problem was that the value creation efficiency even decreased in comparison to the previous year.

Although still above the average efficiency, the economy of Rovinj also

showed falling tendency compared to 2000, which strongly influenced the regional efficiency and brought about the stagnation of the whole county. In the whole county there are only several towns in which the efficiency is well above the national average. In addition to Rovinj, we should also mention the following towns: Kršan (10,5), Kanfar (6,6) Sv. Petar (5,6).

The share of crafts and trades in total value added fell from 10% in 1996 to 5,7% in 2000.



County of Istria	VA	VAIC	County of Istria	VA	VAIC
Pula	1.487.565.978	2,144	Žminj	25.499.447	2,978
Rovinj	937.652.025	4,961	Marcana	16.313.274	2,677
Poreč	566.203.550	2,684	Bartonigla	15.292.049	1,846
Umag	370.069.527	2,352	Cerovlje	14.533.662	2,396
Pazin	212.052.247	1,954	Pican	10.165.541	3,921
Labin	209.747.478	2,001	Višnjan	8.800.243	2,773
Buzet	182.113.117	2,647	Tinjan	7.168.536	3,016
Kršan	165.261.682	10,545	Liznjan	6.936.151	1,916
Raša	126.033.334	3,067	Oprtalj	6.909.040	1,871
Buje	95.093.956	2,340	Sv. Petar u Šumi	5.674.235	5,614
Kanfanar	94.032.596	6,600	Sveta Nedjelja	5.240.408	2,498
Novigrad	88.988.135	2,498	Vizinada	4.620.109	3,479
Vrsar	84.909.655	2,688	Motovun	3.775.369	1,619
Medulin	49.829.369	3,038	Bale	2.883.459	2,270
Vodnjan	34.383.509	2,045	Barban	2.822.550	2,369
Lupoglav	28.640.147	3,195	Svetvinčenant	2.501.742	2,967
Total:				4.902.512.673	2,702

■ COUNTY OF ZAGREB



Velika Gorica has Negative Impact on Regional Efficiency

This county is one of the national leaders in terms of efficiency (2,6) since it has never performed below the average since 1996. Moreover, the efficiency of county of Zagreb has marked a rapid growth after 1999.

This growth becomes obvious when analyzing the changes experienced in 2001. Although investment in CE was below Croatian average, value added and Human Capital have increased. This is another proof that money is not crucial for value creation.

The largest amount of value is created in the economics of Velika Gori-



ca, Samobor, Zaprešić and Sveta Nedjelja. However, the problem lies in efficiency of economy in Velika Gorica, which performs below the county and the national average. If it performed at the county average, it would create almost 100 million kn more value added.

With regard to the value added they create, the leaders in terms of efficiency are Samobor (3,4) and Sveta Nedjelja (3,5). D.Selo, Stupnik, Ivanić Grad and Brdovec are also well above the Croatian average, the most successful ones in the region being Pušća (4,2) and Bedenica (5,4). On the other hand

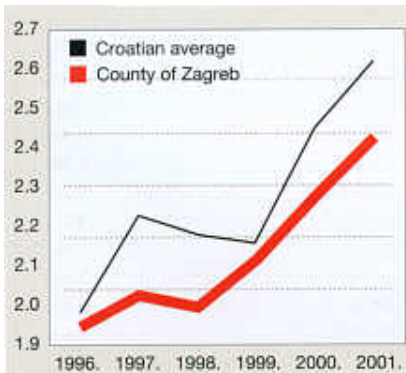
there is Vrbovec, a town with considerable resources, especially physical and financial capital. Nevertheless, it does not create value, but destroys it.

Therefore Vrbovec is the best example to illustrate the considerable importance of intellectual capital in terms of value creation, which, unfortunately, this town lacks.

The share of crafts and trades in total value added in this county is 5,8%, which is around the national average. Unfortunately, this information might be disappointing to those who believed this sector would be more productive.

The already mentioned regional centers listed as economically successful ones are also headquarters of numerous top companies in this county

Fliba, Stupnik	10,85
P.Z. Auto	7,73
Medical lintertrade	7,58
Samoborka	7,33
Stanić Samobor	7,20
STRIDON Dugo selo	6 07
Messer Croatia Plin	3 72
Kvasac, Zaprešić	3,35



County of Zagreb	VA	VAIC	County of Zagreb	VA	VAIC
Velika Gorica	745.604.446	2,378	Bistra	11.340.585	1,619
Samobor	588.535.928	3,434	Kloštar Ivanić	9.655.646	2,228
Zaprešić	307.902.978	2,892	Krašić	8.578.850	2,489
Sveta Nedjelja	305.519.155	3,511	Brckovljani	5.221.786	2,643
Jastrebarsko	160.011.204	2,643	Marija Gorica	4.359.554	3,271
Dugo Selo	131.021.935	2,613	Jakovlje	4.010.586	2,152
Ivanić Grad	130.816.485	2,709	Kravarско	3.441.694	2,474
Sveti Ivan Zelina	112.861.017	2,128	Luka	3.088.109	2,722
Stupnik	96.421.945	3,318	Klinča Sela	3.085.749	1,836
Vrbovec	81.117.128	0,000	Pisarovina	2.455.899	2,379
Brdovec	42.785.833	2,776	Rugvica	1.915.061	2,751
Gradec	25.344.117	2,270	Bedenica	1.309.216	5,482
Križ	23.065.311	1,492	Pokupsko	576.453	2,567
Dubravica	15.775.617	2,607	Farkaševac	533.398	2,616
Dubrava	13.558.648	2,145	Žumberak	209.534	2,828
Pušća	12.042.846	4,209	Rakovec	192.727	1,482
Total:				2.852.481.930	2,636

■ COUNTY OF ZADAR

Tankerska Plovidba Creates 27% of Regional Value Added

According to the Value Added Intellectual Coefficient, some of the municipalities severely damaged during the war are at the very top.



Here is their ranking by efficiency	
Tankerska plovidba	10,89
Zadranka	9,90
Bakmaz	5,20
Aluflexpack	4,81
Sonik	4,02
Tankercomerc	3,81

The economy of this county is full of surprises. The period of growing efficiency in 1997 was followed by two years of decline. It was followed by a leap in 2000 and a minor fall in 2001. Nevertheless, the value creation efficiency of the county is still above the Croatian average.

Although Human Capital has increased (like in the whole economy) value added increased only slightly. Naturally, in such circumstances a decrease in efficiency was the only possible result.

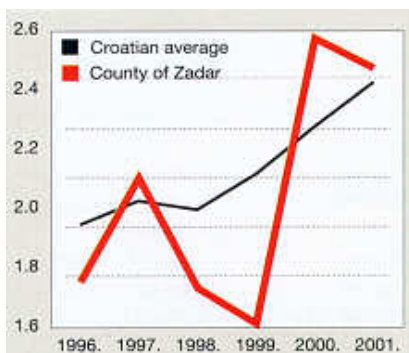
Economy of Zadar is the driving force of regional success, since that town creates as much as 80% of total value in whole Zadar county. Although still above the regional and national av-



erage (2,6), the whole county suffered a stagnation due to the decrease in the efficiency of Zadar.

Among several big companies that have been performing extremely well, it is important to note that Tankerska plovidba has been the best one, with 27% of total value added created in the county. That company also had the best value creation efficiency.

It is interesting that according to VAIC™, the overall efficiency indicator, some of the municipalities severely damaged during the war are at the very top. First of all, we should mention the town of Gračac, with the stunning result (5,3), although Sveti Filip i Jakov, Stankovci, Pašman, Zemuni, Jasenice and Škabrnja also exceed the national average.



County of Zadar	VA	VAIC	County of Zadar	VA	VAIC
Zadar	1.142.061.682	2,610	Vir	4.856.274	1,904
Biograd	49.414.416	1,905	Poličnik	3.858.337	2,167
Pag	35.827.946	2,161	Posedarje	3.836.644	1,966
Kali	35.542.667	2,380	Pašman	3.235.259	3,279
Benkovac	33.133.725	1,664	Obrovac	2.830.643	0,000
Svet Filip i Jakov	29.221.451	3,772	Bibinje	2.380.271	2,390
Sali	15.133.777	1,943	Škabrnja	2.099.744	2,585
Gračac	12.267.433	5,317	Ražanac	867.585	1,861
Pakoštane	11.660.678	1,899	Zemunik Donji	750.549	3,215
Nin	9.847.168	2,318	Sukošan	660.219	0,000
Preko	8.185.157	1,839	Polača	377.714	1,950
Starigrad	6.910.958	2,345 I	Jasenice	320.283	3,069
Stankovci	5.300.134	3,307 I	Lišane Oštvočačke	120.560	2,308
Total:				1.429.835.135	2,485

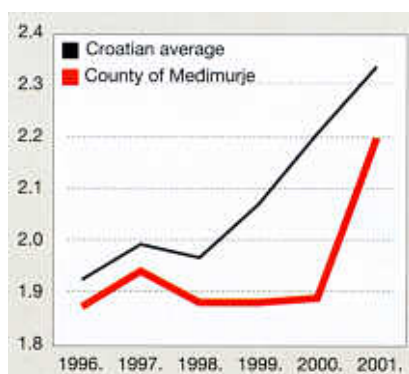
■ COUNTY OF MEĐIMURJE

Međimurje Returns to the Very top of the Most Successful Counties



The leading companies are:

Tvornica stočne hrane	4,91
RM-TRGOHIT	4,57
Čakovečki Mlinovi	3,35
MI VAJDA	2,73
Trgočentar	2,59



Međimurje county has finally entered the stage of recovery. Although it was very close to average efficiency in 1990 and 1997, value creation efficiency kept falling throughout the following three years, reaching its lowest point in 2000. Last year Međimurje county witnessed a significant increase in productivity, thereby coming very close to the national average again.

The smaller towns in the county of Međimurje are more efficient than the center of the county. Thus the most efficient town (4,0) is Domašinec, followed by Mihaljevec (3,6) and f3elica (3,5). Čakovec, the center of the county, has an efficiency index of 2.2, which is identical to the county average, and just slightly below the Croatian average.

County of Međimurje	VA	VAIC	County of Međimurje	VA	VAIC
Čakovec	881.700.724	2,195	Strigova	8.943.982	2,167
Prelog	116.905.769	2,420	Domašinec	6.470.821	4,021
Nedelišće	84.069.451	3,219	Sveti Martin na Muri	6.422.247	1,825
Šenkovec	57.048.699	2,397	Donja Dubrava	5.366.872	2,838
Donji Kraljevec	50.766.303	2,516	Smokvica	4.859.547	2,065
Mursko Središće	37.528.282	2,015	Seti Juraj na bregu	4.833.280	2,521
Goričan	32.056.506	1,854	Vratišinec	4.641.656	1,736
Belica	30.628.367	3,513	Podturen	3.533.428	3,590
Kotoriba	16.059.841	1,626	Gornji Mihaljevec	2.884.380	1,921
Mala Subotica	11.040.270	2,714	Selnica	2.464.533	3,315
Strahoninec	9.483.126	2,848	Dekanovec	2.361.901	1,730
Total:			Total:	1.382.278.146	2,272

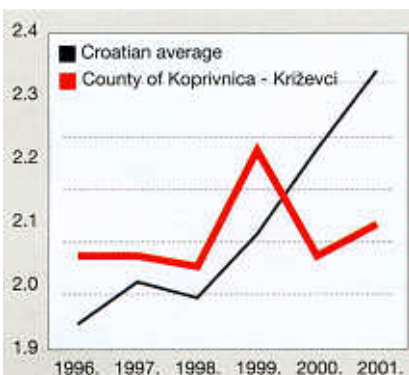
■ COUNTY OF KOPRIVNICA-KRIŽEVCI

Two Thirds of Overall Value Added in County Center- Koprivnica



Here are the most efficient companies in the county

KTC, Križevci	7,04
Belupo, Koprivnica	4,44
Radnik, Križevci	3,52
Panonska pivovara	2,71
Mlinar, Križevci	2,64



This county is unfortunately stagnating. Since 2000 efficiency kept falling, and that trend continued in 2001 as well. Therefore this county is increasingly lagging behind the Croatian average. The town of Koprivnica creates about 2/3 of overall value added of the county, but with regard to efficiency (2,1) it is weaker than Križevci

(2,4). Towns performing above the national average are: Gola (3,3), Kalinovac (3) and Ferdinandovac, with the highest value creation efficiency index (4,2). The share of crafts and trades has been continually declining. Thus in 2000 its share was 3,8%, the lowest share in regional value added of all Croatian counties.

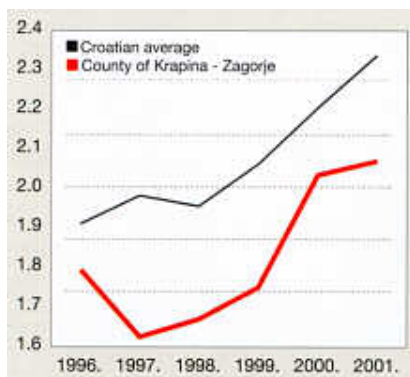
County of Koprivnica - Križevci	VA	VAIC	County of Koprivnica - Križevci	VA	VAIC
Koprivnica	1.113.557.304	2,103	Sveti Petar Orehov	3.562.738	3,215
Križevci	321.890.761	2,404	Peteranec	2.943.317	2,770
Đurđevac	80.982.346	1,638	Rasinja	2.426.241	1,462
Sveti Ivan Žabno	14.206.691	1,925	Drnje	2.149.470	2,228
Kalinovac	10.626.280	3,042	Molve	1.461.035	2,354
Kloštar Podravski	8.726.035	2,239	Sokolovac	1.043.085	2,195
Gola	6.831.626	3,283	Novo Virje	767.614	3,352
Legrad	6.175.319	2,054	Hlebine	189.879	2,065
Virje	5.735.333	2,150	Djelekovec	173.088	2,329
Novigrad Podravski	5.311.056	2,207	Koprivnički Ivanec	90.059	1,803
Ferdinandovac	5.243.173	4,129	Koprivnički Bregi	56.649	3,175
Total:			Total:	1.595.229.982	2,143

■ COUNTY OF KRAPINA-ZAGORJE

Zagorje Holds the Golden Middle in National Efficiency Ranking



The leading companies by value creation efficiency are more or less well known on the national market	
Strahinjčica	4,21
Vetropack strača	4,11
Tondach Hrvatska	3,84
Jedinstvo Krapina	2,91



Once very close to the national average, economy of Krapina-Zagorje County seems to have recovered after an unstable period. The leading companies by value creation efficiency are more or less well known on the national market as well.

The share of crafts and trades

in value creation of this county is very high, 11,67%. Amazingly, in 1996 that share was as high as 18%. The most efficient economy is in Hum (3,2), creating even more value added than the county center, Krapina. Value creation efficiency above the national one was also recorded in Kraljevica (3), Bedekovčina, Gornja Stubica (2,7) and Pregrada (2,5).

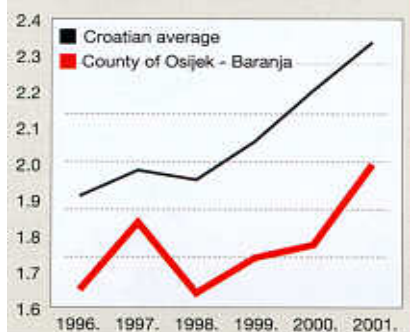
County of Krapina - Zagorje	VA	VAIC	County of Krapina - Zagorje	VA	VAIC
Hum na Sutli	219.897.947	3,243	Konjščina	32.611.413	2,700
Krapina	210.439.380	2,275	Stubičke Toplice	20.410.289	2,259
Bedekovčina	100.380.393	2,688	Sveti Križ Začretje	15.329.303	2,193
Zabok	88.055.117	1,412	Novi golumbovec	12.036.693	0,000
Zlatar Bistrica	65.059.940	1,631	Veliko Trgovišće	11.063.982	1,778
Oroslavlje	56.513.061	2,086	Marija Bistrica	9.567.909	2,144
Krapinske Toplice	50.563.513	1,719	Kumrovec	8.619.963	2,318
Zlatar	41.886.166	0,000	Budinščina	6.940.005	1,811
Pregrada	41.671.436	2,545	Kraljevec na Sutli	5.890.200	3,058
Klanjec	40.076.069	2,308	Radoboj	4.693.888	3,602
Donja Stubica	33.449.159	1,423	Lobor	3.458.290	1,862
Total:			1.092.591.057	2,135	

■ COUNTY OF OSIJEK-BARANJA

Modest Investment in Human Capital Obstructs Business Development



Ranking list of the most successful companies	
Benetton Croatia	9,60
MINACO, Našice	9,59
Doseg, Osijek	8,83
Bil'merkant	7,61
Zito	7,31
Alastor	5,82
Našicecement	5,49
Osijek-koteks	2,85
Saponia	2,65



According to value added (4th), but only 8th by value creation efficiency, it was much closer to Croatian average in 1997, when the economic situation was more difficult. The reasons are intellectual in nature as this county's investments in CE are way above the national average. Although the achieved value added

has increased, it is a poor result with regard to heavy investment in resources. The first four towns by value added create 78% of county's total value added.

The Osijek economy performs below the average (2,1), while the efficiency of Našice is above it (3,1). As incredible as it may sound, in 2001, this county created VA equal to the one created in the town of Opatija (Croatian resort).

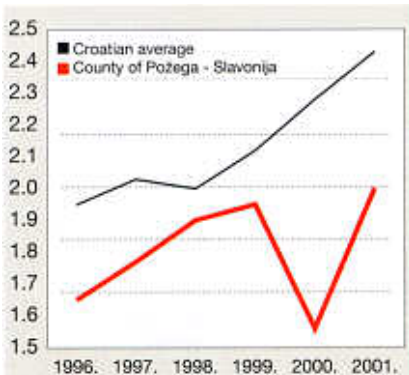
Country of Osijek - Baranja	VA	VAIC	Country of Osijek - Baranja	VA	VAIC
Osijek	1.769.668.463	2,197	Strizivojna	9.228.210	2,141
Našice	287.803.674	3,124	Ernestinovo	8.285.602	1,832
Belišće	204.645.214	2,253	Feričanci	7.793.737	1,323
Dakovo	203.238.611	1,625	Kneževi Vinogradi	7.409.538	2,917
Darda	137.760.259	0,000	Viškovi	7.005.119	1,688
Valpovo	104.567.660	1,836	Satnica Dakovačka	6.316.687	2,054
Donji Miholjac	80.692.493	1,653	Podgorac	5.115.624	0,000
Beli Manastir	35.274.818	1,529	Petlovac	4.049.210	5,157
Durdenovac	34.988.946	1,274	Bilje	3.870.414	2,362
Drenje	19.699.553	2,722	Marijanci	3.549.641	2,881
Total:			3.060.418.814	2,059	

■ COUNTY OF POŽEGA-SLAVONIA

Value Creation Efficiency Rising Slowly



The most efficient companies of this county are	
Kamen-Inggrad	4,57
Presoflex	4,07
Plamen-International	3,12
Kutjevački podrum	2,98



In 1999 the economy of this county nearly reached the Croatian average, but Surprisingly, in 2000 there was a dramatic fall. Although in 2001 it marked a slight recovery, it still operates below the national average.

The town of Požega creates more than half of the total value added in the county, but with a coefficient of 1,9 it is still way below the national average, as well as the pretty low regional value creation efficiency average. Kutjevo has a slightly higher efficiency, but still

below the national average.

However, some smaller towns like Brestovac (2,9) and Velika (3,2) are more efficient than the national average.

The war has had severe impact on the economy of Lipik (1,4) and Pakrac (1,3), which record low value creation (VA) as well as value creation efficiency (VAICTM). The most efficient company in the region is Kamen-Inggrad. The share of crafts and trades in 2000 was 7,43%, while in 1996 it was 9,65%.

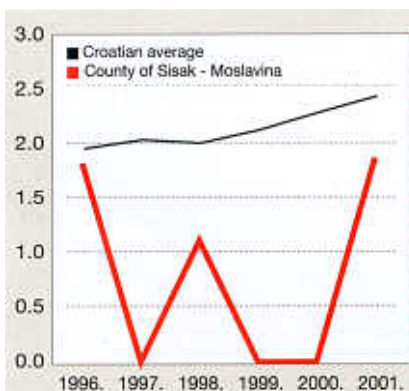
County of Požega - Slavonia	VA	VAIC	County of Požega - Slavonia	VA	VAIC
Požega	339.460.800	1,956	Pakrac	24.496.189	1,385
Kutjevo	117.328.261	2,143	Brestovac	4.864.341	2,930
Velika	79.028.569	3,180	Jakšić	3.070.167	2,305
Lipik	39.996.607	1,452	Kaptol	2.639.191	1,588
Pleternica	30.477.677	1,662	Caglin	834.143	1,786
Total:			Total:	624.195.945	2,009

■ COUNTY OF SISAK-MOSLAVINA

Two Companies Significantly Reduce the Level of Efficiency



The main pillars of this economy are	
Gavrilović	4,71
Petrokemija	2,62
GJ OTV. Kaznenog zavoda	2,28



Besides the County of Lika-Senj, this county records the greatest oscillations in value creation efficiency. The reasons for such trend are well known: the staggering giants "Petrokemija" (Petroleum derivatives) in Kutina and "Željezara" (Steel industry) in Sisak.

Most value added, almost half on the level of the whole county, has not been created in the extremely ineffi-

cient Sisak but in Kutina, the efficiency of which (2,2) significantly exceeds the county's average. One of the healthy sectors of economy has been developing in the town of Petrinja, which participates in total value creation with 20%, reaching excellent efficiency of 3,2. The rest of the previously occupied towns like Glina and Kostajnica are understandably low in efficiency.

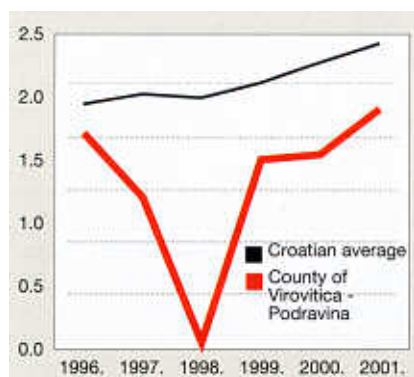
County of Sisak - Moslavina	VA	VAIC	County of Sisak - Moslavina	VA	VAIC
Kutina	537.709.513	2,219	Topusko	4.244.028	0,000
Sisak	279.770.535	0,000	Lekenik	2.437.764	2,110
Petrinja	233.898.458	3,174	Dvor	2.086.626	1,819
Novska	80.765.700	2,121	Jasenovac	1.961.785	1,270
Popovača	45.427.972	2,288	Velika Ludina	1.324.887	0,000
Glina	17.708.706	1,370	Donji Kukuruzari	1.076.285	0,000
Hrvatska Kostajnica	11.092.845	1,422	Gvozd	653.424	0,000
Lipovljani	5.824.612	2,885	Hrvatska Dubica	451.429	0,000
Sunja	5.007.337	1,839	Majur	39.234	0,000
Total:	1.236.438.593	1,876			

■ COUNTY OF VIROVITICA-PODRAVINA

The Economy of Podravina Slowly Starts Recovering



The value creation efficiency leaders in this county are	
Keramička industrija Orahovica	2,99
Trgocentar	2,59
TVIN	2,40
PP Orahovica	2,35



The chart indicates a slow recovery of the economy in this county, although value creation efficiency is still quite low (1,8).

The small town of Crnci (2,5) is the only place in the county operating above the average, as well as Pitomača. Virovitica, the county's seat creates more than half of the total VA

of the county while the rest is created in Slatina and Orahovica. It is interesting to point out that the economy of Slatina records very low efficiency level (only 1,3%).

In 2001 the share of crafts and trades in total value creation was 8,21%, compared to 8,56% in 1997 when it reached its peak.

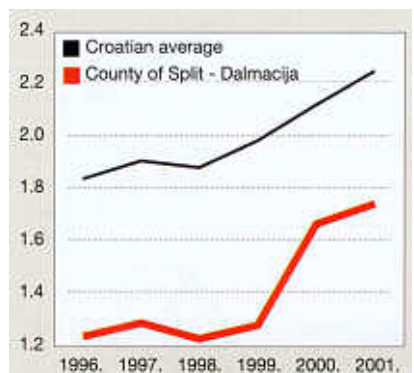
County of Virovitica - Podravina	VA	VAIC	County of Virovitica - Podravina	VA	VAIC
Virovitica	331.520.275	2,179	Mikleuš	1.208.542	0,000
Slatina	119.459.760	1,311	Zdenci	1.004.997	2,198
Orahovica	114.167.454	2,076	Sopje	966.937	2,056
Pitomača	42.685.568	2,201	Čačinci	730.442	1,899
Gradina	7.573.737	2,344	Spišić Bukovica	573.958	2,296
Suhopolje	5.510.604	1,385	Crnac	331.466	2,572
Voćin	4.651.794	0,000	Čadavica	-95.643	0,000
Lukac	2.717.050	2,138	Nova Bukovica	-4.062.546	0,000
Total:				628.944.395	1,852

■ COUNTY OF SPLIT-DALMATIA

Dalmatia's Tourism Lacks Intellectual Capital



Leaders according to VC-Efficiency	
Drvenik-Tuna	12,61
MI Brača Pivac	11,24
Elektromagic	8,15
Kerum	5,81
Konstruktor-inženjering	4,79
Tommy Commerce	4,72



This county's economy is stable, but unfortunately constantly performs below the national average. A county disposing of such natural resources (Croatian coast) and Capital Employed should have the best conditions to perform much more efficiently. However, due to a lack of intellectual capital, it does not utilize its resources efficiently. The economy of the city of

Split contributes with 66% in the total value creation in the county. Together with the top four towns in the region it creates about 85%. However, the problem is that none of the key players perform above the Croatian value creation efficiency average. Best companies according to value creation in this county are newcomers, obviously forming a new economic core.

County of Split - Dalmacija	VA	VAIC	County of Split - Dalmacija	VA	VAIC
Split	2.603.937.144	1,822	Klis	11.006.547	2,241
Kaštela	365.924.419	1,975	Dicmo	10.245.758	3,610
Solin	264.639.768	2,100	Dugopolje	9.524.223	2,510
Trogir	111.512.924	0,000	Marina	7.017.375	2,376
Makarska	106.888.151	1,952	Cista Provo	6.101.074	3,011
Omiš	94.455.664	1,694	Nerežišća	5.762.368	4,418
Sinj	80.337.763	1,275	Lovreč	5.497.966	3,082
Imotski	58.783.854	1,690	Gradac	5.230.627	2,814
Hvar	40.807.071	1,761	Otok	4.475.632	2,145
Dugi Rat	28.135.330	2,318	Hrvace	2.894.430	2,938
Boj	23.588.599	1,270	Okrug	1.403.159	3,569
Total:				3.060.418.814	2,059

■ COUNTY OF DUBROVNIK-NERETVA



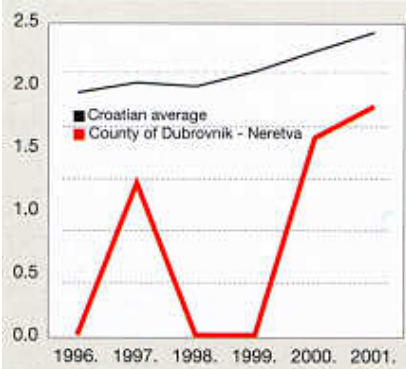
Only Korčula Performs Above the National Average

In the last three years this county has been recording a rising trend.

It is hard to explain the low value creation efficiency of Dubrovnik's economy. Dubrovnik creates the same amount of value added as Poreč, a town with scarce resources, which disposes of much less Capital Employed and intellectual Capital. In this county the town of Korčula is to be highlighted as a positive example, as it enjoys one of the high-

est efficiency levels among many tourist resorts. The town of Korčula is the only one in the county which has surpassed the Croatian average by performing (2,9), while in the city of Dubrovnik the index is only (1,7). Another interesting feature of this county is the fact that in 2000 this county, along with the Istria county, had the greatest decrease in the share of crafts and trades in total value added: from 12,13% to 7,27%.

The leading companies in this county are:	
Combis	6,98
Jambo, Metković	5,36
Mediator, Mokošica	3,47
Atlanska plovdba	3,04



County of Dubrovnik - Neretva	VA	VAIC	County of Dubrovnik - Neretva	VA	VAIC
Dubrovnik	539.638.934	1,704	Dubrovačko primorje	6.881.146	2,573
Konavle	136.692.093	2,316	Mljet	4.472.457	1,401
Ploče	126.468.339	1,801	Lumbarda	2.958.472	1,437
Metković	105.627.833	1,675	Lastovo	2.590.090	1,608
Blato	83.066.643	2,290	Smokvica	1.632.897	0,000
Korčula	79.254.488	2,920	Kula Norinska	1.390.441	2,163
Vela Luka	30.081.330	0,000	Trpanj	1.225.650	2,056
Župa dubrovačka	28.772.654	1,350	Janjina	594.705	1,506
Opuzen	22.990.947	1,746	Zazeblje	115.375	2,105
Orebič	22.827.374	1,966	Pojezerje	22.277	0,000
Ston	7.182.609	1,764	Slivno	15.835	0,000
Total:				1.205.502.589	1,828

■ COUNTY OF BJELOVAR-BILOGORA

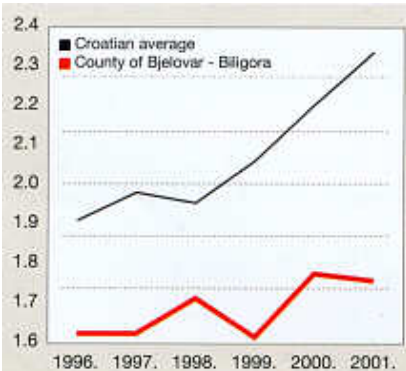


Small Towns More Efficient than Larger Ones

The value creation efficiency of this county is way below the Croatian average. Moreover, the gap between the average and this county's performance is continuously increasing, which is why this county is positioned at the bottom of the national ranking. Among the leading towns there is not a single one performing even close to Croatian average. Daruvar has coefficient 2,1.

Bjelovar 1,9, Garešnica 1,8 while Čazma only 1,2. Strangely enough, efficiency is slightly higher only in small towns like Sirač and Rovišće (2,7). The most efficient economy in the county is the one of Kapela (3,5). The share of crafts and trades in total value creation is relatively high, 9%, with the smallest decrease of all Croatian counties, from 9,24 to 9%.

Only bright spots in the county are	
Pevec	5,82
Elektrometal	2,17



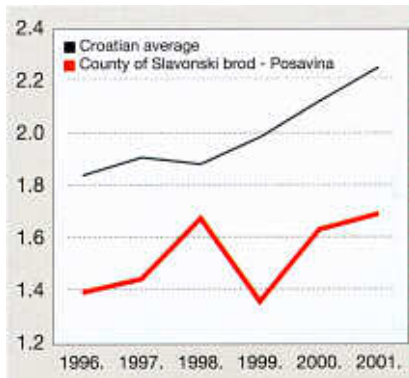
County of Bjelovar - Bilogora	VA	VAIC	County of Bjelovar - Bilogora	VA	VAIC
Bjelovar	404.786.491	1,902	Velika Pisanica	3.571.441	2,438
Garešnica	137.676.888	1,853	Rovišće	3.531.736	2,705
Daruvar	128.354.862	2,129	Veliki Grdevac	3.126.427	2,308
Čazma	88.672.230	1,210	Stefanje	2.877.708	2,209
Sirač	32.095.916	2,695	Dežanovac	2.646.620	1,193
Grubišno Polje	31.669.762	0,000	Velika Trnovitica	1.625.658	2,030
Veliko Trojstvo	9.640.192	2,001	Kapela	1.550.095	3,493
Hercegovac	6.988.223	0,000	Zrinski Topolovac	599.229	1,755
Total:				874.779.391	1,782



■ COUNTY OF SLAVONSKI BROS-POSAVINA

Andrijevcı Three Times More Successful than Slavonki Brod

The bright spots and most successful companies are:	
Đuro Đaković, Termoeneg.	5,61
Postrojenja	
PAN, Papirna industrija	4,77
Oriolik	2,93



This county is another example of an economy which performed better a few years ago than it does today. After the tall in efficiency in 1999, there was a slight recovery, but the gap between the county and Croatian average still remains the same. The greatest problems are encountered in the economies of Slavonki Brod and Nova Gradiška: these towns create

most value added, but with efficiency below the national average. There is a considerable number of smaller towns in which economic performance surpasses the national average, such as Donji Andrijevcı, Garčin, Vrbje and Oriovac. In 2000 crafts and trades participated in total value added with 11%, compared to 1996 when its share was 13,61%.

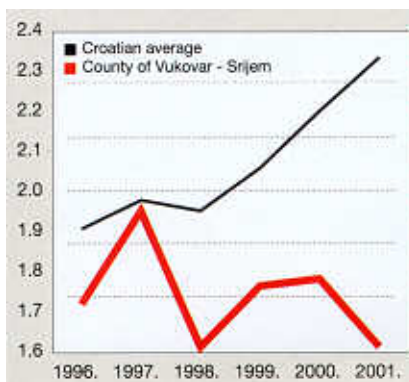
County of Sl. Brod - Posavina	VA	VAIC	County of Sl. Brod - Posavina	VA	VAIC
Slavonki Brod	509.554.216	1,581	Vrpolje	2.826.602	0,000
Nova Gradiška	103.691.228	1,544	Bukovlje	2.522.148	2,125
Oriovac	79.221.243	2,747	Vrbje	1.951.110	3,488
Donji Andrijevcı	57.374.009	4,448	Gornja vrba	1.825.013	3,018
Donji Opišavci	29.032.160	3,033	Klakar	1.638.322	2,800
Sibinj	10.291.016	2,319	Brodski Stupnik	1.576.313	2,562
Rešetari	9.934.914	1,773	Davor	1.552.075	1,964
Slavonki Samac	5.791.985	1,797	Gornji Bogičevci	1.173.300	0,000
Garčin	5.750.882	4,052	Bebrina	997.317	3,153
Cernik	4.150.026	1,316	StaraGradiška	594.355	0,000
Nova Kapela	3.105.538	1,973	Sikirevci	591.332	0,000
Total:				835.454.173	1,782

■ COUNTY OF VUKOVAR-SRIJEM

The Ravaged County Deserves the Help of the Entire Community



In spite of difficulties, there are several successful companies in Vinkovci.	
BOSO, Vinkovci	4,39
Sladorana, Županja	3,85
DILJ, Vinkovci	2,69
PIK, Vinkovci	2,24



It is hard to explain the trends recorded in this county: namely, in 1996 and 1997 it was creating value more efficiently than it does today, seven years after the end of the war in this region. Moreover, this problem should be one of the priorities of the Government as well.

If the town of Vinkovci did not create double VA compared to Vukovar with 11 tolerable efficiency of 2,1, the situation would be even worse. There out

of four leading companies have their headquarters in Vinkovci. Several towns are more efficient than the national average (2,4), and especially the regional average (1,6). These are: Lovas, Gunja, Nuštar, Borovo and Gradište. Unfortunately, even in these towns the value created is negligible and therefore irrelevant. The share of crafts and trades in total value creation in 2000 fell from 13,% to 11,24%, although it is still relatively high.

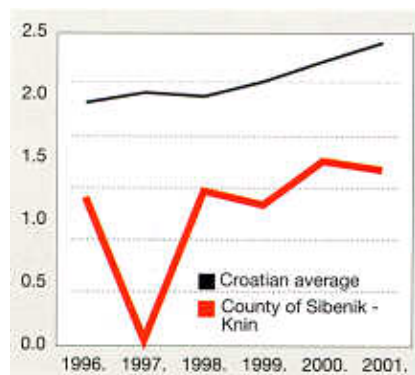
County of Vukovar - Srijem	VA	VAIC	County of Vukovar - Srijem	VA	VAIC
Vukovar	408.441.082	2,112	Jarmina	7.499.340	1,462
Ilok	196.093.017	1,344	Cerna	5.366.446	1,870
Županja	31.167.377	1,723	Borovo	4.741.926	1,628
Ivankovo	31.035.808	0,000	Nijemci	3.894.039	2,510
Gunja	15.196.063	1,946	Andrijaševci	2.286.241	0,000
Nuštar	8.454.406	2,617	Bošnjaci	1.514.969	2,115
Lovas	8.446.357	2,468	Gradište	1.425.408	2,166
Drenovci	8.041.140	2,731	Babina Greda	1.139.147	2,454
Total:				793.968.345	1,625



■ COUNTY OF ŠIBENIK-KNIN

Productivity of the County Twice as Low as in Other Counties

Like the County of Lika, this county is at the bottom of Croatian economy, both in terms of value added and value creation efficiency (1,4). Just for comparison, the total value added created in the County equals the value created in only one company in Istria - Tvornica duhana Rovinj (Tobacco Factory Rovinj)



with only 310 employees. Therefore it is amazing to find many places performing well above the national efficiency average. One of these is Kijevo, a totally ravaged and for a long time occupied town (3,9), Rogoznica (3,4), Ružić and Vodice. Some tourist resorts, such as Tisno, Pirovac, Skradin, surprising as it may sound, have much lower efficiency level than some of the places inland. Unfortunately, average value added of the Šibenik County is extremely low in comparison to the rest

of the country. Moreover, the town of Šibenik produces more than half of the value added in the whole county. Considering the current situation, it is no wonder that there is only one company, which could be considered successful: Jolly-JBS from Drniš, achieving remarkable efficiency (5,39), four times higher than the county average.

The share of crafts and trades in total value creation was 10,68% in 2000 but it keeps falling, just like in other Croatian counties (12,83% in 1997).

County of Šibenik - Knin	VA	VAIC	County of Šibenik - Knin	VA	VAIC
Šibenik	389.868.752	1,177	Promina	5.017.482	2,751
Vodice	60.113.617	2,807	Ružić	4.949.470	3,200
Drniš	41.389.776	1,833	Unešić	3.861.028	2,115
Tisno	17.296.533	2,175	Pirovac	3.589.910	1,901
Primošten	14.553.743	0,000	Skradin	2.423.953	1,867
Rogoznica	12.605.376	3,434	Kijevo	1.440.007	3,967
Knin	6.594.506	0,000	Kistanje	86.592	0,000
Total:			574.228.338	1,366	

■ COUNTY OF LIKA-SENJ



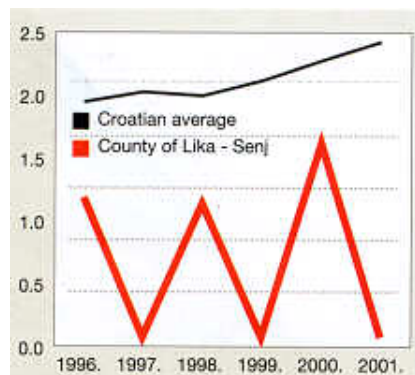
Lika's Economy the Least Efficient in Whole Croatia

In 2001 this was the only Croatian county that did not create enough value to cover the salaries of its employees.

The only company that has tolerable results in terms of value creation and value creation efficiency is the National Park Plitvička jezera (1,87). With regard to its exceptional resources, this figure

proves that even that company is actually performing below its possibilities.

Crafts and trades have an important role in the value creation of this county. In 1996 they created even 25% of total value in this county. However, similar to other counties, the share of this entrepreneurial group is declining: in 2000 it was 17,61%.



County of Lika - Senj	VA	VAIC	County of Lika - Senj	VA	VAIC
Plitvička Jezera	60.709.030	1,906	Karlobag	2.111.518	4,979
Otočac	40.502.398	1,223	Perušić	2.105.830	2,218
Senj	26.004.424	1,259	Donji Lapac	1.874.761	2,603
Novalja	13.387.419	2,986	Lovinac	909.443	2,982
Brinje	3.789.827	2,272	Udbina	-201.139	0,000
Vrhovine	2.232.398	1,638	Gospić	-23.727.354	0,000
Total:			129.698.555	0,000	

■ COUNTY OF PRIMORJE-GORSKI KOTAR

Highly Praised County only 10th by Efficiency



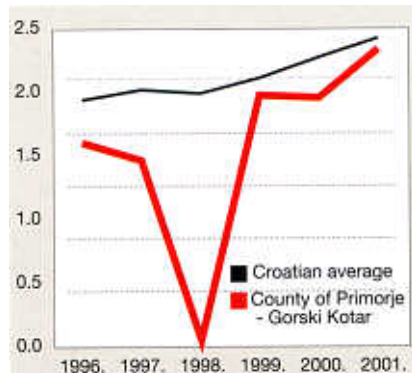
Although perceived as one of the best and most prosperous in the country, it is actually not that good. According to value creation (value added) it is right behind the County of Istria, but it is ranked 10th in terms of value creation efficiency. Between 1996 and 2001 overall efficiency (VA-ICTM) was stagnating, then falling, and finally rising to reach the national average. As it can be seen, the first six

towns create as much as 78% of total value added of this county. The problem is that only three of them are above the county efficiency average (2,05). The top towns according to value added, Rijeka and Opatija, perform below the county average and this is why the greatest amount of value is lost.

would have created 124 million kn more value. If Rijeka's economy performed at Croatian average, it would have created 681.016.485 la~ more value. This is the challenge and motivation for the County and Local authorities in order to improve value creation efficiency.

If Rijeka's economy had performed at the level of average efficiency, it

It is interesting that the most successful economies are not well known places: Skrad, Fužine, Čavle and Lokve.



County of Primorje - Gorski Kotar	VA	VAIC	County of Primorje - Gorski Kotar	VA	VAIC
Rijeka	2.741.075.971	1,976	čavle	36.300.864	3,225
Opatija	288.689.400	2,015	Novi Vinodolski	36.192.190	2,057
Matulji	136.955.830	2,742	Malinska - Dubašnica	35.066.881	2,185
Rab	119.085.063	2,802	Fužine	31.910.905	3,455
Mali Lošinj	114.068.455	1,662	Ravna Gora	28.987.710	2,055
Krk	113.527.702	2,436	Baška	25.592.575	2,826
Viškovo	96.513.091	2,752	Delnice	23.968.968	0,000
Čabar	95.930.346	2,815	Lovran	23.175.634	2,268
Kastav	90.626.861	2,908	Lokve	21.463.019	3,152
Crikvenica	86.375.609	1,680	Vrbovsko	20.122.036	0,000
Omišalj	54.094.450	2,391	Kostrena	18.029.280	2,748
Total:			4.509.510.964	2,285	

■ COUNTY OF VARAŽDIN

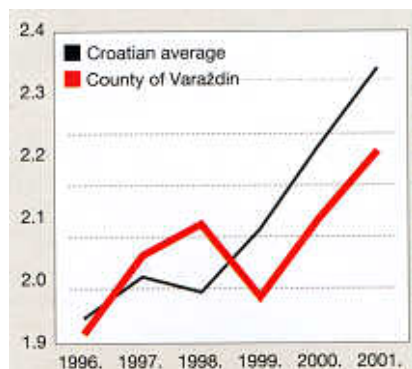
Value Creation Efficiency Below National Average



Most efficient	
Trgonom, Novi Marof	12,63
Koka	7,54
Neckermann	6,81
Magma, Varaždin	4,52
Vindija	3,91
Termika	3,47
TP Varaždin	3,44
Medifarm-Velebit	3,37
Termoplín	3,01

In 1996 this county was slightly below the national efficiency average, then for a short time above it, but since 1999 efficiency of this county has constantly been below the average, although it is rising steadily. Although investment in Human Capital was slightly higher than the national average, value creation increased at much slower pace.

Considering the fact that Varaždin creates 68% of the county's total value added, it has considerable influence on the overall regional efficiency. If this county succeeded in raising its efficiency to the level of Croatian average, it would create almost 160 million kn more value. That should motivate both the County and City authorities.



County of Varaždin	VA	VAIC	County of Varaždin	VA	VAIC
Varaždin	1.596.822.017	2,269	Vidovec	12.368.185	1,784
Ivanec	178.889.476	2,060	Ljubešćica	11.690.976	2,362
Ludbreg	142.239.523	1,994	Sračinec	9.687.146	2,672
Novi Marof	135.994.314	2,635	Varaždinske Toplice	9.491.287	3,044
Lepoglava	47.764.815	2,373	Sveti Ilija	7.478.900	3,862
Donji Martijanec	35.986.198	3,206	Breznica	6.914.837	2,268
Trnovec Bartolovec	33.540.935	3,237	Bednja	5.640.098	0,000
Petrijanec	27.948.317	2,921	Sveti Đurd	5.085.990	2,926
Maruševac	22.003.422	3,153	Cestica	5.064.277	1,706
Gornji Knežinec	17.384.786	2,177	Vinica	4.402.693	2,337
Mali Bukovac	14.931.000	3,009	Jalžabet	4.318.189	1,885
Total:			2.345.242.151	2,278	

