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The Financial Operations of Local Utility Companies in Croatia

The objective of this paper is to present the financial operations of the local government-owned utility firms in Croatia and to draw attention to the problems of liquidity and high liabilities in some counties, problems that are capable of bringing about a rise in the prices of local public services. This preliminary analysis is based on data from the financial reports (profit and loss accounts and balance sheets) of the utility firms that in 2008 and 2009 were published by the Financial Agency. Population estimates were drawn from figures of the Croatian Bureau of Statistics. It has been assumed that the utility firms have presented the data in the financial reports truthfully.¹

1. Introduction

One hundred and sixty seven firms majority-owned by local government units operate in Croatia, providing services in the area of water supply, retail markets,

transportation, waste collection and management, cemetery services and environmental conservation. On the whole they are organised as joint stock companies and they are liable to pay corporate income tax. Only the city of Zagreb has pulled all its companies together into a "holding". Companies may be majority owned by a number of local units (mainly cities). The financial operations of local publicly owned utility firms is often outside of the purview of public politics for they do not undergo the same system of supervision and control as the budgets of local units that are regularly sent down to the local representative bodies for debate. It is the same with the way in which the prices of local public services are set; within the year they are subject to formal debate at the assemblies of the companies, but are less analysed in the local representative bodies. The paper analyses the operations of utility firms at county level. On the basis of selected financial indicators, the firms with the best and with the worst indicators of financial operations are ascertained. The selected financial indicators are: debt to equity ratio, coefficient of indebtedness, coefficients of current and quick liquidity ratios, daily sales outstanding (DSO) ratio, days payable out-

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¹ The authors would like to thank Goran Luburić for help in making the utility companies database.

standing (DPO) ratio, profit and loss per capita and ratio of earnings to liabilities. Amount of revenue and financial performance are analysed in more detail, as are obligations (total, for loans and securities and to suppliers) per capita. The objective of the exercise is to determine whether the inhabitants of the counties are exposed, because of the poor financial operations of the firms, to possible public service price hikes. The analysis covered a sample of 159 companies that submitted financial reports for 2008 and 2009. Some of the utility firms from the following counties did not submit reports to the Financial Agency: Splitsko-dalmatinska, Dubrovačko-neretvanska, Varaždinska and Šibensko-kninska.

2. Financial operations of utility companies

Total revenues and expenditures of the utility firms in 2008 came to 9.5 billion kuna. The utility firms on the whole work at the break-even level. In 2009, there was a loss in the entire utility sector of 13 million kuna. In 2008 and 2009 the Zagrebački Holding (ZGH) made a profit of about 3 million kuna, whereas the other 159 firms registered a deficit of 3 million in 2008 and about 13 million in 2009 (see table 1).

These aggregate figures, though, do not reveal the real financial positions of the firms.

Amount and structure of liabilities

Table 2 provides the outline amounts and structures of firms' liabilities; these might be debt servicing liabilities to commercial banks or on securities, debts to suppliers and other liabilities (for advances, associated enterprises, labour, taxes and contributions, bonuses and other unmentioned liabilities). For the sake of comprehensibility the total liabilities are ascertained at the national level, then the liabilities of ZGH, and then the liabilities of the other firms in the 20 counties.

Long term liabilities dominate, accounting for about 70% of all. In the companies not including ZGH, the maturity structure of the liabilities is adverse, for short term liabilities (up to a year) dominate (53%).

Most of the liabilities of the utility firms refer to loans and bonds, after which come supplier debts and other liabilities (see table 3). The debts of ZGH to suppliers have contributed most to the rise in total liabilities, for they have risen by 1.5 billion kuna in one year.

Total liabilities of utility firms rose from 12.3 to 13.7 billion kuna and considerably exceeded the total revenues achieved in firms in seven counties (see graph 12).

The structure of the biggest liability item, for loans and bonds, is relatively favourable: 90% of liabilities are long-term, on average, and 10% are short-term (see table 4).

Potential problems appear in the case of liabilities to suppliers (see table 5), which have risen considerably from 2.5 billion kuna in 2008 to about 3.9 billion in 2009. This is on the whole the result of the growth of short-term and long-term liabilities on the part of ZGH from 1.7 to 3.2 billion. In the case of other companies (not inc. ZGH) there are problems in the maturity structure of liabilities to suppliers.

The liabilities in 156 utility firms, not including ZGH, reduced from 790 million in 2008 to about 700 million in 2009. About 99% of these are short-term liabilities to suppliers; because of the low level of liquidity, these could easily be transmitted to the public via a service price hike. Some of the local utility firms will clearly have to reduce these liabilities by taking out long term loans from banks.

3. Indicators of indebtedness and liquidity of companies by county

In order to obtain a complete picture of the financial operations it is needful to analyse selected financial indicators of the indebtedness and liquidity of the utility firms.

Debt to equity ratio in companies (see graph 1) as indicator of assets structure is a criterion for the evaluation of the indebtedness of companies and should not exceed 1:1. This means that the total debt should not be more than the total equity of the firm (exceed 100% of the value of the equity). Debt to equity ratio ranged from 0.8% to 65% for all counties, except for ZGH, where not only is it far, far greater, but where it also shows a very worrying growth trend, from 149% in 2008 to 184% in 2009.

The disproportion in the debt to equity ratio in the case of ZGH shows that the Holding needs new borrowings to cover existing liabilities. If this is not possible, the ZGH might be able to shift the burden of the debt via public service price hikes onto the members of the public, the end users of the utility firms' services.

Coefficient of indebtedness (see graph 2) shows the ratio of total liabilities and total assets of the firms and shows which part of the firm's assets is financed by borrowing. The desirable value of the indebtedness ratio, less than 50%, would tend to indicate prudent borrowing. Coefficients of indebtedness in the period under observation

range from 8.7% to 46% and show that the local utility firms are not over-indebted. Poorer coefficients can be found in firms in the Koprivničko-križevačka, Dubrovačko-neretvanska, Zadarska and Osječko-baranjska counties and in the Zagrebački Holding.

Indicators of liquidity in the utility companies

In order to obtain an insight into possible problems of financing it is necessary to ascertain the liquidity of the local utility firms, using the current and quick liquidity ratios.

Coefficient of current liquidity (see graph 3) is the ratio of total current assets and total current liabilities, and the desirable value of this coefficient is that it be over 200%. Unfortunately, with the exception of the utility firms in Varaždinska County, the aggregate coefficients of current liquidity (current ratios) per county in 2009 do not exceed 200%. While in Bjelovarsko-bilogorska and in Splitsko-dalmatinska counties it was more than 200%, in 2009 the value reduced notably.

Coefficient of quick liquidity (see graph 4) is the ratio of total current assets less inventories to total current liabilities, and shows the part of the short term liabilities of a firm that can be financed from its most liquid assets. This coefficient ranged in the counties from 1.35% to 99.48% in 2008, and in 2009 on the whole decreased, indicating a considerable reduction of liquidity in the firms under review. Potential problems occur in utility firms in counties in which the quick ratio is lower than 10%. This group consist of the Koprivničko-križevačka, Zadarska, Međimurska, Osječko-baranjska, Dubrovačko-neretvanska and Vukovarsko-srijemska counties and the Zagrebački Holding.

Daily sales outstanding and Days Payable Outstanding

Daily sales outstanding (DSO) ratio (see graph 5) is calculated as the ratio of the amount of claims on buyers and revenue from sales which is divided by 360 (days). The DSO from purchasers² ranged from 73 to 327 days, while the average time in which liabilities³ were met (DPO) ranged from 67 to 574 days. The average cumulative DSO rose from 117 days in 2008 to 127 days in 2009.

Days Payable Outstanding (DPO) ratio (see graph 6) is calculated as the ratio of current liabilities and total expenditures which is divided by 360 (days). Thirty days

is a desirable time in which to meet liabilities in regular business operations. Extended periods for meeting liabilities indicate possible troubles in firm liquidity; the worst conditions are found in the Koprivničko-križevačka, Zadarska, Dubrovačko-neretvanska and Brodsko-posavska counties.

Average cumulative time for settling liabilities grew from 147 days in 2008 to 157 days in 2009.

The difference between DSO and DPO is 30 days in each of the years reviewed. The inevitable conclusion arises that local utility firms are becoming an illiquidity generator, because of which there is a danger of future price hikes for services, which the firms could rely upon as a resource in their struggle with illiquidity. This in particular refers to Zagrebački Holding, to the Koprivničko-križevačka, Dubrovačko-neretvanska, Brodsko-posavska and Splitsko-dalmatinska counties.

4. Indicators of per capita revenue and profit/loss of companies

The revenues of the utility firms rose over 2008 in six counties and in the city of Zagreb, and in one county they stayed at the same level (Šibensko-kninska). In thirteen counties revenues were reduced, in a range from 40% in Međimurska to 1% in Splitsko-dalmatinska County. The greatest per capita revenues (see graph 7) were recorded by firms in the city of Zagreb, and came to 5,717 kuna, then came Primorsko-goranska at 2,526 kuna and Istarska (Istria) at 2,289, Zadarska at 1,679 and Koprivničko-križevačka counties with about 1,500 kuna per capita. The lowest per capita revenues were found in the Bjelovarsko-bilogorska (578 kuna) and Brodsko-posavska counties (488 kuna).

The greatest per capita losses (see graph 8) were made by utility firms in Osječko-baranjska county (growing from 63 in 2008 to 301 kuna in 2009), after which came firms in Dubrovačko-neretvanska (89 kuna), Splitsko-dalmatinska (52), Brodsko-posavska (51) and Sisačko-moslavačka (48) counties. In 2009, firms in four counties made losses, in a range from 6 kuna per capita in Zadarska to 88 kuna per capita in Primorsko-goranska County. In 2009 too losses grew, so that 11 counties made a loss ranging from the smallest, of 2 kuna per capita, in Koprivničko-križevačka to the highest, 311 kuna, in Osječko-baranjska County.

These analyses only partially reveal possible problems in the operations of utility firms that could be transferred to the prices of public services. For this reason it is necessary to provide a more detailed analysis

² Concerns claims by companies from private and corporate entities for outstanding invoices for utility services.

³ On the whole outstanding due liabilities of companies to suppliers.

of the amount and structure of liabilities of local utility firms per county.

5. Per capita liabilities of companies of the counties and of the city of Zagreb

Total per capita liabilities of firms (see graph 9) rose by 1,988 kuna per capita (from 8,529 kuna in 2008 to 10,527 kuna in 2009). The most exposed to the growth in total liabilities of firms are the inhabitants of the city of Zagreb, in which liabilities rise about 2,000 kuna annually. In 12 counties, the per capita liabilities of firms has decreased, while in nine of them there has been a rise, from 6 kuna in Brodsko-posavska to 278 kuna in Osječko-baranjska County.

Things look a bit different if utility firms liabilities in loans and bonds per capita of the counties are observed (see graph 10). Every inhabitant of the city of Zagreb owes 6,469 kuna. There are somewhat lower liabilities in the Osječko-baranjska and Primorsko-goranska counties, in which each inhabitant owes more than 1,000 kuna. The lowest liabilities for utility firms debts are placed on the inhabitants of the Požeško-slavonska, Karlovačka, Varaždinska, Bjelovarsko-bilogorska and Brodsko-posavska counties (from 85 to 118 kuna per capita).

The annual rate of per capita loan liabilities of firms in the city of Zagreb and the Primorsko-goranska (by 130 kuna), the Osječko-baranjska (by 282 kuna) and Istarska (148 kuna) counties gives cause for concern. In several counties a reduction in the debt liabilities of firms is recorded, among them the firms in the Karlovačka, Splitsko-dalmatinska and Ličko-senjska counties standing out (from 132 to 84 kuna per capita).

The reasons for the possible rise in the prices of public services need to be sought in the outstanding liabilities of the utility firms to their suppliers (see graph 11). The greatest liabilities to suppliers are found in the city of Zagreb, where in just a single year they rose from 1,900 kuna per capita, coming in 2009 to over 4,000 kuna per capita. No such sudden growth has been recorded in any other county. Indeed, in sixteen counties, the utility firms reduced their liabilities to suppliers, the reductions ranging from 3 to 101 kuna per capita.

6. Are the revenues of the companies sufficient to cover their liabilities?

Inhabitants in six counties are exposed to potential growth in the prices of utility services, particularly residents of the city of Zagreb. The total liabilities of utility

firms in these counties exceed the amount of total revenues (see graph 12). In the utility firms of fifteen counties and in Zagreb Holding, total liabilities have risen, having fallen in those of only five. There is an unsatisfactory ratio of total liabilities to revenues in the Zagrebački Holding, and in firms in the Koprivničko-križevačka, Dubrovačko-neretvanska, Zadarska, Međimurska and Osječko-baranjska counties.

Ratio of revenue and liabilities in the form of loans and bonds (see graph 13) is particularly unfavourable in the Zagrebački Holding, in which liabilities from loans alone exceed the level of total revenue. This ratio is reasonably favourable in the utility firms in sixteen counties, at less than 50%. In the utility firms of the five other counties, the liabilities of the firms with respect to loans do not exceed the level of revenue made.

It is very desirable for the utility firms duly to meet their liabilities to suppliers so as not to create a chain of outstanding liabilities that is shunted over to the private sector. Utility firms reduced their liabilities to suppliers in 2009 (see graph 14). The problem is the high level of outstanding liabilities to suppliers of Zagrebački Holding, which constitute about 70% of its revenues. Adverse ratios are also to be seen in the utility firms in the Brodsko-posavska (33%) and Vukovarsko-srijemska (25%) counties.

7. Total indicators of financial operations – where citizens are winners or losers

The financial operations of the local utility firms can be used to gain an insight into possible price rises in utility services per county.

The estimates of financial positions on the basis of the selected indicators of utility firms per county reveal that the most successful firms are in the Varaždinska, Požeško-slavonska, Karlovačka, Bjelovarska-bilogorska and Zagrebačka counties. In the Varaždinska and Požeško-slavonska counties, one utility firm each was not covered by the analysis (see table 6).

In these counties, there is a small chance of rises in the prices of public services, because the operations and management of the finances of the utility firms have been sensible and of a high quality.

In a second group (see table 7) four counties' utility firms (Koprivničko-križevačka, Dubrovačko-neretvanska, Osječko-baranjska, Zadarska) and Holding in Zagreb city are characterised by indicators of very poor financial operations among the utility firms. In the-

se utility firms there is a greater likelihood of additional borrowing and a possible rise in the prices of utility charges. The adverse indicators in the Koprivničko-križevačka county, and the rise in the liabilities of the Osječko-baranjska county and of Zagrebački Holding give cause for particular concern.

8. Conclusion

In addition to the debts of central government managed by the government and the Finance Ministry, there are also the debts of the utility firms. Unfortunately, the financial operations of these firms have for a long time been beyond the reach of public policies and debates on the efficiency with which public services are provided. Thanks to the data available from the Financial Agency, for the first time ever, this paper has been able to analyse the financial operations of the utility firms.

Data about financial operations, particularly about the liquidity of local utility firms, show that some of the firms could well seek a way out in the near future in raising the prices of their services. Judging all in all, the prices of utilities could rise in five counties as a result of the financial crisis, high capital investment as well as possible imprudent management. This particularly applies to utility firms in the Koprivničko-križevačka, Dubrovačko-neretvanska, Osječko-baranjska and Zadariska counties, and in the Zagrebački Holding. Local utility firms will probably increase their calls for long-

term loans from commercial banks, in order to substitute them for the unfavourable structure of liabilities to suppliers. The reasons for the rise in utility firm's liabilities and the possible rise in prices of services should be sought in bad business decisions and in the short-term horizons of financial planning.

Praise is due to the prudent financial operations and management in the firms of five counties: Varaždinska, Karlovačka, Požeško-slavonska, Bjelovarsko-bilogorska and Zagrebačka counties. The inhabitants of these counties are not exposed to the risks inherent in large liabilities of utility firms and probably will not have to feel any burdens from the growth in the prices of utility charges.

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Table 1 Financial results of utility companies operations in 2008 and 2009 (in billion kuna)

Local companies	2008			2009		
	Revenue	Expenditure	Profit/loss	Revenue	Expenditure	Profit/loss
Total (159 of 167)	9.46	9.46	0	9.55	9.68	-0.13
Not inc. ZGH (158 of 168)	5.31	5.34	-0.03	5.03	5.18	-0.15
ZGH (1)	4.15	4.13	0.03	4.52	4.5	0.02

Source: FINA, 2010

Table 2 Maturity structure of liabilities of utility companies in 2008 and 2009 (in billion kuna and in %)

Liabilities	Total		ZGH excluded		ZGH	
	2008	2009	2008	2009	2008	2009
in bn kuna						
Long term	8.2	9.7	1.9	1.9	6.3	7.8
Short term	4.1	4.1	2.0	2.2	2.2	1.9
Total	12.3	13.7	3.9	4.1	8.4	9.6
In %						
Long term	66	70	48	46	74	81
Short term	34	30	52	54	26	19
Total	100	100	100	100	100	100

Source: FINA, 2010

Table 3 Total liabilities of utility companies in 2008 and 2009 (in billion kuna and %)

Liabilities	Total		ZGH excluded		ZGH	
	2008	2009	2008	2009	2008	2009
in bn kuna						
For loans and bonds	6.83	7.02	1.87	1.98	4.96	5.04
To suppliers	2.47	3.86	0.79	0.70	1.68	3.16
Other liabilities*	2.99	2.84	1.20	1.42	1.80	1.42
Total	12.30	13.72	3.86	4.10	8.44	9.62
In %						
For loans and bonds	56	51	48	48	59	52
To suppliers	20	28	20	17	20	33
Other liabilities	24	21	31	35	21	15
Total	100	100	100	100	100	100

* Other liabilities relate to advances, related enterprises, labour costs, taxes and contributions, bonuses and other unmentioned liabilities.

Source: FINA, 2010

Table 4 Liabilities for loans and bonds in terms of maturity in 2008 and 2009 (in billion kuna and in %)

Liabilities	Total		ZGH excluded		ZGH	
	2008	2009	2008	2009	2008	2009
in bn kuna						
Long-term	6.19	6.32	1.69	1.74	4.51	4.59
Short-term	0.64	0.70	0.18	0.25	0.46	0.45
Total	6.83	7.02	1.87	1.98	4.96	5.04
In %						
Long-term	91	90	90	88	91	91
Short-term	9	10	10	12	9	9
Total	100	100	100	100	100	100

Source: FINA, 2010

Table 5 Debt to suppliers in terms of maturity in 2008 and 2009 (in billion kuna)

Liabilities	Total		ZGH excluded		ZGH	
	2008	2009	2008	2009	2008	2009
in bn kuna						
Long-term	1.01	2.36	0.01	0.00	1.00	2.35
Short-term	1.46	1.50	0.78	0.69	0.68	0.81
Total	2.47	3.86	0.79	0.70	1.68	3.16
In %						
Long-term	41	61	1	1	60	74
Short-term	59	39	99	99	40	26
Total	100	100	100	100	100	100

Source: FINA, 2010

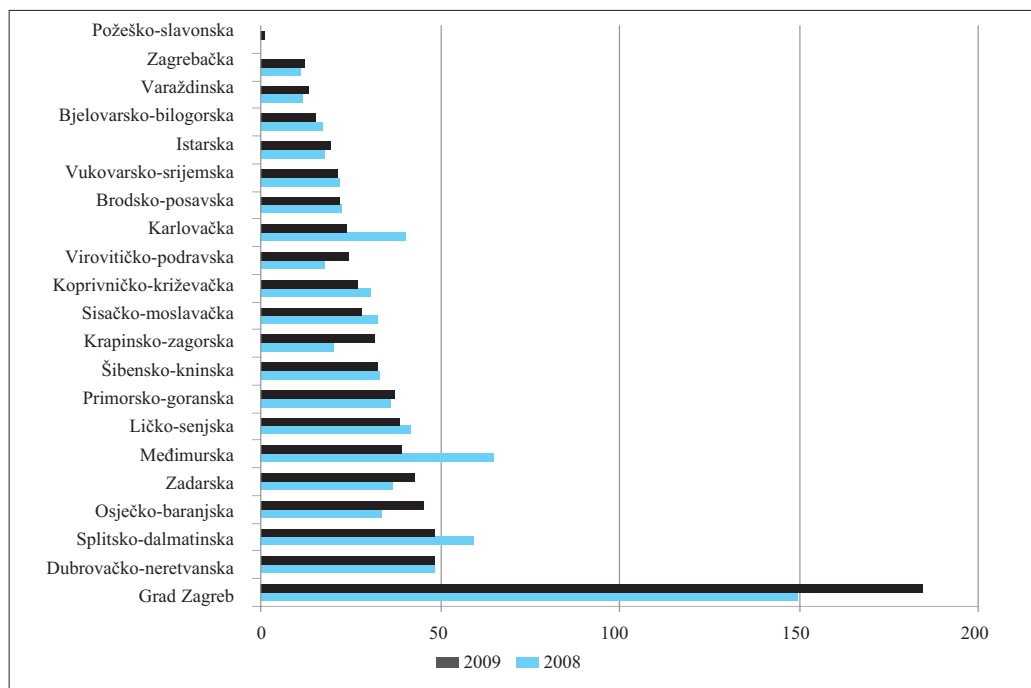
Table 6 Utility companies in the counties with the best financial indicators (2009)

Total evaluation	Debt / equity	Coefficient of indebtedness	Current ratio	Quick ratio	DSO	DPO	Loss / Profit per capita	Liabilities / revenue
Varaždinska	Požeško - slavonska	Varaždinska	Varaždinska	Karlovačka	Grad Zagreb	Varaždinska	Varaždinska	Požeško - slavonska
Požeško - slavonska	Zagrebačka	Požeško - slavonska	Bjelovarsko - bilogorska	Varaždinska	Karlovačka	Karlovačka	Grad Zagreb	Varaždinska
Karlovačka	Varaždinska	Karlovačka	Karlovačka	Požeško - slavonska	Požeško - slavonska	Bjelovarsko - bilogorska	Istarska	Karlovačka
Bjelovarsko - bilogorska	Bjelovarsko - bilogorska	Bjelovarsko - bilogorska	Virovitičko - podravska	Primorsko - goranska	Zagrebačka	Virovitičko - podravska	Primorsko - goranska	Zagrebačka
Zagrebačka	Istarska	Krapinsko - zagorska	Istarska	Sisačko - moslavačka	Koprivničko - križevačka	Krapinsko - zagorska	Krapinsko - zagorska	Virovitičko - podravska

Table 7 Utility companies in the counties with the weakest financial indicators (2009)

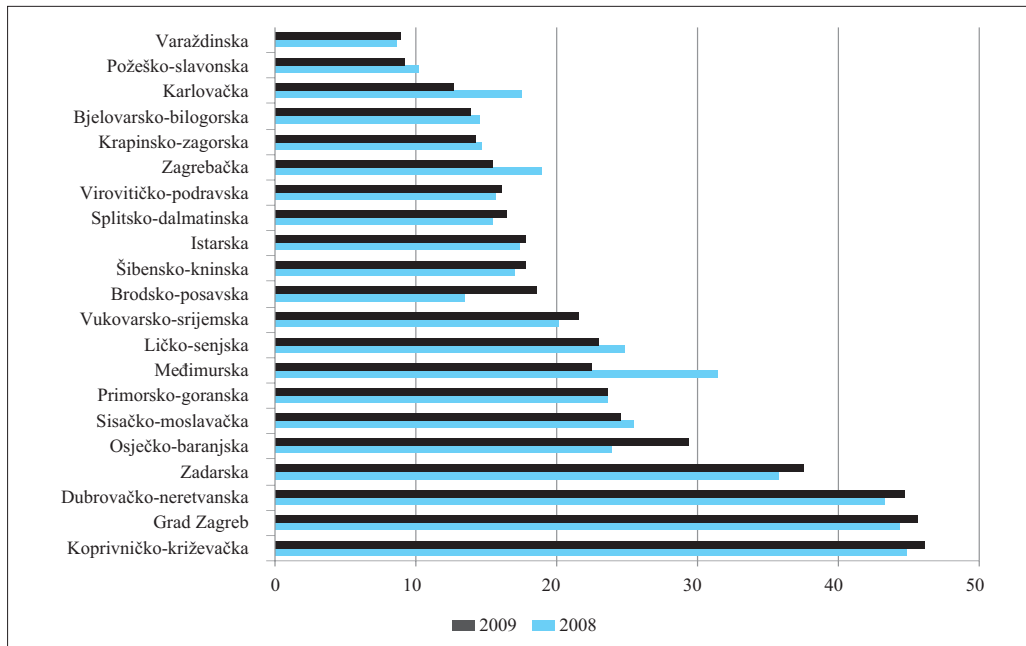
Total evaluation	Debt / equity	Coefficient of indebtedness	Current ratio	Quick ratio	DSO	DPO	Loss / Profit per capita	Liabilities / revenue
Koprivničko - križevačka	Grad Zagreb	Koprivničko - križevačka	Koprivničko - križevačka	Koprivničko - križevačka	Zadarska	Koprivničko - križevačka	Osječko - baranjska	Grad Zagreb
Dubrovačko - neretvanska	Dubrovačko - neretvanska	Grad Zagreb	Dubrovačko - neretvanska	Zadarska	Šibensko - kninska	Zadarska	Dubrovačko - neretvanska	Koprivničko - križevačka
Osječko - baranjska	Splitsko - dalmatinska	Dubrovačko - neretvanska	Zadarska	Međimurska	Osječko - baranjska	Dubrovačko - neretvanska	Brodsko - posavska	Dubrovačko - neretvanska
Zadarska	Osječko - baranjska	Zadarska	Brodsko - posavska	Osječko - baranjska	Ličko - senjska	Brodsko - posavska	Splitsko - dalmatinska	Zadarska
Grad Zagreb	Zadarska	Osječko - baranjska	Međimurska	Grad Zagreb	Vukovarsko - srijemska	Splitsko - dalmatinska	Sisačko - moslavačka	Međimurska

Graph 1 Debt to equity ratio in 2008 and 2009 (in %)



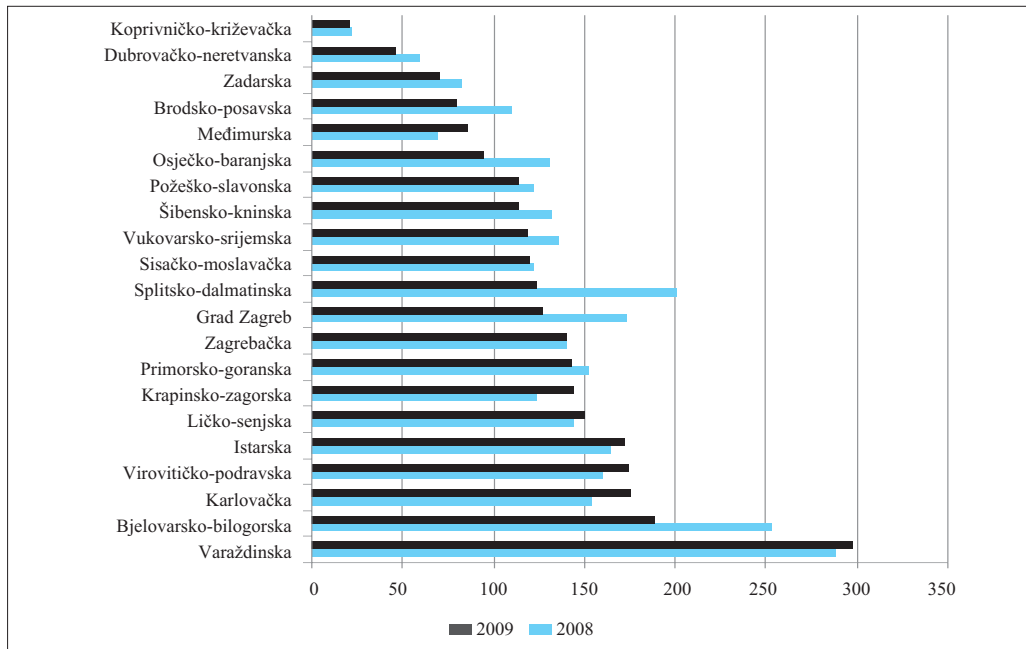
Source: FINA, 2010

Graph 2 Coefficients of indebtedness of utility companies in 2008 and 2009 (in %)



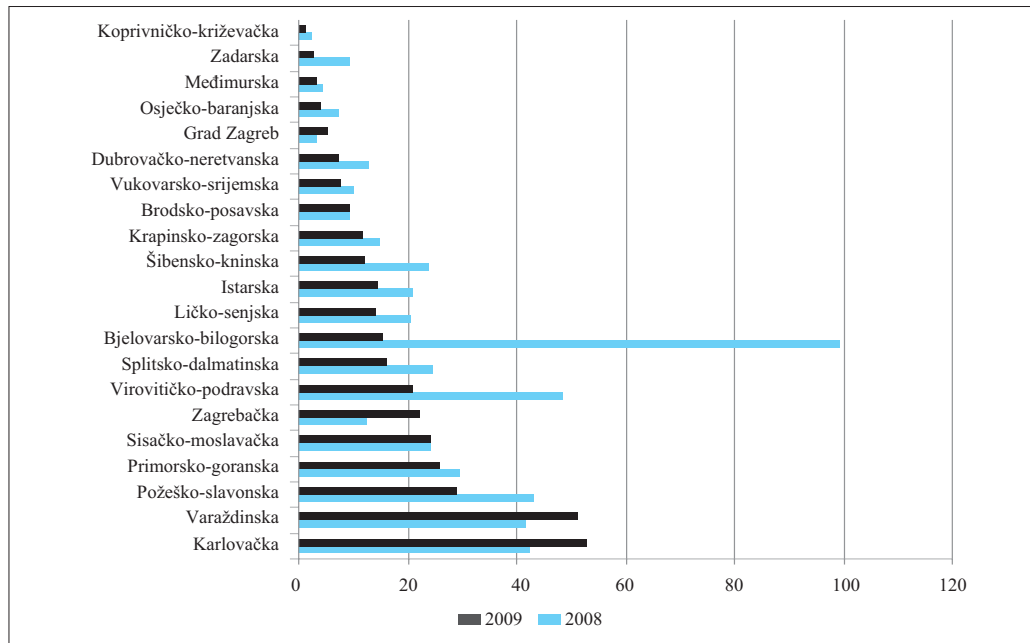
Source: FINA, 2010

Graph 3 Coefficient of current liquidity of utility companies in 2009 and 2009 (in %)



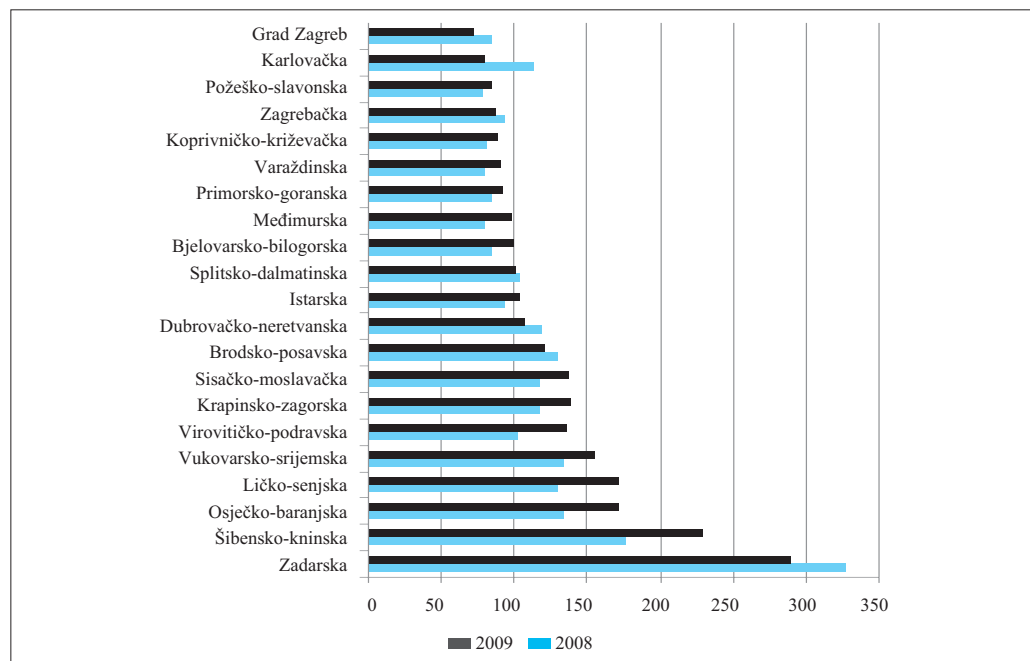
Source: FINA, 2010

Graph 4 Coefficient of quick liquidity in 2008 and 2009 (in %)



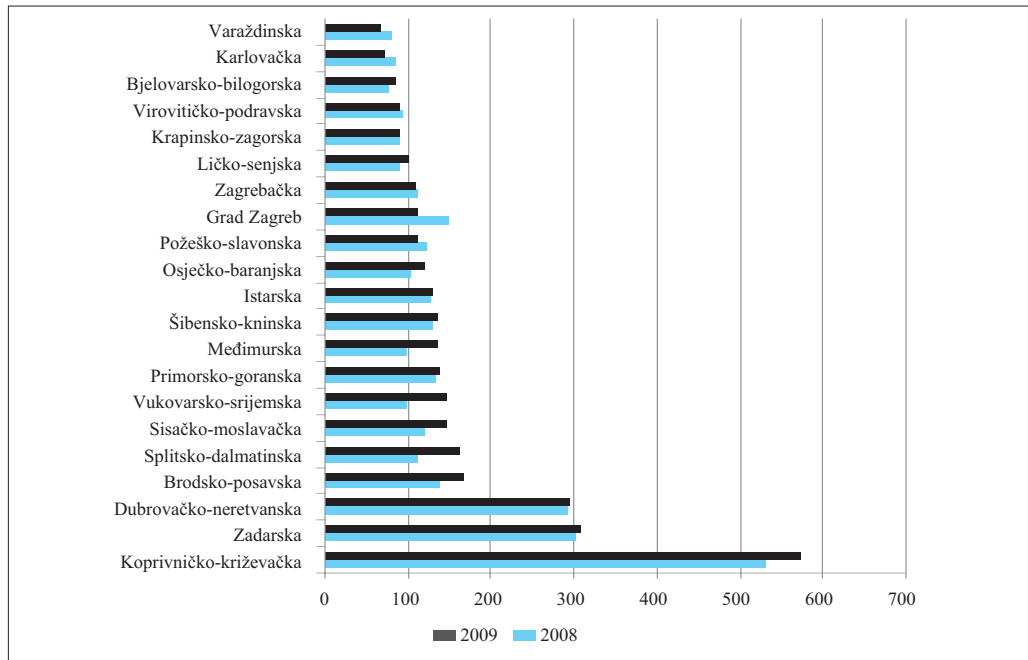
Source: FINA, 2010

Graph 5 Average daily sales outstanding of utility companies in 2008 and 2009 (in %)



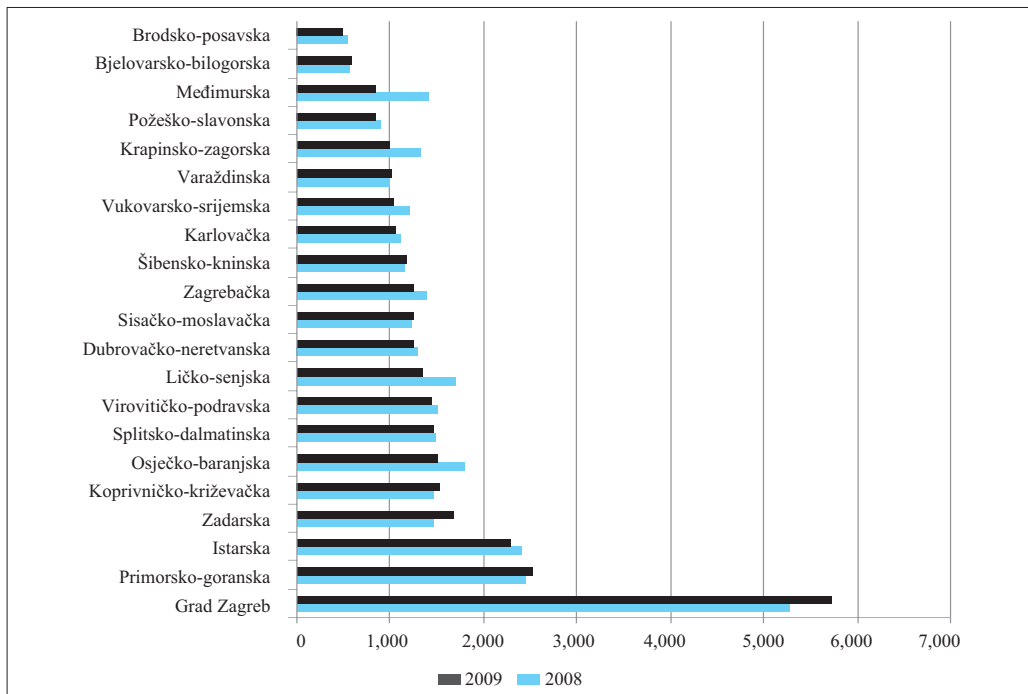
Source: FINA, 2010

Graph 6 Average days payable outstanding of utility companies in 2008 and 2009 (in %)



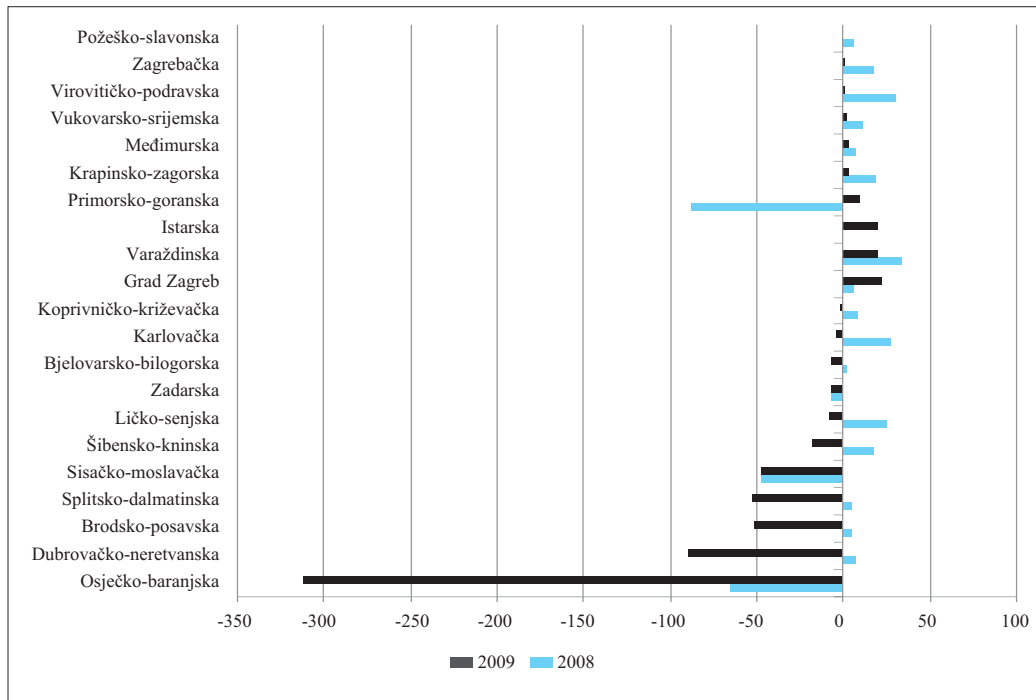
Source: FINA, 2010

Graph 7 Per capita revenue of utility companies in 2008 and 2009 (in kuna)



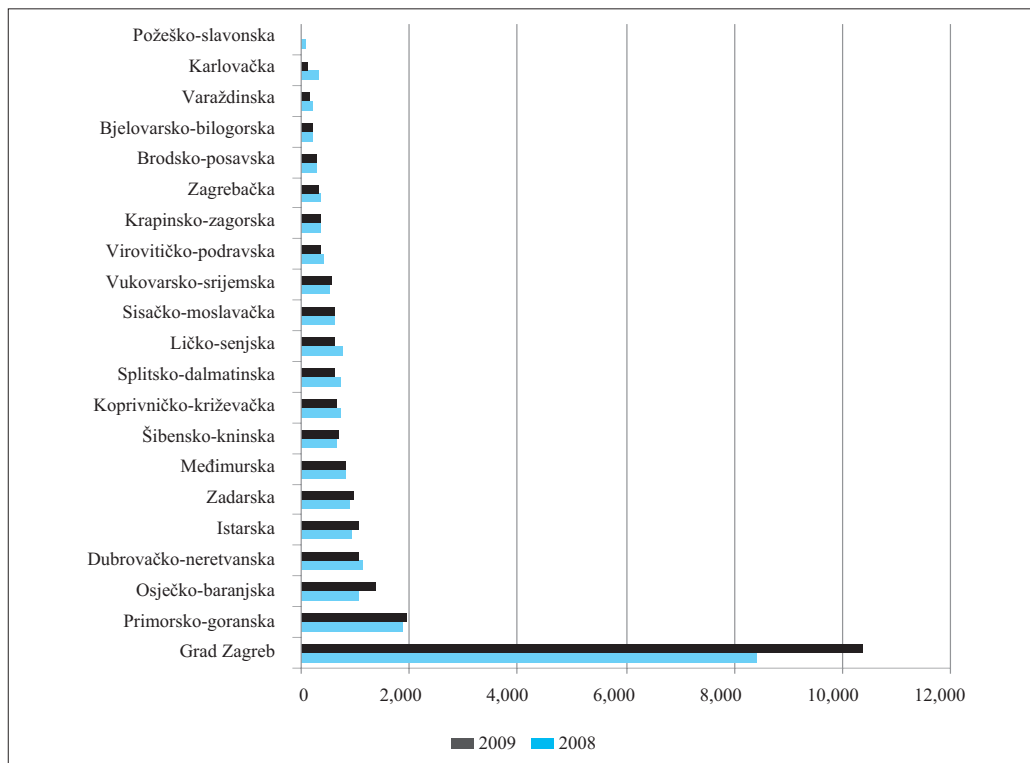
Source: FINA, 2010

Graph 8 Per capita losses/gains of utility companies in 2008 and 2009 (in kuna)



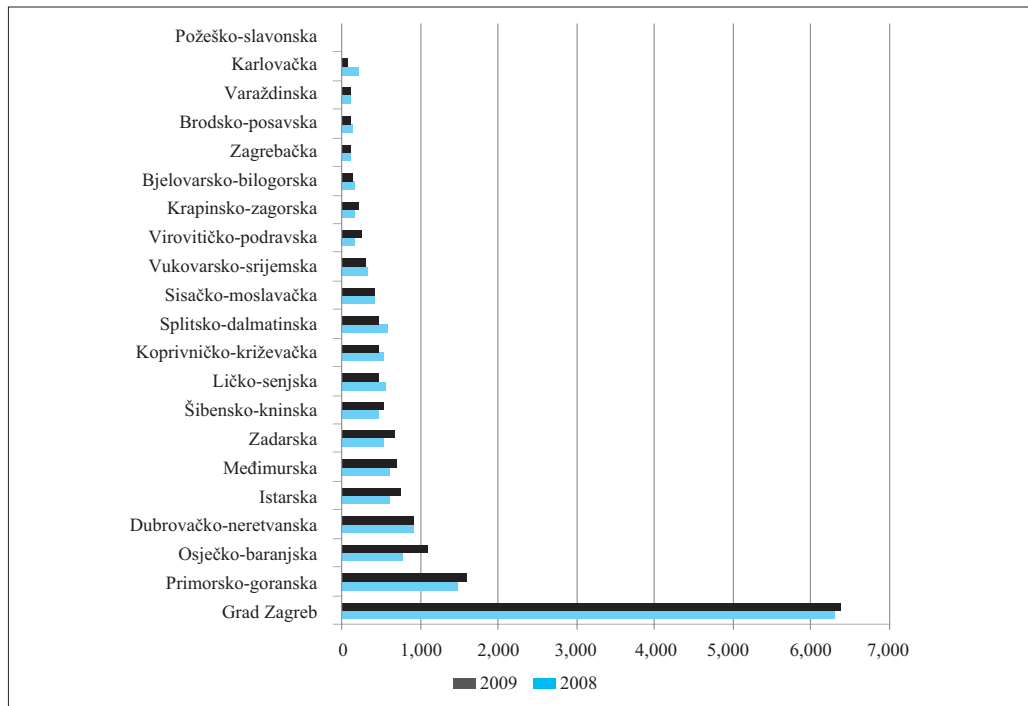
Source: FINA, 2010

Graph 9 Total per capita liabilities of utility companies in 2008 and 2009 (in kuna)



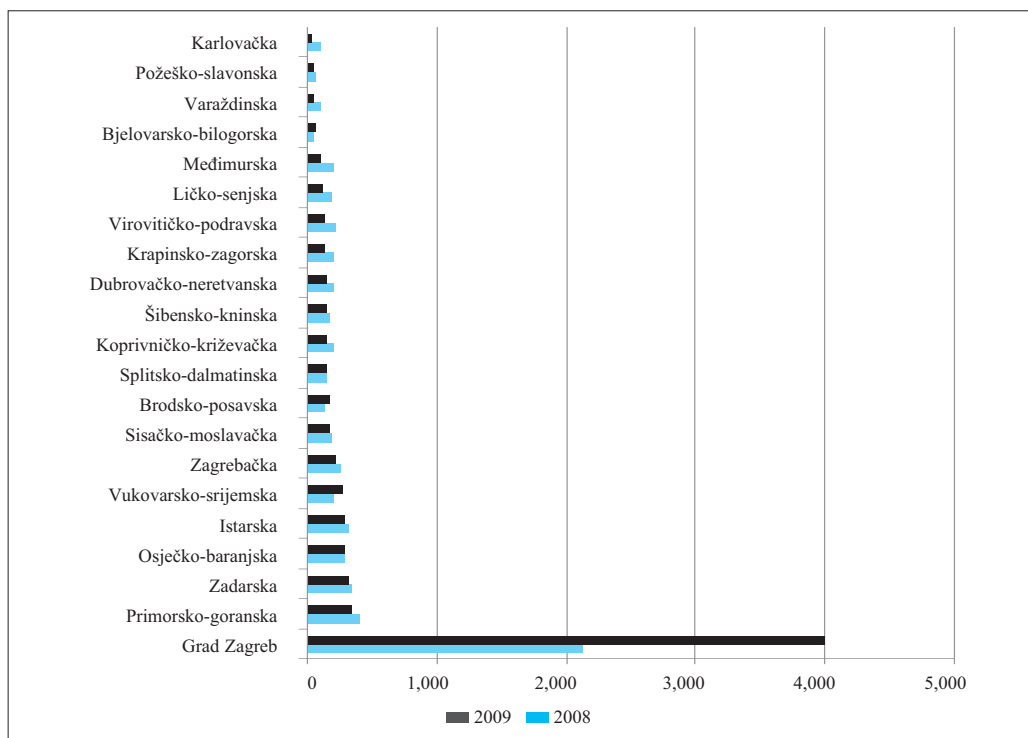
Source: FINA, 2010

Graph 10 Total per capita liabilities of utility companies in loans and bonds in 2008 and 2009 (in kuna)



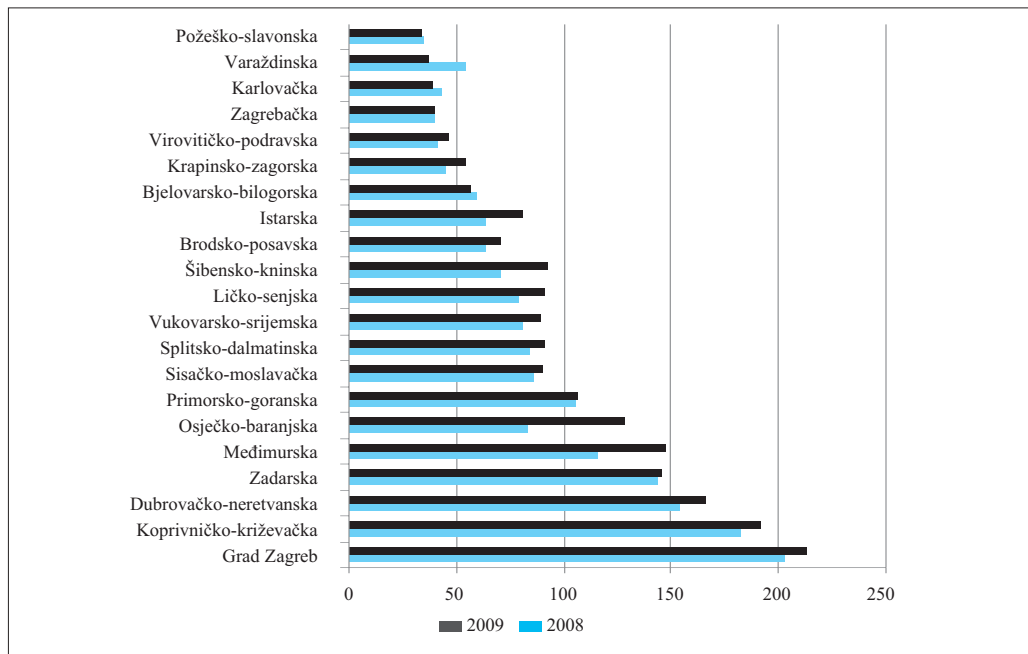
Source: FINA, 2010

Graph 11 Total per capita liabilities to suppliers of utility companies in 2008 and 2009 (in kuna)



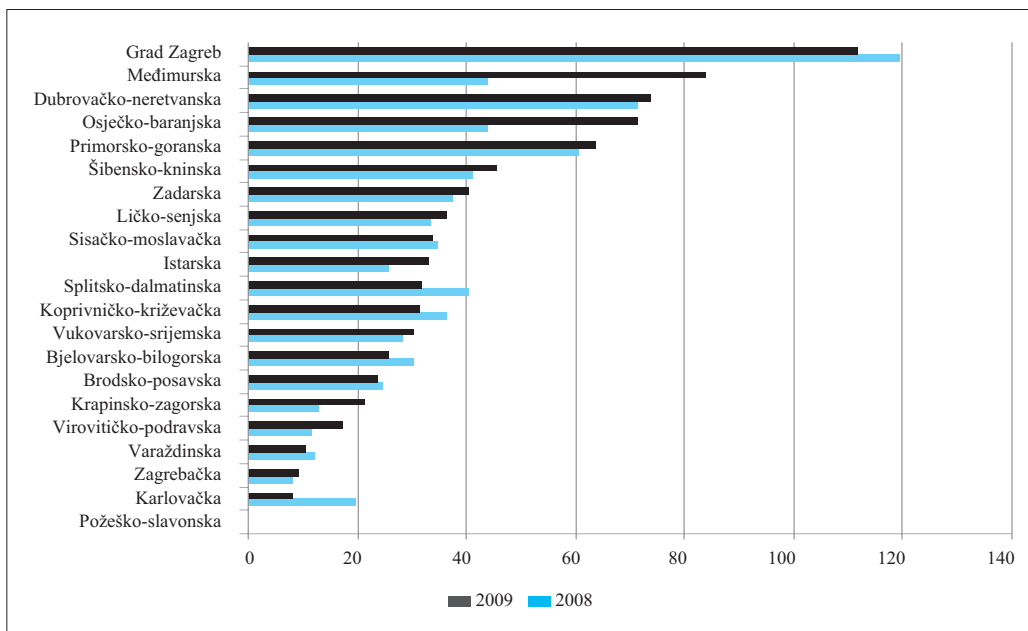
Source: FINA, 2010

Graph 12 Total liabilities as percentage of total revenues of utility companies in 2008 and 2009



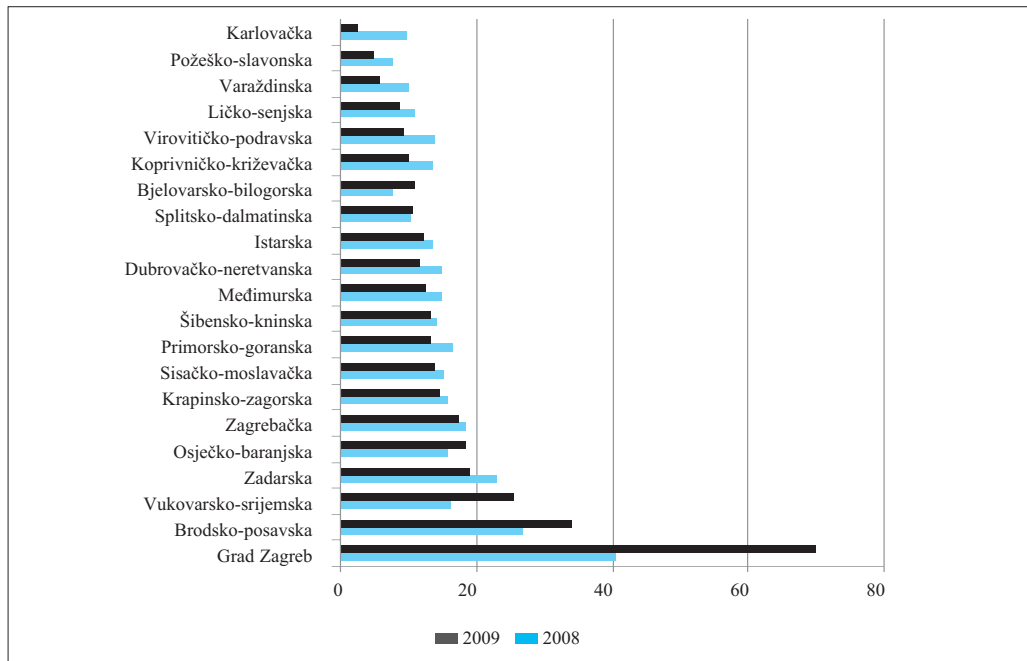
Source: FINA, 2010

Graph 13 Liabilities for loans and bonds as % of total utility companies revenues in 2008 and 2009



Source: FINA, 2010

Graph 14 Liabilities to suppliers as % of total revenues of utility companies in 2008 and 2009



Source: FINA, 2010

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