



Energy Taxation and Its Impact on Industry in the Czech Republic

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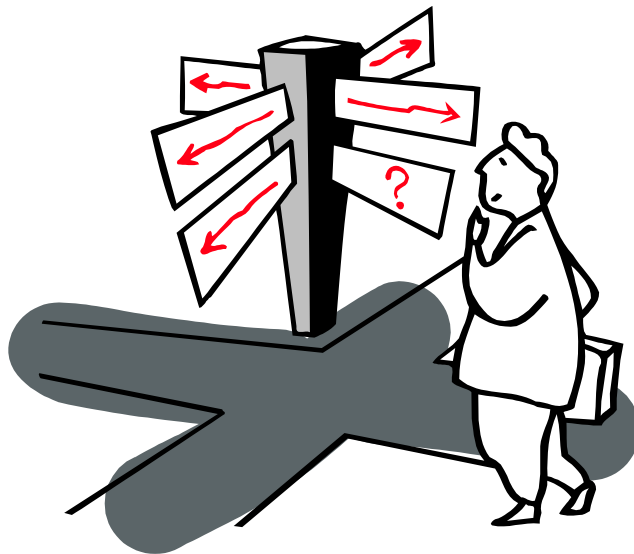


Schedule of Presentation

- ② Introduction
- ② Methodology
- ② Direct Impact on Expenditures
- ② Cross-sectoral analyze of indirect economic impact
- ② Conclusions



I. Introduction





Preparation of New Legislation

- ② CR is going to introduce new energy taxation, which entry into force from 1st January 2008.
- ② Currently, there are proposals of new legislation: act dealing with taxation of electricity, act dealing with taxation of solid fuels (brown coal, black coal and coke) and the last act dealing with taxation of natural gas.



Actual Situation in CR

- ② New legislation is after discussion in parliament and it is waiting for signature of president, so ecological taxation is hot topic in CR in these days.
- ② Simultaneously the pack of other tax legislation will entry into force (VAT, income taxation, etc.) as a part of governmental package of reforms.



Main Principles of New Legislation

- ④ New energy taxation is based on the directive 2003/96/EC, restructuring the Community framework for the taxation of energy products and electricity.
- ④ Support of RES and cogeneration
- ④ Support of ecological transport



Directive 2003/96/ES – tax rates

Minimal levels of taxation - electricity

Electricity	EUR na MWh	CZK na MWh
"business use"	0,5	14
"non-business use"	1,0	28



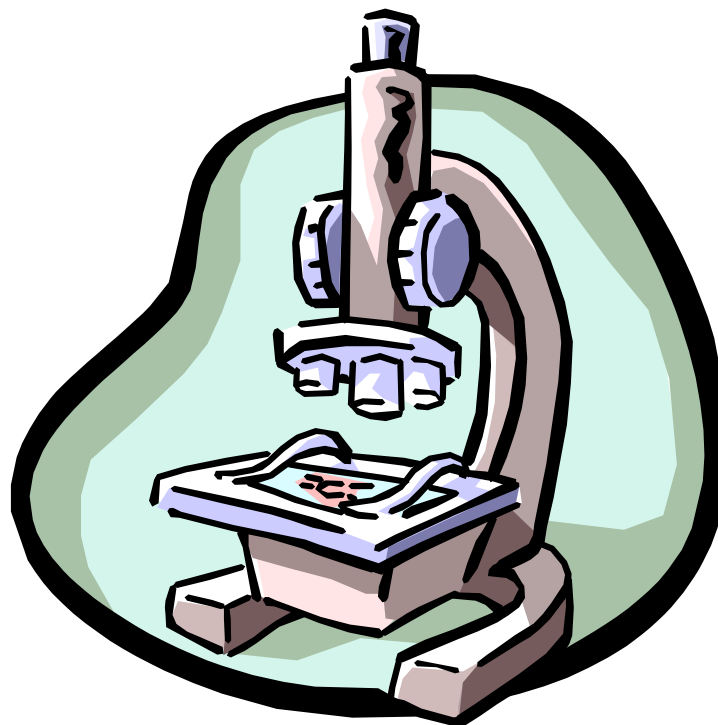
Directive 2003/96/ES – tax rates

Minimal level of taxation – solid fuels and natural gas for heating purposes

	EUR/GJ gross heating value	CZK/GJ gross heating value
Solid fuels		
"business use"	0,15	4,2
"non-business use"	0,3	8,5
Natural gas for heating purposes		
"business use"	0,15	4,2
"non-business use"	0,3	8,5



II. Methodology





Methodology

- ⊗ Tax rates – minimal tax rates for non business use
- ⊗ No exemptions
- ⊗ Short period
- ⊗ 11 basic sectors of NACE
- ⊗ Direct impact on expenditures
- ⊗ Cross-sectoral analyze of indirect economic impact



11 Basic Sectors of NACE

- ⊙ A+B = agriculture, hunting, forestry and fishing
- ⊙ C = mining and quarrying
- ⊙ D = manufacturing industry
- ⊙ E = electricity, gas and water supply
- ⊙ F = construction
- ⊙ G = wholesale and retail trade
- ⊙ H = hotels and restaurants
- ⊙ I = transport, storage and communication
- ⊙ J = financial intermediation
- ⊙ K = real estate, renting and business activities
- ⊙ L to Q = other activities



Cross-sectoral analyze of indirect impact

- ④ I-O table, Leontief matrix, Price model
- ④ There are considered 4 different variants of energy taxation:
 - ④ taxation of electricity
 - ④ taxation of solid fuels
 - ④ taxation of natural gas
 - ④ simultaneous taxation of electricity, solid fuels and natural gas



Cross-sectoral analyze of indirect impact

- ⊗ The I-O for CR and the simple price model was created with help of I-O methodology of Leontief
- ⊗ Than the input coefficients of added value will change, than corresponding price coefficients and finally there will be simulation of impacts on price change for all above mentioned variants and all of 11 sectors of NACE.

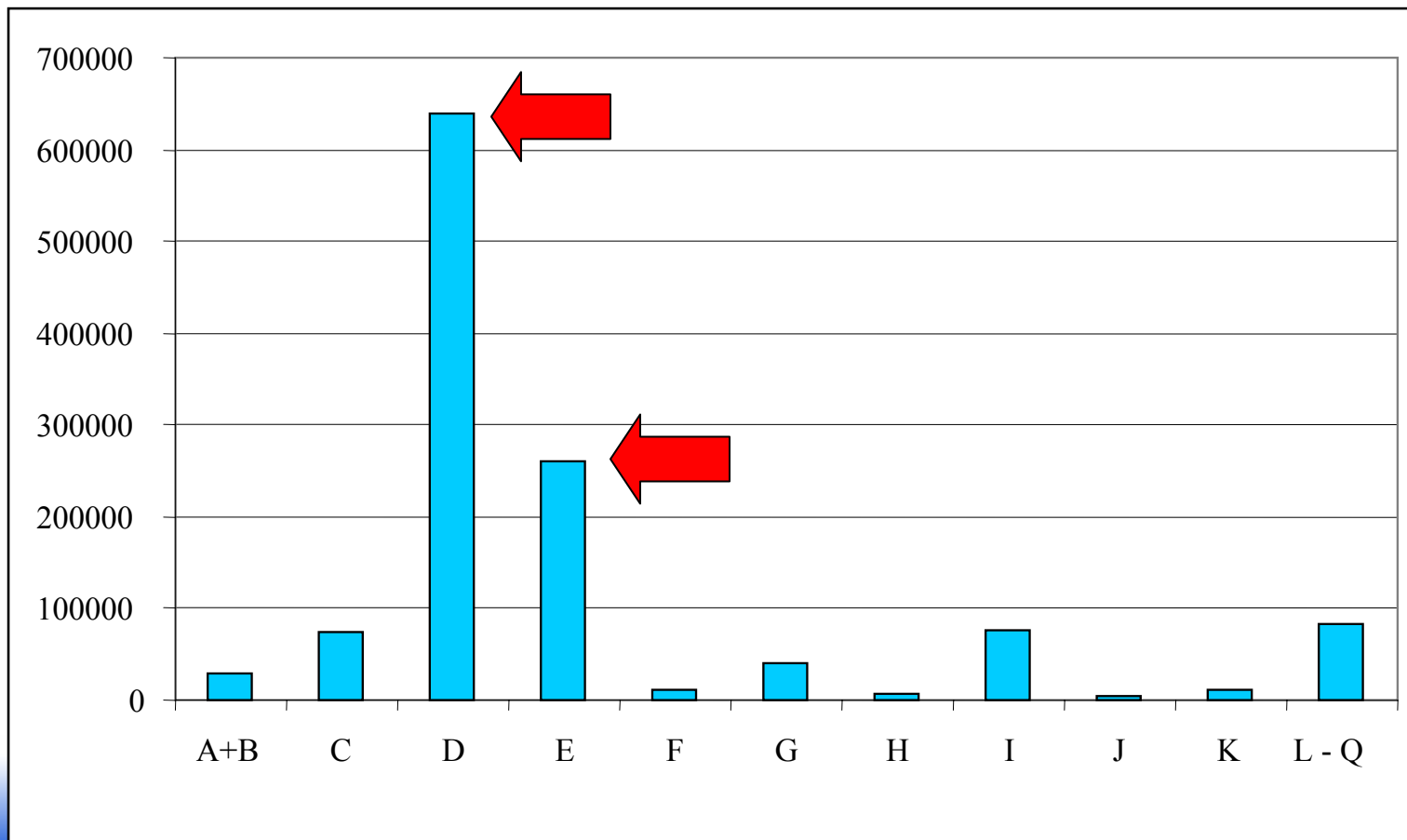


III. Direct Impact on Expenditures



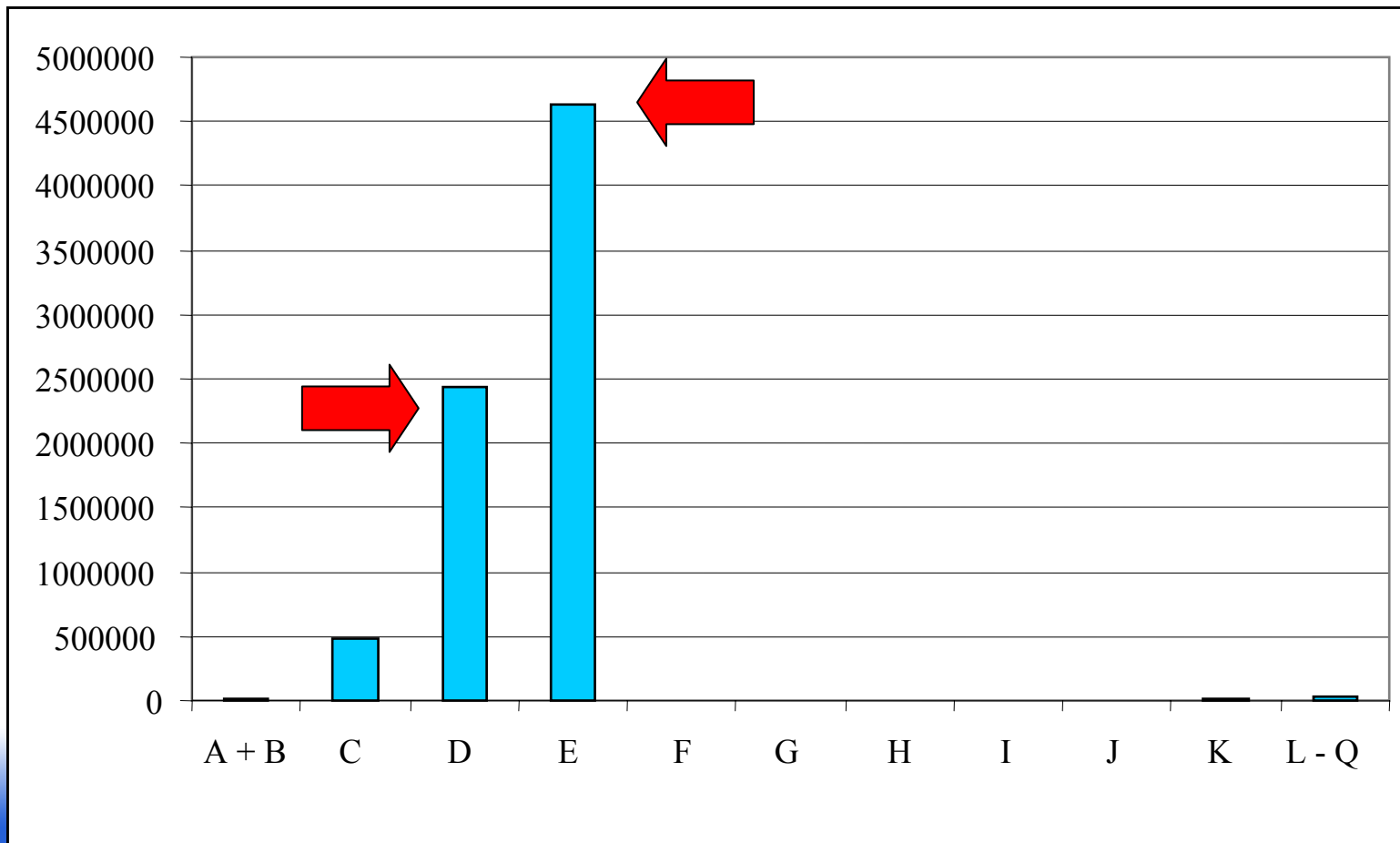


Increase in expenditures on electricity consumption (thousand CZK per year)



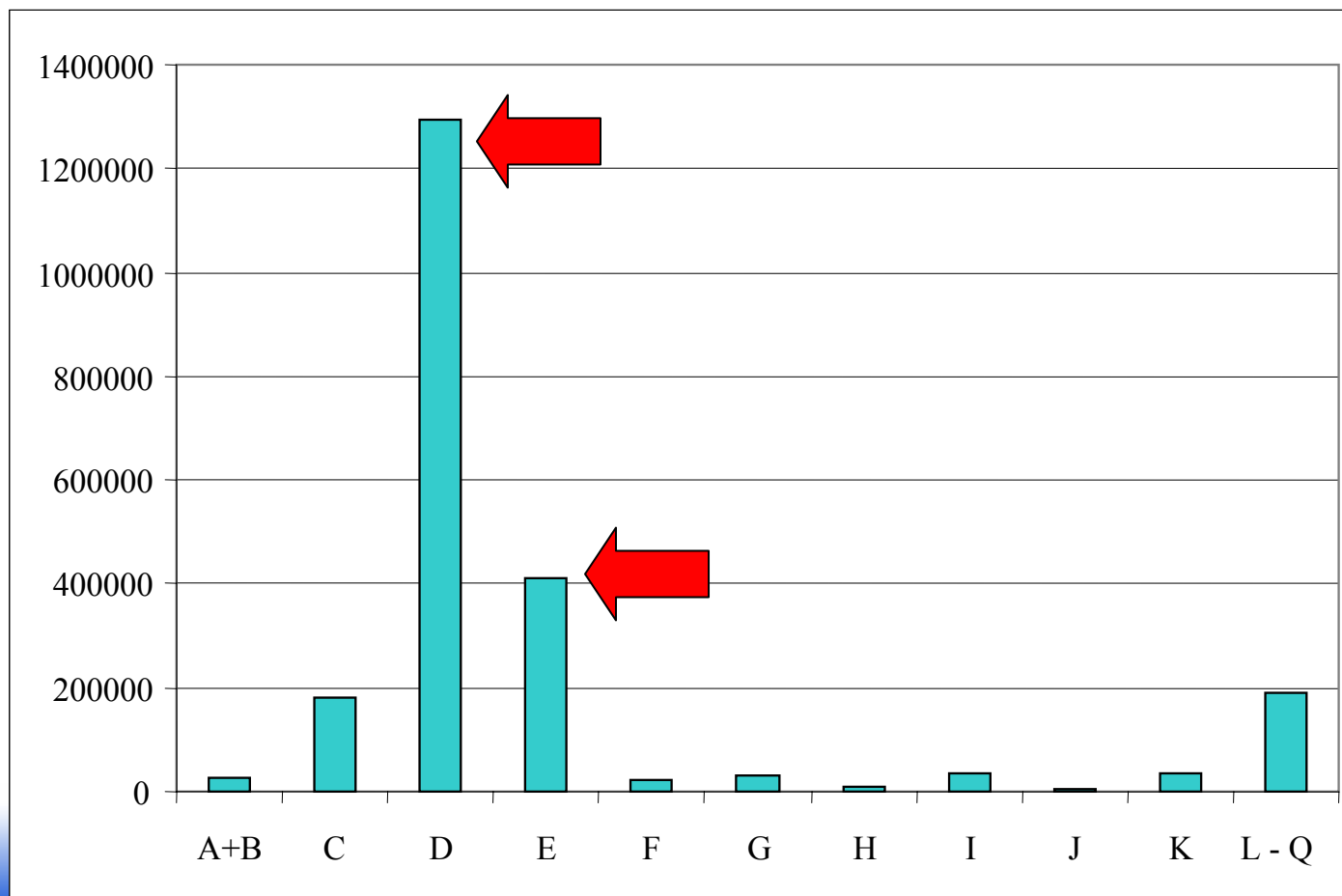


Increase in expenditures on solid fuels consumption (thousand CZK per year)





Increase in expenditures on natural gas consumption (thousand CZK per year)



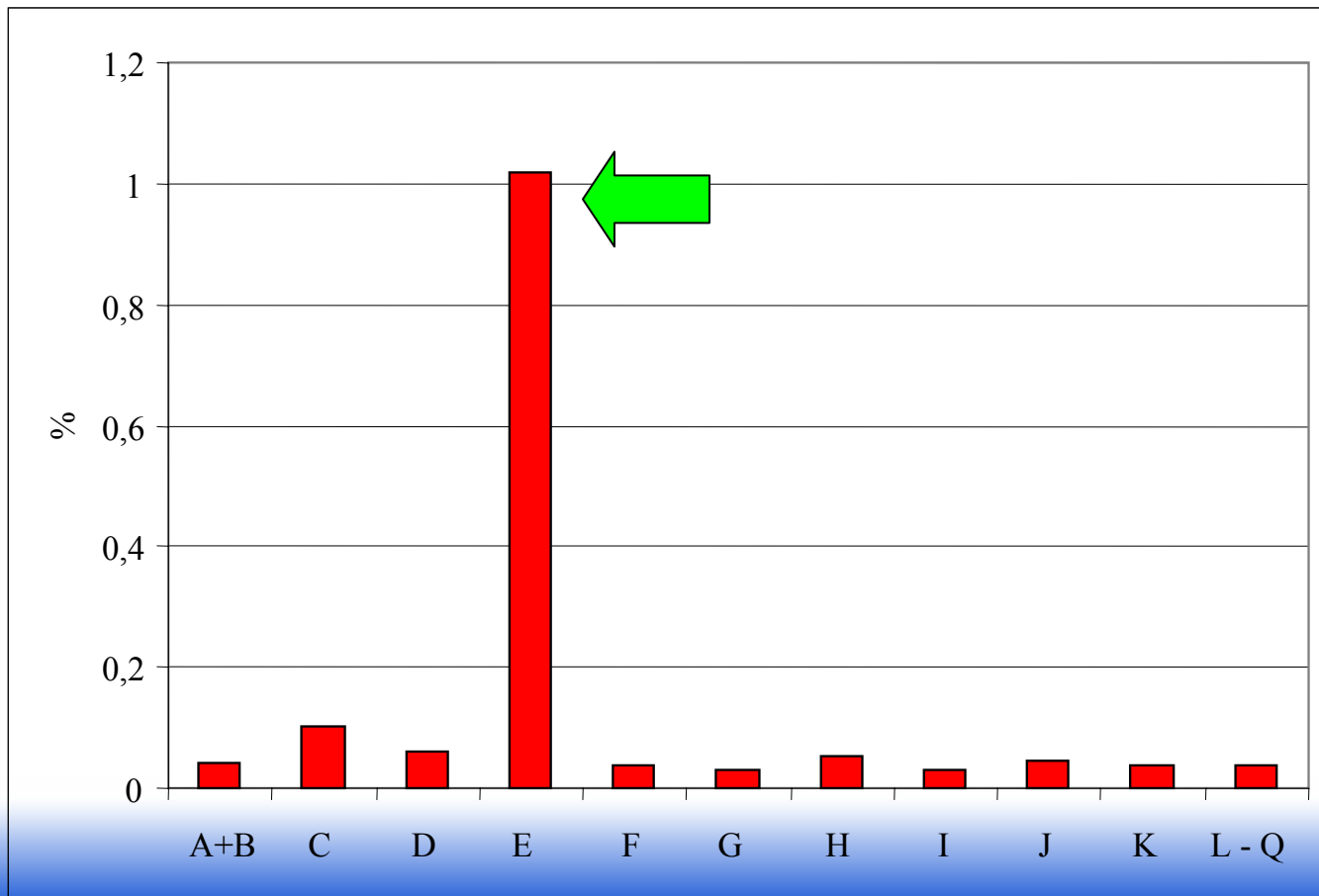


IV. Cross-sectoral analyze of indirect economic impact



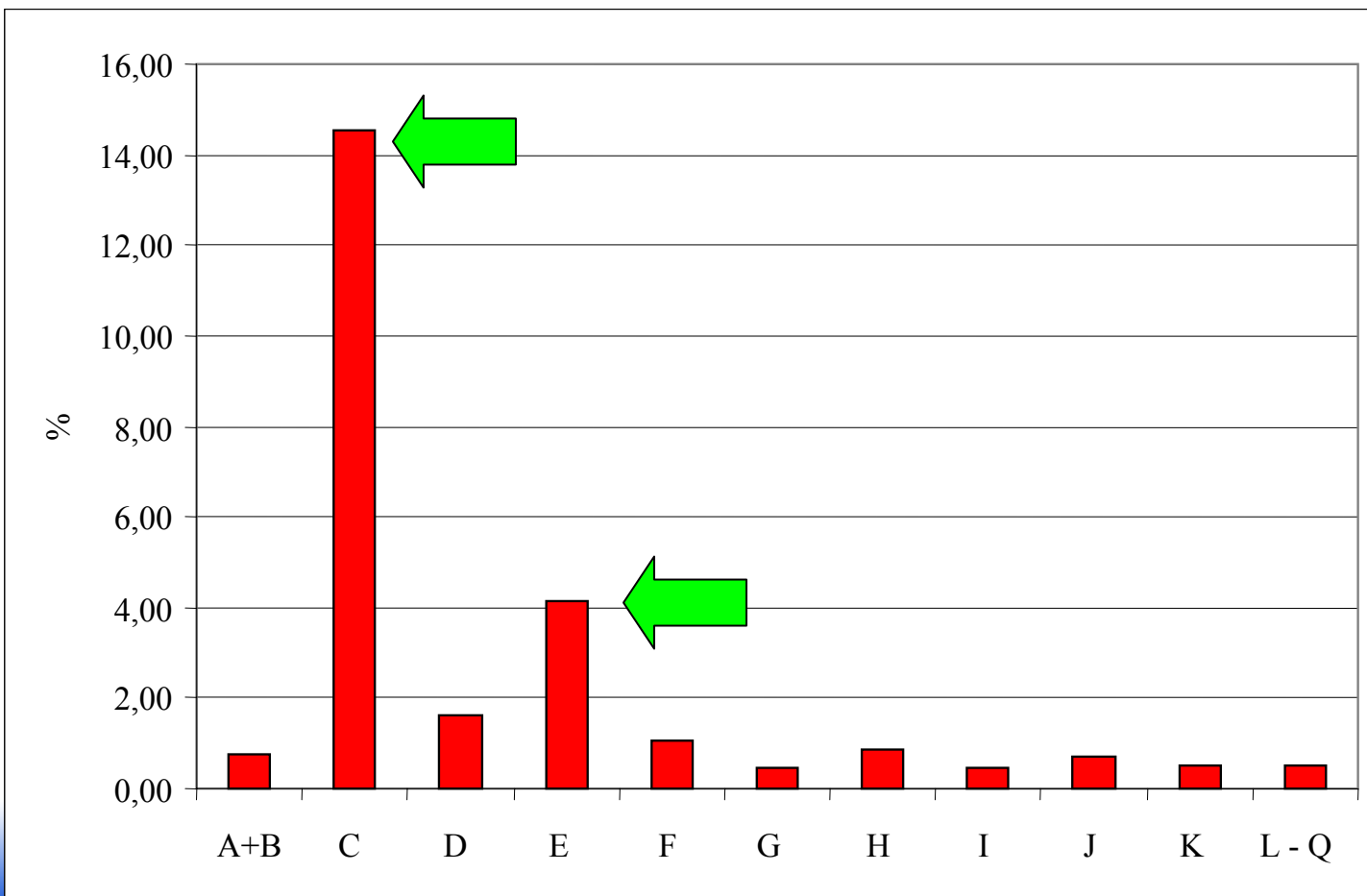


Price indexes after electricity taxation



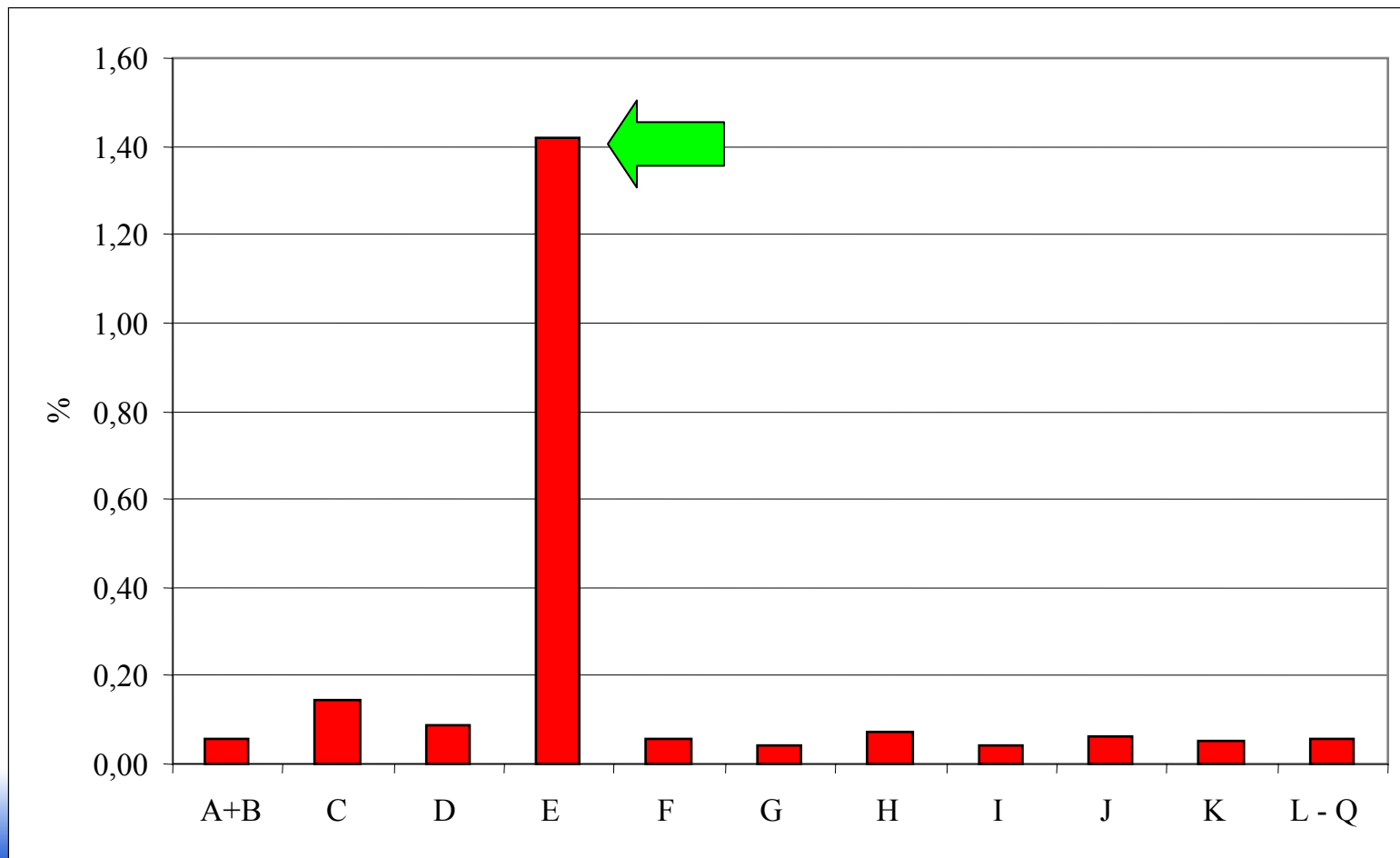


Price indexes after solid fuels taxation



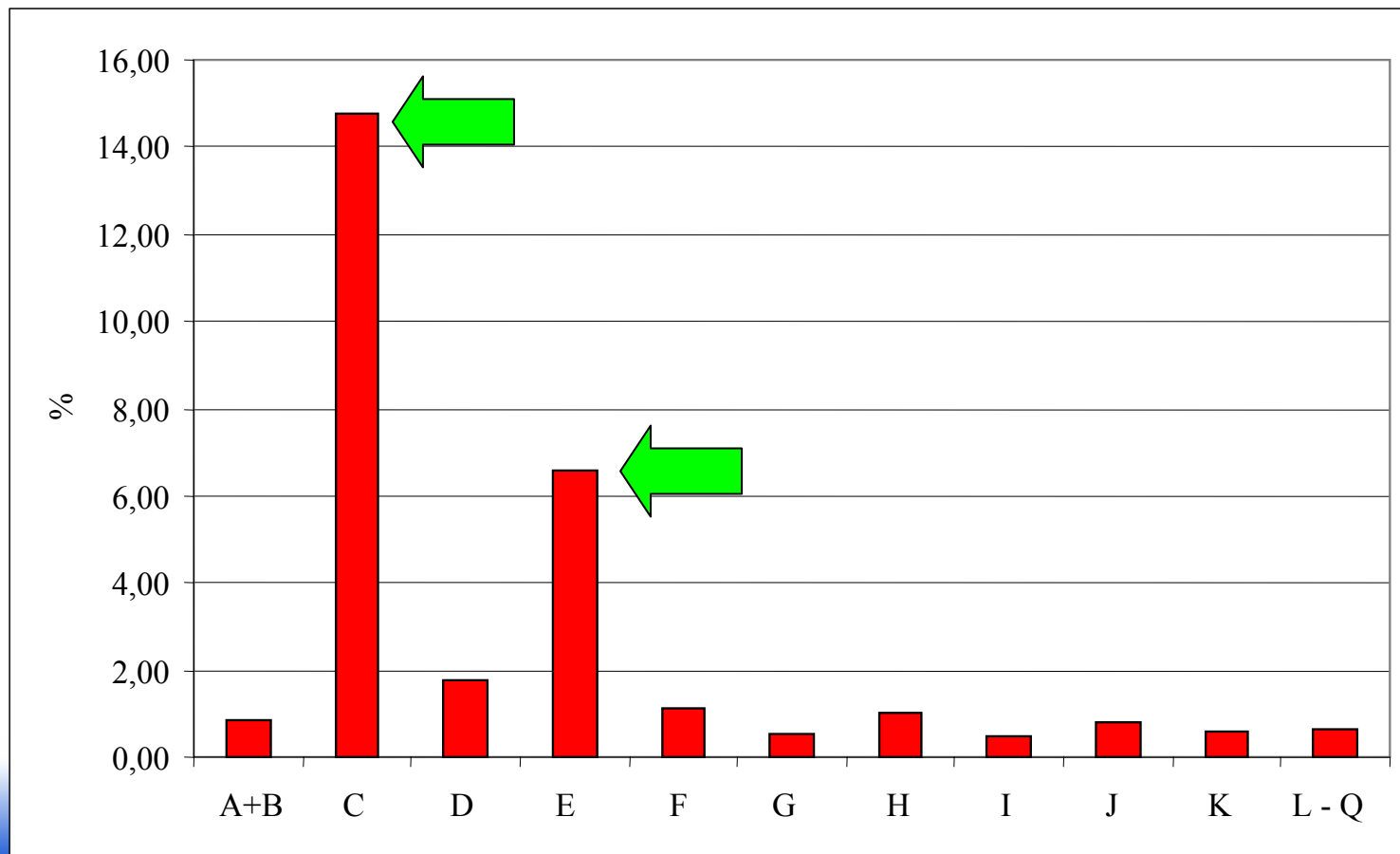


Price indexes after natural gas taxation



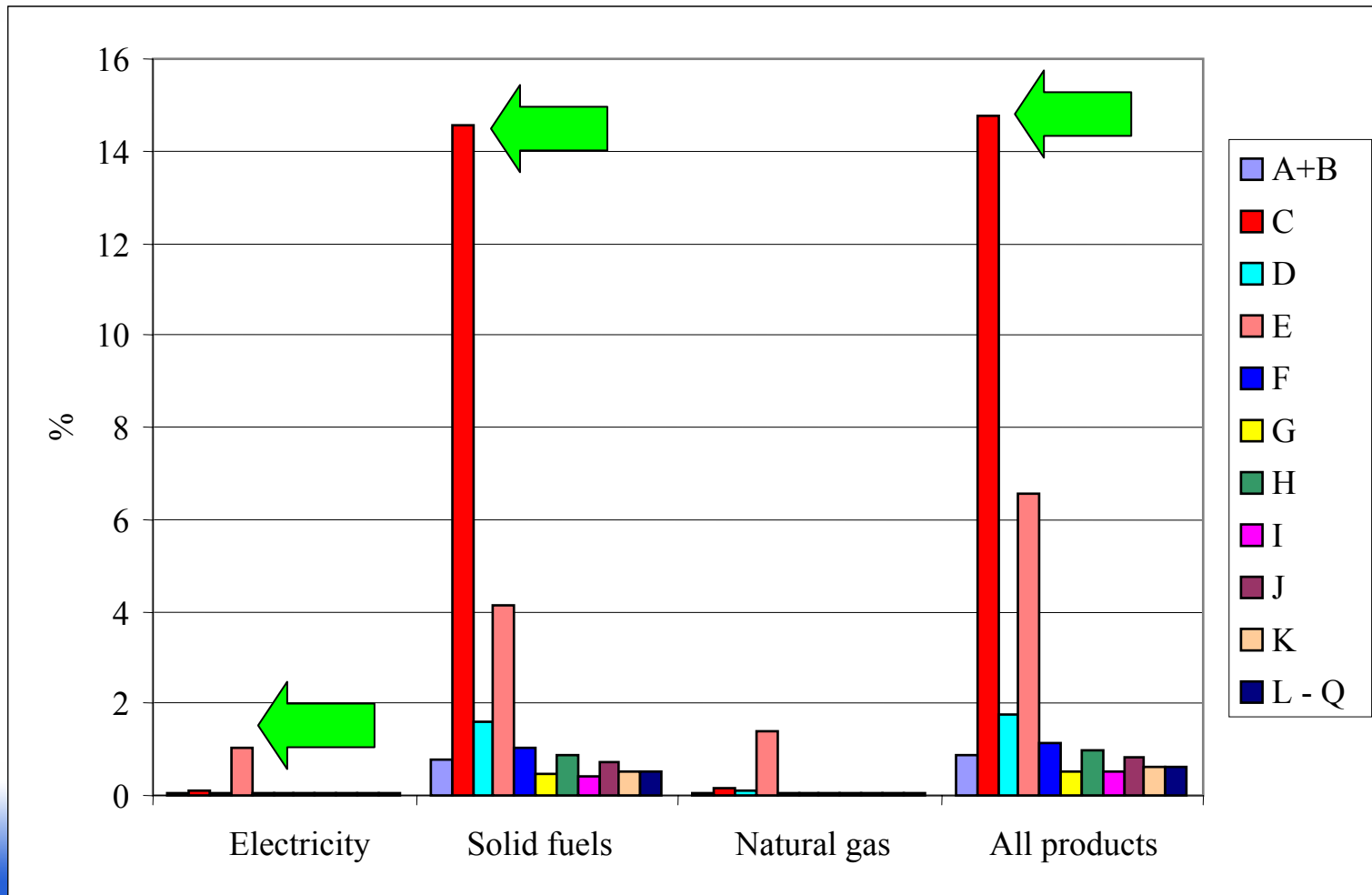


Price indexes after simultaneous taxation of electricity, solid fuels and natural gas





Comparison of all variants





V. Conclusions





Conclusions (1)

- ❖ The legislation for new energy taxation come into force on 1st January 2008. Objects of the taxation are following: electricity, brown coal, black coal, coke and natural gas.
- ❖ The main goal of this presentation is the discussion of new energy taxation in CR as a part of decision making process in companies. Is new energy taxation good instrument for energy savings and change of energy supply and energy demand of companies of CR ?



Conclusions (2)

- ❖ From the results of I-O analyze of new taxation introduction, it is obvious, that impact on prices of companies is not significant.
- ❖ For example, the average price of electricity in CR increases every year per 10 %, because the producers of electricity change their prices. The impact of new electricity taxation will be therefore only 1 %, which is negligible in companies decision process.



Conclusions (3)

- ❖ In case of natural gas, there is similar situation as in case of electricity.
- ❖ CR is importer of natural gas and therefore there is very little way how to influence price of imported natural gas. The total price is influenced by new natural gas taxation, but from the point of companies decision process, the change of this price is not so significant to change the current business plans.



Conclusions (4)

- ❖ The important impact on companies behavior should have only coal taxation. CR is price maker in the case of coal business and prices of coal both for industry and households were not high. Therefore imposing of new coal taxation will have significant impact on price of coal in CR.
- ❖ On the other hand, the directive 2003/96/EC enables total exemption for coal used for electricity production and CR is going to use this exemption in practise. As it is mentioned above, the biggest expenditures on solid fuels consumption has sector E - electricity, gas and water supply. Consequently the impact of new coal taxation on companies in practise will be much more lower than in case of no exemptions usage.



Conclusions (5)

- ❖ Therefore it is not simple task to answer the question whether the new energy taxation is good instrument for energy savings and change of energy supply and energy demand of companies in CR.
- ❖ Probably it is good instrument, but only in case of higher tax rates and no exemptions for companies.



Thank you for your attention.

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