

MICROECONOMIC POLICY INSTRUMENTS USED BY GOVERNMENTS TO INCREASE REGIONAL COMPETITIVENESS

Simona Činčalová

Abstract

By using microeconomic policy instruments, a country attempts to increase their international economic competitiveness, among other things. This means supporting the competitiveness of domestic products on international markets (price and quality). However, this does not always work. The goal of this paper is to investigate how certain specific government measures influence regional competitiveness. For each instrument, the author is posing the research question, “Does this microeconomic policy instrument used by governments increase regional competitiveness?” Using research in international and Czech literature as a basis, the conclusions are made.

Key words: *competitiveness, microeconomic policy, region*

Introduction

No government intervention is necessary when the market works according to classical economic approaches, i.e., a free market and Smith’s invisible hand, which is the idea that each individual – guided by an invisible hand – acts only in their own interest. Today, however, it is necessary for a country to have a microeconomic policy. The basis for market failure resides in two main circumstances: a disruption of productive efficiency (a company does not produce under the lowest average costs) and of allocative efficiency (ineffective division of economic resources among individual sectors or companies).

By using microeconomic policy instruments, a country attempts to increase their international economic competitiveness, among other things. This means supporting the competitiveness of domestic products on international markets (price and quality). However, this does not always work. The goal of this paper is to investigate how certain specific government measures influence regional competitiveness.

1. Theoretical Background

Whereas the concept of a company’s competitiveness is clear, regional competitiveness is interpreted in various ways. According to Kožená (2007), a company’s competitiveness is its ability to achieve competitive advantage in a very turbulent market environment by lowering costs or differentiation by using the best global practices and approaches. This involves the elements of productivity, cost efficiency, and profitability (Chursin & Makarov, 2015). In microeconomics, a company’s competitiveness is defined as its share of the domestic and external markets, i.e., internal and external competitive ability (Mikoláš, 2005).

Opinions on the concept of regional competitiveness vary; they can be considered from two perspectives – the microeconomic and the macroeconomic. Regarding this paper’s focus, the author will focus only on the first of these. The microeconomic concept is based on the fact that regional competitiveness is determined by the aggregation of companies’ competitiveness.

In the European Union, regional competitiveness is defined according to the European Commission (1999) as a region’s ability to produce products and services that can compete on international markets and, at the same time, maintain high and stable incomes for their residents. Tvrdoň and Šuranová (2007) state that, in a region, there are companies that both manufacture products consistent with market requirements for price and quality and show stable profits. This

is where a problem occurs, because, while a company's goal is to maximize profit, regional competition is dependent on other additional factors (e.g., employment levels). Wokoun (2012) states that if a region wants to be competitive, it should provide a sufficient amount of work opportunities of acceptable quality.

A government's microeconomic policy influences the behavior of its economic entities. Government activities are part of economic policy, which is generally perceived as being linked to the government's macroeconomic activities (e.g., fiscal and monetary policies). However, the government also affects the behavior of microeconomic entities – consumers and companies – with the measures it takes. Specifically, it changes the conditions under which these entities make decisions and thus influences the equilibrium on the markets involved and the market equilibrium in general. Thus, a government's economic policy also has its microeconomic aspect.

Market efficiency is dependent on the existence of perfect competition. However, because imperfect competition is what is actually experienced in the real world, it is possible for market failures to occur. These are barriers that prevent the market mechanism from effectively allocating resources. A government's microeconomic policy consists of eliminating these market failures. It encompasses instruments and measures by which the state interferes with the market mechanism, influences economic entities, and fundamentally contributes to creating the market environment (Soukupová, 2011).

2. Market Failure

Four of the main barriers to perfect competition are imperfect competition, externalities, public goods, and imperfect information. In recent years, new manifestations of market failures have appeared; these do not differ from the traditional forms in their essence or the reasons for their occurrence but rather in their consequences (increasing social costs, etc.). According to Bažantová (2013), these include competition vs. rent-seeking, the failure of the financial markets, new manifestations of limited rationality, and decreased responsibility – and their consequences (e.g., moral hazard).

Imperfect competition is the situation where producers appear on the market that are able to influence prices for various reasons. Government authorities react to these negative phenomena using antitrust policy and regulate this imperfect competition with the following measures, for example:

- maintaining low barriers to competition;
- introducing government and price controls;
- tolerating large companies that occurred naturally and are technologically advantageous;
- penalizing bad, anti-competitive practices; and
- supporting small companies' research and development.

An overview of selected government institutions in the Czech Republic and their areas of influence from the perspective of antitrust policy are listed in Table 1, as follows.

Table 1: Antitrust Policy in the Czech Republic

Institution	Area of Activity
The Czech National Bank	Banking supervision
The Ministry of Finance	Price regulation – of the insurance market and pension funds
The Customs Administration of the Cz. Rep.	Customs tariffs
The Ministry of Industry and Trade of the Cz. Rep.	Customer protection, SME support
CzechInvest	An agency for supporting business and investment
The Ministry of Regional Development	Regional programs for supporting SMEs and housing
The Ministry of the Environment	Protecting the water, the air, nature and the countryside, and the agricultural fund
The Securities Commission	Supervision of the capital market
The Office for the Protection of Competition	Protecting economic competition
The Support and Guarantee Fund for Agriculture and Forestry	Support for agricultural loans
The State Agricultural Intervention Fund	Regulation of the markets for agricultural products
The Czech Science Foundation	Supporting research and development
The Ministry of Transport	Regulation of all types of transportation

Source: Author's own work, Soukupová (2011).

The market also does not work effectively when externalities appear in the economy. Externalities are positive or negative effects derived from the production or consumption of certain goods that impact other market entities without these entities securing a substitute for these items or the requirement that another entity provide these items (Mikoláš, 2005). Therefore, the government must try to:

- forbid products that bring in negative externalities,
- introduce norms and punishment in the case they are not upheld,
- define ownership rights and how to enforce them more easily,
- tax negative externalities, and
- introduce subsidies for positive externalities.

Market failure can also take the form of public goods. These are goods that are marked by two features; they must be non-excludable and non-subtractable. Unfortunately, these features lead to the tendency of individuals to take the position of a “stowaway”; therefore, the government introduces:

- the responsibility to pay taxes,
- collecting fees, and
- eliminating non-payers from the pool of users.

The last problem is unequal access to information on the part of market entities. On the other hand, an ideal world with perfect competition provides all consumers and companies with complete and precise information. The government tries to suppress information asymmetry by supporting the free dissemination of information and providing information about the market. For example, government authorities are able to influence a manufacturer and force them to make their goods in accordance with the health and safety regulations that are valid for a given country. Furthermore, they are able to stipulate that sellers publicize key information about their products (and enforce this), or they can also make sure that the necessary information is publicly accessible (Bažantová, 2013).

According to Urban (2015), all of the instruments listed above can be divided into two main groups: direct and indirect. Instruments for direct regulation include administrative measures (directives, prohibitions, or permissions that are required for permission to enter the market, for example). Instruments for indirect regulation include instruments that influence entities' economic motivation (tax policy, government subsidies, or regulating prices or profit).

Examples of specific measures, including their influence on regional competitiveness, are explained in more detail in the following sections. The author has posed the following question for each instrument: "Does this microeconomic policy instrument used by governments increase regional competitiveness?"

2.1 Protecting economic competition

The Office for the Protection of Competition (ÚOHS) serves to penalize bad practices in the Czech Republic. Economic competition is the process of making sure each participant has free access to the market and creative freedom, which eventually leads to optimally satisfying consumer preferences.

The task of the ÚOHS is to create conditions that support and protect economic competition and to supervise compliance with laws protecting economic competition in these areas:

- prohibited (cartel) agreements,
- the misuse of a dominant position, and
- the merging of competitors.

One example of prohibited agreements is given by the companies in the Kofola group: they concluded vertical agreements with customers on resale price maintenance from 2001–2008. The impact of this agreement was to limit the competitive relationship between customers – lowering the advantages for consumers provided by natural competition. For consumers, resale price maintenance means an increase in prices and limiting brand competition. In 2007, administrative proceedings began; the ÚOHS subsequently forbade fulfillment of the agreement and imposed a fine of CZK 27,104,000 mil. (eventually, this was decreased by 50%; ÚOHS, 2015).

Effective economic competition **supports** (increases) **competitiveness** and economic growth. In certain cases, however, a participant's conception of engaging in the market is linked to the attempt to control the market by eliminating competition, which leads to imperiling the business dealings of other market participants.

2.2 Price regulation

The government intervenes in the market equilibrium (according to whether they want to protect consumers or producers) using two possible interventions: setting prices that are lower or higher than the equilibrium.

2.2.1 Price ceiling

If the price is set by control measures to be under the equilibrium price, the situation is called a **price ceiling** (the maximum price). One example from the Czech Republic is rent control (see Fig. 1).

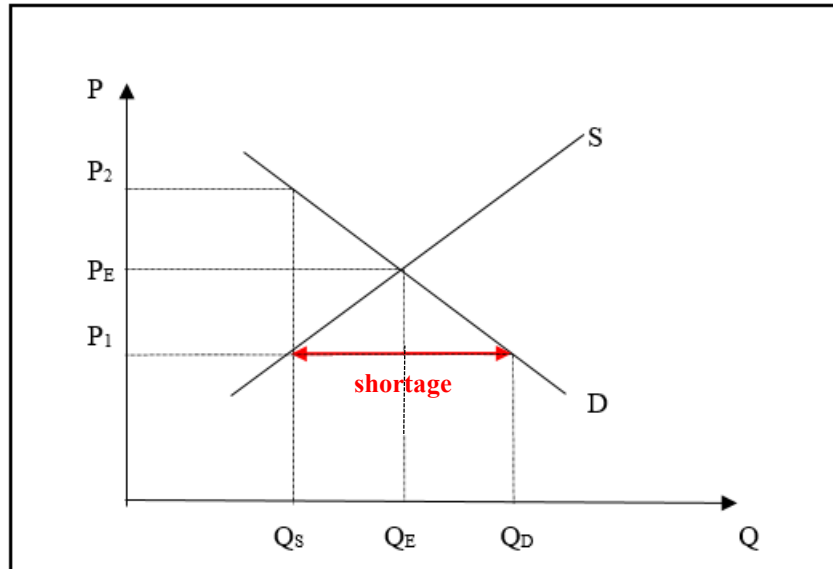


Figure 1: Price Ceiling. Source: Author's own work.

If the government did not intervene in the apartment market, the market demand and supply would be in equilibrium = Q_E, P_E . The government, however, considers this market price for apartments to be too high. Because its goal is to protect consumers, it decides to control rent. It sets the maximum possible price, or the price ceiling, at P_1 . What consequences does this price have? Apartment owners judge this price to be too low; therefore, they offer only the amount of apartments Q_S . On the other hand, this price is advantageous for buyers; therefore, they demand the amount of apartments Q_D at this price. It is thus clear that with the regulated price, P_1 , demand occurs in excess of supply, and there is consequently a shortage of apartments on the market. No one can force the apartment owners to offer a greater number of apartments than they are willing to supply, and the amount supplied at the given price, P_1 , is lower than it would be for the equilibrium amount, Q_E .

The final consequence of this originally well-intentioned government intervention is a deterioration in the citizens' (consumers') situation – they are offered a smaller amount of apartments than if the government did not intervene in the apartment market. Moreover, government intervention in the form of a maximum price can have even further consequences: a black market for apartments and tax evasion, because those demanding apartments are willing to purchase the limited amount for the price P_2 . Price regulation in the form of a price ceiling thus **lowers regional competitiveness**.

2.2.2 Price floor

If the price of a government control is set at a higher level than the equilibrium price, the situation is called a **price floor** (minimum price). One example of a price floor is the regulation of prices for agricultural products (see Fig. 2) – as well as minimum wage on the labor market.

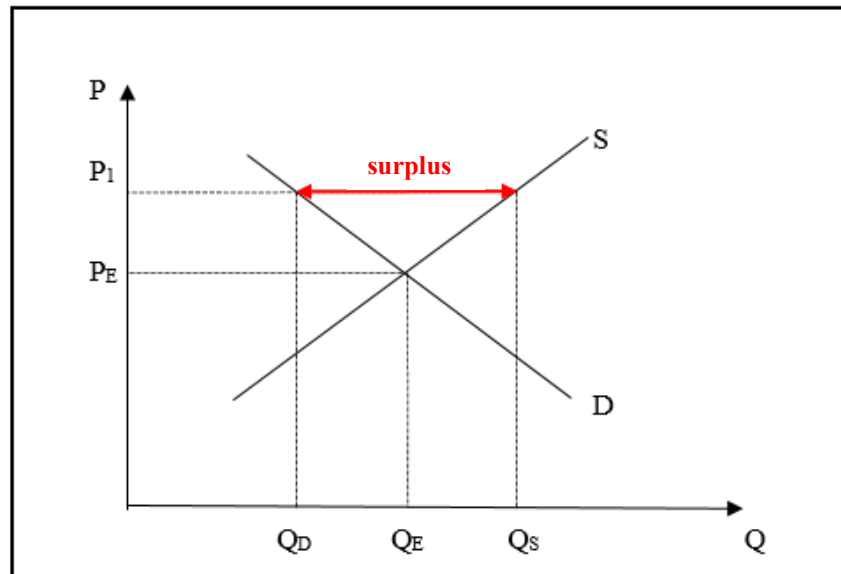


Figure 2: Price Floor. Source: Author's own work.

The goal of this intervention is support for producers in the field of agriculture. Setting minimum prices at the level P_1 leads to a surplus of offers, because the price for producers is attractive, and their offers total the quantity Q_S . On the other hand, buyers consider this price too high and only demand the amount Q_D , which is the actual amount sold and is smaller than the amount of the equilibrium, Q_E . It remains impossible to make use of the surplus of offers or part of the produced production (in the range $Q_D - Q_S$). Thus, the price floor does not represent support for farmers; conversely, it would complicate the situation.

In this case, the price floor would **lower** regional **competitiveness**. However, in practice, what is used is a modification of this intervention – so-called price support. This consists of the government purchasing the surplus that results from price controls at the level of P_1 ; thus, the final amount sold, Q_S , is larger than the equilibrium amount Q_E .

A similar example is minimum wage (a price floor) on the labor market (see Fig. 3). The labor market, in which a minimum wage of w is introduced, is negatively influenced by both supply and demand. If the minimum wage exceeds the equilibrium wage, this lowers demand for workers by employers and, conversely, increases applications for work by job-seekers. The consequence is higher wages for less employees than there would be in the case of an equilibrium. Unemployment brought about by a minimum wage is thus involuntary and, once again, it has been confirmed that minimum wage (a price floor) **lowers** regional **competitiveness**. On account of minimum wages, companies are forced to lower their costs (e.g., employee benefits), but this can also lead to letting employees go and replacing them with machinery – or to discontinuing certain company activities, which has a negative impact on regional competitiveness.

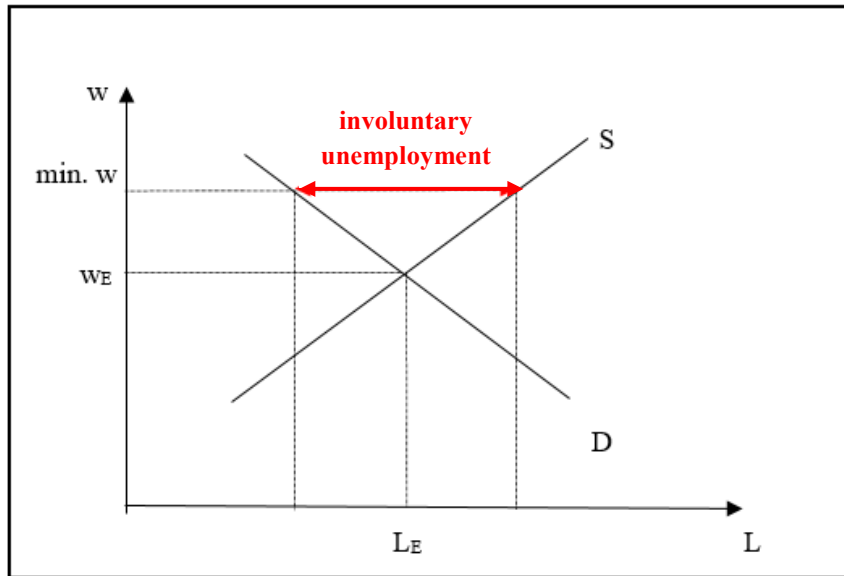


Fig 3: Minimum Wage. Source: Author's own work.

2.3 Subsidies

In the case of positive externalities, when the activities of one economic entity bring benefit to another without the need for reimbursement, the most common example is that of the relationship between the fruit grower and the beekeeper. Bees pollinate the fruit grower's trees, thereby increasing the yield of fruit. The fruit grower does not pay anything to the beekeeper for this effect, and the beekeeper thus does not receive the full proceeds of their activities. The effectiveness of growing fruit is increased, but the effectiveness of beekeeping is lower than it would be if the fruit grower were to provide financial compensation to the beekeeper. Another example is the home owner in a wealthy neighborhood who acquires a guard dog, which discourages thieves from the neighbors' houses as well as their own.

One possible solution for those providing positive externalities is public subsidies (either national or municipal), which is also an instrument for **increasing competitiveness** on its own. Subsidies lower marginal costs for providers and thereby make it possible to increase production and the overall scope of the positive externalities. There are two problems that occur here:

- Determining the size of the subsidy – it is necessary to choose the optimum amount for costs.
- Determining who should pay for the subsidy – if the beneficiary is obvious, they should pay for the externality, but in most cases this is not known.

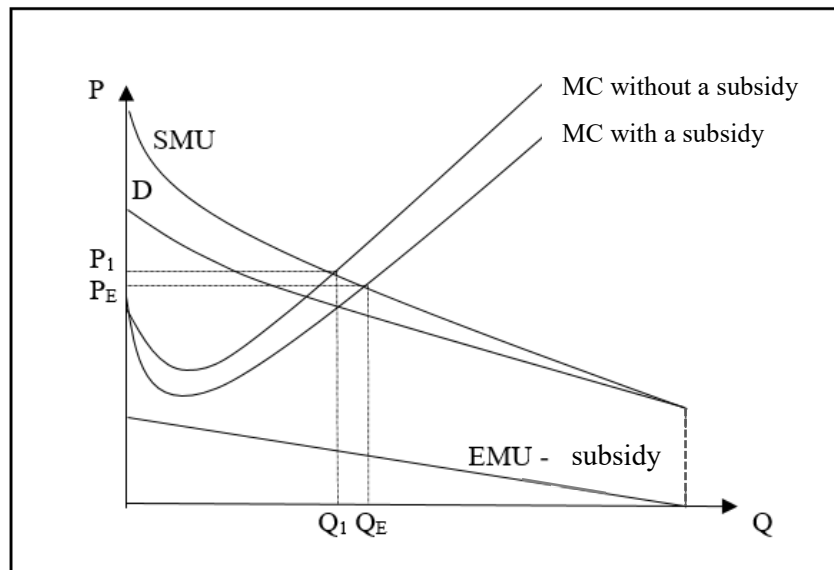


Figure 4: Externalities and Subsidies. Source: Author's own work.

The amount of products Q_1 is offered on the market at price P_1 , when only the company's marginal costs and not the external marginal costs are taken into consideration (see Fig. 4). The subsidy corresponds to the marginal external costs and lowers them to the level of the so-called marginal social costs (a shift of the marginal costs, MC, without a subsidy down to the right by the amount of the marginal external costs); consequentially, this results in increasing the volume of production from Q_1 to Q_E . The result is that there is the amount of products Q_E offered on the market at price P_E (an effective increase). Complete elimination of the positive externality would result in the intersection of the curve of the external marginal utility EMU with the x-axis (zero EMU). In this case, the costs for subsidies would be too large; therefore, it is necessary to come to terms with having only a certain volume of positive externalities.

2.4 Taxes and fees

As was mentioned in Section 2, it is possible to resolve the problem of the "stowaway" in the context of public goods using the collection of taxes or local fees, which is overseen by government authorities.

According to Aktuálně.cz (2016), Czech competitiveness has improved in recent years; despite this, one of the things that does influence it is high taxes. These high taxes are mostly perceived as a barrier to economic growth and are able to **lower** a country's **competitiveness**. This is not only a problem for the Czech Republic but the entire eurozone as well. Many countries increase taxes and local fees in order to cover debt, and a frequent argument tends to be that the selected finances are put back into the economy in the form of government investment. If, however, the taxes are collected in order to cover interest from debt, and they are not thus invested back into the private sector, this is an explicit outflow of finances from the given country. However, this is a macroeconomic problem.

2.5 Information as a public good

The next problem is information asymmetry. It is practically a rule that the seller has more complete information about the goods on offer than their potential consumer, and, thanks to imperfect informativeness, it is possible for the consumer to purchase low quality goods. If this informativeness were perfect, consumers would only purchase high quality goods, and the companies producing low quality goods would be eliminated by the market. According to

Akerlof (1970), it all began on the used car market; there, consumers expected worse quality so they were willing to pay lower prices. The owners of good used cars were not willing to sell for that price; only low quality used cars remained on the market.

However, government authorities can act on this market with information to counter market failure. Regulations have the goal of protecting the weaker contractual party, i.e., their ability to use adequate resources to protect themselves, which can be seen, for example, in modifications of consumer contracts, online purchases, etc. The government can force manufacturers to make goods in accordance with the health or safety regulations that exist in the country involved. Furthermore, they are able to stipulate that sellers publicize key information about their products (and to enforce this); they can also make sure the necessary information is publicly accessible. It is necessary to disseminate certain essential information as a public good (e.g., information on product defects; Bažantová, 2013).

Thus, perfect consumer informativeness **increases** company (or regional) **competitiveness**.

Conclusion

The goal of this paper was to investigate the influence of select government measures on regional competitiveness. For each instrument, the author posed the research question, “Does this microeconomic policy instrument used by governments increase regional competitiveness?” Using research in international and Czech literature as a basis, the conclusions are presented in Table 2.

Table 2: Selected Microeconomic Policy Instruments Used by Governments

Microeconomic Policy Instruments Used by Governments	
Increasing regional competitiveness	Decreasing regional competitiveness
<ul style="list-style-type: none"> • effective economic competition • subsidies for those providing positive externalities • perfect information 	<ul style="list-style-type: none"> • price controls in the form of price ceilings or floors (min. wage) • taxes and fees

Source: Author’s own work.

However, certain of the originally well-intentioned microeconomic policy instruments used by governments are not effective. Critics consider minimum wage, including its changes, to impede the labor market from operating effectively. In the case of increasing minimum wages, a more expensive work force can cause the outflow of international investors to cheaper regions, among other things. Problems with outflow also occur when collecting taxes and fees. If they are collected in order to cover interest from national debt and they are not returned in the form of government investment, this is an explicit outflow of finances from the country.

Externalities, which are one of the most frequent reasons for market failure, also lead to a drop in economic effectiveness and, at the same time, to economic losses. Positive externalities produce a discrepancy between private profits and social benefit, which is the sum of all the benefits from goods. Manufacturers are not able to appropriate certain of the profits; therefore, their private profits are lower than the social benefit. Positive externalities thus produce inefficiency, because they lead to the production of an amount of goods that is not optimal.

Not least, there is effective (efficient) economic competition, the key for increasing regional competitiveness. It is effective when the market is comprised of companies that are not mutually dependent and are exposed to competitive pressure (prohibited practices are defined).

According to Danilova (2007), the following is necessary for regional competitiveness: maintaining existing residents and attracting new ones (primarily of productive age and highly qualified), preserving and developing businesses, attracting new businesses, social infrastructure, or housing and social ties. However, certain microeconomic policy instruments used by governments are at odds with these statements.

References

- [1] AKERLOF, G. A. "The Market for 'Lemons': *Quality Uncertainty and the Market Mechanism*". Quarterly Journal of Economics (The MIT Press) vol. 84 (3): 488–500, 1970. doi:10.2307/1879431.
- [2] BAŽANTOVÁ, I. *Ekonomie regulace: nové projevy tržních selhání a jejich řešení*. Praha: Vladimír Lelek, 2013. ISBN 978-80-904837-3-6.
- [3] DANILOV, I. P. Konkurenceschopnost regionov Rossiji (teoretiočeskije osnovy i metodologija). Vydavatelství Kanon+ ROOI Reabilitacija, Moskva 2007. ISBN 978-5-88373, 2007.
- [4] EVROPSKÁ KOMISE. *Sixth Periodic Report on the Social and Economics Situation of Regions in the European union*, European Communities, Brusel. 1999.
- [5] CHURSIN, A., MAKAROV, Y.. *Management of Competitiveness: Theory and Practice*. Moscow: Springer, 2015. ISBN 978-3-319-16243-0.
- [6] KOŽENÁ, M. *Environmentální aspekty konkurenceschopnosti podniku*. Univerzita Pardubice, 2007. ISBN 978-80-7395-039-2.
- [7] MIKOLÁŠ, Z. *Jak zvýšit konkurenceschopnost podniku: konkurenční potenciál a dynamika podnikání*. 1. vyd. Praha: Grada, 2005, 198 s. ISBN 80-247-1277-6.
- [8] SOUKUPOVÁ, J. a kol. *Mikroekonomie..* Praha, Management Press, 2011. ISBN 978-80-7261-218-5.
- [9] TVRDOŇ, J., ŠURANOVÁ, J. *Teoretické a praktické otázky vyjadrenie regionalnej konkurenceschopnosti v ekonomike Slovenska*. In: 2nd Central European Conference in Regional Science. p. 1089-1098.
- [10] URBAN, Jan. *Teorie národního hospodářství*. 4., aktualiz. vyd. Praha: Wolters Kluwer, 2015. ISBN 978-80-7478-724-9.
- [11] ÚOHS: Úřad pro ochranu hospodářské soutěže [online]. Brno, 2015 [cit. 2016-04-01]. Dostupné z: www.uohs.cz
- [12] Vysoké daňové úniky i neefektivní správa. Tak vidí Česko Brusel. *Aktuálně.cz* [online]. Praha: Economia, a. s., 2016 [cit. 2016-04-04]. Dostupné z: <http://zpravy.aktualne.cz/ekonomika/vysoke-danove-uniky-i-neeaktivni-statni-sprava-tak-vidi-ces/r~dd54b66cdca511e5819a002590604f2e/>
- [13] WOKOUN, R. *Konkurenceschopnost regionů Evropské unie a České republiky*. Univerzita Jana Evangelisty Purkyně v Ústí nad Labem, 2012.

Ing. Simona Činčalová
University of Pardubice
Studentská 95
532 10 Pardubice 2
Mobile phone: +420 608 271 820
E-mail: st30307@student.upce.cz