

# SLOVAK COMPANIES – OPEN ACCES TO THE DATA

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## Abstract

*This paper focuses on the issue of open access to the data about corporate activities. The research focuses on the comparison of applications possibilities to search this type of data in the Slovak Republic area. We focus in this paper on two applications that provide information about businesses in the Slovak Republic area. The first is IndexPodnikateľa (indexpodnikatela.sk) and the second application is FinStat (finstat.sk). For comparison purposes, we closer identify the parameters of the Slovak corporate market.*

**Keywords:** *business, FinStat, IndexPodnikatela, open data, portal*

**JEL Classification:** G32

## 1 Introduction

Numerous scientists have pointed out the irony that right at the historical moment when we have the technologies to permit worldwide availability and distributed process of scientific data, broadening collaboration and accelerating the pace and depth of discovery, but we are busy locking up that data and preventing the use of correspondingly advanced technologies on knowledge.

We focus in this paper on two applications that provide information about businesses in the Slovak Republic area. The first is IndexPodnikateľa (indexpodnikatela.sk) and the second application is FinStat (finstat.sk). For comparison purposes, we closer identify the parameters of the Slovak corporate market.

The use of open data in corporate activities has got ascending tendency. If you want to carry business in the EU market, the portal European Union Open Data Portal is a very good source of information. To do business locally, it is advisable

to find a data source in the country. In the SR is suitable for this purpose portal IndexPodnikateľa. By providing easy and free access to data, the portal aims to promote their innovative use and unleash their economic potential.

## 2 Open data

Open data is the idea that some data should be freely available to everyone to use and republish as they wish, without restrictions from copyright, patents or other mechanisms of control (Auer, 2007). The goals of the open data movement are similar to those of other "open" movements such as open source, open hardware, open content and open access.

The full Open Definition gives precise details as to what this means. To summarize the most important:

- **Availability and Access:** the data must be available as a whole and at no more than a reasonable reproduction cost, preferably by downloading over the internet. The data must also be available in a convenient and modifiable form.
- **Re-use and Redistribution:** the data must be provided under terms that permit re-use and redistribution including the intermixing with other datasets.
- **Universal Participation:** everyone must be able to use, re-use and redistribute - there should be no discrimination against fields of endeavour or against persons or groups. For example, 'non-commercial' restrictions that would prevent 'commercial' use, or restrictions of use for certain purposes (e.g. only in education), are not allowed.

It is important to be clear about what open means and why this definition is used, and there is a simple answer - interoperability. Interoperability (Wilbanks, 2008) denotes the ability of diverse systems and organizations to work together (inter-operate). In our case, it is the ability to interoperate - or intermix - different datasets. Interoperability is important because it allows different components to work together. This ability to componentize and to 'plug together' components is essential to building large, complex systems. Without interoperability, this becomes near impossible.

Management (or managing) is the administration of an organization, whether it be a business, a not-for-profit organization, or government body (Stalmasekova & Stofkova, 2016). Management includes the activities of setting the strategy of an organization and coordinating the efforts of its employees or volunteers to accomplish its objectives through the application of available resources, such as financial, natural, technological, and human resources. The term "management" may also refer to the people who manage an organization.

Open data may include non-textual material such as maps, genomes, connectomes, chemical compounds, mathematical and scientific formulae, medical data and practice, bioscience and biodiversity. Problems often arise because these are commercially valuable or can be aggregated into works of value. Access to, or re-use of, the data is controlled by organisations, both public and private. Control may be through access restrictions, licenses, copyright, patents and charges for access or re-use. Advocates of open data argue that these restrictions are against the communal good and that these data should be made available without restriction or fee. In addition, it is important that the data are re-usable without requiring further permission, though the types of re-use (such as the creation of derivative works) may be controlled by a license.

These are for example timetables, states incomes, budget, databases, list of providers of social services, register of organizations, lists of debtors or the measurement of air pollution. Sources of open data are:

- the state and public administration,
- schools and universities,
- non-profit organizations, associations,
- private companies.

### **3 Slovak market**

Slovakia's strong industrial tradition, tax incentives, inexpensive and skilled workforce, rapidly developing infrastructure (boosted by an influx of EU funds) and fragile but real growth, make our country a preferred base for trade (Hennyeyova, Tothova & Hamasova, 2013). Since 2009, the economic growth of Slovakia has been driven by its exports. The share of foreign trade in the GDP also remains very high, at around 185% in 2015 (World Bank), making Slovakia the most open country of the EU.

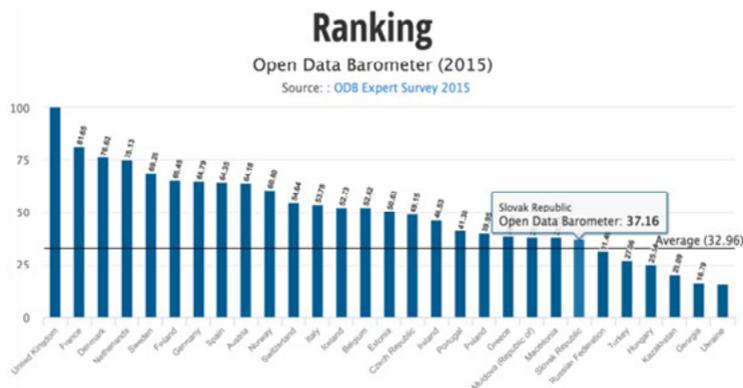
Since 2011, exports have been increasing continuously, representing 93% of GDP. Trade surplus is situated at around EUR 4 billion in 2016. The Slovak trade balance had been in deficit until 2011, mainly because of energy imports from Russia and the substantial imports of machinery and electrical and electronic equipment used in the automotive and energy sectors. Nevertheless, the dynamism of the tertiary sector has contributed to improving the situation. The country represents a platform of re-exportation for the European automotive industry (Slovak production in this sector represents over 44% of the GDP). Our country's main suppliers are Germany, the Czech Republic, China, South Korea and Russia. Main customers are Germany, the Czech Republic, Poland, Austria and France.

Produced by the WWW Foundation as a collaborative work of the Open Data for Development (OD4D) network and with the support of the Omidyar Network, the Open Data Barometer (ODB) aims to uncover the prevalence and impact of open data initiatives around the world. Covering 92 countries in the present edition, the Barometer ranks nations on:

- Readiness for open data initiatives.
- Implementation of open data programmes.
- Impact that open data is having on business, politics and civil society.

The Barometer (Open data Barometer, 2015) is a truly global and collaborative effort, with input from more than 150 researchers and government representatives. It takes over six months and more than 9,000 hours of research work to compile. This report is intended to be a summary of some of the most striking findings. The full data is available online, and intended to support further secondary research into the progression of open data policies and practices across the world. We can see in Figure 1 the Slovakia's position in Open Data Barometer scale.

Figure 1 Rankings for Europe and Central Asia



Source: Own adjustment based on Open data Barometer [online: <http://opendatabarometer.org/>].

Slovakia has achieved above-average ranking. There are 5.5 million inhabitants, of which more than 337,000 are self-employed. More than 290,000 are registered companies. We can say that the data from the Statistical Office are outdated, since they are published for the year 2015. We can obtain updated information from already mentioned applications IndexPodnikateľa and FinStat.

Key fact about Slovakia company market:

- Slovakia ranks 19th in the EU by total GDP and 21th for GDP per capital
- Slovakia produces many passenger cars - annually at 1 million cars per year (2015).
- Slovakia's economy was one of the quickest to recover in the European Union (EU) following the economic crisis of the late 2000s and has one of the highest economic openness scores (total imports and exports divided by GDP) of any economy in the world.
- Low inflation, a stable political environment, and the introduction of the Euro in 2009 make Slovakia a country with attractive investment opportunities.
- Further liberalization of trade is strongly supported at all levels of society.

According to the European Commission's spring 2016 Economic Forecast, unemployment in Slovakia is projected to decrease from 10.5 percent in 2016 to 9.5 percent in 2017. Low inflation (-0.1 percent in 2016), strong governmental incentives, political stability, low corporate taxes, and a skilled labour force all contribute to Slovakia's impressive investment attraction.

## 4 FinStat and IndexPodnikateľa

These applications have their own databases and information is available immediately. Database contains information on defunct and newly established companies and self-employees. In the table below, we can see a comparison of databases of two selected applications.

Table 1 **Application and its databases**

Application	FinStat	IndexPodnikateľa
<b>The number of companies</b>	421 007	344 329
<b>The number of self-employees</b>	838 835	1 027 893

*Source:* Own processing.

To another database, which application FinStat contains, belong a database of financial data, a database of persons in the companies, a database of non-profit organisations. After paying fees there is also a database of Czech companies and self-employees, legal databases (e.g. register of executions and payment orders) and other databases containing information from commercial journal (e.g. auctions).

Application IndexPodnikateľa contains the following additional databases: a database of accounting statements, a database of financial analysis, a database of

records from commercial journal, a database of debtors in taxes, debtors on social and health insurance. Among published business data belong:

- registers of self-employees, companies and organizations - Commercial Register is a public register, which includes statutory data about entrepreneurs and other persons, which are stipulated by a special law,
- macroeconomic, demographic and social statistics,
- economic results of companies - incomes, profits, etc.,
- public procurement and e-marketplace,
- central register of contracts,
- a list of Slovak domains,
- contact information, company websites, catalogues,
- debtors' list (health and social insurance, taxes, duties, state claims),
- entrepreneurs in bankruptcy (bankruptcy, restructuring, small bankruptcies),
- execution proceedings,
- judicial decisions,
- register of pledges,
- information from the cadastre (land, buildings, certificates of ownership, encumbrances).

These data can be used in business. The entrepreneurs may know better the market in which they operate (Hudak, Kianickova, & Madlenak, 2017), for example: how many companies are operating in the same industry, or area, what turnover they have. The entrepreneurs may properly identify risks in the market and in the business contact (Soltes, 2016). Available information gives them an idea about their business partners. Applications, which are compared below, inform also about the changes in the monitored companies (bankruptcy, execution proceedings). Based on the data, which can be obtained from the applications, the company can compare its results with the competition, or branch, etc. And on this basis it can take improvement, or gain new business opportunities.

Examples of what data we can watch:

- results of competitors,
- the change of the name or residence of the company,
- if the company became a VAT payer,
- if the company has been declared bankrupt or restructuring,
- increasing debt of the company,
- the change of the owner or manager of the company,
- if the company rewrites properties to other persons / companies,
- if the property is on mortgage,
- if the company has made any contracts with the state.

**FinStat** was founded in 2012 and launched in 2013. The aim of the application was to create a web portal that helps people to, easily and for free, assess the financial health of Slovak companies.

Finstat offers a range of data feeds that are used extensively by financial advisers, accountants and investment managers Provides validated equities, gilts and fund prices as well as currencies, dividends and indices. Is deliverable as daily, weekly and monthly data feeds and can be downloaded from a dedicated website or via File Transfer Protocol (FTP) 24 hours a day, 365 days a year. Also, it is compatible with major software packages including 1st Software's Adviser Office, Prestwood, JCS, Pulse, Fairs, Investmaster, Swift, Plum, IMVS and Dividend Analysis.

FinStat has processed from the beginning a number of data sources which analyses and uses to make a picture of individual companies. By combining data sources, editing and analysing them it creates at the same time the image of the entire market - Slovak companies as a whole, individual sectors and groups of entrepreneurs.

The most important data sources, which are processed, are commercial bulletin, business register, trade register, the register of statement of finances, lists of debtors from insurance companies, lists of financial administrative and judicial decisions. There are also other data sources, which are used by FinStat.

The project **IndexPodnikatela** has been created as a tool to promote and develop a transparent business environment in Slovakia. It is an innovative and unique service that can examine and analyse any company doing business in Slovakia. Entrepreneurs can therefore receive the basic and extended information about business partners, suppliers or competitors. IndexPodnikatela provides a detailed view of the arrears of health and social insurance, tax, bankruptcy, restructuring, execution and other statements relating to the monitoring company. One of the most important outcomes of this service is also a financial analysis of the company and the index "IndexPodnikatela".

All information and data on which the IndexPodnikatela operates is drawn from publicly available databases and registries. Basic information frame is formed by the digital structured data, files in pdf, csv, xls formats and electronic scans of various documents. Detailed analysis of companies requires detailed information about financial results (financial statements) for the previous periods. They are the only one in Slovakia, who decided to digitize (convert into a structured format) all qualitative sufficient and for the processing suitable documents (scans of accounting documents). From the vast amount of data they create financial analysis of companies, predictions, but also various statistical analyses relating to the sectors, or specific lines of business.



In Figure 2 we can see the design of FinStat application and in Figure 3 we can see the design of IndexPodnikateľa application and also filtered data. Figure 2 shows the output for search - traders in the information technology industry in Žilina region. Figure 3 shows the output for search – self-employees in the business field of Information and Communication in Žilina region. We can observe a difference in filter from the beginning. FinStat application uses sectors to assign the activity of entrepreneur and IndexPodnikateľa uses the branch of business according to SKNACE.

#### Figure 4 Searching results in the application FinStat

PRÍJMKA	KONTAKTNÉ ÚDAJE	MESTO	KRAJ	ODVETVA	ZAMESTNANOSŤ	DÁTUM VZNIKU
Ing. Štefka Martovica IČO: 4760339		Žilina	Žilinský	Informačné technológie	5-9	5.9.2014
Ing. Roman Káľavský BELL IČO: 3679344		Liptovský Mikuláš	Žilinský	Informačné technológie	3-4	30.12.1993
Peter Sedláček IČO: 34220771		Žilina	Žilinský	Informačné technológie	7	19.6.1955
Milan Maršovič - SK MODR IČO: 40294911		Hánesťovno	Žilinský	Informačné technológie	2	30.8.2002
Eduard Šafář - ALMA IČO: 39431125		Žilina	Žilinský	Informačné technológie	2	27.1.1999

Source: by authors.

In Figures 4 and 5 we can see the filtered data. We searched for companies in the telecommunications industry in Žilina region. It was displayed the list of companies in the sector and a general information about these companies. The difference in displaying self-employees and companies is observed in the initial display of information on searching companies.

#### Figure 5 Searching results in the application IndexPodnikateľa

Vyhľadávanie spoločností a obchodných partnerov (2292)

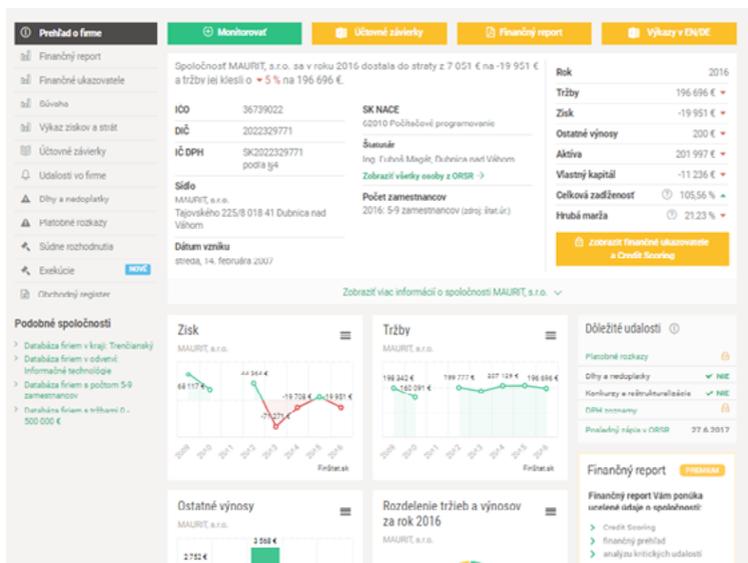
stav spoločnosti všetky; typ právnej formy Živnostník; v regióne Žilinský kraj; sídlace: 58110, 58120, 58130, 58140, 58190, 58210, 58200, 59110, 59120, 59130, 59140, 59200, 60100, 60200, 61100, 61200, 61300, 61900, 62010, 62020, 62030, 62090, 62110, 63120, 63910, 63990; zoradenie zostupne podľa: tržby a výnosy

Index	Názov	Rak	Veľkosť organizácie	Právna forma	Daň	Tržby + výnosy	Zisk po zdanení	Vlastné imanie
-	Vladimír Polišovský	nečlenský	Živnostník	0,00 €	0,00 €	0,00 €	0,00 €	
-	Ing. Peter Šafář	1 zamestnanec	Živnostník	0,00 €	0,00 €	0,00 €	0,00 €	
-	Štefan Štan	0 zamestnancov	Živnostník	0,00 €	0,00 €	0,00 €	0,00 €	
-	Jan Zdobák	0 zamestnancov	Živnostník	0,00 €	0,00 €	0,00 €	0,00 €	
-	Michal Lukáčik Bedník	nečlenský	Živnostník	0,00 €	0,00 €	0,00 €	0,00 €	
-	Ing. Václav Brňavač ŠPŠOFT	nečlenský	Živnostník	0,00 €	0,00 €	0,00 €	0,00 €	
-	Ing. Michal Drozdaček - U11 - A2	nečlenský	Živnostník	0,00 €	0,00 €	0,00 €	0,00 €	

Source: by authors.

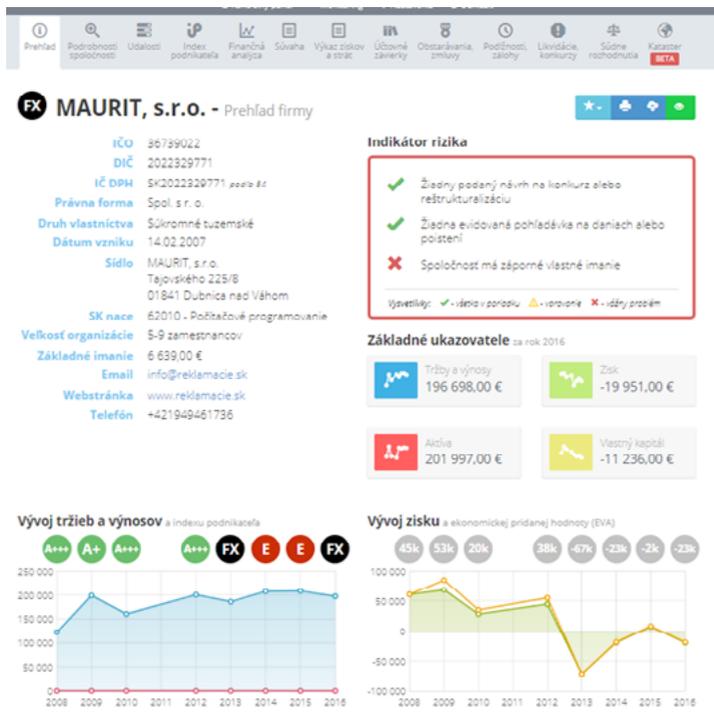
If you click on a particular company, details about the company will be displayed, where we can find the necessary information regarding the company (Figure 6, Figure 7). Design of applications is different and also the way to get the searched information.

Figure 6 Company details in FinStat application



Source: by authors.

Figure 7 Company Details in the application IndexPodnikateľa



Source: by authors.

## 5 Conclusion

We can point out in the conclusion that none of these applications does not have its version in English. FinStat application provides more information free than IndexPodnikateľa. In the FinStat application we can obtain free of charge information on sales, profits, incomes, assets, equity capital, gross margin, return of assets and the total debt of the observed company. On the contrary, in the application IndexPodnikateľa we can receive information only about the development of sales and earnings. Both applications provide basic information about the establishment of the company, its field of business, registration number and information on whether the company has any debts and arrears. We can find the difference between applications also in filtering capabilities of searching information. Both applications offer services free, as well as the paid services.

With these applications, the company may also find new customers with this information:

- websites, e-mails, phone contacts,
- filtering by company's legal form,
- filtering by residence (region, district, city),
- filtering by industry,
- search only uncontroversial companies,
- many other filters.

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