

MA IN APPLIED ECONOMICS

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Project seminar proposals

MA in Applied Economics program at CERGE-EI

Instructors: Filip Matejka and Iva Kleinova



CCEA: ECONOMIC POTENTIAL OF THE PRAGUE MAGISTRALA

Short company or organization description: The Centre for Central European Architecture (CCEA) is an alternative space for further education and research in architecture. Its mission is not just to popularize architecture but mainly to search, read and redefine the architectural identity of Central Europe. CCEA specializes, among other things, in contemporary architecture of Central Europe, Central European cities development, interdisciplinary projects, perceiving architecture in larger context, and education in the field of architecture, urbanism and environment.

Project description: The City of Prague is traversed in its very center by Magistrala, a large four to six-lane highway, built in the 1970s, when urbanists believed that car transport can solve traffic in cities. Urban experts see city transport very differently these days. If Prague follows international trends to make cities more livable and orderly, Magistrala has the potential to become Prague's Main Boulevard, an avenue with trees, cars, cyclists, pedestrians, and life on the street, as well as new buildings positioned on the many free parcels along the current highway. We're interested in calculating the economic potential of the new Magistrala in the locations where it crosses the core of Prague. Since most of the parcels are owned by the City of Prague, how can it profit from the new development here? What is the best model for city investment in the 21st century?

Impact: Arguments of economic sustainability are powerful tools to convince city governments to make adjustments in order to make our cities more pleasant to live. We plan to use the results of this study in helping the City of Prague make decisions about the future of Magistrala. Students will lean about the most modern business models that cities can use to take care of their land. They will test these models to demonstrate which ones would be most suitable in the case of this project. Their work could potentially enable one of the largest development projects in the center of Prague in the years to come. CCEA has been working on this problem for five years now and is coordinating the Magistrala transformation on behalf of the Institute of Planning and Development of the City of Prague. You can learn more (in Czech) about what has already been done here: http://magistrala.eu/co-jsme-jjz-udelali/.

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CCEA: ECONOMIC POTENTIAL OF MIXED-USE BUILDINGS

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Project description: This project will examine the economic advantages and disadvantages of mixed-use buildings. A typical townhouse of the 19th century consisted of three main activities - retail on the ground floor, flat of the owner and his office space (1st, 2nd floor) and flats for rent on the upper floors. This form ensured sustainable economics of the house. In the beginning of the 20th century, even more complex structures emerged. Wenceslas Square is the home of some terrific examples of metropolitan palaces that combined four main functions: living, working, leisure and shopping (for example, Lucerna and Koruna Palaces offered, besides office and living quarters, cinemas, restaurants, shops, bars, larger or smaller music halls, or baths). After WWII, urbanists started strictly segregating our daily activities into distinct city zones (living, working, recreation, transport). Today, the mixed-use model is once again seen as more sustainable for our cities. However, while a century ago, layering different activities within a single building proved to be a successful business model, returning back to it is problematic nowadays. Students will be asked to build a business model comparing single- and multiple-function buildings. Does adding new functions make economic sense in the short-, medium- and long-term for the owner? If so, how, and which functions? Are the additional economic advantages for the city large enough to warrant incentives to encourage mixed-use development? Or should we use a different model altogether?

Impact: Arguments of economic sustainability are powerful tools to convince city governments and small/medium/large developers to make adjustments in order to make our cities more pleasant to live. We plan to use the results of this study both in lobbying the city governments in Central Europe to adjust their zoning laws, and to enable developers to try new building models. Students will lean about the economy of real estate development.



CCEA: ECONOMIES OF NON-CAR TRANSPORTATION IN CITIES

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Project description: Alternatives to car transport – public transportation, cycling, walking – improve the quality of life in our cities. This project will compare these different alternatives and calculate the economic costs and benefits from the point of view of the city and the individual. From an economic perspective, which form of transportation would be most desirable in the 21st century? We suggest the case study be made on the City of Prague, for which we can provide some data.

Impact: We will use the results of this project in the discussions with cities and public transportation providers in Central Europe. We will also use it in our public outreach to fight for more sustainable cities. Students will learn to understand the economic drivers of the different modes of transportation. They will learn how to build a robust model based on a variety of data and assumptions.

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Project description: This project evaluates the economic reasons for offering housing for rent/sale on the case example of Prague. Recent residential development in cities of the Czech Republic has been mostly focused on housing that tries to sell fast. However, this is not a model necessarily used in other large European cities, such as Berlin, Zurich, Amsterdam, or Vienna. Why are Czech developers not offering housing for rent (as is the case with office space, for example)? What are the conditions under which rental housing make more economic sense for all parties? What influence does apartment ownership have on the inhabitants (flexibility, market migration, etc.)? The result of this project will be a report and a model, benchmarking/contextualizing Prague with other comparable cities in Europe on the rent/sell dichotomy. A model of conditions under which a rental housing development would make sense will be developed.

Impact: CCEA will use the results of this project in discussions with the public, developers and the cities in Central Europe to suggest the best diverse options for development. Students will learn the economies of different types of housing strategies, from the point of view of the developers and the clients. They will be able to better plan their own housing decisions for the future.





DATEIO: ADVANCED SHOPPING BEHAVIOR ANALYTIC ON CARD TRANSACTIONAL DATA

Short company or organization description: Dateio is a Czech start-up founded in 2013. We are developing a platform for card-linked, data-driven marketing (Google ad words for offline world based on shopping history of clients). Currently, we launched our first implementation with UniCredit Bank. See <u>www.u-setrete.cz</u>. For more information about our company, see our web: www.dateio.cz.

Project description: The aim of the project is to improve our reporting in order to provide merchants with better understanding of client shopping behavior (based on card payment history), client profiles and impact of personalized discount offer on their current and future purchases. Currently, retail merchants are spending most of their marketing budgets with no hard data on its impact. Even worse, they do not understand profile and shopping behavior of their current clients. Card transactions are a great source of data for solving the aforementioned problems and will help retailers understand their clients and push their businesses forward. Dateio currently provides reporting showing progress and results of the current campaign to its retail clients. During the project, students need to understand how retailers see their own business, identify relevant analyses and find simple understandable form(s) to present the outcomes. Furthermore, students need to understand available real world data and learn how to analyze them (SQL). An analytical approach bringing statistically relevant outputs without bias and side effects have to be developed and tested. The output should be a set of graphs understandable to merchants.

Impact: The project output will become part of online reporting, which Dateio provides to retail merchants running card-linked offer on our platform. Reporting is one of the key "value adds" of our platform. Students will go through the process of identifying business needs of top Czech retailers, understanding available data, preparing statistically relevant and accurate analyses, and finally, building a simple and understandable graphical output from the business perspective.

PROJECT SEMINAR PROPOSALS MA IN APPLIED ECONOMICS



OTAKAR MOTEJL FUND: VALUE OF OPEN DATA

Short company or organization description: The Otakar Motejl Fund is a <u>leading campaigner</u> for <u>open data</u> in the Czech Republic. From the initial inspiration by the concept three years back, we moved forward to legal implementation of open data that will proceed this year at the Czech Parliament. We serve as a moderator and animator of the Czech open data community by organizing major open data events, eg. Prague open data hackathon (Prague Hacks) or the annual <u>Open Data Apps Challenge</u>.

Project description: Despite our efforts, we are still at the beginning of the open data journey, because in reality there is not much data published in open format. We need to promote the potential of open data by locally based examples and arguments. Therefore, we decided to define 10 most promising datasets that should be open first and to advocate for their publication in the open format (e.g. real-time posting of public transportation vehicles, register of companies, ownership & stewardship of public greenery, some health data, some environment data). We need help with assessing the financial potential of some of the datasets. This means mainly to compare its recent value and economic benefits to a potential situation when the same data is published in the open format, and therefore openly accessible and usable by everyone without any additional costs or barriers.

Impact: Such outcomes may be used in two ways. First, in light of legislative action coming up in 2016, we would like to use the outcomes to show the potential of open data to legislative stakeholders (this means a mix of communication ranging from expert statements through face-to-face debates to promotion in the media). Second, we would use this expression of value of concrete data sets in our effort to make them published in open format. This means that the outcome of the seminar could have very quick and straight impact on public policy in the Czech Republic, and, if convincing, could be discussed nationally.

http://www.otevrenadata.cz/manifest/

http://www.otevrenadata.cz/otevrena-data/co-jsou-otevrena-data/

http://www.praguehacks.cz

http://www.otevrenadata.cz/soutez/



SOCIAL BANK: MARKET CAPACITY FOR PRIVATE FUNDRAISING

Short company or organization description: Social Impact Banking at Ceska sporitelna is a new banking segment of Ceska sporitelna, which targets non-profits and social entrepreneurs delivering capacity building and support alongside with banking services. Currently, we are among other things preparing a fundraising capacity building program for nonprofits. Ceska sporitelna is one of the largest banks in the Czech Republic and is part of the Erste Group.

Project description: Non-profit organizations in the Czech Republic often ask for grants from the government, the EU or private foundations. Some have ventured into models of securing funds from private donors – individuals or companies – often through innovative strategies. Fundraising from private sources is much more developed in other countries in Western Europe and North America. We'd like to understand the market potential for Fundraising from private donors here in the Czech Republic. This will require case study quantitative comparison to private funding market saturation in other countries, such as the UK, the Netherlands, or Sweden. It will require building a model to estimate how much individuals and companies can and are willing to give to charity, but also some qualitative research to understand the behavioral factors that influence the future growth of private giving, such as the levels of trust, transparency and communication standards.

Impact: The results will be used in strategy (including validation of key assumptions), training programs and instruction materials. We will use this information to promote and solidify the concept of Social Banking both internally within Ceska sporitelna and externally to help our target group realize the potential of private giving and the resulting financial sustainability. Students will learn a great deal about worldwide innovations in financing of social projects and their work will enable sustainable growth of good projects in the Czech Republic.



SOCIAL BANK: IMPACT OF SOCIAL BANK ON THE GDP AND/OR OTHER MACROECONOMIC INDICATORS IN THE CZECH REPUBLIC

Short company or organization description: Social Impact Banking at Ceska sporitelna is a new banking segment of Ceska sporitelna, which targets non-profits and social entrepreneurs delivering capacity building and support alongside with banking services. Currently, we are among other things preparing a fundraising capacity building program for nonprofits. Ceska sporitelna is one of the largest banks in the Czech Republic and is part of the Erste Group.

Project description: Our aspiration with the social bank is to give access to banking to those who have been neglected in the past: nonprofits and social entrepreneurs. The actions that these companies and organizations have on the economy – when allowed to develop their projects – can eventually be visible in macroeconomic indicators, such as the GDP. We are interested in finding out how, under different scenarios of growth of each of the two segments, our work will have incremental impact on these indicators. Students will be asked to choose one or more indicators and develop models to calculate our impact.

Impact: The results of this study will help us communicate – internally and externally – the greater impact of our work, and potentially compare the impact on GDP or different indicator(s) with the impact of other interventions. We will be able to compare the magnitude of our impact to scenarios where we do not exist, as well as to other types of economic activities that contribute to the GDP or other indicators. Also, it will help us communicate our impact to internal and external stakeholders.



SOCIAL BANK: DEVELOPING METHODOLOGY FOR SOCIAL IMPACT MEASUREMENT

Short company or organization description: Social Impact Banking at Ceska sporitelna is a new banking segment of Ceska sporitelna, which targets non-profits and social entrepreneurs delivering capacity building and support alongside with banking services. Currently, we are among other things preparing a fundraising capacity building program for nonprofits. Ceska sporitelna is one of the largest banks in the Czech Republic and is part of the Erste Group.

Project description: Measuring the impact of money given to social projects has long been something that nonprofit organizations and their donors/financiers struggle with. At the same time, there is a willingness on behalf of donors and lenders to provide finances pragmatically; where they can expect their dollar or euro to have the biggest impact. Organizations such as givewell.org or initiatives like the Social Impact Index, have tried to create methodologies for assessing impact. Social Bank needs to create its methodology for measuring whether its loans and investments have been placed well. This study will help develop (part of) such methodology, for example by looking at specific case studies of projects we have already funded or in developing tools for our future clients to measure the effects of our help. All in all, the million-dollar question is: how do we assess impact so that we can make sound decisions where to allocate resources and leverage our assets to maximize the overall social impact? When you dig deeper, a fundamental underlying question is whether we can compare social impacts of two interventions from two totally different fields, e.g. providing assistance to the mentally impaired vs. social prevention in distressed neighborhoods through organizing Scouting.

Impact: The results of this study will be used to assess projects that have been funded and projects that come to ask for a loan, education, or mentoring with us. We will be able to communicate, internally and externally, both the financial and the social impact of our work. We will also build capacity of our clients to more rigorously assess their work. Students will learn about different ways and methodologies for assessing impact.

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ZONKY: INNOVATIONS OF RISK SCORING METHODS

Short company or organization description: Zonky is a P2P (peer to peer) lending platform that is cutting the cost of borrowing money for people who have difficulties getting fair interest rates in traditional financial institutions. Similarly to Uber or Airbnb we are challenging the status quo of the traditional business system.

Project description: Many people do not get fair interest rates because they do not fit into the "right box" in traditional banking risk assessment processes (students, self-employed, SMEs, women on maternity leave, people who like to move around, travel, change jobs). This project will explore ways to innovate scoring methods using individual digital footprint, findings from behavioral economy, psychology, etc. to be able to risk score people more precisely and fairly than scoring purely based on biased socio-demographic data.

Impact: Your findings and suggestions will be tested "live" in our everyday practice. Those that prove to be relevant will be implemented to the Zonky risk process and will further cut costs for our customers.