

ORIGINAL PAPER

# ROLE OF ACADEMIA IN THE LIFE OF AN ACADEMIC CITY: A CASE STUDY OF POZNAŃ, POLAND

## Agnieszka Stanowicka

Faculty of Economic Sciences University of Warmia and Mazury in Olsztyn ORCID: https://orcid.org/0000-0002-0004-8288 e-mail: agnieszka.stanowicka@uwm.edu.pl

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### Abstract

The aim of this study has been to evaluate how a city-academia cooperation model functions, using the city of Poznań as a case for this study. Several benefits were identified from having a college or university seated in a city, for instance: stimulation of the city's economic growth and development and of its cultural life, positive influence on the labour market, shaping a positive image of the city. For these reasons, the city authorities have been making efforts to attract students to Poznań, to sustain their interest in the city while in academia, and to retain the graduates in the city. It is highly probable that the cooperation model identified in Poznań will work in other academic centres, generating a number of development benefits.

#### ROLA UCZELNI W FUNKCJONOWANIU MIASTA AKADEMICKIEGO NA PRZYKŁADZIE POZNANIA

Kod JEL: R11, O180, O150.

Słowa kluczowe: uczelnie, ośrodki akademickie, rozwój miasta, zarządzanie miastem.

#### Abstrakt

W opracowaniu podjęto próbę oceny funkcjonowania modelu współpracy miasto-uczelnie na przykładzie Poznania. Zidentyfikowano wiele korzyści z funkcjonowania uczelni w mieście, którymi są: pobudzenie wzrostu i rozwoju gospodarczego miasta, rozwój kulturowy miasta, pozytywne

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oddziaływanie na sytuację na rynku pracy, kształtowanie pozytywnego wizerunku miasta. Z tych powodów władze miasta podjęły działania, których celem jest przyciąganie studentów do Poznania, utrzymanie ich zainteresowania miastem w trakcie studiów oraz zatrzymanie absolwentów w mieście. Taki model współpracy, jaki zidentyfikowano w badanym mieście, z dużym prawdopodobieństwem może się sprawdzić także w innych ośrodkach akademickich, przynosząc im wiele korzyści rozwojowych.

# Review of the Literature Dealing with the Role of Academia in the Life of a City

With a view to the sustainable development of a city, relevant determinants are sought to be identified and properly employed for the sake of beneficial socio-economic and environmental transformations in the city. In the classical approach, the basic development factors are labour, land and capital. More contemporarily, this set has been expanded by adding technological progress and entrepreneurship, which point to the capability of using all available production factors effectively. The priority role of knowledge in stimulating the economic development (knowledge-based economy) is also increasingly recognised. Another significant development determinant is social capital understood as collective, indivisible resources and as a public good (Boccella & Salerno, 2016). The creation and development of knowledge resources as well as the formation of social capital are what the education system deals with, and tertiary education plays a special role in the creation of high quality of these resources. Currently, apart from knowledge-based economy, attention is drawn to the economy based on creativity, indicating that the creativity sector is the one that significantly stimulates the economic development. The so-called creative class is 'the product' of colleges and universities. Without a shadow of a doubt, they affect the development of cities as well as entire regions.

The cities where higher education institutions operate are referred to as academic centres or university cities. Academic centres are most often metropolitan cities, have large populations, are multi-functional and are seats of universities and other higher education institutions (Rewers, 2016). The academic function in these cities is not the dominant one. This is different from university cities, where the university function is often the dominant one and the university campus is an important part of the urban space. Universities have been an integral part of cities for centuries, in which they have played the role of a basic drive of the economic, social and environmental development, having an influence on the employment, real estate market, the leisure facilities or consumer activity in a given city (Cannas da Silva & Valsassina Heitor, 2014). With respect to their impact on economy, universities influence this area by entering networks of regional cooperation and through the commercialisation of their research and scientific outputs. Universities are creators of production factors, such as human resources and knowledge and innovation, which determine creativity and entrepreneurship, thereby stimulating the economic growth and development (Piotrowska-Piątek, 2014). They attract students (new inhabitants) to the city, thus generating new demand for goods and services, and the growing consumer demand stimulates the demand for investments, which leads to the economic growth of the city and the region. Higher education schools contribute to the formation and reinforcement of the city's position as a regional or subregional centre (Rokita-Poskart, 2015). They create the region's identify and image, improve its competitiveness, attract new city residents – students, scholars, investors, businessmen. The transfer of knowledge, technology and innovation from science to business is a condition underlying the growth of the regional competitiveness. A model developed by the Polish Economic Institute shows that academicity in nearly 80% affects the socio-economic development of cities (Akademickość polskich miast, 2019). It is also emphasised that Polish cities together with the functional surroundings are becoming the engine of the economic development of the whole country (Rudewicz, 2020).

A higher demand for accommodation is stimulated by students arriving in academic cities. One reason is the insufficient number of places in residence halls. In some academic centres, the influx of students is so intense that it is referred to in certain UK cities as studentification. It stimulates the development of the real estate rental market but has also given rise to the emergence of new private investments, called the PBSA (Purpose Built Student Accommodation), that is buildings raised for the purpose of housing students (Zasina, 2018).

The university infrastructure, other than ensuring room for academic teaching, is often used for holding the city's cultural and sports events as well as other teaching activities addressed to the local population (courses, the University of the Third Age, classes for children, etc.). This infrastructure, often contained in historic buildings, also shapes the city's positive image. Moreover, the rhythm of an academic year affects the rhythm of the city's life. In the so-called university city, a university is one of the principal employers. University students and staff create a specific type of urban culture, known as student (academic) culture, and simultaneously co-create the creative class (Florida, 2007). Academic culture is a combination of science and student entertainment, and as such is governed by specific social norms and behaviours (Rewers, 2016). The collage of learning and playing which students bring to the city is defined in American studies as the academic lifestyle (Chatterton & Hollands, 2003). Universities are thought to be urban institutions which collaborate with people, institutions and enterprises operating in a given city, and with which they share some challenges (Perry & Wiewel (Eds.), 2005). Colleges and universities shape both professional and social roles. They also create desirable moral attitudes, cultural customs, lifestyles, systems of values, etc. The research conducted in tertiary education institutions represents one of the basic conditions for preparing the local community to undertake entrepreneurial activities, which determines the development of innovations and is a source of patents (Breschi *et al.*, 2007). Academia also encourages local residents to take steps to forward the city's social and economic development.

The concept of 'the urban university', which emerged over 40 years ago, focused on education orientated towards the city, research, strategies of services and responsibilities of a university to the society (Hill, 1981). In 1994, a model of higher education was developed based on the notion of a socially engaged university (Boyer, 1994). This model envisaged the engagement of students in social matters, expansion of education over the whole society, efforts to associate theory with practice, and promotion of an integrated view of knowledge. In recent years, higher education institutions have been assigned the so-called third mission, which suggests that apart from education and research the academic function of tertiary education schools obliges them to act for the sake of regional development (Kauf & Stec, 2017). Thus, colleges and universities become the region's research and development background, so that it can transform into a learning region, operating as a store of knowledge and ideas, which are a source of innovation and a motor of economic growth (Florida, 2001). Academics are able to identify, research and develop technological needs of the city and region, in order to satisfy local needs and then to find export markets. Studies conducted at universities are often oriented towards this goal (Hall, 1997).

## Methodology

The role of a university in a city is therefore considered in four dimensions: as an economic entity, a producer of knowledge, an institution forming human capital, and as a regional actor' (Boucher et al., 2003). The city-academia cooperation model largely contributes to the social, cultural and economic life of modern cities (Ngo & Trinh, 2016). The following paper presents an attempt at making an evaluation of how such a model functions, using the city of Poznań as an example. To this end, an in-depth interview was carried out with the deputy director of the department of the City's Development and International Cooperation, who is also the plenipotentiary of the Mayor of Poznań for matters of the youth and cooperation with higher education institutions. This case study is a detailed description of the actual economic development, its components and the organisation's environment, which served to identify the causes and consequences of its course. Based on the collected information, this method enabled the author to make an in-depth analysis of the researched problem, to identify its specific characteristics, and to describe its interaction with the organisation or its environment (Grzegorczyk (Ed.), 2015). In this case, the goal was to test the city-academia cooperation theory, which could be either confirmed or negated.

# Role of Academia and the Cooperation of the City Council with Higher Education Schools – a Case Study of the City of Poznań

Poznań is one of the biggest academic centres in Poland. There are eight public and 16 private (including 2 branches) schools of higher education. The best known are: Adam Mickiewicz University, University of Life Sciences, Karol Marcinkowski Medical University, Poznań University of Technology, University of the Arts, Poznań University of Economics and Business, the Ignacy Paderewski Academy of Music, and Poznań University of Physical Education. There are also a few dozens of scientific and research and development institutions, and each year Poznań hosts over 3 thousand conferences. Data on the higher education in Poznań, relative to such information from other Polish cities, are collated in Table 1.

Table 1

32,881

26,429

24,920

16,007

15,009

| number of students and number of graduates in 2020 |                                       |          |                       |          |                        |  |  |
|--|---------------------------------------|----------|-----------------------|----------|------------------------|--|--|
| Cities   | Number of higher<br>education schools | Cities   | Number<br>of students | Cities   | Number<br>of graduates |  |  |
| Warszawa   | 64                                    | Warszawa | 225,200               | Warszawa | 48,917                 |  |  |

130,428

107,894

104,729

66,110

65,325

Kraków

Wrocław

Poznań

Gdańsk

Lublin

Kraków

Wrocław

Poznań

Gdańsk

Łódź

| Ranking list of Polish cities in terms of number of higher education schools, |
|---|
| number of students and number of graduates in 2020                            |

Source: Local Data Bank, Statistics Poland (GUS).

24

22

19

18

13

Wrocław

Poznań

Kraków

Gdańsk

Łódź

With respect to the number of higher education schools, Poznań is the third biggest academic center in Poland, after Warsaw and Wrocław. The highest number of students is found in Warsaw, followed by Kraków. The number of students in Wrocław is only slightly higher than in Poznań, which means that Poznań occupies the fourth place in this ranking list. The same is true for the number of graduates. Analysts of the Polish Institute of Economics have demonstrated that the most academic cities in Poland, beside the capital city, are Kraków, Poznań and Wrocław (*Akademickość polskich miast*, 2019). This justifies the conclusion that Poznań is an academic centre of considerable importance in Poland, and a case study involving this city can provide the evidence for many valuable conclusions, which other academic cities in Poland can benefit from. According to the Poznań City Council employees, the academic community is a significant and integral part of the city, even though the number of higher education schools and the number of students have both decreased in the recent years (Tab. 2).

Table 2

| Number of higher<br>education school<br>and students | 2012    | 2013    | 2014    | 2015    | 2016    | 2017    | 2018    | 2019    | 2020    |
|--|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Higher education schools                             | 27      | 26      | 25      | 24      | 23      | 24      | 24      | 22      | 22      |
| Students   | 128,212 | 121,117 | 116,969 | 116,450 | 112,002 | 110,346 | 104,088 | 102,164 | 104,729 |

Number of students and higher education schools in Poznań in years 2012-2020

Source: Local Data Bank, Statistics Poland (GUS).

The number of higher education schools decreased by 5 in years 2012-2020, and the number of students in the same time period fell down by 18.32%. This is consistent with the overall trend in Poland. In that decade, the number of students was decreasing steadily from around 1,927,800 people in the academic year 2008/09 to 1,230,300 in the academic year 2018/19 (Szkolnictwo wyższe w roku akademickim 2018/2019, 2019). Relative to the number of students in 2012 equal 1,764,060, the rate of decrease in the number of students in the whole country over the analysed period was 31.8%. The decrease in the number of people studying in Poznań was therefore over 10% lower than the decrease in the total number of students in Poland, which is a positive result. Nevertheless, in the face of this regress, the city authorities have been making efforts to cooperate with the authorities of the higher education schools in their city to attract new students, retain those who have chosen to study in Poznań and also to entice the graduates to stay in their city. It has been acknowledged that the human and economic potential of the Poznań academic community generates social, cultural and financial benefits for the city. The engagement of the academic community in the social, cultural and sport life, and in the entertainment sphere creates the atmosphere of a student city and gives the city a large dose of positive energy. Furthermore, it boosts the economy.

It has been observed that cities which play an academic function have been transforming in the past decades into consumption-oriented student cities, whose economies function and develop by meeting the demands of the academic youth (Zasina, 2020). Whenever a new academic year starts, the demand for educational services in Poznań as well as for public transport, catering or housing increase because the student community of over 100,000 people is a large group of consumers. Considering the fact that over 80% of these students come from outside Poznań, it can be said that the income they spend in this city is generated in other localities.

In the opinion of the Poznań City Council staff, higher education schools also generate the high quality of human resources, which attracts investors. Entrepreneurs consider both the location of a given city and the availability of highly qualified workforce, and Poznań offers the latter owing to the high level of education at its colleges and universities. Locating new investments in Poznań means higher revenues for the city from taxes and more jobs. Moreover, there are more possibilities for the transfer of knowledge to economy; there is progress in the technological and organizational innovativeness and development of the creative sector. With respect to work places, it is worth adding that the Poznań-based schools of higher education are important employers on the local labour market.

When analysing the benefits from having schools of higher education in their city, the City Council employees also emphasised the role of academic mentors and experts, who join them in making efforts to solve problems significant for the development of Poznań. They also underlined the considerable importance of the investments made by higher education schools in facilities (school buildings, research facilities, amenities) in the spatial and architectural development of the city. Other functions of academia which are acknowledged are the culture-forming role of the academic community, popularisation of science, or academic sports, both amateur and professional. By understanding and appreciating the importance of higher education schools in the development of the city, the local authorities consider it their priority to tighten the collaboration with the academic and scientific community, and therefore consistently implement measures to support the development of universities and colleges and to shape the image of Poznań as a strong academic centre. The undertaken actions are rooted in the provisions of the strategic documents of the city of Poznań, which are presented in Table 3.

The activities launched by the city authorities (previously referred to as the activities undertaken by the city of Poznań) include the ones addressed to potential students, to persons already studying in Poznań, to graduates and to academic teachers.

Since 2010, the city has organised meetings with potential students in secondary schools, during which school pupils can become acquainted with the offer of Poznań-based colleges and universities, and with the assets of the city as such. Each year, the plan of on-site visits in schools is accompanied by an online promotional campaign, mostly in social media, under the slogan 'Poznań Attracts'. Since 2011, the city has been participating together with Poznań-based schools of higher education in the educational fairs. Stands of Poznań as an academic city are also present during the Secondary School Graduates' Shows held by the magazine Perspektywy. Another initiative is the campaign 'Study in Poznań', which since 2015 has seen representatives of the Poznań City Council and Poznań-based higher education schools participating in international fairs, held in other countries, in order to entice foreign students to study in Poznań.

Table 3

#### Cooperation of the city of Poznań with the academic and scientific community

| Year | Stages in the development of the cooperation  |
|------|---|
| 2005 | Academic and Scientific Strategy of the City of Poznań  |
| 2005 | The 'Academic Poznań' Programme in the Plan for the Development of the City of Poznań<br>in years 2005-2010 (the programme has been continued since 2010 under the name<br>of 'The Academic and Scientific Poznań' in the Strategy for the Development of the City<br>of Poznań until 2030. Since 2017, these activities have been continued under the priority<br>'Strong Metropolis' in the Strategy of the City of Poznań 2020+) |
| 2008 | Appointment of the Management Board for the Programme 'Academic and Scientific<br>Poznań (the current name: Board of Academic and Scientific Poznań)  |
| 2008 | Agreement on cooperation with Poznań-based public schools of higher education, under<br>the Programme, in the scope of supporting the development of Poznań-based scientific<br>institutions in the education and scientific and research spheres   |
| 2018 | Appointment of the Plenipotentiary of the Mayor of Poznań for the youth affairs and academic cooperation P  |
| 2018 | The policy titled "Poznań of the Young 2025'  |

Source: Report on higher education issued by the Department of the Development of the City and International Cooperation, of the City Council of Poznań, dated on 14 October 2020.

Under the umbrella of the 'Study in Poznań' campaign, the city has taken part in fairs Kazakhstan, Ukraine, Russia, Georgia and Azerbaijan. Representatives of the City Council also took part in meetings organised by the International Conference of Educational Agency and Programmes 'Net Conference Warsaw', held by the New Educational Trend in Warsaw in 2016 and 2017. In early 2021, in cooperation with the National Academic Exchange Agency (NAWA), the Study in Poznań Virtual Educational Fair was held, where 10 Poznań-based higher education schools and the city of Poznań showed their educational offer. The authorities of Poznań address a programme of scholarships to the best secondar school leavers from all Poland to study in Poznań because they wish to attract best students, ambitious, creative, potential leaders, who may become a showcase of the city and future experts in their fields of expertise. The Poznań City Council issues a brochure to encourage students to choose Poznań. There are also sites on Facebook, such as Poznań Attracts in the Polish language and Study in Poznań in English.

The city also participates in the development of persons who are already studying in Poznań, and makes efforts to sustain their interest in the city (as these are potentially well-qualified future residents of Poznań). The City Council co-organises open lectures of outstanding scientists and artists, which allows students of Poznań-based higher education schools to meet the most distinguished representatives of the world's sciences and arts in person. Since 2008, the city has co-funded over 300 lectures held at different colleges and universities, including lectures given by Nobel Prize winners (*Idea programu*, 1998-2023). Another interesting initiative of the City Council is the competition for the best Master Theses and Doctoral Dissertations presented at the Poznańbased higher education institutions, whose aim is to expand and disseminate the knowledge about Poznań, promote achievements of university graduates and young scholars from Poznań colleges and universities, and to scout for young talents to work for the development of the city. Since 2014, the annual Poznań Literary Award has been awarded by the Mayor of Poznań and Rector of Adam Mickiewicz University.

Regarding the integration of foreign students, representatives of the city authorities participate in the so-called Orientation Days, in the organisation of football tournaments Euroasmus and Friends Cup, or in the organisation of concerts called Chop (IN) POZnań. In 2020, the Poznań University of Economics and Business completed the project 'Cultural Diversity', co-funded by the city of Poznań, which was addressed to academic teachers and students in Poznań, and dealt with issues of cultural diversity and anti-discrimination. In the same year, the cooperation between the city and the Poznań University of Economics and Business resulted in holding a debate between the mayor and the rector of this university, under the title 'Role of the university in building an open and diverse city'. Since 2018, the city of Poznań has been involved in the project ON\_BOARD\_Connecting Cities through Education, which facilitates international exchange of experience and good practice in education.

The city authorities initiate activities to persuade students to remain in Poznań once they graduate, which seems more important nowadays, when the number of college and university graduates has been declining in recent years (Tab. 4).

Table 4

| Graduates  | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| College and<br>university<br>graduates<br>in total | 35,424 | 33,894 | 32,505 | 32,031 | 29,171 | 32,531 | 27,470 | 25,061 | 24,920 |
| Rate<br>of change [%]                              | -      | -4.32  | -4.1   | -1,46  | - 8.93 | 11.52  | -15.56 | -8.77  | -0.56  |

Graduates of higher education schools in Poznań in years 2012-2020

Source: Local Data Bank, Statistics Poland (GUS).

In years 2012-2020, the number of graduates decreased by nearly 30% (while the number of students fell down by 20%). Wishing to retain the college and university graduates in Poznań, the city launched in 2013 a project aiming to create an attractive offer of housing for rent available to this group. The city also provides help to students by co-financing their training placements in enterprises located in Poznań. Efforts to retain foreign students in the city are carried out under the slogans 'Stay in Poznań' and 'Find a Job in Poznań'. The objective is to acquaint young people with possibilities of finding employment in Poznań. Another interesting activity that the city participates in is the Job Fair, which is held at the Poznań University of Economic and Business, among other locations.

The city also endeavours to strengthen its cooperation with the scientific community. Scientists from Poznań, for example, take part in the works on updating the Strategy for the Development of Poznań, developing other strategic documents, solving selected research problems, e.g. the development of e-administration. The city has also collaborated with the Adam Mickiewicz University in the Centre for Audio-visual Documentation, which was established to collect, develop, digitise and disseminate archival films concerning the history of the development of Poznań, and - as experts emphasise – documenting the past is an extremely important element of the preservation of cultural heritage (Pusz & Boryczka 2021, p. 30). Other examples of joint research projects implemented are 'The functioning and directions of development of the Poznań Agglomeration', 'Indicators of life quality of Poznań residents', research projects dedicated to the preservation of forests in Poznań, or the implementation of the energy strategy of Poznań. The schools of higher education in Poznań can also count on the city's support in the development of their teaching and research infrastructure – the city has ceded land with the total area of 44 ha on preferential terms to the Poznań-based colleges and universities.

The city has initiated business-academia meetings, and supports academic entrepreneurship. Examples of such initiatives are the Program for Support of Innovative Projects, the Common Work Zone +1, Poznań Day of Entrepreneurship, an initiative supporting the start-up environment, or the city's contribution to the establishment of science and technology parks (Poznań Science and Technology Park, Wielkopolska Tele-information Cluster). The city is also engaged in the research on labour market, for example in 2013 it helped to establish the Poznań Agglomeration Observatory of Economy and Labour Market, which undertakes activities aiming to counteract unemployment and activate the unemployed. The city authorities also participate in the organisation of congresses and conferences, of which over 3,000 are held annually in Poznań (the Poznań Convention Office was set up for this purpose).

# Conclusions

Poznań is a city that can be recognised as one of the most important academic centres in Poland. The authorities of this city have long acknowledged the benefits that can be achieved from the cooperation of the city with colleges and universities, and therefore initiated such collaboration and have been developing it very successfully. They appreciate the role of students, who make up a very large segment of the local market, which generates a high level of consumer demand,

which stimulates the economic growth of this city. They also notice the high quality human capital produced by academia, which stimulates the investment demand, and this additionally translates into the economic growth of the city. It also has a positive impact on the labour market in Poznań. The Poznańbased colleges and universities are large employers as such, and the investments that attract provide the Poznań residents with additional jobs. The tertiary education institutions also invigorate the cultural development of Poznań. They disseminate knowledge among the city's inhabitants (not only students), and the university facilities have a positive influence on the architectural landscape of the entire city. All these factors contribute to the positive image of Poznań, which in the long-term attracts new residents, students, tourists, investors, etc., thus stimulating the growth and economic development of the city and region. For all these reasons, the city of Poznań has entered into intensive cooperation with the colleges and universities seated in this town - it participates in the promotion of their educational offer, it endeavours to retain the graduates in the city and tries to attract talented people from abroad. The city authorities also intensify the cooperation with the academic circles, striving towards the greater participation of researchers in solving the city's problems and engaging in joint research projects. They also undertake initiatives to improve the collaboration of scholars with entrepreneurs from Poznań and the region. The city-academia cooperation model has been operating in Poznań for years, bringing it numerous development benefits.

In all likelihood, this model has been implemented in other academic centres in Poland and it can be concluded that it may bring them similar benefits to those observed in Poznań. These impacts can be direct or indirect. An example of a direct impact of academia on a city and its life is the commercialization of the results of studies conducted in universities by private entrepreneurs, which gives measurable benefits to both sides. A direct effect of higher education institutions on the labour market is also noticeable – they are large institutions, providing hundreds of work places; the indirect effect on the labour market is associated with the creation of the future work force, whose education will correspond to the development needs of the city and region. Other effects of academia in a city consist of the knowledge and innovations it produces, which determine creativity and entrepreneurship, thus stimulating the city's economic growth and development. Tertiary education schools also multiply the human resources in the city, attracting new city dwellers. Through their versatile activities, colleges and universities arise interest of other entities, attracting their demand to the city. Moreover, higher education schools operating in the city have a positive influence on its image. In addition to the city's economic development, academia also adds to its social development by promoting and creating positive cultural patterns. It can therefore be concluded that the city-academia cooperation model is desirable in supporting the socio-economic growth and development of a city.

## References

+jeden. (2022). Retrieved from www.plusjeden.com (15.11.2022).

- Akademickość polskich miast. (2019). Raport PIE. Warszawa. Retrieved from https://pie.net.pl/ wp-content/uploads/2022/01/18\_06\_2019\_Informacja\_prasowa\_Akademickosc\_miast.pdf
- Bank Danych Lokalnych. (2022). Główny Urząd Statystyczny. Retrieved from www.bdl.gus.pl (30.10.2022).
- Boccella, N., & Salerno, I. (2016). Creative Economy, Cultural Industries and Local Development. Procedia Social and Behavioral Sciences, 223, 291-296. https://doi.org/10.1016/j.sbspro.2016.05.370
- Boucher, G., Conway, C., & Meer, E.V.D. (2003). Tiers of Engagement by Universities in their Regions Development. *Regional Studies*, 37(9), 28-41.
- Boyer, E.L. (1994). Creating the New American College. Chronicle of Higher Education, 3(9), A48.
- Breschi, S., Lissoni, F., & Montobbio, F. (2007). The Scientific Productivity of Academic Investors. New Evidence from Italian Data. *Economics of Innovationand New Technology*, 16(2), 101-118. https://doi.org/10.1080/10438590600982830
- Cannas da Silva, L., & Valsassina Heitor, T. (2014). *Campus as a City, City as a Campus: University Precincts in Urban Context*. Proceedings of the 7<sup>th</sup> knowledge cities world summit. Tallinn University & World Capital Institute.
- Chatterton, P., & Hollands, R. (2003). Urban Nightscapes. Youth Cultures, Pleasure Spaces and Corporate Power. London-New York: Routlege.
- Florida, R. (2001). Toward to the Learning Regions. Futures, 27(5), 528-533.
- Florida, R. (2007). The Flight of the Creative Class. New York: Collins.
- Grzegorczyk, W. (Ed.). (2015). Wybrane problemy zarządzania i finansów. Studia przypadków. Łódź: Wydawnictwo Uniwersytetu Łódzkiego.
- Hall, P. (1997). The University and the City. GeoJournal, 41(4), 301-309.
- Hill, S.R. Jr. (1981). Urban Universities: Twentieth Century Phenomena. Phi Kappa Phil Journal National Forum, 61(3), 38-39.
- *Idea programu* (1998-2023). POZnan. Studia. Wykłady otwarte. Retrieved from http://www.poznan. pl/mim/studia/idea-programu,p,12973,12974.html (15.11.2022).
- Kauf, S., & Stec, P. (2017). Szkolnictwo wyższe jako czynnik zrównoważonego rozwoju regionów. Zeszyty Naukowe Politechniki Śląskiej. Seria: Organizacja i Zarządzanie, 106, 93-102.
- Ngo, L., & Trinh, T. (2016). A University-City Complex, a Model for Sustainable Development: a Case Study in Vietnam. Procedia Engineering, 142, 92-99. https://doi.org/10.1016/j.proeng.2016.02.018
- Obserwatorium Gospodarki i Rynku Pracy Aglomeracji Poznańskiej (2022). POZnan. Retrieved from www.obserwatorium-poznan.pl (14.11.2022).
- Opracowanie Wydziału Rozwoju Miasta i Współpracy Międzynarodowej Urzędu Miasta Poznania z dnia 14.10.2020 na temat szkolnictwa wyższego. (2020). Poznań: Wydział Rozwoju Miasta i Współpracy Międzynarodowej Urzędu Miasta Poznania.
- Perry, D., & Wiewel, W. (2005). From Campus to City: The University as Developer. In W. Wiewel, & D.C. Perry (Ed.). The University as Urban Developer: Case Studies and Analysis. Abingdonon-Thames: Routledge.
- Piotrowska-Piatek, A. (2014). Szkoły wyższe jako czynnik rozwoju regionalnego. Rozwój Regionalny i Polityka Regionalna, 28, 37-49. https://doi.org/10.14746/rrpr.2014.28.04
- POZnan. (2022). Retrieved from www.poznan.pl (16.11.2022).
- POZnan.travel. (2022). Retrieved from www.poznan.travel (16.11.2022).
- Poznańska Nagroda Literacka. (2022). Retrieved from www.poznanskanagrodaliteracka.pl (16.11.2022).
- PTBS. (2022). Poznańskie Towarzystwo Budownictwa Społecznego sp. z o.o. Poznań. Retrieved from www.ptbs.pl (14.11.2022).
- Pusz, K, & Boryczka, E. (2021). Rola i znaczenie uczelni wyższych w ochronie i kształtowaniu dziedzictwa kulturowego ochrony dziedzictwa kulturowego. *Kwartał. Magazyn SKN Spatium*, 23(1).

- Rewers, E. (2016). University Cities: Imagined? *Przegląd Kulturoznawczy*, 28, 151-162. https://doi. org/10.4467/20843860PK.16.012.5364
- Rokita-Poskart, D. (2015). Miejsce funkcji akademickiej w strategiach rozwoju lokalnego wybranych miast pozametropolitarnych w Polsce. *Studia Miejskie*, *19*, 159-169.
- Rudewicz, J. (2020). *Rozwój ekonomiczny wielkich miast w Polsce*. Szczecin: Wydawnictwo Naukowe Uniwersytetu Szczecińskiego.
- Szkolnictwo wyższe w roku akademickim 2018/2019. GUS. Retrieved from file:///C:/Users/PC/ Downloads/szkolnictwo\_wyzsze\_w\_roku\_akademickim\_2018\_2019.pdf
- Zasina, J. (2018). W kierunku studentyfikacji? Zakwaterowanie studenckie w polskich miastach akademickich. Gospodarka w Praktyce i Teorii, 48(3), 69-84. https://doi.org/10.18778/1429-3730.48.06
- Zasina, J. (2020). Miasta studentów-miasta konsumentów zachowania konsumenckie studentów w rozwoju Łodzi i Turynu. Łódź: Wydawnictwo Uniwersytetu Łódzkiego.