

University — Business Interaction in Times of Demographic Change

University-business cooperation has been largely discussed from the perspective of technology transfer, education and research cooperation. An important issue in the related discussions is that in the globalised knowledge society competitiveness and prospering development of regions heavily depend on local strengths and innovations. Herein, universities play an important role within the regional development supporting regional enterprises to compete in the global economy.

However, not only education and innovation are important factors. Indeed, socio-economic environment is crucial for successful and sustainable regional development as well. Especially in times of demographic change the success in the global competition of brains depends highly on the attractiveness of regions and regional soft factors. This is a case especially in the Eastern and Central Eastern Europe, where a lot of regions are suffering from weaknesses in soft factors and innovations, what, in turns lead to the brain drain and dramatic demographic changes.

The paper at hand highlights new models and results of successful university-business interaction in the context of demographic change with a special focus on the Baltic Sea Region emphasising the role of universities as a driving force in regional soft factor development.

Keywords: Universities' third role, knowledge economy, demographic change, region business culture and development.

1. Universities 3rd role and Regional Development

With the growing importance of knowledge economy from the early 1990s the region played an increasing role as a key factor for prosperity in the 21st century. But there are different aspects why different regions are developing differently. Porter in his cluster concept stressed the regional aspects for economic development by defining «...a geographically proximate group of interconnected companies and associated institutions in a particular field, linked by commonalities and complementarities» (Porter 2000). Other scholars emphasize beyond geographical settings and spatial aspects also the external environment which influences heavily regional development and networks (Florida 2002; Bluhm 2008).

By highlighting the role of universities in regional development a possible starting point represents Florida's TTT-concept because in his approach talent, technology and tolerance are identified as the frame conditions for creative economy of 21st century (Florida 2002). A possible translation of the TTT-concept into the university world could be gained by replacing talent by education, technology by innovation and technology transfer and by linking the 3rd T, representing tolerance, with the university impact on the regional socio-cultural environment (Prause and Hunke 2012).

The classical ground for the investigation of regional engagement of universities is related to the areas of education, innovation and technology transfer. In the concepts of regional knowledge networks universities are given a special role since knowledge and skills have become the prerequisites of SMEs' and regions' competitiveness where universities are expected more than ever to actively engage in the development (Goddard 2000). This innovation aspect is also in the centre of competence networks, involving universities as regional innovation motors for new business and regional network creation, especially in Central Eastern European regions (Meier zu Köcker 2008).



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So a regionally engaged university can become a key asset for regional development recognized as a «third role» for universities. This development is in line with European Commissions reflections on «The Role of the Universities in the Europe of Knowledge» (EC 2003). Research results show that the technology and innovation factor of a region; as well the human capacities with high educated work force, especially in correlation with entrepreneurial and technology transfer activities, have a high impact on the economic situation of regions (Kröhnert et al. 2007, p. 6; Etzkowitz 2003; Clark 2001).

2. Socio-cultural Environment and Regional Development

Until now the cultural and social regional impact of universities represents a neglected research topic even if there are indications that a major role for universities in 21st century can be found as leading regional institution for soft factor development representing the environment of network and cluster development (Prause and Hunke 2012; Prause and Winkler 2011). Especially in Eastern and Central Europe where a lot of regions are suffering under their weakness in soft factors and innovations and which are linked to brain drain and dramatic demographic changes the success of universities 3rd role is strongly linked to the development of regional soft factors (Hirsikoski et al. 2009). Some important research results highlighting the relationship of soft factors and regional development shall be mentioned.

Bruhn et al (2008) who were able to prove that Eastern German regions suffer under a lack of high skilled business leaders due to low regional attractiveness. An analysis of business locations in various regions in Germany showed that factors like life quality and location image are regional soft factors which are having an important impact on regional development even if their weight is different for different branches (Hansmann and Höck 2001, Brandt, A. 2010).

Other results of the think-tank of the German Employment Agency from 2007 revealed that cultural diversity has a significant impact on the regional innovation power expressed in patents per capita (Niebuhr 2006). Bussmann and Werle from the Eastern German University of Halle – Wittenberg investigated the negative economic influence of crime and xenophobia for Eastern Germany and calculated the economic damage to be a couple of million Euros (Bussmann and Werle 2007). So tolerance, security and openness represent important factors for regional prosperity in knowledge economy.

Finally the results of a survey of the Federal Ministry of Family Affairs proved that family – friendly companies are more successful to attract and to hold highly qualified employees (MFA 2011). Since highly qualified female workforce will be more and more in the future, family orientation becomes a crucial issue for employer branding in times of demographic change and lack of well-educated work force.

3. Socio-cultural Impact of German Universities

Recently Leibniz – Institute of Demographics revealed that the population between 20 and 25 years in German regions with universities is significantly higher than in regions without universities and in that around universities the corresponding female population is significantly higher than in other locations (Leibert and Wiest 2010). This trend is expected to increase since in 2005 57% of university education degrees were awarded to women and that this value will increase to 63% by 2025 (OECD 2008).

Additionally inner German long-term statistics about migration showed that females below the age of 30 years are more flexible than their male counterparts willing to migrate to university locations to increase their education and to study at large universities (Brähler et al. 2007). Despite the fact that this observation applies to all students, male students rather stay at their home and prefer to commute to their universities whereas female students prefer urban lifestyle and adapt their lives to urban culture (Leibert and Wiest 2010). Edlund delivered a further explanation for this phenomenon since bigger cities offer generally more chances for women to find wealthy potential partners (Edlund 2005).

German universities with a high percentage of female students are University of Heidelberg (57.3%), University of Tübingen (58.6%), University of Freiburg (53.2%), University of Osnabrück (58.3%) and University of Flensburg (68.0%) (Prause and Hunke 2012). However there are also some exceptions from this general trend including Aachen University of Technology which focusses on engineering and natural sciences, which are preferred by male students.

The regional gender mix caused by universities has an important impact of the socio-economic and political environment of the region. Franz Walter (2008) found out that good educated and ambitious females are primarily supporting red–green parties due to their high priority for more life quality and environmental protection. Since the 1980'ies women voted more for center–left parties whereas men supported centre–right parties, especially in

Germany, where the «Green Party» formed a forefront in «Green Movement» the majority of voters was and is female (Schneider 2008). Without the early political success of the «Green Movement» in Freiburg the region would not have become one of the most successful innovation and business locations for renewable energy (Change 2013).

These results are in line with the findings of the Centre for the American Woman in Politics which formed the concept of «Gender Gap» expressing the fact that females are more engaged than men in support of environmental activities, for economic disadvantaged and for equal rights for all kind of people. Whereas men prefer generally more often extreme political parties, female voters are rather offended by aggressive attitudes and political statements. (Schneider 2008). These observations correspond to the model of business culture of Geert Hofstede who dedicated one dimension of his theory to Masculinity/ Femininity by stating that Masculinity is related to the trait which emphasizes ambition, acquisition of wealth, and differentiated gender roles whereas femininity is seen to be the trait which stresses caring and nurturing behaviours, sexuality equality, environmental awareness, and more fluid gender roles (Hofstede 2001).

So the political dimension of the regional gender mix is only one aspect of the socio-cultural environment. The model of business culture reveal that women in general avoid conflicts, act sensitive and are social oriented. With their tendency to build social relationships they support the creation of networks and also business relations on another level as men can do. Women have a comprehensive view on situations and they can share their power and success (Kessler et al. 2011). These female attitudes are linked with a positive influence on the regional crime situation by considering the regional total number, the level of violence and the level of corruption (Statista 2011, Dollar et al. 1999).

In the context of foreign workers the female culture is paving the way for tolerance, support and a successful integration of foreigners into the region. But universities are not only influencing the regional gender mix, they also attract foreign students to their region. The number of foreign students at German universities amounts around 9% of all students in Germany and universities enjoy a long experience in intercultural networks of knowledge exchange and in international project work (Bildungsministerium 2010). So universities are regional competence centres for intercultural experience and diversity management taking the role of regional crystallisation point for attracting well-educated migrants to push regional innovation power (Niebuhr 2006; Prause and Hunke 2012).

4. Case Study: Wismar University

The Hanseatic town of Wismar has about 40,000 inhabitants and is located in the most Western part of the federal state of Mecklenburg-Western Pomerania in former Eastern Germany. It is representing a rather rural region with around 500,000 inhabitants surrounded by booming economic centres such as Hamburg, Berlin, Hannover and beyond the Baltic Sea the region is connected to Öresund region. The major economic areas of activities are shipbuilding, wood processing industry,

metal industry, logistics and food industry. Wismar University has currently around 7,500 students where around 3,500 students are long distance students who are living all around Germany, so only around 4,000 students are living near Wismar. The University represents the sole higher education institute in the region consisting of the faculties of technology, a business school and a faculty of design where approximately 350 persons are employed.

As a part of former Eastern Germany, the region of Westmecklenburg, including Wismar, is facing a couple of challenges which are characteristic for nearly all parts of Eastern Germany. It is important to mention that even 20 years after the reunification significant differences in the economy between Western and Eastern Germany exist. These characteristics for these differences can be found especially in the fields of soft factors which is comparable to large parts of Eastern Europe (Martens et al. 2003, Prause and Kramer 2006, Bluhm 2008, Prause 2010):

- Decreasing & aging population.
- Migration towards West.
- Weakness in Soft factors.
- Underdeveloped international and intercultural skills.
- Hierarchic and inflexible organisational structures.
- Weakness in innovation.
- Low attractiveness of Eastern regions.

Mainly young and skilled workers but also young and well educated women under 30 years are leaving their Eastern regions in order to find better living, working and development conditions in the West so that there exists already now a lack of younger ladies in the East increasing the demographic problems in the Eastern regions.

In 2005, Wismar University was confronted with budget cuts, initiated by the State Ministry of Education and Culture in Mecklenburg-Western Pomerania, so the university proposed a concept called «Model University 2020» which contained the following cornerstones (Prause and Winkler, 2011):

- 10% of the public budget was promised to be generated by business activities;
- main income sources will be correspondence business training and long distance studies;
- new, more business-oriented management structures;
- regional orientation in future activities;
- family-friendly orientation;
- strengthening of Internationalisation, R&D activities and technology transfer.

The focus on business training and long distance studies was done due to the special situation in German public education system where the charge of tuition fees at public universities is not provided in general but in long distance studies it is possible to charge service fees to students. The organisation and marketing of the long distance studies is realised by WINGS Ltd., a 100% subsidiaries of Wismar University. Currently about 3,500 long distance student doing their course in outposts in Munich, Potsdam, Mannheim, Heidelberg and other German cities and meanwhile Wismar University is among the public service providers the third largest university in Germany.

The sustainable regional development depends heavily on the ability to attract and keep qualified staff and to link the region to international networks. The University plays

in internationalisation the role of a regional competence centre due to its involvement into a large number of international projects, cooperation and exchange programmes and related networking activities. So around 600 foreign students are living permanently in Wismar and during their studies and internships in regional companies they contribute to the regional internationalisation and innovation process (HSW 2014).

Beside the international activities Wismar University tried to find new ways to strengthen its role in socio-cultural regional development by appealing the younger generation as well as female students and the third age generation (Prause 2010). For this purpose the «KinderUni» (children at university) has been created and started operating from winter semester of 2004/05 – initially with 7 lectures. Each year, Wismar University has attracted the young generation with ages from 8 to 12 with 9 lectures per semester. A large number of children have already attended the lectures, as well as their parents who got the opportunity to attend via video screen. The KinderUni attract children and their parents in order to promote an education and a career at Wismar University. Growing numbers of enrolled students in recent years despite general negative influences from demographic change showed the success of the concept.

Parallel to that, a senior university started in March of the same year. Due to the demographic change the group of people beyond 50 year age (Silver Agers) represent a growing part of the society (BIBE 2009). So the Silver Agers can be considered as new target group for the university because they are interested in education and culture, and due to the medical progress they are enjoying good health. So the start of the senior university in Wismar is not only enabling seniors to stay keep up to date through lectures that are dealing with scientific and innovation subjects, it also bears the opportunity for the university to develop their skills in «geragogics». Since the social and cultural dimension for regional development of KinderUni and senior university are appreciated by regional business both events were supported by the economic sector of the region.

In addition to the opening of the university towards non-typical target groups of universities Wismar University took measures to fight low regional birth rates and to become more family-oriented by offering special services for academic personnel and students with children. Wismar University became the first university in Eastern Germany to be given the Occupation and Family Limited Certificate (an endowment of the Hertie foundation) as a «families-appropriate university» by the Audit Council in 2004. In order to promote that process of integrating families into the education development, a university-kindergarten was established directly on the campus in 2005.

Beside the direct socio-cultural activities on the campus of Wismar University the institution became also active outside the university. In vicinity of the university campus the Wismar Theatre is situated. The theatre is used in a shared way by Wismar University, Wismar City and Wismar Theatre. Two further important institutions of general interest are the regional Film Centre for the Federal state of Mecklenburg-Vorpommern and the Technical Museum of Mecklenburg-Vorpommern, which

are working in close cooperation with the university. As a last cultural institution of regional importance is the German-French Society of Wismar which was founded by professors of the Wismar University Business School and which is open to all interested citizens. Due to the close academic contact to France a lot of German-French university activities enrich the cultural life in Wismar.

5. Conclusion

The socio-cultural environment has a high impact on regional development, especially in knowledge economy. Universities are leading regional institutions for soft factor development which is especially needed in Eastern and Central Eastern Europe where a lot of regions suffer under weak soft factors, brain drain and dramatic demographic change. Germany universities attract female population in the age between 20–30 years and bring high skilled foreigners in their regions representing exactly the most wanted groups in an aging society.

These two key groups are sharing common cultural attitudes and they are highly important for a sustainable business development of regions. Internationally linked universities with a female friendly profile facilitate attraction of these two groups, can act as regional competence centres for diversity management can improve the development of the regional soft factors. So the international active university influences regional socio-cultural environment by impacting the regional gender mix and the attraction and integration of high skilled foreigner which improves the regional attractiveness, the sustainability of development and the innovation power in knowledge economy.

The case study of the Eastern German university in Wismar shows how regional universities can successfully contribute to the regional development of soft factors and the socio-cultural environment. The Wismar case also illustrates that even small universities are able to play the role of a regional competence centre for internationalisation and diversity management and they can deploy a positive influence on the consequences of demographic change.

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Взаимодействие университета и бизнеса во времена демографических изменений

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Взаимодействие университетов и бизнеса в основном обсуждается с точки зрения передачи технологий, образования и кооперации в исследованиях. Важным вопросом в соответствующих обсуждениях является то, что в условиях глобализации конкурентоспособность знаний общества и процветание развития регионов, в значительной степени зависят от региональных усилий и инноваций. При этом университеты играют важную роль в региональном развитии, поддерживая местные предприятия, для конкуренции в глобальной экономике.

Впрочем, не только образование и инновации являются важными факторами. На самом деле, социально-экономическая среда имеет также решающее значение для успешного и устойчивого регионального развития. Особенно во времена демографических изменений, успех в глобальной конкуренции за умы в высокой степени зависит от привлекательности регионов и, в частности, региональных «мягких» факторов. Это особенно важно для Восточной и Центрально-Восточной Европы, где много регионов, страдающих от слабости в «мягких» факторах и инновациях, что, в свою очередь приводит к утечке мозгов и драматическим демографическим изменениям.

Эта статья представляет новые модели и результаты успешного взаимодействия между университетами и бизнесом в контексте демографических изменений с особым акцентом на регион Балтийского моря, подчеркивая роль университетов в качестве движущей силы в региональном развитии мягких факторов.

Ключевые слова: третья роль университетов, экономика знаний, демографические изменения, область деловой культуры и развития.