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University-Industry Partnerships in Kazakhstan (0356)

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University-industry partnership not a new phenomenon globally, in Kazakhstan or any other post-Soviet republic. Government reports in Kazakhstan, North America, United Kingdom, Australia and in Germany, among others, place similar emphasis on developing links between universities and industry. While the purposes of collaboration appear to be more or less the same, the forms, extent, challenges and risks are context specific and vary from one country to another.

Partnerships emerge from the joint initiatives of universities and industry to develop new study programmes, increase research productivity, enhance opportunities for faculty and students to be involved in cutting edge research (Laursen et al., 2009), advancement of innovation and technology, to establish new funding mechanisms for universities, develop students' work relevant skills; and to make students more employable and effective in changes to production and management of industries and policies affecting universities (Thune, 2010). Partnerships can also house political motives 'such as the enhancement of reputation or institutional prestige and responsiveness to government initiatives' (Prigge, 2005). However, the motivation and ways in which universities engage with industry are field-specific (Perkmann, King, and Pavelin, 2011).

For over 70 years Kazakhstan was a republic of the Soviet Union, where universities were an integral part of the centrally planned command economy. As such, universities had knowledge of what majors, and in what numbers, students were necessary for meeting the need of a qualified workforce across the Union. Thus, colleges and industry were inextricably linked. This was not, however, an institutional linkage, but more of a functional form, as often an industrial plant would take patronage over educational institutions (Bain, 2003). Although mostly involuntary, those linkages helped to ensure that adequate number and quality of specialists, in most cases, college graduates were the subject of obligatory work placement and had to take the jobs that were assigned to them (Grant, 1964).

Shortly after independence Kazakhstan suffered a significant economic crisis, with brain drain of academic talent. Within such a context, university-industry linkages largely disappeared or became stagnant. The introduction of tuition fees, as a part of the marketization of the educational sector led to a 'mushrooming' of largely entrepreneurial private institutions of higher learning. Nonexistent in 1990, the number of these institutions grew to over a hundred in 1999 (Bilyalov & Streitwieser, 2007). To date, university-industry

partnership mainly take the form of provision of internship opportunities, placement of graduates, curriculum consultations; and, to a lesser extent, joint research programs.

In its aspiration to become one of the thirty most developed nations in the world, the President of the republic wishes better alignment and partnership between higher education and industry (Nazarbayev, 2014). Ongoing reform of university governance aims, in addition to others in a long list, to foster better partnerships, and includes decentralization of decision making powers from the Ministry of Education and Science to the institutional level through recently established governing boards. Moreover, policy makers in Kazakhstan strongly believe that granting universities institutional autonomy can lead to improved quality of education, through innovation, equity in access, and efficiency in terms of financing (systems and use of funds).

One key point in the argument of policy makers on institutional autonomy is that as universities gain autonomy, they must become more responsible for the quality of education delivered and graduates' preparation for the job market. Both, the education strategy for Kazakhstan, as well as many presidential and policy makers addresses emphasize that one key role for universities is to prepare graduates who are responsive not only to local, but also to global labour market needs for skills. University-industry partnerships are therefore argued to be beneficial to innovation, advancement of technology and in the enhancement of students' preparation for the labour market. As examples, Kostanai State University and Karaganda State University are two institutions that have developed forms of university-industry partnerships. However, except for assisting students with obtaining internships and work-experience, little is known about the structure, forms and benefits of the current university-industry partnerships at these universities; and more generally within Kazakhstan. As universities in Kazakhstan are in the process of gaining autonomy, the role of university-industry partnerships becomes more critical for financial independence, improved curriculum, research, teaching and learning and identification of opportunities and risks. While policy makers emphasize and promote university-industry partnerships, research is needed to explore the forms and nature of such partnerships. This lack of research on university-industry partnerships is also in contrast to the current policy focus that emphasizes increasing connection between education, research, scientific advancement of technology and innovation. Therefore, this study will fill this gap by examining the nature, extent, purposes and effects of current university-industry partnerships and identify the benefits and barriers to successful partnerships.

The overarching research question that guided this study was: 'How and in what ways university and industry collaborate in Kazakhstan?'. The sub questions were:

1. What are the current forms of university-industry partnerships?

2. What are the benefits of collaboration with industry?
3. What are the potential barriers to developing sustainable and effective university-industry?

This study employed case study methodology (Stake, 1995; Yin, 2014) at two universities in Astana which are currently engaged in several forms of partnerships with industry. Data is being collected through interviews (with senior leadership of selected universities and faculty engaged in partnerships), observations and secondary data analysis. The data collection is currently in progress and will be completed at the end of July 2018. The findings of the study are planned to be presented at SHRE conference in December.

Preliminary analysis of the collected data so far suggests that the main purposes of partnerships with industry are: to improve the quality and relevance of educational programmes, to enhance graduates' employability, and to increase the status and prestige of the universities. As such, most partnerships are related to revising existing programmes and developing new ones, collaboration with employers to organize career fairs, and placing students at companies for internships. Research collaborations are very limited and in some departments almost non-existent. The key barriers to developing successful collaborations appear to be little awareness about benefits of university-industry partnerships among faculty and employers, heavy workload of faculty and limited financial resources. Key success factors for effective partnerships include geographical location, status of the university, financial resources and clear goals and expected outcomes of partnerships.

The study will contribute to ongoing discourse on the role of partnerships and their impact on educational practices, policies and research globally. By studying universities that are already collaborating with industry, the intent is to highlight issues faced, lessons learnt and best practices fostered. Furthermore, by identifying success factors, risks and challenges of existing partnerships, the study can make practical recommendations to universities on teaching and researcher collaborations with industry. The study will also contribute to policy makers' understanding of key challenges and factors for successful university-industry partnerships through an appreciation for the need to provide a more enabling environment to support effective partnerships. Furthermore, the study will contribute to global research on university-industry partnerships. By providing evidence from post-Soviet Kazakhstan, findings will assist in understanding the peculiar forms of partnerships, barriers to partnership, and success factors within a non-western context.