

TRENDS IN KAZAKHSTAN HIGHER EDUCATION: THE DEMOGRAPHIC DIMENSION

Kazakhstan economic situation remains challenging due to a banking crisis aggravated by the global financial crisis and instability of oil prices. The government budget has been revised downward, putting pressure on many government programs, including education. According to Abazov and Ibrayeva, “education in Kazakhstan is among the first sectors to have been hit particularly hard, experiencing pressures on many fronts”[1]. But the government has thus far resisted significant higher education budget reductions, placing reform as one of its highest priorities. Indeed, the commitment to education seems strong as the Kazakhstan government has embarked upon several new projects including a major renovation project at Kazakhstan National University and, more importantly, the creation of a new national university in Astana. Both projects are well funded and supported by the government. But both of these projects remain an issue as long as the economic situation remains uncertain.

Another challenge less often discussed is the Kazakhstan demographic dimension. The fluctuations in the demographic dimension are influencing the educational system. A negative “demographic trough” began in the 1990s that has negatively affect higher education student enrollment beginning in 2006 and that will last for the next decade. Simply put, there are fewer students graduating from secondary school which translates into an overall decline in student matriculating through the higher educational system. This will create a challenge for higher educational institutions as they attempt to adapt to a decline in the overall student population. This through, however, is short-lived. The number of students entering into the educational system began to increase in the earlier part of this decade with Kazakhstan experiencing a mini-baby boom.

But there is a positive side to this decline. Fewer students allows Kazakhstan to more effectively manage and change the higher educational students before the next wave of it also represents an opportunity to introduce changes without the pressures of an expanding student population and before the next demographic wave increases the student population.

Demographic Waves

After independence, Kazakhstan economic decline triggered two demographic phenomena. The first had a profound negative effect on the composition and total number of inhabitants. The overall population declined from 16,265,065 in 1989 to 15,032,140 in 2000 [2]. Much of this decline can be attributed to an out migration of mostly non-Kazakh ethnic groups. The largest number leaving were Russians. Calculating the actual number of out migrants is not possible but one estimate by a Library of Congress country study states “it seems likely that as many as 750,000 non-Kazaks left the republic between independence and the end of 1995.” [3]. In 1995, the US Census Bureau estimated that an additional 300,000 people left (see Table One) with a similar proportion continuing to leave until 2001. Many of those who left were young adults of child rearing age. One outcome was a recalibration of the ethnic balance with Kazakhs becoming the majority ethnic group for the first time in many decades. Another was to reduce the number of people of child bearing age and, consequently, the number of children being born [4].

Table One. Demographic Indicators for 1995-2025

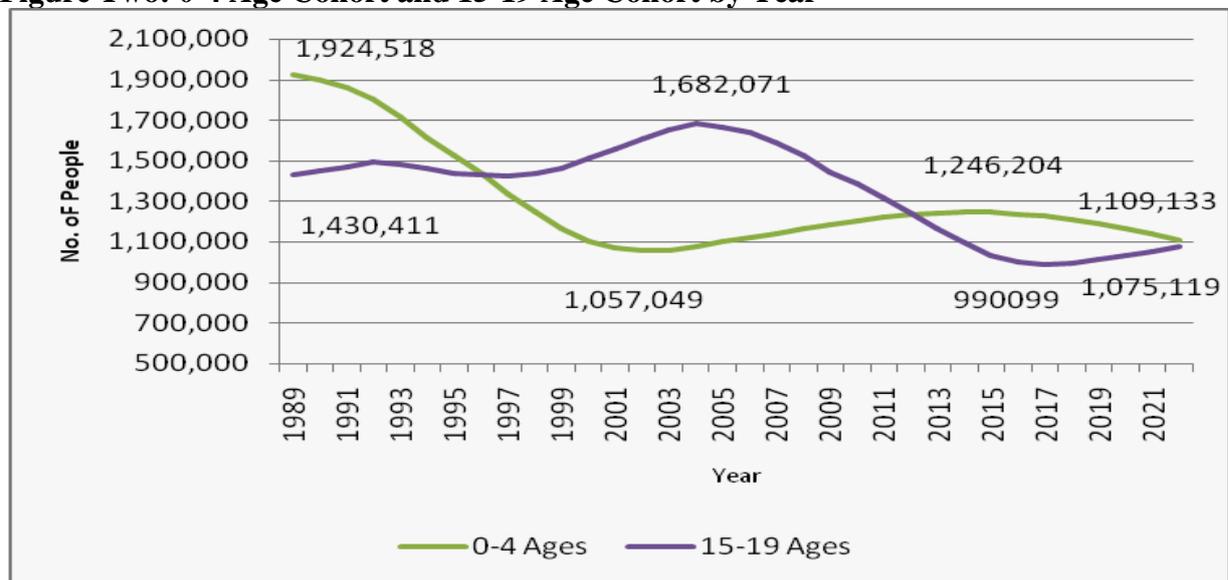
Demographic Indicators	1995	2005	2015	2025
Growth rate (percent)	-1.4	0.3	0.4	0.3
Net number of migrants	-322,492	-50,721	-50,751	-50,690
Population (in thousands)	15,878	15,186	15,761	16,041

Source: U.S. Census Bureau, International Data Base [5]

The second trend is a decline in the birth rate between 1985 and 2002. In 1985, the birth rate was 25.5 but declined to 17.0 by 1995. As one might expect, this led to a dramatic decline in the 0-4 age cohort by 45.1% between 1989 and 2002 (1,924,518 and 1,057,049, respectively). But that trend has reversed itself in the last few years with United Nations estimates suggesting that the birth rate has increased to 19.7 for the period 2005 through 2010. This has led to a corresponding increase in the 0-4 age cohorts and the 5-9 age cohorts that are now entering into the educational system. This has reversed the decline and as suggested by the US Census Bureau estimates, there will be a 20% increase over the next few years. Though the

The 15-19 age cohort followed the pattern of their younger cohorts as these cohorts matured. As such, the 15-19 age cohort reached their peak three years after the bottoming of the 0-4 age cohort (2005). This means that as the number of students matriculating through the primary and secondary educational system was decreasing while the number of students entering higher educational institutions was increasing, placing pressure on primary and secondary schools to retrench while placing pressure on higher educational institutions to expand in the number of institutions and in the capacity of existing institutions.

Figure Two: 0-4 Age Cohort and 15-19 Age Cohort by Year



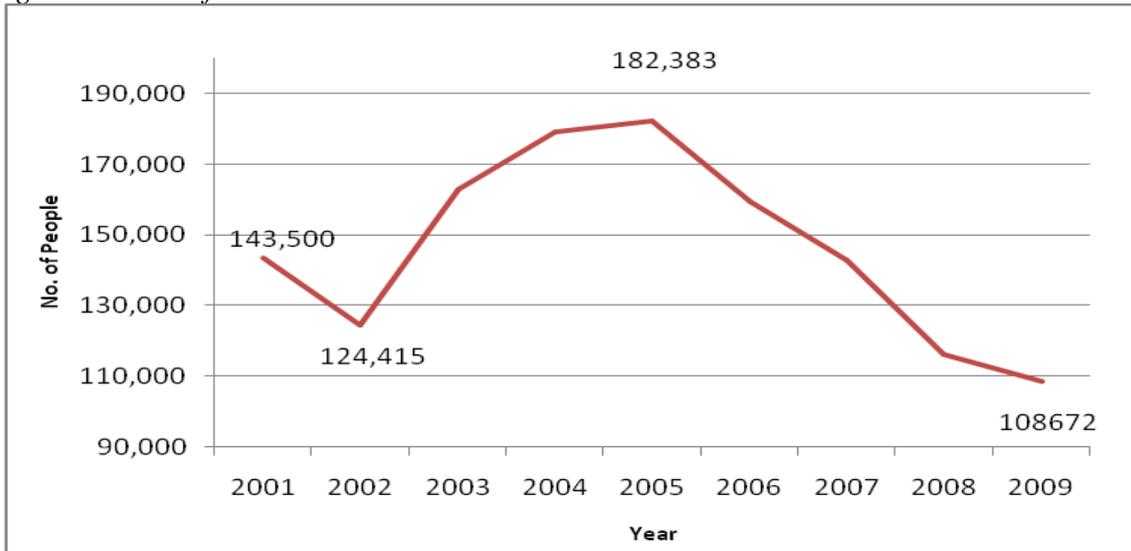
Source: Data Compiled from the U.S. Census Bureau, International Data Base.

Using the conservative estimates of the U.S. Census Bureau, the size of the 0-4 age cohort began to increase after 2001, coinciding with a slowing of out migration and an increase in birth rates. This demographic wave has already begun to affect primary schools and by 2018, will positively affect the number of potential students attending higher educational institutions.. This mini-baby boom is expected to continue with a steady increase in the 0-4 age cohort predicted through 2014 (from 1,057,049 to 1,246,204). Some sources, including the Kazakhstan Republic Statistics Department, estimate an even higher population growth rate, fueled by a birth rate that remains high [6].

Higher Educational Institutions

This wave and trough effect began to affect the higher education market in the 2006-2007 academic year. In 2006, over 182,000 students took the required Unified National Test (UNT), a requirement for those seeking entry into higher educational institutions [7]. As Figure Two indicates, the number of people taking the Unified National Test (UNT) declined 40.2% by 2009 [8]. Official statistics from the Department of Social and Demographic statistics indicate that between 2007 and 2008, the number of students attending higher educational institutions declined 6.7% to approximately 717,000 students [9]. Given the general demographic decline of the 15-19 age cohort, this decline will continue until the mini-baby boom wave enters the 15-19 age cohort in 2018 [10]. This suggests a continuing shrinkage of the higher educational market, increasing competition among institutions for students.

Figure Two: Unified National Test Takers: 2001-2009

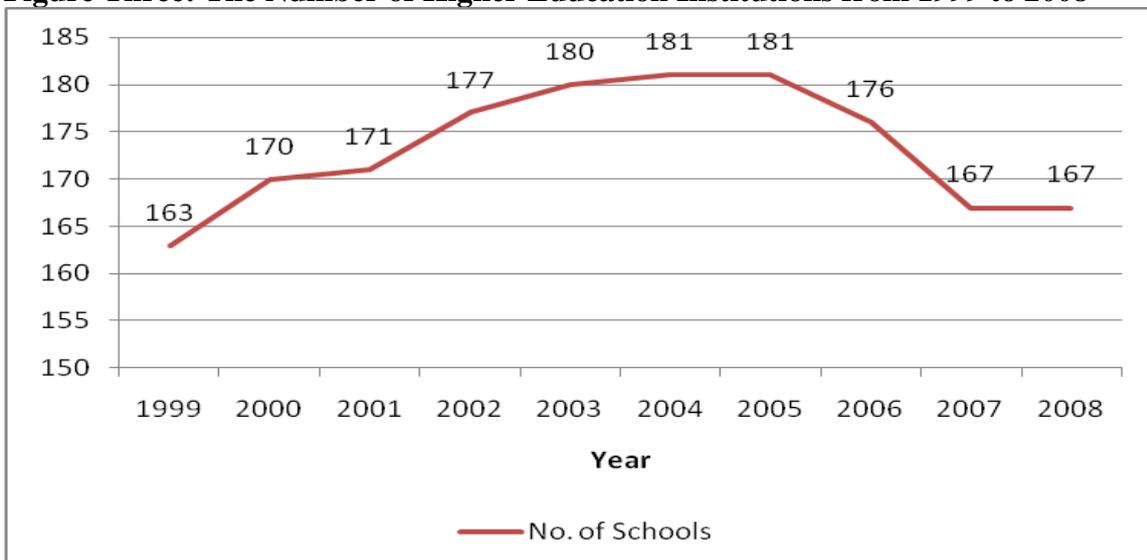


Source: U.S. Census Bureau

Higher Educational Institutions

After independence, Kazakhstan encouraged the establishment of private higher educational institutions [11]. As Figure Three indicates, the number of higher educational institutions dramatically increased from approximately 40 institutions in 1991 to 181 by 2005 with a majority of this growth in the private sector, many private or non-profit joint stock institutions [12]. This seemingly positive trend, however, did not necessarily insure that all new higher educational institutions were of high quality. There were few regulations to ensure quality control many institutions emerged that had under qualified faculty, suffered from inadequate resources, or lacked sufficient management experience to ensure a quality education. The result was a mediocre private sector higher educational system. Beginning in 2007, the Ministry of Education implemented more stringent standards for higher educational institutions through their attestation process. This led to a number of higher education institutions closing, either voluntarily or through the withdrawal of their license. Overall, the number of higher educational institutions declined to 167 [13]. In total, 33 institutions and 57 branches were closed or chose to close voluntarily. Most of these closures were among smaller private institutions and their closure had little effect on the overall capacity in higher education.

Figure Three: The Number of Higher Education Institutions from 1999 to 2008



Source: Compiled by Author

As the number of students seeking a higher education decreases, the next decade may witness a further “thinning out” of higher educational institutions. Particularly vulnerable are private institutions financially dependent on tuition fees and who are unable to maintain a high quality level in an environment that is becoming more discriminating in their selection process [14]. This may well be happening as several private institutions in high demand in the past have seen significant declines in enrollment over the last two years.

Further exacerbating the situation are two other factors. First, the Bolashak program currently supports over 3,000 Kazakhstani students studying in the best institutions around the world. This competitive program targets the best Kazakhstani students. Second, western institutions have discovered Kazakhstan and have become more aggressive in recruitment as well as cooperative partnerships with local universities. Examples of effective cooperative partnerships are also occurring. Two examples of this are the Kazak-British Technical University who has also experimented with a joint degree program with the London School of Economics and the intention of creating a new university in Astana with the purpose of creating a university with the active participation of international universities [15]. Another factor is the dramatic rise in wealth creation with more Kazakhstani families able to afford a foreign education without financial aid.

Least vulnerable are public institutions with government support and, if the 2005 plan of the government is fully initiated, these public educational institutions will continue to move toward international standards and improve their overall quality. Kazakhstan’s commitment to the Bologna process has already resulted in the introduction of a credit system and some hiring of western trained faculty with the intent of stimulating further reforms. There are several attempts underway to link Kazakhstani universities with western institutions in joint degree programs and there are plans to construct a new university in partnership with several western universities. This will undoubtedly stimulate reforms in more established universities.

If these and other measures are successful, this will enhance the quality of public institutions and put pressure on smaller private institutions since their claim of superior quality based on the number of western trained faculty on their staff, their use of western teaching techniques, and linkages with western institutions will offer the student no advantage over public institutions. There may be a shift away from costly private institutions if those institutions offer nothing more than higher tuition prices. Given the current economic environment and the declining number of students, this shift may occur sooner rather than latter

Challenges and Opportunities

The decline in higher education students accompanied with the decline in students entering higher educational institutions will place pressure on many higher educational institutions that may lead to closures. But there is a silver lining in this rather gloomy short term picture. As mentioned, this will provoke a shake out in higher educational institutions with those that survive, either public or private, will do so by providing a quality education. Quality and financial stability are the two critical factors for survival. From this perspective, public institutions and private institutions not overly dependent on student tuition fees have an advantage.

This is also a time of opportunity, especially for public institutions or those that can develop strong partnerships with. Understanding the demographic dimension will allow the government to strategically allocate resources that anticipates market demand. This time of lower student enrollments allows the government to re-think higher education in both the private and public sector and to implement reforms without worrying about expansion. Simply put, resources, if increased, can be directed toward quality without the concern of infrastructure issues associated with quantity. Fewer students suggests that any infrastructure issues can be directed toward improvement rather than.

Fewer students over the next decade opens an opportunity to reshape the educational system not suffering under the weight of an increasing number of students. The demand on resources will be less in higher education.

There are several challenges facing the government in implementing these reforms and in the educational system in general. Not least of these challenges is one that the government has little

control. This is the demographic issue. After the collapses of the Soviet Union, Kazakhstan, as with many other former Soviet republics went into an economic tailspin. GNP drops and economic hardship gripped the country for the next few years. This was accompanied by a significant decline in the birth rate.

1. Abazov, Rafis and Ibrayeva, Galiya. "Can Kazakhstan's Education Reforms Dodge in Face of the Global Economic Meltdown?," *Central Asia-Caucasus Institute Analyst*, Issue 01/14/2009, <http://www.cacianalyst.org>.

2. The Russian population dropped from 37.4% in 1989 to 29.9% in 2000. Positive population growth began according to US Census Bureau in 2002 while the Kazakhstan National Statistics Department estimates that positive population growth began in 2003, but at a faster rate than suggested by the US Census Bureau

3. Library of Congress Country Studies: Kazakhstan, 1996 www.loc.gov

4. The Kazakhstan Republic Statistical Agency estimates the population of Kazakhstan in 2008 at 15,571,506. A. Kasenova, "2008 zhili Kazakstan Respublikasindfi khalik saninin ozgerii turali Ov: izmenenii chislennosti naseleniya Respubliki Kazakhstan v 2008 gody," *Kazakstan Respublikasi Statistika Agenttigi*, 2008.

5. U.S. Census Bureau, International Data Base, www.census.gov/ipc/www/idp.

6. The US Census Bureau estimates population growth of around 0.4%, the United Nations suggests a growth rate of 0.7% and the Kazakhstan Republic Statistics Department at 1.3%. Table 1 uses the more conservative estimates of the US Census Bureau. If, however, higher growth rates are more accurate, then the estimates for both cohorts will be higher after 2009.

7. The UNT has five sections: four compulsory and one elective subjects. The four compulsory subjects are language (Kazakh or Russian), mathematics, history of Kazakhstan, the Kazakh language for the schools with the Russian language of instruction and Russian for the schools with the Kazakh language of instruction

8. *Kazakhstan Today*, "Unified National Testing began in Kazakhstan," June, 6, 2009, www.gazeta.kz.

9. Kassenova, Asiya. "Eloquent arithmetic of the education. About local universities," *Kazakhstani Pravda*, August 2, 2008, <http://kazpravda.kz>. Asiya Kassenova is Director of the Department of Social and Demographic Statistics, Statistical Agency of the Republic of Kazakhstan

10. Kazakhstan is planning to increase the number of secondary and pre-secondary schooling from 11 to 12 years beginning in 2010. The plan envisions a phase-in over a number of years. However, this will have a short term negative effect on higher education applicants

11. For a brief overview of the history of Kazakhstan higher education, See "Kazakhstan: Higher Education," [StateUniversity.com](http://www.stateuniversity.com). <http://education.stateuniversity.com/pages/764/Kazakhstan-HIGHER-EDUCATION.html>, Accessed June 10, 2009.

12. In 2007, there were 176 higher education institutions with an additional 81 branches. Nine were national, 46-state owned or partially state-owned, 14 military and 107 private institutions. In 1995, there were 41 private institutions. See G. Zhakenov, "Kazakhstan National Report on Higher Education System Development," http://www.unesco.kz/education/he/kazakh/kazakh_eng.htm.

13. In 2007, the Ministry inspected 143 out of 176 higher education institutions. See Zinaida Rumleascaia, "Kazakhstan Completes Major Shakedown of Higher Education Institutions," *American Association of Collegiate Registrars and Admissions Officers*, 09/20/2007 www.aacrao.org

14. 81.2% students pay tuition fees themselves. Asiya Kassenova, "Eloquent arithmetic of the education. About local universities," *Kazakhstani Pravda*, August 2, 2008, <http://www.kazpravda.kz>

15. "New University of Astana to begin its work this autumn," *Kazakhstan Today*, 02.06.2009, <http://www.kt.kz/index.php?uin=1141192335&chapter=1153487862>

В статье «Тенденции в высшем образовании Казахстана: демографическое измерение» исследуются некоторые проблемы, стоящие перед правительством в осуществлении реформ в образовательной системе в целом. Одна из серьезных проблем связана с демографическим фактором. После краха Советского Союза Казахстан как и многие другие бывшие советские республики, вошел в экономический штопор. Снижение ВВП и экономические трудности, охватившие страну в последующие несколько лет, сопровождалось существенным снижением в коэффициенте рождаемости. Сегодня данная проблема налицо, происходит снижение числа абитуриентов и студентов.