

Tab. A1 – Age-specific fertility rates by level of education, Kazakhstan, assumptions for IIASA projections, in ‰

	2000–05	2005–10	2010–15	2015–20	2020–25	2025–30
Primary education						
15–19	23.0	19.9	16.8	13.7	10.6	7.5
20–24	129.3	137.0	144.6	152.3	160.0	167.6
25–29	109.2	118.8	128.5	138.1	147.7	157.4
30–34	67.7	65.1	62.6	60.0	57.4	54.9
35–39	32.3	28.6	24.9	21.2	17.5	13.8
40–44	11.0	9.8	8.7	7.6	6.4	5.3
45–49	1.5	1.5	1.5	1.5	1.6	1.6
Secondary education						
15–19	38.3	32.2	26.2	20.1	14.0	7.9
20–24	215.8	208.3	200.8	193.3	185.8	178.3
25–29	182.2	179.2	176.3	173.3	170.4	167.4
30–34	113.0	102.1	91.1	80.2	69.3	58.4
35–39	53.9	46.1	38.2	30.4	22.5	14.7
40–44	18.3	15.8	13.2	10.7	8.2	5.6
45–49	2.5	2.3	2.1	2.0	1.8	1.7
Tertiary education						
15–19	29.2	24.5	19.9	15.2	10.5	5.8
20–24	164.6	157.8	151.0	144.2	137.4	130.6
25–29	139.0	135.7	132.5	129.2	125.9	122.7
30–34	86.2	77.5	68.8	60.1	51.5	42.8
35–39	41.1	35.1	29.0	22.9	16.8	10.8
40–44	14.0	12.0	10.0	8.1	6.1	4.1
45–49	1.9	1.7	1.6	1.5	1.4	1.2

Source: IIASA – Future Human Capital: Population Projections by Level of Education

<http://www.iiasa.ac.at/Research/POP/edu01/humancapital.html#5a><http://www.iiasa.ac.at/Research/POP/edu01/assumptions.xls>

Tab. A2 – Age-specific mortality rates, all education levels, Kazakhstan, assumptions for IIASA projections, in ‰

	2000–05	2005–10	2010–15	2015–20	2020–25	2025–30
<i>Males</i>						
0–4	10.1	9.3	8.6	7.8	7.1	6.3
5–9	0.9	0.8	0.8	0.7	0.6	0.6
10–14	0.7	0.7	0.6	0.6	0.5	0.5
15–19	1.3	1.2	1.1	1.0	0.9	0.8
20–24	1.8	1.6	1.5	1.4	1.2	1.1
25–29	1.8	1.7	1.6	1.4	1.3	1.1
30–34	2.0	1.9	1.7	1.6	1.4	1.3
35–39	2.6	2.4	2.2	2.0	1.8	1.6
40–44	3.6	3.3	3.1	2.8	2.5	2.3
45–49	5.4	5.0	4.6	4.2	3.8	3.4
50–54	8.3	7.6	7.0	6.4	5.8	5.2
55–59	12.8	11.9	10.9	10.0	9.0	8.1
60–64	19.7	18.3	16.8	15.4	13.9	12.5
65+	62.0	57.4	52.8	48.3	43.7	39.1
<i>Females</i>						
0–4	3.5	3.2	2.8	2.4	2.0	1.7
5–9	0.3	0.3	0.2	0.2	0.2	0.1
10–14	0.2	0.2	0.2	0.2	0.1	0.1
15–19	0.4	0.3	0.3	0.3	0.2	0.2
20–24	0.5	0.5	0.4	0.4	0.3	0.2
25–29	0.7	0.6	0.5	0.4	0.4	0.3
30–34	0.8	0.7	0.6	0.6	0.5	0.4
35–39	1.1	1.0	0.9	0.7	0.6	0.5
40–44	1.5	1.4	1.2	1.0	0.9	0.7
45–49	2.3	2.1	1.8	1.6	1.3	1.1
50–54	3.5	3.1	2.8	2.4	2.0	1.7
55–59	5.4	4.8	4.2	3.7	3.1	2.5
60–64	8.6	7.7	6.8	5.9	5.0	4.1
65+	39.5	35.3	31.1	27.0	22.8	18.6

Source: IIASA – Future Human Capital: Population Projections by Level of Education

<http://www.iiasa.ac.at/Research/POP/edu01/humancapital.html#5a><http://www.iiasa.ac.at/Research/POP/edu01/assumptions.xls>

Tab. A3 – Age-specific migration rates, according to education, both genders, Kazakhstan, assumptions for IIASA projections

	2000–05	2005–10	2010–15	2015–20	2020–25	2025–30
	<i>No education</i>					
0–4	–0.41	–0.41	–0.41	–0.41	–0.41	–0.41
5–9	–0.32	–0.32	–0.32	–0.32	–0.32	–0.32
10–14	–0.33	–0.33	–0.33	–0.33	–0.33	–0.33
15–19	–0.54	–0.54	–0.54	–0.54	–0.54	–0.54
20–24	–0.63	–0.63	–0.63	–0.63	–0.63	–0.63
25–29	–0.56	–0.56	–0.56	–0.56	–0.56	–0.56
30–34	–0.49	–0.49	–0.49	–0.49	–0.49	–0.49
35–39	–0.42	–0.42	–0.42	–0.42	–0.42	–0.42
40–44	–0.36	–0.36	–0.36	–0.36	–0.36	–0.36
45–49	–0.29	–0.29	–0.29	–0.29	–0.29	–0.29
50–54	–0.22	–0.22	–0.22	–0.22	–0.22	–0.22
55–59	–0.16	–0.16	–0.16	–0.16	–0.16	–0.16
60–64	–0.10	–0.10	–0.10	–0.10	–0.10	–0.10
65+	–0.18	–0.18	–0.18	–0.18	–0.18	–0.18
	<i>Primary education</i>					
0–4	–1.65	–1.65	–1.65	–1.65	–1.65	–1.65
5–9	–1.26	–1.26	–1.26	–1.26	–1.26	–1.26
10–14	–1.30	–1.30	–1.30	–1.30	–1.30	–1.30
15–19	–2.17	–2.17	–2.17	–2.17	–2.17	–2.17
20–24	–2.53	–2.53	–2.53	–2.53	–2.53	–2.53
25–29	–2.25	–2.25	–2.25	–2.25	–2.25	–2.25
30–34	–1.97	–1.97	–1.97	–1.97	–1.97	–1.97
35–39	–1.69	–1.69	–1.69	–1.69	–1.69	–1.69
40–44	–1.42	–1.42	–1.42	–1.42	–1.42	–1.42
45–49	–1.14	–1.14	–1.14	–1.14	–1.14	–1.14
50–54	–0.86	–0.86	–0.86	–0.86	–0.86	–0.86
55–59	–0.63	–0.63	–0.63	–0.63	–0.63	–0.63
60–64	–0.39	–0.39	–0.39	–0.39	–0.39	–0.39
65+	–0.72	–0.72	–0.72	–0.72	–0.72	–0.72

Source: IIASA – Future Human Capital: Population Projections by Level of Education

<http://www.iiasa.ac.at/Research/POP/edu01/humancapital.html#5a>

<http://www.iiasa.ac.at/Research/POP/edu01/assumptions.xls>

Tab. A3(continued) – Age specific migration rates, according to education, both genders, Kazakhstan, assumptions for IIASA projections

	2000–05	2005–10	2010–15	2015–20	2020–25	2025–30
	<i>Secondary education</i>					
0–4	–1.65	–1.65	–1.65	–1.65	–1.65	–1.65
5–9	–1.26	–1.26	–1.26	–1.26	–1.26	–1.26
10–14	–1.30	–1.30	–1.30	–1.30	–1.30	–1.30
15–19	–2.17	–2.17	–2.17	–2.17	–2.17	–2.17
20–24	–2.53	–2.53	–2.53	–2.53	–2.53	–2.53
25–29	–2.25	–2.25	–2.25	–2.25	–2.25	–2.25
30–34	–1.97	–1.97	–1.97	–1.97	–1.97	–1.97
35–39	–1.69	–1.69	–1.69	–1.69	–1.69	–1.69
40–44	–1.42	–1.42	–1.42	–1.42	–1.42	–1.42
45–49	–1.14	–1.14	–1.14	–1.14	–1.14	–1.14
50–54	–0.86	–0.86	–0.86	–0.86	–0.86	–0.86
55–59	–0.63	–0.63	–0.63	–0.63	–0.63	–0.63
60–64	–0.39	–0.39	–0.39	–0.39	–0.39	–0.39
65+	–0.72	–0.72	–0.72	–0.72	–0.72	–0.72
	<i>Tertiary education</i>					
0–4	–0.41	–0.41	–0.41	–0.41	–0.41	–0.41
5–9	–0.32	–0.32	–0.32	–0.32	–0.32	–0.32
10–14	–0.33	–0.33	–0.33	–0.33	–0.33	–0.33
15–19	–0.54	–0.54	–0.54	–0.54	–0.54	–0.54
20–24	–0.63	–0.63	–0.63	–0.63	–0.63	–0.63
25–29	–0.56	–0.56	–0.56	–0.56	–0.56	–0.56
30–34	–0.49	–0.49	–0.49	–0.49	–0.49	–0.49
35–39	–0.42	–0.42	–0.42	–0.42	–0.42	–0.42
40–44	–0.36	–0.36	–0.36	–0.36	–0.36	–0.36
45–49	–0.29	–0.29	–0.29	–0.29	–0.29	–0.29
50–54	–0.22	–0.22	–0.22	–0.22	–0.22	–0.22
55–59	–0.16	–0.16	–0.16	–0.16	–0.16	–0.16
60–64	–0.10	–0.10	–0.10	–0.10	–0.10	–0.10
65+	–0.18	–0.18	–0.18	–0.18	–0.18	–0.18

Source: IIASA – Future Human Capital: Population Projections by Level of Education

<http://www.iiasa.ac.at/Research/POP/edu01/humancapital.html#5a>

<http://www.iiasa.ac.at/Research/POP/edu01/assumptions.xls>

Tab. A4 – Urban employed population according to educational level and age (15+), Kazakhstan, in thousands

<i>Higher education</i>						
	2003	2004	2005	2006	2007	2008
15–19	0.0	0.0	0.0	0.0	0.0	0.0
20–24	83.5	94.9	93.2	104.4	102.0	104.4
25–29	158.3	189.0	207.7	222.4	249.0	276.6
30–34	156.6	195.9	223.6	225.6	230.6	235.5
35–39	138.1	155.9	163.1	177.4	177.0	181.2
40–44	158.9	183.1	200.1	196.0	180.9	171.8
45–49	133.4	140.5	167.0	184.8	185.4	192.1
50–54	116.4	108.3	114.1	124.0	122.9	137.3
55–59	50.7	62.3	68.1	79.4	77.3	80.0
60–64	22.7	18.1	18.3	16.6	21.1	25.0
65+	8.1	6.5	5.8	5.9	7.2	5.6
<i>Total</i>	1026.7	1154.5	1261.0	1336.5	1353.4	1409.5
<i>Unfinished higher education</i>						
	2003	2004	2005	2006	2007	2008
15–19	11.7	9.7	7.7	10.3	6.8	8.7
20–24	46.0	43.4	59.7	59.3	51.3	62.7
25–29	25.7	27.0	33.8	32.3	30.4	29.0
30–34	19.7	25.6	27.1	24.7	21.6	17.7
35–39	13.6	14.8	15.0	16.4	16.6	13.8
40–44	12.3	12.1	11.7	12.2	11.0	10.3
45–49	7.3	7.8	7.7	11.5	10.8	9.2
50–54	7.0	3.4	3.9	6.4	6.1	7.2
55–59	3.1	3.9	2.4	3.5	3.6	2.5
60–64	1.1	0.9	0.9	0.4	0.7	0.2
65+	0.5	0.6	0.3	1.1	0.9	0.6
<i>Total</i>	148.0	149.2	170.2	178.1	159.8	161.9

Source: Statistical yearbooks of economically active population of Kazakhstan. (2009). Қазақстан халқының экономикалық белсенділігі. Статистикалық жинақ. /2009 Мешімбаева. http://www.stat.kz/publishing/DocLib/Econom_akt_09.pdf

Tab. A4 (continued) – Urban employed population according to educational level and age (15+), Kazakhstan, in thousands

<i>Vocational education</i>						
	2003	2004	2005	2006	2007	2008
15–19	30.9	29.7	34.7	31.3	29.1	18.6
20–24	153.3	162.8	171.9	175.8	156.6	178.3
25–29	250.3	236.9	214.8	216.1	232.5	211.5
30–34	277.9	301.3	295.9	281.2	266.5	258.0
35–39	251.2	265.5	247.1	247.0	247.5	241.0
40–44	310.4	303.0	280.7	258.6	240.0	240.7
45–49	264.9	255.3	272.5	285.3	271.9	280.8
50–54	207.8	204.2	204.8	211.5	205.2	218.4
55–59	81.2	86.0	103.5	109.4	117.4	127.5
60–64	35.9	24.1	24.7	19.3	25.2	33.9
65+	16.2	13.2	9.3	8.2	6.7	7.3
Total	1880.0	1882.0	1859.9	1843.7	1798.6	1816.0
<i>Unqualified (primary or basic secondary education)</i>						
	2003	2004	2005	2006	2007	2008
15–19	75.9	72.7	67.1	74.3	45.9	39.2
20–24	97.7	95.5	106.7	108.8	91.0	88.9
25–29	107.1	113.2	106.1	98.9	86.6	93.4
30–34	101.8	108.7	102.1	114.9	93.5	94.8
35–39	81.4	79.2	76.9	79.5	60.3	72.0
40–44	98.3	90.8	89.4	81.1	62.3	63.0
45–49	95.6	90.2	88.2	96.0	79.4	78.5
50–54	86.9	76.6	79.0	81.7	74.6	70.7
55–59	35.6	42.0	40.2	49.7	43.2	41.2
60–64	37.6	25.5	15.8	14.1	12.9	12.4
65+	32.4	22.4	15.6	17.2	10.2	15.3
Total	850.3	816.8	787.1	816.2	659.9	669.4

Source: Statistical yearbooks of economically active population of Kazakhstan. (2009). Қазақстан халқының экономикалық белсенділігі. Статистикалық жинақ. /2009 Мешімбаева. http://www.stat.kz/publishing/DocLib/Econom_akt_09.pdf

Tab. A5 – Rural employed population according to educational level and age (15+), Kazakhstan, in thousands

<i>Higher education</i>						
	2003	2004	2005	2006	2007	2008
15–19	0.0	0.0	0.0	0.0	0.0	0.0
20–24	24.8	29.7	30.4	38.7	42.9	45.6
25–29	34.1	42.5	48.8	53.2	70.9	73.0
30–34	42.3	45.5	43.6	52.0	60.1	74.1
35–39	34.1	36.6	36.9	33.3	47.1	46.4
40–44	49.5	45.3	49.0	48.6	54.9	56.0
45–49	39.5	36.9	41.1	47.1	59.3	62.7
50–54	32.8	31.2	33.7	37.7	47.4	49.1
55–59	19.5	19.8	23.4	22.3	28.5	30.9
60–64	8.6	6.5	4.2	6.8	9.6	12.1
65+	3.7	3.6	3.3	3.2	3.8	4.6
<i>Total</i>	288.9	297.6	314.4	342.9	424.5	454.5
<i>Unfinished higher education</i>						
	2003	2004	2005	2006	2007	2008
15–19	6.5	8.2	8.0	7.9	8.6	8.5
20–24	22.1	26.8	26.4	29.1	37.3	35.1
25–29	12.2	13.6	10.7	12.5	12.1	17.8
30–34	8.6	8.8	10.4	11.7	9.1	9.2
35–39	4.8	4.9	5.0	3.0	5.0	5.2
40–44	3.8	4.6	2.2	3.5	4.4	5.0
45–49	2.7	2.0	2.5	3.1	3.4	2.0
50–54	1.2	0.6	1.1	1.3	3.9	2.7
55–59	0.8	0.5	1.0	1.5	1.9	1.2
60–64	0.5	0.3	0.4	0.7	0.8	0.8
65+	0.4	0.1	0.0	0.1	0.4	0.2
<i>Total</i>	63.6	70.4	67.7	74.4	86.9	87.7

Source: Statistical yearbooks of economically active population of Kazakhstan. (2009). Қазақстан халқының экономикалық белсенділігі. Статистикалық жинақ. /2009 Мешімбаева. http://www.stat.kz/publishing/DocLib/Econom_akt_09.pdf

Tab. A5 (continued) – Rural employed population according to educational level and age (15+), Kazakhstan, in thousands

<i>Vocational education</i>						
	2003	2004	2005	2006	2007	2008
15–19	27.9	25.5	31.1	24.2	24.5	18.9
20–24	93.5	89.5	89.7	104.6	119.9	120.0
25–29	127.9	129.0	117.8	122.1	134.8	130.8
30–34	161.6	145.8	141.1	140.3	156.9	156.2
35–39	152.8	142.3	125.9	124.0	133.1	127.0
40–44	161.6	166.0	160.0	154.3	172.0	162.3
45–49	124.8	130.6	138.6	145.5	169.7	173.8
50–54	107.7	100.4	97.4	102.6	120.6	138.0
55–59	41.4	47.3	60.4	68.2	74.7	85.3
60–64	28.2	22.5	13.5	13.5	20.8	27.4
65+	17.3	10.8	8.8	9.9	11.4	11.7
Total	1044.7	1009.7	984.3	1009.2	1138.4	1151.4
<i>Unqualified (primary or basic secondary education)</i>						
	2003	2004	2005	2006	2007	2008
15–19	196.6	190.6	205.8	196.4	201.6	194.7
20–24	239.3	271.8	256.8	258.7	305.2	285.4
25–29	231.9	261.1	271.9	265.2	275.7	301.3
30–34	210.1	247.2	246.8	238.5	282.9	331.9
35–39	174.3	174.6	178.6	173.1	195.1	198.3
40–44	187.3	198.5	191.3	182.9	200.1	216.9
45–49	160.7	167.2	181.7	190.3	209.6	217.4
50–54	110.3	126.1	132.8	135.5	153.4	166.4
55–59	56.7	67.3	72.2	83.0	98.3	101.5
60–64	61.4	46.4	34.5	33.6	39.8	42.8
65+	54.6	50.2	44.0	45.2	48.5	50.2
Total	1683.2	1801.0	1816.4	1802.4	2010.2	2106.8

Source: Statistical yearbooks of economically active population of Kazakhstan. (2009). Қазақстан халқының экономикалық белсенділігі. Статистикалық жинақ. /2009 Мешімбаева. http://www.stat.kz/publishing/DocLib/Econom_akt_09.pdf

Tab. A6 – Employed population according to gender and age (15–64), Kazakhstan, in thousands

	2003	2004	2005	2006	2007	2008
<i>Total</i>						
15	22.2	15.5	23.1	20.7	12.7	14.7
16–19	327.4	321.2	331.3	323.8	303.7	273.9
20–24	760.3	814.3	834.7	879.6	906.3	920.5
25–29	947.4	1012.4	1011.6	1022.7	1092.1	1133.4
30–34	978.6	1078.8	1090.7	1088.8	1121.4	1177.3
35–39	850.2	873.9	848.4	853.6	881.7	884.8
40–44	981.9	1003.5	984.4	937.3	925.7	926.0
45–49	829.0	830.5	899.2	963.6	989.5	1016.5
50–54	670.1	650.9	666.8	700.6	734.0	789.7
55–59	288.9	329.0	371.2	417.0	444.2	470.1
60–64	195.9	144.3	112.2	105.0	130.8	154.9
<i>Total</i>	6851.9	7074.3	7173.6	7312.7	7542.1	7761.8
<i>Males</i>						
15	11.0	9.4	12.6	10.1	6.4	9.2
16–19	182.9	182.9	193.6	188.9	183.6	154.8
20–24	424.1	448.0	457.5	485.3	488.1	501.7
25–29	504.5	538.1	542.9	537.2	582.7	602.0
30–34	502.8	557.2	553.0	550.7	560.9	593.7
35–39	430.0	446.9	445.0	439.1	451.9	444.1
40–44	495.0	490.2	485.6	454.4	451.1	456.4
45–49	411.7	412.9	441.9	475.3	490.9	498.8
50–54	326.8	323.8	327.8	343.3	355.8	382.8
55–59	151.1	171.7	186.2	208.8	221.7	231.8
60–64	112.8	84.3	74.1	65.6	80.2	92.7
<i>Total</i>	3552.7	3665.4	3720.2	3758.7	3873.3	3968.0
<i>Females</i>						
15	11.2	6.1	10.5	10.6	6.3	5.5
16–19	144.5	138.3	137.7	134.9	120.1	119.1
20–24	336.2	366.3	377.2	394.3	418.2	418.8
25–29	442.9	474.3	468.7	485.5	509.4	531.4
30–34	475.8	521.6	537.7	538.1	560.5	583.6
35–39	420.2	427.0	403.4	414.5	429.8	440.7
40–44	486.9	513.3	498.8	482.9	474.6	469.6
45–49	417.3	417.6	457.3	488.3	498.6	517.7
50–54	343.3	327.1	339.0	357.3	378.2	406.9
55–59	137.8	157.3	185.0	208.2	222.5	238.3
60–64	83.1	60.0	38.1	39.4	50.6	62.2
<i>Total</i>	3299.2	3408.9	3453.4	3554.0	3668.8	3793.8

Source: *ibid.*

Tab. A7 – Employed population by gender and education level, age 15+, Kazakhstan, in thousands

	2003	2004	2005	2006	2007	2008
<i>Total</i>						
Higher education	1315.7	1452.0	1575.4	1679.3	1778.1	1863.9
Unfinished higher education	211.4	219.6	237.9	252.4	246.0	249.9
Vocational education	2924.5	2891.9	2844.0	2853.2	2936.6	2967.2
Unqualified	2533.6	2618.5	2603.7	2618.7	2670.3	2776.3
Total	6985.2	7182.0	7261.0	7403.6	7631.0	7857.3
<i>Males</i>						
Higher education	616.1	672.2	721.3	756.4	806.6	837.9
Unfinished higher education	107.8	108.8	110.5	128.9	117.0	111.2
Vocational education	1533.6	1503.4	1493.5	1510.4	1549.4	1561.1
Unqualified	1360.7	1434.2	1439.1	1413.3	1449.7	1507.6
Total	3618.2	3718.6	3764.4	3809.0	3922.7	4017.8
<i>Females</i>						
Higher education	699.6	779.8	854.1	922.9	971.5	1026.0
Unfinished higher education	103.6	110.8	127.4	123.5	129.0	138.7
Vocational education	1390.9	1388.5	1350.5	1342.8	1387.2	1406.1
Unqualified	1172.9	1184.3	1164.6	1205.4	1220.6	1268.7
Total	3367.0	3463.4	3496.6	3594.6	3708.3	3839.5

Source: Statistical yearbooks of economically active population of Kazakhstan. (2009). Қазақстан халқының экономикалық белсенділігі. Статистикалық жинақ. /2009 Мешімбаева. http://www.stat.kz/publishing/DocLib/Econom_akt_09.pdf

Tab. A8 – Share of employed population by education, gender and place of residence, age 15+, Kazakhstan

	2003	2004	2005	2006	2007	2008
Total number of employed	6985.2	7182.0	7261.0	7403.6	7631.0	7857.3
Total number of employed ()	100.0	100.0	100.0	100.0	100.0	100.0
Total urban						
Higher education	14.7	16.1	17.4	18.1	17.7	17.9
Unfinished higher education	2.1	2.1	2.3	2.4	2.1	2.1
Vocational education	26.9	26.2	25.6	24.9	23.6	23.1
Unqualified	12.2	11.4	10.8	11.0	8.7	8.5
Total	55.9	55.7	56.2	56.4	52.1	51.6
Total rural						
Higher education	4.1	4.1	4.3	4.6	5.6	5.8
Unfinished higher education	0.9	1.0	0.9	1.0	1.1	1.1
Vocational education	15.0	14.1	13.6	13.6	14.9	14.7
Unqualified	24.1	25.1	25.0	24.4	26.3	26.8
Total	44.1	44.3	43.8	43.6	48.0	48.4
Urban males						
Higher education	6.9	7.5	7.9	8.1	8.1	8.2
Unfinished higher education	1.1	1.1	1.2	1.3	1.0	0.9
Vocational education	14.0	13.6	13.3	13.1	12.2	12.0
Unqualified	6.4	6.0	5.8	5.7	4.5	4.4
Total	28.3	28.1	28.2	28.2	25.8	25.5
Urban females						
Higher education	7.8	8.6	9.5	9.9	9.7	9.8
Unfinished higher education	1.0	1.0	1.2	1.1	1.1	1.1
Vocational education	13.0	12.6	12.3	11.8	11.3	11.1
Unqualified	5.8	5.4	5.0	5.3	4.1	4.1
Total	27.6	27.6	28.0	28.2	26.2	26.1
Rural males						
Higher education	1.9	1.9	2.0	2.1	2.5	2.5
Unfinished higher education	0.5	0.5	0.4	0.5	0.5	0.5
Vocational education	8.0	7.4	7.3	7.3	8.1	7.8
Unqualified	13.1	14.0	14.0	13.4	14.5	14.8
Total	23.5	23.7	23.6	23.2	25.6	25.6
Rural females						
Higher education	2.2	2.3	2.3	2.6	3.0	3.3
Unfinished higher education	0.4	0.5	0.6	0.6	0.6	0.6
Vocational education	7.0	6.7	6.3	6.3	6.9	6.8
Unqualified	11.0	11.1	11.0	11.0	11.9	12.0
Total	20.6	20.6	20.2	20.4	22.4	22.8

Source: *ibid.*

Tab. A9 – Number of people working for family without pay, by gender, Kazakhstan, in thousands

	2003	2004	2005	2006	2007	2008
<i>Urban</i>						
Males	5.3	5.6	2.3	4.5	2.7	3.5
Females	6.2	7.6	3.4	5.2	4.4	2.7
<i>Rural</i>						
Males	24.1	32.7	37.0	39.0	32.1	22.5
Females	32.7	38.1	28.0	35.6	36.5	31.8

Source: Statistical yearbooks of economically active population of Kazakhstan. (2009). Қазақстан халқының экономикалық белсенділігі. Статистикалық жинақ. /2009 Мешімбаева. http://www.stat.kz/publishing/DocLib/Econom_akt_09.pdf

Tab. A10 – Number of people working for family without pay, by age-groups, Kazakhstan, in thousands

	2003	2004	2005	2006	2007	2008
<i>Urban</i>						
15	0.0	0.0	0.0	0.0	0.0	0.0
16–24	3.1	3.9	1.2	1.5	1.5	1.2
25–34	4.1	3.2	1.4	3.2	3.3	2.4
35–44	2.2	3.9	1.3	2.2	1.9	1.2
45–54	1.7	2.0	1.5	2.7	0.2	1.1
55–64	0.2	0.2	0.3	0.0	0.2	0.2
65+	0.2	0.0	0.0	0.1	0.0	0.1
<i>Rural</i>						
15	0.3	0.1	0.2	0.1	0.2	0.0
16–24	22.4	28.5	23.7	17.6	20.6	16.8
25–34	15.6	19.0	19.4	27.6	23.2	18.3
35–44	9.9	14.5	12.4	15.9	11.1	9.1
45–54	7.1	6.5	6.1	10.3	10.5	7.9
55–64	1.0	2.1	3.2	2.8	2.7	1.9
65+	0.5	0.1	0.0	0.3	0.3	0.3

Source: Statistical yearbooks of economically active population of Kazakhstan. (2009). Қазақстан халқының экономикалық белсенділігі. Статистикалық жинақ. /2009 Мешімбаева. http://www.stat.kz/publishing/DocLib/Econom_akt_09.pdf

Tab. A11 – Employment rate according to education and age, urban population, Kazakhstan

<i>Higher education</i>						
	2003	2004	2005	2006	2007	2008
15–19	0.000	0.000	0.000	0.000	0.000	0.000
20–24	0.876	0.903	0.867	0.889	0.925	0.917
25–29	0.936	0.940	0.941	0.921	0.932	0.955
30–34	0.953	0.971	0.969	0.958	0.948	0.959
35–39	0.939	0.961	0.960	0.977	0.975	0.957
40–44	0.948	0.965	0.970	0.966	0.960	0.967
45–49	0.946	0.954	0.961	0.965	0.958	0.962
50–54	0.935	0.947	0.945	0.966	0.970	0.950
55–59	0.934	0.945	0.965	0.945	0.958	0.940
60–64	0.962	0.948	0.948	0.927	0.968	0.940
<i>Unfinished higher education</i>						
	2003	2004	2005	2006	2007	2008
15–19	0.813	0.630	0.928	0.896	0.764	0.906
20–24	0.893	0.889	0.831	0.796	0.845	0.868
25–29	0.895	0.849	0.862	0.873	0.902	0.763
30–34	0.938	0.921	0.847	0.892	0.878	0.763
35–39	0.889	0.897	0.920	0.953	0.907	0.896
40–44	0.932	0.903	0.936	0.897	0.894	0.963
45–49	0.849	0.918	0.928	0.920	0.956	0.948
50–54	0.972	0.919	0.848	0.955	0.924	0.986
55–59	1.000	0.929	1.000	0.921	0.837	0.806
60–64	1.000	1.000	1.000	1.000	1.000	0.333

Source: Statistical yearbooks of economically active population of Kazakhstan. (2009). Қазақстан халқының экономикалық белсенділігі. Статистикалық жинақ. /2009 Мешімбаева. http://www.stat.kz/publishing/DocLib/Econom_akt_09.pdf

Tab. A11 (continued) – Employment rate according to education and age, urban population, Kazakhstan

<i>Vocational education</i>						
	2003	2004	2005	2006	2007	2008
15–19	0.813	0.756	0.857	0.905	0.915	0.944
20–24	0.863	0.865	0.871	0.891	0.895	0.934
25–29	0.909	0.906	0.904	0.896	0.902	0.922
30–34	0.907	0.905	0.917	0.930	0.920	0.928
35–39	0.898	0.920	0.922	0.921	0.936	0.935
40–44	0.917	0.927	0.925	0.916	0.937	0.951
45–49	0.927	0.923	0.915	0.929	0.934	0.947
50–54	0.924	0.925	0.923	0.931	0.924	0.929
55–59	0.945	0.906	0.935	0.912	0.923	0.933
60–64	0.947	0.927	0.965	0.946	0.947	0.924
<i>Unqualified (primary or basic secondary education)</i>						
	2003	2004	2005	2006	2007	2008
15–19	0.768	0.754	0.810	0.846	0.810	0.945
20–24	0.767	0.790	0.792	0.814	0.839	0.869
25–29	0.814	0.811	0.828	0.806	0.785	0.821
30–34	0.818	0.857	0.862	0.868	0.878	0.861
35–39	0.844	0.854	0.860	0.886	0.869	0.881
40–44	0.857	0.895	0.878	0.880	0.875	0.906
45–49	0.864	0.869	0.870	0.908	0.897	0.894
50–54	0.884	0.875	0.871	0.890	0.897	0.882
55–59	0.870	0.901	0.891	0.886	0.864	0.877
60–64	0.954	0.924	0.969	0.966	0.908	0.805

Source: Statistical yearbooks of economically active population of Kazakhstan. (2009). Қазақстан халқының экономикалық белсенділігі. Статистикалық жинақ. /2009 Мешімбаева. http://www.stat.kz/publishing/DocLib/Econom_akt_09.pdf

Tab. A12 – Employment rate according to education and age, rural population, Kazakhstan

<i>Higher education</i>						
	2003	2004	2005	2006	2007	2008
15–19	0.000	0.000	0.000	0.000	0.000	0.000
20–24	0.950	0.917	0.938	0.933	0.941	0.968
25–29	0.958	0.957	0.949	0.976	0.956	0.924
30–34	0.977	0.972	0.965	0.952	0.969	0.961
35–39	0.983	0.981	0.981	0.957	0.973	0.977
40–44	0.986	0.974	0.970	0.984	0.968	0.989
45–49	0.983	0.984	0.990	0.994	0.980	0.981
50–54	0.985	0.948	0.985	0.974	0.973	0.976
55–59	0.975	0.961	0.963	0.965	0.969	0.934
60–64	0.966	1.000	0.977	1.000	0.970	0.984
<i>Unfinished higher education</i>						
	2003	2004	2005	2006	2007	2008
15–19	0.833	0.901	0.860	0.929	0.925	0.904
20–24	0.880	0.899	0.807	0.861	0.944	0.907
25–29	0.961	0.965	0.915	0.926	0.840	0.820
30–34	0.925	0.989	0.945	0.992	0.938	0.929
35–39	0.906	0.942	0.980	0.909	0.833	0.897
40–44	0.974	1.000	1.000	0.897	0.880	0.980
45–49	1.000	0.952	1.000	1.000	0.872	1.000
50–54	1.000	1.000	1.000	1.000	0.907	0.871
55–59	1.000	1.000	1.000	1.000	1.000	0.857
60–64	1.000	1.000	1.000	1.000	1.000	1.000

Source: Statistical yearbooks of economically active population of Kazakhstan. (2009). Қазақстан халқының экономикалық белсенділігі. Статистикалық жинақ. /2009 Мешімбаева. http://www.stat.kz/publishing/DocLib/Econom_akt_09.pdf

Tab. A12 (continued) – Employment rate according to education and age, rural population, Kazakhstan

<i>Vocational education</i>						
	2003	2004	2005	2006	2007	2008
15–19	0.880	0.898	0.864	0.852	0.901	0.945
20–24	0.900	0.877	0.912	0.906	0.916	0.931
25–29	0.927	0.932	0.925	0.931	0.916	0.924
30–34	0.950	0.929	0.958	0.939	0.944	0.961
35–39	0.940	0.950	0.952	0.944	0.945	0.958
40–44	0.951	0.960	0.964	0.952	0.952	0.964
45–49	0.964	0.955	0.963	0.958	0.957	0.952
50–54	0.967	0.952	0.940	0.946	0.962	0.962
55–59	0.974	0.948	0.926	0.938	0.943	0.961
60–64	0.986	0.987	0.957	0.971	0.967	0.972
<i>Unqualified (primary or basic secondary education)</i>						
	2003	2004	2005	2006	2007	2008
15–19	0.858	0.861	0.892	0.895	0.921	0.939
20–24	0.881	0.891	0.885	0.896	0.935	0.939
25–29	0.898	0.909	0.910	0.904	0.898	0.904
30–34	0.912	0.929	0.912	0.935	0.913	0.927
35–39	0.927	0.924	0.936	0.933	0.928	0.926
40–44	0.933	0.933	0.947	0.937	0.946	0.949
45–49	0.938	0.934	0.933	0.937	0.935	0.944
50–54	0.939	0.942	0.948	0.939	0.933	0.939
55–59	0.937	0.948	0.926	0.930	0.937	0.900
60–64	0.968	0.979	0.950	0.974	0.973	0.907

Source: Statistical yearbooks of economically active population of Kazakhstan. (2009). Қазақстан халқының экономикалық белсенділігі. Статистикалық жинақ. /2009 Мешімбаева. http://www.stat.kz/publishing/DocLib/Econom_akt_09.pdf

Tab. A13 – Education enrollment rates according to age groups, 2005–2006, for 100 people

Age	Years	OECD average	Estonia	Russia	Kazakhstan
3–4	2005	68.5	117.1	.	22.9
	2006	69.4	83.3	.	26.8
5–14	2005	98.4	104.6	81.5	89.4
	2006	98.5	102.2	81.5	90.0
15–19	2005	81.5	87.5	73.5	83.7
	2006	81.5	87.4	73.5	83.8
20–29	2005	24.9	27.3	18.7	19.2
	2006	25.1	26.6	18.7	19.1
30–39	2005	6.0	9.8	0.7	3.7
	2006	5.7	7.0	0.7	3.5
40+	2005	1.6	.	.	0.4
	2006	1.4	0.8	.	0.4

Source: National report on condition and development of education in Kazakhstan (2005, 2009). Қазақстандағы Білім беру саласындағы жағдай және даму бойынша ұлттық есеп.

http://www.quality.edu.kz/index.php?option=com_content&view=article&id=34%3AAnaczionalnyj-doklad-o-sostoyanii-i-razvittii-obrazovaniya-v-respublike-kazaxstan&catid=18%3A2009&Itemid=22&lang=en

Tab. A14 – Probability of surviving by age and place of residence, Kazakhstan

<i>Urban population</i>						
	2003	2004	2005	2006	2007	2008
15–19	0.994	0.994	0.995	0.995	0.994	0.995
20–24	0.990	0.988	0.988	0.988	0.989	0.990
25–29	0.984	0.982	0.981	0.981	0.981	0.985
30–34	0.979	0.976	0.975	0.973	0.974	0.978
35–39	0.974	0.972	0.970	0.970	0.970	0.975
40–44	0.962	0.960	0.959	0.959	0.961	0.968
45–49	0.945	0.946	0.946	0.946	0.950	0.956
50–54	0.924	0.925	0.924	0.928	0.930	0.941
55–59	0.897	0.901	0.901	0.904	0.910	0.917
60–64	0.857	0.864	0.863	0.874	0.879	0.887
<i>Rural population</i>						
	2003	2004	2005	2006	2007	2008
15–19	0.995	0.995	0.995	0.995	0.994	0.995
20–24	0.990	0.990	0.990	0.991	0.989	0.990
25–29	0.987	0.986	0.985	0.985	0.981	0.985
30–34	0.983	0.983	0.982	0.981	0.974	0.978
35–39	0.980	0.978	0.978	0.977	0.970	0.975
40–44	0.971	0.972	0.971	0.970	0.961	0.968
45–49	0.959	0.960	0.960	0.960	0.950	0.956
50–54	0.941	0.942	0.941	0.941	0.930	0.941
55–59	0.915	0.916	0.915	0.915	0.910	0.917
60–64	0.874	0.877	0.875	0.880	0.879	0.887

Source: Statistical Yearbook. Demographic yearbook of Kazakhstan. Қазақстанның демографиялық жылнамалығы. Статистикалық жинақ. / Редакциясын басқарған А. Мешімбаева / Астана, 2009 — 637 б.
http://www.stat.kz/publishing/DocLib/Dem_Ezegod_2009%20CD.pdf

Tab. A15 – Average mensual salary according to educational level (qualification), Kazakhstan, 2003–2008 (in USD)

	2003	2004	2005	2006	2007	2008
Specialists with high-level qualification	179.7	237.9	290.1	362.9	495.7	577.0
Employees serving documentation*	124.2	169.4	209.0	261.6	337.1	405.0
Specialists with mid-level qualification	120.4	161.4	199.5	252.0	361.9	415.7
Unqualified workers	67.7	91.9	113.0	143.1	192.9	222.1

*Employees engaged in preparation of information, designing documentations, stocktaking and registration service.

Source: Statistical yearbook. Wages in Kazakhstan. «Қазақстан Республикасындағы еңбекақы» Статистикалық жинақ / 2009–362б. Редакциясын басқарған А. Мешімбаева. http://www.stat.kz/publishing/DocLib/oplata_truda_09.pdf

Tab. A16 – Annual earning (wages) according to education and age, urban population, Kazakhstan, in KZT

<i>Higher education</i>						
	2003	2004	2005	2006	2007	2008
15–19	4285	5126	6128	7224	9596	10903
20–24	9855	11789	14095	16615	22072	25077
25–29	23996	28704	34318	40455	53740	61058
30–34	32137	38443	45961	54181	71973	81774
35–39	38136	45619	54541	64295	85408	97039
40–44	42636	51001	60975	71880	95485	108487
45–49	44564	53308	63733	75131	99803	113393
50–54	42850	51258	61282	72241	95965	109032
55–59	42207	50489	60362	71158	94525	107397
60–64	37708	45107	53928	63572	84449	95948

<i>Unfinished higher education</i>						
	2003	2004	2005	2006	2007	2008
15–19	5528	6813	8242	9721	12184	14286
20–24	7581	9344	11303	13332	16709	19592
25–29	17215	21219	25668	30275	37944	44490
30–34	23059	28421	34381	40552	50824	59592
35–39	26375	32509	39327	46385	58134	68164
40–44	28744	35429	42859	50551	63355	74286
45–49	30008	36987	44743	52774	66140	77552
50–54	28744	35429	42859	50551	63355	74286
55–59	27955	34456	41682	49163	61615	72245
60–64	24796	30563	36972	43608	54653	64082

Source: Statistical yearbook. Wages in Kazakhstan. «Қазақстан Республикасындағы еңбекақы» Статистикалық жинақ / 2009–362б. Редакциясын басқарған А. Мешімбаева. http://www.stat.kz/publishing/DocLib/oplata_truda_09.pdf

Tab. A16 (continued) – Annual earning (wages) according to education and age, urban population, Kazakhstan, in KZT

<i>Vocational education</i>						
	2003	2004	2005	2006	2007	2008
15–19	6957	8429	10218	12161	16980	19040
20–24	11949	14476	17548	20885	29162	32700
25–29	19662	23821	28877	34368	47987	53810
30–34	21477	26020	31543	37540	52417	58777
35–39	23443	28402	34431	40977	57216	64158
40–44	25258	30601	37096	44149	61645	69125
45–49	26922	32617	39540	47057	65706	73678
50–54	27073	32800	39762	47322	66075	74092
55–59	27376	33166	40206	47850	66813	74920
60–64	23141	28036	33986	40448	56477	63330
<i>Unqualified (primary or basic secondary education)</i>						
	2003	2004	2005	2006	2007	2008
15–19	3334	4088	4929	5882	7709	8667
20–24	8620	10568	12743	15207	19931	22408
25–29	12117	14856	17913	21376	28016	31498
30–34	13824	16949	20437	24389	31965	35937
35–39	15369	18844	22722	27115	35538	39954
40–44	16264	19940	24044	28693	37606	42279
45–49	16508	20240	24405	29124	38170	42914
50–54	16182	19841	23924	28550	37418	42068
55–59	15939	19542	23563	28119	36854	41434
60–64	13824	16949	20437	24389	31965	35937

Source: Statistical yearbook. Wages in Kazakhstan. «Қазақстан Республикасындағы еңбекақы» Статистикалық жинақ / 2009–3626. Редакциясын басқарған А. Мешімбаева. http://www.stat.kz/publishing/DocLib/oplata_truda_09.pdf

Tab. A17 – Annual earning (wages) according to education and age, rural population, Kazakhstan, in KZT

<i>Higher education</i>						
	2003	2004	2005	2006	2007	2008
15–19	2778	3410	4048	4717	6612	7593
20–24	6390	7844	9310	10850	15208	17463
25–29	15559	19097	22669	26417	37027	42520
30–34	20839	25577	30360	35380	49590	56946
35–39	24728	30351	36027	41984	58847	67576
40–44	27646	33932	40277	46938	65789	75548
45–49	28896	35467	42099	49060	68764	78965
50–54	27785	34103	40480	47173	66120	75928
55–59	27368	33591	39873	46466	65128	74789
60–64	24451	30010	35622	41513	58185	66817
<i>Unfinished higher education</i>						
	2003	2004	2005	2006	2007	2008
15–19	3584	4533	5444	6348	8395	9948
20–24	4916	6217	7467	8706	11513	13644
25–29	11163	14117	16955	19770	26143	30982
30–34	14952	18909	22711	26481	35017	41499
35–39	17102	21629	25977	30289	40054	47468
40–44	18638	23572	28311	33010	43652	51732
45–49	19458	24608	29555	34461	45571	54006
50–54	18638	23572	28311	33010	43652	51732
55–59	18126	22924	27533	32103	42453	50310
60–64	16078	20334	24422	28476	37656	44626

Source: Statistical yearbook. Wages in Kazakhstan. «Қазақстан Республикасындағы еңбекақы» Статистикалық жинақ / 2009–3626. Редакциясын басқарған А. Мешімбаева. http://www.stat.kz/publishing/DocLib/oplata_truda_09.pdf

Tab. A17 (continued) – Annual earning (wages) according to education and age, rural population, Kazakhstan, in KZT

<i>Vocational education</i>						
	2003	2004	2005	2006	2007	2008
15–19	4511	5608	6750	7941	11699	13259
20–24	7748	9631	11592	13638	20092	22772
25–29	12749	15849	19075	22442	33063	37472
30–34	13926	17312	20836	24514	36115	40931
35–39	15201	18896	22743	26758	39422	44678
40–44	16378	20359	24504	28829	42474	48137
45–49	17457	21700	26118	30728	45271	51308
50–54	17555	21822	26265	30901	45526	51596
55–59	17751	22066	26558	31246	46034	52173
60–64	15005	18653	22450	26413	38913	44102
<i>Unqualified (primary or basic secondary education)</i>						
	2003	2004	2005	2006	2007	2008
15–19	2162	2720	3256	3841	5312	6036
20–24	5589	7031	8418	9930	13733	15605
25–29	7857	9884	11832	13959	19303	21935
30–34	8964	11277	13500	15926	22024	25026
35–39	9966	12537	15009	17706	24485	27823
40–44	10546	13267	15882	18737	25911	29443
45–49	10704	13466	16121	19018	26299	29884
50–54	10493	13200	15803	18643	25781	29295
55–59	10335	13001	15565	18362	25392	28854
60–64	8964	11277	13500	15926	22024	25026

Source: Statistical yearbook. Wages in Kazakhstan. «Қазақстан Республикасындағы еңбекақы» Статистикалық жинақ / 2009–3626. Редакциясын басқарған А. Мешімбаева. http://www.stat.kz/publishing/DocLib/oplata_truda_09.pdf

Tab. A18 – The estimations of aggregate human capital for workers with higher and unfinished higher education, urban population, 2003, Kazakhstan, in USD – deflated for 2008

<i>x</i>	<i>Higher education</i>			<i>Unfinished higher education</i>		
	P_x^h	H_x^h	$H_x^h \times P_x^h$	P_x^u	H_x^u	$H_x^u \times P_x^u$
15–19	0	141,137	0	11,700	131,447	1,537,927,350
20–24	83,500	137,378	11,471,054,756	46,000	105,931	4,872,825,760
25–29	158,300	130,553	20,666,570,069	25,700	95,401	2,451,810,427
30–34	156,600	118,052	18,486,899,102	19,700	81,172	1,599,084,761
35–39	138,100	102,527	14,158,917,830	13,600	69,264	941,984,778
40–44	158,900	85,818	13,636,450,265	12,300	57,500	707,253,149
45–49	133,400	68,071	9,080,681,673	7,300	45,683	333,483,285
50–54	116,400	50,259	5,850,123,707	7,000	35,065	245,458,172
55–59	50,700	33,722	1,709,725,502	3,100	23,531	72,945,431
60–64	22,700	17,066	387,391,533	1,100	11,667	12,833,640
$H^{h_{total}}$			95,447,814,436			12,775,606,754

SOURCES: Author's calculations based on Statistical Agency of Kazakhstan (2003–2008), State Committee on Control of Education in Kazakhstan (2006, 2009), National Bank of Kazakhstan (2008), Le (2006), Gu and Wong (2008).

Tab. A19 – The estimations of aggregate human capital for workers with vocational education and unqualified workers, urban population, 2003, Kazakhstan, in USD – deflated for 2008

<i>x</i>	<i>Vocational education</i>			<i>Unqualified</i>		
	P_x^v	H_x^v	$H_x^v \times P_x^v$	P_x^a	H_x^a	$H_x^a \times P_x^a$
15–19	30,900	99,964	3,088,884,699	75,900	69,957	5,309,708,695
20–24	153,300	78,667	12,059,710,100	97,700	46,453	4,538,423,182
25–29	250,300	75,700	18,947,595,966	107,100	44,056	4,718,401,515
30–34	277,900	70,005	19,454,413,662	101,800	40,610	4,134,143,974
35–39	251,200	61,095	15,347,036,246	81,400	35,507	2,890,306,042
40–44	310,400	52,090	16,168,837,597	98,300	29,965	2,945,526,341
45–49	264,900	42,053	11,139,798,711	95,600	23,902	2,284,989,894
50–54	207,800	31,650	6,576,861,790	86,900	17,954	1,560,163,367
55–59	81,200	21,350	1,733,618,087	35,600	12,049	428,945,570
60–64	35,900	10,314	370,260,769	37,600	6,207	233,399,238
$H^{v_{total}}$			104,887,017,626			29,044,007,819

SOURCES: Author's calculations based on Statistical Agency of Kazakhstan (2003–2008), State Committee on Control of Education in Kazakhstan (2006, 2009), National Bank of Kazakhstan (2008), Le (2006), Gu and Wong (2008).

Tab. A20 – Aggregate human capital stock, by worker's educational level and place of residence, Kazakhstan, in USD billions (deflated for 2008)

	Absolute value			Relative value		
	Urban	Rural	Total	Urban	Rural	Total
	2003					
Higher education	95.4	17.9	113.3	27.3%	5.1%	32.4%
Unfinished higher education	12.8	4.1	16.8	3.7%	1.2%	4.8%
Vocational education	104.9	40.9	145.8	30.0%	11.7%	41.7%
Unqualified	29.0	44.4	73.4	8.3%	12.7%	21.0%
Total	242.2	107.2	349.4	69.3%	30.7%	100.0%
	2004					
Higher education	141.8	24.9	166.7	29.6%	5.2%	34.8%
Unfinished higher education	16.5	6.2	22.8	3.5%	1.3%	4.8%
Vocational education	136.2	52.1	188.4	28.4%	10.9%	39.3%
Unqualified	37.5	63.8	101.4	7.8%	13.3%	21.2%
Total	332.1	147.1	479.2	69.3%	30.7%	100.0%
	2005					
Higher education	183.8	31.0	214.8	31.3%	5.3%	36.6%
Unfinished higher education	23.1	7.1	30.2	3.9%	1.2%	5.1%
Vocational education	161.4	59.9	221.3	27.5%	10.2%	37.7%
Unqualified	43.8	76.6	120.4	7.5%	13.1%	20.5%
Total	412.2	174.5	586.7	70.3%	29.7%	100.0%
	2006					
Higher education	234.6	40.7	275.3	32.3%	5.6%	37.9%
Unfinished higher education	28.8	9.0	37.8	4.0%	1.2%	5.2%
Vocational education	194.0	73.3	267.3	26.7%	10.1%	36.8%
Unqualified	55.8	90.4	146.2	7.7%	12.4%	20.1%
Total	513.2	213.4	726.5	70.6%	29.4%	100.0%
	2007					
Higher education	321.3	69.4	390.7	31.7%	6.8%	38.5%
Unfinished higher education	32.2	13.4	45.6	3.2%	1.3%	4.5%
Vocational education	263.4	118.9	382.3	26.0%	11.7%	37.7%
Unqualified	57.7	137.4	195.1	5.7%	13.6%	19.2%
Total	674.7	339.1	1013.7	66.6%	33.4%	100.0%
	2008					
Higher education	376.7	84.6	461.3	32.3%	7.2%	39.5%
Unfinished higher education	36.9	16.2	53.1	3.2%	1.4%	4.5%
Vocational education	293.7	133.6	427.3	25.2%	11.4%	36.6%
Unqualified	64.7	160.8	225.5	5.5%	13.8%	19.3%
Total	772.0	395.2	1167.2	66.1%	33.9%	100.0%

SOURCES: Author's calculations based on Statistical Agency of Kazakhstan (2003–2008), State Committee on Control of Education in Kazakhstan (2006, 2009), National Bank of Kazakhstan (2008), Le (2006), Gu and Wong (2008).

Tab. A21 – Human capital per capita, by worker's educational level and place of residence, in USD (deflated for 2008)

	2003	Urban	Rural	Total
Higher education		93,705	62,683	86,919
Unfinished higher education		86,614	64,232	79,901
Vocational education		56,276	39,825	50,430
Unqualified		35,510	27,241	30,006
Total		62,933	35,687	50,987
	2004	Urban	Rural	Total
Higher education		123,496	84,737	115,594
Unfinished higher education		111,343	88,854	104,121
Vocational education		72,906	52,163	65,681
Unqualified		47,251	36,464	39,831
Total		83,869	47,240	67,744
	2005	Urban	Rural	Total
Higher education		146,430	99,648	137,138
Unfinished higher education		136,116	104,494	127,105
Vocational education		87,214	61,377	78,296
Unqualified		56,808	43,210	47,334
Total		101,836	55,820	81,780
	2006	Urban	Rural	Total
Higher education		176,295	119,833	164,812
Unfinished higher education		162,692	121,661	150,561
Vocational education		105,689	73,324	94,280
Unqualified		69,821	51,428	57,177
Total		123,887	67,304	99,355
	2007	Urban	Rural	Total
Higher education		238,690	164,975	221,138
Unfinished higher education		202,588	154,864	185,766
Vocational education		147,001	105,508	130,980
Unqualified		88,854	70,031	74,714
Total		170,941	94,298	134,402
	2008	Urban	Rural	Total
Higher education		268,328	188,046	248,844
Unfinished higher education		228,714	185,145	213,392
Vocational education		162,409	117,212	144,938
Unqualified		98,862	78,181	83,172
Total		191,662	105,840	150,378

SOURCES: Author's calculations based on Statistical Agency of Kazakhstan (2003–2008), State Committee on Control of Education in Kazakhstan (2006, 2009), National Bank of Kazakhstan (2008), Le (2006), Gu and Wong (2008).

Tab. A22 – Returns on human capital due to investment in education, in USD (deflated for 2008)

	<i>Urban population</i>					
	2003	2004	2005	2006	2007	2008
Higher education	9,690	12,963	14,658	16,521	26,882	32,110
Unfinished higher education	31,483	40,089	48,563	57,348	74,341	85,166
Vocational education	30,007	38,263	46,066	55,196	73,745	82,737
	<i>Rural population</i>					
	2003	2004	2005	2006	2007	2008
Higher education	6,834	7,846	9,752	11,095	19,099	20,154
Unfinished higher education	21,973	28,823	34,231	40,476	54,077	62,002
Vocational education	20,947	27,449	32,440	38,122	52,111	60,201

SOURCES: Author's calculations based on Statistical Agency of Kazakhstan (2003–2008), State Committee on Control of Education in Kazakhstan (2006, 2009), National Bank of Kazakhstan (2008), Le (2006), Gu and Wong (2008).

Tab. A23 – Differences between expected mensual labor income and average mensual salary, by worker's educational level, in USD (deflated for 2008)

	<i>Urban population</i>					
	2003	2004	2005	2006	2007	2008
Higher education	3,212	6,905	8,278	10,470	14,981	17,169
Unfinished higher education	10,642	14,654	17,367	21,351	31,116	33,349
Vocational education	3,499	5,979	6,790	8,525	9,098	10,694
Unqualified	5,374	7,603	8,933	10,926	15,090	17,320
	<i>Rural population</i>					
	2003	2004	2005	2006	2007	2008
Higher education	3,892	6,575	7,872	9,686	12,784	14,330
Unfinished higher education	8,573	11,924	13,858	16,716	23,758	26,145
Vocational education	3,554	5,618	6,337	7,588	7,878	9,699
Unqualified	4,400	6,204	7,253	8,640	11,683	13,672

SOURCES: Author's calculations based on Statistical Agency of Kazakhstan (2003–2008), State Committee on Control of Education in Kazakhstan (2006, 2009), National Bank of Kazakhstan (2008), Le (2006), Gu and Wong (2008).

Tab. A24 – Differences in lifetime labor income between “investment stream” and “stable stream”, by worker’s educational level and place of residence, in USD (deflated for 2008)

	Per capita		For whole cohort	
	Urban	Rural	Urban	Rural
	2003			
Unfinished higher education	195,325	135,868	3,579,929,558	1,172,462,922
Vocational education	111,871	79,855	18,306,233,884	7,419,156,732
Unqualified	79,179	53,144	6,332,154,361	9,118,555,198
	2004			
Unfinished higher education	254,169	176,527	4,539,107,295	1,752,128,220
Vocational education	143,366	105,632	23,532,603,829	9,524,444,387
Unqualified	98,463	69,328	7,600,282,961	12,275,027,158
	2005			
Unfinished higher education	303,236	208,447	6,283,868,260	1,975,687,969
Vocational education	174,241	121,987	28,583,367,686	10,793,274,203
Unqualified	120,784	80,686	8,898,922,528	14,762,602,259
	2006			
Unfinished higher education	364,669	250,034	7,859,024,394	2,569,757,073
Vocational education	207,781	145,796	34,029,971,065	13,133,047,008
Unqualified	143,577	96,335	11,126,645,614	17,129,713,467
	2007			
Unfinished higher education	492,417	353,635	9,280,765,476	4,300,544,494
Vocational education	268,971	190,795	44,569,626,512	19,968,371,420
Unqualified	189,123	131,957	11,232,442,934	25,597,879,694
	2008			
Unfinished higher education	405,037	403,433	9,238,744,442	4,943,129,472
Vocational education	295,324	223,263	49,165,140,538	23,428,972,236
Unqualified	199,394	149,073	11,535,800,390	30,212,919,713

SOURCES: Author’s calculations based on Statistical Agency of Kazakhstan (2003–2008), State Committee on Control of Education in Kazakhstan (2006, 2009), National Bank of Kazakhstan (2008), Le (2006), Gu and Wong (2008).

Tab. A25 – Decomposing human capital stock change to the components, from 2003 to 2008, by worker’s educational level and place of residence, Kazakhstan, in USD billions (deflated for 2008)

Elements of change	Higher	Unfinished Higher	Vocational	Unqualified
	Total			
Gross human capital formation	142.0	10.4	47.1	16.4
Revaluation	205.4	27.7	291.8	138.3
Depreciation	-51.7	-7.2	-65.8	-37.6
Retirement	-0.5	0.0	-0.6	-0.5
New members	52.8	5.4	9.0	35.4
Net human capital formation	90.3	3.2	-18.7	-21.2
Total changes in human capital	348.0	36.3	281.5	152.0
	Urban			
Gross human capital formation	113.0	6.3	24.7	-9.4
Revaluation	171.6	20.2	206.4	52.5
Depreciation	-43.0	-5.5	-47.1	-14.9
Retirement	-0.4	0.0	-0.4	-0.2
New members	40.1	3.2	5.2	7.7
Net human capital formation	69.9	0.7	-22.4	-24.3
Total changes in human capital	281.3	24.1	188.9	35.6
	Rural			
Gross human capital formation	29.0	4.1	22.4	25.8
Revaluation	33.9	7.5	85.4	85.8
Depreciation	-8.7	-1.7	-18.7	-22.7
Retirement	-0.1	0.0	-0.2	-0.3
New members	12.6	2.3	3.8	27.7
Net human capital formation	20.3	2.4	3.6	3.1
Total changes in human capital	66.7	12.1	92.7	116.4

SOURCES: Author’s calculations based on Statistical Agency of Kazakhstan (2003–2008), State Committee on Control of Education in Kazakhstan (2006, 2009), National Bank of Kazakhstan (2008), Le (2006), Gu and Wong (2008) and Wei (2009).