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Income sources, income level and the problem of poverty in Georgia

Gela Grigolashvili¹

The income of the Georgian population increased in recent years and the structure of it became more favorable. However, it is still not enough to eliminate poverty. The analysis investigates the structure of population's income, the level of poverty and the relationship between different factors.

Economic growth by itself does not mean corresponding growth of population's income. In certain conditions, increase of real value of income can fall away that would be reasonable. From this point of view, economic policy plays significant role.

For the population, it was very hard to overcome the crisis of the transition period from planned to the market economy. Starting from the end of 1980s, the economic depression accompanied with critical political events starting at the end of 1991, achieved impressive scales. The economic slump finished in 1995.

In the beginning of the crisis, the commercial branch was also hardly depressed. In 1993, commodity turnover in comparative prices was just 7.4% of the same data in 1990.² In 1993, commercial businesses and cooperative trade was limited just on selling standard food products and bread. Heavy setback of the industrial sector, sharp deterioration of the financial position resulted in a sharp increase of unemployment level. Comparing with 1989, in 1995 only 31.7% of the labor force was formally occupied, besides, 55.7% of employees were on indefinite leave.³

After 1992, the processes of population's impoverishment accelerated. By 1 October 1993, the food expenses were 79% of all expenses of the average citizen. The average volume of used calories during the day/night period was just 2100 calories and 75% of them were under the food products. The share of wages in cash incomes sharply decreased, as in the 1st quarter of 1993 its proportion was more around 60% and in the third quarter it felt to 26%. Other traditional sources of income such as pensions, scholarships and others completely lost their real value. 93% of population appeared to be under the poverty line.⁴

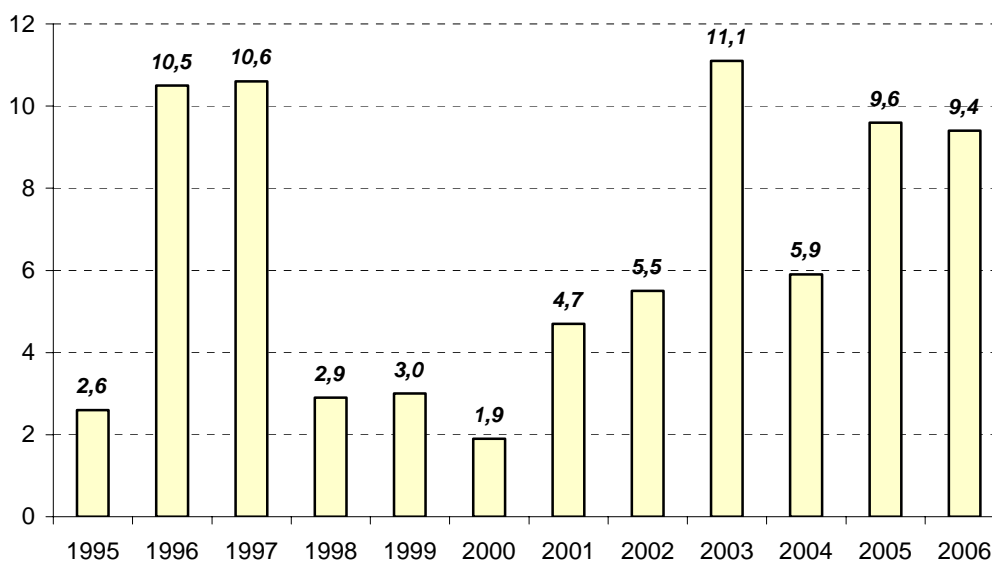
The economic and social recovery started from the extremely low level. In 1996-1997, high double digit annual real GDP growth rates were achieved. In 1998-2002, mainly caused by economic crises of main CIS countries, the real GDP growth slowed down significantly. Finally, since 2003 up till now, Georgia experienced a high growth period. (*Chart 1*)

1 PhD

2 Report on Social and Economic situation in the Republic of Georgia of 1993. Committee of Social and Economic Information of the Republic of Georgia. Tbilisi, 1994. /Georgian/, page 4.

3 Vlodzimezh Pankuv, Barbara Gonchazh and Gela Grigolashvili. Transformation of State Enterprises in Georgia. Center for Social and Economic Research. CASE. 93. Warsaw, December 1996. /Russian/, page 29.

4 Report on Social and Economic situation in the Republic of Georgia of 1993. Committee of Social and Economic Information of the Republic of Georgia. Tbilisi, 1994. /Georgian/, pages 11-12.

Chart 1. Real GDP growth in, 1995-2006 (%)

Source: International Monetary Fund

In 1999-2001, the per capita cash income from domestic economy approximately equaled USD 18.2 per month.⁵ By 2006, this figure reached USD 40 per month but the living wage of a man able to work became USD 70.⁶ Here can be mentioned that the consumer price index (CPI) year-on-year was 110.7% in 1998, 110.9% in 1999, 104.6% in 2000 and 103.4% in 2001.⁷

2001-2006 was the period of relatively stable development. Average monthly incomes increased from GEL 263.2 million in 2001 to GEL 387.6 million in 2006. It decreased only in 2003. In that year, the average monthly gross income decreased by 0.1%. In 2001, the incomes on one person from GEL 63.0 (USD 30.4) per month approximately increased up to GEL 102.7 in 2006, what means that they increased at about USD 57.8. This figure is behind USD 10 living wage of a man able to work. The level of poverty towards 60% median using in 2006 was 23.3%, but the depth of poverty was 7.2% and the severity of poverty – 3.3%.⁸

Cash incomes and money transfers are the main sources of incomes of the population that make 66.7% of total, while non-cash incomes make 21.1%, other money sources 12.2%. The main sources of cash incomes and transfers consist of incomes from hired labor (41.7%), self-employment (15.8%), selling agricultural products (12.6%), pensions, scholarships and allowances (12.6%) and financial assistance of cousinly peoples (10.9%).⁹ (Table 1)

5 Statistical annual year-book of South Caucasian countries. Publishing house "SADA", 2002. /Russian/, page 64.

6 Department of Statistics of the Ministry of Economic Development

7 Statistical annual year-book of South Caucasian countries. Publishing house "SADA", 2002. /Russian/, pages 4-5.

8 Department of Statistics of the Ministry of Economic Development

9 Department of Statistics of the Ministry of Economic Development

Table 1. Gross average monthly income of population, 2001-2006 (USD million)

	2001	2002	2003	2004	2005	2006
Cash incomes and transfers	68.5	74.1	82.0	100.9	126.0	145.5
Income from employment	27.7	28.0	28.7	35.7	49.1	60.7
Income from self-employment	12.7	14.0	15.3	19.4	22.1	23.0
Income from selling farm production	11.2	14.0	14.6	18.1	18.0	18.2
Income from property	0.8	0.5	0.7	1.2	1.8	0.8
Pensions, stipends, aids	6.4	5.9	3.9	8.3	14.3	18.4
Migrant's remittances	4.5	5.2	8.8	6.6	7.7	8.3
Income from close persons	5.2	6.2	9.5	11.4	12.7	15.9
Non-cash incomes	48.8	45.0	41.9	46.4	44.4	46.3
Incomes, total	117.2	119.1	123.9	147.3	170.5	191.7
Other cash incomes	9.7	21.6	19.8	22.6	24.2	26.3
Property's selling	3.6	4.2	3.9	4.9	2.9	3.8
Money borrowing & saving's using	6.1	17.3	15.9	17.6	21.3	22.5
Cash means	78.3	95.8	101.8	123.5	150.3	171.9
Cash and non-cash means	127.0	140.8	143.8	170.0	194.8	218.1

Source: Department for Statistics, Ministry of Economic Development and author's calculations

In 2006, incomes from hired labor (USD 728.4 million), from self-employment (USD 276.0 million) and selling of agriculture products (USD 218.4 million) were the main resources of total incomes. For Georgia, as 42% of population live in villages¹⁰, processing of agricultural products is very important. This branch has been developing considerably. Though large part of products are delivered to local markets without further processing and other part damages while searching for new markets. In 1997, the agriculture and fish products amounted to USD 1026.2 million. In 2005, this comparative price index was only USD 784 million. In 2006, it started increasing and in first two quarters it was USD 723.4 million. The average nominal monthly wage was sharply increased in this sector. In the first quarter of 2007, the nominal wage of persons employed in agriculture, hunting and forests achieved GEL 192.6 (USD 120). In the second quarter, it increased to GEL 230.8 (USD 142.5). In fishery and fishing industry the same index in the same period from GEL 107.0 rose up to GEL 121.5 (USD 75) that meant 13.5% increase.¹¹

The insufficient employment and the high unemployment enforced the government to promote small-scaled businesses and self-employment in order to create better conditions for entrepreneurship and to increase incomes. It should be mentioned that 65.9% of employed are self-employed; hired persons' share is 33.9%. In complete income structure of population, 10.5% of incomes are from self-employment, from the hired labor – 27.8%. In comparison with 2001 the level of incomes from self-employment was increased just by 0.5%, from the hired labor by 6%. The first made GEL 40.9 million (USD 23 million) and the second one GEL 107.9 million (USD 60.7 million).

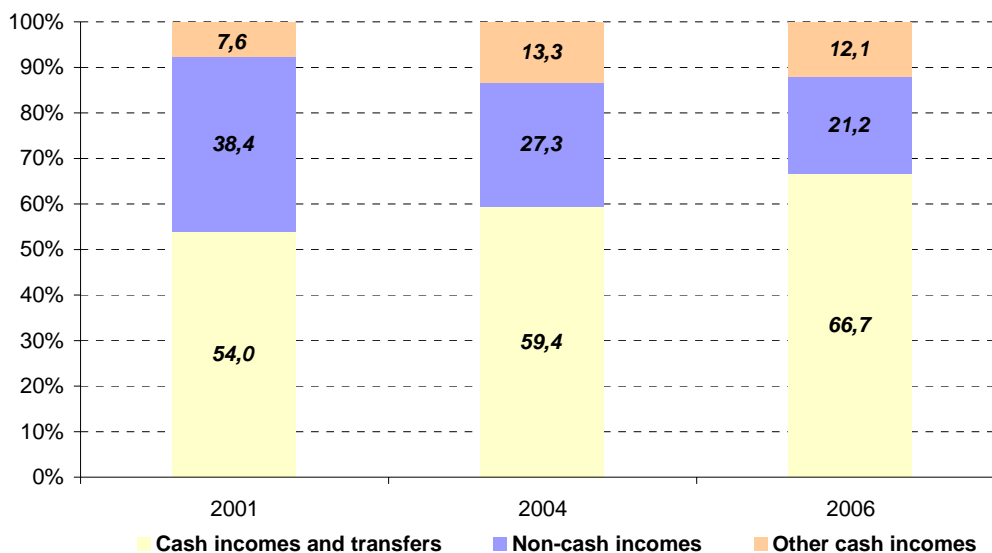
74.5% of people have been looking for a job more than one year, 28.4% of them have never been employed before. Such status interfere the process of poverty elimination though its decreasing has not stopped yet. For example in 2006 the level of poverty was decreased by 1.3% in comparison with 2004, the depth of poverty – with 0.9%, the severity of poverty – with 0.7%. At the same time it should be mentioned that the

¹⁰ Statistical annual year-book of South Caucasian countries. Publishing house "SADA", 2002. /Russian/, page 12.

¹¹ Department of Statistics of the Ministry of Economic Development

average monthly income of average self-employed persons in last year was GEL 36.64 (USD 20.62), while for the hired person the same index was equal to GEL 187.71 (USD 105.63).¹²

Chart 2. Structure of gross incomes of the population, 2001-2006 (% of total)



Source: Department for Statistics, Ministry of Economic Development and author's calculations

It is obvious that in 2006 the structure of gross incomes of population is better than in 2001 and 2004. The share of cash incomes and transfers increased, while of non-cash incomes decreased. The proportion of other cash incomes in total was 12.1% in 2006, more than in 2001, but less than in 2004. This figure covers the sales of property's, the money borrowing and the use of savings. In the structure of other cash incomes, the property's selling makes 14.5%; money borrowing and saving's using makes 85.5%. The poverty situation in Georgia is mostly in connection with money borrowing and use of savings. (Table 1)

In the economies, where poverty is rooted in unstable internal and external political background, there is a very high risk for large economic fall, hyperinflation, increase of poverty and other negative impacts. Beside high economic growth rates, when the state budget experiences increasing revenues, the government can improve the living standards. In such good times, excessive attempts might cause undesirable inflation pressure. The same is the case in Georgia nowadays, before elections. The annual inflation was 11.4% in the middle of 2006.¹³ It should be also mentioned that increasing of bank credit, high level of increasing of service sphere in comparison with industrial sector and primary sector.

In present, the inflation is expected to be high, as few years ago the prices on many products became higher, such as: on fuel, bread, sugar. The price of vegetable oil or the public transport fares in Tbilisi got doubled for instance, among others. In the near future, supply of money will not be reduced until the end of elections. Despite nominal growth of incomes, the real living standards will improve insignificantly as the high inflation is inevitable.

¹² Department of Statistics of the Ministry of Economic Development

¹³ Georgian Economic Trends. Georgian-European Policy and Legal Advise Centre. Quarter review – October. Tbilisi, 2006.

Structural weaknesses of healthcare in Armenia

Gohar Jerbashian

Despite the geographically well-accessible healthcare, extensive right of people for state guaranteed free-of-charge services and the broad scope of healthcare services included in the Basic Benefit Package, 39.5% of ill people do not seek medical care due to financial constraints.¹⁴ In addition, the low level of awareness (only one third of patients knew they have right for free services), the operation of “shadow health economy” caused by poor funding (low salaries of healthcare providers) as well as uneven distribution of physicians in the country mean significant challenge.

Unlike many developing countries facing huge shortage of healthcare workforce, Armenia is experiencing lack of access to healthcare even though the average number of physicians of all specialties was estimated at 38.2 per 10,000 inhabitants¹⁵ in 2005, whilst the latest average for EU-25 countries is 27.8 physicians.¹⁶ The Armenian healthcare system is characterized by oversized and overstaffed hospitals with utilization below 50%¹⁷, specialized medical care at the PHC level, significant differences in the access to healthcare in rural and urban areas, and regiment of unsatisfied needs for healthcare.

USAID Project NOVA patient survey (April 2006) shows that 94% of women reported paying out-of-pocket money for pregnancy and delivery care, despite the fact that these services have been fully funded by the state budget. Those women paid on average USD 117.7 (inclusive of antenatal, delivery and post-natal care and medicines), while average monthly income was only USD 126.4 and per capita monthly minimum consumer basket was USD 72.6. 25% of women paid USD 283.6 to USD 1,196.7 for mentioned services.

In Armenia, there has been an erroneous belief in the capability of healthcare free market to serve as a mechanism for rational resource allocation. The medical workforce has not been reduced, despite the substantial cutback of hospital beds (49.8%) executed by governmental optimization of the healthcare system in 1995-2005.¹⁸ An excessive number of physicians in the capital city coupled with inadequate distribution of physicians across the country (75.8 per 10,000 inhabitants in capital city Yerevan versus 17.6 elsewhere¹⁹) threaten the viability of public health in Armenia. A household survey (2002) indicates that households' spending on healthcare outweigh 6-7 times the amounts officially reported by health facilities to the National Statistical Service (NSS). Additionally, the number of employed in the healthcare sphere 1.5 times exceeds the respective indicator reported by healthcare facilities to NSS. Households' spending on medicines 10 times exceeds the amounts reported by pharmacies and 1.77 times more people work in this sector than it is reported to the NSS.²⁰

14 Human Poverty and Pro-Poor Policies in Armenia, UNDP, 2005, p. 26

<http://www.undp.am/docs/publications/2005publications/propooreng.pdf>

15 Social Conditions in Armenia, NSS, 2005, http://www.armstat.am/arm/Publications/2006/SOC_05/SOC_05_8.pdf, p.156

16 http://www.euro.who.int/document/e88202_ukraine.pdf, p. 232

17 “Health and Healthcare in Armenia”, RA MOH NIH, 2005, p. 137

18 “Health and Healthcare in Armenia”, RA MOH NIH, 2005, p. 137

19 Social Conditions in Armenia, NSS, 2005, http://www.armstat.am/arm/Publications/2006/SOC_05/SOC_05_8.pdf, p. 156 and own calculations

20 “Health and Healthcare in Armenia”, RA MOH NIH, 2005, p. 101-103, Report on Health Module of Integrated Survey of Living Standards (Pilot Survey), http://www.armstat.am/Arm/Publications/2007/H_modul/H_modul_4.pdf

The number of medical graduates (Yerevan State Medical University only, as there is no statistics on the number of graduates of 4 private ones) reached 35.6 practicing physicians per 1,000 in 2004 as compared to 28.9 in Norway and 17.7 in France which have much higher life expectancy and much lower infant mortality rates as compared to Armenia. Respectively, the number of nursing graduates (state medical colleges only, as there is no available data on the number of graduates of 18 private ones) reached 125.7 practicing nurses per 1,000 in 2004 contrary to Norway (50.6) and France (44.6).²¹

In order to increase access to and quality of healthcare services in Armenia, it is necessary to understand the price formation process in healthcare system. Additionally, in order to properly plan the healthcare supply (which is to some extent equivalent to medical workforce supply because of the high labor intensiveness of healthcare), matching the local health needs (which constitute the demand side of healthcare services); it is essential to pay deeper attention to the peculiarities of healthcare economics, pointing that there is strong evidence of supplier induced demand, increase of medical fees as a result of increase in the supply of doctors, and finally, at some level more healthcare may not be better in terms of health outcomes. Worldwide experience shows that health outcomes do not always correlate with health spending and the number of physicians. Increase in the supply of doctor above certain level increases medical fees and does not result in better health outcomes and hence becomes a burden to the public health.²²

Research suggests that an increase in the supply of doctors has been associated with an increase in fees.²³ This phenomenon has been explained by Supplier Induced Demand (SID): as doctors' supply increases - patients per doctor decline - as a consequence: doctors increase the fees and induce excessive (quite often unnecessary) services to compensate for the loss due to decline of patients. Knowing this phenomenon will allow the Armenian health policy makers to establish equitable and efficient healthcare system in Armenia.

Demand for healthcare services

From many points of view, the market for healthcare services is similar to the market of other services. It provides services in response to consumer demand based on health needs. But, the demand of healthcare services essentially differs from the demand for other goods and services. The first reason for this is that consumers of healthcare services rely on the information received from service providers. Secondly, the majority of people do not pay directly for healthcare services; instead, the state budget and/or private insurance companies pay. Thus, people use more healthcare services than it is necessary, even though an additional (marginal) healthcare service does not give an essential improvement.

Costs and prices of healthcare services increase mainly because of higher increased rates of healthcare services demand versus their supply. The price elasticity of demand for medical care is low (or inelastic), which results in healthcare providers having essential influence on the prices of services.²⁴ Price inelasticity of health services' demand partially explains why doctors and health facilities are interested in increasing their prices. In the condition of inelasticity of demand, the income of a health provider increases when the

21 "Health and Healthcare in Armenia", RA MOH NIH, 2005, p. 101-103, and <http://www.oecd.org/dataoecd/46/36/38979632.xls>

22 Bob Carbaugh, Health Care: Why Costs are so High, <http://www.cwu.edu/~carbaugh/Health%20care%20costs.htm>,

Financing Health Care: Short Term Problems, Long Term Options, <http://www.buseco.monash.edu.au/centres/che/pubs/wp138.pdf>

Reconsidering theories and evidence of supplier induced demand, <http://www.buseco.monash.edu.au/centres/che/pubs/rp13.pdf>

Supply and Demand for Medical Care: Or, Is the Healthcare Market Perverse?,

<http://www.buseco.monash.edu.au/centres/che/pubs/wp123.pdf>

23 Jeff Richardson, Does an Increase in the Doctor Supply Reduce Medical Fees,

<http://www.buseco.monash.edu.au/centres/che/pubs/wp145.pdf>, p. 1

24 Under the conditions of non-elastic price demand, the price of the service increases together with the income of service provider.

service price increases. In addition to price inelasticity of demand, the demand of healthcare services has significantly increased in last years, because of the following reasons.

1. There is evidence on direct link between the income of households and their expenditures on healthcare. Just to mention, in 2000-2005, incomes of households have significantly increased annually by 15.0% on average²⁵, thus boosting the spending on healthcare annually by some 25.9% on average.
2. One of the most significant factors influencing the healthcare and social assistance state programs is the increase in lifespan. Like in developed countries, the trends of population ageing in Armenia are obvious too. In 1990, 5.6% of the total population was 65 or older, whereas according to 2001 census data their share reached the level of 9.7% and the recent data is 10.8% in 2006.²⁶

In EU-15 countries the ratio of population above 65 to the population in the age of 20-64 will double during 2000-2050 and will increase from 26.7% to 53.4%.²⁷ In the same period, a significant increase of the same indicator is expected in Armenia: from 17.5 % to 29.0%.²⁸ (Table 2)

Table 2. Ratio of 65 and above population to the 20-64 age population in EU-15 and Armenia, 2000-2050 (%)

	2000	2010	2020	2030	2040	2050
EU-15	26.7	29.8	35.1	43.8	52.4	53.4
Armenia	17.5	17.7	18.1	25.9	24.5	29.0

Source: Eurostat, own calculations

The change in the observed ratio is attributed not only to the decrease in the rate of birth, but also to the increase in life expectancy. In general, life expectancy at elder ages increases at higher rates than life expectancy at birth: during the last decade, life expectancy at age 60 will increase by one to two years each decade as compared to life expectancy at birth which increases only by 0.5 years.²⁹ Along with the ageing of the population, the demand for healthcare services increases as elderly people get sick frequently and the illness lasts longer. At the same time, it is necessary to pay attention to the fact that 40-50 years ago elderly people suffered from acute diseases, whereas now, chronic diseases are widespread which require longer healthcare and a need for additional social assistance.

3. Private or state health insurance system significantly influences the motivation of the insured patients to consume health services. As they are guaranteed from paying the full cost of healthcare in case of sickness and injury, insured people have less motivation for limiting the expenses due to accidents or illness. People having medical insurance more often go to the doctor and undergo high cost medical examinations more frequently, thus contributing to the increase of healthcare services demand and hence giving rise to healthcare prices.

25 Statistical Yearbook of Armenia, NSS, 2005, p. 71

26 Demographic Handbook of Armenia, RA NSS, 2007, p. 37,

http://www.armstat.am/Arm/Publications/2007/Demos_07/Demos_07_2.pdf

27 Commission Communication on Modernizing and improving social protection in the European Union, COM (97) 102 adopted on 12 March 1997 http://europa.eu.int/comm/employment_social/social_protection/docs/com102_en.pdf p. 4-5

28 A. Jerbashian, G. Jerbashian, "Future of Pension Systems in EU", Armenian Trends, AEPLAC, No Q3/05, pp. 51-54 (Eng.), Yerevan, 2006, p. 52

29 Beyond Six Billion: Forecasting the World's Population (2000), Commission on Behavioral and Social Sciences and Education, National Academy Press, Washington D.C., 2000 <http://www.nap.edu/books/0309069904/html/125.html>

4. Doctors are more informed on healthcare than their patients (asymmetric information) and they usually order the types and quantities of medical examinations, prescribe different medical interventions and medicine for treatment. When doctors are paid for each healthcare service separately, they have clear motivation in addition to the main (essential) medical interventions to prescribe also non-essential diagnostic examinations and interventions. At the same time, such behavior guarantees the doctors from being accused of “careless” treatment. To legally protect themselves, doctors prefer to conduct many diagnostic examinations (sometimes not necessary), diagnose complicated diseases, and prescribe more (exaggerated) interventions, expensive medicine and frequent check-ups.

Supply of healthcare services

The supply of healthcare services also essentially differs from the supply of other services. In Armenia, in 2000-2005, the number of doctors of all specialties (including dentists) per 10,000 inhabitants increased from 32.3 to 38.2, despite the substantial cutback (almost 50.0%) of hospital beds in 1998-2005 (Table 3). Unequal distribution of doctors in Yerevan (75.8 physicians per 10,000 inhabitants) and remaining part of the country (17.6 physicians per 10,000 inhabitants) make this issue alarming.

Table 3. Doctors and hospital beds in Armenia, 2000-2005 (per 10,000 inhabitants, %)

	1998	1999	2000	2001	2002	2003	2004	2005
Number of doctors	34.3	33.2	32.3	30.3	35.8	36.5	35.4	38.2
Number of hospital beds	66.5	62.0	54.7	42.5	43.5	44.2	44.3	44.6

Source: *Social Conditions in the RA, RA NSS, p. 156, Main Indicators of Public Health* http://www.edrc.am/project.html?cat_id=173,

In general, the increase of the supply of healthcare services' providers also contributes to the increase of costs. In the short run, the supply of doctors is price inelastic, as general health education lasts at least six years and another three years are necessary to qualify for a narrow specialization. Under the conditions of existing increase of demand, a real increase of healthcare services' supply (which would balance the increase of demand) is possible only in later years which results in increase of prices in the short run.

Another important reason for the growth of the healthcare prices is the low rate of increase in productivity in the health sphere. Healthcare is a labor intensive sector and usually it is difficult to increase productivity in the healthcare system as in other areas of production or services. Technological progress in healthcare contributes to increasing quality of healthcare and creates new opportunities for implementing new types of interventions or examinations. On the other hand, as the number of patients does not increase in conjunction with a greater number of doctors, the patient-doctor ratio drops, thus resulting in the decrease of the doctors' expertise, directly influencing the quality of the healthcare.

Conclusions

All the above deliberations allow us to conclude that in order to efficiently use scarce financial resources, along with customizing the medical workforce skill mix to local healthcare needs, introducing proper incentives for retention of health workers in rural areas so that to have more evenly distributed medical workforce in the country, the government shall try to regulate the quantity of healthcare workers as well as their distribution across the country. Particularly, stricter regulatory frameworks for medical education and practice shall be enforced: encouraging preparation of scientifically sound number of medical cadre, and regulating the healthcare system with equitable and balanced distribution of health workforce, through licensing or other regulatory mechanisms.

Openness and the structure of international trade in CCA countries

Tamás Borkó

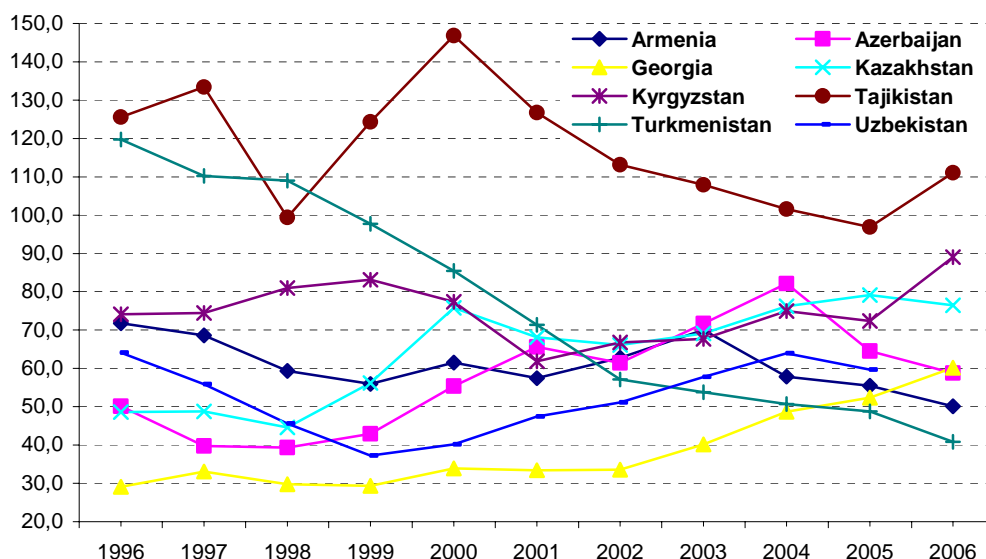
In the global world economy integration of countries, especially concerning financial markets and international trade is of great importance. The economic openness and the nature of international trade in terms of geographical and product division are important features of sustainable economic growth, and consequently of social development.

Openness

According to comparable data of *Chart 3*, total merchandise exports and imports³⁰ as a share of GDP varies across countries and shows interesting dynamics. It is clear that Central Asian economies are more opened than Caucasian ones, as in 2005 the average of Caucasus was 60%, while of Central Asia was 70%, even if this difference diminished in time (46% and 61% in 1996, respectively). By the given data in 2006, Tajikistan (110%) is the most opened economy, followed by Kyrgyzstan (90%), Kazakhstan (76%), Azerbaijan (60%) and Georgia (60%) forestall Armenia (50%) and the final Turkmenistan (40%).

More spectacular is the investigation of change in time. Out of eight countries, only Kazakhstan, Kyrgyzstan, Georgia, Azerbaijan were managed to increase its GDP related merchandise turnover in the course of 1996-2006. Uzbekistan reached its 1996 level, while Armenia, Tajikistan and extremely Turkmenistan experienced decrease of economic openness.

Chart 3. Merchandise exports and imports to GDP, 1996-2006 (%)



Source: IMF, UNCTAD, own calculations

³⁰ Concerning exports and imports of services no data available on Uzbekistan, and for several years for other CCA countries. International trade of services play insignificant role in total trade of these countries, especially in exports.

Diversification and concentration

If investigating the structural changes of international trade of these countries, one can understand more in abovementioned developments. Diversification³¹ and concentration³² of countries' merchandise trade shows qualitative dimension of external economic activity. (*Table 4*)

Table 4. Diversification and concentration of merchandise trade, 1996-2005

Country	Export concentration		Import concentration		Export diversification		Import diversification	
	1996	2005	1996	2005	1996	2005	1996	2005
Armenia	0.25	0.36	0.18	0.16	0.67	0.80	0.64	0.49
Azerbaijan	0.61	0.55	0.10	0.13	0.69	0.79	0.52	0.49
Georgia	0.17	0.20	0.26	0.13	0.66	0.75	0.68	0.47
Kazakhstan	0.23	0.61	0.07	0.08	0.74	0.80	0.49	0.40
Kyrgyzstan	0.18	0.33	0.16	0.20	0.68	0.70	0.56	0.53
Tajikistan	0.48	0.53*	0.18	0.16*	0.79	0.81*	0.63	0.51*
Turkmenistan	0.45	0.81*	0.11	0.15*	0.58	0.79*	0.55	0.56*
Uzbekistan	0.54	0.30*	0.08	0.10*	0.79	0.76*	0.46	0.43*
CCA average	0.23	0.55	0.06	0.07	0.69	0.76	0.44	0.40

**data for 2004, Source: UNCTAD*

Concentration measured by Herfindahl-Hirschmann index (HHI) in case of exports is very high in Turkmenistan, Azerbaijan, Kazakhstan and Tajikistan, while relatively low in others. In case of imports, there are no significant differences among countries. If having a look on dynamics, one can observe that in 1996-2005 only Uzbekistan managed to decrease its exports' concentration. Concerning imports', Georgia improved significantly, while others rather increased its concentration in the investigated period.

Comparing with the world average, all countries of CCA show very low diversification of exports, by 2005 data. As for imports, the picture is different, as the diversification is higher for all countries than that of the exports', while among countries one cannot see significant differences. If having a look on the dynamics, in case of exports, in 1996-2005, with exception of Uzbekistan, all countries experienced deteriorating diversification, while in case of imports, with exception of Turkmenistan, improving diversification.

Structure by regions and product groups

It is worth to dedicate some sentences to the structure of trade by regions of origin and destination, and by product groups. As for exports, the countries of CCA can be divided into two groups: mainly EU-25 oriented ones, like Armenia, Azerbaijan, Kazakhstan, Tajikistan and mainly CIS (Russia) oriented ones, like Georgia, Kyrgyzstan, Turkmenistan, Uzbekistan. 30-40% of total exports of all countries go into non-CIS and non-EU countries.

31 Diversification index that ranges from 0 to 1, reveals the extremal of the difference between the structure of trade of the country and the world average. The index value closer to 1 indicates a bigger difference from the world average.

32 The Herfindahl-Hirschmann index is a measure of the degree of market concentration. It has been normalized to obtain values ranking from 0 to 1 (maximum concentration)

In case of imports, one can see quite balanced picture, as CIS, EU-25 and other regions by all states represent balanced shares. However it is important to mention, that Central Asian countries depend less on EU-25 imports, then Caucasian counterparts.

Table 5. Structure of merchandise trade by regions of destination and origin, 1996-2005

<i>Regions</i>	Exports		Imports	
	1996	2005	1996	2005
EU 25	18.5	30.8	18.4	20.6
CIS	47.2	33.0	45.9	41.0
Other	34.3	36.1	35.7	38.4
Total	100.0	100.0	100.0	100.0

Source: UNCTAD, own calculations

Dynamically, the share of EU-25 in exports of these countries in 1996-2005 in most cases (with exception of Uzbekistan and Kyrgyzstan) increased. The share of CIS in the same period in most cases (with exception of Turkmenistan and Uzbekistan) decreased. The role of other regions rather stagnated.

The share of imports from EU-25 increased in three Caucasian countries and in Kazakhstan, while in remaining four Central Asian ones decreased. The share of CIS in imports rather decreased significantly in Kazakhstan and Kyrgyzstan, rather stagnated in Armenia, Azerbaijan and Uzbekistan and increased significantly in Tajikistan and Turkmenistan. The role of other regions increased notably only in Kazakhstan and Kyrgyzstan.

Investigating the product group structure of trade, both exports and imports show significant points. (Table 6) The picture varies again country by country. In 2005, most of CCA countries rely heavily (above 50% of total exports) on primary commodities – including fuels, with exception of Armenia and Kyrgyzstan. Tajikistan and Turkmenistan is almost completely primary commodity dependent in its exports.

Table 6. Structure of merchandise trade by main product groups, 1996-2005

<i>Countries</i>	<i>Product group</i>	Export		Import	
		1996	2005	1996	2005
Armenia	Primary commodities	43.4	25.8	60.5	36.5
	Manufactured goods	55.6	70.3	39.3	59.0
Azerbaijan	Primary commodities	80.3	88.9	46.9	25.6
	Manufactured goods	19.7	11.0	53.1	74.2
Georgia	Primary commodities	59.4	57.3	75.5	38.3
	Manufactured goods	40.6	38.7	24.5	61.7
Kazakhstan	Primary commodities	67.7	87.3	35.8	21.7
	Manufactured goods	32.3	12.0	64.2	78.3
Kyrgyzstan	Primary commodities	61.2	35.0	52.2	47.8
	Manufactured goods	38.5	27.5	47.7	52.1
Tajikistan	Primary commodities	83.1	85.3	64.5	48.2
	Manufactured goods	16.9	14.2	35.5	51.8
Turkmenistan	Primary commodities	91.6	94.0	29.3	7.7
	Manufactured goods	8.4	6.0	70.7	92.3
Uzbekistan	Primary commodities	77.8	66.5	25.4	9.3
	Manufactured goods	17.5	28.4	74.6	90.7

Note: remaining % of total exports and imports are other products, Source: UNCTAD, own calculations

Concerning imports, in most countries of CCA primary products play less important role, while manufacturing goods represent dominant share. Of course, countries with rich natural resource endowment rely less on primary commodity imports.

Time series of 1996-2005 show that, especially in natural resource abundant countries the share of primary exports increased in Azerbaijan, Kazakhstan, Tajikistan and Turkmenistan, decreased but remained high in Georgia and Uzbekistan, while decreased significantly in Armenia and Kyrgyzstan. Trade off in share of primary exports and manufacturing goods could be observed. Nevertheless imports, reliance on primary products decreased considerably, while the role of foreign-born manufacturing goods increased heavily.

Concluding remarks

It is important to see that the economic openness of the CCA countries is insufficient, if compared for instance with emerging countries of the Balkan, or with the new EU-member countries. CCA countries show low export diversification and relative to exports' high import diversification. In the last decade, diversification of exports decreased and that of the imports increased. CCA countries experience different export and relatively similar import concentration. However, in last ten years, export concentration in most of the cases worsened significantly, while import concentration rather remained unchanged. The role of EU-25 both in exports and in imports increased, as well like of other regions, while the share of CIS (and likely of CCA) decreased. From the point of view of product groups, countries of CCA experience with some exceptions reliance on primary commodity exports and on manufacturing goods imports.

Several implications follow from data analysis. First of all, the openness of these economies is insufficient, especially in the light of the size of these economies, as all of them are small ones. The openness should be increased, with economically and socially reasonable pace and sequencing. Initial but not insignificant measures can be the WTO accession of all countries and the enhancing of intraregional trade relations (let it be either in CIS or in CCA). Trade relations with the European Union, as important export destination and import origin should be improved either on bilateral or multilateral base. Trade with China, also has to be of core importance.

Second, the diversification of exports has to be an important objective. These might be achieved through more opened markets for imports and foreign direct investments, that can prove technology and knowledge transfer. This attractiveness however depends on the level of democracy, the protection of property rights, deregulation and privatization efforts, on the quality, skills and health of labor force and infrastructural availability. Thus, especially in countries with extra export revenues, significant financial resources should be invested in education, infrastructure, while institutional framework also has to be adjusted particularly on legal basis.

As empirical validation, *Auty (2001)*³³ concludes by international literature review that those countries were successful in terms of sustainable economic development, which proved to be able to decrease dependence of exports on primary commodities. *Isham et al (2003)*³⁴ did show that the vulnerability of the economy increases in the following order from less to more fragile: manufacturing dominated exports, mixed export

33 Auty, Richard M. (2001): Conclusions: Resource Abundance, Growth Collapses, and Policy in Auty, Richard M. ed. (2001): Resource Abundance and Economic Development, Oxford University Press, Oxford, 315-328.

34 Isham, J., Woolcock, M., Pritchett, L., Busby, G. (2003): The Varieties of Resource Experience: How Natural Resource Export Structures Affect the Political Economy of Economic Growth, Middlebury College Economics Discussion Paper No. 03-08

structure, raw material dominated exports and agricultural products dominated exports. Export concentration by *Lederman and Maloney (2003)*³⁵ – negatively correlates with growth on the long run.

Isham et al (2003) states additionally that the export structure not only affects the economic performance, but also has influence on the development of social-political institutions, that finally reacts on the economic performance again. So the task is difficult but, not impossible. Several positive samples are available – Malaysia, Botswana – with empirical evidence on increasing social welfare measured by all kinds of human development indices.

35 Lederman, Daniel – Maloney, William F. (2003): Trade Structure and Growth, World Bank Policy Research Working Paper 3025

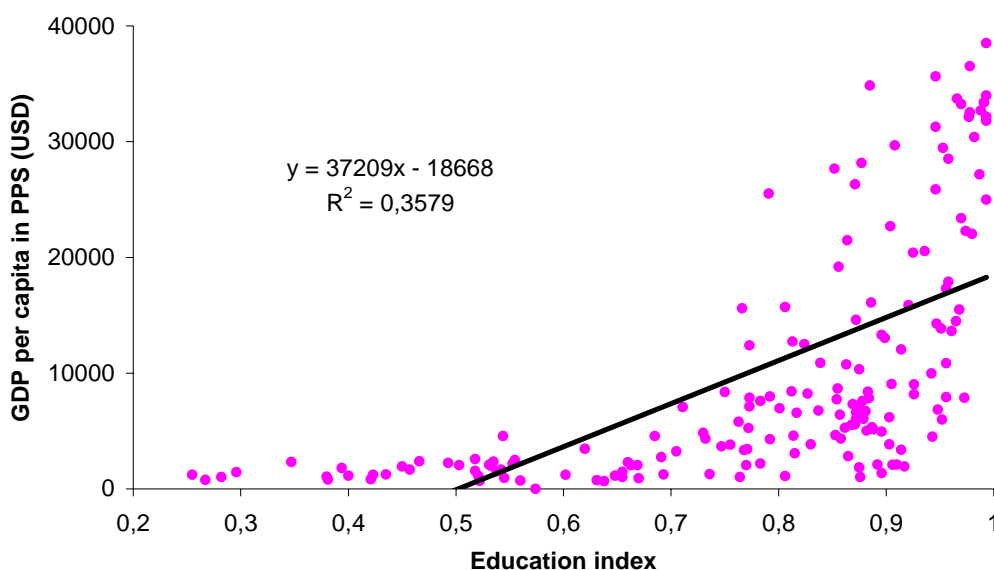
Challenges and changes concerning education financing in Azerbaijan

Namig Tagiyev and Shovgi Guliyev

While the government of Azerbaijan tries to preserve positive elements of the former education system, it has also implemented reforms that fulfill the requirements of the global economy and the interests of the state. Thus, according to the Constitution of Azerbaijan, which was adopted in 1995, government provides compulsory and free education for the citizens. A new law concerning education will be adopted in 2008 that will lead to significant reforms in secondary education. Thus, education will be subject to reforms compiled on the basis of international experience and secondary education institutions will be financed according to the number of students. In addition, many grave discussions are still in process regarding of the new law.

Education has an important role as it contributes not only to the development of the human capital, but also to the enhanced participation of the population in economic, political and public activities. Education is the main distributor of human potential. On international scale, one of the major reasons for high human development index is the high education index. Of course, the relation of these two indicators operates vice versa, as the level of GDP, the income level of the population determines the expenditures on all types of education both from budgetary and from private resources.

Chart 4. Relation of HDI education index and GDP per capita, 2005



Source: UNDP, own calculation

Chart 3 shows the relation between the development of education and the economy. One can observe positive and relatively strong linkage, as the higher the country's GDP per capita, the better the education system and its outcomes. However the investigation of the correlation would require the usage of more sophisticated methods.

In Azerbaijan, similarly to other countries with low level of education and a relatively low income, the lack of skills are in trade-off with the opportunities of the poor population to get out of the poverty trap. For children living in low-income families occurs an option between either being educated or supplied by necessities of life, like for instance nutrition or health services. Low-income cells of society can hardly cover costs arising from food and accommodation. Therefore they are not able to pay for education.

One of the major problems indicating that opportunities for being educated are limited in Azerbaijan is that with an increase in the level of education, the coefficient of enrolment decreases. The reason behind the phenomenon is that the financial constraints of the low-income families influence negatively the opportunities of children to get basic or general secondary education. Generally, these children evade attending educational facilities as a result of limited opportunities for obtaining appropriate clothing or school accessories and in many cases they are forced to work in order to support family budget.

Secondary education in Azerbaijan is financed by the government. This also applies to distribution of books and other educational tools among population, and the infrastructure as well. Thus, with increase in growth in secondary education investment, the number and quality of educational tools increases and improves, as well as conditions of students. Analysis indicates that 10% growth in GDP, leads to 7.8% growth in budgetary expenditures on secondary education. In recent years, the economic performance of the country has significantly improved due to the rising world market prices of natural resources. As a result, the budgetary resources separated for educational expenditures considerably swelled.

Table 7. Education indicators in Azerbaijan, 2002-2006

Year	2002	2003	2004	2005	2006
State budget expenditures from state budget (AZN million)	191.2	234.8	294.1	372.5	479.1
Number of secondary schools	4533	4542	4533	4538	4516
Number of students (thousands)	1688	1676	1627	1579	1529
Number of teachers (thousands)	169	171	173	174	177
Average monthly wage in education sector (AZN)	33.8	42.3	50.9	66	84.4

Source: State Statistics Committee of Republic of Azerbaijan

As seen from *Table 7*, parallel with the increase of the budget expenditures on education, the number of schools and students has decreased, whereas last can be explained by lower population growth rates. On the contrary a significant rise in the average monthly wages in the education sector and a slight increase in the number of teachers can be perceived.

Increase in financing of secondary schools also influences the quantity of subjects educated. By these means, it would be reasonable for the state a growing interest for financing development of computer skills from ministry of education. In fact, in 2003 only 26% of secondary schools have possessed computer laboratories and e-labs necessary for developing e-skills among students. This number has increased to 66% in 2006 in the framework of state program of ministry of education.

Another challenge that the education system faces is the discrepancy of libraries and book supply meeting international standards. Shortage of technical base and equipment, low quality of the stock of libraries and the book supply have led to the practice of collecting extra charges from students, which renders more difficulties for poor families to school their children.

It is worth to mention the regional dimension of education. There are differences across regions and educational services in the utilization of teaching materials, in the deterioration of material and technical basis of schools and in the degree of declension in the skills of teachers, some differentiation among educational services has started. According to the data of State Statistic Committee of the Republic of Azerbaijan, in the last two years a slight decrease in the educational skills of teachers can be observed.

Table 8. Education level of population, 2004-2007 (thousand)

Education level	2004	2005	2006	2007*
Population in the age 15 years and older, having (complete or incomplete) higher and secondary education	911	912	912	913
Of which				
Higher	112	113	115	115
Incomplete higher	9	9	9	9
Middle skilled	121	119	118	118
General secondary	520	522	522	523
Incomplete secondary	149	149	148	148

**not final data, Source: State Statistics Committee of Republic of Azerbaijan*

Currently, the financing conditions of the secondary education are changing as reforms had been introduced recently. Notably, financing of education is executed in accordance with the development level of each state. Financial aid is provided to the schools on the basis of the number of enrolled students.

Schools are subsidized through regional educational departments. It is notable that, these departments make decisions on distribution of expenditures according to the number of students, the provision of transparency and the appropriateness of the subsidy's determination is also taken into consideration.

Concluding remarks

In the coming years a quota-per-student system will be introduced. Thus, not only the number of the students will be taken into consideration, but the location of the school and the saturation within the facility will be also examined in each case. Currently there are large differences among budgets of schools with similar number of students (e.g. resources of schools in Baku are significantly higher).

In the new system these differences are expected to be eliminated. In addition, schools will be granted with the opportunity of rationally allocating expenditures in line with their requirements. Current system does not allow noted approach. Undoubtedly, the government dedicates significant attention to the improvement of education system. One example of it is the opportunity for domestic youth to be sent with grants to foreign universities.

Labor markets and mostly required occupations are yet to be investigated, whereas result will serve as basis for structuring of education. With increase in educational expenditures, particularly with increase teachers' salaries, non-official payments will be liquidated, that will positively influence low income families. From another point of view, increase in budgetary expenditures will generate in multiplicative effect that can be positively evaluated in general.