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# Central Asian Journal

## of Management, Economics and Social Research

### ABOUT THE JOURNAL

The Central Asian Journal of Management, Economics and Social Research is an annual professionally refereed academic journal. Authors from around the world regularly contribute to the Journal. The Journal is published by the Center for Research and Development of Kazakhstan Institute for Management, Economics and Strategic Research (KIMEP), Almaty, Kazakhstan. The Center was established in 1998 as a think tank with the mission of stimulating research within the faculty and student body as way to enrich teaching and services at the institute. The Center strives to identify and examine critical issues affecting Kazakhstan and its neighbors, seeking to foster and enable collaboration between KIMEP and universities and organizations around the world. The goal of such collaboration is to advance understanding of complex problems and, by reaching beyond KIMEP's walls, to contribute to the solutions of these problems and enhancing of the social and economic environment of the Central Asian region.

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The Journal aspires to become the foremost international forum in Central Asia for academics and policy makers by encouraging and publishing original research relevant to Central Asia in the areas of management, economics and other social sciences. It is directed towards national and international readership among economists, social scientists, administrators and managers in Universities, research institutions, government, and business.

The articles of the Volume 5, Issue 1-2 are drawn from work submitted by researchers and scholars from Central Asian universities and institutions, as well as from all other parts of the world. Before being accepted for publication, all articles went through the double blind peer - review.

Along with works of researchers and scholars from the region, this issue has a special student section as an output of the KIMEP Fourth Regional Student Research Conference "Economics and Politics in Transition: Central Asia and Beyond". It includes eleven best papers presented at the Conference.

Views expressed by individual authors in various articles reflect their opinions and should not be ascribed to the Journal or to KIMEP. Comments or brief notes responding to the articles of the Journal are welcome and will be considered to the extent that space permits.

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Volume №5, November 2006

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All articles in the Journal are provided with the abstracts in Russian.

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Порядок цитирования авторов в статьях следует правилам «Чикагского руководства по соблюдению стиля», 15-ое издание (Чикаго, США, 2003 г.)

Все статьи в журнале содержат русский перевод тезисов.

## DIVERSITY – THE KAZAKHSTAN CASE STUDY

PATRICK LOW KIM CHENG\* AND ALMA ALPEISSOVA\*\*

The key focus of the paper is to examine the impact of diversity in business in Kazakhstan. Using focus groups, this research seeks to examine the value of diversity and its effects in Kazakhstan; its purpose is to analyze the possible opportunities, benefits and, if any, negatives or downsides for companies that diversity can bring.

### КУЛЬТУРНАЯ И ЭТНИЧЕСКАЯ РАЗНОРОДНОСТЬ: СИТУАЦИЯ В КАЗАХСТАНЕ

ПАТРИК ЛОУ КИМ ЧЕНГ И АЛМА АЛЬПЕИСОВА

Данная работа ставит основной целью проанализировать влияние этнической и культурной разнородности казахстанского общества на казахстанский бизнес. Используя фокус-группы, данное исследование дает оценку разнородности и ее влиянию в Казахстане; наряду с возможными перспективами и выгодами, работа также дает подробный анализ возможного негативного отражения подобной разнородности в работе казахстанских компаний.

### INTRODUCTION

Throughout history, religious heterogeneity is said to have existed in Kazakhstan in great part due to the Great Silk Road: “together with Buddhism, Nestorian, Christianity, Zoroastrianism and Manicheism was diffused, and in the seventh to tenth centuries, Christian churches were opened in many towns of Southern Kazakhstan and Semireche.” (George 2001, 4). Additionally, the Kazakhstani society is naturally diverse; there are about 132 nationalities (ibid., 3). Kazakhstan’s 14.951 million people (Groman 2002) come from many different cultures. 50 percent of them are Kazakhs, 40 percent Russians, Ukrainians and other Slavs while the remaining 10% consist of perhaps 100 others including the Germans, the Uighurs and the Koreans. Besides, there are four groups of Cossacks in Kazakhstan – the Semirek, Uralsk, Orenburg and Siberian (George, 2001, 134-135).

Roy (2000, 135), in fact, observed that the “Kazakh society is more complex and less monolithic than that in other countries of Transoxiana. Its ethnic diversity, the size of the country, the scale of Russification, the existence of a private sector and a high degree of urbanization make it harder to achieve political and policing control than in Turkmenistan. (Moreover,) this diversity is reflected in the (political and) cultural domain...” Diversity in Kazakhstan in the Soviet period (Alash Orda), may be a misleading term as the country “has undergone the highest degree of Russification” (Roy 2000, 191) with the Soviet

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Union then having the goal of assimilating Turkic and some other ethnic groups. For the most part, pre-independence cultural life in Kazakhstan was indistinguishable from that elsewhere in the Soviet Union. Many Kazakh practices that lost their original meanings are assuming value as symbols of post-Soviet national identity (Curtis 1996).

In such a milieu, a need arises for greater awareness of managing diversity effectively. Managing diversity can be defined as "having an acute awareness of characteristics common to a culture, race, gender, age, or sexual preferences, while at the same time managing employees with these characteristics as individuals" (Mondy and Noe 1996, 39). To this definition, these researchers would also add that of working together and reaping the benefits of working or synergizing as a team.

## THE OBJECTIVE OF THE STUDY

This paper reports the findings of the focus groups on diversity in the workforce for companies in Kazakhstan as well as analysing the possible opportunities, benefits and, if any, negatives for both for corporations and the country that diversity can bring.

## LITERATURE REVIEW

In Low's study (2002), he distinguishes multiculturalism from diversity. He argues that the value of diversity is more than the value of multiculturalism. The languages and cultures of the existing members of the society create multiculturalism. But diversity has extra dimensions, chiefly that of the varying ages, gender, physical abilities and skills – and in particular, the presence of foreign talents, giving the organization or nation a plural or cosmopolitan outlook and mentality.

Diversity can be described as an inclusive behavior, that is, diversity fosters treating members of minorities in the same ways as the more dominant group in the society is treated. Diversity "respects and accommodates differences" (Stone 2002, 699). Here, multiple perspectives are encouraged and the society taps into the talents and contributions of all involved (Kogod 1998).

Indeed, diversity in the workplace reflects diversity in the larger environment and a Kazakhstani manager is someone who endeavors to work effectively in a diverse cultural environment. The challenge of cultural diversity to corporate leadership is the ability to empathize, cooperate and work together with other cultures from the big picture view of overall smooth operations, high productivity and great satisfaction. Success or failure depends very much on the degree to which people who have different needs and ways of doing things work together.

Over the years, even during the Soviet times, there has, in fact, been greater participation of women in the workforce in the Republic of Kazakhstan, and this clearly contributes to the value and practice of diversity here. Whether they are "a desire for mental stimulation, communication, personal development and a

sense of independence" (Kay 1997, 91-92), these are the commonly expressed as to why women wish to carry on working, irrespective of their family circumstances.

## METHODOLOGY

The research was conducted by the researchers using a focus group methodology to systematically question individuals simultaneously, in a formal and informal settings and in which the researchers acted as moderators.

"Focus groups are normally associated with a phenomenological methodology. They are used to gather data relating to the feelings and opinions of a group of people who are involved in a common situation", (Hussey and Hussey 1997, 155). An acceptable group size may be between 8 to 12 participants, a group size of fewer than 6 participants may not have group dynamics to work well and more than 12 may have difficulty in group control (Burns and Bush 2000, 241). In this research, a total of two focus groups were held. The first group consisted of 9 persons from the business world including two business owners, while the second focus group consisted of 8 persons, also from the business and corporate world including a Human Resource Manager. Business and corporate people were selected because the research is interested in the value and impact of diversity on companies and corporate world; they were picked from people whom the researchers know or referrals from the researchers' contacts. The researchers also ensured that there was a good mix of people within the focus groups – males, females, and people of varying ages and from various business sectors. The focus groups officially started on 28 April 2004 and ended on 21 May 2004.

The two researchers prepared a list of questions for the focus groups (see Figure 1). This list of questions was also pilot-tested to ensure clarity of the questions asked, and that the focus group members understood the questions. Though the focus groups were held in English, a Russian version of the questions was prepared and put on standby in case there was any need for the Russian equivalent; the researchers can then dish out the required Russian question(s).

FIGURE 1. LIST OF QUESTIONS

*List of key questions asked during the focus group sessions:*  
*Opening question (served as an initial ice-breaker to establish a common ground or similarity of experiences for the focus group members):*

Let's introduce ourselves; get to know each other. Do please make ourselves comfortable with each other.

What is your opinion on diversity and Kazakhstan?

Is the value of diversity practiced in Kazakhstan? If so, why? If not, why not?

What do you think about the position of women in Kazakhstani companies?

What are your views on the fact that women help to "boost the labor force" as well as giving "women the possibility of achieving financial independence through waged work" (Akiner 1997, 275)?

What are your views about expatriates in Kazakhstani companies or foreigners in Kazakhstan?

What are your views on the fact that Kazakhstan has been "a melting pot" (George 2001, 125), having "religious heterogeneity" (ibid., 4) and "tolerant of the religious beliefs of its citizens and visitors" (Almaty International Women's Club 1999, 93)?

In your opinion, what benefits diversity brings?

What do you see, if any, the negatives or downside diversity brings?

*Closing question:* What are other final comments you wish to offer on diversity?

## FINDINGS

In these findings, as suggested by Krueger (1994), instead of just referring to numbers and frequency of comments, the researchers also considered the use of qualifiers such as: "the prevalent feeling was that", "a few participants strongly felt" or even "most participants agreed".

All focus groups – consisting of 8 males (4 Kazaks, 1 Russians, 3 Koreans) and 9 females (3 Kazaks, 4 Russians, 1 Tartars, 1 Uighurs) – highlighted that there was a glass ceiling that separated women from top management positions. In part, the groups strongly felt that this was, in part, attributed to the Islamic influence and the fact that Kazakhstani society was a masculine society. However, increasingly, "more women are contributing to household incomes and the economy as a whole."

The majority, 82.3 per cent of the focus groups however indicated that, "it is difficult for women or the ethnic minorities to get promotions to top positions in the civil service" while 58.8 per cent of the focus groups spoke of "a problem for women to do business as most businessmen discuss business issues in sauna or bath-houses"; women were in fact kept out of such business opportunity discussions. Given the fact that 50 per cent of Kazakhstan's population consists of women (the ratio of women to men: 52: 48) (Agency of Statistics of the Republic of Kazakhstan 2003), this lack of equity or equal opportunity for women only shows that Kazakhstan is under-utilizing its workforce, business and leadership potential which may not be advantageous to the country's economy; more so when one considers that the Republic, having a land area of 2.7 million square kilometers, is indeed sparsely populated (Agency of Statistics of the Republic of Kazakhstan 2003). Nonetheless, both focus groups reported that diversity was much valued in Kazakhstan. They highlighted that "the Kazakhstani peoples are open to outsiders", "look at our history, we have been open" and one group specifically highlighted that so long as "these foreigners are competent, Kazakhstani companies is willing to take them in and our companies will benefit". However, the focus groups reported that the acceptance of the foreigners depended on "the locals' level of education and the cities they lived" – in some cities such as Almaty and Astana, the people are more open and in fact,

are accustomed to foreigners such as Americans and other nationalities. The higher the education, the more the locals are open to foreigners, not thinking that the foreigners are taking their jobs or "robbing them of their livelihood". The majority of the focus groups members, 88.2 per cent, agreed on the reports of beatings of foreigners in the country's less urban areas. Here, it can be thus interpreted that diversity or differences between rural and urban populations exist and in the rural areas, often there appears to be less acceptance of foreigners.

The majority, or about 94.1 per cent of the first focus group members and 82.3 per cent of the second group members, agreed that within the Kazakhstani corporate, the young and the old could work together. As more foreigners work within the Republic, experience sharing can take place; besides, the young can also learn from the old. Here, like in the most Asian cultures, the culture in Kazakhstan can be said to place more reverence on age and experience than is generally found in the West.

## ANALYSIS & DISCUSSIONS

Since Kazakhstan has been located on the crossroad of two ancient cultures, its people have always met guests arriving from both Europe and Asia (Low and Ahsan 2004). Kazakhstani people are "open to foreigners" (focus groups' input). Since 15 February 2004, Kazakhstan has simplified visa issue procedure for citizens of some economically advanced states and these include Australia, Denmark, Japan, Malaysia, Singapore, Switzerland and several other countries and this will result in "improvement of the Republic's investment and tourism attractiveness" (Sadatov 2004, 1).

This "openness to foreigners" is, in part, due to its history and in part due to its geography: its vast land. Riding on a camel or traveling over a large extent of land has made its people feel that "there's enough" for everyone, hence "foreigners are welcome" (focus groups' input). These were cited about seven (7) times. Other reasons include the "people's collectivistic nature, a fallout of the Soviet era" and Kazakhstani's "open to learning", "want(ing) to learn new experiences" (focus groups' input), all these contributed to the Kazakhstani people's accommodating to the foreigners.

Nonetheless, there may be some resistance to the presence of foreigners. Forty-seven (47) per cent of the focus group members viewed that "most multi-national corporations (MNCs) in Kazakhstan are reluctant or at least not willing to invest in the staff's promotions and professional development"; instead, "they import their own kind". In other words, the MNCs, though may have their own reasons in importing foreign professionals, appear to be ethnocentric in their human resources practices (Daft 2000; Dowling et al. 1994). These, the focus groups (a 88.2 per cent majority) felt, can be taken as not tapping the locals' talents and the locals can get demoralized. It may, in a way, cause a gap, if not some differences between the locals and foreigners that may, in turn, be harmful to organizations. Organizations in Kazakhstan should adopt what Speechley and Wheatley (2001) have proposed, that is human resource systems need to be

redesigned to monitor where unintentional discrimination affecting particular groups can be most easily detected; these include areas such as:

- the ratios and numbers of staff from different groups who are selected for promotion, training and/ or allocation to projects and special teams;
- performance appraisals;
- composition of labor turnover.

Besides, to prevent gender discrimination, it is vital that the above be applied to staff of different gender too. Such adapted human resource systems can thus help managers better manage their people, organizations – through improving equal opportunities – and change across cultures.

Companies and even nations recognize that everyone is not the same and the differences people bring to the workplace or the country are valuable (Bhasin and Low 2002, 113). Rather than expecting all employees to adopt similar values and attitudes, companies are learning that these differences enable them to compete globally and to acquire rich sources of new talent (Daft 2000, 428). Here, this is, in a way, reflected in the two focus groups' comments, that is, "foreigners will open up Kazakhstan" and that "the Republic of Kazakhstan will be plugged into the global economy", connecting it to other countries' markets as well as learning from them.

This can be viewed as akin to the President's call "for Kazakhstan to emulate the South Korean model of development" (George 2001, 152); the Koreans in the country have, in fact, established their own diaspora; and "since 1991, the Koreans have become one of the successful nationalities in part because of their ties to the South Korea, a country with considerable business interests in Kazakhstan" (ibid., 155).

According to Larson (2002), the US Under Secretary for Economic, Business, and Agricultural Affairs, diversity can generate a "win-win" thinking that produces prosperity for both international investors and the people of Kazakhstan. One case in point is that in 2000 Kazakhstan brought in investments equal to 1.5 billion dollars from Turkey and now, 600 Kazakh-Turkish joint ventures are operating in Kazakhstan. A total of 2200 young Kazakhs are studying in Turkey while a total of 700 young Turks are studying in Kazakhstan (Kazakhstan Daily Digest 2000). Indeed, the 2003 figures show that investments of Turkish businessmen in the Republic have been increasing (Turkish Press Review 1998). And Turkish-link *Ramstor* – with a hypermarket and a supermarket in Almaty and a hypermarket in Astana – has in fact contributed to the country's growing retail market (Sadatov 2004, 4). Other retail stores are also coming and these include Russia's largest retailer, *Pyatyorochka* and other retailers (ibid.).

Diversity also means having various types of businesses including small businesses. When introducing diversity into Kazakhstan's economy, the Republic can also be building a modern, market-based economy by emphasizing the development of small and medium enterprises. Take Vietnam, for example, small businesses have boomed and Vietnam has become one of the fastest-growing countries in Asia (The Economist 2004, 27).

Interest in the Kazakhstani oilfields is also growing, with many oil producing companies and countries want to be in action in the Republic as a matter of their prestige, after all the country has been approved as part of the world's oil reserves (Yuritsyn 2004, 8; Sidorenko 2004, 5). Oil giants from Italy, the United Kingdom, the United States and Russia, for example, are presently developing the Karachaganak field, one of the largest oilfields in Kazakhstan (Yuritsyn 2004, 8). By its explored oil reserves, the country is amongst the second top ten countries in the world yet it is not in an Organization of Petroleum Exporting Countries (OPEC) (ibid.). Germany, though not one of the largest oil countries, holds part of KazGerMunai while Turkey holds a joint venture called the KazakhTurkMunai (ibid.).

All these only serve to show that Kazakhstani people can in fact tap their ethnic diasporas. What is true for Singapore with the various ethnic Singaporeans (the Malays, the Chinese and the Indians) – through their respective trade chambers – tapping the rich ethnic connections globally for mutual benefits (Low, 2002) can also be applied to Kazakhstan. In other words, the diversity and the presence of the various ethnic groups can be a boon: just like the Koreans who develop good ties with the South Koreans; ethnic Germans can also connect well with the Germans in Germany. *Gros*, the German supermarket chain-owner, has 11 outlets in Almaty and "the number will be trebled by the end of the year" (Sadatov 2004, 4). "Kazakhstan Inc.", a network of Kazakhstan's major ethnic trade associations and chambers such as the European Business Association of Kazakhstan (Eurobak) and the United States Chamber of Commerce may thrive on collaborative efforts to boost the Republic's economic growth; diversity and networking then can be seen in the big picture and work to the Republic's advantage.

The nation's education too benefits from diversity. One of Kazakhstan's tertiary institutes, KIMEP, the premier English language University, located in Almaty, has one of its formal statements that reads as "Feeling and understanding the difference; the difference is indeed obvious". Here, the difference can be interpreted as diversity. KIMEP values its diverse student population – "irrespective of race, gender, ethnic origin or financial means" (KIMEP 2003, 223) – with its student exchange programs as well as its diverse (local and foreign) lecturers' pool that makes it stand out as being different not only in Kazakhstan but also in the CIS (Commonwealth of Independent States) region.

It is claimed that schools that are racially segregated, having little contact with ethnic minorities, can encourage insular, if not narrow, thinking and are not helpful in building a diverse society (The Straits Times 2004, 6). Most educators see diverse student body as an important educational resource that enhances the environment for learning (Diversity Digest 1997). Extending to Kazakhstan what the Malaysian Prime Minister Abdullah Badawi has said of its foreign students' population in that nation (The Straits Times 2004, 6), the researchers would also argue that foreign students had the opportunity to understand the way of life of the local community better. Besides, from an economic standpoint, the presence of foreign students and lecturers in KIMEP

or Kazakhstan is good because of their numbers and besides, visits by their family members can also be regarded as 'education tourism'.

Moreover, one key benefit from valuing diversity in human resource management terms is the chance to grow employee and organizational potential. This means higher morale; after all, people feel valued for what they bring to the organization. It also "produces better relationships at work, because people acquire the skills to recognize, understand and accept cultural differences" (Daft 2000, 450). Growing human capital – developing employee skills and valuing diversity – has become a bottom-line business issue (Stone 2002; Bhasin and Low 2002; Daft 2000). Other than these benefits, as one Singapore example shows, having a "cosmopolitan melting pot...(helps,) the foreign professionals are needed to meet shortfalls in local manpower and to jumpstart new economic initiatives" (Chia 2004).

Additionally, diverse or heterogeneous teams produce a broader and deeper base of experience for problem solving, creativity and innovation. "Heterogeneous teams produce more innovative solutions than homogeneous teams" (Daft 2000, 451). Moreover, the "multicultural mosaic" (George 2001) or people with diverse backgrounds can bring different perspectives to problem solving. Diversity can also contribute to the learning organization, in which teams of across functional boundaries are engaged regularly in identifying and solving problems.

However, the presence of diversity in Kazakhstan, certain issues (such as

and being encouraged by the elders in Muslim families. Added to this, the value of diversity would directly affect the country's food and dishes – Kim chi (Korean pickled cabbage), Uzbeks' mantee, Uighurs' lakman, Turks' bastirma, Turkish delights and a host of many others; the focus groups spoke of "mutual enrichment". They also reported that "Korean salad is also liked" and that Kazakhstani food is indeed enriched because "we take the best from all". There has been strong cultural revival such as the Nauryz (the Kazakhs' New Year) celebrations. "People within Kazakhstan are glad to celebrate the various ethnic groups' holidays and New Year days" (focus groups' input; these were cited about six (6) times), and indeed, these views match with Almaty International Women's Club (1999) views. The Kazakhstan Monitor also reported that "cultural variety in its many forms", particularly in Almaty, the Southern capital of Kazakhstan, permits it to respond to numerous types of holiday, including 'Maslenitsa', a merry Slavic holiday (on 20 February), dating back to pre-Christian times (Sobolev 2004). Similarly, people from other countries can also be attracted to the taste of the Republic's cuisines and the various ethnic festivities; and that, in a way, would indirectly contribute to the country's tourism.

## LIMITATIONS

Certain limitations must be noted when assessing the validity of the study.



capitalized, Kazakhstan can certainly continue to go forward and even get a good chance to be the Eurasian leader.

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# THE MIND AND HEART OF THE KAZAKHSTANI NEGOTIATOR

PATRICK LOW KIM CHENG\*

*This paper discusses the negotiation techniques and ways in the Republic of Kazakhstan. A qualitative study is made, through the use of focus groups, with the aim of identifying, examining and understanding the common techniques, ways and methods of business negotiations as practiced in Kazakhstan.*

## МЫСЛИ И ЧУВСТВА КАЗАХСТАНСКОГО ПОСРЕДНИКА

ПАТРИК ЛОУ КИМ ЧЕНГ

В статье обсуждается техника и пути переговоров в наиболее в Республике Казахстан. Через использование фокус-групп был проведен качественный анализ, с целью определения, исследования и понимания общих техник, путей и методов деловых переговоров в Казахстане.

## INTRODUCTION

People negotiate in their personal and business lives. Negotiation is a core management competency and such skills are increasingly important for leaders, and managers in the business world. "Negotiating effectively starts with communicating effectively" (Dessler 2001, 367). Indeed, negotiation skills have become increasingly important, because, among other things, there are increased competition, and interdependence of people within organizations as well as globalization (Thompson 2005, 3-5).

Since business is increasingly global and competitive, managers need to present their ideas or services influentially, and they also need to effectively cross cultural boundaries to do their jobs. Managers too, in this information age, are expected to negotiate at a moment's notice and being advocates for their products and services, they need to win customers and buyers locally and the world at large to their ideas, products and services; they should navigate well in such a setting to be successful when negotiating.

Kazakhstan is Central Asia's largest economy and the richest country with a growth rate approaching 10 percent in recent years (Garekar 2004). The rise in interest in the study of negotiations in Kazakhstan coincides with the country's rapid growth, opening up and market-oriented economy. As at 2002, Moody's increased the Republic's credit rating moving it up, from Baa3 to Aa2 (Salikhova 2002, 4). There are Multinational Companies' (MNCs) high interest in oil, natural resources, trade and business in the Republic (Yuritsyn 2004, 8; Sadatov 2004, 4; Yuritsyn 2004a, 5; Sidorenko 2004, 5). Foreigners and locals alike need to know what negotiations techniques are normally used, and how or in what

ways negotiations are done; they can negotiate better when working, selling or partnering with each other. However, so far, no studies have been done to look at negotiations in business in Kazakhstan.

The paper's objective is to analyze and understand the common techniques, ways and methods of negotiations in business in the Republic of Kazakhstan. The next Section "Literature Review" sets out the literature review while Section "Research Methodology" discusses the research methodology employed. Section "Findings" then presents the study's findings; Section "Analysis and Discussion" next examines the common techniques, ways and methods of business negotiations as practiced in Kazakhstan. Before concluding the study in Section "Conclusion", the research limitations and ways of overcoming them are also discussed (in Section "Limitations").

## LITERATURE REVIEW

When negotiating, foreigners need to show and prove that they are in Kazakhstan for a long-term presence. Indeed, one needs to be culturally empathetic, illustrate and prove that one is here for the locals' best interests, not one's Company or one's interest (Wright 2004, 4); and simply work to establish a locally-defined relationship. Simply, be their friend!

The best negotiators and sales people are said to first establish a mood of trust and rapport with their other parties (OPs) or customers. In other words, they are verbally or move physically (body language) in sync with their OPs. They also reflect or mirror their OPs' body language (Lewicki and Litterer, 1985) so that they can negotiate more effectively, with the OPs feeling comfortable.

When negotiating, both parties should share common goals or face common problem(s) so that they can work together. There is a joint purpose (Low 2001). People also form both personal and business relationships to others who are literally physically close to them (Thompson 2005, 131 - 133).

Engaging in small talks help negotiators to build trust. Small talks often seem to serve no obvious function but such "schmoozing" (Thompson 2005, 135) has been said to have a dramatic impact on people's liking and trust of others. Even a short exchange, for example, can lead people to develop considerably more trust in others than in the absence of interaction (Thompson, 2005: 135).

Trust needs to be developed once rapport is established and relationships are built. Eating and drinking helps to establish relationships between parties (AIWC, 1999). Indeed, "having good relationships with others helps us a lot" when we negotiate with them (Low 2001, 76). In fact, in negotiations between friends, though some haggling may occur, there are much opening up, mutual honesty and co-operative problem solving and working together (Thompson 2005, 142).

In Soviet times (Alash Orda), one's contacts and network was critical. "Good contacts in the party" was necessary, and "without a solid network to lean on, promotion was virtually impossible" (Odgaard and Simonen 1999, 27). The Soviet authorities persistently tried to break the Kazakh clan systems

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although they never quite succeeded in this undertaking (Odgaard and Simonen 1999, 28), and today, these kinship type alliances, in a way, continue to hold great significance in Kazakhstan. The relationships between the individual and the group are still regarded as important.

The question is: how relevant are these values and ways when it comes to negotiating in the Republic of Kazakhstan?

## RESEARCH METHODOLOGY

The methodology employed involved focus groups ("talk and probe") (Low 2004, 60) or in-depth interviews with several local Kazakhstanis. "Focus groups are normally associated with a phenomenological methodology. They are used to gather data relating to the feelings and opinions of a group of people who are involved in a common situation", (Hussey and Hussey 1997, 155). Though commonly used in marketing-research contexts; most academics tend to restrict to such applications of the focus group method" (Morgan 2002; Blackburn and Stokes 2000; Fontana and Frey 1994), the use of focus groups have been helpful in socio-cultural research as exemplified in the studies made by Low and Or, 2004, and Low, 2002.

An acceptable group size may be between 6 to 12 participants, a group size of fewer than 6 participants may not have group dynamics to work well and more than 12 may have difficulty in group control (Burns and Bush 2003, 213; Burns and Bush 2000, 241).

The study's sample involved a total number of eighteen (18) business owners and senior managers representing retail, service and trade sectors. These business people were selected because they had business and corporate experiences, having negotiated for their divisions or departments and companies they worked for. Although most members lived in Almaty, they came from a number of towns in Kazakhstan such as Astana, Karaganda, Aktau, and other cities.

The focus groups took place at conveniently located sites and in conference room settings. A total of three (3) 6-member focus group sessions were held and as a rule, 3 or 4 focus group sessions are usually sufficient (Aaker and Day 1986, 124). The focus group sessions were held for about two months, from 20 August to 18 October 2004.

A list of key questions was tested and used to guide the focus group sessions (please see Table 1). The purpose is to get detailed account from business people on what they were thinking about and how they acted in negotiation events or episodes in their work or corporate life, and they then related the key negotiation techniques and ways employed. Note that the study participants did not have access to the questions in advance of the focus group session convening. Questions were posed verbally by the researcher-cum-moderator and offered in written format as well.

\* Morgan has indicated here that focus group interviewing is such a flexible data gathering technique it has become increasingly attractive to social researchers.

According to Stewart and Shamdasani (1990), there is no substitute for pre-testing focus group questions regardless of how experienced the research or how familiar the subject area as pre-testing gives opportunity to determine if questions are appropriate and to identify questions that are not easily understood. One procedure for pre-testing is to have the first focus group

function as the pre-test, and if no major changes to the focus group questions takes place, then the first focus group results are included in the subsequent analysis (Krueger 1994), and the same happened in this research.

TABLE I. LIST OF KEY QUESTIONS ASKED IN THE FOCUS GROUPS

OPENING
Let's get to know each other. Please introduce yourself to the group and tell what kind of business you are in.
Thinking back or even now in your own experiences, how do you negotiate?
What do you think are the common or key negotiation techniques or methods used in Kazakhstan?
Is there a 'Kazakhstani way' of negotiation?
If so, how? Please tell more about it.
When negotiating, what are some of the cultural likes and dislikes among the Kazakhstani people?
What are some of the face-saving ways as practiced in Kazakhstan?
CLOSING
Do you have any final comments or views you want to offer with regard to the questions posed this evening?

## FINDINGS

All the focus group members (100 percent) agreed that "it's always good to develop the relationship, get to know the other party well.... establish the rapport, break the ice; things can then get on easier." "I prefer to meet the other party first before talking terms or negotiating with him." For "big deal, we talk first, break down the formalities first. We talk... sometimes, engaging in small talk" "It's important to communicate and relate with each other." These were referred to about thirty-four (34) times.

All the focus group members (100 percent) agreed that in Kazakhstan, the people "want to be co-operative, believing in exchange. There should be mutual gains. I scratch your back; you scratch my back sort of thing must exist". Such references were made about twenty-three (23) times by the focus group members. A few members further highlighted that, "gift-giving before or during negotiations is necessary to facilitate things, smoothening the negotiation process".

"Effective negotiators listen... usually discuss things... about contracts while eating... contracts are sealed at dinners; these are common cultural features". Such references were referred to about twenty (20) times, and agreed by all the focus group members.

Kazakhstanis prefer and feel that it is better to negotiate between and among "people of the same gender". "Men usually discuss in the sauna or in the bathhouses"; these were cited about seventeen (17) times. The negotiation "process is easier" and "members of the same gender relate better" with each other.

"It helps to know the local language. For example, if you are a Korean, non-Kazakh, you should know Kazakh when dealing with a Kazakh national, then, it becomes an advantage. The OP may be accommodating, willing to reduce the price... ..he is likely to be more flexible". All the focus groups members agreed to this, and the members cited this about sixteen (16) times.

## ANALYSIS AND DISCUSSION

People "get their needs or interests met" (coinciding with "the purpose of negotiating is to serve your interests") (Fisher and Ury 1981, 51) and besides, they want to "make lives easier to do business". Most people "negotiate to solve problems". They also "discuss things so that (their) projects can be on time or meet the deadlines".

### Being Culturally Sensitive

When negotiating with Kazakhstani nationals, foreigners should be culturally sensitive, knowing the locals' cultural likes and distastes. Guests should never refuse to eat when offered, as this is an insult to the family (suggesting that the guest does not trust them, (Kazakhstani guests) should never be offered an empty plate. (Low and Ahsan 2004; AIWC 1999, 130, italics mine)

Akin to negotiating with the Chinese, "do observe what is good or bad to give as business gifts and other concerns". Though the Chinese prefer even (good luck) numbers, this is not applicable to the Kazakhstanis. The focus groups confirmed "not to offer flowers in even numbers as they are considered ill-mannered or not so good; give an even number of flowers only at funerals". AIWC (1999, 130, italics mine) highlights this, "give... an odd number for celebratory events (say, post-negotiation)... congratulations, thanks, etc.

### Establishing Rapport

Another key negotiation feature in the Republic is that of establishing rapport and building relationships; this appears to coincide with what Thompson (2005, 131) has pointed out – people who are similar to each other like one another. Establishing the initial rapport normally based on similarity-attraction effect that can occur through small and "sometimes downright, trivial information" make the whole negotiating process "easy".

### Saving Face

"Aman' (peacefulness) is valued; the Kazakhs would rather work cooperatively" (focus groups' input). Some face-saving ways during negotiations in Kazakhstan are said to include things such as blaming on the third parties or "the common enemy, perhaps even putting the blame on the weather, traffic jam, etc."

### Speaking the Same Language

Another key negotiation feature in Kazakhstan is that it is important to know or speak the same language. It is vital to know the Kazakh language when negotiating with the Kazakhs as the focus group members highlighted.

Certainly, barriers need to be broken or reduced; if you are a foreigner, then "it would be advantageous for you to speak Russian... or get a Kazakh assistant or interpreter; simply because many Kazakh executives or government officials at the operations level do not have a good working knowledge of English" (Low and Ahsan 2004, 39-41).

The above not only shows the importance of sociability and willingness to communicate such as using the host language without fear of making mistakes but also that of empathy, at least the perceptions of one's empathy by the other party (Thompson 2005, 267). When one speaks the other party (OP)'s language, it gives the perceptions that one has the "interest in the host culture" (Thompson 2005, 267), and that one "work(s) hard to understand the OP's viewpoints" (focus group's comments); this, in fact, can ensure success in intercultural interactions and negotiations.

### Building Relationships

In Kazakhstan, "people of the same gender" can also better relate to each other; they can easily build their rapport with each other. "People like to create "karym katynas" (a Kazakh term, meaning relationships)" "People prefer to buy from 'dos' (Kazakh for friend)" (Focus group's input). "People do not buy from you unless they know you" (Low 2001, 46); people tend to "be calculative" when negotiating with strangers (Conflict Research Consortium 1998).

"Before doing business with anyone, the Kazakhs prefer to get to know or relate first with the person well; they rather eat or dine with the person first" (Low and Ahsan 2004). This is a good negotiation technique, the "pre-negotiation" way, since it builds the stage making it easier for both parties to clarify, discuss and work things out during the formal negotiation (Low 2001, 77).

"In Kazakhstan, there can be no negotiation without food first!" "We drank, we ate together and shared jokes" and "as we drank, we talked... laughed". These words from the focus groups appear to echo Thompson's (2005, 132) words "similarities... actually lead to positive results". Successful negotiators increase their effectiveness by making themselves familiar to their counterparts.

Moreover, such fostering of relationships ties-in with what this researcher terms as post-negotiation way; there should be follow-up after the formal negotiations. In the marketing parlance, such post-purchase dissonance can be reduced when sellers follow-up, talk, and relate to help buyers feel good about their buys and choices (Kotler and Armstrong 1997, 163-164). It is nice, similar to doing business, even to negotiate, with friends (McCormack 1995, 84; Low 2001).

“People like to meet, face each other” and fostering relationships help us to negotiate effectively (Low 2001, 77). “You need to be sincere, you cannot fake sincerity; without a genuine interest, you’ll never grow a trusting professional relationship” (focus groups’ input) and these were felt strongly by all the focus group members.

Among friends, the negotiations would be positive, and are less likely to have “the squeaky wheels”. Friends relatively use more positive emotional style (Thompson 2005, 310) and in fact, this researcher would also add the focus groups’ input, friends “are less demanding when communicating in non face-to-face situations”. When negotiating, mutual respect and mutual affection – that exists among friends – help (Low 2001).

#### **Giving Respects to the Elders**

The seniors or elders should be respected (Akshalova 2002) and “the person who needs the favor from the elder or the other party will invite him to go to the restaurant”; he will then pay for the meal.

#### **Triggering Opportunities to Negotiate**

Playing billiards, skiing and even hunting are common here, and business people at times use them as “negotiation opportunities”. “Interests in golfing is growing too, and it can also be a way to talk business and negotiate”. Golfing supplies opportunities for parties to share “golf interests” while indirectly or subtly negotiate business matters. Such “same interests” activities can also be deployed

Flattering the other party by giving gifts can also be applied here; people like others who appreciate and admire them. This fits with what Thompson has highlighted, “people are more likely to trust those who like them and respond more favorably when they are flattered” (Thompson 2005, 135).

#### **Exchanging or Reciprocating**

Close to giving gifts is exchange or reciprocity, another powerful way or technique frequently used in negotiations here. This reciprocity principle means people feel obligated to return in kind what others have offered or given to them (Thompson 2005,134).

This indeed highlights a very powerful pointer on the psychology of negotiation that should be borne in mind when negotiating, in fact, with anyone. Kindness begets kindness, and favors are being returned. “Exchange gives the feeling of fairness or even gratitude... ..‘exchange is no robbery” (Low 2001, 56).

#### **Emphasizing Mutual Gains**

Negotiating in any country, foreigners need to be empathetic, understanding the norms and the meaning underlying them. Effective negotiators understand their opponents better (Thompson 2005). Both foreigners and the locals should also be prepared to manage bureaucratic interactions with government. They can alleviate red tape, “de-bias the number of biases that lurk against the civil bureaucracies” (focus groups’ input) and work solutions together for mutual gains. “Both parties show respect to each other and adopt a win-win way”; the focus groups’ members referred to such terms about twenty-one (21) times.

Overall, “there’s (also) much talk, haggling and discussions; all done in a friendly, co-operative mood amidst eating and drinking” “During dinners, once the ice has melt and both sides understand each other; it’s then on a win-win track”. “There’s a co-operative mood. ...in fact, a common Kazakh saying goes

## “Clanning” and Connecting

Interestingly, George (2001: 45) highlighted that in 1993, the shift of the capital

one key plus factor was that the focus groups provided data from a group of people much more quickly and at lesser costs and they can be assembled on much shorter notice than would be required for a larger survey (Morgan 2002;

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Executives of the large organizations have been using business intelligence (BI) to track the pulse of their business by monitoring key parameters and to understand the long term behavior and relationships between various variables of interest. Similar trends can be seen today in case of small & medium sized organizations (SMEs) because of availability of generalized BI products in the marketplace tailored to the need of SMEs. Further, BI tools are assisting organizations to analyze terabytes of unused data stored in Enterprise Resource Planning (ERP), Customer Relation Management (CRM), Supply Chain Management (SCM), data warehouses, data marts and other legacy Online Transaction Processing (OLTP) systems. Infact, BI tools are means to provide value for money to business users for the time they spend gathering, massaging and debating data. This presentation includes BI concepts, its components, its information sources, its architectures & their comparative analysis.

КОММЕРЧЕСКАЯ РАЗВЕДКА

НЕТРА ПАЛ СИНГХ

Руководители больших организаций используют коммерческую разведку, чтобы проверить пульс их бизнеса с помощью контролирования ключевых параметров и понимания долгосрочного поведения и отношений между различными переменными интересами. Подобные направления могут быть замечены на примере малых и средних организаций (SME), потому что доступные распространенные продукты коммерческой разведки на рынке привязаны к нуждам SME. Далее, инструменты коммерческой разведки помогают организациям анализировать терабайты неиспользованных данных, хранящихся в системе управления предприятиями (ERP), системе управления контактами с клиентами (CRM), системе управления поставками (SCM), хранилищах данных, витринах данных и других легальных систем оперативных обработок транзакций (OLTP). На самом деле, инструменты оперативной разведки являются средствами, обеспечивающими рациональное использование средств для коммерческих потребителей на время, которое они используют на сборку, обработку и обсуждение данных. Эта презентация включает концепцию коммерческой разведки, ее компоненты, информационные ресурсы, ее строение и сравнительный анализ.

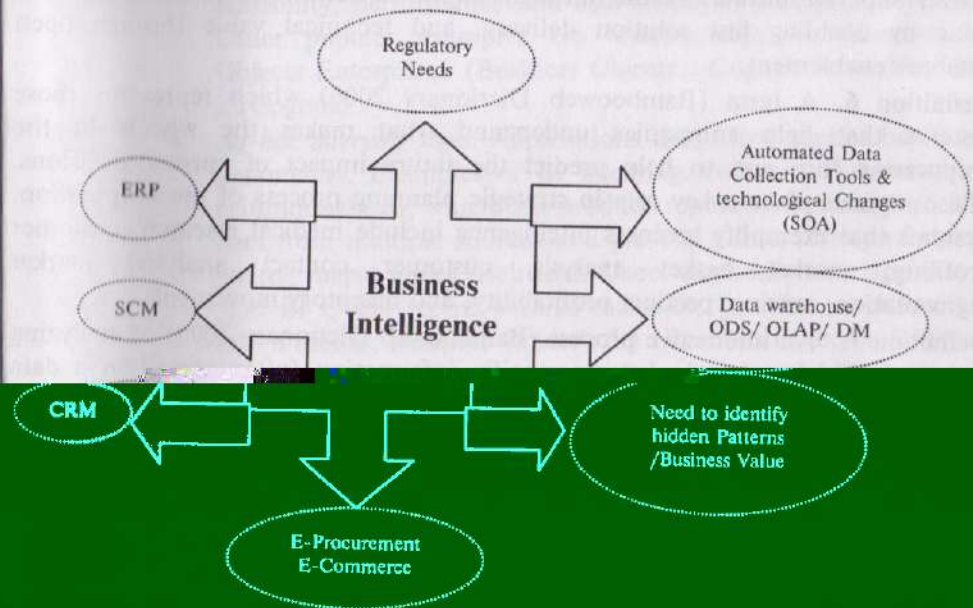
I. INTRODUCTION

In the seventies and early eighties, the organizations were focusing on protecting and recovering their data with very less emphasis on converting it in to information/ knowledge for decision making process. With the advent of automatic data collection tools and implementation of ERP, CRM, SCM and other enterprise information systems, massive amount of data are collected by organizations and as a consequence they have started thinking to implement/develop business intelligence tools to dig out relevant information for competitive advantages from these massive databases. In addition, data

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warehouse has become a standard component of the architecture of information systems of most of the business organizations because of its added features and increasing value of the data to the organizations in the competitive environment. Further, customer focus, need for sharing information, analytics, inability of statistical packages to analyze huge amount of data and availability of user centric technology are contributing significantly to promote usage of BI in the organizations. In a nutshell BI has become now a necessity of the organization for converting mines of their data in to a strategic weapon for competitive advantage. With business intelligence tools organizations don't have to tear out any existing systems, BI leverages on existing systems, and therefore it's easier to justify investment on it and realize expected high returns on the investment. The major driving forces (Figure 1) of adoption of business intelligence tools by the organizations are ERP, SCM, CRM, e-commerce, e-procurement, automated data collection tools, data warehouse, data mining, and need to create business value out of large databases of the organizations. In addition, development of Service Oriented Architecture (SOA) had worked as catalyst for making business intelligence tools acceptable by organizations. The subsequent sections of the article present BI terms, BI tools of different vendors, trends in architecture, and BI components and future trends.

FIGURE 1. BUSINESS INTELLIGENCE DRIVING FORCES





## 2. WHAT IS BUSINESS INTELLIGENCE?

**Definition 1.** Business intelligence is defined in different ways (Shared Insights LLC 2006). In its simplest form BI is the knowledge about your customers, competitors, partners, competitive environment and internal operations. A few popular definitions of BI are mentioned in the following:

**Definition 2.** Tyson (1986) identified the term, which emphasizes on continuous monitoring of customers, competitors, suppliers and other fields. According to him it comprises of customer intelligence, competitor intelligence, market intelligence, technological intelligence, product intelligence.

**Definition 3.** Viva Business Intelligence Oy (1998) had defined BI as a continuous and systematic process, which produces knowledge, insights and forecasts on a company's operating environment.

**Definition 4.** According to Jonathan (2000), business intelligence is the process of gathering high-quality and meaningful information about the subject matter being researched that will help the individual(s) analyzing the information draw conclusions or make assumptions.

**Definition 5.** Business Intelligence (Bambooweb Dictionary 2006) provides business roadmaps to deliver solutions for business analysis, which includes data models, meta-data and analytical applications. By having these roadmaps, we deliver superior business value through improved return on investment, time value by enabling fast solution delivery, and technical value through open database enablement.

**Definition 6.** A term (Bambooweb Dictionary 2006) which represents those systems that help companies understand what makes the wheels of the corporation turn and to help predict the future impact of current decisions. These systems place a key role in strategic planning process of the corporation. Systems that exemplify business intelligence include medical research, customer profiling, market basket analysis, customer contact analysis, market segmentation, scoring, product profitability, and inventory movement.

**Definition 7.** "An interactive process (Bambooweb Dictionary 2006) of analyzing and exploring structured, domain-specific information (often stored in a data warehouse) to discern trends or patterns, thereby deriving insights and drawing conclusions. The BI process includes communicating findings and effecting change. BI domains include customers, products, services or competitors".

**Definition 8.** "Business intelligence (BI) (Bambooweb Dictionary 2006) is a broad category of applications and technologies for gathering, storing, analyzing, and providing access to data to help enterprise users make better business decisions."

**Definition 9.** "Usage of timely and accurate information to base decisions upon. Typically, includes a broad category of applications and technologies for gathering, storing, analyzing, and providing access to data. Activities include

decision support, query and reporting, online analytical processing, statistical analysis, forecasting, and data mining." (Bambooweb Dictionary 2006).

**Definition 10.** Business Intelligence (BI) (Information Builders 2006) gives you the ability to gain insight into your business or organization by understanding your company's information assets. These assets can include customer databases; supply chain information, personnel data, manufacturing, and sales and marketing activity as well as any other source of information critical to your operation. Business intelligence software allows you to integrate these disparate data sources into a single coherent framework for real-time reporting and detailed analysis by anyone in your extended enterprise – customers, partners, employees, managers, and executives.

## 3. BUSINESS INTELLIGENCE COMPONENTS

According to Gupta (2004) and Priyankara (2003), BI solution comprises the collective use of a number of software tools/components. These components are explained below:

- *Core-reporting tools.* These tools enable the user to prepare formatted and organized reports as an output of analyses. For Example: Cognos ReportNet™, which rests upon web-based architecture that delivers scalability, performance and cost saving at enterprise levels (Cognos 2004). Other popular examples are Microstrategy 7i (Microstrategy), Business Objects Enterprise6 (Business Objects), Cognos PowerPlay Series 7 Version 2 (Cognos).
- *Ad-hoc querying tools.* Applications that allow queries based on user-specific parameters. Examples of BI querying tools are Hummingbird Enterprise™ (Hummingbird), which can produce reports (Hummingbird 2006) containing data from multiple sources and present it in a variety of styles – cross tabs, charts, maps, tables, rich text. Users can easily overlap, nest or tile objects. And BI Query report wizards make the creation of charts, tables and cross tabs a breeze, Business Object's 5.1 (Business Objects), SAS query (SAS).
- *OLAP tools.* Online Analytical Processing (OLAP) tools are server-based analysis tools that enable organization of data in a hierarchical fashion in multiple hierarchies and analysis across multiple dimensions like time, geography, organizational unit, customer, and product line. The major OLAP products and their vendors are intelligence (Brio Software), MetaCube (Informix), Hyperion Intelligence (Hyperion Solutions), DB2 OLAP Server (IBM), Business Objects & Web Intelligence (Business Objects), Microstrategy 7i (Microstrategy), Proclarity (Proclarity), SAP BW (SAP), e-planning (Cognos), EAP (Outlooksoft), SQL Server 2000 Analysis Services (Microsoft), Express and the Oracle OLAP Option (Oracle).
- *Data mining tools.* Data Mining tools allow user to extract information from a data warehouse/data marts spanning single or multiple dimensions like

time, geography, customers, and product groups. The major categories of the data mining tools are association mining, summarization, visualization, classification, clustering, deviation analysis, statistical analysis, pre-processing tools (Singh 2004). The popular data mining products are Enterprise Miner (SAS), Oracle 9i Data Mining Oracle), Clementine (SPSS).

- *APIs.* APIs tools enable the site designer to control the BI system and perform tasks like instruct it to display a report or pivot an OLAP model. APIs supporting Java, .Net, and XML, J2EE framework, which are embedded with BI Products. For example SAS AppDev Studio (Information Technology Toolbox, Inc. 2006) to build intelligent applications combines SAS software, APIs.

#### 4. BUSINESS INTELLIGENCE INFORMATION SOURCES (SHARED INSIGHTS, LLC 2006)

Different types of front end and back end tools are being used in BI implementations. BI tools act as an interface between business information needs and available data to derive this information for better business decisions. BI tools extract information from various information systems implemented by the organizations such as the internet, their extranet, intranet, Online Transaction Processing systems (OLTP), Operational Data Stores (ODS), Data Warehouses (DW), Data Marts (DM), Analytical Applications (AA), data mining applications, statistical analysis applications, predictive modeling applications, reporting systems, and other data islands (isolated sets of data such as spread sheets, desktop databases, etc.). BI implementations include basically two types of systems, one for storing the resources of data and other for the purpose of analysis. The major categories of these systems are analytical processing and analytics, customer intelligence systems, customer scoring tools, data cleansing processes, data marts, data mining, data warehouse, dimension, DTEAMM (Design, Transformation, Extract, Access, Monitoring and Management), filtering and house holding, Information Database, Legamart, Meta Data, ODS (Operational Data Store), OLAP (On-Line Analytical Processing), OLTP (On-Line Transaction Processing), OODBs (Object Oriented Data Bases), Operational Data, Operational System or Database.

#### 5. BUSINESS INTELLIGENCE ARCHITECTURE

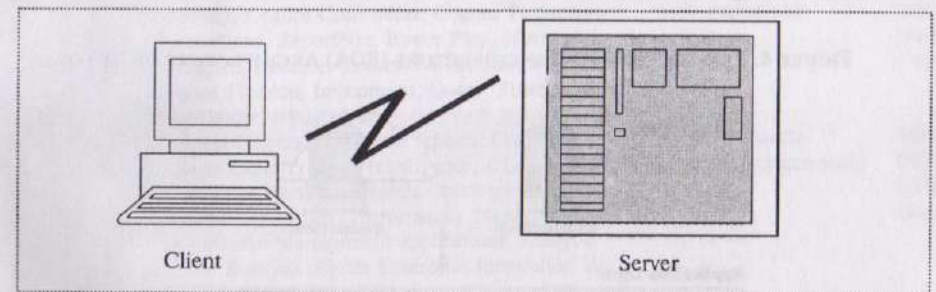
Business intelligence architectures are called a patchwork of hardware, software, storage and other tools since it is based on many aspects which relate from topology to ease of use to applications. These aspects are:

1. Architecture may be full client/non-web based or web based.
2. Architecture may be based on OLAP approaches (MOLAP, ROLAP, and HOLAP).
3. Architecture may be based on ease of customization or embedded with other applications.
4. Architecture may be based on generalized framework (metadata, security, and infrastructure) that BI suites use across query, reporting OLAP, dashboard or analytical applications.
5. Architecture may be based on distributed or non-distributed servers across multiple servers and plate forms.

Commonly used three types of BI architecture are detailed in the following:

1. *Full Client, or non-web, BI applications* (Wu 2000): *The architecture consists of Client and server components. It is client/server architecture. BI application resides on client and Relational data base management system on server. In addition operating system and data base middleware for connectivity reside on both client and server components of the BI architecture.*

FIGURE 2. FULL CLIENT ARCHITECTURE / NON-WEB BI APPLICATIONS

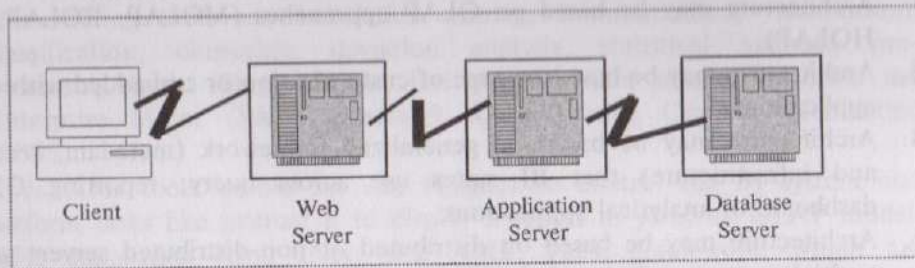


Source: Wu, Jonathan (2000) Business Intelligence: Difference Between Web and Non-Web Applications. DM Review.com. March 9. [http://www.dmreview.com/article\\_sub.cfm?articleId=2026](http://www.dmreview.com/article_sub.cfm?articleId=2026)

2. *Thin Client or Web-based, Bi Architecture* (Wu 2000): *Web based architecture is also based on client/server architecture. It requires additional hardware as shown in Figure 3. The web browser resides on client components of the architecture. Web server resides on web server, BI application on application server and relational database management system, (RDBMS), re*

database server.

FIGURE 3. THIN CLIENT ARCHITECTURE / WEB BASED ARCHITECTURE

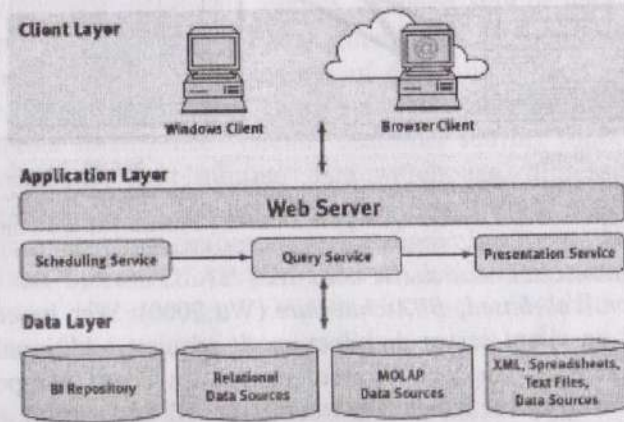


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Operating system component reside on all the four components of the architecture. Data base middleware for connectivity resides on application server and database server.

3. *Service oriented Architecture* (Howson 2004): SOA is an architectural style whose goal is to achieve loose coupling among interacting software agents (Hao 2003). It is resented in Figure 5. It consists of three layers, i.e., client layer, application layer, and data layer. It is also based on client/server architecture. Service oriented architecture allows different BI applications /services to perform specified tasks and, when necessary, to be distributed across multiple services.

FIGURE 4. SERVICE ORIENTED ARCHITECTURE (SOA) ARCHITECTURE OF BI TOOLS



Source: Howson, Cindi (2004) BI Scorecard: The Best BI Tool. Intelligent Enterprise Magazine. June 12. [http://www.intelligententerprise.com/print\\_article.jhtml?articleID=21400422](http://www.intelligententerprise.com/print_article.jhtml?articleID=21400422)

The above mentioned three types of architectures of BI tools have four parts (Information Technology Toolbox, Inc. 2006) in common, an information architecture (needed for business application systems), data architecture (its boundaries stretches from information providers to information consumer),

technical architecture (it includes RDBMS, BI, Extraction Transformation & Load (ETL), enterprise application integration (EAI), Enterprise Information Integration (EII), Operating Systems (OS), Network Operating System (NOS), Application Program Interface (API), etc.) and product architecture (actual product to be procured for implementation) as described by Sherman (2003). The key products of popular BI vendors are presented in Table 1. Their products are either SOA based or moving towards SOA platform. These Business intelligence tools and platforms are categorized by META group (2004) as leaders (Cognos, Business objects, SAP), challengers (Seibel, Hyperion, SAS, Microsoft, Micro strategy, Oracle, Peoplesoft, Proclarity, Actuate, Computer Associates, Hummingbird etc), and followers. However, no follower was evaluated by META group. Some more BI vendors along with their products are presented in Table 2. In addition there are other vendors also such as Databeacon Inc, OutlookSoft Corporation, Panorama Software Limited, Systems Union Inc, Noetix Corporation, Prophix Software, Applix, Inc., Biz Tools Private Ltd., Computer Associates, ArcPlan, however their market share is not very large.

TABLE 1. BUSINESS INTELLIGENCE TOOLS

SN	Name of the Software	Name of the Vendor	Architecture
1.	Cognos BI Series 7, Cognos 8 BI, Cognos Planning, Cognos Controllers, Cognos Performance Applications, ReportNet, Power Play, Metrics Managers, Decision Stream, NoticeCast, Visualizer, Cognos Finance, Impromptu, Query, Powerhouse, Powerhouse web, Axiant.	Cognos <a href="http://www.cognos.com">www.cognos.com</a>	SOA (SOA Web Services News Desk 2005) for Cognos 8 BI
2.	Business Objects XI, Crystal reports, Crystal Reports Explorer, Web Intelligence, OLAP Intelligence, Business Objects, Business Object Dashboard Manager, Performance Manager, Performance Management applications, Analytic engine, Business objects Enterprise Integration kits, Business objects live office.	Business Objects <a href="http://www.businessobjects.com">http://www.businessobjects.com</a>	SOA (Business Objects SA 2005) for Business Objects XI
3.	SAS 9 Enterprise Intelligence platform, SAS Enterprise BI Server, Key Technologies- BI development Environment, Business Metadata Management, Guided Analysis and Model Development, Embedded Portal, Centralized Metadata Visualization, Microsoft Office Integration, Web reporting.	SAS <a href="http://www.sas.com">http://www.sas.com</a>	SOA (Bajkowski 2005) for SAS 9 Enterprise Intelligence platform
4.	SAP Business Information Warehouse (SAPBW), SAP Extraction transformation and Loading tools, SAP Business Modeling Tools, SAP Netweaver.	SAP <a href="http://www.sap.com">http://www.sap.com</a>	SOA (Westervelt 2005) features will be embedded very soon
5.	Oracle BI 10g, Oracle Warehouse Builder 10g, Oracle9i Warehouse Builder (OWB), etc.	Oracle <a href="http://www.oracle.com">http://www.oracle.com</a>	Moving towards SOA (Singer 2004)

**TABLE I. BUSINESS INTELLIGENCE TOOLS (CONTINUED)**

SN	Name of the Software	Name of the Vendor	Architecture
6.	Hyperion Business Intelligence Platform: Hyperion Essbase and Hyperion Performance Suite, (Versions: Hyperion BI Essbase 7X, Hyperion Performance Suite 8.3 and Hyperion Compliance Management Dashboard).	Hyperion Solutions www.hyperion.com	Moving towards SOA
7.	Business Analytics 7.8., Siebel "Project Nexus" with BEA Systems, IBM and Microsoft is a SOA-based infrastructure for CRM that runs natively on both .Net and J2EE application server platforms.	Siebel http://www.siebel.com	SOA (Neil 2005) based project Nexus
8.	MBS- Axapta, GP Professional & Standard, Navision Professional & Standard, Solomon Professional & Standard.	Microsoft http://www.microsoft.com	Moving to SOA
9.	Enterprise Business Intelligence (WebFOCUS), Host-based Reporting (FOCUS), Integration Solutions (iway software developing SOA platform).	Information Builders http://www.informationbuilders.com	SOA (Information Builders 2005) for WebFOCUS 7
10.	MicroStrategy SDK (Software Development Kit), MicroStrategy 8 Platform, Intelligence Server, Packaged analytics.	Microstrategy http://www.microstrategy.com/	SOA (Microstrategy 2006) for Intelligence server
11.	Proclarity Analytics Platform, Advanced data visualization tools, Business Logic Server, Dashboard Server, Analytics Server, etc.	ProClarity Corporation	
12.	Hummingbird BI, Hummingbird BI™ 8.5.	Hummingbird Ltd.	Hummingbird's BI/Suite (Chapman 1999) 5.0.1
13.	Actuate BIRT, Formula One e. Spreadsheet Engine, Formula One e. Report Engine, Enterprise reporting platform.	Actuate www.actuate.com	SOA Actuate (Corporation 2006) based
14.	Power Analyzer, Informatica PowerCenter, Informatica Power Exchange.	Informatica www.informatica.com	SOA (Informatica Corporation 2006)

**6. BUSINESS INTELLIGENCE APPLICATIONS**

BI software's are providing wide range of solutions tailored to information and reporting demand across the enterprise (performance management, customer intelligence, financial intelligence, human capital management, supply chain management, and more) and across the industries (financial services, pharmaceuticals, healthcare, retail, telecommunications, automotives, energy and more). To be more specific business intelligence tools can be used in a central bank to evaluate the key performance indicators of the banking system, and monitor the health of the system, the liquidity position and the adherence to prudential norms. It can be applied for customer profiling and segmentation, identification of cross sell and up-sell opportunities, churn management, customer profitability analysis, customer relationship management (customer contact management, customer site and contact information management, access to financial information such as credit limits etc, expense management, site visit reports, quotation requests), call center management, developing

targeted marketing campaign at lowest optimal costs and highest possible returns in the marketing field. In finance and & accounting applications, BI tools are used in budgeting and planning, financial forecasting, reporting and analysis, cost management, perform current and potential exposure, create credit metrics to arrive at an enterprise wide risk measures. In addition, BI tools can be applied for procurement analysis, inventory analysis, manufacturing process analysis, scorecards, key performance indicators, reporting and dashboards.

**7. BUSINESS INTELLIGENCE FUTURE**

In its article Mitch Betts (2004) while describing future of BI stated that "image is every thing", "the end of Gut feel", "a sixth sense", "peta byte mining, no sweat", "mining the click stream", "radio frequency identification: Data overload", "BI meets AI", "Oops" and so on. To certain extend these technologies and events may make appearances in the form of small islands in the oceans of data and its transactions but every prediction may not be true in terms of it time schedule.

However, more and more organizations will start using business intelligence tools for making use of their data for decision making processes specially in the banking & insurance sector because of high risk. In addition customer churn, embedded with competition in the market force telecom companies to implement BI tools to sustain in price v/s service sensitive mobile and global market.

Business intelligence market will evolve around application service providers (ASPs) especially for small and medium size companies, mobile connectivity using handheld devices (Cognos NoticeCast is an examples for this category tools) and enterprise information portals to provide real time customized view of the business for decision-making process. However, according to Enter group Ltd., (Enter group Ltd. 2006) BI market will be dominated by e-intelligence, e-business real time & closed loop articles, e-service business intelligence, ASP BI services, data warehousing (custom & packaged), data marts (custom & packaged), Analytical Applications, Enterprise Information Portals, and Knowledge Management. As far as size of vendors is concern BI market will have two categories of vendors. One group consists of large companies such as IBM, Microsoft, and Oracle and other group will consists of companies such as Business Objects, Proclarity, Informatica, and Hyperion, etc. BI tools will be categorized as comprehensive suits and best breed tools for a specific task. Further, if the vendors will continue to suffer with "star disease" i.e., to developing architectures only for large companies will create brand value for them, BI growth may confine to few parts of the world as is the case of other technologies.

Acquisition is the on going process in BI market. To mention a few in the recent past, Brio is acquired by Hyperion Solutions its products Brio Intelligence, Brio SQR, Brio Metrics Builder, Brio Performance Suite 8 are named as Hyperion

Intelligence, Hyperion SQR, Hyperion Metrics Builder, and Hyperion Performance Suite. Business objects acquire Crystal Decisions. Siebel is acquired by Oracle.

## 8. CONCLUDING REMARKS

In the competitive world of business, organizations are depending on information systems for doing their business across the globe. In the process they are implementing better and better tools for communication, integrating their data and also for generating valuable information from their mines of data. Business intelligence tools in its present form providing solution to these tasks. However, as mentioned above to make BI a reality for all organizations small or big, vendors have to work hard to reduce Total Cost of Ownership (TCO) and improves resource efficiency through consolidation of BI systems and platforms. Scalability, manageability and interoperability enable deployment of BI across the enterprise is another issue, especially for large organization. BI if implemented on every desktop keeping cap on TCOs will provide ready access to information and the analyses required to make best decisions with reduced time. In addition, low cost customized business intelligence solutions will help organizations to meet their unique BI needs in case of small & medium enterprise. With this scenario, BI tools will empowers organizations/individual decision makers for timely, low-risk collaborative decision making to improve business performance.

The major trends across the industry are to develop business intelligence platform around service-oriented architecture, which can integrate many tools in to one product and at the same gives freedom to customer to select tools for business needs. For example:

1. Cognos had developed its latest tools in the series Cognos 8 BI based on SOA architecture. It provides foundational web services based architecture that integrates all Cognos BI and performance management tools such as ReportNet (enterprise reporting software), Power Play analytic product, Metrics Manager scorecard software, Design Stream ETL software, and Notice Cast event manager within a single product/ on one server. Customer can till license each component separately. It costs in the range of US \$ 22,000 but varies depending on its configuration (Cowley 2005).
2. BusinessObjects XI is business intelligence (BI) platform that integrates everything you need to track, understand, and manage your business.
3. Business intelligence (Swoyer 2004) major vendors such as Actuate Corp., Applix Inc., Business Objects SA, and Cognos Inc. (among others) have retrofitted their products with compliance-aware features, such as auditing, change tracking, and data security features.
4. Big vendors such as SAP (Hashmi 2005) are developing their own version of SOA. SAP calls it enterprise service architecture (ESA).

5. Big vendors are acquiring smaller vendors with a view to incorporate small vendor products unique features in their product.

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## APPENDIX

TABLE 2. ADDITIONAL FEATURES SELECT BUSINESS INTELLIGENCE TOOLS

Name of Vendor	Business Objects	Crystal	Cognos	Hyperion	Informatica	Micro strategy	Microsoft	SAS	Proclarity
Common Framework Platforms	Business Objects Enterprise *	Crystal Enterprise 10	Cognos EBI *	Hyperion Essbase 7.0 *	Informatica Power Analyzer 4.1 *	Micro strategy 7.5 *	Microsoft Reporting Services 1.0 *	SAS9i *	Proclarity Analytics Server 5.3 *
SOA	Windows & Unix	Windows & Unix	Windows & Unix	Windows, Linux, AS400, 390 & Unix	Windows & Unix, Linux	Windows & Unix	Windows & Unix	Windows	Windows
Application Server	Java App server needed for footprint & interactive web reporting	DLL (Power Play), Web Services (CRN) Java Required	J2EE	J2EE	J2EE	COM	Web Services	J2SE	Thin Client
Market Focus	BI, ETL, Build Analytical Applications	BI, ETL, Build Analytical Applications	BI, Buy Analytical Applications, ETL, BI as Complementary	Financial Applications, BI	Java Required	Windows	Windows	Java Required	Windows
	* Good Capabilities, & limited capability								

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**A REMARK ON THE NON-UNIQUENESS OF A NON-NEGATIVE  
INTEGER SOLUTION OF A SYSTEM OF LINEAR DIOPHANTINE  
EQUATIONS WITH APPLICATIONS TO INTEGER PROGRAMMING,  
GENETICS AND RELIABILITY**

VASSILY VOINOV\* AND NATALYA PYA\*\*

*An example of an integer program with several optimum solutions, which can not be solved in full using some well-known standard techniques, is demonstrated. A solution of the system of linear diophantine equations and inequalities, describing the universal genetic code, is discussed. It has been shown that the uniqueness of such a solution is very important and can be proved, e.g., by the full enumeration and analysis of all nonnegative integer points of the feasible region. The full enumeration is also required for constructing all vector partitions when applying a multivariate discrete probability distribution of the multinomial type in, say, analysis of questionnaires, estimating reliability, assessing the quality of products and so forth. All three examples considered need a software permitting to construct all possible solutions or the full enumeration and analysis of all nonnegative integer points of a feasible region, which is the NP-complete problem.*

О НЕЕДИНСТВЕННОСТИ НЕОТРИЦАТЕЛЬНОГО ЦЕЛОЧИСЛЕННОГО РЕШЕНИЯ  
СИСТЕМЫ ЛИНЕЙНЫХ ДИОФАНТОВЫХ УРАВНЕНИЙ И ЕГО ПРИМЕНЕНИЕ В  
ГЕНЕТИКЕ, ЦЕЛОЧИСЛЕННОМ ПРОГРАММИРОВАНИИ, НАДЕЖНОСТИ

demonstrate a specially designed integer program aiming to show that the problem of solutions' constructing really exists. Using the full enumeration technique we showed that the problem possesses three optimum points and that not all of them can be found out by some often used approaches. Section on *Mathematical Model of the Universal Genetic Code* is devoted to the analysis of a system of linear diophantine equations and inequalities in nonnegative integers constructed by Shcherbak (2003) for describing the universal genetic code. Several polynomial algorithms for constructing a general solution in integers for a system of diophantine equations are known (Schrijver 1986). The situation is dramatically changed, if one searches for a solution in nonnegative integers. Stanley (1986) has demonstrated a very nice technique permitting at least in simple cases to construct the solutions' generating function for a homogeneous system of linear diophantine equations, but by the date we do not know good general algorithms. In the same section we use the aggregating technique jointly with the full enumeration, which leads to an alternative solution of Shcherbak's system. In section on *Multivariate Discrete Probability Model* we consider a class of multivariate discrete distributions useful in assessing the joint survival function of a system with discrete time (Nikulin and Voinov 2000), in analysis of questionnaires (Price et al 2001), in radioecology (Nikulin et al 2001), etc. The problem of probabilities and their estimates evaluation in this case is trivially solved by a construction of all non-negative integer solutions of a system of linear diophantine equations. Being the NP-complete problem, it can

possible solutions rearranging the order of constraints. The order in (1), e.g., is 1,2,3. Trying all 6 permutations we received the same two solutions 2,1,1 and 1,2,1 under all possible options of LINDO. Thus, the branch and bound algorithm losses the solution 0,3,1 of problem (1).

Let us apply for the problem the Gomory's technique. The optimum of LP-relaxation is attained at  $x_1=1$ ,  $x_2=2$ ,  $x_3=5/4$ . Performing the cutting-off procedure we have got two solutions: 0,3,1 and 2,1,1. Note that the third solution 1,2,1 has been lost.

Let us try now to apply the Microsoft Excel-Solver. If you will use Newton search with forward derivatives and tangent estimates under the initial points 2,1,1 and 0,3,1 – which are solutions of (1) – you receive only one solution 1,2,1. The same solution is obtained for the LP-relaxation 1,2,5/4 as an initial point. If you will use the “assume linear model” option, under all possible permutations of the order of constraints, you receive two solutions 0,3,1 and 2,1,1. Thus, under the above option the solution 1,2,1 is being lost.

Our last available possibility is using of UniCalc (demo-version 3.42, <http://www.rriai.org.ru/UniCalc>, see also Babichev et al 1993). The root locating tool for the searching of maximum of  $L$  for variables in arbitrary order and directions gave all three solutions of problem (1): 0,3,1, 1,2,1 and 2,1,1.

The example clearly shows that selecting a software or technique for solving an integer program a customer has to be very attentive to the abilities of a respective soft or method. It seems that only UniCalc presents a method permitting to find all solutions of the problem.

## A MATHEMATICAL MODEL OF THE UNIVERSAL GENETIC CODE

Shcherbak (2003) states: “the presence of any number system formalism within the alphabetic code of any language is an indicator of the presence of arithmetic within a language itself” and, possibly, inside the genetic language as well. Exploiting this idea, Shcherbak (1994) tries to find the symbolism of arithmetical language in the genetic code. He has found out the presence of the decimal system inside the genetic language, which is the most surprising and exciting fact. Describing canonical amino acids by the number of nucleons (protons and neutrons together) and formalizing the co-operative symmetry of the code elements (Shcherbak 1993) by a set of inequalities, Shcherbak (2003) created a mathematical model of the universal genetic code. In this paper we consider an alternative recently designed (jointly with Shcherbak) model. The differences of this model from that in Shcherbak (2003) are as follows: the four numbers of degeneracy are considered to be given, syntactic signs Stop I and Stop II are treated as being different, equation (23) (ibid.) is removed. The model is now represented as a system of linear diophantine equations and a set of inequalities:

$$Ax = b, \quad (2)$$

where  $x=(x_1, x_2, \dots, x_{30})^T$  is an unknown vector with the non-negative integer components corresponding to one of the nucleon numbers of the chain or block,  $A=(a_{ij})$ ,  $i=1,2,\dots,30$ ,  $j=1,2,\dots,28$ , the matrix of known coefficients and components  $b_j$ ,  $j=1,2,\dots,28$ , of the vector  $b$  equal to the nucleon sums of some code sets. The co-operative symmetry is characterized by a set of five inequalities (Shcherbak 2003). To maintain the biological sense variables  $x_i$ ,  $i=1,2,\dots,30$ , should belong to the intervals

$$[2, 14], [16, 23] \text{ and } [32, 38]. \quad (3)$$

Using the above-cited UniCalc software Shcherbak (2003) has found out only one solution of his previous model. Since this uniqueness is the most exciting and important with respect to the origin of the genetic code and, hence, the origin of life on the Earth, it is of interest to solve (2) using another approaches. Applying aggregating, and then enumerating techniques we received several non-negative solutions. Imposing inequalities of co-operative symmetry onto these solutions, we shall see that there is only one actually unique solution (same as the UniCalc gave) of (2) and of the model as a whole.

Note that receiving this solution we did not use condition (3), which has been used by Shcherbak when applying the UniCalc to his previous model (ibid.). It means that this important information is contained anyhow in (2) and inequalities of co-operative symmetry only.

## A MULTIVARIATE DISCRETE PROBABILITY MODEL

Consider the following multivariate discrete probability distribution, which can be introduced as follows (Nikulin and Voinov 2000). Let an urn contain balls marked by  $m$ -dimensional vectors  $a=(a_1, \dots, a_m)^T$ ,  $a_j \in \{\tilde{a}_{j1}, \tilde{a}_{j2}, \dots, \tilde{a}_{jk_j}\}$ ,  $j=1, \dots,$

$m$ ,  $\tilde{a}_{j0}$  – being arbitrary integers. Denote  $\alpha_j=(a_{j1}, a_{j2}, \dots, a_{jm})^T$ ,  $j=1,2,\dots,K$ , where  $K=k_1 \cdot k_2 \cdot \dots \cdot k_m$ , all possible values of  $\alpha$  defined by values of their components  $a_j$ . Let  $p_{\alpha_j}$ ,  $j=1,2,\dots,K$ , be the probability for a ball bearing a

vector  $\alpha_j$  be drawn with replacement and  $\sum_{j=1}^K p_{\alpha_j} = 1$ . Let a random vector

$X=(X_1, X_2, \dots, X_m)^T$  take the value  $r=(r_1, r_2, \dots, r_m)^T$  if sums of numbers of  $j^{\text{th}}$  components of vectors on  $n$  balls drawn are  $\sum_{i=1}^n a_{ij} I_{\alpha_j} = r_j$ ,

$$n \min_{1 \leq i \leq k_j} \{\tilde{a}_{ji}\} \leq r_j \leq n \max_{1 \leq i \leq k_j} \{\tilde{a}_{ji}\}, \quad j=1,2,\dots,m,$$



where  $l_{\alpha_i}, i=1, \dots, K$ , denotes the number of balls in the sample bearing the vector  $\alpha_i$  and  $l_{\alpha_i}^{\text{th}}$  are nonnegative integers such that  $\sum_{i=1}^K l_{\alpha_i} = n$ . Evidently that the probability distribution of the vector  $X$  can be written as

$$P(X=r, p) = \sum_{\substack{\sum_{i=1}^K l_{\alpha_i} = n \\ l_{\alpha_i} \geq 0}} \frac{n!}{\prod_{i=1}^K l_{\alpha_i}!} \prod_{i=1}^K p_{\alpha_i}^{l_{\alpha_i}}, \quad (4)$$

where  $p = (p_{\alpha_1}, \dots, p_{\alpha_K})^T$  is the vector of parameters and the summation is performed over all sets of nonnegative solutions  $l_{\alpha_i}, i=1, \dots, K$ , of the system of linear diophantine equations

$$\begin{cases} \sum_{i=1}^K a_{ij} l_{\alpha_i} = r_j, & j=1, 2, \dots, m, \\ \sum_{i=1}^K l_{\alpha_i} = n. \end{cases} \quad (5)$$

To evaluate the probability (4) one needs to find all solutions of the system of equation (5) in nonnegative integers or what is the same to construct all vector partitions of  $r$  on exactly  $n$  parts. The trivial way for solving this system is to enumerate all nonnegative integer points inside the  $K$  - dimensional feasible region (as in section on *Non-uniqueness in Integer Programming*) and to select those points, which are solutions of (5).

It is worthy to note that UniCalc solves the same problem in interactive mode, and it is not easy to use it in mass calculations. That is why, e.g., in Nikulin et al (2001) we used the above described approach.

## DISCUSSION

It seems as there is no sense to raise the question concerning the non-uniqueness in integer programming. It is very simple and understandable. Nevertheless, some circumstances forced us to do this. Very many mathematical textbooks for students do not mention the non-uniqueness of the problem. The second point of our discussion is to note that not all software in use permit to find out all those solutions. It seems as only UniCalc permits to do this.

The other two examples described in sections on *Mathematical Model of the Universal Genetic Code* and *Multivariate Discrete Probability Model* concern the non-uniqueness of a system of linear diophantine equations and/or inequalities solution. They clearly show that if one searches for solutions in non-negative integers the problem of non-uniqueness becomes sometimes very important. Quite possibly that the only way for solving such problems is the full enumeration of all non-negative integer points inside a feasible region. The problem is evidently NP - complete, because the number of those points

exponentially increases with the size of a problem. Nevertheless, in many practical situations it proves to be solvable on a computer for a reasonable time.

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# THE MODERN PROBLEMS OF CREATING DEMOCRATIC CONTROL OVER THE ARMED FORCES OF THE KYRGYZ REPUBLIC

MICHAEL TKACIK\* AND TIMUR UZAKBAEV\*\*

*This article investigates the requirements of, and necessity to create, democratic controls over the Armed Forces of the Kyrgyz Republic as one of the elements of democratic reforms and building a modern army. Democratic control implies oversight by civil society and state institutions. The present Constitution of the Kyrgyz Republic and other legal frameworks stipulate some principles of democratic control, but today there are no constant instruments of control. Furthermore, there are a number of problems without resolution of which, democratic control will continue to be impossible to fully establish. This paper considers: the principal theoretical fundamentals of democratic control; the present state of political oversight over military forces of the Kyrgyz Republic; and, the existing problems and obstacles for the successful creation and functioning of civil control over military forces as a component of complex reforms.*

## СОВРЕМЕННЫЕ ПРОБЛЕМЫ СОЗДАНИЯ ДЕМОКРАТИЧЕСКОГО КОНТРОЛЯ НАД ВООРУЖЕННЫМИ СИЛАМИ КЫРГЫЗСКОЙ РЕСПУБЛИКИ

МАЙКЛ ТКАЧИК И ТИМУР УЗАКБАЕВ

Данная статья исследует перспективы создания системы демократического контроля над Вооруженными Силами Кыргызской Республики как одного из элементов демократических реформ и строительства современной армии. Демократический контроль подразумевает собой осуществление надзора со стороны гражданского общества и государственных институтов над Вооруженными Силами. В современной Конституции Кыргызской Республики и других правовых документах описаны некоторые принципы демократического контроля, но постоянных инструментов контроля сегодня нет. При этом существует множество проблем без разрешения, которых демократический контроль не возможен. Это исследование рассматривает: основы теории демократического контроля, современное состояние политического надзора за Вооруженными Силами Кыргызской Республики и барьеры для успешного создания и функционирования системы гражданского контроля над военной сферой как компонента комплексных реформ.

## INTRODUCTION

The collapse of the USSR in the last decade of the past century led to changes of global scale. The political wave of this "explosion" had two vectors. The first vector was internal and characterized by appearance of new independent states, the creation of new state institutions, the recommencement of old ethnic conflicts, the division of the former empire's property and friction between the new states. While significant tensions were thereby engendered, democratic reforms nevertheless became popular in most newly formed states, as did the market economies that rose over the ruins of the former system. The second vector was external: the fall of the USSR caused a revision of security and

economic policies by members of the North Atlantic Treaty Organization. European members of NATO, which no longer faced the threat of the USSR to their security, began reforms in defense policy, which included reducing the size of armed forces as well as the size of their military budgets. At the same time, these countries tightened mechanisms and instruments of control over their respective militaries. The purpose, concept, and activity of NATO needed to be reconsidered in light of the changed global environment. In the economic sphere, these states began to promote the principles and values of democracy and market economics in former Warsaw Pact states first, and then later in CIS countries, with the aim to create a "belt of security".

The creation of new states demanded the creation of national armies in most of these states. The national army guaranteed the independence of the state, but a lack of financial resources, staff, and superficial democratic reforms could not fundamentally change the image of the new military forces with deep roots in their Soviet past. The Armed Forces of all CIS countries were built on the model of the Soviet army. In the middle of ninetieths the defense representatives of European countries, United States, and also NATO, through the "Partnership for Peace" program, actively joined the process of military reforms. These Western states and IOs participated not only in reforming post-Soviet militaries, but also encouraged reforms of a political character. For example, the West assisted in creating democratic systems of control over the armed forces in Eastern and Central Europe. The Baltic States reduced the gap in civil-military relations most successfully. The CIS countries like Ukraine, Moldova and Russia are also promoting reforms in the security sector, though with more difficulty. The Central Asian countries have faced the most pronounced difficulties in asserting democratic control over their militaries because of various problems which these complex reforms have faced.

This paper considers the possibility of civilian control over military forces as one of the components of democratic reforms conducted in Kyrgyzstan. The paper investigates the following issues:

1. The fundamentals of the theory of democratic control over military forces in the contemporary world;
2. The level of democratic control over the Armed Forces of Kyrgyzstan;
3. Barriers to introducing civilian control over the military in the Kyrgyz Republic.

## THE CONCEPT OF DEMOCRATIC CONTROL OVER MILITARY FORCES

Plato, in Ancient Greece, philosophers of Roman Empire, Alexis de Tocqueville, Machiavelli and Thomas Hobbes all asked themselves the question: "Who guards the guard?" This question implies who controls the armed forces, which are the instrument to defend a state, but at the same time can be an instrument of political groups within the state to achieve their own narrow interests. The question remains important today. World history is replete with examples of armies that were instruments of revolution or coups d'etat, like the

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1917 revolution in Russia where the soldiers and sailors played an important role. Some countries have experienced multiple or even "serial" coups d'état by their respective militaries, including the neighbors of Central Asia – Turkey and Pakistan. At the present time and in the context of Central Asia, the question of "Who guards the guards?" can be restated as follows – "How is it possible to institutionalize civil-military relations so that militaries have the ability to defend society but without threatening that same society?" (Born H., K. Haltiner and M. Malesic 2001).

Today the concept of democratic control over the military means civilian control of military forces, political control, and more generic concepts such as civil-military relations.\*\*\* Simon Lunn\*\*\*\* precisely explained the concept of democratic control. In the article "The Democratic Control of Armed Forces in Principle and Practice," Lunn argued the expression "democratic control of armed forces" is "generally understood as the subordination of the armed forces to those democratically elected to take charge of the country's affairs. In its fullest sense it means that all decisions regarding the defense of the country – the organization, deployment and use of armed forces, the setting of military priorities and requirements and the allocation of the necessary resources – are taken by democratic leadership and scrutinized by legislature in order to ensure popular support and legitimacy. The ultimate aim being to ensure that armed forces serve the societies they protect and that military policies and capabilities are consistent with political objectives and economic resources" (Lunn 2003). Thus, democratic control of the armed forces must be seen as an essential part of and, indeed, reflection of, the broader relationship between the armed forces and societies they protect.

Scholars note the main features of democratic control, which are at the same time its objectives. In greater detail, they are:

1. The establishment of close relations between civil society and democratic institutes on the one hand, and the army on the other hand;
2. A moderate "politization" and "civilization" of the military achieved by attracting civilian personnel to the military for higher and consultative positions;
3. A rational interaction between politics and military strategy;
4. An increase of the peace-keeping potential of the state;
5. Ensuring a balance between military security and the economic potential of state, and also changing the military structure by dividing authority between the General Staff – which will be responsible for management of the Armed Forces, and the Ministry of Defense – which will define the common development of the Armed Forces. In most liberal democracies, the defense structure is managed by elected politicians, who have as counselors a number of qualified civilians (state employees – officials, councilors, etc.)

\* Under civil control is understood the formal legal accountability of a military organization to a non-military civilian.

\*\* Political control means that armed forces should be accountable to each of the main branches of power.

\*\*\* Civil – Military relations means the relationship in any given country between civilians and military personnel from personal to the political, from the individual to the institutional levels.

\*\*\*\* Simon Lunn, Secretary General, NATO Parliamentary Assembly.

working together with military leaders implementing the objectives of military planning and coordination. The civilian personnel must participate in administrative control, direction, and decision-making on important military-political issues. The presence of civilians helps to ensure that the military executes government orders (Born 2003).

The objects of democratic control over the security sector focus on the armed forces; other state military organizations such as border services, customs services, internal forces, civil defense forces; law-enforcement bodies; secret and intelligence organizations; and, private security and military services like mercenaries, private security structures or private military structures. The military units and regiments structurally belonging to Ministry of Defense, military ideology and military doctrine, military planning; selection and arrangement of staff; and, the military budget, should all be under democratic control.

One of the basic principles of democracy is a division of power within society. A democratic state typically has three branches of power: the executive, the legislative, and the judicial. Accordingly, the main institutions of control over military forces are, according to Hans Born, Carl Haltiner, Marjan Malesic of the Geneva Center for Democratic Control of Armed Forces\*, these three branches of government, as well as the democratic institutions present in civil society. Each branch has its own functions and scope of control (Born H., K. Haltiner and M. Malesic 2001).

1. The Executive exercises direct control over the military from central, regional, or even local levels of Government, as well as determining the budget, general guidelines, and priorities of the military's activities;
2. The Legislature exercises parliamentary oversight by passing laws that define and regulate the military and by adopting the corresponding budgetary appropriations. Such oversight may also include establishing a Parliamentary Ombudsman or a commission that may launch investigations into complaints by the public;
3. The Judiciary both monitors the security sector and prosecutes the wrongdoings of servicemen through civil and criminal proceedings whenever necessary (Born 2001).

Modern research on democratic controls over the military is represented in significant part by two classical schools. Morris Janowitz, a military sociologist typifies the first school and examines civil-military relations from a sociological point of view. He argues civilianization of the military occurs due to technological changes in modern armament. The second school is that of Samuel Huntington who sets forth three models of democratic interaction with the military. In the first model, "objectivism" stands for army professionalization and minimal interference of civil society. Today this model is embodied in the US military forces. In the second model, civilians leading to a weakening of the

\* Geneva Center for Democratic Control of Armed Forces (DCAF) established in October 2000 on the initiative of the Swiss government, the DCAF encourages and supports States and non-State governed institutions in their efforts to strengthen democratic and civilian control of the armed and security forces, and promotes security sector reforms in accordance with democratic standards. [http://www.dcaf.ch/news/thisweek\\_index.html](http://www.dcaf.ch/news/thisweek_index.html)

army and its capabilities identify "subjectivism" as interference and control. In the third model, "Praetorianism" implies a situation whereby the military interferes in politics to such an extent that coups d'état by military circles sometimes result. In such a case, the options vary between overthrows of existing civil government, or in a more successful concourse of circumstances, the military interferes in important political decision-making, even in nonmilitary spheres, remaining in the shadows (Huntington 1957). In the case of Praetorianism, scholar of civil control Amos Pearlmuter says that the "military authoritarian regime can consist of civilians and army officers and be headed by civilians who even do not have military skills" (Maior and Huluban 2002). Praetorianism has two other important features: first, it provides weak civil political institutions in society and second, it provides great autonomy for, S.Fainer and others do research in the sphere of democratic control militaries.

Besides these classical schools, the Geneva Center of Democratic Control over Armed forces, Hans Born, D.Bland, A.Pearlmuter. Country models are presented by the German model "civilian in uniform", the Swiss model "army-nation," and others.

### KYRGYZ REPUBLIC MILITARY FORCES AND DEMOCRATIC CONTROL OF ARMED FORCES

The military forces of the Kyrgyz Republic were formed in 1992 by a Decree of the President of the Kyrgyz Republic on the basis of military units billeted in the times of the USSR.

The armed forces are designed to fulfill the following functions:

1. Defense of independence, sovereignty and territorial integrity of state and its citizens;
2. International peace-keeping missions for strengthening peace;
3. Disaster relief;
4. Maintenance of internal security (assistance to law-enforcement bodies in keeping order); and,
5. Participation in nation formation (social function).

TABLE 1. KYRGYZ REPUBLIC MILITARY FORCES

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1. Land forces units number 8,500 and include a motorized rifle division, 2 independent mountain motorized rifle brigades, 1 air defense brigade, 1 antiaircraft regiment, 3 Special Forces battalions. Their equipment includes 215 tanks (T-72), 417 armored fighting vehicles (BRDM, BMP-1, and BMP-2), and 63 armored personal carriers (BTR-70, BTR-80).
  2. Air forces and air defense units include fighter attack, transport and helicopter regiments with 2,400 men. The weapons include: 52 combat aircrafts (MiG-21, L-39), and 9 attack helicopters (Mi-24).
  3. The defense budget of Kyrgyzstan in 2003 was 24.0 million dollars (in 2002 21.7m)
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Source: *The Military Balance 2003/2004*. Oxford: Oxford University press. P.139, p.288.

The basic principles of the modern Kyrgyz army are set forth in the Military Doctrine of State for the transition period up to 2010. The Doctrine underlines such principles of democratic control as obedience to the Kyrgyz Republic's legislation; a recognition of state control over military structures; compliance with the mandated organizational structure as well as combat and numerical composition, with the objective of ensuring both the military security and economic potential of the state.

In practice, up to 2002 the armed forces did not have a conceptual or doctrinal basis that was directed to their efficient functioning. The well-known Batken events 1999-2000 were one of the primary reasons for reform of the defense system and underlying military strategy. However, Kyrgyz Military Doctrine (Security Council of the Kyrgyz Republic 2002) does not stipulate a particular strategy of military planning and reform. Rather, Kyrgyz Military Doctrine is of more declarative character rather than practical and does not touch many aspects of rebuilding the military. One of the problems for democratic control over the armed forces of the Kyrgyz Republic is the absence of civilian experts at the level of military-political decision-making in the army. Civilian experts, according to the article 13 "Armed forces and their destination" of the Law "On Defense of the Kyrgyz Republic," are responsible for production, economics, and other decisions (Parliament of the Kyrgyz Republic 1994). Yet, in the Ministry of Defense, the officials making important military-political decisions are trained primarily as military officers. For example, the Minister of Defense is General E. Topoev, a military-trained officer, and his deputies are also similarly trained officers ranking from colonel to Lieutenant General.

One of the conditions of democratic control is a division of functions between the Ministry of Defense and the General Staff. The Ministry of Defense headed by a civilian minister should solve management problems.

The General Staff consists of select higher-ranking officers. In peace-time and in war-time, this leading military body coordinates building and developing the Armed Forces; plans for their operative, combat and mobilization training and organizes and implements operative planning for the use of the Armed Forces. It is important here to note that generals with higher positions in the Ministry are also affiliated with the General Staff. This results in a situation where the same group of people makes decisions in the main General Staff as well as in the Ministry of Defense. Yet, according to the functions and tasks of two administrative bodies, the Ministry of Defense has more powers than the General Staff.

TABLE 2. TASKS OF MINISTRY OF DEFENSE OF THE KYRGYZ REPUBLIC

- A. Implements policy in the field of building the Armed forces of the Kyrgyz Republic in accordance with decisions of higher bodies of state authority of the Kyrgyz Republic;
- B. Produces proposals for the defense budget and presents them to the Government of the Kyrgyz Republic;
- C. Implements operative management of military forces for the Kyrgyz Republic;
- D. Organizes operative preparation of headquarters and troops;
- E. Cooperates with military agencies of other states;
- F. Makes proposals to the Government on the use of Armed Forces in support of the socio economic development of the Kyrgyz Republic.

Source: Parliament of the Kyrgyz Republic. Law On Defense of Kyrgyz Republic. April 13, 1994. Parliament of the Kyrgyz Republic. Constitution of Kyrgyz Republic. 12<sup>th</sup> sess. December 24, 2001.

Democratic control over military forces in the Kyrgyz Republic has made some progress, but unfortunately, it has secondary importance (at best) in the process of military reforms. It seems military and economic efficiency as well as traditional notions of organizational nepotism take precedence over democratic control of the military.

Some aspects of civil-military relations are found in the Constitution of the Kyrgyz Republic. In the Kyrgyz Republic a member of the military is not allowed to be a member of political parties and it is forbidden to use military forces for the resolution of intrastate political disputes. As mentioned above in the theory of democratic control, control of the armed forces is ideally performed by legislative power represented through Parliament, executive power in the person of President, and judicial power through the courts. Each of these branches of government is to exercise partial control over the Armed Forces, in compliance with its functions and authorities. In the Kyrgyz Republic, however, as in many other post-Soviet countries, the President is the key figure, typically having a wide scope of power. Thus, to be accurate, the institution of the presidency should be distinguished as a separate body of control over the Armed Forces. At present, the President of Kyrgyz Republic has the following authority (See Table 3.)

While the President defines the operational character of the armed forces, the broader executive branch has the authority to deal with the military's day-to-day maintenance functions. The Government solves important problems regarding building the armed forces and their reform. The Government has important mechanisms and instruments of control. For example, the Government can make corrections in the budget project submitted by the Ministry of Defense. The Government also provides manpower for the military. In this regard, local self-governments and local state administrations are also

TABLE 3. THE PRESIDENT OF THE KYRGYZ REPUBLIC

- A. Is the chief commander of Armed Forces and the chairman of Defense Council of the Kyrgyz Republic;
- B. Approves plans for building and using the Armed Forces of the Kyrgyz Republic;
- C. Appoints the Minister of Defense consulting with the Prime Minister, the former has personal responsibility for his activity in front of President and Government;
- D. Appoints and replaces the higher command of the Armed Forces of the Kyrgyz Republic;
- E. Approves the composition, structure and number of the Armed Forces of the Kyrgyz Republic;
- F. Conducts negotiations and signs international treaties on joint defense and military cooperation, collective security, and disarmament issues;
- G. Declares a state of war, as well as any general or partial mobilization; and,
- H. Orders the Armed Forces to conduct military acts;

Source: Parliament of the Kyrgyz Republic. Law On Defense of Kyrgyz Republic. April 13, 1994. Parliament of the Kyrgyz Republic. Constitution of Kyrgyz Republic. 12<sup>th</sup> sess. December 24, 2001.

TABLE 4. EXECUTIVE OR GOVERNMENT POWER

- A. Has a responsibility for maintaining the state of the Armed Forces of the Kyrgyz Republic
- B. Makes proposals to the Jogorku Kenesh on projected defense budgets;
- C. Organizes equipment for the Armed forces;
- D. Prepares proposals to the President on the contingent of citizens to be recruited to military service;
- E. Fulfills the obligations indicated in international treaties on defense issues;
- F. Approves the Regulation on the Ministry of Defense;
- G. Establishes privileges for the civil staff of the Armed Forces;
- H. Establishes procedures of transfer, giving for rent, sale and liquidation of armament and military equipment, defense objects and other military assets;
- I. Organizes control over export of armament and military equipment, strategic materials, advanced technologies;
- J. Conducts international negotiations on military issues, defines measures for strengthening trust between states and mutual reduction of military danger levels, creation of collective security.

Source: Parliament of the Kyrgyz Republic. Law On Defense of Kyrgyz Republic. April 13, 1994. Parliament of the Kyrgyz Republic. Constitution of Kyrgyz Republic. 12<sup>th</sup> sess. December 24, 2001.

The role of Government is especially important as it conducts negotiations on strengthening confidence between states in the military sphere and also participation of the Kyrgyz Armed Forces in joint exercises and military cooperation. Democratic control is strengthened through joint exercises; units from different countries exchange experiences and after units from different

Armed Forces and the ombudsman for the rights of militaries (soldiers and military officers) play significant roles in Parliament's control over the military. Parliaments typically possess mechanisms and instruments for controlling the military, with the approval of budget as perhaps the most important of these instruments. In the structure of the Parliament of the Kyrgyz Republic, the

military policy formation mechanism that provides state control of adoption and execution of military-political decisions as well as state oversight armed forces." (Security Council 2002).

#### **PROBLEMS OF CIVILIAN CONTROL OVER ARMED FORCES IN THE KYRGYZ REPUBLIC**

in bigger cities. However, in the countryside and small towns where many conscripts are from, these principles are unknown and are not spread especially with respect to protection of rights and freedoms of man. The problem is the same with military officers, as Soviet military schools and military traditions continue to have a rather rigid hold even today. Therefore, democratic values are not the values of all the military personnel.

5. Problems of specialization. The lack of specialists in the sphere of civil-military relations is an obstacle for political control over the military and prevents the proper functioning of civilian control at the executive, legislative, and judicial levels.
6. Problems of understanding. Finally, and fundamentally, the concept of civilian control is simply foreign to the Kyrgyz military. The very concept of democratic control over the Armed Forces of the Kyrgyz Republic is absent from the country's history and culture. Although the Military Doctrine stipulates it, there is no precise control strategy for indoctrinating the concept, and indeed the military appears hostile to notions of civilian control.

The state is not currently organized, either practically or legally, to build civilian control over the military. Without solving the problem of this category, the effectiveness of democratic control is questionable. Problems of this sort are apparent in Kyrgyz society today:

1. One problem is the lack of a professional civilian staff to appoint to higher positions within the Ministry of Defense, and also the lack of any educational base for preparation of such specialists. Appointment of civilians to higher positions may cause, on the one hand, a problem of insufficient competence of civilians in military sphere; on the other hand, it is possible that military personnel may simply refuse to recognize civilians.
2. A second problem is related to the possibility of military interference in the elections process. During presidential or parliamentary elections, military personnel can promote their candidates for Presidency or deputies in Parliament. This may quickly reverse whatever other gains were made in asserting civilian control over the military.
3. The third problem is a lack of balance while implementing democratic control between branches of government. The executive branch has a wider range of instruments of control as opposed to the Parliament. Establishing a true balance between the branches of government would result in more successful implementation of control, for instance, through transfer of certain controlling functions to the Parliamentary Committee for defense issues or setting a Committee for Parliamentary control over Armed Forces in the framework of Parliament.

Almost all the armies of post-Soviet countries have faced social problems. However, the lack of civilian control results in disobedience by military forces to civil authorities. Many of history's coups d'état occurred during times of economic crisis. The Turkish experience in 1960's is an apt example. Today in Kyrgyzstan the problem of social and legal insurance of militaries is critical. The primary social problems of military personnel include: the lack of state-owned

housing or any system of crediting military personnel to obtain housing; low wages; and, low pensions. Often these problems lead to other social "diseases" such as corruption in military forces, and violations of rights by military personnel with higher ranks or positions.

## ARMED FORCES OF THE KYRGYZ REPUBLIC IN THE EVENTS OF 24 MARCH

The events of 24 March marked a turning point in the history of contemporary Kyrgyz Republic. Debate continues with regard to the meaning of these events. Were the events of 24 March a national revolution or a planned coup d'état? If one labels these events a coup d'état, then according to the Constitution of the Kyrgyz Republic, the Armed Forces were obliged to defend the constitutional regime of state. The cause of the events can be traced back to recent parliamentary elections, during which significant violations of democratic principles occurred. The events most proximately leading to 24 March actually began the previous week. Beginning on 17 March, spontaneous protest actions swept through the south and north of the country. On 18 March protestors in the city of Osh, referred to as Kyrgyzstan's southern capital, surged into the building of province administration. Insurgents appealed to power structures urging them not to use force. Women-protestors went ahead of other protestors and the soldiers and police simply stepped aside. Following seizure of the building soldiers and police encircled the building. There were around 400 protestors inside, whereas the number of soldiers and representatives of law-enforcement bodies was more than 1500. On 19 March in another southern town of Jalalabad a crowd took over the local airport, the headquarters of the Province Department of Internal Affairs, and the local province administration headquarters. On the next day an unknown military or paramilitary unit assaulted the building of the province administration. Some protestors were beaten up, and then the assaulting unit withdrew from the town. According to some people, the unit had arrived from the capital city.\* However, local soldiers and officers stationed in Jalalabad did not put up strong resistance to protestors and later came over to the side of protestors. These local soldiers were in the headquarters of the Province Department of Internal Affairs, but received no orders from Bishkek. Local police and internal troops also gradually came over to the side of protestors\*\*.

On 24 March events in Bishkek began to develop in the morning when people started to head over to the main square from every corner of the city. In the afternoon when the crowd surged into the White House, the soldiers of the National Guard and Internal Troops did not put up any resistance and did not use any weapons. Meantime, Commander of the National Guard A. Chotbaev, Minister of Defense E. Topoev, Head of the Department for Security, Law-

\* The DIA building burned to the ground and the airport has been taken over in Jalalabad. Public\_Rating. March 20, 2005. <http://pr.kg/news2005/050320allinformationfromprkginf.php>

\*\* Power structures have come to the side of protestors in Jalalabad. Public\_Rating. March 20, 2005. <http://pr.kg/news2005/050320allinformationfromprkginf.php>

Enforcement Bodies and Defense under the presidential administration B. Januzakov, and President's Press Secretary, were in the White House. A crowd of insurgents beat them up. The same day Felix Kulov, a major political opponent of President Akaev, was released from jail. Toward the evening of 24 March opposition leaders gathered in the White House. Many of them were surprised by the outcome of the day's events. Consequently, the so-called Interim Government formed by opposition was unable to mobilize itself to administer state affairs and stop growing political crisis in the country. The formation of the Parliament was not finalized. Moreover, many of the parliamentarians had just been elected for the first time and did not have experience. Also, court examinations on falsification cases during parliamentary elections were still in process. The Prime Minister was the figurehead of the executive branch of power. The whole executive branch was subordinate to the President. This provoked a crisis in the executive branch. In the absence of a President the executive branch fell apart. The collapse of the executive branch demoralized the regimes remaining power structures, most significantly, the Ministry of Interior Affairs and the National Security Service. The political crisis led to collapse of power. The army did not know who the Commander-in-Chief and the Minister of Defense were. During the course of 24 March, the armed forces did not interfere in internal policy. There was no attempt to seize power or engage in a coup d'état on the part of the military. The military could have easily taken power at this point. Instead, throughout the day the incumbent Minister of Defense Ismail Iskakov, a former opposition figure, "regularly met with officers of power structures and persuaded them not to stand against their own people" (Isakov 2005). The armed forces remained neutral and in doing so played an important role in the events.

In the aftermath of 24 March, the armed forces remain too weak to claim political power. Kyrgyzstan does not have a politically coherent officer staff, which could lay claim to political power. Another positive factor was that former President Akaev did not order the troops into streets. Otherwise, there could have been significant bloodshed and human losses. Had Akaev ordered the troops into the streets, the situation in Kyrgyzstan might have more closely resembled that which followed a few months later in Uzbekistan. Alternatively, the Armed Forces themselves might have revolted against Akaev, which would have politicized the military. One of the protests of 24 March tells us a great deal about the military and the possibility of violent suppression during this period of instability. This particular protest occurred near the Medical Center of Nazaraliev, which is on intersection of Chui Avenue and Fuchika Street. K. Duishebaev, who was appointed Minister of Interior Affairs the day before the events, came to the place where the protest was being held. He made an appeal to protestors saying that their action was illegal and demanded them to break up. The protestors rejected his appeal. After a while, on Molodaya Gvardiya Avenue next to the National TV and Radio Company armored troop carriers were sighted moving towards the city center. By that time, several

military helicopters were also flying over Bishkek\*. This tells us about the army that was becoming active. Furthermore, during this period the armed guard around the White House was strengthened with additional soldiers from the National Guard. However, following fall of the White House soldiers were sent to quarters. In the course of following days the armed forces were involved only in ensuring public order, not suppressing the protestors. Abdygul Chotbaev, Commander of the National Guard and at the same time Deputy of the City Council, undertook an obligation to patrol and control situation in the center of the city. On his initiative and on the initiative of other deputies of the City Council, forces of the National Guard and the City Department of the Ministry of Interior Affairs patrolled the capital city evenings and nights because of the difficult security situation. Every day around 200 soldiers of the National Guard were on service in Pervomai District trying to ensure public order. It is worth noting that the armed forces patrolled streets without weapons in order not to exacerbate the situation. Also, the National Guard protected cultural and other monuments in the capital city of Bishkek, which was reported to Interfax by a source in power structure. It was also reported that big gas stations were guarded by soldiers of the National Guard to prevent their possible burning.\*

The situation in Bishkek deteriorated due to unauthorized land seizures by newcomers from the periphery of the country. The squatters seized agricultural and other land. In order to prevent the construction of houses and further land seizures, the Acting Minister of Internal Affairs Myktybek Abdyldaev said "If necessary, units of the Ministry of Defense will be involved in guarding public order in Bishkek". "Due to the recent events derived from unauthorized land seizure, intensive patrols have been introduced in Bishkek and its suburbs," said the Acting Minister of Internal Affairs\*\*. Later the situation was settled by the Department of the Internal Affairs of Bishkek.

In sum, the involvement of the army in recent events was minimal. Before the seizure of the White House the army demonstrated some activity probably by order of the White House. However, later on the army took a neutral position. On balance, it appears that during the uprising the army was controlled by civil population, not by the political leadership of the country.

## CONCLUSION AND SUGGESTIONS

The modern Kyrgyz Armed Forces are young and are in the stage of building. Today, it is important to build military forces along with building a system of civilian control that provides oversight of the Armed Forces by state bodies as well as civil society. Kyrgyzstan will be able to answer the question of ancient philosophers "Who guards the guards?" through the control by these two institutions. From the time of independence Kyrgyzstan created the legal

\* On Molodaya Gvardiya Avenue, next to the National TV and Radio Company armored troop carriers were noted. Public Rating. March 24, 2005. <http://www.pr.kg>

\*\* Armed forces were brought in the capital of Kyrgyzstan. Public Rating. March 26, 2005. <http://www.pr.kg>

\*\* If necessary, the military can ensure law and order in Bishkek, Acting Minister of Internal Affairs of Kyrgyzstan. Public Rating. April 15, 2005. <http://www.pr.kg>



framework but this framework was often not implemented in practice or is today outdated. The system today is in need of an amended legal framework and the political will to implement this framework. Probably the best option would be to establish a separate bloc of laws for military forces, which would include provisions regulating military reforms. This bloc of laws could contain the concept of civilian control over military forces with precise authorities and a clear chain of command in all the branches of government. Additionally, this set of laws should include mechanisms and instruments that make constant oversight of Armed Forces possible. The other question requiring special attention is the creation of a system to prepare the civilian staff to be appointed to higher positions in the Ministry of Defense and parliamentary councilors within the military sphere for work in parliamentary commissions.

An important component of civilian control over the Armed Forces is strengthening civil-military relations between civil society, political parties, and the army. Cooperation between the civil sector and the army can be established at the level of protection of rights and freedoms of military personnel, especially of first year compulsory conscripts. The role of the civil sector is broad. It has to disseminate democratic values and principles throughout the army and beyond so that they become the values of the whole society. This cooperation will also remove the question of military involvement in the elections process. As mentioned above, military personnel are not allowed to create or join any political parties. But social problems create incentives for military personnel to go on strikes, to engage in hunger strikes, and to conduct other activities to protect their rights. Here, two extreme points are observed: the army possesses arms and could create a coup d'état and provide itself with all the social welfare. At the same time, it is restricted only by legal frameworks and by executing these laws it is doomed to a miserable existence. Civil society represented by NGOs, the mass media, and other institutions must therefore act to protect social rights of military personnel. Otherwise, the incentives for a military seizure of power become overwhelming.

Resolution of this and other problems will make it possible to form an effective system of civil and political control over military forces, grounded in democratic values and principles. The formation of democratic control over the Armed Forces will have to be part of that complex of reforms implemented in the country and become one of the core principles to build the military forces of Kyrgyz Republic.

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# CORPORATE GOVERNANCE IN UZBEKISTAN: INSTRUMENTS OF CORPORATE CONTROL

OLEG LENSKI\*

*Important issues of transition to market and domestic development have combined to bring the corporate governance debate to the fore in Uzbekistan. Given the increasing interest in corporate governance and significance of Uzbekistan as an emerging market, this thesis outlines the Uzbek corporate governance framework by providing overview of main corporate control instruments in Uzbekistan. The paper begins with a review, covering the modern corporate governance debate related to corporate control instruments discussion. The account on the corporate governance environment is provided further, within which the Uzbek corporate control instruments debate is unfolding and aspects of privatization, competition, and shadow economy are addressed. This is followed by examination of corporate control instruments per se, including large shareholders, Disclosure practice, Associations, Boards of Directors and Banks as corporate control mechanisms. Finally, a summary of the main findings and some recommendations are offered in the conclusion.*

*The paper is designed to bring an understanding of Uzbekistan's corporate governance in the global context of emerging market development.*

## КОРПОРАТИВНОЕ УПРАВЛЕНИЕ В УЗБЕКИСТАНЕ: ИНСТРУМЕНТЫ КОРПОРАТИВНОГО КОНТРОЛЯ

ОЛЕГ ЛЕНСКИЙ

Переход Узбекистана к рынку обусловил необходимость кардинальных перемен во всех сферах национальной экономики, связанных в том числе с преобразованием предприятий государственности в корпорации.

represents one of the most important ways by which this problem is handled. As a concept, it has acquired unprecedented significance in the global debate on the issues of productivity and competitiveness. Also, in recent years, corporate governance augmented by transition to market economy of a large block of the countries in Eastern Europe and Commonwealth of Independent States (CIS). Uzbekistan, being one of these countries, is not an exception in the discussion of corporate governance. This issue is increasingly important, as the corporate performance enhancement becomes a vital concern.

Different countries solve the problem of corporate control in different ways. Such diverse elements of economy as financial system, privatization, corporate ownership structures, competition or other vital issues regarding economic performance appear to be vital to corporate governance. The objective of the paper is therefore to present an overview of corporate control instruments used in Uzbekistan and elucidate the most effective monitors out of them. For this purpose, we shall outline the main features of corporate governance framework. This will be done in order to find out what prerequisites are required for certain set of instruments to be used in a certain country. Then, in the five consequent sections, the instruments themselves will be examined:

- large shareholders (concentrated ownership);
- disclosure practice and shareholders protection;
- associations;
- Boards of Directors;
- banks.

Two approaches are taken into account in definition what is included to

instrument, through which "suppliers of finance to corporations assure themselves of getting a return on their investment".

This was called an *agency approach*. Vives outlined the main instruments of this approach in the following manner (2000, 4-9):

- provision of incentives. While the investor may be reluctant to put the funds in the venture because of moral hazard, the incentives are to encourage the manager to follow the investor's will. The incentives can be monetary in character (any type of compensation or cost reduction) or may refer to rewards and punishments with regard to manager's own career (promotion, dismissal);
- monitoring and control. The shareholder can impose passive control (exit), or active, through the Board of Directors. The power of the Board to dismiss may stop the manager from wrongdoing;
- large shareholders and creditors. When ownership is concentrated, the one possessing the majority of the stake takes more care in the firm's affairs;
- market for corporate control, represented largely by hostile takeovers. This is also an important source of constraints for bad management;
- legal protection. The legal mechanisms of investors' protection are essential (Shleifer and Vishny 1996, 5). The rights of shareholders are defended by Organisation for Economic Co-operation and Development (OECD) accords and various local laws.

Corporate governance is thus viewed by the agency approach as a set of rules and practices aimed to minimizing the agency cost for the shareholders, who are considered to be central figures in the debate.

An empirical data and academic debate criticized and complemented the standard agency approach. The essence of the critique was that agency approach failed to find evidence on how corporate governance constitutes economic growth apart from maximizing the shareholders value (Vives 2000, 9-10).

Modern theory suggests that corporation is an institutional arrangement for governing the relationships among the participants. Corporation includes not the shareholders only, but other people involved: employees, customers, and suppliers. These people, commonly named stakeholders, have their right in possessing the part of the value, produced by them. Since the task of a manager is to make the most of the value, created by the company, he/she then ought to take into account the welfare of all the stakeholders of the firm (Blair 1995, 14). This theory is sometimes referred to as *evolutionary approach*.

The notion of stakeholders as having equal rights in utilizing wealth formed by the firm provoked a further discussion. As a logical continuation of this, the question of stakeholders' involvement in corporate governance process arose. It was first inspired by Porter (1980), who wrote about encouragement of "dedicated capital" and stakeholders' direct participation in governance, implying that this would produce a cohort of "dedicated owners", crucial for corporate development (Blair 1995, 142).

The involvement of stakeholders is usually made by the virtue of representation. Representation in the wide sense is participation of employees (other than shareholders) in decision – making process.

Another key concept of this approach is competition as a major driving force behind the corporate governance. It is found, that in real economy the decisions, taken by the managers, are compliant with the aspirations of owners not because of Board of Directors monitoring or threat of takeover, but because of dynamic competition forces (Allen and Gale 2000a, 78).

The notion of competition as one of the major incentives brought the corporate governance into the context of overall economic structure (Mayer 1998, 236). An aspect of allocative and productive efficiency provided a linkage with a greater scope of economic and social issues (Aoki 1994, 19), including privatization, external financing and cultural dimension.

This very concept of competition instigated the issues of accountability, transparency, and reliability and prompted the corporate governance codes origination.

As a result, the evolutionary approach introduced the additional instruments:

- stakeholders' representation. This can take the forms of trade unions having vote in shareholders meetings, or having workers' delegate in the Board;
- disclosure practice, including introduction of Corporate Governance Codes, accountability and transparency;
- competition.

The evolutionary approach has, as a result, broadened corporate governance definition. Apart from increasing the shareholder's value and minimizing the agency cost, it concentrated on the notion of stakeholders' representation and competition as a driving force of corporate governance. It also envisaged the developing of corporate governance codes through raising issues of transparency and accountability.

Thus, summarizing the differences between two approaches:

- agency approach – Corporate Governance in the sense of corporate control, imposed by shareholders aiming at increasing the shareholder's value;
- evolutionary approach – Corporate Governance in the sense of institutional arrangements, imposed by shareholders and stakeholders aiming at improving performance and increasing the shareholders' and stakeholders value.

Together these two approaches represent the basis for our discussion on corporate governance instruments. They are used for imposing control over production and make sense of economic growth. This is true for every country that is trying to implement sound corporate governance. The Government of Uzbekistan, striving to stimulate the economic growth, introduced a number of reforms. Throughout the 90-s and early 2000-s, these reforms were implemented with different degree of success. In the next paragraph we shall summarize the

main results of that policy, relevant to the discussion of corporate control instruments.

## UZBEKISTAN: CORPORATE GOVERNANCE ENVIRONMENT

The application of corporate governance framework to any of newly emerged economies bears unprecedented features. Imposing the corporate control instruments implies the maturity of corporate governance institutions that is corporations, shareholders and stakeholders. The development of these institutions is on the reform agenda of all countries in transition, with proven track of difficulties (World Bank 2002, 23). The progress of development differs from country to country.

Therefore the goal of this section will be to present a comprehensive review of Uzbekistan's corporate governance framework in terms of political, social and economic patterns of development. The objective is to understand the underlying forces that drive the development of corporate control instruments in Uzbekistan with special emphasis on privatization.

Given an unexpected sharp economy decline after the disintegration of the Soviet Union, political and social stability became the priorities of Uzbekistan's policy. Following critical consideration of transitional experience in other CIS and Eastern European countries Uzbekistan has adopted a gradual and cautious approach in its transition to market economy.

There were certain reasons underlining the great attention paid to social consideration. In a country of 25 million people (more than 60% living in rural areas) with substantial number of them below poverty level (International Monetary Fund and World Bank 2004, 7), the social cost of transformation can be very high. In order to prevent this and avoid any possible danger of instability, the Government tried to soften the consequences of market reforms to the population. In practice, it helped to keep the shaken industry afloat for the sake of people who worked there, maintaining the domestic prices at affordable level despite high inflation. These measures had an adverse effect as well, since subverting the natural process of bankruptcy and renovation withheld the wages decompressing and in fact just delayed the social cost.

In these circumstances, the gradual transition to free market proved to be rather slow. A large portion of the economy still remains in state hands. According to Wright et al. (1997, 213), there are three components of successful privatization: being speed, accountability and efficiency. While recognizing the need of rapid and transparent process of private property formation, the Uzbek Government emphasized enterprises' efficiency, which made privatization slower than in other transitional economies. According to the Law on Privatization and Denationalization (1991), the companies are to be sold either through the public auction or incorporation. Thereby, the Uzbek Government took the two-fold approach:

- conventional "buy-outs" approach, as opposed to more socially fair but less efficient "give-away" privatization (Wright et al. 1997, 216);
- insider approach, i.e. creation of holding-style system of corporations through equity issues subscribed by management and employees, but essentially with blocking (more than 25%) share belonging to the Government (very often 51% or above).

The underlying rationale for this approach was the emphasized significance of "strategic investments". Such an owner would pay more attention to the increasing of productivity and welfare in his firm (Taksanov 2003). In the second instance, that was a move to prevent a decapitalization of the enterprises during the privatization process (Boeri and Perasso 1997).

While these requirements are justifiable from the social and macroeconomic point of view, they often imposed conditions on privatizations that made real investment unviable. The sale conditions might include not changing the profile of the factory, effectively condemning the buyer to continue the same unprofitable lines. Not surprisingly, interest in these factories was minimal and ambitious program for large state-owned enterprises privatization, launched in 1994, was slow and reluctant.

There are still crucial things on the country's to do list. Those include further private sector development and verifying the privatization mechanisms and incentives for competition, fighting the vested interests and improvement of foreign investments environment. This agenda will have a direct impact on formation and usage of corporate control mechanisms

### Privatization

The outcome of privatization was highly concentrated economy (International Crisis Group 2004a), mostly controlled by a small minority, with insignificant independent business class emerging. Obviously, the Government had small interest in the emergence of powerful oligarchs, and preferred to ensure that they are retained within the present political system, thus imposing large degree of control.

The employees' buyouts scheme is a matter of particular interest. There is considerable number of corporations with substantial workers' share (Pogrebnyak 1998, 29). Although it may seem socially just and potentially effective, the one has to take the following into account:

- employees' buyouts were not the free voucher schemes. In the latter the workers were considered as already contributed to company's value and thus having a legitimate claim of its share. Instead, the employees had to subscribe to their company IPO and to pay for the shares. In practice, they were given shares at the expense of their earnings and perks;
- substantial amount of IPO was not subscribed and redeemed consequently (ibid., 14);

- the evidence shows that managers manipulate the labor's stake in their own interests, the shareholders meetings are infrequent and nominal, and dividends are usually not paid.

Given these factors, it is of no surprise that little correlation was found between productivity and employees ownership (*ibid.*, 23). While the true purpose of such schemes is to stipulate efficient governance by incumbents (FitzRoy and Acs 1994, 85), akin to American ESOP (employees stock option plan), the stakeholders in Uzbekistan, similar to other transitional economies, found themselves restricted from decision-making by management dominated bodies (Wright et al. 1997, 217).

Recently, the Government took new bolder steps toward fostering the private sector by requiring State Property Committee to sell state shareholdings in corporations of 25% or less through the stock market in 2003-2004. As a result, 980 enterprises have been privatized in 2003 (Karimov 2004) and 966 in the 9 months of 2004 (Center for Effective Economic Policy 2004). The leading shareholders have also started to consolidate their stakes acquiring control through offshore companies (International Crisis Group 2004b).

Fostering a competitive environment is essential in the process of transformation and crucial for corporate performance. Improved business atmosphere is a core objective of the Uzbek authorities' economic reform program. The system Uzbekistan inherited from the Soviet Union was based on planned distribution of production to plants and factories according to the demand. The absence of competition, or "contestable" environment was an essential feature of socialism, which led to the existence of numerous "natural monopolies". As of 2000, there were 142 companies with such recognition, according to Uzbekistan Anti-Monopoly Committee. The list included postal service, oil extraction, coal mining, airport services, and other industries considered in most developed economies to no longer be natural monopolies.

Apart from supervision of the natural monopolies, the activity of the Anti-Monopoly committee is concentrated on enforcing sanctions on firms who engage in unfair competition, or regular "monopolies". The main instrument is the "Monopoly Register", which contains companies with market share of more than 65%, but, under certain conditions, even as few as 35%. Companies listed in the Register must agree their prices with the Committee and register their particular transactions (in cases with natural monopolies, the Committee sets the prices directly). There used to be as much as 716 enterprises in the Register as of the end of 1999 (Broadman 2002, 2); the number was reduced to 532 by the mid-2002, as required by the Memorandum of Economic and Financial Policies with IMF (Government of Uzbekistan 2002).

## Shadow economy influence

Shadow economy has a substantial share in the Uzbek national economy. Estimations vary from 30% (World Bank) to 50% (EBRD) of GDP (Djuraeva 2004, 3). The level of 40% is considered critical and the influence of shadow factors is felt throughout the economy (*ibid.*, 12).

It is important to understand what underlies the underground economic activity and why people choose the exit instead of voice option (Schneider and Enste 2000, 77). Among reasons, causing the existence of shadow economy, the institutional problems are recalled most often. They constitute excessive government control over basic economic activity compound with weak law enforcement, infringement of property rights and various constraints on business. According to evidence, collected by World Bank and other international organizations, it is easier and cheaper for entrepreneurs to get involved in informal activities, than to go through complicated documentation procedures, bureaucratic maze and deal with ambiguous legislation (Suhir 2004).

An excessive regulation creates another way into the shadow. In properly functioning market the shareholders must have incentives to monitor the performance of managers. It is argued that if the investors are liberated from restrictive regulations, they would become active monitors themselves (Coffee 1996). In Uzbekistan, however, poorly developed secondary stock market offers little help in monitoring, since companies' performance has limited impact on the shares value. For instance, if the stock market were the established and normally functioning institution, the information of company losses would affect shares performance and reduce yields. Since it is not, the manager has an incentive to show losses or zero profit on the balance sheet, rather than report profitability and be in position to pay taxes. A traditional free cash flow problem acquires another dimension here.

Large corporations also establish informal connections with regulating bodies. Connections help to get official decisions on procurement of public investment contracts, provisions of tax incentives, tender, etc. Strong reliance on the connections is supported by the phenomenon of clan networks, indigenous to Uzbekistan as well as to other developing countries with venerable patriarchal traditions. The members of clans are promoted by their fellows already taking high rank positions in their public or commercial service. The power structure is formed, which works toward benefits of the clan members. Lack of transparency in bureaucratic processes makes corrupted networks attractive.

The complicated clan-based power structures appear to profit from the distortions in the current economic system, and therefore resist reform. President Islam Karimov denounced the clan networks, calling them one of the main sources for corruption and major obstacle for democratisation (Karimov 1997, 128).

Why is the shadow economy important in the discussion of corporate governance? First of all (there is no 'secondly' further in the text), given its considerable size, it implies certain implicit rules over economy as a whole.

These rules are based on trust and family affairs, thus essentially lay the foundation for relationship-based economy. The rules, accepted either by the Uzbek Government or international practice, are not necessarily followed the shadow economy players. That is why unofficial means prevail and legal protection as a corporate control instrument is poorly developed and often ignored. Finally, the tight connection of new commercial elite with incumbent political leaders through clan-based network brought in the patterns of concentrated ownership, which is the common case for many transitional economies (World Bank 2002, xxiii).

The mechanism of bankruptcy as an exit option is used sparsely in Uzbekistan, especially in the case of large state enterprises (International Monetary Fund 2000), due to mentioned social policy constraints. The formation of feasible competitive environment per se is still on the way.

In this way, difficulties with laying foundation for truly market-based economy deprived country of sustainable competitive environment, crucial for development of corporate control mechanisms (Frydman et al. 1996, 325). In the following 5 sections we will discuss the particular instruments that become established in Uzbekistan, with different degree of success.

### **LARGE SHAREHOLDERS (CONCENTRATED OWNERSHIP)**

The issue of ownership is the central one in discussion about differences between socialism and capitalism as economic systems (Brada 1996, 67) and is of the utmost significance for the countries in transition. The concentrated ownership pattern, developed in Uzbekistan, in the terminology of Frank and Meyers (1997, 62) is characterized by: (1) few listed companies, (2) a large number of substantial stakes (ownership concentration) and (3) large inter-corporate shareholdings. Out of approximately 3,000 registered companies in Uzbekistan only 6 of them are listed in Tashkent stock exchange (Juraboev 2004, 7). The findings of Himmelberg et al. (2002) suggest that in insiders' system, shareholders tend to retain larger stocks, than they would under a perfect risk diversification environment.

There is a disagreement on whether the concentrated ownership is good or bad for corporate performance. Sufficient evidence shows that it decreases transparency, suppresses minority shareholders and potentially conducts to lower return on assets. Conversely, the great deal of authors speaks in favor of concentration, arguing that large shareholders do have incentives to monitor their companies' performance closely (FitzRoy et al. 1998, 364). While the latter is correct, it is also true that free cash flow problem, where a manager chooses to reinvest free cash rather than pay dividends, becomes further complicated with larger concentration (Tsipouri and Xanthakis 2004). The majority owners may expropriate the minority shareholders' returns by reinvesting in the firm, which is actually the way it is done in Uzbekistan (Dosti et al. 2003, 7).

In the case of inter-corporate shareholdings, Uzbekistan seems to be in a different position comparing to other transitional economies, notably Russia. This happened mainly for two reasons. Firstly, the Government still keeps major industries stocks under control, and even in privatized corporations the Government stake is often above 50% or a blocking share of 25% (Broadman 2002, 13). Secondly, the weak secondary stock market prevents from development of holding structures in Russian style or interlocking ownership akin to German model (Schilling 2001, 149). However, large shareholders, as said above, have connections with each other, often informally.

We conclude therefore that Uzbekistan has developed purely insider system of ownership, with the following consequences for Uzbekistan's corporate governance framework:

- lower funding through equity market;
- greater dependence on debt financing;
- greater shareholders concentration;
- greater involvement of owners in corporations management.

The evolving pattern of concentrated ownership thus envisages the "large shareholders" as an essential instrument for corporate control. It leaves a bunch of other instruments unemployed. In particular it diminishes the importance of monitoring and control by the Board of Directors and market for corporate control, since shares are not actively traded when shareholders are big.

### **DISCLOSURE PRACTICE AND SHAREHOLDERS' PROTECTION**

The legal mechanisms of investors' protection are crucial to any corporate governance framework (Shleifer and Vishny 1996, 5). The rights of shareholders are defined by OECD accords and various local laws. In Uzbekistan the fundamental document defining the shareholders' rights is The Law of the Republic of Uzbekistan on Joint-stock Companies and Shareholder's Rights Protection (1996, Article 88). According to this Law, the manager of the corporation acts for the benefit of shareholders, not any other persons' benefit.

Recently, the Government has taken measures to promote better shareholders protection. In January 2003 the Cabinet of Ministers issued the Decree on measures to radically increase the share and significance of the private sector in the Uzbek economy that incorporates the removal of the preferential powers of state trustees to veto supervisory board decisions. Since corporate governance is about the definition of property rights and the mechanisms of exercising such rights (Fremond and Capaul 2002), this regulation is seen as crucially important for private property encouragement and its legal protection.

The Decree also requires the following: (i) the Board of directors to develop an annual business plan based on profitability and dividend targets to be approved by shareholders, (ii) submission of a report on the results of this plan quarterly to the supervisory board and the linking of executive directors and the

supervisory board chairman remuneration to financial performance. These new rules are to meet the other main concerns for shareholders' rights protection in Uzbekistan, which inter alia include information disclosure, accounting and audit.

According to Monks and Minow (1995, 148), disclosure practice is necessary for corporate performance and monitor's ability to observe and respond to it. In this sense, the insufficient information hampers the ability of the market for external finance and increase the cost of capital, resulting in poor allocation of resources (La Porta et al. 1999). One of the main obstacles for foreign investors is undisclosed ownership structure: true shareholders' names are hidden from the public in most of the cases (Dosti et al. 2003, 23). Non-transparency and weak information infrastructure of the Uzbek market has often been a matter of complain. Investment climate in Russia, for instance, was significantly improved, after companies started to reveal their ownership structure and identify the exact amounts of shares owned by their top managers (Belikov 2003, 1).

The disclosure practice in Uzbekistan is thus inadequate, obstructing the market from potential investors. The market forces for transparency are weaker in economies characterized by concentrated ownership and dominated by banks' lending as a major source of external finance (Ararat and Ugur 2003, 69). The fact, that the sole shareholder possesses the majority of shares and is involved in company's management, makes him aware of corporate affairs and makes him unwilling to disclose any information he considers may harm his firm's financial position. Consequently, the decent practice of disclosure is underestimated by shareholders themselves. This is felt particularly by minority shareholders, since often the only document available for them is Annual report, which apparently is published once a year. Their voting thus cannot be viewed as completely independent and free from various sorts of pressure.

The Law of the Republic of Uzbekistan on Joint-stock Companies and Shareholder's Rights Protection (1996, Article 116) requires external audit for all corporations. The external auditor is approved by shareholders meeting and carries out an independent assessment of company's performance. All large companies have internal audit departments as well, reporting to the management.

There is still no regulation as to International Accounting Standards (IAS). Inapplicability of IAS is often viewed by investors as non-transparency and large companies, especially ones dealing with foreign counterparties, take steps on their own. For example, National Bank for Foreign Economic Activity (National Bank for FEA) of Uzbekistan, the main channel of foreign investments to the country, introduced IAS in 1995 to be followed by GAAP (Generally Accepted Accounting Principles) in 1998 (see Box 1). These standards are to ensure that shareholders have sufficient, timely, credible and comprehensible information to monitor the company's performance.

The review of OECD principles of corporate governance shows that Uzbek shareholders protection system is in line with internationally recognized norms.

Two crucial points are however missing. First, the remuneration policy for members of the Board and key executives must be made public (Organisation for Economic Co-operation and Development 2004, 22). This part of disclosure practice is largely neglected: the information about compensation and stock options available is found neither in Annual reports nor in any other documents prepared for shareholders. The law does not envisage it as well (Chen 2003, 15-16). In fact, most of the perks are unofficial to avoid taxation.

The other essential part of OECD principles that Uzbekistan's corporate governance misses is stakeholders' rights (ibid., 21). They are not specifically considered in either the The Law of the Republic of Uzbekistan on Joint-stock Companies and Shareholder's Rights Protection or more recent legislation. This is explained partly by overall immaturity of corporate governance framework and partly by low social activity (World Bank 2002, 110). Trade unions and other groups that might represent broader social interests are circumscribed and little interest is found in stakeholders themselves. In any case, given the equal treatment of shareholders and stakeholders in internationally recognized best practice, this attitude should be changed.

The attempt to fill the gap was made recently by Business Solutions, privately owned consulting company based in Uzbekistan. The Corporate Governance Code made by them can serve as a blueprint for Uzbek joint-stock companies trying to comply with international standards. It can also help the Government once it wants to make the one on its own.

## ASSOCIATIONS

The system of Associations is a phenomenon naturally belonging to Uzbek economy. Its origin ascends to the accepted in the Soviet Union State Ministries structure that made possible the smooth functioning of central planning mechanism. Under this system the distribution of funds, input and raw materials, as well as pricing and contracts, was made upon the command of ministries, each belonging to appropriate sector of economy (e.g. Ministry of Agriculture, Ministry of transport etc). The ministries controlled enterprises' performance and enjoyed a power to dismiss the directors of enterprises, who failed to meet their requirements. In all, they were the main monitor of corporate performance, the watchdogs of the system and fulfillers of state's will.

In 1992-1993, the Ministries were transformed into "associations", with operational purposes similar to holding companies (Broadman 2002, 11). Currently there are 56 of them. The enterprises that used to report to their sector Ministries consequently became members of corresponding associations. Although designed to act in the new environment as commercial organizations, the functions of Associations resemble the old ones. They include mainly allocation or regulatory tasks, like rationalizing output and pricing policy. The directors of Associations report to the Cabinet of Ministers on sectors' performance and profitability, and themselves have a rank of Minister. As a

result, the associations are still perceived as regulatory bodies and all important decisions are discussed with and endorsed by the heads of respective association.

Thus, the Associations represent another institute of corporate control and incentives in Uzbekistan, having an ambiguous impact on corporate governance. On the one hand, they impose certain degree of discipline over the management; they also make the industry more transparent and accountable, since different forms of reports on companies' performance are required from the members. Besides that, associations usually take care of corporate recovery (sanation) and bankruptcy procedures.

On the other hand, the State, using Associations as a channel, widely interferes in corporate affairs, even in fully privatized companies and where the Government stake is low (Dosti et al. 2003, 23). Directors of Associations and their deputies are usually members of Supervisory Boards in member companies, and according to evidence they dominate other shareholders representatives in decision making (although they are revoked off their right of veto). Such practice diminishes the importance of market incentives for corporate governance. Moreover, the Associations' activity sometimes impedes competition within the given sector, due to their regulatory orientation. At last the Associations, given that they administer the State's assets in companies, themselves must be subjects to corporate control. But in practice they are not registered as companies and are the part of bureaucratic mechanism. This implies the lack of market incentives for good performance, and obstacles the development of commercial bodies out of them.

The World Bank research conducted by Broadman (2002, 13), strongly recommends carrying out the corporatization of Associations and giving up most of shares by the State. This would enhance their ability to impose corporate control using market incentives and separate the Government and business, which appears crucial for the smooth process of transition. The Associations in their current form had fulfilled their task of keeping the whole industry afloat in the first years of transition, but further reforms are needed to proceed as business organizations.

## BOARDS OF DIRECTORS

The Board of Directors is considered as one of the main internal control mechanisms (Allen and Gale 2000b, 341). Whereas in market-based models the Board is a unitary body, formed by executive and non-executive directors (Fernandez Alvarez et al. 1998, 2) (insiders and outsiders), Uzbekistan has accepted two-tier management structure, the one similar to German. It envisages the distinction between the control function of Supervisory Board and executive responsibility of Board of Directors (Clarke and Bostock 1997, 212) (management board or Vorstand, as it is called in Germany). According to The Law of the Republic of Uzbekistan On Joint-Stock Companies and Shareholder's Rights Protection (1996, article 83), it is a must for corporations

to have a Supervisory Board, which represents interests of shareholders and fulfills the role of the main monitor. Thus, the legislation stipulates the active control of the managers' performance, as opposed to passive control (exit), which is less possible due to weak capital market.

Together with the model itself, the practice of corporate control through Supervisory Board in Uzbekistan borrowed the problems. Clarke and Bostock (1997), speaking about German model of corporate governance, points out several key fallacies of Supervisory Boards system. At least two of them are applicable to Uzbekistan.

First of all, the Supervisory Board relies on information provided by the management. There are indeed various forms of reports, which are required by the charters of corporations and by regulatory bodies. Usually they are prepared on a quarterly basis, with the exception of external audit, which is performed annually. Apparently, only the latter is prepared by outsiders. The quarterly reports, on the basis of which the decisions are supposed to be made by Supervisory Board, are the ones endorsed managers. According to Dosti et al. (2003, 17) the reports prepared by Uzbek companies for shareholders and Supervisory Boards, lack the information on strategy and agenda for future development. By the same token, the Annual reports seldom include the comments on forthcoming plans of the management, thus making them unfeasible for sound prognosis. Such crucial information as growth forecast, business conjuncture, possible risks, are missing from Supervisory Board's attention.

Secondly, the real power of Supervisory Boards to influence managers is questioned. Empirical data from Uzbekistan show that membership in Boards is often understood both by shareholders and managers as an honorary post, not as the responsibility (ibid., 2003, 14). The formal participation of Board members makes them distrusted by shareholders, especially minority ones. Meetings of the Board are infrequent, and there is no uniform regulation as to how often the members should get together. Sending out documents for endorsement without holding a meeting at all is the normal practice.

There is one crucial difference between Supervisory Board in Uzbekistan and Germany. While German Aufsichtsrat consists of equal number of employees and outsiders (FitzRoy et al. 1998, 369), the Uzbek law specifies that only shareholders have the right to sit in the Board. Shareholders with largest stake are particularly encouraged (Cabinet of Ministers of Republic of Uzbekistan 1998, attachment 2). The system of codetermination which comprises the participation of labor representatives in decision-making process is thus neglected.

Recent Decree on Measures to Radically Increase the Share and Significance of the Private Sector in the Uzbek Economy (2003) discussed earlier, envisaged the professionalisation of Board's members' position. While this could mean the move away from German system, which despite imperfection performed well for



a long period of time (Schilling 2001, 150), that can also signify the increased efficiency within the existing legal framework.

## BANKS

Corporate control and financial intermediation are deeply intertwined notions and financial system plays a critical role in corporate governance discussion (Walter and Smith 2000, 197). Financial institutions complement the corporate control patterns and influence the ownership structure. In order to understand the present day structure of Uzbek financial sector, we first take a historical perspective, which shows that Uzbekistan was preconditioned to the dominance of banking institutions.

In the Soviet economy the decisions on resources allocation were largely governed not through a cost-benefit framework, but given the absence of financial markets, centrally by the Gosplan\* and locally by enterprises managers. All the other functions of the financial system were executed by the banking system. Consequently, low level of non-bank financial institutions development was observed.

After 1991, a contemporary two-tier banking system, with the Central Bank of Uzbekistan and commercial banks was formed. The number of banks grew rapidly and at present there are 38 banks of various ownership forms. In terms of total assets, however, the whole banking sector is still dominated by few large state banks. For instance, only the National Bank for Foreign Economic Activity of Uzbekistan (NBU) accounts for 70% of the total banking assets (see Box 1).

The formation of non-bank financial institutions took a longer time, given its initial non-existence. The stock market was introduced between 1994 and 1996 alongside the privatization, as privatized enterprises' shares began to circulate. A number of credit institutions, including Business Fund for financing small and medium sized businesses, private insurance and investment companies emerged at this period as well. The first Privatization Investment Fund (PIF) was set up in 1996, later than in other transitional economies\*\*.

Given such prerequisites, the capital market remains largely immature. The Stock Exchange is used primarily by the State Property Committee (SPC) to raise funds for corporations going through corporatization and initial public offerings. According to evidence of Asian Development Bank (2003, 3) there is a limited investment interest in listed enterprises, resulting in limited trading liquidity. This is due to poor information available and overregulation. The alternative to Stock exchange is over-the-counter market, which also appears not to act independently, being the subject to the Centre on Coordination Functioning of the Securities Market. There is one formal secondary trading platform, Elsis Savdo, which is controlled by the NBU, however most of

secondary trading of listed shares (approximately 81%) takes place on an unregulated informal secondary "curb market."

Recent legislation raised the permissible size of corporate bond issues from 20% of charter capital to 100%, enabling large domestic enterprises to raise needed funds through bond market. An international syndicate that includes 19 local and foreign banks, Carhill Asset Management Company (Uzbek off-shore company, registered in the Isle of Man), and one other non-bank financial institution has been formed to underwrite corporate debt

### Box 1. National Bank for Foreign Economic Activity of Uzbekistan (NBU)

The Bank was established in 1991 with the purpose to implement government's policy in the field of international economic activity. The designated position as monopolist in dealing with foreign transactions allowed the Bank to accumulate the nation's foreign exchange reserves. Although the Bank was deprived of its monopoly in 1995, it still accounts for more than 90% of country's international settlements. It is equally due to established ties with clients and international institutions, and to enormous size comparing to other Uzbekistan's banks: with assets of 2801 bln. UZS (Uzbek soums) as of January 1 2003, it comprises 70% of all banking system assets. The assets largely constitute the lending (up to 82%), being mainly refinanced loans of foreign banks covered by State's guarantee. These loans were the part of the Government's program for industry re-structuring, particularly the purchase of foreign advanced technological equipment and know-how. The total amount of big projects financed up to 2003 was 3 987.72 mln. US Dollars, plus SME financing accounted to 231 mln. US Dollars.

With the termination of large scaled restructuring program the Bank found itself in a difficult situation with a substantial number non-performing loans and had to call the State's guarantee in some cases. The profitability started to decrease and first losses were encountered in 2002. In search of recovery, the Government is currently seeking to privatize 40% of Bank's shares.

Despite the difficulties, the Bank is still the most dynamic financial institution in the country and the example of best practice in banking. It was the first to introduce external audit in 1993 from internationally recognized auditor (Ernst&Young) and IAS (followed by GAAP) in 1995. Its position in The Bankers top 1000 world banks list was upgraded from 824 in 1994 to 403 in 2002. It is listed in The Bankers top 50 reliable banks in the world, according capital/assets BIS ration. The Bank was also the first to be assessed by credit rating agency Thomson Bank Watch, recently merged with Fitch IBCA. This made possible the attraction of number of uncollateralized (i.e. without State guarantee) credit lines from foreign institutions.

Sources: NBU Annual Report 2002, NBU web site <http://eng.nbu.com/about/history/index.php>

The absence of independent and reliable credit rating agency is often named as one the blunders of capital market. Uzbekistan does not have a sovereign rating either, which impedes the corporations ability to go international with equity or bonds issues. Also concerns have been raised based on affiliations and inadequacy of financial disclosure, since purchasers and underwriters of corporate debt are generally institutions affiliated with the issuers, including banks.

\* Gosplan is chief authority of central planning in the Soviet Union.

\*\* Czech Republic and Russia - 1993, Poland - 1994 (Boeri and Perasso 1997).

In circumstances of pathologic weakness of stock market, banks eventually arose as the major source of external finance. This is not uncommon for countries in transition. The patterns of banking dominance, in more or less explicit forms, aroused throughout the Eastern Europe and CIS (Popov 1999, 5-6). Moreover, it is exactly what advised by apologists of German-Japanese models of corporate governance, who argued that strong mechanism for corporate control might involve banks' ownership of industry, including swapping debt for equity (Dittus and Prowse 1996, 20).

Apart from capital market underdevelopment, the policy of economy restructuring and designated position of the State as the main reformer led to strong reliance on banking sector's lending. It happened because great attention was paid by the Government to the transformation of the economy through foreign investments. Banks, notably NBU (see Box 1), became the channel for foreign loans flow, guaranteed by the State. Such project financing, according to La Porta et al. (2000, 3, 20), enables the government to overcome institutional failures undermining private capital markets, and generate aggregate demand and other externalities fostering growth and made possible through State ownership of banks. Ownership of banks enables the government to collect savings and to direct them toward strategic long-term projects, which are socially or politically desirable. In both cases, the government finances projects that would not get privately financed.

In addition to extensive lending agenda, the State relies on banks in its control of monetary flows (Akhbor-Rating 2003). According to the legislation commercial banks act as the state agents performing currency and tax control. Banks are thus engaged in unusual activity and bear responsibility for the events they cannot control. It is planned that such functions will gradually die off upon establishment of new institutions of monetary control, including State Treasury.

Being easy channels for economy restructuring and existing monitors, banks largely stayed in State's hands. The Government was afraid of possible instability of banking sector. This explains small number of international banks in the market and poor competition. The only international bank that provides all kinds of bank services is a joint venture with ABN AMRO Bank.

Banks currently do not maintain large stakes in corporations. The Central Bank of Uzbekistan has increased the permissible level for the banks' share in the charter capital of any company, other than a financial company, from 20% to 26% (The Central Bank Of The Republic Of Uzbekistan 2004a). The permission for banks to have a blocking stake is motivated by plans to make more use of banks' investment potential and to stimulate bank activity in the stock market. This would allow credit organizations to effectively influence the management process. According to Central Bank regulations, Uzbek commercial banks can invest up to 75% of the regulated level-one capital in all non-government securities. This includes the bank's charter capital, general reserve fund and retained earnings from previous years less intangible assets. A bank can

put 40% of this regulated capital into long-term investments, and 25% in a short-term (up to one year) trading portfolio.

Apart from their role in corporate governance, banks themselves are subjects to corporate control. Various international standards were introduced, including capital-to-assets ratio of 8% (BIS ratio), loan classification schemes and mandatory provisioning (The Central Bank Of The Republic Of Uzbekistan 2004b). The external audit is a must, and many banks use the services of internationally recognized auditors, such as PriceWaterhouse&Coopers or Ernst&Young, and IAS are encountered voluntarily by some banks (see Box 1). The independent banking rating agency Akhbor-rating was set-up.

The pre-eminence of banking sector over the capital market is a common feature of all transitional economies (Duttis and Prowse 1996, 20). At the same time it was not the policy choice or deliberate reform that created bank-dominant economy, but rather the outcome of path dependent development (Popov 1999, 3). Moreover, the strong banking sector was essential for the Government to implement its active industrial policy (Walter and Smith 2000, 205).

Is that good or bad for corporate governance? There are both evidences for and against banks participation in corporate control. General perception is that development of banks must be given a priority over the development of stock market mechanisms in transitional economies (Thakor 1996, 932). Among cited advantages of bank-based system are higher degree of banks' involvement into company's affairs and their better ability to mitigate the information problems (Duttis and Prowse 1996, 60). At the current stage banks in Uzbekistan are not deeply involved in corporate governance and restructuring, but *ceteris paribus* they will be better prepared to it than the rest of monitors.

The other point of view is that development of bank-based financial structure will be one-sided for evolving patterns of corporate governance in transitional economies. This view was expressed by Boot et al. (2002), who argued that development of a universal (not separated, like in US) banking system, would lead to further distortions in economic development. They went on to quote mentioned in *The Economist* (1994), which brought in the following determinants of successful financial system transition:

- creation of a stable financial system, capable of winning the depositors' trust and credit allocation;
- restructuring of inefficient industries, created by the central planning;
- promotion of efficient and competitive capital market.

However, the bank-based financial system in Uzbekistan and German-Japanese model of corporate governance has little in common. The undeveloped patterns of bank ownership and active state's participation are the reasons. Given the large share of State's assets in banking sector the state-led model of financial system is more appropriate definition. It is an alternative to equity or bank-based systems, adopted in Anglo-American and German-Japanese models of corporate governance respectively.

The paradigm of the state-led financial system is probably best embodied in present-day French financial system. In France, where banking institutions were not privatized until late 80-s, the Ministry of Finance controls both domestic lenders and capital market players through investment priorities, elaborated through discussions with policy-makers and large corporations (Walter and Smith 2000, 205). Despite concerns of non-transparency and decreased liquidity of such a system, it is still legitimate, due to the claim of acting in public interest. Equally the Uzbek Government is acting in public interest carrying out its policy on industry restructuring. The set of instruments, unlike in France, is limited to banking sector intermediation with corresponding consequences for corporate governance framework.

Neither a bank-based, nor a stock-market model can be defined as superior to each other. The 80-s and early 90-s witnessed the intense academic argument on which model is the best. Starting

- *Disclosure practice and shareholders' protection.* The disclosure ratio is low. The legal instruments are unviable because of sometimes ambiguous, sometimes inadequate laws (e.g. labor representation in the Boards), but most of all, due to poor enforcement. Unofficial means often prevail over the legal processes and shadow economy mechanisms are used widely.

The significance of the two however may rise with the pace of reforms, while importance of Associations as effective monitor may diminish. The other important institutions of corporate control are largely missing in the country, due to various restraints. They are:

- Hostile takeovers. There are number of obstacles for hostile takeovers practice in Uzbekistan: (1) stock market does not provide the necessary capacity for the purchase of equity in free flotation; (2) minority shareholders are unsophisticated which imposes difficulties in trying to draw

3. *Encouragement of market incentives by development of equity trading.* Although giving more freedom to banks in swapping debt for equity may increase the managers' discipline equally, well-developed equity market is essential to inject domestic savings into investments and attract institutional investors. Establishing of credit rating agency, similar to banks rating agency Ahbor-rating, would be essential.

It is naive to believe that introduction of these or similar measures would make an immediate effect. It is more likely to be an evolutionary process requiring change of values and attitudes of the Government, shareholders and corporations. Nevertheless, the consistent addressing of these issues should speed up the corporate governance framework improvement.

The study of corporate governance certainly has limitations. For instance, researches are not fully convinced that a correlation between best practice and economic performance in fact exists (Heracleous 2001, 165) and poor linkage with other studies e.g. of cultural dimension is observed (Buckley 1997, 206). However the basic principles of corporate governance are to be considered carefully by the countries in transition. The type of the evolving corporate governance model has to be examined and reform agenda must be put into connection with it. In case of Uzbekistan, the composition of the large shareholders, state (Associations) and banks is found as the main driving force of viable corporate governance framework formation.

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## BENEFITS BASED SEGMENTATION AND DIFFERENCES IN THE BRAND CHOICE OF MOBILE COMMUNICATIONS SERVICES BY KAZAKH CONSUMERS

JUNG-WAN LEE\* AND SIMON TAI\*\*

*This study identifies consumer-oriented critical attributes that influence consumers' purchasing decision, the importance of attributes perceived by consumers, and their perceptions toward brands offered by mobile communications service operators in Kazakhstan. The analyses of survey data collected from young consumers (college students) in Almaty suggest that the most critical attributes influencing consumers' purchasing decision of mobile communications services, in the order of importance, are: communications service quality, connecting speed, area of coverage, and communications service price.*

*Further applications of analysis of variance and multiple regression model to the survey data suggest that young consumers in Kazakhstan could be segmented into the four subgroups of: service quality-oriented, price-oriented, company image-oriented, and product design-oriented subgroups. Consumers tend to perceive the "service quality" and "service price" as the determinant factors in making their purchasing decision of mobile communications services. Hypothesis testing of these determinant factors were conducted to determine the generalizability of these factors. Furthermore, the researchers depict a position map of brands with the two consumer perceived determinants.*

**Keywords:** Attribute, benefits, segmentation, brand choice, perceptual map, positioning map, service quality, service price, mobile communications.

### СЕГМЕНТАЦИЯ ПО ИЗВЛЕКАЕМОЙ ПОЛЬЗЕ И РАЗЛИЧИЯ В ВЫБОРЕ БРЭНДОВ УСЛУГ СОТОВОЙ СВЯЗИ КАЗАХСТАНСКИМИ ПОТРЕБИТЕЛЯМИ

Джун Ван Ли и Саймон Тай

Данная работа определяет важнейшие атрибуты, влияющие на выбор потребителей, важность атрибутов, воспринимаемых потребителями, и восприятие последних в отношении брендов операторов услуг сотовой связи в Казахстане. Анализ данных опроса, проведенного среди молодых потребителей (студентов) в Алматы, показывает, что важнейшие атрибуты, влияющие на выбор операторов услуг сотовой связи, распределены по важности в следующем порядке: качество услуг связи, скорость связи, зона охвата и цены на услуги оператора.

Далее применяя анализ различий и модель регрессии к данным опроса, мы получаем, что молодые казахстанские потребители могут быть сегментированы по четырем подгруппам:

1) ориентированные на качество, 2) ориентированные на цены, 3) ориентированные на имидж компании, 4) ориентированные на дизайн продукции. Потребители склонны воспринимать "качество услуг" и "цены услуг" как определяющие факторы при выборе услуг операторов сотовой связи. Тестирование этих определяющих факторов были проведены с целью определения их обобщаемости. Далее, исследователи описывают позиционную карту брендов с обеими определяющими факторами.

Ключевые слова: атрибут, польза, сегментация, выбор бренда, пресепционная карта, позиционная карта, качество услуг, цены услуг, сотовая связь.

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## INTRODUCTION

Many marketing researchers apply Market structure studies to analyze the strengths and weaknesses of current and/or potential competitors in the market in order to project and develop the best future marketing strategies. Market structure studies are vital in managing existing brands because a new entry can and does change the way in which existing brands are perceived by consumers. The most detailed level of market structure is the segment-level competition that frequently exists among similar brands in the same competitive set. Consequently, the segment-level competition is the market structure of most concern to the brand manager because it defines the arena in which the manager's brand competes. When a company has a clear understanding of market structure at the segment level, it can determine what and where competitive sets exist in order to generate new products or brands possibilities by identifying attractive segments for which the company currently has no offering.

A segment-level structure can be identified by examining either actual consumer purchase behavior or consumer perceptions (Day, Shocker and Srivastava 1979). The actual purchases made by consumers within a product category provide information about the degree of substitutability among existing brands. The study of actual purchase behavior can determine whether all brands in the same product category are actually comprised of distinct groups of brands that are competing more closely with each other than competing with the other brands based on the level of across brands switching. Furthermore, studying consumers' perceptions of the similarity or dissimilarity among brands can also provide valuable information for the understanding of market structure. In such a study, perceptual mapping techniques can be utilized to portray how consumers perceive the brands available to them. Those brands that are perceived by consumers as in a similar form constitute a competitive set. Once the competitive set has been identified and defined, the next step in a market structure study is to uncover possible determinant attributes, which might be used for differentiation and for gaining competitive advantage against those competitors that could influence the sales potential of a company's brands.

Market segmentation is "the process of partitioning a market into groups of potential customers who are similar in designated ways and who are likely to exhibit similar purchasing behavior (Weinstein 1987, 4)." It is understandable that if there are similarities within each group or segment, there should also be differences across the segments that suggest different marketing strategies for targeting and satisfying different segments. The key to a successful segmentation strategy is the ability to capitalize on similarities within a segment that are important from a marketing point of view. Segmentation is to discover the needs and wants of specific groups of consumers so that specialized products and brands can be developed and promoted to satisfy the needs of each group. Segmentation, therefore, is the important guide in redesigning or repositioning of existing products for the creation of promotional appeals.

Consumers wanting a similar product or service category can also be segmented based on the relative importance they place on the key benefits of the product or service. Benefit segmentation has received increasing attention in recent years because "experience with this approach has shown that benefits sought by consumers determine their behavior much more accurately than do demographic characteristics or volume of consumption" (Haley 1968). Benefit segmentation involves the partitioning of the market into subgroups according to similarities in the benefits individuals seek. A common research approach in implementing benefit segmentation is to survey a sample of consumers and ask them to rate the importance of various benefits and features of a product or service, or to express their level of agreement with statements relating to the importance of each benefit. Many studies proved that benefit segmentation could be used to position various brands within the same products category (e.g., Cermark, File and Prince 1994; Harley 1995; Kastenzholz, Davis and Paul 1999).

To understand whether consumers have any different perceptions of benefits toward mobile communications services and its brands in Kazakhstan, the researchers set the two study objectives: (1) To investigate Kazakh young consumers' perception of benefits from mobile communications services, and (2) To examine the relationships between perceptions of benefits and consumer purchase intentions or brand choice. That is, to identify the possible existence of preferred benefits in order to segment the markets and its effects on the perceived service quality and brand choice.

## MOBILE COMMUNICATIONS SERVICE MARKET IN KAZAKHSTAN

The subscribers of mobile communications grow substantially with the economic development of a country. By the end of 2003, the cellular operators in Kazakhstan served about 1.5 million subscribers, that is, about 9.6% of the country's total population. The comparable figure in Russia was about 25%, and the similar figure ranged from 40% up to 100% in the Western European countries. However, by the end of 2005, the number of cellular subscribers in Kazakhstan could exceed at least 3.5 million or 23% as indicated by the micro-economic parameters in Kazakhstan (see Table 1).

TABLE I. INFORMATION COMMUNICATIONS TECHNOLOGY (ICT) PENETRATION AND ITS ECONOMY GROWTH IN KAZAKHSTAN

Year	Telephone line (per 100)*	Mobile subscribers (Per 100)*	FDI inflow** (Mil. USD)	GDP per capita*** (USD)
1997	11.0	0.1	1320	1432
1998	10.9	0.2	1143	1457
1999	10.8	0.3	1584	1132
2000	11.3	1.5	1278	1231
2001	11.3	4.0	2861	1492
2002	12.1	5.9	2157	1658
2003	12.5	9.6	2300	2069
2004	13.5	16.0	2500	2300

\* Penetration rate per 100 inhabitants.

\*\* FDI stands for the foreign direct investment.

\*\*\* GDP stands for the gross domestic product.

Sources: Data represent the most recent official estimates of out-turns, published by the national authorities, the World Bank, and the European Bank for Reconstruction and Development (EBRD 2004).

Notes: "In February 2003 the government adopted a program for Kazakhstan's telecoms sector development 2003-2005, containing an aggressive legislative timetable for policy reform adoption and implementation. The program envisages full liberalization of the telecommunications market by the end of 2005, provided that appropriate regulation is in place. Following a government decree in June 2003, a new regulatory was established. However, state-owned KazakhTelecom (KTC) still has exclusive rights over domestic long distance and international voice communications" (EBRD 2003, 157).

Everything about cellular began in 1994 when Altel launched the first cellular network with the standard of advanced mobile phone system (AMPS) - which is the analog mobile phone system standard developed by Bell Labs and has been used throughout the Americas, particularly in the United States and Canada. Altel has the exclusive license for its activity for five years and became almost 100% monopolist at the cellular service market in Kazakhstan. Even though the quality of network was not very good and the range of coverage was somewhat limited, the mobile network became very popular in Kazakhstan. However, it did not last long when the two Turkish companies (Turkcell and Rumeli Telecom) established their operations in Kazakhstan in 1998. Turkcell created GSM Kazakhstan (later, it was called "K-cell" and "Active" brands) and Rumeli Telecom created KarTel (later called "K-mobile" and "Excess" brands). They launched mobile networks with the global system for mobile communications (GSM) standard - which makes international roaming very common between mobile phone operators, enabling subscribers to use their phones in many parts of the world, and differs significantly from its predecessors in that both signaling and speech channels are digital. When Altel realized that its operations were in jeopardy to a greater extent, it began to implement differentiated marketing strategies. One of them was the launch of "Tumar"- the package that was aimed at the consumers with the middle level of income. Although it was somewhat successful at that time, Altel could not retain its market share. Sometime later K-cell and K-mobile offered packages that were even cheaper than Altel. For

the time being, Altel is working on the code division multiple access (CDMA) standard, a digital cellular technology that uses spread-spectrum techniques, and presenting new brand names such as "Dalacom" and "Pathword." According to the press release of the company (<http://www.pathword.kz>), it began the CDMA services in February of 2004 that offer the benefits of: lowest tariff, the third generation connection, wider range of coverage, and the target segment of 15-24 years old age group. By September of 2004, the number of Pathword subscribers had reached 60,000 in Kazakhstan.

## LITERATURE REVIEW AND HYPOTHESIS FORMATION

### Perceived Product- and Service-Quality

In some cases, consumers may employ physical characteristics to judge product quality. Consumers like to believe that their product quality evaluations are based on intrinsic cues, which enable them to justify their product purchasing decisions as being rational or objective choices. In the absence of actual experience with a product, consumers often evaluate product quality on the basis of the cues that are external to the product itself, such as price, brand image, firm's image, and retail store image. Consumers may rely on surrogate cues to evaluate service quality in the cases that they are unable to compare competing services side-by-side as they do with competing products. Moreover, since the actual quality of services can vary from day to day and from consumer to consumer, marketers should try to standardize their services in order to provide consistency of service quality.

Zeithmal (2000) has identified numerous aspects of the relationship between perceived service quality and profitability. In general, when consumers have higher service quality evaluations, their behavioral intentions toward the service company tend to be more favorable, and they are more likely to remain as customers. Similarly, higher perceived service quality and/or higher service satisfaction tends to result in higher levels of purchase intentions and repeat buying. While there are many studies of consumer evaluations of service quality, few studies have examined the relationship between perceptions and future buying intentions, and even fewer studies have related consumers' evaluations to their retention levels (e.g. Zeithmal 2000).

From the above discussion, the researchers hypothesize that consumers evaluate service quality in order to make purchasing decisions of high-tech products such as mobile communications services. The reasoning suggests the following hypothesis:

*Hypothesis 1: The perceived quality of mobile communications services has an effect on consumers' purchasing intention toward a particular brand.*



## The Quality of Products or Services in Relation with Their Prices

Many past studies have found that consumer characteristics such as age and income affect their perception of value (e.g. Chang and Wildt 1994) and that consumers rely on the price as an indicator of product quality. In other words, it is entirely possible that consumers may attribute different levels of qualities to identical products with different price tags. For example, consumers who consider a price/quality relationship are actually relying on a well-known brand name as an indicator of quality without actually relying directly on price per se (Liechtenstein, Ridgway and Nitemeyer 1993). Brucks and Zeithmal (2000) further found out that consumers frequently make use of price level and brand name to evaluate the prestige of the product but they generally do not use these cues in evaluating the product's performance.

Applying the above findings, the researchers infer that consumers make use of price to evaluate the quality and performance of high-tech products such as mobile communications services in making a purchasing decision. Therefore, the following hypothesis is proposed:

*Hypothesis 2: The price of mobile communications services has an effect on consumers' purchasing intention toward a particular brand.*

## Company Image

Quite a few marketing managers have argued that consumers make their purchasing decision based on the benefits they received rather than on product features and/or company image. However, firms enjoying favorable images generally find that their new products are more readily accepted than products from those firms who have less favorable images. Past studies (Alden, Steenkamp and Batra 1999; Alpert and Kamins 1995) have found that consumers tend to have favorable perceptions of pioneer brands, which are the first in a product category, even after many more follower brands become available. Pioneering brands or the first brands to enter a new market often enjoy a long-term consumer preference advantage over follower brands. This preference advantage, known as the 'pioneering advantage', has been observed in a wide variety of consumer markets that include growing markets, mature markets, markets with low brand-switching costs, and even in markets with high brand-switching costs (e.g., Gurusurthy and Urban 1992; Robinson and Fornell 1985; Urban, Carter, Gaskin and Mucha 1986). The pioneering brand is novel and interesting, and tends to attract much more attention from consumers than a redundant, less interesting, copycat brand. Moreover, the phenomenon has very important implications for managers since it suggests that all firms should try the best to get their high-tech products and services to the market as soon as possible.

Extending the above discussion to high-tech products, the researchers hypothesize that consumers apply their images of service operators to evaluate the quality and performance of high-tech products such as mobile

communications services and make their purchasing decisions. Therefore, the following hypothesis is proposed:

*Hypothesis 3: The company image of mobile communications services has an effect on consumers' purchasing intention toward its brands.*

## Product Design

Products have their own images that serve to influence consumers in their perception toward the product quality and their decisions on which brand to purchase. These product images stem from their features, design, physical shape, and functions. Prior studies on technology adoption show that users' perception of usefulness and easiness of using a new information system determine their adoption (e.g. Davis 1993; Venkatesh and Davis 2000). Expanding the ideas of human-computer interaction and information search theory by Alba et al. (1997), the researchers propose that the way consumers assess a set of mobile hand-set characteristics such as navigation structure, hand-set design and contents influences their subsequent evaluations of product quality and purchasing intention.

"Navigation structure" is defined here as the organization and hierarchical layout of the contents and pages in a mobile handset. This structure governs a user's forward and backward movements through a control panel and can be characterized as the number of clicks it takes to get into and through the site. "Hand-set design" refers to the tangible aspect of the mobile communications that reflects the perceived attractiveness of a mobile handset. Accordingly, the researchers hypothesize that the aesthetically pleasing handset design offered by the operators of mobile communications services should attract consumers if it generates their pleasurable feelings in association with the mobile communications experience. Thus, the perceived attractiveness of a handset design should be positively associated with consumer's purchasing intention of a specific brand. The logic described above leads to the following hypotheses:

*Hypothesis 4: The handset design and function offered by the mobile communications service operator have an effect on consumers' purchasing intention toward its brand.*

## METHODOLOGY

### A Survey Questionnaire and Samples

The researchers designed and developed a 14-item questionnaire and apply it to conduct focus group interviews with college students. To measure the perceptions of attribute variables, this study employs interval scaled (Crask and Fox 1987) questions, in which respondents are asked to indicate their degree of agreement on a symmetric scale for each of a series of statements concerning the attributes' levels of importance (for example, 1=Not important, 7=Very

important), their perception of each brand, and their purchasing intentions toward a brand (for example, 1=Not agree, 7=Strongly agree). In addition, this study also included several open-end questions designed to obtain information about mobile phone uses, costs of mobile communications, and additional relevant demographic items.

The targeted population in this survey study was the young consumers who are between 18-30 years old and who live in urban in Kazakhstan. A total of 1000 students at the School of Business, KIMEP University, were randomly selected to receive the survey questionnaire during the period from September to November 2004. Of the randomly selected students, 729 completed and returned the questionnaire. After carefully screening, 588 were considered as useable. Of the 588 respondents, 59.7 percent were female and the mean age of the student respondents was 24.7 years: 18-20 years old (23%), 21-25 years old (49%), 26-30 years old (28%). About 45 percent of these respondents were working either part-time or full-time in industries such as management consulting firms, banks, financial institutions, oil and gas companies, foreign invested consumer goods companies, and automobile dealer shops. The phenomenon of student working full or part time is quite normal in developing countries since they have to support the relatively high tuitions of attending business schools. The average family income of sampled students was 14 000 USD per year, which is relatively high when compared to the GDP per capita in Kazakhstan of about US\$2,400 for the year of 2004. Therefore, the income level of the sample was not a representative of the broader population.

The respondents were spending an average of about 31 US dollars (Mean=\$31.3, Standard Deviation of S.D.=25.393) for the monthly expenses of mobile communications services and had an average of 4 years (Mean=4.2, S.D.=1.806) experience in using mobile communications services. During the average of 4-year service subscribing period, the respondents had changed their mobile phone-number more than two times (Mean=2.2, S.D.=1.618) and replaced mobile handset about 4 times (Mean=3.8, S.D.=3.482).

### Measurement, Reliability and Validity

Prior to the data analysis, the researchers reviewed a number of independent variables in order to determine the best combination of these variables in explaining the constructed common factors. Of the 14 items in the survey questionnaire, 13 resultant variables have the extracted communalities of larger than 0.500 with the exception of the "customer service" variable which has the communality of 0.472. The "communality" refers to the proportion of the variance in a particular variable that can be explained by the common factors. To find a variable reduction scheme that would result in the best linear combination of independent variables, the principal components analysis procedure was applied to transform the original variables (responses to the 14 items in the survey questionnaire) into the new set of linear combinations or

components. To increase the interpretability of components and parsimony, Varimax rotations with Kaiser normalization procedures were employed, and then the principal component analysis was conducted. After conducting the principal component analysis, the researchers derived a four-component model in which each component is represented by the linear combination of three or four survey items that have the highest loadings (>0.500) with the component. As an example, the component of "company image" is the linear combination of the three survey items labeled as company size, company image, and the number of mobile subscribers of a company; the component of "service price" is the linear combination of the three survey items labeled as discount program, communications charge, and purchasing subsidies; the component of "communications service quality" is the linear combination of four survey items labeled as connecting speed, communications quality, area of coverage, and communications security; the component of "product design" is the linear combination of three survey items labeled as hand-set design, contents providing, and value added services. Results from the above analyses indicate that the total variance of the model explained by rotation sums of squared loadings has the cumulative value of 59.515%.

Validity is the accuracy of responses to a measure. Establishing predictive and construct validity involves the detailed examination of response frequencies and relationships. However, measurements used in many marketing research tend to be partly valid in most cases. What this study wanted to do was to design measurements that can maximize the degree of validity under a given level of resource constraints. A reliable measure refers to the capacity of an instrument to obtain identical or very similar responses from the same respondents. Internal consistency reliability is used specifically to estimate the reliability of a multiple-item scale to measure a single characteristic. For example, if the Cronbach's alpha has the value of 0.60, it indicates moderate internal consistency reliability, and an alpha value of equal to or greater than 0.80 indicates more desirable internal consistency reliability (Peter 1979, 15). A reliability analysis of the measurements and correlated items in this study provided the following results: the component of "company image" achieved the higher reliability coefficients of Cronbach value and validity (Cronbach's Alpha=0.789, Items=3); the component of "service price" attained a reliability coefficients of Alpha 0.700; the component of "service quality" obtained an Alpha of 0.611; and the component of "product design" had the Alpha value of 0.653.

### DATA ANALYSIS AND HYPOTHESIS TESTING

#### Importance of Attributes and Perceptions toward Mobile Communications Brands

Marketers should consider the consumers' perception of brand attributes when they evaluate the quality of services. It is understandable that attributes as

perceived by consumers toward each brand might differ. Moreover, the greater degree of differentiation itself alone might also affect consumers' preference toward a brand. In short, marketers should consider both the importance of attribute and the greater differentiation of attributes between brands as the primary factors that influence consumers' brand preference. The researchers identified the main attributes that have greater importance and at the same time have higher levels of differentiation effects between brands, and called them as the "determinant attributes." Examples of such attributes include area of coverage, service charge, and purchasing subsidies (see Table 2).

TABLE 2. IMPORTANCE OF ATTRIBUTES AND CONSUMERS' PERCEPTIONS TOWARD THE BRANDS OF MOBILE COMMUNICATIONS SERVICES IN KAZAKHSTAN

Attributes/Brands	Mean of K-cell (S.D.)	Mean of K-mobile (S.D.)	Mean of Pathword (S.D.)	Importance of attributes (S.D.)
Communications quality	6.6 (0.749)	6.6 (0.721)	6.2 (0.902)	6.6 (0.754)
Connecting speed	6.3 (0.929)	6.2 (0.852)	6.0 (1.135)	6.4 (0.923)
Coverage range	6.3 (0.892)	6.2 (0.942)	5.9 (1.436)	6.3 (0.973)
Service charge	6.1 (1.202)	6.4 (0.874)	6.2 (1.144)	6.2 (1.107)
Customer service	6.0 (1.063)	6.1 (1.006)	5.9 (1.231)	6.0 (1.049)
Design of hand-set	5.9 (1.084)	5.9 (1.090)	5.3 (1.099)	5.9 (1.104)
Discount program	5.6 (1.374)	5.9 (1.298)	5.2 (1.495)	5.7 (1.361)
Communications security	5.6 (1.331)	5.8 (1.279)	5.9 (1.036)	5.6 (1.302)
Contents providing	5.5 (1.334)	5.5 (1.442)	5.2 (1.063)	5.5 (1.350)
Added service	5.1 (1.221)	5.4 (1.200)	5.1 (1.276)	5.3 (1.224)
Purchasing subsidies	5.0 (1.263)	5.5 (1.218)	4.5 (1.760)	5.2 (1.314)
Company image	5.1 (1.427)	5.1 (1.453)	5.1 (1.454)	5.1 (1.432)
Number of subscribers	4.8 (1.429)	4.4 (1.871)	5.2 (1.449)	4.7 (1.609)
Company size	4.7 (1.446)	4.5 (1.664)	4.2 (1.630)	4.6 (1.536)

### Results of Hypothesis Testing

The "Hypothesis 1: The perceived quality of mobile communications services has an effect on consumers' purchasing intention toward a particular brand" was empirically tested by the data obtained from the 588 respondents surveyed in Almaty. The testing results show that the perceived quality of mobile communications services is statistically significant at the 0.01 significant level (the t-value=23.999, p-value=0.000). That is, the perceived quality of mobile

communications services influence consumers positively in their purchasing intention toward the brand (see Table 3). In other words, the better the perceived quality, the higher will be the purchasing intention of consumers toward a specific brand.

The "Hypothesis 2: The price of mobile communications services has an effect on consumers' purchasing intention toward a particular brand" was empirically tested by the survey data, and the analyzed results show that it is statistically significant at the 5% significant level (t-value=6.481, p-value=0.000). That is, the price of mobile communications services influence consumers in their purchasing intention toward the brand.

The "Hypothesis 3: The company image of mobile communications services has an effect on consumers' purchasing intention toward its brands" was empirically tested by the survey data. The testing results indicate that the hypothesis was statistically significant at the 0.01 significant level (t-value=3.100, p-value=0.002). In other words, the result of the testing supports that the company image as perceived by consumers influences their purchasing intention of its brand. That is, the more favorable company image, the better will be consumers' purchasing intention toward its brand.

The "Hypothesis 4: The hand-set design and functions offered by the mobile service operator have an effect on consumers' purchasing intention toward its brand" was empirically tested by the data, and the test results show that it is statistically significant at the 5% significant level (t-value=3.154, p-value=0.002). That is, the result of the hypothesis testing supports that the hand-set design and functions as perceived by consumers influence their purchasing intention of its brand. That is, the more favorable the product design the more likely consumers' purchasing intention toward the particular brand.

TABLE 3. RELATIONSHIPS BETWEEN THE BENEFITS OF PRODUCT/SERVICE AND PURCHASING INTENSION

Independent variables	Regression weights (Standard error)	Standardized regression weights	t-value	Results
Service quality	0.514 (0.021)	0.689	23.999***	Accepted
Service price	0.139 (0.021)	0.186	6.481***	Accepted
Company image	0.066 (0.021)	0.089	3.100**	Accepted
Product design	0.069 (0.022)	0.090	3.154**	Accepted

The dependent variable: Purchasing intension to a brand  
R=0.727, R Square=0.530, Adjusted R square=0.526

\*\* p<0.05, \*\*\*p<0.001 statistically significant at =0.05 with 95% confidence interval

## The Differences of Perceived Benefits by Young Consumers toward Mobile Communications Brands in Kazakhstan

This study further investigated the mean score differences of benefit factors among brands by the application of an analysis of variance (ANOVA) to the survey data in order to identify any significant differences among the perceived benefits. The results of data analysis suggest that service price and communications service quality are statistically significant at the 0.01 significant levels (see Table 4).

**TABLE 4. DIFFERENCES OF BENEFITS PERCEIVED BY YOUNG CONSUMERS TOWARD BRANDS OF MOBILE COMMUNICATIONS IN KAZAKHSTAN**

Benefit factors	Mean of K-cell	Mean of K-mobile	Mean of Pathword	F-value	P-value
Company image	0.069	-0.147	0.138	2.599	0.051
Service price	-0.165	0.265	0.046	8.648	0.000
Service quality	0.122	-0.089	-0.419	6.016	0.000
Product design	0.008	0.100	-0.557	4.984	0.002

Results of this study suggest that mobile communications markets for young consumers in Kazakhstan can be segmented into the four subgroups of:

- (1) Company image-oriented group which patronize company;
- (2) Price-oriented group which is more sensitive to price;
- (3) Service quality-oriented group which seeks a high communications service quality;
- (4) Product design-oriented group, which looks for aesthetic product features.

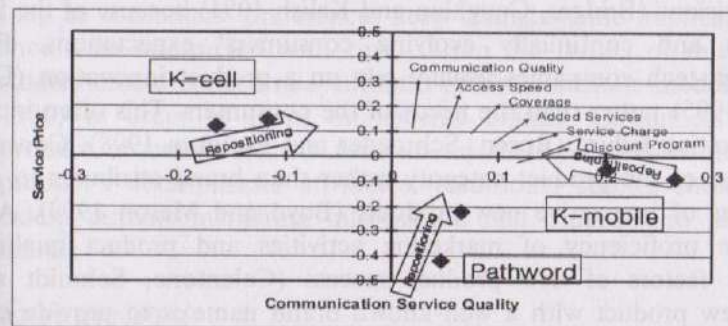
### Perceptual/Positioning Map and Repositioning

Perceptual/positioning mapping is developed to help marketers to determine how certain characteristics of their products or brands can best appear to consumers in relation to competitive brands. It enables marketers to identify areas in which consumer needs are or are not being adequately met and then to search for gaps in the positioning of a particular product or service among competitors. For example, if a mobile telecommunications service operator wants to introduce a new mobile telecommunications product or brand to the generation Y markets, it may utilize perceptual/position map to uncover a niche of consumers who have a special set of interests that are not being adequately or equally addressed by other mobile service operators serving the same demographic segment. Results from the mapping allow the service operator to position its new product or brand specially focused on the consumers' interests. With the determinants of the two most critical benefits of service price and

communications service quality identified, the researchers were able to depict a perceptual/positioning map of mobile telecommunications market by brands in Kazakhstan (see Figure 1).

Positioning conveys the conception of how the product or service can fulfill the needs of consumers. A good positioning strategy should correspond to consumers' needs and enable the features of the brand or products to compete against its competitors. The result of successful positioning strategy should result in a distinctive brand image, which consumers can rely on in their product choices. In today's competitive environment of high-tech products and services, a distinctive product or brand image is one of the most important factors, but also very difficult to create and maintain. As products become more complex and with higher technological contents, the marketplace become more competitive, and consumers have to rely more on the product image and claimed benefits than its actual attributes in making their purchase decisions. Regardless of how well positioned a product appears to be, the marketers may be forced to reposition its product in response to new market events such as competitors are cutting into the brand's market share or too many competitors are stressing the same attributes. Another reason for repositioning a product or brand is to satisfy changing consumer preferences and to beat down the competitors in the market. Once the competitive set has been defined, the next logical step is to uncover any strengths or weaknesses of these competitors who could influence the sales potential of the company's brands. Based on the competitive advantages of brands, this study simulates a company's marketing strategy based on the determinant benefits; communications service quality, and service price within the specific market segments. The examples of stimuli and marketing strategy are shown at Figure 1.

**FIGURE 1. AN EXAMPLE OF PERCEPTUAL/POSITION MAP BY PERCEIVED BRAND BENEFIT OF MOBILE COMMUNICATIONS SERVICES IN KAZAKHSTAN**



## MANAGERIAL IMPLICATIONS AND DISCUSSION

Consumers have a number of enduring perceptions or images that are particularly relevant to products or brands marketing. Products and brands have symbolic value for individuals, whose purchases of certain products and patronizing brands are attempts to preserve or enhance their self-images. This study reviews consumers' perceived benefits of products, services, brands, prices, product quality, and service providers. Most new products fail because they are perceived as "me too" offerings that do not offer potential customers any advantages or unique benefits over competitive products (Bronnenberg and Wathieu 1996; Carpenter and Nakamoto 1990). Marketers of different brands in the same product category can effectively differentiate their offerings only if they stress the benefits that their brands provide rather than the physical appearances of their products. The benefits featured in a product's positioning must reflect those attributes that are important and correspond to the needs of the targeted consumer segment.

Results of this study further suggest that firms should develop a repositioning strategy based on the determinant attributes and benefits if they can be differentiated. The positioning and repositioning process should execute a series of steps that provide a base for designing the marketing mix in consistent with a market segment. First, identify the specific consumer needs and benefits desired by the targeted segment. Second, applying the perceptual mapping technique to identify and analyze the perceived benefits and images of each present and potential competitor. Third, search for an unique position that offers a combination of deterministic benefits. Fourth, design a marketing campaign to communicate with consumers about the benefits of its brands rather than competitors' brands, and finally continue to monitor the market, to periodically reviews of changing consumer preferences in order to introduce a timely, better offering.

High-tech markets are increasingly complex, shorter life cycles, and the need of rapid decisions (Bridges, Coughlan and Kalish 1991) because of the increasing competition and continually evolving consumers' expectations. For these reasons, high-tech companies usually rely on a product innovation (Dugal and Schroeder 1995) rather than the needs of the consumers. This often incorporates with a marketing failure (Rosen, Schroeder and Purinton 1998). Consumers use the attributes of the product category rather than brand attributes to assess the attractiveness of innovative new products (Boyd and Mason 1999). A research suggests the proficiency of marketing activities and product quality as the controllable factors of new product success (Calantone, Schmidt and Song 1996). A new product with a well-known brand name is to provide consumers with a sense of familiarity and security by leveraging positive brand characteristics in a product category (Han 1998). Accordingly, the researchers conclude that brand pioneering based on the needs and benefits of consumers

have become a beloved marketing strategy for the introduction of new high tech products in today's competitive marketplace.

## CONCLUSION

This study is an empirical research to identify the present position, to set the direction of repositioning with a product category and within a segment, and to develop how to differentiate a firm's product or brand offerings against competitors within the set of market structure. Information about other brands comprising the competitive set is crucial to the brand manager in developing marketing strategy for the brand. However, the complexity and uncertainty that face most business firms today in their rapidly changing operating environment have a major impact on the positioning strategy. As a result, many managers have experienced the frustration of not being able to predict the future with a desirable degree of accuracy and not having sufficient information to understand competitors' movements and strategies, and not having sufficient time to engage in necessary long-range planning activities.

The results of this research indicate that consumers want better communications service quality, faster connecting, wider area of coverage, and lower service charge. Consumers are looking for product/service quality and price utility. In a way, marketers identify the specific consumers' needs, and benefits perceived by consumers within the targeted segment through their perception toward products and brands, analyze the perceived images of each present and potential competitors by perceptual/positioning map, and then introduce a better offering with a combination of deterministic benefits.

## LIMITATION AND FURTHER RESEARCH SUGGESTIONS

Marketing changes are occurring at the time as firms are approaching their strategy formation. As long as it is unable to predict changes accuracy and as long as consumers' preferences keep changing, the implications of this research should be interpreted with care. Given the results of this research, additional studies should concentrate on multi-attribute attitude model (Ajzen and Fishbein 1980) in order to focus on specific brands. Consumers' attitudes toward a product or brand are the function of their perception and assessment of the product's deterministic attributes. Additional studies should be conducted to extent current marketing information and practices to high-tech products or brands.

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# THE COMPARATIVE ADVANTAGES OF THE PRESENT AND FUTURE PAYMENT STRUCTURES FOR AGRICULTURAL PRODUCERS IN UZBEKISTAN\*

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*In the aftermath of independence from the Soviet Union in 1991, the republic of Uzbekistan in Central Asia is in the process of rebuilding and restructuring its agricultural sector to strengthen self-sustained production and consumption. One avenue being pursued is the privatization of the former state and co-operative farms, the investment in modern farm technology, although training of farmers has so far been neglected. However, the present payment structure upheld by the Government of Uzbekistan (GoU) for target crops such as cotton and winter wheat is often criticized and pointed out as the key obstacle to the income generation of agricultural producers as well as for building the necessary farm capital for investments and long-term planning.*

*This study uses secondary data to analyze the present factors influencing the profitability of agricultural producers and the dynamics of the profitability rates in the administrative district of Khorezm in the Aral Sea region of northwest Uzbekistan. Present and future profits were compared using various price scenarios by including domestic as well as world market price combinations with the assistance of simulation models. The results shed unexpected light on the present generalizations that Khorezmian producers would be much better off obtaining higher prices for their commodities instead of selling to the Government at fixed prices. The findings of the simulation scenarios showed that isolated reforms such as increased farm gate prices will only marginally facilitate these anticipated effects, but rather a package of reforms is necessary, which has not been considered in the on-going discussions. Introducing higher output prices as an isolated measure is unlikely to increase revenues, but rather should be complemented with a range of procedures, including education of farmers and introduction of alternative agricultural practices, leading to a judicious and more efficient use of inputs. Only when the discussed measures are applied in combination can the anticipated increase in agricultural income be realized.*

## СРАВНИТЕЛЬНЫЕ ПРЕИМУЩЕСТВА СУЩЕСТВУЮЩЕЙ И ВОЗМОЖНОЙ СТРУКТУР ПЛАТЕЖЕЙ ДЛЯ СЕЛЬСКОХОЗЯЙСТВЕННЫХ ПРОИЗВОДИТЕЛЕЙ В УЗБЕКИСТАНЕ

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Республика Узбекистан, расположенная в Центральной Азии и когда-то входившая в состав Советского Союза, с 1991 года находится в процессе перестройки и реструктуризации сельскохозяйственного сектора с целью укрепления самоподдерживающего производства и потребления. Средствами для достижения поставленных задач явились приватизация бывших государственных коллективных хозяйств, инвестиции в современные технологии и даже обучение фермеров. В то же время существующая структура платежей, осуществляемая правительством, за такие культуры как хлопок и озимая пшеница часто критикуется и считается основным препятствием для получения прибыли и накопления сельскохозяйственными производителями капитала, необходимого для дальнейших инвестиций и долгосрочного планирования. Основываясь на вторичных данных, в предлагаемой работе анализируются

факторы, повлиявшие на рентабельность хозяйств и дается динамика уровней рентабельности. С помощью имитационных моделей с различными сценариями, включающими внутренние и мировые цены, а также их комбинации, были сопоставлены действительные и возможные доходы сельскохозяйственных производителей. Результаты с неожиданной стороны высветили общепринятое мнение о том, что более высокие цены на сельхоз продукцию принесли бы узбекским производителям больше прибыли. Полученные из имитационных сценариев данные свидетельствуют о том, что увеличение цен само по себе не способно принести ожидаемые результаты и что, скорее всего, потребуется целый пакет реформ, не рассматриваемых, однако, в данной работе. Более высокая плата за сельхоз продукцию в качестве изолированной реформы не способна увеличить доходы, а скорее должна быть дополнена целым рядом мероприятий, включая повышение знаний работников села, внедрение альтернативных сельскохозяйственных практик, способствующих разумному и более эффективному использованию вкладываемых ресурсов. Желаемый рост доходов в сельском хозяйстве может быть достигнут только в комбинации этих мероприятий.

## INTRODUCTION

In the aftermath of independence in 1991, the agricultural sector of Central Asian Uzbekistan has constantly been the target of legislative and governmental reforms and regulations. The agricultural sector, which contributes one-third to GDP and is most important for prosperity of the whole nation, has experienced numerous reforms, of which only some were favorable for producers. Prices for agricultural products did not rise as fast as the cost of inputs, the irrigation network proved to be outdated and inefficient, and update technology had not yet been introduced (Martius et al. 2004). Public extension services are non-existent, agricultural research is now rarely conducted and complementary services for private farmers, such as extension provision and soil laboratories, are lacking. On the positive side, land reform has been completed and water user associations (WUAs) have been created, so that local users could share responsibility for water distribution.

International institutions have placed the Government of Uzbekistan (GoU) under continuous pressure to accelerate and extend agricultural reforms. The World Bank (2003) stated, "A minimum set of critical reforms are needed to provide the impetus for growth as the Uzbek economy moves towards a more decentralized market economy. ...Prices in the domestic market should generally reflect international prices. ...State procurement quotas for wheat and cotton should be further reduced and farms given freedom to dispose of the products over the state procurement levels at their own discretion and prices for these products should be liberalized. ...In parallel to the reduction in state procurement and agricultural price liberalization, agricultural sector should be involved in the agro-processing industry, also marketing infrastructure, storage and transportation services, and tolling arrangements for cotton should be encouraged".

In line with the World Bank country assessment, the GoU eased target crop production and undertook various attempts to amend the price system. According to governmental regulations (amendments to the Decree of the Cabinet of Ministers # 477 dated from 19.12.2001 and # 27 dated from

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19.01.2002), the shares of target crops submitted to the GoU at a fixed price will be decreased. Thus, the share of cotton accepted by the GoU at a fixed state price was set at 30%, and 20% was to be bought at a contractual price. Farmers could sell the remaining 50% of the cotton harvest at their discretion. However, there are no free cotton markets in Uzbekistan, so all cotton was and still is sold to the GoU at a fixed state price. Wheat turn-in shares were 25% of the planned harvest at a fixed state price, 25% at contractual prices and 50% at market prices, which is usually twice as high as the state price (Ruzmetov et al. 2003). Likewise cotton, wheat shares and price differentiation are rarely followed in practice.

It is often advocated (e.g. Murodov 2002) that agricultural producers would gain higher incomes if they obtained world-market prices for their products. Although it is questionable that this price level will ever be paid to farmers at all, in any case paying higher prices to farmers would restrict the government's ability to provide the present subsidies which kept the prices for inputs relatively low until now.

In principle, the GoU intends to increase state prices for cotton, wheat and rice by 50-55% every year to support agricultural producers (Ismailov 2003). However, as concluded elsewhere (Rudenko 2003) this price update is unrealistic. Output prices increased moderately, while input prices rose at a faster rate. Thus, the liberalization of prices led to the rapid growth of prices for industrial products, such as fertilizers and fuel. In contrast, much slower growth was registered in prices for agricultural commodities. This disproportion in price growth greatly affects the profitability of agricultural producers.

Until recently the production of the target crops rested mainly with shirkats, which are large-scale agricultural producers, which arose from the former collective farms in 1998. Shirkats have large cropping areas and inherited all the production factors and infrastructure from the collective farms. Despite the seemingly favorable working environment, such as agricultural machinery parks, privileges in the acquisition of inputs, priority in water use, and governmental support, profitable production in shirkats was not sustained. In Khorezm, for example, in the northwestern region of Uzbekistan, only 6 shirkats out of 117 were profitable in 2002 and 7 shirkats out of 102 in 2003 (Annual reports of Khorezm district Agriculture and Water Resources Management Office "ObiVodKhoz"). The least profitable shirkats were and still are being transformed into private farms. Given the different views on the influence of production factors on the profitability, this study intends to define those factors that influenced the profitability of shirkats and to analyze the dynamics of profitability rates under different price scenarios to support policy makers in the decision-making of future price scenarios.

## METHODOLOGY

*Description of the study site.* The research was conducted at four shirkats in Khorezm district (41°41' N latitude, 39°40' E longitude and altitude 113 m). Khorezm is the smallest administrative region of Uzbekistan. It borders the southern edge of the ecologically degraded Aral Sea area and is one of the most problematical areas regarding salinity, irrigation water availability and overall crop performance (Martius et al. 2004). The climate in Khorezm is arid and sharply continental, as characterized by hot summers with temperatures rising to +45 °C and cold winters with temperatures falling as low as -20 °C (Glazirin et al. 1999). The annual evaporation of about 1626 mm is far in excess of the annual long-term average precipitation of 100 mm, and hence agriculture is only possible with irrigation. The four representative shirkats were randomly selected by profitability rates in 2001-2002. The geographical distribution represented their location with respect to the Amu Darya River, which is the main supply of irrigation water.

*Data collection.* The survey combined structured (questionnaires) and semi-structured interviews. Primary data on agricultural production included input and output quantity and prices, which were collected through questionnaires. In-depth information was collected on farm labor force, physical assets, farm equipment, land use, plant and livestock production. Concurrently, secondary data was collected at regional and district statistical offices for crosschecking and to complement the primary data. First a rapid analysis was conducted to determine possible data gaps. When necessary, revisits occurred.

*Simulation scenarios with domestic and world market prices.* At the time this survey was conducted agricultural producers were growing vegetables, fodder crops and the so-called state crops: cotton, winter wheat and rice. The state order was recently abolished for the latter. Based on real production data, de facto gross margins (GMs) were calculated for the whole range of crops cultivated by the selected shirkats. Gross margins were calculated as the difference between direct variable costs, such as seeds, fertilizers, fuel and labor, and the gross return. Further analysis and simulation scenarios focused on the crops with negative GMs and largest cropping areas (cotton, winter wheat, and rice), leaving aside those crops, which had positive gross margins under the present payment structure. These simulation scenarios consisted of two sets of eight scenarios each (see Table 1), representing different combinations of the world market prices for commodities as well as for inputs. Prices in these two sets, other than cotton, were the same. In the first set the export border price for cotton was used in the calculation of GMs. In the second set use was made of the "hypothetical" farm gate price (see Table 2). A second set of scenarios examined the adjusted farm gate price for cotton. This is the price farmers could have received (instead of the actual received state procurement price) after the export border price was adjusted for raw cotton processing, transportation and marketing. Local ginneries have the capacity to transform about three kilograms



of raw cotton into one kilogram of cotton lint, thus a 32% conversion ratio was applied in farm gate price calculations (see Table 3).

Rate of return (RR) shows how much income is generated per each invested monetary unit. RR was estimated for the main inputs as the ratio of GMs to the cost of these inputs.

TABLE 1. SCENARIOS COMPARED IN THE PROFITABILITY ANALYSES

Scenario	Inputs	Outputs	Seeds	Fertilizers	Diesel
1	D	D			
2	WM	WM			
3	WM	WM	D		
4	WM	WM	WM	D	
5	WM	WM	WM	WM	D
6	WM	WM	D	D	WM
7	WM	WM	D	WM	D
8	WM	WM	WM	D	D

D= domestic prices  
WM= World Market prices

TABLE 2. PRICES OF THE DIFFERENT SCENARIOS, US\$ PER UNIT

	Unit	Scenarios							
		1	2	3	4	5	6	7	8
<b>Commodities:</b>									
Cotton (set 1)	kg	0.054	0.351	0.351	0.351	0.351	0.351	0.351	0.351
Cotton (set 2)	kg	0.054	0.226	0.226	0.226	0.226	0.226	0.226	0.226
Wheat	kg	0.035	0.139	0.139	0.139	0.139	0.139	0.139	0.139
Rice	kg	0.100	0.271	0.271	0.271	0.271	0.271	0.271	0.271
<b>Seeds:</b>									
Cotton	kg	0.072	0.085	0.072	0.085	0.085	0.072	0.072	0.085
Wheat	kg	0.079	0.28	0.079	0.28	0.28	0.079	0.079	0.28
Rice	kg	0.068	0.013	0.068	0.013	0.013	0.068	0.068	0.013
<b>Diesel</b>	litre	0.057	0.536	0.536	0.536	0.057	0.057	0.536	0.057
<b>Fertilizers:</b>									
Nitrogen	kg	0.047	0.224	0.224	0.047	0.224	0.224	0.047	0.047
Phosphate	kg	0.093	0.61	0.61	0.093	0.61	0.61	0.093	0.093
Potash	kg	0.033	0.168	0.168	0.033	0.168	0.168	0.033	0.033

Note: Set 1: export border prices for cotton lint; Set 2: farm gate price for raw cotton

In the baseline scenario *scenario 1* only domestic prices (prices received by or paid to agricultural producers) were used, which represents the current situation.

In *scenario 2* only world market prices (valid for the year 2001) for all inputs and outputs were used, which is the extreme opposite to the current reality for the producers. In *scenario 3* it was assumed that seeds could only be acquired at domestic prices, whereas all the commodities were valued at world market prices. Since chemical fertilizers are produced in Uzbekistan, *scenario 4* assumed that these fertilizers are acquired at domestic prices. A similar consideration was introduced for diesel. Since this commodity is produced in the country, *scenario 5* evaluates the profitability with the domestic price for diesel. Other scenarios assessed different input price combinations: either seeds and fertilizers are made available at domestic prices (scenario 6), or seeds in combination with diesel (scenario 7) or a combination of fertilizers and diesel (scenario 8).

According to the Center for Economic Research (Report 2004/02), the transport and marketing share of the border price for cotton lint is 17.89%, while the processing share is 17.61%. Hence, agricultural cotton producers could have received about 0.23\$ per kg cotton lint in 2001 if they were paid the world market prices for cotton.

TABLE 3. PRICES USED FOR THE ESTIMATION OF THE FARM GATE PRICE FOR COTTON

Export border price for cotton lint, US\$/kg	1.09*
Conversion ratio, %	32
Border price for raw cotton, US\$/kg	0.351
Marketing and transport cost, US\$/kg	0.063
Processing cost, US\$/kg	0.062
Farm gate price for raw cotton, US\$/kg	0.226

\* Export border price for cotton lint = cotton export value/export volume

*Simulation scenarios with various levels of state procurement prices.* Low or absent profitability rates can be caused by low output prices. To analyze what would happen to these profitability rates if output prices for the state crops were increased by the state, a set of different price change scenarios were examined. The rate of profitability may change with rising gross income by lowering the prime cost of the product or the whole enterprise by changing the structure and volumes of sales. The dynamics of profitability rates were traced for the year 2003, based on the price levels determined in the price change scenarios and according to the following equation:

$$\Delta Rp = \frac{P1 - P0}{Z0} \times 100$$

Where P0 equals state prices and Z0 the real prime costs of crops in the surveyed shirkats. P1 is the price determined in the state procurement price change scenarios for each of the surveyed shirkats.

## RESULTS

*Price analyses.* Prices received to, or paid by the surveyed shirkats followed the basic trend of disparity in growth similar to the rest of Uzbekistan. Commodity prices rarely reached the 50-55% growth rate stated in the regulations (see Table 4). Concurrently the average input costs in the surveyed shirkats increased substantially. The gross revenues increased moderately but since the production costs exploded, agricultural producers faced losses or in best cases low profitability rates.

**TABLE 4. AVERAGE GROWTH (DECLINE) IN PRICES, PAID OR RECEIVED BY SHIRKATS, IN %**

	2002/2001	2003/2002
<b>Commodity</b>		
Cotton	37	61
Wheat	23	-10
Rice	-5	-24
<b>Seeds</b>		
Cotton	41	76
Wheat	26	26
Rice	81	-32
<b>Fertilizers</b>	92	31
Fuel	69	70

Source: own calculation

*De facto gross margins.* GMs of major crops, estimated based on the actual production data from the relevant year, showed that rice was a profitable crop (see Table 5). GMs also explained the reason why farmers are often reluctant to grow cotton, as it was usually less or non-profitable to them. Those shirkats located close to the Amu Darya river, such as SH (shirkat) "Amudarya" and SH "Urgench", had positive state crop GMs (especially for rice), aside from cotton in 2002, in "Amudarya" and in 2003 in "Urgench".

**TABLE 5. GROSS MARGINS IN SURVEYED SHIRKATS, US\$ PER HA**

Shirkat	Year	Cotton	Wheat	Rice
Amudarya	2001	15	58	151
	2002	-22	50	161
	2003	32	5	180
Urgench	2001	40	41	138
	2002	8	128	210
	2003	-5	8	97
Avaz Otar	2001	-51	-29	*
	2002	-81	20	2
	2003	-95	-31	61
Pakh. Makh.	2001	-132	-66	*
	2002	-44	71	136
	2003	-56	-71	-169

Source: own calculation.

\*Rice was not grown.

*Simulated gross margins.* The GoU sells cotton at world market prices, which are much higher than the prices paid to agricultural producers. The latter receive prices equivalent to one third of the world market price. However, inputs for agricultural production in the world market must also be procured at much higher prices as well. The difference in domestic versus world market prices for inputs, valid for the year 2001, appears to be even higher than the gap between the output prices (see Table 6).

**TABLE 6: DIFFERENCES IN THE WORLD MARKET AND DOMESTIC PRICES, 2001, US\$ PER UNIT**

	Domestic price	World market price	Ratio, times
<b>Commodities:</b>			
Cotton (export border price)	0.054	0.351	6.5
Cotton (farm gate price)	0.054	0.226	4.2
Wheat	0.035	0.139	3.9
Rice	0.100	0.271	2.7
<b>Seeds:</b>			
Cotton	0.072	0.085	1.2
Wheat	0.079	0.280	3.6
Rice	0.068	0.013	0.2
<b>Diesel</b>	0.057	0.536	9.5
<b>Fertilizers:</b>			
Nitrogen	0.047	0.224	4.8
Phosphate	0.093	0.610	6.5
Potash	0.033	0.168	5.0

Source: own calculation, FAO and ASTA websites.

A ratio time indicates the ratio of domestic prices to world market prices.

\*Exchange rate in 2001 was about 1500 soum per US\$.

To examine the assumption that agricultural producers would gain more in a free market environment, possible GMs were calculated using the example of one non-profitable (Avaz Otar) and one profitable (Amu Darya) shirkat, one private farm and with average indicators of Khorezm province. Table 7 depicts these estimates as well as the total costs per hectare when implementing world market prices into local agricultural production according to the various scenarios.

TABLE 7. GROSS MARGINS OF VARIOUS SCENARIOS, US\$ PER HA

Farm units	Scenario	Cotton (border price)	Set 1		Set 2	
			W Wheat	Rice	Cotton (farm gate price)	W Wheat
Profitable shirkat	1	15	58	151	15	151
	2	644	-66	512	254	512
	3	645	-8	501	255	501
	4	768	393	588	378	588
	5	644	-66	512	254	512
	6	769	108	878	379	878
	7	823	452	577	434	577
	8	946	509	964	556	964
Total costs per ha		167	240	330	167	330
Nonprofitable shirkat	1	-51	-29	*	-51	-29
	2	491	-111	*	161	-111
	3	492	-5	*	162	-5
	4	544	11	*	215	11
	5	730	102	*	400	102
	6	545	207	*	216	207
	7	731	117	*	401	117
	8	783	224	*	454	224
Total costs per ha		207	158	0	207	158
Private farm	1	-152	-36	0	-152	-36
	2	862	-85	981	531	-85
	3	583	-44	970	252	-44
	4	679	57	1064	348	57
	5	764	35	981	433	35
	6	680	75	970	349	75
	7	765	97	1053	434	97
	8	861	176	1064	530	176
Total costs per ha		659	1098	0	659	1098

TABLE 7. GROSS MARGINS OF VARIOUS SCENARIOS, US\$ PER HA (CONTINUED)

Farm units	Scenario	Cotton (border price)	Set 1		Set 2	
			W Wheat	Rice	Cotton (farm gate price)	W Wheat
Oblast average	1	49	37	122	49	37
	2	404	28	190	98	28
	3	405	94	176	99	94
	4	555	139	298	249	139
	5	626	185	359	320	185
	6	556	251	345	250	251
	7	628	192	273	321	192
	8	777	296	467	471	296

Source: own calculation

\*Rice was not grown

Calculation of GMs of the three major crops for the year 2001 showed that rice was usually the most profitable crop, even under the present price policy in Uzbekistan.

Under scenario 1, the non-profitable shirkat and the private farm did not manage to cover their prime production costs, which resulted in negative GMs for all crops. Although the district average GMs for all three crops were positive, there is a question as to if the average agricultural production indicators as reported by ObIVodKhoz were real.

The results from scenario 2 indicate that the production of wheat valued at world market prices would not give any profits to agricultural producers, whereas rice would definitely increase their income. This was especially true for private farms, where resources are used more efficiently. As depicted in Table 7, the farm gate price, reflecting the world market price for cotton, gave in almost all cases a far lower GM than when the export border price was used. In addition, even the latter prices were insufficient to cover total expenses per ha for each crop cultivated at these farms, except in the case of the profitable shirkat. Since crops used in the different scenarios require different levels of inputs, the GM estimates that result from implementing world market prices under the different scenarios obviously depend on the application amounts of the most expensive inputs: fertilizers and fuel. Under scenario 2, seeds of all three crops gave the highest rate of return (RR) for all farm types except for the private farm. Private farms usually use little hired labor, and therefore labor gave the highest RR in the case of the private farm. The second highest RR was reached by labor in shirkats and seeds in the private farm. The third placed RR was that from mineral fertilizers and the least RR in all farm units came from diesel fuel. This can be explained by the fact that diesel is the most expensive input in the world as shown in Table 6.

*Break even point analyses.* Another option examined was to see what level of crop productivity should have been reached in shirkats to meet the breakeven

point in case of unchanged prices. Crop yield levels needed for the break-even points are shown Table 8.

TABLE 8. REAL COTTON AND WHEAT YIELDS AND THE QUANTITIES NEEDED TO BREAKEVEN, 2001, CENTNERS PER HA

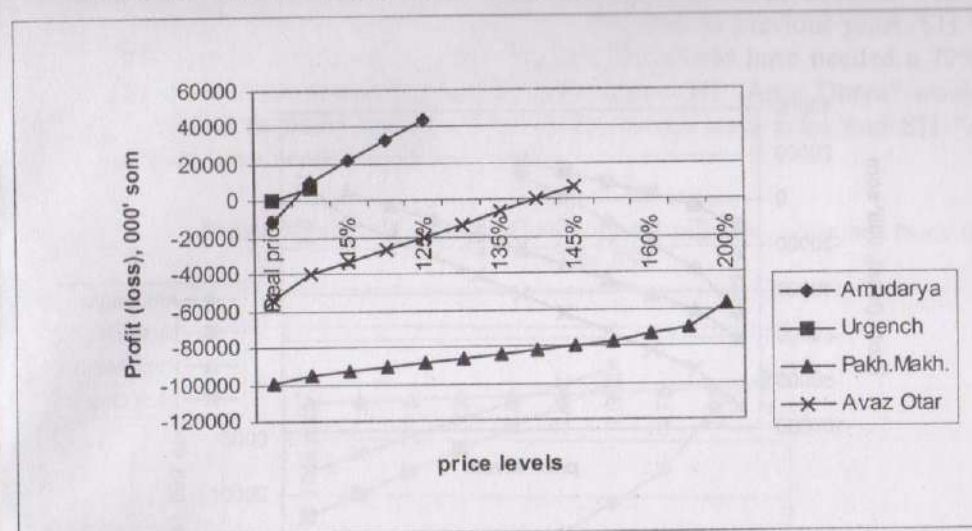
		Cotton		Wheat	
		real yields	for the breakeven	real yields	for the breakeven
Avaz Otar	2001	26,4	36	31,7	45
	2002	18	28	*	*
	2003	21	27	31	34,8
Pakh.Makhm.	2001	11,8	39	10,8	31
	2002	17,6	25	40	*
	2003	13,8	23,3	23,8	43,6
Amudarya	2001	31,2	32	51	68
	2002	16,7	20	*	*
	2003	15,9	20,1	*	*
Urgench	2001	31,4	32	68	71
	2002	14,9	17	44,3	89
	2003	14,8	19,7	35,5	37,4

Source: ObiVodKhoz, own calculation.  
\* Production was profitable.

To increase yields, farmers may have to increase inputs accordingly, thus increasing costs concurrently. In particular the latter may be a burden since this would mean additional costs to producers as well as on the environment, which would conflict with sustainable development. As shown in Table 7, surveyed shirkats should have reached cotton yield levels, which are not that much higher than their actual yields (except for "Pakhlavan Makhmud") and which are feasible in Khorezm. The opposite is true with wheat. Yields should have been substantially and sometimes even unrealistically higher to reach the break-even point.

Changing output prices would be another approach to pursue higher profits. The profits of surveyed shirkats would have changed under different price levels (Fig. 1). The production of cotton in 2001 was non-profitable in all shirkats, despite the acceptable yields. SH "Amu Darya" and "Urgench" would need a 5% increase in state prices to reach the breakeven point, SH "Avaz Otar" a 40% increase. In contrast, even a two-fold increase in state price would not have helped SH "Pakhlavan Makhmud", which had the highest production costs per hectare. This indicates that the "losses" can be reduced by different state prices for cotton.

FIGURE 1. PROFIT FROM COTTON PRODUCTION AT VARIOUS PRICE LEVELS IN 2001



The production of wheat in 2001 was also non-profitable. The difference in state and market prices was about 83%. To reach the break-even point SH "Urgench" would have needed a 10% increase in state price, SH "Amu Darya" a 40%, and SH "Avaz Otar" a 45% state price increase. SH "Pakhlavan Makhmud" would again not break even, even with a two-fold price rise.

FIGURE 2. PROFIT FROM WHEAT PRODUCTION AT VARIOUS PRICE LEVELS IN 2001

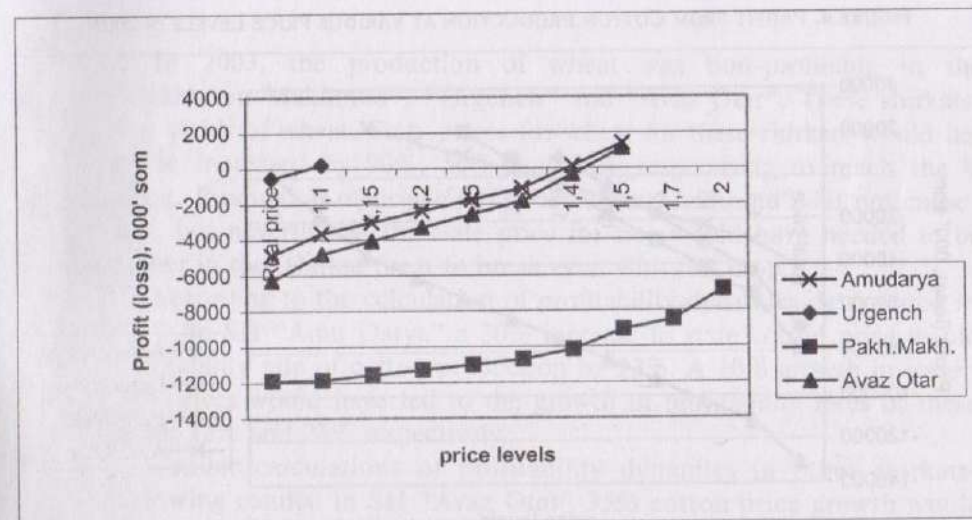
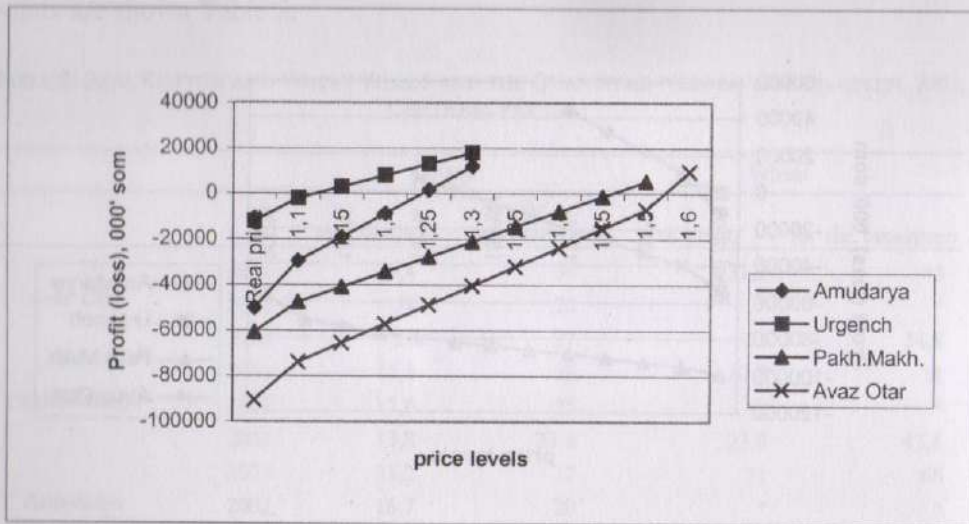
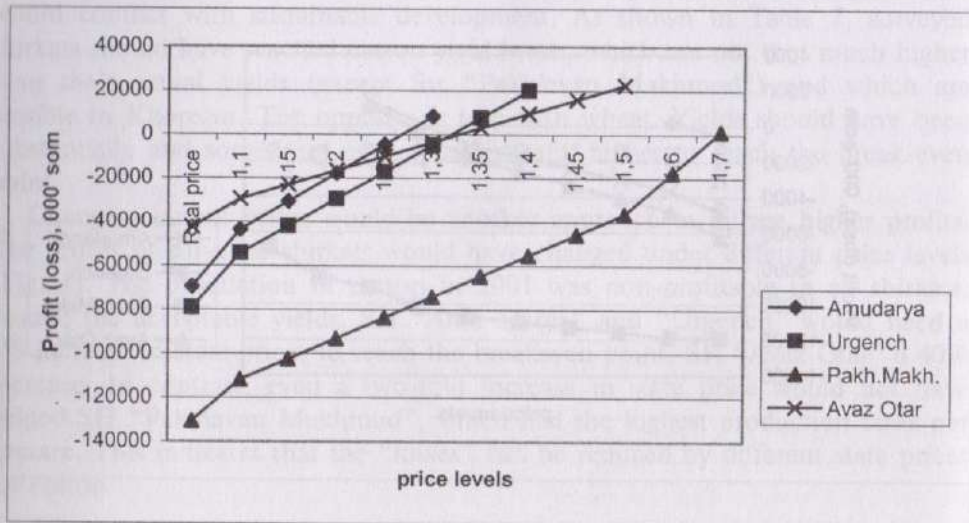


FIGURE 3: PROFIT FROM COTTON PRODUCTION AT VARIOUS PRICE LEVELS IN 2002



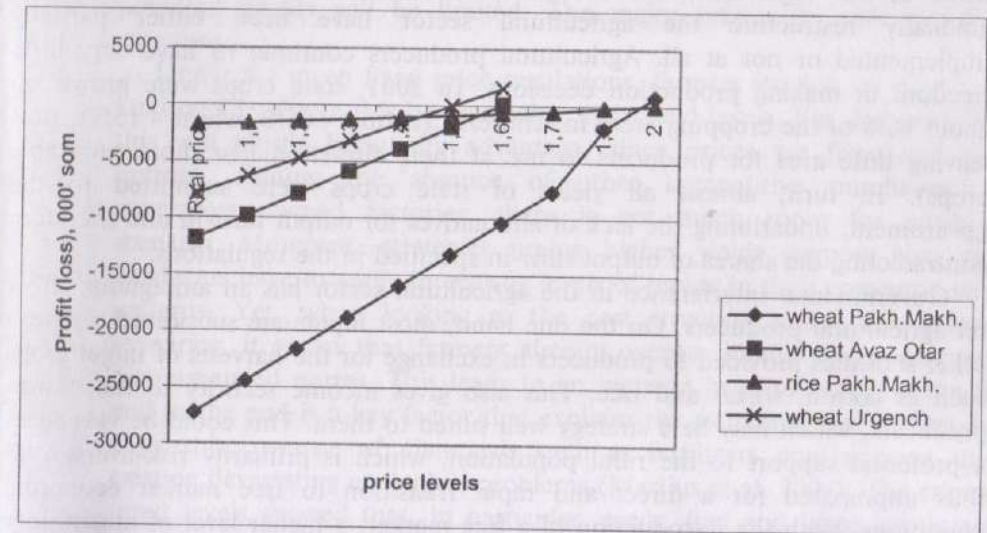
In 2002, all shirkats throughout the province harvested a maximum of half of the planned average yields of cotton due to insect damage. In order to break even, the greatest increase in state price for cotton was needed in SH "Avaz Otar" (55%), SH "Pakhlavan Makhmud" would have needed a 47% increase, and SH "Amu Darya" and SH "Urgench" would have needed a 25% and 12% state price increase respectively.

FIGURE 4. PROFIT FROM COTTON PRODUCTION AT VARIOUS PRICE LEVELS IN 2003



Cotton production proved to be non-profitable in 2003 as well (Figure 4). Surveyed shirkats bore even greater losses than in previous years. SH "Pakhlavan Makhmud", the most heavily indebted SH, would have needed a 70% growth in state price for cotton in order to break even. SH "Amu Darya" would have met a breakeven point with a 27% increase in the state price and SH "Avaz Otar" would have needed a 32% increase.

FIGURE 5. PROFIT FROM WHEAT AND RICE PRODUCTION AT VARIOUS PRICE LEVELS IN 2003



In 2003, the production of wheat was non-profitable in the shirkats "Pakhlavan Makhmud", "Urgench" and "Avaz Otar". These shirkats harvested low yields of wheat. State prices for wheat for these shirkats would have needed to be increased by 90%, 50% and 60% respectively to reach the break-even point. Production of rice in SH "Pakhlavan Makhmud" did not cause too much loss, but nevertheless the state price for rice would have needed to be two-fold higher in that shirkat for it to break even with this crop.

According to the calculation of profitability dynamics determined for the year 2003, in SH "Amu Darya" a 30% increase in state cotton price would raise the profitability rate of cotton production by 23%. A 10% growth in state wheat and rice prices would have led to the growth in profitability rates of these crops by about 12% and 23% respectively.

Similar calculations of profitability dynamics in other shirkats gave the following results: in SH "Avaz Otar" 35% cotton price growth would increase the profitability rate of cotton production by 27%, 60% wheat price growth would raise wheat production profitability by 42%; in SH "Pakhlavan Makhmud" the dynamics of profitability were very weak. Even a 70% increase in cotton price would give only a 0.41% change in profitability rate.

A two-fold increase in wheat and rice prices would raise the profitability rate of wheat production by 0.54% and of rice production by 0.77%. In the "Urgench" shirkat, a 35% increase in state price for cotton would increase profitability by 26%. A 55% increase in wheat price would lead to a profitability increase of 38%.

## DISCUSSION

Most of the regulations and reforms initiated by the GoU as a means to gradually restructure the agricultural sector have been either partially implemented or not at all. Agricultural producers continue to have very little freedom in making production decisions. In 2001, state crops were grown on about 80% of the cropping areas in Khorezm (cotton - 65%, wheat - 15%), thus leaving little area for producers to use at their discretion (for more profitable crops). In turn, almost all yields of state crops were submitted to the government, underlining the lack of alternatives for output turn-in and therefore contradicting the shares of output turn-in specified in the regulations.

Governmental interference in the agricultural sector has an ambiguous effect on agricultural producers. On the one hand, most inputs are subsidized, as were other subsidies provided to producers in exchange for the harvests of target crops such as cotton, wheat and rice. This also gives income security to the cotton producers, which may be a strategy well suited to them. This could be viewed as a profound support to the rural population, which is primarily risk-averse and thus unprepared for a direct and rapid transition to free market economic conditions. With the introduction of a free market, a higher level of uncertainty in terms of employment, income, and working environment, is likely to arise in a more conservative nation and create chaos.

On the other hand some may argue that, at the same time the GoU deprives agricultural producers from opportunities to increase incomes by having access to different markets. State procurement prices in the last years remained below world market levels at about one third of the Outlook A Index for cotton. Combined with state production targets, these low prices hindered optimal crop choices and kept incomes below potential as concluded elsewhere (e.g. Asian Development Outlook 2004; Baffes 2004). The agricultural sector was taxed and it is not clear exactly where the profitability figure was allocated (Baffes 2004).

Another opportunity for local producers would be to get legal access to regional markets in neighboring countries. On various occasions cases of smuggling raw cotton to neighboring countries were reported, which tend to rise with the start of the cotton harvest campaign in Uzbekistan (UzReport.com; BBC Monitoring 2003). Cotton smugglers are attracted by the higher prices offered by the underutilized ginning capacities of neighboring countries. The same is true for other crops, such as rice, fruits and vegetables, which are unofficially exported to neighboring countries. Given the freedom to determine the production structure and marketing channels independently, the producers

are likely to gain higher incomes. Also, as shown elsewhere (Hau and von Oppen 2002), an increased market orientation improves farmers' efficiency in the use and allocation of agricultural resources.

It frequently is postulated that, in case Uzbek farmers gain higher prices for their products, they also would make much more revenues (Murodov 2002; Ismailov 2003). However, this would imply concurrently that the state would be deprived from the income that is used for subsidizing inputs (Djalalov 2005), but will continue to subsidize inputs. Hence, sooner or later farmers would also have to pay for their inputs at e.g. world market or border prices, and thus the potential profits will be limited. The major reason for this lies in the cost structure.

Under the given fixed price regulations, farmers striving for higher returns to land could achieve this by increasing their yield levels. Yet, for state order crops this will hardly bring any advantage, since prices are fixed and determined upfront. Adding the absence of other competitive purchasers than the government-owned factories, there is not much room for advocating this scenario. Moreover, strategies urging higher yields suppose that agricultural producers have to apply increasing levels of inputs in their conventional cropping patterns. Yet, when looking at the cost structure under the different price scenarios, it seems that farmers already overuse inputs when compared to the recommended norms. This leads to an increase in prime costs in the first place and in the end is a key factor that explains the estimated low profitability. Aside from this, overuse of chemicals such as fertilizers may engrave the already existing devastating ecological problems (Martius et al. 2004). The comparison of input levels showed that, in particular, seeds, fuel and labor inputs are usually overused, while fertilizers, especially potash-containing blends, are underused.

When striving for higher profits farmers may look for options to lower their expenses, for which potential room exists. In case, for example, farmers shift towards conservation agriculture practices such as direct seeding or by employing no-till practices, agricultural producers could considerably reduce production costs and sharply reduce energy needs, which allows for fewer machinery requirements. By not tilling the soil about 30 to 40 percent (FAO estimate) of time, labor and fuel costs could be saved as compared to conventional cropping. In addition to these economic benefits, no tillage agriculture reduces environmental pollution, brings less soil damage from machinery and less wind and water erosion, improves the soil structure and allows an increase in organic matter content, crop yields and cropping intensities (e.g. Phillips and Young 1973; Hargrove 1990; FAO 2001). For example, under conventional cotton cropping each field will be typically visited eight to ten times by a tractor with different equipment. Under soil conservation tillage practice a tractor is needed only twice or a maximum of three times during the cotton cultivation. However, farmers are barely aware of such options due to their lack of education, as they are trained once and then hardly exposed to progressive cultivation activities.

Moreover, as a result of the privatization process of the agricultural sector including the land reform, many people have gained access to land. Yet, most of today's Uzbek farmers are not farmers by tradition, but by default. There seems thus much room and need for the training and education of farmers. Agricultural extension and farmer education programs are used as policy instruments for improving the productivity of agriculture while protecting the environment. Although the impact of such programs and the experience of extension systems over the past few decades have been mixed, various studies estimate rather high rates of return to investments in extension (Birkhaeuser et al. 1991), or farmer education (Jamison and Lau 1982; Lockheed et al. 1980). A recent overview of 289 studies of economic returns to agricultural research and extension estimated a 58% rate of return for investments in extension compared to 49% for research (Alston et al. 2000). Although most experience of such programs have been gained in regions other than central Asia and outside the countries of the former Soviet Union, first indications show that this can be expected also for countries such as Uzbekistan. In Azerbaijan, for example, reference farmers (without access to education and extension) had less farm capital for investments and less knowledge on production technology and hence showed a higher dependence on off-farm income than contact farmers collaborating with an extension organization (Lamers et al. forthcoming).

The findings show that GM for wheat production with world market input and output prices are unlikely to give any profits to farmers. This is mainly due to the large share of fertilizers and fuel costs in the total variable costs, reflected both by the high world market prices and by the high requirement of these inputs for wheat production in Khorezm. Also, winter wheat seeds appeared to be available in the world market at a relatively high price, which, in combination with replanting practice caused by unfavorable weather conditions in 2001, added a great deal to the overall production costs.

Rice production would increase farmers' income, which is mainly explained by the relatively very high output prices as compared to other commodities and the low requirements in machinery and thus lower fuel costs and the absence of water charges. However, Uzbekistan is considering implementing water charges in the agricultural sector (see Bocharin and Glovatzkiy 2004). Once this is brought into life, the rice producers would be certainly affected since paddy rice cultivation requires large amounts of water. The total annual amount of water applied to rice is 25 000 – 27 000 m<sup>3</sup> ha<sup>-1</sup> (2500 mm), and is much higher than the amount normally applied to crops such as cotton (7 000 – 10 000 m<sup>3</sup> ha<sup>-1</sup>, 1000 mm), or winter wheat (6 000 m<sup>3</sup> ha<sup>-1</sup>, 600 mm). In case water charges will be accounted for in GM scenarios, the results would definitely look different (in a way of lower GMs for rice) from what was actually obtained.

Water is a major factor determining cotton (Kamilov et al. 2003) and rice yields. However, recent research showed that the risk of not obtaining water in Khorezm has increased during the last decade and even much more than in the rest of Uzbekistan. It was concluded for Khorezm (Mueller and Wehrheim

forthcoming), that roughly in four out of each ten years farmers would face a water shortage. This indeed represents a high long-term risk to farmers. Given the unfavorable water supply in 2001 and 2002, the findings may have been influenced, but yet this scenario seems to have become a reality for Khorezmian farmers. However, when looking at the break even cotton yields, indeed they seem to be feasible in water abundant years.

Next to the high level of use of key production factors, also the large difference between domestic and world market prices for the inputs may explain the low estimated gains in the different scenarios with world market prices for inputs. Moreover, the uneven growth in prices for inputs and outputs, provoked by the partial liberalization of the price system in Uzbekistan, showed that prices for inputs tended to grow at a faster and larger rate than those for the agricultural commodities. Input supplying organizations seek higher profits by adjusting to the free market conditions more eagerly and roughly, while the GoU has opted for a gradual approach. In such conditions a major burden of the reforms is transferred to the producers. Agriculture is still being heavily taxed with little consideration for the impact on agricultural producers and the rural population in general. Actions to improve the working and living conditions of the rural inhabitants, which constitute about 70 percent of the total population, are thus required. In this respect the agricultural sector has the ability to become the engine for the revival of the rural Uzbek economy. When increasing incomes in the rural area, the purchasing power of rural inhabitants will be lifted and hence their demand for the products of other sectors of the economy.

The market driven economy will open marketing opportunities not only to agricultural producers, but also to the producers and distributors of inputs, thus pushing the prices for inputs further up. The general assumption of higher profits to producers under the access to the world market was not confirmed by this analysis. Even if agricultural producers would gain more, it is unclear who would then have to bear the costs for further handling, transport, processing and marketing, as presently these costs and responsibilities are covered by the GoU. In case these costs are to be covered by the producers themselves, would this burden be acceptable and appropriate to them in terms of economic and social considerations? The level of education, the way of making decisions, and the perception of the market economy by local producers might not allow them to integrate and adjust for the requirements of the market economy.

## SUMMARY AND CONCLUSIONS

Several factors cause the low profitability rates in shirkats. These include the governmental interference and inconsistency of the real working environment with those conditions stated in regulations. Yet, rather than the often cited low output prices, the main causes for low profitability rates are much more an overuse of inputs such as seeds, fertilizers and in particular fuel during the present conventional agricultural practices. Yet, the disparity of inputs and

output price growth since independence also contributes to the explanation of the observed low profitability. Presently farmers profit considerably from the subsidized inputs, as these prices are very low compared to world market prices. Gross margins for wheat production with world market in- and output prices would not give significant additional profits to farmers, whereas rice production will increase farmer incomes, at least as long as water pricing is not introduced. Seeds of all three crops gave the highest rate of return (RR) except for the private farms, followed by labor, fertilizer and diesel.

The findings show that the production costs of various crops differed significantly from shirkat to shirkat, and the different shirkats needed various levels of state prices' growth to break even. Thus it is difficult to state what increase in prices for the state crops would help profitability levels to go up. First steps in increasing profits to farmers should be a judicious and more efficient use of inputs, thereby lowering costs. This would call for an increased effort in educational extension type programs for farmers. Much scope for income generation is present for example in soil conservation agriculture, since this will directly lower fuel costs, which represent the greatest outlays. Also a guarantee of water supply (esp. for cotton) will lower production risks.

Introducing higher output prices as an isolated measure is unlikely to increase farmers' income, as it would mean the abandonment of the present subsidy system and thus the payment of inputs at world market prices.

When reflecting on increasing output prices, one should not forget who would then bear the costs for further handling, transport, processing and marketing, which presently are covered by the state.

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# MODIFIED CHI-SQUARED GOODNESS-OF-FIT TESTS BASED ON NEYMAN-PEARSON CLASSES

NATALYA PYA\*

*Modified chi-squared goodness-of-fit tests for the family of logistic and normal distributions based on Neyman-Pearson classes are considered. Those tests are based on different methods for the unknown parameters estimating. The power of the tests against some symmetrical alternatives for Neyman-Pearson classes is investigated.*

## МОДИФИЦИРОВАННЫЕ КРИТЕРИИ СОГЛАСИЯ ХИ-КВАДРАТ, ОСНОВАННЫЕ НА КЛАССАХ НЕЙМАНА-ПИРСОНА

НАТАЛЬЯ ПЯ

Рассматриваются модифицированные критерии согласия хи-квадрат, основанные на классах Неймана-Пирсона, для проверки сложной гипотезы о согласии с логистическим и нормальным семействами распределений. Данные критерии основаны на различных методах оценки неизвестных параметров. Исследуется мощность критериев, основанных на классах Неймана-Пирсона, против некоторых симметрических альтернатив.

### INTRODUCTION

Let  $X_1, X_2, \dots, X_n$  be independent identically distributed random variables. Suppose that one has to test a null hypothesis  $H_0$

$$P\{X_i \leq x\} = F(x; \theta), \quad \theta = (\theta_1, \dots, \theta_s)^T \in \Theta \subset R^s, \quad x \in R^1,$$

where  $\theta$  is an open set, against an alternative hypothesis  $H_1$ , according to which

$$H_1 : P\{X_i \leq x\} = G(x; \theta).$$

Let probability density functions

$$f(x; \theta) = F'(x; \theta) \quad \text{and} \quad g(x; \theta) = G'(x; \theta)$$

exist. When testing  $H_0$  it is possible to use the so-called Neyman-Pearson classes or intervals

$$\delta_i = \{x: f(x; \theta) < g(x; \theta)\}$$

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and

$$\eta_j = \{x: f(x; \theta) > g(x; \theta)\}, \quad i = 1, 2, \dots, n, \quad j = 1, 2, \dots, m$$

Some intervals like, say,  $\delta_i$ ,  $i = 1, 2, \dots, n$ , can be combined into less number of classes. Two grouping classes

$$\Delta_1 = \delta_1 \cup \delta_2 \cup \dots \cup \delta_n \quad (1)$$

and

$$\Delta_2 = \eta_1 \cup \eta_2 \cup \dots \cup \eta_n \quad (2)$$

if it is possible to use them, are of the most interest (Greenwood and Nikulin 1996). In this paper a problem of testing compound parametric hypothesis  $H_0$ , according to which r.v.  $X_i$  follows the logistic and normal probability distributions is considered. The power of the Dzhaparidze-Nikulin  $U_n^2(\hat{\theta}_n)$

(Dzhaparidze and Nikulin 1974) and the Mirvaliev's  $Y_2^2(\hat{\theta}_n)$  (Mirvaliev 2001) test statistics based on the method of moments estimates (MME) of the unknown parameter  $\theta$  for the normal (N), uniform (U), triangular (T), and double exponential (Laplace) (D) alternatives, using Neyman-Pearson classes is investigated. For the normal null hypothesis the power of the Rao-Robson-Nikulin  $Y_1^2(\hat{\theta}_n)$  (Nikulin: 1973a, 1973b, 1973c), Rao and Robson (1974) and

the Dzhaparidze-Nikulin  $U_n^2(\hat{\theta}_n)$  test statistics based on the maximum likelihood estimates (MLE) for the logistic (L), uniform (U), triangular (T), and double exponential (Laplace) (D) alternatives, using Neyman-Pearson classes is investigated.

### LOGISTIC DISTRIBUTION VERSUS SYMMETRICAL ALTERNATIVES

Let the null hypothesis  $H_0$  be that r.v.  $X_i$  follows logistic probability distribution with the following p.d.f.

$$f(x; \theta) = \frac{1}{\theta_2} g\left(\frac{x - \theta_1}{\theta_2}\right) = \frac{\pi}{\sqrt{3}\theta_2} \frac{\exp\left(-\frac{\pi}{\sqrt{3}} \frac{x - \theta_1}{\theta_2}\right)}{\left[1 + \exp\left(-\frac{\pi}{\sqrt{3}} \frac{x - \theta_1}{\theta_2}\right)\right]^2}, \quad x \in R^1. \quad (3)$$

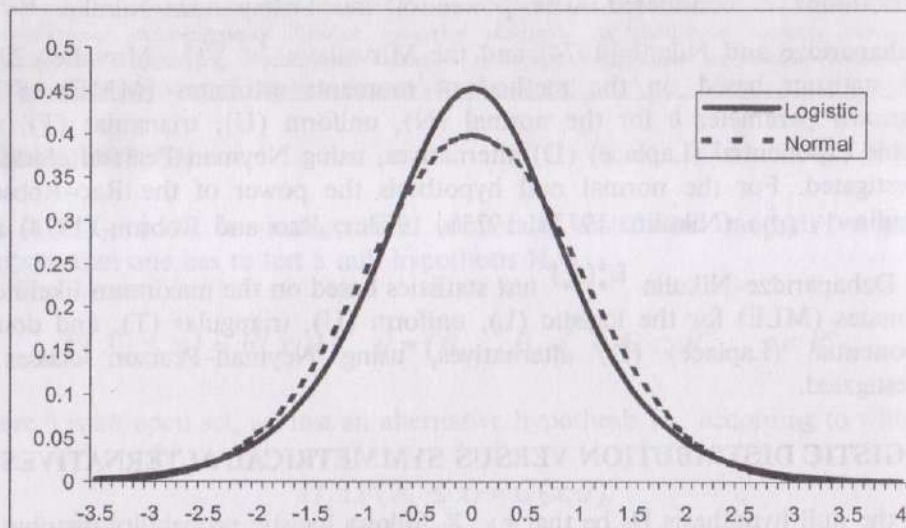
And let the alternative hypothesis  $H_1$  be that r.v.  $X_i$  follows the normal probability distribution with the p.d.f.

$$g(x; \theta_1, \theta_2) = \frac{1}{\sqrt{2\pi\theta_2}} \exp\left(-\frac{(x-\theta_1)^2}{2\theta_2}\right), \quad \theta_1 \in R^1, \quad \theta_2 \in R^2,$$

and let for both  $H_0$  and  $H_1$ ,  $\theta_1 = 0$  and  $\theta_2 = 1$ . To construct Neyman-Pearson classes one has to solve the equation  $f(x; 0, 1) = g(x; 0, 1)$ . Microsoft Excel Solver gives the following four points of intersection: -2.374686, -0.682762, 0.682762, 2.374686. Let these points be denoted by  $a_1, a_2, a_3, a_4$  correspondingly. Since the rank of the matrix  $B$  if one intends to use the Mirvaliev's modified chi-squared test statistics  $Y_2^2(\hat{\theta}_n)$  should be equal to  $s$  ( $< r - 1$  by conditions, where  $r$  is a number of classes), the minimal possible number of Neyman-Pearson classes is four. Consider the following classes (see Figure 1):

$$(-\infty; -2.374686] \cup [2.374686; +\infty), [-2.374686; -0.682762], [-0.682762; 0.682762], [0.682762; 2.374686].$$

FIGURE 1. NEYMAN-PEARSON CLASSES



If the alternative hypothesis is the uniform distribution with the p.d.f.

$$g_2(x; 0, 1) = \begin{cases} \frac{1}{2\sqrt{3}}, & x \in [-\sqrt{3}; \sqrt{3}], \\ 0, & \text{otherwise,} \end{cases}$$

then the corresponding Neyman-Pearson classes are

$$(-\infty; -1.732051] \cup [1.732051; +\infty), [-1.732051; -0.76916],$$

$$[-0.76916; 0.76916], [0.76916; 1.732051].$$

For the triangle probability distribution with the p.d.f.

$$g_3(x; 0, 1) = \frac{1}{\sqrt{6}} - \frac{|x|}{6}, \quad -\sqrt{6} \leq x \leq \sqrt{6} \quad (5)$$

one has the classes

$$(-\infty; -2.28121] \cup [2.28121; +\infty), [-2.28121; -0.827723], [-0.827723; 0.827723], [0.827723; 2.28121].$$

And, finally, if r.v.  $X_i$  follows the Laplace probability distribution with the p.d.f.

$$g_4(x; 0, 1) = \frac{1}{\sqrt{2}} \exp(-\sqrt{2}|x|), \quad -\infty \leq x \leq \infty, \quad (6)$$

the Neyman-Pearson classes are

$$(-\infty; -2.277744] \cup [2.277744; +\infty), [-2.277744; -0.409551], [-0.409551; 0.409551], [0.409551; 2.277744].$$

In order to apply the Pearson or Fisher-Pearson's statistics one should evaluate only  $P_i(\theta)$  for each specified null distribution. For the Rao-Robson-Nikulin test  $Y_1^2(\hat{\theta}_n)$  it is necessary to evaluate matrices  $B(\theta)$  and  $J(\theta)$ . To apply the Mirvaliev's test  $Y_2^2(\hat{\theta}_n)$  one has to evaluate three matrices more ( $C(\theta)$ ,  $B(\theta)$ ,  $K(\theta)$ ). These matrices must be evaluated for the number of classes specified.

## NORMAL DISTRIBUTION VERSUS SYMMETRICAL ALTERNATIVES

Now let  $X = (X_1, \dots, X_n)^T$  be a random sample. Consider the problem of testing the hypothesis  $H_0$  that the distribution function of  $X_1$  belongs to the family of normal distributions with the p.d.f.

$$f(x; \theta_1, \theta_2) = \frac{1}{\sqrt{2\pi\theta_2}} \exp\left(-\frac{(x-\theta_1)^2}{2\theta_2}\right), \quad \theta_1 \in R^1, \quad \theta_2 > 0 \quad (7)$$

If  $\theta$  is unknown, then MLEs  $\hat{\theta}_1, \hat{\theta}_2$  and MMEs  $\bar{\theta}_1, \bar{\theta}_2$  defined by the first EX and the second EX2 population moments are the same equal to

$$\bar{X} = \sum_{i=1}^n X_i/n \quad \text{and} \quad S^2 = \frac{1}{n} \sum_{i=1}^n (X_i - \bar{X})^2 \quad (8)$$

respectively.

Moreover the Rao-Robson-Nikulin  $Y_1^2(\hat{\theta}_n)$  and the Mirvaliev's  $Y_2^2(\bar{\theta}_n)$  tests are identically equal (Voinov, Pya: 2004).

Consider the case of four Neyman-Pearson classes (1), (2) for  $\theta_1 = 0$  and  $\theta_2 = 1$ .

Let us compare the power of the Rao-Robson-Nikulin  $Y_1^2(\hat{\theta}_n)$  and the Dzhaparidze-Nikulin  $U_n^2(\hat{\theta}_n)$  test statistics for the same alternatives as above.

Let the alternative hypothesis H1 be that r.v.  $X_i$  follows the logistic probability distribution with the p.d.f.

$$g(x; \theta_1; \theta_2) = \frac{\pi}{\sqrt{3}\theta_2} \frac{\exp\left(-\frac{\pi}{\sqrt{3}} \frac{x-\theta_1}{\theta_2}\right)}{\left[1 + \exp\left(-\frac{\pi}{\sqrt{3}} \frac{x-\theta_1}{\theta_2}\right)\right]^2}, \quad x \in \mathcal{R}.$$

and let for both  $H_0$  and  $H_1$   $\theta_1 = 0$  and  $\theta_2 = 1$ . To construct Neyman-Pearson classes one has to solve the equation  $f(x; 0, 1) = g(x; 0, 1)$ . Using Microsoft Excel Solver the following classes were obtained:

$$(-\infty; -2.374686] \cup [2.374686; +\infty), [-2.374686; -0.682762], [-0.682762; 0.682762], [0.682762; 2.374686].$$

By analogy Neyman-Pearson classes can be obtained for the uniform, triangle, and Laplace alternative distributions.

As above let the points of intersections be denoted by  $a_1, a_2, a_3, a_4$  correspondingly. Then for these intervals

$$p_1 = \int_{\Delta_1} f(x; \theta_1, \theta_2) dx = F(a_1; \theta_1, \theta_2) + 1 - F(a_4; \theta_1, \theta_2),$$

$$p_i = \int_{\Delta_i} f(x; \theta_1, \theta_2) dx = F(a_i; \theta_1, \theta_2) - F(a_{i-1}; \theta_1, \theta_2), \quad i = 2, 3, 4,$$

where

$$F(x; \theta_1, \theta_2) = \frac{1}{\sqrt{2\pi}\theta_2} \int_{-\infty}^x e^{-\frac{(t-\theta_1)^2}{2\theta_2}} dt,$$

elements of 4 X 2 matrix  $B(\theta)$  are

$$B_{11} = \frac{1}{\sqrt{2\pi}\theta_2 p_1} \left[ -\exp\left(-\frac{(a_1 - \theta_1)^2}{2\theta_2}\right) + \exp\left(-\frac{(a_4 - \theta_1)^2}{2\theta_2}\right) \right],$$

$$B_{ii} = \frac{1}{\sqrt{2\pi}\theta_2 p_i} \left[ \exp\left(-\frac{(a_{i-1} - \theta_1)^2}{2\theta_2}\right) - \exp\left(-\frac{(a_i - \theta_1)^2}{2\theta_2}\right) \right], \quad i = \overline{2, 4},$$

$$B_{12} = \frac{1}{2\theta_2 \sqrt{2\pi}\theta_2 p_1} \left[ -(a_1 - \theta_1) \exp\left(-\frac{(a_1 - \theta_1)^2}{2\theta_2}\right) + (a_4 - \theta_1) \exp\left(-\frac{(a_4 - \theta_1)^2}{2\theta_2}\right) \right],$$

$$B_{i2} = \frac{1}{2\theta_2 \sqrt{2\pi}\theta_2 p_i} \left[ (a_{i-1} - \theta_1) \exp\left(-\frac{(a_{i-1} - \theta_1)^2}{2\theta_2}\right) - (a_i - \theta_1) \exp\left(-\frac{(a_i - \theta_1)^2}{2\theta_2}\right) \right], \quad i = \overline{2, 4}.$$

## ON THE POWER OF DZHAPARIDZE-NIKULIN TEST AND OTHER MODIFICATIONS

To assess the power of  $Y_2^2(\bar{\theta}_n)$  and  $U_n^2(\bar{\theta}_n)$  the following Monte Carlo experiment was conducted.

Using Microsoft Excel  $N = 5000$  samples of size  $n = 200$  of pseudorandom numbers, which follow the standard logistic distribution, were generated.

Statistics  $Y_2^2(\bar{\theta}_n)$ ,  $U_n^2(\bar{\theta}_n)$  and  $Y_2^2(\bar{\theta}_n) - U_n^2(\bar{\theta}_n)$  for both null and alternative hypotheses under consideration were simulated.

As it was expected, the Mirvaliev's statistic  $Y_2^2(\bar{\theta}_n)$  follows the chi-squared distribution with three degrees of freedom; the Dzhaparidze-Nikulin's one

follows the chi-squared distribution with one degree of freedom, and  $Y_2^2(\bar{\theta}_n) - U_n^2(\bar{\theta}_n)$  possesses the chi-squared distribution with two degrees of freedom. Powers of those tests are shown in Table 1.

TABLE 1. ESTIMATED POWERS OF MODIFIED CHI-SQUARED TESTS FOR LOGISTIC DISTRIBUTION

	$\alpha$	Power of $Y_2^2(\bar{\theta}_n)$	Power of $U_n^2(\bar{\theta}_n)$	Power of $Y_2^2(\bar{\theta}_n) - U_n^2(\bar{\theta}_n)$
$H_0$ : Normal	0.10	0.319	0.486	0.074
	0.05	0.204	0.357	0.034
	0.01	0.058	0.136	0.007
$H_0$ : Uniform	0.10	0.999	0.999	0.448
	0.05	0.999	0.999	0.227
	0.01	0.999	0.999	0.021
$H_0$ : Triangle	0.10	0.960	0.992	0.047
	0.05	0.912	0.982	0.018
	0.01	0.693	0.896	0.001

TABLE 1. ESTIMATED POWERS OF MODIFIED CHI-SQUARED TESTS FOR LOGISTIC DISTRIBUTION (CONTINUED)

	$\alpha$	Power of $Y2^2(\bar{\theta}_n)$	Power of $U_n^2(\bar{\theta}_n)$	Power of $Y2^2(\bar{\theta}_n) - U_n^2(\bar{\theta}_n)$
$H_0$ : Laplace	0.10	0.692	0.750	0.249
	0.05	0.582	0.656	0.159
	0.01	0.369	0.445	0.052

From this table one sees that the power of the Dzharidze-Nikulin statistic  $U_n^2(\bar{\theta}_n)$  is greater than the power of  $Y2^2(\bar{\theta}_n)$  for different values of the level of significance and for all considered alternative hypothesis, although for four equiprobable classes with fixed boundaries  $U_n^2(\bar{\theta}_n)$  is insensitive to some symmetrical alternatives (Voinov, Pya: 2004). And it is very remarkable that in the case of four Neyman-Pearson classes the test  $Y2^2(\bar{\theta}_n) - U_n^2(\bar{\theta}_n)$  resulted in much decrease in the power compared to  $Y2^2(\bar{\theta}_n)$  and  $U_n^2(\bar{\theta}_n)$  especially for uniform and triangle alternatives. So, comparing these test statistics the most powerful one for Neyman-Pearson classes is  $U_n^2(\bar{\theta}_n)$  but in the equiprobable case the statistic  $Y2^2(\bar{\theta}_n) - U_n^2(\bar{\theta}_n)$  is preferable. It is of interest to note that the Rao-Robson-Nikulin test  $Y1^2(\hat{\theta}_n^1)$  based on four Neyman-Pearson classes 1 and 2 (see (1) and (2)), where  $\hat{\theta}_n^1$  is the first iteration of the Fisher's procedure (Fisher: 1925) for improving the non-effective MME of the unknown parameter  $\theta$

$$\tilde{\theta}_n^{i+1} = \tilde{\theta}_n^i - \left( \frac{\partial^2 L_n}{\partial \theta^2} \right)^{-1} \left( \frac{\partial L_n}{\partial \theta} \right) \tilde{\theta}_n^i, \quad i = 0, 1, \dots, \quad (9)$$

where  $L_n = L_n(X_1, \dots, X_n; \theta) = \sum_{i=1}^n \log f(X_i, \theta)$ , can also be implemented. The simulated results of power comparison for the alternatives under consideration for  $n = 200$  are given in Table 2.

TABLE 2. ESTIMATED POWERS OF RAO-ROBSON-NIKULIN TEST

	Power of $Y1^2(\hat{\theta}_n^1)$	
$H_0$ : Normal	0.10	0.266
	0.05	0.152
	0.01	0.036

TABLE 2. ESTIMATED POWERS OF RAO-ROBSON-NIKULIN TEST (CONTINUED)

	Power of $Y1^2(\hat{\theta}_n^1)$	
$H_0$ : Uniform	0.10	0.999
	0.05	0.999
	0.01	0.999
$H_0$ : Triangle	0.10	0.952
	0.05	0.891
	0.01	0.634
$H_0$ : Laplace	0.10	0.684
	0.05	0.587
	0.01	0.380

From this table one can see that the power of  $Y1^2(\hat{\theta}_n^1)$  is slightly less than the power of the Mirvaliev's test  $Y2^2(\bar{\theta}_n)$ .

If any asymptotically equivalent to MLE  $\hat{\theta}_n$  estimator of  $\theta$  is available, then for testing the compound hypothesis about the logistic probability distribution one may use the Mirvaliev's statistic  $Y2^2(\bar{\theta}_n)$  or the Rao-Robson-Nikulin test  $Y1^2(\hat{\theta}_n^1)$  for Neyman-Pearson classes. Another possibility is provided by the Dzharidze-Nikulin statistic. It is worthy to note (compare Table 1 and Table 2) that the Dzharidze-Nikulin statistic for four Neyman-Pearson classes being based on the inefficient MMEs is the most powerful for all alternatives considered.

Suppose now that  $X_1, \dots, X_n$  are i.i.d. random variables which follow the normal probability distribution with the p.d.f. (7). Consider the composite null hypothesis stating that  $X_i$  belongs to this family.

To illustrate the applications of  $Y1^2$  and  $U^2$  consider the following Monte Carlo experiment. Assuming  $\theta_1 = 0, \theta_2 = 1$  the random variables

$$X_i = \Phi^{-1}(Y_i), \quad (10)$$

where  $Y_i(\hat{\theta}_n)$  are uniform on  $[0,1]$ , will follow the standard normal probability distribution. Let a sample size be  $n = 200$  and consider four Neyman-Pearson classes defined above. For every sample  $\hat{\theta}_1, \hat{\theta}_2$  and observed frequencies  $N_i^{(n)}, i = \overline{1,4}$ , were defined. Then statistics  $Y1^2(\hat{\theta}_n)$  and  $U_n^2(\hat{\theta}_n)$  were evaluated.

To assess the power of tests the same formulas for  $Y1^2(\hat{\theta}_n)$  and  $U_n^2(\hat{\theta}_n)$  were used, but pseudorandom numbers  $X_i$  for logistic (L), uniform (U), triangle (T) and double exponential (Laplace) (D) alternative distributions were generated accordingly. All alternative distributions are symmetric with mean zero and variance one (as for the null hypothesis). For the null hypothesis statistics

$Y_1^2(\hat{\theta}_n)$  and  $U_n^2(\hat{\theta}_n)$  possess three (r-1) and one (r-s-1) degrees of freedom respectively.

The simulated results of the power comparison for the alternatives under consideration are given in Table 3.

From this table one sees that actually the power of  $U_n^2(\hat{\theta}_n)$  is not too much but systematically higher than that of  $Y_1^2(\hat{\theta}_n)$ . And consideration of  $Y_1^2(\hat{\theta}_n)$  -  $U_n^2(\hat{\theta}_n)$  has not resulted in increase in the power compared to  $Y_1^2(\hat{\theta}_n)$  and  $U_n^2(\hat{\theta}_n)$ . Moreover, comparing the powers of the considered tests based on four Neyman-Pearson classes with those based on four equiprobable intervals with fixed boundaries (Voinov, Naumov, Pya: 2003) one can note that the Dzharidze-Nikulin  $U_n^2(\hat{\theta}_n)$  test for four Neyman-Pearson classes is the most powerful one for all alternatives under consideration.

TABLE 3. ESTIMATED POWERS OF MODIFIED CHI-SQUARED TESTS FOR NORMAL DISTRIBUTION

		Power of		Power of	
		$Y_1^2(\hat{\theta}_n)$	$U_n^2(\hat{\theta}_n)$	$Y_1^2(\hat{\theta}_n)$	$U_n^2(\hat{\theta}_n)$
$H_0$ : Normal	0.10	0.402	0.477	0.156	
	0.05	0.290	0.374	0.088	
	0.01	0.135	0.185	0.022	
$H_0$ : Uniform	0.10	0.999	0.999	0.924	
	0.05	0.999	0.999	0.856	
	0.01	0.999	0.999	0.577	
$H_0$ : Triangle	0.10	0.590	0.767	0.096	
	0.05	0.414	0.623	0.049	
	0.01	0.128	0.306	0.007	
$H_0$ : Laplace	0.10	0.972	0.982	0.332	
	0.05	0.948	0.969	0.242	
	0.01	0.866	0.912	0.114	

## CONCLUSION

If one needs to test a compound null hypothesis about the logistic probability distribution the Mirvaliev's statistic  $Y_2^2(\bar{\theta}_n)$  or the Rao-Robson-Nikulin test  $Y_1^2(\bar{\theta}_n^1)$  based on four Neyman-Pearson classes may be applied. Another possibility is provided by the Dzharidze-Nikulin test  $U_n^2(\bar{\theta}_n)$ . It should be noted that the Dzharidze-Nikulin statistic for four Neyman-Pearson classes being based on the inefficient MMEs is the most powerful for all alternatives considered.

When testing a compound null hypothesis about the normal probability distribution the Rao-Robson-Nikulin  $Y_1^2(\hat{\theta}_n)$  and Mirvaliev's  $Y_2^2(\bar{\theta}_n)$  statistics coincide. The power of the Dzharidze-Nikulin  $U_n^2(\bar{\theta}_n)$  test for four Neyman-Pearson classes is not too much but systematically higher than that of  $Y_1^2(\hat{\theta}_n)$ .

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## IMAGINING A NATIONAL "PANTHEON" OF HISTORICAL PERSONALITIES. NATIONAL MYTHOLOGY IN KAZAKHSTAN

ASKAR ABDRAKHMANOV\*

*The paper examines some elements of a *panneau* exhibited in the main hall of Eurasia National University in Astana and depicting 150 personages of Kazakhstan's national history. Relying on fundamental western theories of nationalism (Smith, Anderson and Gellner), the author identified significant patterns of developing nationalist emotions of a viewer through using certain models of making images appeal to him or her.*

### СОЗДАВАЯ НАЦИОНАЛЬНЫЙ "ПАНТЕОН" ИСТОРИЧЕСКИХ ПЕРСОНАЖЕЙ. НАЦИОНАЛЬНАЯ МИФОЛОГИЯ В КАЗАХСТАНЕ

АСКАР АБДРАХМАНОВ

В работе рассмотрены некоторые особенности панно в главном холле Евразийского национального университета в Астане, на котором изображены 150 деятелей казахской истории. Основываясь на новейших западных теориях национализма (Смит, Андерсон и Геллнер), автор выделил ряд методов, с помощью которых содержание панно призвано вызывать определенный набор патриотических («националистических» в западном понимании этого термина) чувств у зрителей.

Today it is widely acknowledged in scholarly circles that nations and nationalism should be named among the most exciting and mystical phenomena of the recent centuries. Sentiments of national solidarity are grounded in a belief in continuity between the community's past, present and future generations, in a shared historical experience. Of striking interest is the convergence of history and myth. Without any of them the strong sense of nationhood does not have a vital force. That is why nationalist mythology is almost always based on the community's historical experience, both real and imagined.

My study addresses samples of creation of nationalist mythology in the Republic of Kazakhstan, one of the former Soviet republics of Central Asia, which gained its independence in 1991. The thesis statement is that *some of techniques used in officially supported embodiments of a pool of Kazakh history's heroic personages strongly resemble general "European" patterns of early nationalism identified in classical western theories of nationalism by Benedict Anderson (1991), Anthony Smith (1999) and Ernest Gellner (1983).* Specific difficulties in the study of history of Kazakhstan, namely the lack of written sources and resulting extensive reliance on oral tradition leads to stronger mythologisation of the nation's historical consciousness, aggravated by politics of emphasising the outstanding role of personality for the nation. The thesis is

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examined at the example of creation of national pantheon of historical heroes of the nation embodied in the special editions and one of the relevant monuments, *panneau* in the National University in the country's new capital, Astana.

For this work I decided to analyse the structure and some attributes of the book "Eltutqa. El Tarihytan Belgili Tulgalar" (Joldasbekov, Salgarauly and Seidimbek 2001), title of which can be approximately translated as: *Support of the Nation. Personalities of the National History*. The authors of the book include Myrzatai Joldasbekov, the rector of the National University in the country's new capital Astana, a well-known historian Qoysygara Salgarauly, and an ethnographer and philosopher Aqseleu Seidimbek. It seems to be very illustrative in showing the specific role of glorifying the past personalities for constructing image of the national history.

The aim of the authors of book, as it is noted in the preamble, was to outline the deeds of approximately 150 personalities depicted at the huge *panneau* placed in the National University's hall. The *panneau* was painted by an artist Nurjan Qarymsaqov. Several of his studentship times paintings from mid-1990s are also exhibited in the hall of Jurgenev National Arts Academy. All of them have the same structure with assembly of historical personages from various epochs of the past of Kazakh nation. I try to analyse some features of this review of the key figures in the history of Kazakhstan.

First of all, a few things should be said about crucial specifics of historical study of the country's past. Regrettable fact is that the mainly Turkic-speaking nomads, who dominated the territory of modern Kazakhstan until 19th century, did not possess the written tradition of their own. Only occasionally were the historical events fixed on paper (or stone) in the Chinese, Persian, Arabic, European, or local Turkic sources. Thus, in narrating the past of the 'Great Steppe' the scholars face the sheer scarcity of information about the events, and moreover, on the individual personalities. Hence, there follows the most important specifics of studying past of the Kazakh community - heavy reliance on the oral narrative tradition. It should be acknowledged that the science of history does not in principle deny the possibility of studying the past not fixed by written sources. However, studies of this kind of past would require a very sophisticated methodology. In my opinion, so far it has not been properly elaborated in Kazakhstani historiography.

When reading this book, I had a feeling that names of many of the personalities examined in the book are totally unknown to me. Perhaps, it is an outcome of the fact that so far historians in the universities have been trained in the traditions of Russian and Soviet historical scholarship. But this might change with the coming of the generation of academics, educated in the frameworks of the national system. In the Soviet historiography, authors avoided using the names of personalities not mentioned in written sources but known in the oral tradition (folklore), which is almost impossible today.

Illustrative of the earlier days' historiographical tradition is the National Academy's mass edition *Essays on History of Kazakhstan* (Qozybayev 1994), still

widely used by many high school and university students. I made a comparison between those two books in the historical personages considered. The result was that out of 59 "personalities of the national history", examined in *Support of the Nation*, who supposedly died before 1800, more than a half are not mentioned in the "academic version" of national history.

The edition of 1994 was written under the strong influence of Soviet standards, focusing mainly on political and "socio-economic" developments, but almost ignoring what is known as "cultural realm". This partly explains the great difference between these "academic" and "non-academic" publications. To a large extent, it shows some positive trends in historiography, namely the more sensitive attention to the popular oral tradition. However, the data given about at least five of the characters seem to be an extremely dubious base for acknowledging the fact of their 'real existence'. I personally tend to consider them as purely mythical personages, since, in my opinion, it would be impossible to prove their existence by scientific methods. Nevertheless, they are present in the "historical pantheon" of Kazakh nation, together with real personalities.

Taking into account Benedict Anderson's notion of a strong impact of European models of nationalistic imagination on the Third World communities (Anderson 1991), of which the Kazakhs are certainly a part, I identified the tendencies of fitting the national pantheon to some of European models or also imitating them. One of the examples is providing the dates of birth and death for persons about whose life events it is in fact impossible to say anything precisely. The lifetime of 15 of 59 persons who died before 1800 is indicated only in respect of the century. But, at least 25 of them are known only from oral tradition. The events described in these sources can provide historical dates in a very approximate way.

Illustrative in this respect are the discrepancies in giving birth and death dates of the three eminent *bi* (judges), who constituted the Judges' council of Tauke Khan, the codifier of nomadic laws. The lifetime of Baibekuly Aiteke *bi* is designated in the article as "1644-1700". At the same time, the contents table show it as "1664-1700". The year of death of another famous *bi*, Keldibek Qazybek *bi*, in the article is 1765, while the table of contents gives another date - 1756. One of the rare females in that "national pantheon", the wife of one of the rulers of Karakhan dynasty, Aisha-Bibi is ascribed to living in the 11th or 12th century, while the table of contents indicates that she lived in the 10th.

Of course, these cases may be explained by the editors' mistakes. Nevertheless, I see them quite symptomatic for they show that none of the books' publishers was confident enough of the dates they provided. The similarity of these biographical data with the ones from the Russian textbooks must have mattered more for the authors than admission of the fact of impossibility of giving precise data about these people. Indicating exact dates would make the texts on Kazakh history look more convincing, specifically in light of the modern European understanding of the current of history, or otherwise, the concept of "empty homogenous time".

One more example of tendencies of imitating European models is a necessary provision of portrait features of the heroes, presented at the *panneau*. Among such paintings, known to me and representing the wide variety of real personages, are Jacques Louis David's "Coronation of Napoleon I" and Ilya Glazunov's "The Millenium of Russia's Adoption of Christianity" with the wide variety of individuals, recognisable from national history.

The significant feature of the examined pantheon is the "Kazakhness" of all its personages. Officially, "Kazakh" appeared as a polythonym in the 15th century, and developed later as a name for the ethnic community. So, it means that we cannot actually speak of 'Kazakh' heroes before 15th century in the exact meaning of the word. However, the purpose of the 'national myth' is to show as many as possible great personalities as constituting one's *own* "national" heritage.

The emotional effect of this kind of visual embodiment of national symbolic is achieved through making the heroes of the past closer to the contemporary. A national needs to feel almost personal closeness and attachment to these figures. They represent exemplifications of national spirit and must serve as chains of the continuity of generations. Therefore, promoters of nationalist ideology tend to "nationalise" the symbolic figures of the past, or give them features of national, in accordance with the attributes of the group that sanctifies them. At the considered *panneau*, all the personalities have appearance of contemporary ethnic Kazakhs. In other words, they look just like co-nationals of the contemporary citizen to whom the *panneau* appeals. Nevertheless, it is obvious that people who lived centuries or even millennia ago might have possessed quite different features. Especially this concerns the rulers of Saka (Asian Scythians) tribes, the Hun and Mongols.

The national pantheon emancipated the figures of different ethnic origin. In some cases they do not belong not only to Kazakhs, but even to Turkic linguistic groups. One of the illustrative examples is the princess Tomiris, known from Herodotus; she is famous for having defeated the Persian emperor Cyrus the Great in 529 BCE. Ruler of the *Saka* tribes (Asyatic branch of Scythians), she belonged to the people, whose language is classified as Iranian. In fact, it is impossible to say anything precise about her appearance; this concerns the vast majority of the personages of the *panneau*. But, it is highly characteristic that on the painting she (or rather her depiction) looks as, say, a student girl of the Kazakh University. I believe that exactly this perception was the intention of the artist.

The same notion appeals to such personages, included into the pantheon, as Mode, the ruler of Great Xiognu (Hunnu) Empire who confronted with Han China in 2-1 centuries BCE; Attila, the leader of European Huns, acknowledged lately as the personification of nomadic virtues; and Juchi Khan, the eldest son of Genghis Khan and founder of the Golden Horde. They all obviously had non-Turkic ethnic origins, with a dominance of Mongolian elements, hence there is no evidence that they looked like modern Kazakhs, even if they can be considered somehow as related to their history.

Three of the four considered personalities are totally unknown in Kazakh folklore, but from the Greek, Roman and Chinese historical writings. However, all of them are mentioned in the book, as well as in most of other popular publications, under their new names, which were transformed in order to sound Turkic. Mode, otherwise known as Maodun, is called Tumanuly (the son of Tuman) *Mu'de*. Atilla is called *Edil*, the Turkic name for the Volga river, and also quite a popular first name among Kazakhs. Tomiris became princess *Tumar*, the word for talisman, which makes it sound very Kazakh, but definitely not as incomprehensibly Iranian, transformed in Greek mediation.

At the same time, one should mention that no personalities of non-Kazakh origin from Modern history are included. First of all, it concerns Russian-speaking people of the country, which has constituted significant part of the population since the 19<sup>th</sup> century. I suppose that several personalities could have been introduced into the Kazakhstan's national pantheon, for instance: Levon Mirzoyan, moderate and much appreciated leader of Kazakh SSR in the 1930s (ethnic Armenian) or Evgeni Brusilovski, author of the music of the National anthem's music and of the first Kazakh ballets (ethnic Jew). Ignoring the figures of non-Kazakh origin is, surely, not accidental, but is a part of the ruling elite's vision of nationalism. It is rather characteristic that in this way the panneau, which is one of the symbolic centres of the National University, appeals mainly to the youth of Kazakh origin, while students of other ethnic backgrounds cannot identify themselves with such representation of nation.

It is of course no accident that one of the most impressive nationalist symbolic is placed in a University. The educational system constitutes an essential part of modern culture, and exercises an extensive power in promotion of nationalist ideology. "A man's education ... confers his identity on him. Modern man is not loyal to a monarch or a land or a faith, whatever he may say, but to a culture" (Gellner 1983, 37). Embodied in the decorations of the National University, such symbolics may be containing the essence of new nationalist mythology.

The reviewed premises urge me to suggest that the generations growing in the 21st-century Kazakhstan will be educated in the new perspective of national history, strongly influenced by myths.

It is worth to mention that the central focus of Kazakh nationalist mythology is not an event or events but rather personalities. This must be symptomatic for the societies experiencing the process of shift from traditional to modern societies. Societies of such a type tend to accept authoritarian mode of government. For it is the role of the exceptional personality and the leader as the core of national success that is emphasised in the current nationalist propaganda in Kazakhstan.

Among the implications of policy of glorifying the heroes of the past is raising of the status of the current leadership. The usual motive of the numerous biographies of the country's past leaders is an emphasis on the prominent place of a leader in community's life. This process accompanies the appraisal of the

role of the country's first (and so far the only) president in contemporary history of the country.

A viewer can find him as the current national leader in the centre, riding a white horse. The other person standing together with him in the first row is Abylai Khan, the ruler of 18<sup>th</sup> century, acknowledged as the most successful leader of the Kazakh Khanate. The second row is constituted by other best known rulers of the Kazakh polities. Further they are surrounded by the bunch of political and military leaders, artists, scientists and other eminent figures. Presence of all these figures must be meant to justify and even bless (as three *bi* (judges) ritually do in the center of the panneau) the rule of the nation's current leader.

*Support of the Nation. Personalities of the National history* had its editor's board, mentioned in the foreword. The board included the best-known historians from the National Academy of Science and National University, and also the top officials of Kazakh government. This shows the highest rank of this book and also that such interpretations of national history can be sanctioned only by the state.

The structure of panneau also provides interesting analogies. The background is the view of the mountains as the symbol of native land. They can be interpreted also as the Altai Mountains, the cradle of Turkic peoples and their first Empire – the Turkic Kaganate. On the left is situated the Mausoleum of Hoja Ahmet Yassavi in the town of Turkestan. It is considered as one of the main religious centres in Central Asia. But, most importantly, it served as the tomb for Kazakh khans of especial prominence (since they were mainly elected at the basis of meritocracy) in 16<sup>th</sup>-18<sup>th</sup> centuries. Hence, it is the major national shrine of Kazakhs and its placement at the panneau is no accident.

150 personages of the panneau can be divided into four quite distinctive groups. The central one is the political leaders, rulers of Kazakh polities, from the 15<sup>th</sup> to the 21<sup>st</sup> centuries. This group consists of the most prominent khans, but also the much appreciated long-time leader of Kazakh SSR is included. The focus, however, is on the contemporary leader and Abylai Khan.

At the top of panneau one can find personifications of what Anthony D. Smith called the "founding myth". For the last decade, the governmental mass media have been promoting the image of the Turkic kaganate as beginnings of the Turkic-speaking nomadic, and subsequently Kazakh statehood. Of big symbolic significance was the transfer in 2001 of copies of the first Turkic monumental inscriptions from the present-time Mongolia to Kazakhstan's new capital – Astana. Among the implications connected with the inscriptions is that the Turkic people possessed writing several centuries before Eastern Slavs and Russians. The history of USSR always started with the foundations of Russian written culture. The thesis of antiquity of writing among Turks might be used to overcome the inferiority complex of the Soviet times. The copies of inscriptions were placed in the National University, and it is next to them where the examined panneau was placed. The function of the "foundation" personages is



to give blessing to and thus to legitimise the contemporary rule. Actually, half of the personages of this group are known only exclusively from genealogical legends.

The big group of men to the left of the rulers are military heroes, the defenders of the nation. Placed to the left are representatives of the nation's cultural realm: artists, scientists, writers, and intellectuals. In my opinion, this composition of the pantheon was to symbolise concepts of two wings, or two sources of support for the nation's rulers: military and intellectual. Together all these four realms - legendary, military, cultural and political - symbolise the unity of the nation in all its strength. That it was political leaders but not intellectuals or soldiers who serve as the focus of the pantheon must signify their crucial position for the survival of nation. Hence, the supremacy and legitimacy of politico-administrative power is achieved also by symbolic means of nationalist mythology.

In my opinion, the study has shown that in such a young independent state as Kazakhstan, with an extensive presence of elements of traditional society, mythologisation of the public image of history is almost inevitable. The weakness of academic school of historical studies, accompanied by heavy reliance on oral folklore tradition, may lead to consideration of legendary heroes as purely historical personages. Also traced is the tendency to assimilate the new personages into population's historical consciousness: the inclusion of Attila is probably the best example. The far-reaching emphasis on the role of prominent individuals serves the propagation of the image of a strong authoritarian rule. The attempts to create national pantheon seem to be following certain strategy of legitimisation of the existing rule.

However specific can nationalist mythology of contemporary Kazakhstan be, in many parts it relies on the patterns and models, known from the European experience of nationalism.

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## TRANSFORMATIONS IN SELF-GOVERNMENT INSTITUTIONS OF UZBEKISTAN SINCE INDEPENDENCE

AKMALJON ABDULLAYEV \*

*Historically the role of community neighborhoods (mahallas) in societies of Central Asia has been significant. After the collapse of Soviet Union Uzbek policy-makers decided to utilize traditionally formed institutions and solve many new challenges.*

*There have been many structural and functional transformations within self-administration institutions since independence of Uzbekistan. These transformations lead scholars to never-ending debate. It is important to note that legally self-administration institutions are non-governmental. However, many skeptics believe that there are too many intersections between state and mahalla that make the latter ones vulnerable in order to be independent.*

*This paper will evaluate the policy of Uzbek government towards mahallas, self-administration institutions, focusing specifically on changes in status and functions of these organizations. It will be shown that the government has overemphasized mahallas by giving them administrative tasks and jeopardized traditional values of these institutions.*

*As far as methodology of the paper allows, there will be comparative analysis of changes in self-administration institutions before and after independence. Articles from local and foreign authors will be used in the paper. The results of recent survey on self-administration institutions by "Public Opinion" organization will serve as one of the main sources.*

*Transition period had affected all citizens of Uzbekistan. Self-administration institutions were in the center of changes during this period. These institutions are the utmost in significance as they have an effect on all population.*

### ПРЕОБРАЗОВАНИЕ ОРГАНОВ МЕСТНОГО САМОУПРАВЛЕНИЯ СО ВРЕМЕНИ НЕЗАВИСИМОСТИ УЗБЕКИСТАНА

АКМАЛЖОН АБДУЛЛАЕВ

Роль соседских общин в культуре Средней Азии всегда была очень важной. После распада Советского Союза узбекские политики решили использовать традиционный институт «махалля» для решения многочисленных новых проблем. Получив статус органа местного самоуправления (органа МСУ), махалля претерпела структурные и функциональные трансформации за весь период независимости Узбекистана. Эти изменения стали предметом дебатов. Очень важно отметить, что по закону органы МСУ являются неправительственными организациями. Однако многие скептики придерживаются того мнения, что государство и махалля пересекают между собой, и это делает последний институт зависимым.

Данная работа имеет целью дать оценку политике узбекских властей по отношению к махалля, органов МСУ, с акцентом на детальное изучение изменений в статусе и функциях этих организаций. Вероятно государство переоценило возможности махалля, наделив их административными задачами, и таким образом подвергнула риску традиционные ценности этих институтов.

Насколько позволяет методология данной работы, будет произведен сравнительный анализ изменений в органах МСУ за период до и после независимости Узбекистана. В работе будут использованы статьи местных и зарубежных авторов. Одним из основных источников информации послужат результаты недавно проведенного организацией "Общественное мнение" опроса об органах МСУ.

Транзитный (переходный) период оказал влияние на всех граждан Узбекистана. За этот период в центре всех изменений оказались органы МСУ. Эти органы, тем самым, имеют особую важность, так как оказывают непосредственное влияние на жизнь всего населения страны.

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Mahallas have existed for many centuries in Uzbek culture. Each community has a group of elders that is expected to solve any social problems within certain territory. They help organizing weddings and funerals. They also try to prevent divorce and check if elder people are being cared for. Today mahalla committees have one national office and there are about 12,000 local level mahallas in the country with the number of households in each mahalla ranging from 150 to 1,500.

First, the leaders of mahalla had voluntarily assisted their community before the independence. The government of newly independent Uzbekistan had attached secretary to the leader and started to pay salary for their new tasks including finding families with low income and allocating social welfare. Many scholars have written about efficiency of this system but they have ignored the essence of that organization.

Second, the attention of the government to mahallas has increased and inhabitants start to feel government's control through this institution. For instance, mahalla committees have been assisting state in collecting taxes and/or reporting procurator about committed crimes each month. These attempts have directly been influencing people's opinion of their traditional institutions.

As a result of one single effort of the Uzbek government, renaming self-government institutions, 'mahalla' became a buzzword. A prominent scholar, Eric Sievers writes, "Islamic donors see mahalla as the engine to revive Islamic culture, while western donors interested in civil society try to recast mahalla as NGOs. The UN Population Fund hopes mahalla 'NGOs' will get contraception information to youth. The UN Commission on Human Rights similarly plans for several thousand mahalla to build human rights awareness." (Sievers 2002, 132) However, the government of Uzbekistan decided to utilize the traditionally formed institution of mahalla in many spheres simultaneously: allocation of social welfare, fighting crime, provision of security, building an open society, prevention of divorce, etc.

The term 'mahalla' has been used differently by academic scholars depending upon the field of their research. In the Uzbek legislation, particularly in the law "On Institutions of Self-Government of Citizens", 'mahalla' and 'institutions of self-government of citizens' were used interchangeably. Akmal Saidov (2003, 9) writes that the term derives from the Arab words 'mahal' and 'mahallatui' which mean 'community'.

What makes the issue more complicated is that some scholars classify mahalla. According to Eric Sievers, four types of mahalla exist in Uzbekistan: rural, apartment, contemporary and traditional (Sievers 2002, 96). At the same time; Sievers uses terms such as 'administrative mahalla' and 'social mahalla' but does not define them. Sukhareva observed that the size of mahalla of the late 19th century in Bukhara ranged from 90 to 900 persons (Sievers 2002, 139). Thus, the community neighbourhoods were small. Everybody in community

\* The bill was adopted on 2<sup>nd</sup> September, 1993 and revised on 2<sup>nd</sup> April 1999 (Mahalla Law).

new each other. They had elected elders who dealt with the problems of a specific territory.

Are there such mahalla in Uzbekistan today? Uzbek policy-makers had installed institutions within self-government institutions such as a secretary of the aksakal, an advisor on women issues (formerly pedagogue), and a posbon (security guard) and they assigned specific administrative tasks. According to the laws and decisions of the Uzbek Cabinet, the mahalla has to cooperate and assist many institutions of the government including local government, the tax office, the prosecutor, the court of the district, schools, etc.

Analysis of the functions of the mahallas in villages of Uzbekistan can provide a researcher with better understanding of the transformations. Each mahalla is divided into communities. It is very complicated when it comes to the name of this community because people call it as mahalla and the leader aksakal. In other words, two different units have the same name. So, there are communities called mahalla within mahalla. And reforms in these self-government institutions of Uzbekistan have not only failed but also jeopardized the historically formed institution.

The government of Uzbekistan utilized the mahalla and gave them legal status as non-governmental organizations\*. According to official statistics, there are about 12,000 mahallas at the local level, which together technically serve all the inhabitants of Uzbekistan (Sievers 2002, 96). Each mahalla's population varies between 3000 and 5000 people (Earle 2004, 52), so the number of inhabitants in 'official or artificial' mahallas is so big that it is practically impossible to implement the tasks of the original mahalla. In the past, mahallas assisted inhabitants with organizing ceremonies such as weddings. People still organize weddings but they do not invite 4000 people but their mahalla, which is much smaller.

When they were first formed, self-government institutions were regarded as effective instruments of state-sponsored campaign to transfer responsibilities for welfare and other social services onto local shoulders". The main argument of the state was that mahallas could effectively target people in need because each aksakal know his/her community very well. However, this government initiative led to a rise in corruption among mahallas. As a result, the government itself criticized aksakals for passing illegal applications during the selection of candidates who received money from the state.

As it is mentioned earlier, a mahalla is required to cooperate with prosecutors as well as other state organs. Starting from this year, each aksakal of a mahalla has been asked to report to the prosecutor about crime committed within his territory. Galima Bukharbaeva (2003) points out that 'the mahalla used to be a benign social institution – now it is part of a police state' and she explains that

\* See Mahalla Law, however there is a debate over the issue, and many sceptics regard it as a governmental organization (e.g. the salary of the leader of mahalla, aksakal, is paid by the local government).

\*\* For discussion see Coudouel Aline and Sheila Marnie, "The Mahalla system of allocating social assistance in Uzbekistan" (presentation, UNDP Central Asia Conference, Almaty, Kazakhstan, July 21, 1998).

mahalla is 'used as a basic instrument of social control, which can award or withhold state benefits' (Bukharbaeva 2003).

Another aim of the government for using self-government institutions was to preserve families. Bukharbaeva writes about cases when women wanting to divorce abusive husbands were denied their requests by the mahalla. "Unfortunately, such situations end tragically - the woman is driven to commit suicide. There are many such cases. But the mahalla is not held responsible." (Bukharbaeva 2003). Again, a great amount of bureaucracy and huge territory seem to lead artificial mahallas to such failures.

"The attempt to use the mahalla to fulfill at least some of the functions of local government has changed both the institution of the mahalla and people's attitudes towards it, and blurred the dividing line between the community and the state. Eric Sievers, a U.S. scholar who has made an extensive study of the mahalla, says the mahalla is more an instrument of government, not an organ of civil society" (Carlson 2003).

As the mahalla committee gained power, its role in the lives of citizens increased significantly. According to the results of the recent survey on self-government institutions conducted by the "Public Opinion" organization, 64% of the respondents mentioned the importance of these institutions (Mahalla Newspaper 2004). However, did the respondents mean official mahalla or small community that they live in? This is important because the traditional mahalla is given the same rank as the artificial mahalla.

In conclusion, both, self-government institutions and mahallas existed during the Soviet period\*. However, the latter had a longer history. As soon as Uzbekistan became independent, the government renamed the self-government institutions after the historically formed institutions, the mahalla. This was a crucial policy that changed the meaning of mahalla.

At the same time, there were many functional and institutional transformations within these self-government institutions. These transformations, according to many scholars, have caused residents to lose faith in mahalla (Sievers 2002, 147). However, residents actually do believe in mahallas, but not self-government institutions called 'mahalla'. In other words, there are still small communities, original mahallas in Uzbekistan where state and academia had not intervened as into the self-government institutions, yet.

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\* There were difference depending upon the territory, rural and urban/apartments.

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The main purpose of the research is to investigate the reasons why Kazakhstani banks provide the real estate sector with small amount of long-term credits. It also examines the factors that influence the amount of total loans invested in the sector.

This paper considers different aspects and operations of Kazakhstani banks, such as conditions for deposits, interest rates on mortgages and the loans invested in real estate sector, as all these factors have direct impact on the amount and the period of loans.

In Kazakhstan being a country with transition economy the financial intermediaries should put more attention on providing both loans for corporations that operating in real estate sector and mortgages for individuals as well, because individuals' purchases of the new apartments allow the corporations to pay back the loans. Thus, the banks should provide the consumers of real estate products with reasonable conditions, so that they would be willing and able to take mortgages from them.

The real estate sector has great potential mainly due to growing demand for commercial and residential premises that motivates the corporations operating in real estate sector to improve the technology, to establish good relations with the banks, to show their ability to pay back the loans (good credit history), to learn innovations from abroad. If these are done, the company wins confidence from banks and is able to get longer-term loans.

#### БАНКИ И РЫНОК НЕДВИЖИМОСТИ

АНУАР АРЗЫКУЛОВ

Основная цель исследовательской работы понять причины, по которым казахстанские банки не предоставляют крупных долгосрочных кредитов на рынке недвижимости. Также будут рассмотрены факторы, которые влияют на общее количество займов инвестируемых в сектор недвижимости. также

В данной работе будут рассмотрены различные аспекты и деятельность казахстанских банков, включая условия для открытия депозитов, процентные ставки по ипотечным кредитам и займам, инвестируемым в сектор недвижимости, так как данные факторы оказывают непосредственное воздействие на срок и суммы займов на рынке недвижимости.

В связи с тем, что Казахстан развивающееся государство, финансовым посредникам следует уделять большее внимания обеспечению и займами корпорации, оперирующие в секторе недвижимости, и ипотечными кредитами физических лиц, потому что имеется прямая взаимосвязь между приобретением жилья физическим лицами и возвратом займов корпорациями. Следовательно, банки должны предложить потребителям на рынке недвижимости разумные условия, чтобы они хотели и могли взять ипотеку в банке.

Рынок недвижимости является одним из наиболее перспективным вследствие возрастающего спроса на жилье и коммерческую недвижимость. Корпорациям, оперирующим на данном рынке, это дает стимул улучшить применяемые технологии, установить хорошие взаимоотношения с банками, показать свою способность вернуть займы (кредитная история), изучить зарубежные нововведения. Если все это сделано, компания заслужит доверие банков и будет способна взять долгосрочный заем.

#### Characteristics of most popular loans and mortgages in Kazakhstan

There are many different types of loans that provided by the financial intermediaries in Kazakhstan for residential and non-residential construction companies. The majority of these loans are short and medium-term loans and only 30% of all loans given to real estate market participants are long-term. Georgiy Marchenko, the chairman of the National Bank of Kazakhstan, said that the average interest rate on credits given in KZT to different sectors of economy (including sector under consideration) from the beginning of 2003 has insignificantly raised from 14,1 % up to 15,2 %, and in a foreign currency has declined from 12,3 % to 10,3 % (National Bank 2004a). The increasing demand for resources in national currency leads to the slight growth in interest rate on the loans. Due to instability in the exchange rates most of the companies prefer to take loans in national currency, as it was stronger than the foreign currency, i.e. USA dollar. As a result, the interest rate on loans in dollar decreased.

This percentage rate fluctuates depending on the type, the maturity and the riskiness of loans. The longer the maturity, the higher the interest the company has to pay. But as it was stated before, most of loans are short-term and thus, their percentage rate is approximately 6%-8% in national currency. Some companies cannot afford such high interest rate as 14% annually, so why they take shorter-term loans. Comparing with the USA, where the interest rates depend on the sector of economy and the highest rate for real estate sector is 5%, in Kazakhstan it is very expensive to operate in the real estate market.

The majority of the companies operating in the market usually take the medium-term credits except few ones received long-term and very cheap loans like *Reiz* and *Elite Stroy*. What is good about the loan system in Kazakhstan, that it allows the banks to change the interest according to the place (or city) where the corporation is going to invest the money. For example, those corporations, which construct buildings in the regions, have opportunities to receive loans at lower rates, like 8% annually. But still these loans in most cases are short-term.

Let us consider the information on mortgages for individuals who would like to purchase apartment or a house. In Kazakhstan the system of mortgages is quite young and thus, there is no many types of mortgages. Usually they are standardized and an individual can receive a loan only if he/she agreed to provide guarantees that loan will be paid back. These guarantees can be the confirmation of individual income from work place, property he/she currently posses, or the property that he/she is going to acquire.

The average interest rate stated by the National Bank for consumer loans is 13,4% in national currency and 11,2% in foreign currency, i.e. USD dollars or euros. The percentage rate is not so low, thus some people prefer to put money on deposits and to accumulate additional income instead of taking credits. The

interest rate is lower if a person is able to pay back the mortgage in short period of time. Financial intermediates concern with return of mortgages provided to individuals that result in increase of loan terms and interest rates. In 80% of cases people take long-term mortgages, and thus not every person can pay such a high interest on loans.

### Possible consequences of the current situation in real estate sector

There are three major consequences of situation with small amount of long-term loans in real estate sector that result in:

1. low quality of constructions;
2. high prices on new apartments, office rooms, etc.;
3. banks' failure to collect the loans from the real estate corporations because of the high price on mortgages.

Let consider these consequences in more details. The low quality of the new building is the major negative aspect at the market. The corporations having medium- and short-term loans hurry to finish the construction projects, in order to pay back the loans to banks and get profits from customers' purchases. They omit a lot of important details when starting the projects and these make the buildings dangerous in case of different disasters.

The main goal of any business is to get a profit, or the difference between the revenues and all operating expenses and taxes. *The main source of revenues of real estate corporations is money they get from selling new constructions.* It was found out that value of money on Kazakhstani financial market is very high. Beside this there are a lot of other operational expenses, which results in increase of prices of apartments. Also the prices are significantly affected by the ability of individuals to take mortgages, despite the high interest rates. This allows companies to assume that clients are able to buy new apartments because the mortgages are available).

Although there is a risk that companies may not sell apartments at planned prices because customers are eager to pay high interest rates. This may result in failure to return loans in time. In turn, banks may get into difficulties providing the short-term loans for huge projects based on overestimated expectations for high prices.

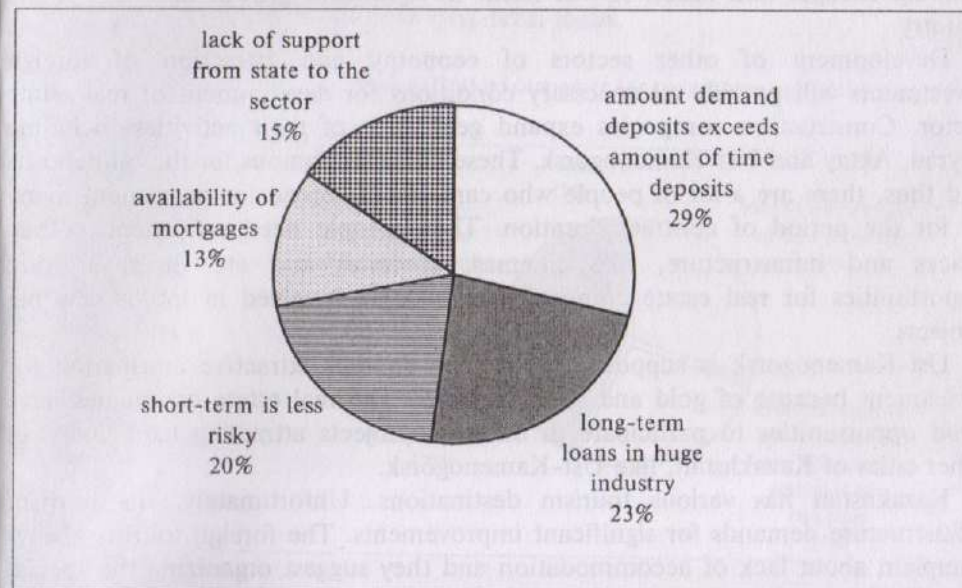
### Reasons, that do not allow banks to provide long-term loans for real estate sector

There are several reasons why local banks are not able to provide the real estate sector with long-term loans. The Figure 1 gives the information about the problems that banks face when they give long-term loans.

As you can see the main issue is that on the liabilities side of bank's balance sheet the amount of short-term demand deposits exceed the amount of time

deposits. Thus, if a bank provides long-term loans and if there are bank-runs, it becomes bankrupt. In order to decrease the risk banks try to keep the maturity gap equal to zero. It doesn't allow them to provide more long-term loans, because any changes in the interest rates may impact the equity section of the balance sheet.

FIGURE 1. MAIN ISSUES WITH LONG-TERM LOANS



The real estate sector suffers because the majority of long-term loans go to the heavy industry. Figure 1 illustrates that this issue stands on the second position (23%). Local banks with the support of Ministry of Finance and the National Banks made different researches that showed the higher profitability from investing activities in the long-term projects in the heavy industry rather than in the real sector of the economy. Of course the state support exists both in heavy industry and real sector. However, in real sector there are many foreign investors operating that makes the credit system more open to provide long-term loans.

According to Mr. S. Kamzaev, the Director of Credit Department, the state provides insufficient support to local real estate corporations. If the government provides guarantees to the banks to repay debts in case of insolvency, the banks could be more confident in borrowing long-term loans (Arzykulov 2004).

## PERSPECTIVES FOR REAL ESTATE SECTOR OF ECONOMY IN KAZAKHSTAN

### Possible perspectives

Kazakhstan is developing state and thus, it has a lot of perspective in different sectors of economy for the future. The improvements and innovations will allow building cheaper and faster. It will result in significant growth of GDP of the country.

Development of other sectors of economy and attraction of foreign investments will provide all necessary conditions for development of real estate sector. Construction companies expand geography of their activities including Atyrau, Aktay and Ust-Kamenogorsk. These cities are famous for the oil deposits and thus, there are a lot of people who came from abroad for permanent living or for the period of contract duration. These people need apartments, office spaces and infrastructure, like cinemas, groceries and etc. It is a good opportunities for real estate companies to become involved in lot of new big projects.

Ust-Kamenogorsk is supposed to become another attractive destination for investment because of gold and silver deposits. The real estate companies have good opportunities to participate in different projects attracting bank loans in other cities of Kazakhstan, like Ust-Kamenogorsk.

Kazakhstan has various tourism destinations. Unfortunately, the tourism infrastructure demands for significant improvements. The foreign tourists always complain about lack of accommodation and they suggest organizing the special camping places in the mountains or on banks of rivers. It is considered that investments in tourism result in attracting visitors to Kazakhstan. Thus, this means tourism sector is dependent on real sector. According to the Research and Development Department of Kazakhstan, the perspectives for investing in the construction of new "cities" in the wild areas of Kazakhstan (deserts and mountains) are expected to be highly profitable. Of course, for this purpose banks should provide the construction companies with long-term loans, because such projects need more time to be completed.

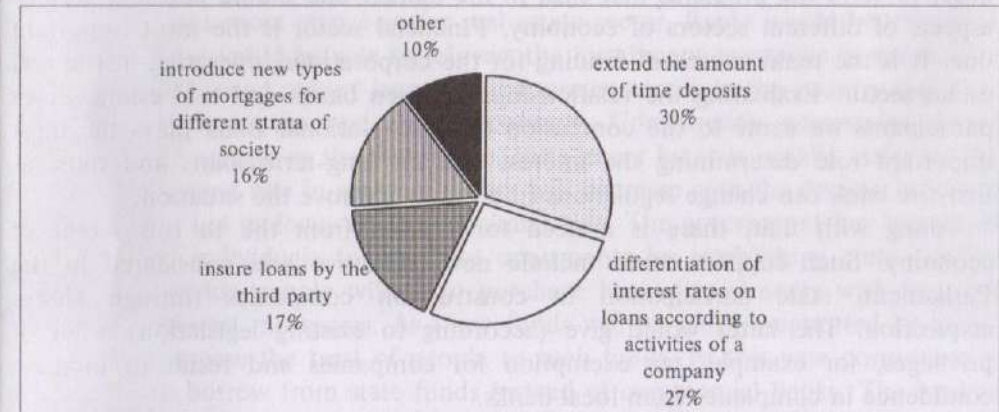
### Actions of bank that help to fulfill the potential

In order to fulfill the potential one should consider the current relationships between banks and real estate companies. If we find possible solutions to the problems, it will give the chance for real estate sector to be provided with long-term loans and thus, it may reduce the prices on apartments. Increase in number of long-term loans offered will result in significant decline of interest rates and will be cheaper to borrow money to construction companies.

Some possible solutions were suggested by the credit managers from Credit department. Figure 2 shows the most important measures that should be taken to improve current situation in banking system in Kazakhstan.

The major problem is related to demand deposits. People prefer to place money on such short-term deposits, which ensures its repayment. Thus, people don't trust in financial sector in our country. This influences banks' capacities to provide the corporate clients with long-term loans. It is recommended to eliminate most types of demand deposits and introduce new types supporting the banks initiatives with long-term loans.

FIGURE 2. IMPROVEMENT MEASURES FOR BANKING SECTOR



It was stated before that Kazakhstan has advantage over the US system of corporate loans, because there is differentiation of the interest rates according to sectors of economy. There are lot of corporations with different amount of assets and equities inside each sector. This fact doesn't take into consideration and thus, often local banks find it difficult to meet clients' wants.

One fifth of cases (17%) belong to the problem with insuring the loans by the third party; in our case it has to be the government or any other state or international financial organization. Such measure aims to guarantee local banks loans to be paid back by the third party in case of insolvency.

The problem regarding interest rates on mortgages can be considered from three sides: *consumer of mortgages, banks and producers of real estate property*. The interest rates on mortgages and loans are established by the National bank, so the second-tire banks work in accordance with the National Bank Acts and Decrees. If one considers the chain it will help to understand the relationships between consumers, banks and real estate companies.

Banks provide mortgages to individuals. These mortgages are used for purchases of real estate property. The construction companies get revenues from the individuals, who get these mortgages from banks. Thus, if the National bank

provides conditions that encourage more people to borrow money, the construction companies will be able to pay back their long-term loans faster than they do it now.

## CONCLUSION

### Overview of the topic

As it was stated above the real estate sector in Kazakhstan faces with a shortage of long-term loans provided by the commercial banks. This leads to some other difficulties that impact the individuals, like high prices on real estate property. In order to solve the problems that exist in the market one should consider various aspects of different sectors of economy. Financial sector is the most important one. It is the main source of funding for the corporations, operating in the real estate sector. Evaluating the relationships between banks and real estate sector participants we came to the conclusion that the National Bank plays the most important role determining the interest rate on long-term loans and thus, as first-tire bank can change regulations in order to improve the situation.

Along with that, there is a need for support from the to this sector of economy. Such support could include new legislative acts considered in the Parliament, state participation in construction companies through shares acquisition. The latter would give (according to existing legislation) a lot of privileges, for example, tax exemption for companies and result in increase confidence in companies from local banks.

In order to keep approximately stable interest rate, the National bank should try to keep the same inflation rate. As we know the inflation rate for 2003 was 6,5% comparing to 4,8% in 2002. Of course this impacts on the nominal rates of long-term loans as well as of consumer loans and mortgages. The interest rates on mortgages at commercial banks don't differ from the interest rates on time deposits. For example, if the mortgage rate at *Kazkommertzbank JSC* fluctuates from 10 till 13,5 % annually, the interest rate for time deposit is approximately 9-11% annually. Thus, there is no much difference between saving of money and taking mortgage at commercial banks. The main goal of the National Bank is to provide clients with available and appropriate mortgages. These actions would help the real estate sector to make profits and to be able to pay back the loans.

Evaluating the situation based on the information of representative people from three different sectors (banks, real sector and individuals) I have concluded that they all face the same interrelated problems. It can be assumed that solving one would direct to the real improvements in the situation with real estate sector.

## Recommendations on improvement the situation

During the whole work I considered the problems, suggestions and possible solutions only based on the interview results, different statistical data, observations and etc. In this part there will be my own view on the problem and solution that was not considered by anyone before in the research.

The problem that banks provide only 40% out of 100% of long-term loans can be solved in simpler way, which doesn't require interrelations with the National Bank or with the government. It could be recommended to the bank management to consider the installment payments on the long-term loans instead of single payment at the day of maturity. First of all, it would allow expanding the maturity of loans, decreasing slightly the interest rates and making loans more attractive for real estate sector. Banks would benefit as well, because they would be able to reinvest the installment payments in another projects. This reinvested money increases the money supply in the country and can be invested again in the real sector economy. Construction companies would also have advantage, as the maturity of installment loans is usually larger so the amount of interest rate in cash equivalent will decrease with the decline in loan term.

Let us focus on the consumer side. The government has impact on the ability of individuals to purchase apartments by establishing state funds, which will provide people willing to purchase houses/apartments with long-term and low interest mortgages. As these funds will be purely supported by state, this would increase the trust of people to such funds. In this case consumers would prefer to borrow from state funds instead of commercial banks. The banks will be able to invest money that initially was purposed for mortgages into the real sector of economy. Establishing of such funds would be good both for real sector and individuals.

My third recommendation, or better say, suggestion, relates to the point that have been already discussed. The National Bank should help to reduce the amount of demand deposits and increase the willingness of people to place money on time deposits. As debit cards, money on banks' accounts and deposits less than one-year maturity are considered as demand deposits, among them only amount of the short-term deposits can be changed. In order to attract customers for time deposits, the interest rate for demand deposits has to be decline significantly. Of course, if it is done, commercial banks would be able to increase the amount of loans provided for real estate sector.

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**DESERTIFICATION AS A THREAT TO THE ECONOMIC AND  
POLITICAL SECURITY OF THE CENTRAL ASIAN REGION**

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**Sustainable agriculture** – farming systems in which the use of purchased chemical-based inputs is significantly decreased in comparison to conventional agricultural systems, soil erosion is controlled and weeds managed, there is maximum efficiency of on-farming and purchased inputs, maintenance of soil fertility to proper addition of plant nutrients, and the basic utilization of biological principles throughout the farming process.

**Environmental Conflict** – ‘a conflict caused by human-sourced disturbance of normal regeneration rate of a renewable resource’; ‘probable linkage between environmental degradation and the outbreak of violent civil or interstate conflict’ (ibid.).

**Environmental change** – ‘a human-induced decline in the quantity or quality of a renewable resource that occurs faster than it is renewed by natural processes’ (Homer-Dixon 1994)

## INTRODUCTION

### Problem

The countries of Central Asia face serious problems of land degradation and desertification due to natural and human causes. In Central Asia – as in many other dry areas across the globe – inappropriate agricultural practices will, in the long term, lead to the destruction of both vegetation and soils (UNCCD 2002). This negatively influences on the productivity of the cultivated land, and, consequently, may lead to economic and social instability in the region. In Central Asian environmental conditions land is a treasure, which feeds people, dresses them and touches not only rural population, but also people working in all sectors of economy.

The economic costs of land degradation to the economies of the countries in Central Asia are enormous. For instance, the Project Document of the GEF/World Bank Aral Sea Basin Program (1998) indicates that due to salinization in the Aral Sea Basin about 5% of Central Asia’s GNP is lost annually (Saigal 2003).

Worsening environmental conditions may be directly associated with social instability and lead to increases in poverty. Poverty incidence ranges between 45 percent and 87 percent in environmentally unfavorable areas. Poverty and continuous agricultural land degradation in rural areas may push people to migrate to urban areas. Overpopulation of cities and increasing poverty rates might become a background for social instabilities. This problem is further discussed in the paper, reviewing different researches and opinions.

Regions security and peaceful development of CA countries is only conceivable within the scope of mutually beneficial regional cooperation. So it is very important to recognize that desertification problem cannot be solved by one country alone. According to the report of the Asian Development Bank, the United Nations Convention to Combat Desertification (UNCCD) serves as the

principal global agreement addressing sustainable land management, which by 1997 was ratified by all of Central Asian Republics. The countries took obligations to implement measures to mitigate desertification on the regional level.

The objective of this research is to identify the link between desertification and security in Central Asian region with the emphasis on Kazakhstan. And, ultimately, using information on successful international experience and interview results, the author tries to assess what kind of policy recommendations could be proposed.

### Hypothesis

Desertification as one of the forms of environmental degradation may cause instability and conflict in the Central Asian region.

### Methodology

The methods used in research: Literature review; interviews with governmental officials (Parliamentarians and the Ministry of Environment of Kazakhstan), NGO representatives (Regional Environmental Center of Central Asia), Kazakhstani geologist, rural sector representatives (farmers) (Conference in Astana, Kazakhstan); materials of conferences.

### Structure of research

The paper consists of three major parts. The first part represents an overview of desertification problem in the world and in Central Asian region specifically. In Appendix there is a brief description of land situation in each of Central Asian countries. The second part presents the analysis of correlation between desertification and security. The example of Fergana Valley is given. The third part is mainly of recommendation and conclusive character. It takes into account the conclusions from the pilot projects in the Ili-Balkhash region, Kazakhstan, the results of the interviews with public officials and a successful international experience. Ultimately there is conclusion, where all major results of research are summarized.

Let us start from brief background information in order to have a basis for the further analysis of the problem.

## BACKGROUND

### Brief description of desertification problem in the world

The term desertification was first used by Aubreville (1949) in connection with the loss of productivity of good land through loss of soil as a result of mindless tree cutting in humid and sub-humid tropics. Whitford (1990) defined desertification as the diminution or destruction of the biological potential of the land leading to desert like conditions. Deserts are a climatological and geographic phenomenon, but desertification is neither climatological nor geographic. It can be defined as a destructive process in which the loss or impairment of productivity or productivity potential of a land results from the direct or indirect activity of man coupled with environmental factors. The world desertification facts are summarized in the Table I (Appendix).

### Brief description of desertification problem in Central Asia

As it was mentioned earlier, desertification not only has to do with deserts. Combating desertification means working against the destruction of natural resources towards rural development and long term food security. Thus desertification control is one way of crisis prevention, though diminishing rural migration and, ultimately, contributing to poverty reduction. So when we look at desertification processes in each country, we will try to assess also the economic and social costs of it.

Table 2 in Appendix briefly overviews the desertification in CA region.

## DESERTIFICATION – A THREAT TO SECURITY?

When we talk about a security threat caused by environmental degradation, we come to the discussion of environment-conflict linkages. Researchers on the issue have different opinions about it. We will discuss two opposite opinions on the issue, of Thomas F. Homer-Dixon (1994) and Daniel Deudney (2006) and some other researchers.

In the opinion of Homer-Dixon (1994), there is a direct positive correlation between environmental degradation in combination with social factors and internal stability of the state. According to his research, decreases in the quality and quantity of renewable resources, population growth, and unequal resource access increase scarcity of cropland, water, forests, and fish. This, according to Homer-Dixon, can reduce economic productivity both for the local groups and for the larger regional and national economies. The affected people may migrate or be expelled to new lands. Migrating people often trigger ethnic conflicts when they move to new areas. "In developing countries, the migrations and productivity losses may eventually weaken the state", - Homer-Dixon writes. However there are some counterarguments about environment affecting security.

Among the many controversies surrounding the environmental security concept, two are central, which Daniel Deudney (2006) describes. First, is there enough evidence to support the claim that ecological change is, or will be, a major new source of conflict? Second, are the advantages of linking environmental problems to security concerns worth the risk of militarizing a society's responses to environmental problems? Other scientists have voiced stronger criticisms, suggesting that the powerful association between the concept of security and the use of military force creates the danger of turning environmental problems into sources of military tension and conflict.

There is such an argument that 'for any environmental threat to be security threat there must be some demonstrable connection to some vital national interest.' (Allison and Jonson 2001, 71). There can be several pressures and threats, which can cause the conflict, such as economic pressure, social and political pressures and ideological pressures. As the illustration we should look at the example in Central Asia, Fergana Valley.

Fergana Valley is the biggest and the most populated oasis in Central Asian region. From the beginning of 1990s there have been several conflicts, leading to severe human victims. These conflicts were: in 1989 on the border of Fergana city and Batken region (Kyrgyzstan), as well as in the related to it Isfar region (Tajikistan), in Osh 1990; in Khujand city (former Leninabad) 1996-98, and the events in the Kyrgyzstan and Uzbekistan border (Batken), 1999-2001. What were the factors or pressures underlying those conflicts?

First of all it is demographic pressure. It is expressed in the region as rapid population growth. Fifty percent of region's population lives in 20% of Fergana area. The average population density is 360 people per square km, where each second resident is younger than eighteen. The birth rate in Fergana is high as well. According to the forecasts of experts in 2010 population will reach 14-15 mln people, whereas now it is 10 mln. The consequences are the increase of new labor in the market, emergence of problems with water and land supply, the feeling of social injustice, causing the phenomena of "creeping migration". This kind of migration is occurring when population of boundary regions of Tajikistan and Uzbekistan moves to the territory of Kyrgyzstan and purchases land and homes there. But these transactions are not legal. Such resettlements to put it mildly are not welcomed by the native Kyrgyz population and may cause deep fears of tearing away for native lands.

The second pressure is low level of economic development of the region. According to unofficial statistics the unemployment rate in Baken region in Kyrgyz part ranges from 50 to 80 percent. 35 percent of potential labor force in the Uzbek part is still unemployed. In most of the cases it is 25 years old youth. Exactly these young people are more liable to create movements of various sort, which become the basis for armed units existing on the territory of the Valley. This economic pressure data is confirmed by the field research, conducted in the South of Kyrgyzstan by the Institute of Regional Research (Bishkek) in 1999. Their research says 60 percent of respondents see unemployment as the main

reason for social instability; 40 percent see the main problem in the decrease of living standards.

Therefore, to decrease social tension in the rural areas of Central Asian states the problem of land scarcity and low quality land should be solved.

## RECOMMENDATIONS

### Improve methods of agriculture

With the existing technique of irrigation using furrow watering 50% of water is used inefficiently. Moreover such watering not only spoils and erodes soil, but also it pollutes ground waters with harmful pesticides, salts and herbicides. The use of overhead irrigation instead of traditional methods will provide an opportunity of saving 5-10 cubic km of water, to increase total agricultural yield by 25-30 percent and finally to increase GDP by 0,3-0,5 billion dollars. These financial resources could be used for buying new agricultural technologies for new overhead irrigation.

### Improve cooperation

There should be better cooperation between the environmental organizations and international commitments taken inside the countries and among them.

### Improve financing of science

Because the major cause of unsatisfactory results of desertification control strategy in China was usage of the wrong methodology of agriculture and grazing due to the lack of scientific knowledge.

### Consider all interests, including less powerful users

The decisions should not be made only in the pursuit of individual or group gains, with little regard for the impacts on others and ignorance of the long-term consequences. During the interview with Kerim P. Primkululy, the Head of the Environmental Committee in the Majilis of the Parliament of Republic of Kazakhstan, he emphasized that Kazakhstan still has this problem of considering interests of only one stakeholder group in decision-making process. This creates a situation that laws and regulations become unfeasible and unjust.

### Establish participatory approach

The process of development must be participatory to succeed in the long run as well as in the short run. According to Eva Kleinn, Regional Coordinator of CCD Project, the main advantages of participatory process are:

- The role of the government decreases, because the population as well becomes interested and motivated in the positive result of the project;
- International investments also increase, because the project becomes more sustainable;
- Through taking into account the interests of all stakeholders, the conflict is less likely to occur.

## CONCLUSION

The paper has shown that land degradation and mismanagement of resources may lead to such negative consequences as migration and social stress in the entire Central Asian region. Those consequences then turn into problems for politicians and have to be solved on a local, national or regional level.

Social science may lack the tools to tell us exactly when and where environmental problems will produce conflict. Nevertheless, the capacity of environmental change to disrupt people's lives, erode standards of living, and threaten established interests tells us that the possibility of widespread violent conflict must be taken seriously.

Analysis showed that it is useless to search for new reserves of water to use them in order to increase subsoil waters. It is essential to move towards progressive methods of irrigation, popular and approved all over the world. Progressive methods mean sprinklers and overhead irrigation. Although furrow irrigation is widely spread in developing countries, countries such US, Russia, Ukraine use only mechanized sprinkling method.

Ultimately, integrated approach to all solutions is important to solve such complex problem as desertification. To achieve this approach the gap between technical solution (knowledge) and daily natural resources management practices should be eliminated. Meaning that support and participation of rural communities is vital if any plan is to be implemented. It will ensure success and sustainability of policy of desertification mitigation.

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## APPENDIX

TABLE 1. WORLD DESERTIFICATION PROBLEM FACTS SUMMARY

- Desertification damages 70% of the world's dry lands, which is 3.5 times the size of Canada. About 30% of the Earth's total land surface is affected.
- Land permanently degraded to desert-like conditions increases by 10 million hectares every year, an area twice the size of Nova Scotia, Canada.
- 110 countries are affected by desertification. Eighty are low income or developing countries with limited resources to restore degraded areas. Two-thirds of Africa is desert or dry lands.
- North America has the highest proportion of dry lands (about 74%) severely or moderately affected by desertification.

There are 25 million refugees in the world forced to relocate as a result of desertification. Another 250 million people are in danger of losing their land. The United Nations estimates that desertification causes affected countries to lose US \$45 billion in income per year.

Source: Amin, Ammar A. (2004). The extent of desertification on Saudi Arabia. *Environmental Geology*, Vol.46, No.1, pp.22-31

TABLE 2. BRIEF OVERVIEW OF LAND DEGRADATION PROBLEM IN CENTRAL ASIA

Country	Brief Description
Kazakhstan	<p>Kazakhstan, the largest of the Central Asian Republics, extends almost 2,000 km from the Caspian Sea in the west to the border of China in the east and nearly 1,300 km from central Siberia in the north to eastern Uzbekistan in the south.</p> <p>The total area of degraded lands in the Republic is estimated to comprise 66% of its territory. The main zones of ecological stress and land degradation are in the Aral and Caspian regions. The Aral Sea was once the world's fourth largest inland water body but has in recent decades shrunk to less than one third of its former size. The rising level of the Caspian Sea is causing the flooding of coastal areas, including active oil production areas, populated areas, agricultural land, and pastures in Western Kazakhstan. Radioactive pollution of soils at the former nuclear test site at Semipalatinsk poses a particular danger.</p> <p>Total annual economic loss due to desertification in Kazakhstan is estimated at 93 billion tenge (US\$ 6.2 billion). Land degradation impacts particularly the poor households. While comprehensive poverty analyses are lacking official statistics show that the proportion of the population living below the poverty line declined from 34.5 percent in 1999 to 31.8 percent in 2000. However, poverty remains a major challenge as the proportion is still high compared with 25 percent in 1992. Poverty is more pervasive in rural than urban areas.</p>
Uzbekistan	<p>More than 85 percent of the territory of Uzbekistan consists of desert or semi-desert. Approximately 47 percent of the land area consists of meadows and pastures; another 10 percent is arable, and 1 percent has permanent crops. A third of the land is "not used", and the balance is utilized for non-agricultural uses. Water is the basis for intensive irrigated agriculture, which is the mainstay of the economy in Uzbekistan, as in the other Central Asian Republics (CARs). The two main rivers of the region, Amu Darya and Syr Darya, flow through the country and terminate in the Aral Sea. The lands of Bukhara, Navoi, Kashkadarya and Fergana regions suffer from soil degradation. Water erosion</p>

TABLE 2. BRIEF OVERVIEW OF LAND DEGRADATION PROBLEM IN CENTRAL ASIA (CONTINUED)

Country	Brief Description
	<p>strongly affects the agricultural lands of Surkhandarya, Tashkent, Namangan and Andijan regions. Sheep pastures are mainly based upon use of the summer mountain pastures, and overgrazing has contributed to degradation. During the past 15-20 years, there has been an extensive degradation of pasture lands, due to the unsustainable use of pasture in cattle breeding, lack of maintenance of pastures and other human activities.</p> <p>The economic costs of land degradation in Uzbekistan are the deterioration of production base due to lack of upkeep of irrigation and drainage systems, huge water losses, severe soil salinization and declining crop yields. All this is estimated by the World Bank to cost the country US\$ 1,000 million annually at economic prices.</p>
Tajikistan	<p>According to the Tajik NAP, currently 97.7% of the country's agricultural lands are suffering from erosion, as compared to 68% in 1973. The erosive processes have been especially active in the foothill regions. The two main factors underlying the process of soils degradation in Tajikistan are water erosion and gully erosion. Human economic activity plays a significant role in accentuating the erosive processes through intensive development of agriculture on sloping lands and associated unsustainable cultural practices. Intensive agricultural activity on steep slopes inevitably results in erosion. Soils are washed out, and the growth of ravines tends to decrease the area of arable soils. Even in the flat lands of Fergana, Gissara, Vahasha and Kabodina, a large amount of farming soils are scattered over the hills, small ravines, and dales. For example, the hilly parts of cotton fields suffer from under-watering, while in those places where there are depressions, crops suffer from an oversupply of water. Both negatively affect the productivity of cotton fields. Under rainfed agriculture, slopes of up to 25° are widely used now, ignoring observance of organizational and agro-technical anti-erosion measures. All pasturable lands of Tajikistan are strongly subject to erosion—with 89% of the summer pastures and 97% of winter pastures suffering from medium to strong erosion.</p> <p>The Tajik NASAP estimates that the decrease in production of only four agricultural enterprises has caused an annual loss of 281 billions rubles (US\$ 224 million) to the country's economy. The annual production of major agricultural products is estimated to have decreased due to land degradation by as much as 50 to 60 percent. <i>There is a close nexus between land degradation and poverty. Poor people are highly dependent on natural resources for their livelihood and are most affected by environmental degradation, contamination of water sources and outcome of natural disasters including droughts and floods<sup>1</sup>. It is therefore important that policy makers involved in the PRSP process duly factor in the economic impact of land degradation in macro-economic and sectoral strategies.</i></p>
Kyrgyzstan	<p>Kyrgyz Republic is a mountainous and land-locked country characterized by harsh natural conditions and fragile ecosystems. The Government adopted macroeconomic and structural reforms and its liberalization measures received considerable support from international financial institutions (IFIs), UNDP and other donors, which assisted in the reorganization of the industrial and agricultural sectors of the economy. However, Kyrgyz Republic's two main export products, gold and electricity, have been affected by declining gold prices and uneven implementation of regional water-energy agreements.</p> <p>The main land degradation processes at work in Kyrgyz Republic include</p>

TABLE 2. BRIEF OVERVIEW OF LAND DEGRADATION PROBLEM IN CENTRAL ASIA (CONTINUED)

Country	Brief Description
	<p>soil erosion, salinization and swamping, chemical pollution, and destructive changes of vegetable covering. According to the Kyrgyz classification system, there are three ecological zones — low mountain (desert and semi-desert steppe), moderate mountain (forests), and high mountain (Sub-alpine/Alpine). The problems of natural resource degradation are conditioned by the geophysical and climatic characteristics of various zones which are compounded by excessive and inappropriate economic activity. Intensity of erosion is dependent mostly on a wind regime, soil lithology and inappropriate agricultural activities on steeply sloping lands in a mountainous country (see table 2 in the main report on ecological zones. More than 51 percent of the 10.6 million ha of arable lands in Kyrgyzstan are affected by erosion. About 90% of cultivated crops are grown on irrigated sites with significant slope and as such are subject to washing off of soils estimated at losses of 15-20 tons irrigation from one ha. Land slides and mudflows on the slopes caused from irrigation and precipitations, affect an area of about 5.5 million hectares, while salinization and swamping in lowlands affect an area of about 1.5 million hectares. The natural conditions of Kyrgyz Republic make it practically not possible to support agriculture without irrigation. However, in some regional and territorial features of the Republic, it is possible to practice rainfed agriculture, when the spring storage of water in the ground is enough to sustain the crops.</p> <p>Hard and structured data on the dimensions and types of land degradation, or estimates of the economic costs of land degradation were not readily available. While it is difficult to put a dollar value on environmental damage, a world bank study on the mountain and forest sector in the Kyrgyz Republic estimates that the annual value with improved grassland yields would be 62% higher — \$477 million as compared with \$296 million based on poor grassland yields</p>
Turkmenistan	<p>Turkmenistan covers a territory of 491.2 thousand km<sup>2</sup>, with a total population of 5.6 million (2001) which is growing at a rapid average annual growth rate of 3.3% (between 1992 and 2000). The largest part of country (80%) is occupied by a desert plain, and arable land constitutes only about 4% of the total land area. Gross National Product (GNP) per capita in 1998 was \$540<sup>1</sup>.</p> <p>The Karakum Desert occupies about 80% of the territory of Turkmenistan. The high aridity of the climate, mobility of the soil substrate, and sparse natural vegetation, with high sensitivity to even small changes in the wind velocity, favour the appearance of deflation processes characterized by drifting sand and dust storms. The desertification processes are classified as: (i) degradation of the vegetative cover; (ii) deflation in a sand desert; (iii) water erosion of hillsides; (iv) salinization of irrigated lands; (v) salinization of soils caused by lowering of the Aral Sea level; (vi) technogenic desertification; and (vii) swamping of pastures in the zone of discharge of collector and drainage water. Flooding processes and salinization of new territories, together with pollution caused by oil and gas industrial activity, have caused severe environmental degradation in the entire Caspian Sea region of the country.</p> <p>Land degradation results largely from improper land use. Total annual direct economic losses from these practices are estimated at US\$ 112.87 million, while total indirect costs of rehabilitation are estimated at US\$ 234.00 million, providing an estimated total (annual) economic loss of US\$ 347 million.</p>

(Results of a research done in Ozgorush village of Naryn district in 2003)

ELIZA ISABAeva\*

*Past and present situation in Kyrgyzstan affected to some extent the Kyrgyz funeral ceremony. In the past Kyrgyzstan was a member state of the ex-USSR, which in every possible way banned the belief in God and practicing folk traditions because of the atheistic ideology of the former USSR. The Soviets wanted to destroy traditional social institutions among the people. Their main goal was to create relations, which were not based on kindred and tribalism, but, on the contrary, they strived to construct socialist relations. Therefore the Soviet government was against those rituals, which used to make kinship relationships stronger.*

*When Kyrgyzstan gained its independence in 1991, freedom of religion was declared by the government. Thus, the number of mosques and people preaching Islam and practicing Islamic and folk traditions grew. The people's perception of Islam changed, which I divide into a traditional and non-traditional perception or change. According to a traditional change, currently the Kyrgyz are becoming more and more educated. In other words they try to follow the rules of orthodox Islam when burying a deceased. For instance, they might demand from main organizers of a funeral to bury the dead body as soon as possible, within a few hours; they might oppose the decision to slaughter many animals, females' as well as males' loud weeping loud in public, erecting a huge fashionable monument, distributing goods which involves huge expenses, etc. The non-traditional change is related with a conversion of the Kyrgyz to other confessions. Since these Kyrgyz are not Muslim, obviously their funeral ceremonies differ from the way of a traditional Kyrgyz funeral. For instance, the converted people don't read Koran to a deceased. However, the gist of the Kyrgyz funeral ceremony remains the same. They also set up yurts, they slaughter animals keep the dead for three days, etc.*

*Changes in a Kyrgyz funeral ceremony were not significant since they could not change the tradition, though the attempts were made from different sides.*

КЫРГЫЗСКИЕ ПОГРЕБАЛЬНЫЕ ТРАДИЦИИ В ПРОШЛОМ И НАСТОЯЩЕМ

ЭЛИЗА ИСАБАЕВА

Прошлая и нынешняя ситуации в Кыргызстане в какой-то мере повлияли на погребальный обряд кыргызов. В прошлом Кыргызстан был частью Советского Союза, который любым способом запрещал веру в бога и выполнение народных традиций из-за атеистической идеологии бывшего Советского Союза. СССР хотел разрушить традиционные социальные институты среди людей. Главной его целью было создание отношений, которые не были основаны на родственных связях. Наоборот, советская администрация стремилась создать социалистические отношения. Поэтому советское правительство было против таких обычаев народа, которые укрепляли родственные отношения.

Когда Кыргызстан стал независимым государством в 1991, правительство объявило свободу религии. Тогда количество мечетей и людей, исповедовавших Ислам и выполнявших мусульманские и народные обычаи, возросло. Народное понятие об исламе изменилось. Это понятие я разделила на две части: традиционное понятие и не традиционное понятие или изменение. Согласно традиционному изменению, в настоящее время кыргызы становятся все

более и более религиозно грамотными, т.е. они стараются следовать правилам классического ислама при захоронении умершего. Например, они могут потребовать от организаторов похорон, чтобы умерший был похоронен как можно скорее, в течение нескольких часов; они могут не разрешить резать много скота, женщинам и мужчинам плакать у всех на виду, возводить большие памятники, раздавать вещи, что требует больших затрат, и т.д. Не традиционное изменение связано с переходом некоторых кыргызов в другую веру. Так как эти кыргызы не являются мусульманами, соответственно их погребальный обряд отличается от похорон традиционных кыргызов. Например, кыргызы, перешедшие в другую религию, не читают Коран над умершим. Однако суть кыргызского погребального обряда не изменяется даже у этих людей. Они тоже ставят юрты, режут скот, держат покойника три дня, и т.д.

Изменения в кыргызском погребальном обряде не были значительными, так как они не смогли изменить традиции, не смотря на попытки с разных сторон.

My main goal in this paper is to tell about a funeral among Kyrgyz people. Particularly, I will talk about changes in the Kyrgyz funeral tradition and its past and present conditions. By past I mean the time during the Soviet Union. Especially in this time it was banned to believe in God and preach any kind of religion since the ideology of the Soviet time was to achieve communism. Communists were closer to science and therefore atheism was very well practiced among soviet people.

In order to study a Kyrgyz funeral tradition, I have done a fieldwork in a small remote village of Ozgorush near the At Bashy range in Naryn district. My primary methods were interviewing people and doing participant observation. I stayed in the village first for two weeks and later I returned to the same village as a research assistant for a group of Swiss students, who also did field research on rural life after the collapse of the USSR by means of visual anthropology. My second stay was longer than the first one – a month – during which I could conduct another few follow-up interviews with my informants. I did not choose this place with a purpose – I went there with a group of other anthropology students for an ethnological fieldwork.

Kyrgyzstan is a former Soviet country, which existed for more than 70 years of rule. During 70 years, the Soviet government was able to spread its culture and affect member states.

The Kyrgyz funeral ceremony went through several changes due to governmental regimes in the country and the people's perception about religion. The latter reason can be in a tight connection with the development of the people's understanding of Islam, which I divide into traditional and non-traditional understandings. By traditional changes, I mean those changes introduced by Muslim Kyrgyz people. In recent times, the people are becoming more and more educated. In other words they try to follow the rules of orthodox Islam when burying a deceased. For instance, they might demand from main organizers of a funeral to bury the dead body as soon as possible, within a few hours; they might oppose the decision to slaughter many animals, females' as well as males' loud weeping in public, erecting a huge fashionable monument, distributing goods which involve huge expenses, etc. By non-traditional changes I mean those changes introduced by Kyrgyz who are not Muslim but believers of

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different confessions who bury their dead people not according to the rules of traditional Kyrgyz or Islam.

## CHANGES IN THE KYRGYZ FUNERAL CEREMONY OF THE SOVIET TIME

During the Soviet time there was a great oppression from the government's side not to practice religious rituals because of the atheistic ideology of the USSR. The emphasis of the Soviet policy was placed upon combating religious ideas among the masses. The Soviet government "called for a further development of the 'natural, technological and social sciences' in creating a scientific worldview... in 1959 the Presidium of the Academy of Sciences adopted a resolution 'on the intensification of scientific work in the field of atheism'..." (Anderson 1994, 38) At the moment people say openly that they were forced not to believe in God, especially this is true about people involved in governmental work, such as members of political parties, high governmental officials, *etc.*

The Soviets in every possible way wanted to destroy traditional social institutions among the people. "Only the very close relatives were supposed to attend a funeral ceremony, other people were supposed to go to work". Their main goal was to create relations, which were not based on kindred and tribalism, but on the contrary they strived to construct socialist relations. Therefore the Soviet government was against those rituals, which used to make kinship relationships stronger. However these covertly done things were not successful. In a funeral the Soviets forbade the exchange of goods between the immediate family and other funeral participants, and generally all the rituals requiring expenditure of much money were banned to practice. Most of my informants voiced that the government told them not to spend much money. A Soviet man was supposed to be buried in "a Soviet style" but not in a traditional Kyrgyz way, which was about spending much time, money, goods, emotions, nerves, and health. A Soviet funeral meant the presence of speeches given by prominent figures of the soviet government, special funeral music instead of women's traditional weeping, a wreath, a portrait of the deceased, *etc.* Here is an example of such a funeral, which happened in a small and remote Ozgorush. When S. Raimbekov, a party activist, died, he was placed in the middle of the yurt and dressed in a suit with tie. There wasn't much noise but instead a death march was playing. There was a meeting dedicated to the deceased – his colleagues gave a speech... But despite the fact that all the rituals were forbidden to fulfill, they were implemented secretly far from the house of the dead – in neighboring villages". During a funeral in the Soviet time, involvement of colleagues, rather than relatives, was very active. The government mentioned all the awards of a deceased and the collective body of colleagues covered most of

the expenses. The Soviet government introduced some changes in terms of rituals, but was not able to change the funeral ceremony of Kyrgyz entirely because the funeral is a tradition, which is hard to remove. Even the Tikopians' "burial ritual has been shortened and the period of mourning reduced from thirty to only a few days, the basic structure of a funeral remains the same" (Fried and Fried 1981, 149). So, a tradition – an unwritten body of customs and beliefs - is hard to change because it has been handed down from generation to generation.

I wondered that the strong ideological Soviet past could not remove from the minds of people the traditional rituals, though was able to influence them to some extent. For instance, having meetings during a funeral for a deceased, introduction of the Russian alcoholic drink, "vodka", a portrait of a deceased and many others are the influence of Russian Orthodox culture. So the changes, as my informants told me, were not to read the Koran, not to attend a funeral with the exception of only close relatives, not to weep loudly, not slaughter many animals and distribute goods because to the Soviet government these were only a waste of time and money. The Soviet authorities viewed these distributions in forms of money, clothes, and food as the deception of God. Moreover the Soviet government had a feature not to trust its people. T., a village informant, shared his story how he had to show a telegram to the university officials that said about the death of his father in order to be able to attend the funeral.\*

The Soviet funeral ceremony was kept and practiced among the Kyrgyz by force. Despite all the efforts, it was not absorbed by the people. Today one can only observe the remnants of the Soviet past in a Kyrgyz funeral of these days. A Kyrgyz funeral ceremony as a social institution remained without changes. The Soviet policy with a pretext that it would fight against rituals, which belonged to a single religion, banned rituals that used to make strong group or clan ties. The aim of the Soviet ideology was to replace national feelings and values with 'Soviet' values.

Kyrgyz were traditionally but not fully Muslim. Therefore they were very quick at picking up new rituals for themselves, but not changing the root of their traditions. K. Jusupov argues, "Kyrgyz claim themselves as Islam followers, but only few of them possess some knowledge about Islamic rituals" (1993, 536). He thinks that the most religious person could only pray namaz five times a day and fast during Ramadan month.

## CHANGES IN A KYRGYZ FUNERAL CEREMONY AT PRESENT

The funeral ceremony of present day Kyrgyz people has changed, first of all, due to development of religiosity. Since they identify themselves as Muslim in terms of religious identity, they try to demonstrate this by implementing Islamic rituals

\* Interview with K.N.

\*\* Interview with B.

\* Interview with T.

precisely. I have heard my informants saying that it is not good for males as well as for females to weep loudly and mourn publicly. Some people who possess some knowledge of Islam start banning people from slaughtering many animals, distributing goods, erecting a fashionable monument for a deceased and believing in paganism because the latter things might question abilities of God. These kinds of changes can also create a proper condition for the emotional aspects and feelings to be expressed. The community might simply not attend the funeral or gossip expressing their offence. This is what happened to my informant – K. – in the village of Ozgorush. When his mother died in 2001, he was the chief of the village. Through the “Economy” program he introduced “new rules” of a funeral to the villagers. Since the village elderly asked him to start this new method in the funeral of his mother, he did so, i.e., he did not slaughter a big animal, such as horses or cows, but rather limited himself to a couple of sheeps. Later when another person died in the same village, the immediate family members killed several big animals, and that is when K. felt the feeling of damaged pride: “if he can slaughter animals for his parents, then why cannot I?” was the question for K. Moreover after these events, he heard many bad things said about himself among the villagers. “I think if a family's social status is good enough, it is right to kill an animal, but if it is not, then there is no need to torture him/herself,” says K. He himself is from a family that is middle class. Consequently he could afford slaughtering some animals, but did not do it because of the request of the elderly and also because he wanted to introduce some innovations, which few supported but ended unsuccessfully. Arsar's story has the same character. Her elder sister, who came from far did not listen to village religious people because she brought some friends along with herself. She must have fed her guests and thus slaughtered a big animal. “On the other hand, why should not I kill an animal for my mother? This is my duty,” said my informant Arsar, sharing her ideas with me. However new changes, which show the development of religiosity in a Kyrgyz funeral ceremony, are implemented mostly when young people, usually children (boys under 12; and girls under 9 years old), die. In such cases the dead body is kept only for several hours after death, no specific rituals are held for the deceased, no distribution of goods, no feast is held and no commemorations are marked as it is usually done if the dead person is old aged. Guljan, an informant from Ozgorush, told me that when her younger sister, who was living in the neighboring village, died, slaughtering animals, distributing goods, bringing clothes for the deceased were banned according to imams' instructions. According to her, people did not express their negative emotions because they were told and explained everything by the imams.

Touching back the question of paganism, I would like to bring you an example of a ritual, which demonstrates the development of the religion among Kyrgyz people. The ritual has a name “*dalil tash*” (lit. “Stones for proving”).

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\* It is a ritual, where a certain amount of stones are collected because it is believed that these stones will ease one's sins and help during the establishing of divine justice.

When stones are collected, some verses from the Koran will be read over them, so that they could assist the dead in ‘the other world’. Ozgorush villagers strongly believe in the power of the stones, but none of my informants have collected stones so far, though they have intentions to do so. The villagers' opinion on this very ritual is diverse; they do not have steady rules and norms for *dalil tash*. Some say 40-41 stones should be collected, others told 70-73 stones are needed, and still others believe that 100 stones will be used in the ritual. There are also two groups of people: one says that stones should be collected for every good deed that a person does in life; others say stones must be collected when a person is in trouble, so that later during the divine justice, stones could prove that the person was not guilty. There is no clear rule of who should collect: a person him/herself or an imam?

The Ozgorush villagers are still confused with the ritual of *dalil tash*, because of that some people say they still practice it, but some say they do not. I asked my informants why they do not collect the stones though they know very well what they are needed for. Their responses were related to vital problems of time and money. People pay a certain amount of money to an imam who reads verses from the Koran over the stones, and according to villagers they cannot afford the expense.

The *dalil tash* ritual is losing its meaning among the villagers for that it does not have steady rules. The people say various things about it; they do not collect them, even though they are aware of benefits; even elderly people feel indifferent towards the ritual. Moreover, *dalil tash* is transforming into a piece of paper. To be more exact, the villagers, instead of collecting stones, simply get a piece of paper with certain Koran verses on it from an imam, and place it on the chest of a deceased. The villagers end up blaming religious leaders for such a transformation because according to them, for a religious leader it is easier and not time consuming to write several words than praying for each stone more than a few Koran verses. Religious people and other people, who possess some knowledge on Islam, on the other hand, do not support the idea of *dalil tash* because for them believing in stones equals to questioning the abilities of God. A Muslim should trust only God and nothing else. I have heard statements like “How could stones help?” Such a statement later was confirmed by the instructor at the Islamic Institute of Hazreti Umar, whom I had interviewed upon my arrival back in Bishkek from Ozgorush, and who declared that “*Dalil tash* was just an imagination of the people.”<sup>8</sup> Therefore some educated people summon the common people to stop practicing the folk religion, but rather to approach the Islamic way of life. However this is a very difficult task for Kyrgyz and will require gradual progress because Kyrgyz have not yet formed well as fully Muslims. They keep implementing Islamic rituals together with their folk religion. In scientific language this is called Sufism, where Islam lives together

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\* Interview with O.



with traditional folk rituals. It is interesting to point out that the villagers perceive their traditional rituals as 'pure' Islamic ones.

At the moment some Kyrgyz are trying to be fully Muslim and thus balance what they have lost during the former USSR time. However their attempts are not always successful. Still many Kyrgyz give preferences to folk traditions rather than to more modern religion. To my question "What prevents you from being a fully Muslim?" most of my informants, as one of the many reasons, pointed out a lack of educated religious leaders.

The second reason for the current changes is the conversion of the Kyrgyz to other beliefs. Since these Kyrgyz are not Muslim, obviously their funeral ceremonies differ from the way of traditional Kyrgyz funeral. I have talked to my neighbor who was a witness of a funeral of non-Muslim Kyrgyz in my neighborhood. Once he heard about the death of a neighbor, he decided to go and pray the Koran. He stepped into the yard and did not see the yurt, and then he entered the house. "I went in and saw that the deceased (a woman) was lying on mat on the floor, as if she was sleeping. People around the dead did not mourn, but on the contrary, were sitting around chatting and laughing, as what you and me are doing at the moment. That evening a really cool Mercedes came, put the dead body into a sack, placed it in the luggage rack of a car and left. Nobody could know where those people buried the dead." According to my respondent, none of the neighbors attended the funeral of a non-Muslim person. The traditional Kyrgyz society excluded them because they violated the rules and norms of the society. These people are different from the rest of the Kyrgyz and that is why they are distinguishable. When I asked my informant about his attitude towards Kyrgyz of other beliefs, he expressed his fear thinking that nobody would come to a funeral of his close relative too. For traditional Kyrgyz, pride and conscience are of significant importance, which might even lead a person to death sometimes.

One Sunday morning, together with my group mate I went to the place where Kyrgyz, who believe in Jesus, usually gather. It was a big house and the hall was full with people watching the concert. These people were celebrating Easter. After the concert I was invited to the yard to eat. After that I had a chance to talk to a couple of Kyrgyz who converted from their religion. The reason for their conversion was that they had sought for eternal peace in their hearts for a long time and found it in Christianity. They truly believe in the Salvation and praise Jesus for sacrificing his life for humanity. Funeral ceremonies of Kyrgyz, who believe in Jesus, are very much similar to funerals of traditional Kyrgyz. In other words, they also set up yurts, if they have them, they slaughter animals (even big ones, if needed), keep the dead for three days, *etc.* The differences were that these Kyrgyz do not read the Koran in Arabic and distribute goods. They also do not mourn a lot; on the contrary, they make a big emphasis on life and pray for the well being of the people, who are alive. My

\* Interview with K. D.

informants told me that they had to face disapproval, discouragement, and disagreement from their relatives' during the first years when they changed their religion. They think that Kyrgyz, who condemn and do not welcome them, are mistaken because they lack the true information about Jesus believers and there are no great differences in their funeral ceremonies\*.

Even though Kyrgyz, believers in Jesus, have changed their confession, the traditional funeral ritual remains the same even among them. Simply traditional Kyrgyz perception is not adequate in interpreting that Kyrgyz, who believe in Jesus, totally changed their values and traditions. Converting from one religion to another for a Kyrgyz equals to betraying ancestors among Kyrgyz, and therefore conversion is not welcomed and treated well in the society. Converting also means challenging and questioning ancient traditions, which were given from ancestors. Obviously conversion brings many changes in the funeral ceremony of Kyrgyz: there is no mourning, feast, animal slaughtering, exchange *etc.* at all, as it should be in a traditional Kyrgyz way.

A religious figure at the Spiritual Board of Kyrgyzstani Muslims and the instructor at the Islamic Institute told me that there is a law among religious authorities that states that they are not allowed to go to the funeral ceremonies of non-Muslim Kyrgyz to pray for them. They converted and thus committed a big sin. According to him, they changed the tradition that came to us from the Kyrgyz ancestors since the year of 651A.D.\*\*

The third reason that brought some innovations to the Kyrgyz funeral ceremony is the socio-economic reason. Many big changes emerged in the lives of the people since Kyrgyzstan gained independence. By privatizing national wealth and owning private property, social layers appeared among the Kyrgyz people: some people got rich and others got poor. Therefore each person organizes a funeral according to his/her social status in life. Funerals are different in this sense. There are some funerals, which involve much expenditure and remind of a big feast, but some are very simple. If during pre-Soviet and Soviet times funerals, according to my informants, were very simple and less expensive, nowadays it is the opposite picture. Before, not that many animals were killed, not that much money spent and not that many goods distributed. However with the improvement of life conditions of some people, they introduced many nuances to their funerals. One of the things that people immediately notice is the preparation of the table for guests. In present day Kyrgyz funerals, one could see different kinds of salads, candies, cookies, fruits and vegetables. If an alien person saw the table, then he/she would think that the family is going to have a party. People nowadays slaughter many animals not because it is their obligation in front of their dead parents or close relatives, but rather because of pride. Even the poor have to borrow from somebody else just not to be gossiped about by the community. People are very concerned about what others will think and say, and, because of it, they are ready to sacrifice all

\* Interview with A.

\*\* Interview with O.

they have. People bring expensive clothes for the dead to hang up in the yurt and there is a great distribution of goods.

While talking to my respondents, I felt their negative attitude towards the economic changes because not many can afford such a huge expenses. It seemed to me that recently a Kyrgyz funeral ceremony was becoming a sort of rivalry, where people compete in display of their wealth, a showcase in other words. Pride has replaced duty. On the one hand, it is sad that a funeral ritual is beginning to look like a big party and competition; on the other hand, huge expenses show the status of the immediate family, and the improvement and betterment of society members.

I was interested in how these changes influence the traditional Kyrgyz funeral ceremony as a social institution, and figured out their great impact on it. If certain changes are introduced, it might recreate the society and bring people together, or, vice versa, destroy the society, when people refuse to attend a funeral due to some reasons, such as the conversion of people, or the development of religion, that results in banning some traditional rituals. There also seems to be developing wasteful competition that may slow down economic development and divide people into social classes.

Analyzing results of my research on the changes in a Kyrgyz funeral ceremony, I have understood that a funeral tradition has a great significance in a Kyrgyz society. The changes introduced by the Soviet government, slightly affected a funeral ceremony of Kyrgyz people. Despite all the efforts and force done towards a funeral, a Kyrgyz funeral ceremony did not change its function in organizing and bringing people together.

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## AN INFLUENCE OF MODERNIZATION AND RECONSTRUCTION OF MAIN ASSETS ON TAXES EXPENDITURE

NIKOLAY MARTYNOV\*

*The paper focuses on analysis of final definition – balance cost of main assets divide to annual depreciation of this asset. The main idea is that raising cost of main assets leads to rising depreciation and taxation on main assets. But it leads to reducing profit tax. It is important to find optimization between these two taxes. The main assets of "Krasnoyarskenergospecremont" company had being analyzed using depreciation foundation approach along with the Cash Flow method.*

### ВЛИЯНИЕ МОДЕРНИЗАЦИИ И РЕКОНСТРУКЦИИ ОСНОВНЫХ АКТИВОВ НА НАЛОГОВЫЕ ЗАТРАТЫ

НИКОЛАЙ МАРТЫНОВ

Данная работа сфокусирована на анализе результатов отношения балансовой стоимости основных средства на определение. Основная идея заключается в том, что увеличение стоимости имущества приводит к росту амортизации и налога на имущество, а это ведет к уменьшению налога на прибыль. Имеет смысл найти некое оптимальное соотношение этих двух налогов. В данной работе были проанализированы основные средства ОАО «Красноярскэнергоспецремонт», используя подход формирования амортизационного фонда в дополнении к методу «Cash Flow».

Since the planed economy was over in 1990 year there are a lot of companies, which need to be reorganized by many reasons. Most of those companies were natural monopolies, with large amount of assets.

Some of the main assets, like machines, machine tools, and lathes were manufactured long time ago, even before 1990, so it means, that it is really hard to find out their true value. Big amount of defaults makes it more difficult. That is why, companies invite consulting firms to evaluate the true value of their main assets. Sometimes it is very useful to increase the cost of main assets, because in that case – company reduces the amount of taxable profit.

The main idea is, that rising cost of main assets leads to a rising depreciation and tax on main assets. But it leads to reducing profit tax. It is important to find optimisation between these two taxes. Figure 1 shows the forming process of the profit after taxes.

Principal assets (main assets) are machines, buildings, machine tools, constructions, vaults, with the cost more than 10,000 roubles. The amount of depreciation depends on cost of main assets, and net costs also include depreciation, so depreciation reduces the taxable profit. Tax on main assets pays from out sale costs, and it also reduces the taxable profit.

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FIGURE 1. NET PROFIT: CALCULATION PROCESS

Sales income
- Indirect taxes
- Cost of sold product (depreciation, costs of materials, salary...)
- Commercial costs
- Management costs
= Sales profit
+ Operational income
- Operational costs
- Nonrealization income
- Nonrealization costs (tax on main assets 2,2%)
= Profit before taxes
- Profit tax (24% from profit before taxes)
= Profit after taxes

The crucial moment in this issue is to determine the ratio (quotient) of balance cost of main assets divided by annual depreciation of these assets:

$$k = (\text{Balance cost of main asset}) / \text{Annual depreciation}$$

Obtained experimentally that if this definition (ratio) is less than the number 14,3, then company has gained economy in taxes. But usually, for aims of accounting management all parameters and coefficients are transformed into monthly parameters. So if you use monthly depreciation, this definition should be more than 171,6. It means that economy in profit tax is more, than in tax on main asset.

In other words, principal asset brings an income, when it is set on a balance, even if it is not working and producing anything.

For example, let's show a table for analysing main assets like it was written before.

TABLE 1. ANALYSING THE MAIN ASSETS

Main assets	Current balance cost	Amortization per month	Depreciated cost per year	K-definition	Annual tax on main assets	The result of the year
	A	B	C	D	E	F
Formula for calculation*	Given	Given	A - B*12	C/B	C*0,022	(D+E)*0,24-E
Transformation	26,305	125.26	25,678.7	205	564.9	-68.5
Lather	51,187	243.75	49,968.2	204	1,099.3	-133.4
Machine, track.	10,237	48.75	9,993.2	204	219.8	-26.6
Elevator	12,490	103.22	11,973.9	116	263.4	97.1
Basement	50,544	280.8	49,140	175	1,081	-12.9

TABLE 1. ANALYSING THE MAIN ASSETS (CONTINUED)

Main assets	Current balance cost	Amortization per month	Depreciated cost per year	K-definition	Annual tax on main assets	The result of the year
	A	B	C	D	E	F
Car	25,650	211.98	24,590.1	116	540.9	199.3
Total result						+ 55

\*Note:

1) The tax on main asset in Russia is 2,2%;

2) The tax on profit in Russia is 24%;

3) As far as tax on main assets counts from depreciated cost, it is more logical to use for K definition not the balance cost, but depreciated cost. To put the balance cost in K definition is good, when your main asset is new.

One more useful definition for main assets is "depreciation period". It is the number of years, required for amortization to be written off account completely. So usually, at the end of such period, depreciated cost equals zero and main asset has to be liquidated. It was mentioned, that the longer the depreciation period of the main asset is, the less it brings gain economy in taxes. And if the period is more than 25-30 years, it brings loss in taxes. This is not a rule, but it usually happens this way. The recommendation is - try to use in production only main assets with short depreciation period, such as computers, high technology machines, and tools.

The company's gain economy in taxes rises with time. It happens because depreciation depends on balance cost of main assets. Depreciation is constant amount of money, which does not change with time. But the tax on principal assets is taken from the depreciated cost. That is why tax on main assets falls faster, than the economy on profit tax. As a result, gain economy in taxes rises.

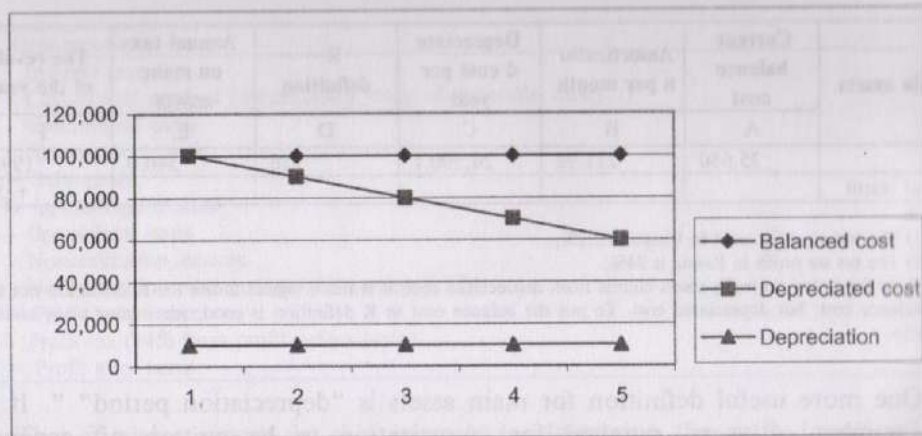
For example, let's consider a main asset with cost of 100 000 roubles and depreciation 10 000 roubles per year. So, the time of use of the main asset is 10 years.

TABLE 2. EXAMPLE IN RUBLES

Depreciated cost	100,000	100,000-10,000= 90,000	80,000
Depreciation	10,000	10,000	10,000
Tax on main assets (2,2% from depreciated cost)	100,000*0.022=2,200	90,000*0.022=1,980	1,760
Economy in profit tax	(10,000+2,200)*0.24=2,928	(10,000+1,980)*0.24=2875.2	2,822.4
Gain economy in taxes	2928 - 2200=728	2,875.2 - 1,980=895.2	1,062.4

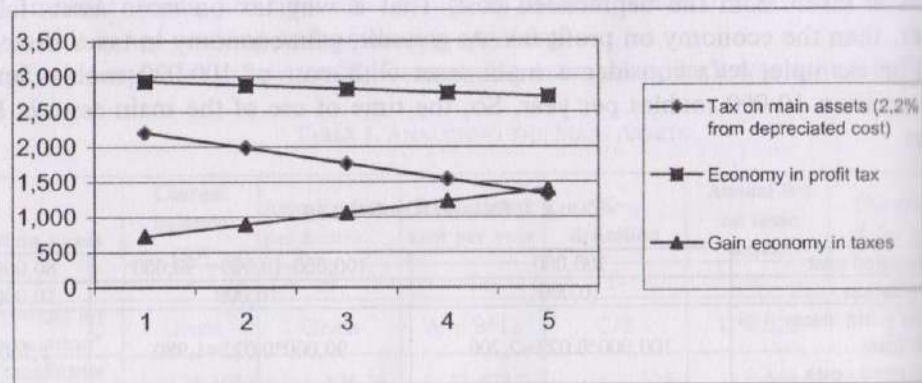
On Figure 2 it is shown, that the balance cost is always constant. But depreciated cost falls with time. It is reduced by depreciation for 10 000 rubles per year.

FIGURE 2. CHANGING THE DEPRECIATED COST WITH TIME



On Figure 3, tax on main assets falls, according to depreciated cost. As far as tax on main assets is taken from depreciated cost, tax on main assets falls too. Unfortunately, economy in profit tax decreases as well, because the tax on main assets is nonrealization costs, and it takes put before the tax profit. But economy in profit tax declines slower than tax on main assets. That is why, gain economy in taxes rises with time. Gain economy is economy in profit tax minus tax on main assets.

FIGURE 3. CHANGING THE PROFIT TAX, TAX ON MAIN ASSETS AND GAIN ECONOMY IN TAXES WITH TIME



The aim of creating depreciation foundation is to return the cost of main assets to a product. That is why, the greater is depreciation, and the greater is net cost. It leads to a fall in profits. On the other hand, the depreciation foundation is the amount of resources (money), which company can use, as it wants. Top managers' aim is to make the company work as long as possible. It means, that top managers are interested in larger amount of amortization.

Shareholders and owners of the company are always interested in profitability of the company, or, in other words, how to make more profit. So they are interested in lower amortization. We can see here the contradiction in the interests of top managers and owners of the company, which needs to be taken into account when making such manipulations with main assets.

For the purpose of taxation, according to law, company can't change balance cost of main assets. Although company can change the balance cost of main assets with the help of special consulting company, which can evaluate and measure the real cost of main assets. But when this company will make the annual report for tax police, it will need to show the previous balance cost and make the correction for tax payment into the budget. But with the help of modernization and reconstruction balance cost of main asset can be reduced or increased, so it can be changed for the purposes of tax accounting. Modernization and reconstruction means change of the productiveness of main assets, or large spending for considerable renovation in main assets. For example, if a machine tool produces 10 details per hour. After investment in new engine machine-tool starts producing 50 detailers, it can be called modernization. So, modernization can reduce the payments into government budget.

This method can be used as additional to the *Cash Flow* method. Economy in tax profit goes as an income and tax on main assets goes as expenditure. Then make the detailization for each year.

For illustration of this approach as an addition to *Cash Flow* method let's continue our example. Imagine, that company invests money into a new equipment, machine-tool with balance cost of main asset 100,000 roubles. Suppose, that each year it brings income 35,000 roubles, and annual costs for material and salary is 5,000 roubles. At the Table 3 usual Cash Flow with discount rate 15% is shown. The conclusion is, that after 5 years pure profit will be 98,619.2 rubes. So, investments would not return.

TABLE 3. USUAL CASH FLOW METHOD [2]

		1 year	2 year	3 year	4 year	5 year
Income		35,000	35,000	35,000	35,000	35,000
Costs	100,000					
Current costs		5,000	5,000	5,000	5,000	5,000
Result	-100,000	30,000	30,000	30,000	30,000	30,000
Discount cash flow		26,087	22,684.3	19,725.5	17,152.6	12,969.8
Discount cash flow with accumulation for each year		26,087	48,771.3	68,496.8	85,649.4	98,619.2

In Table 4 all the previous conditions are left. Plus added into income — economy in profit tax, and subtracted tax on main assets (as one of the current

costs). So, in Table 4 we use the definition "gain economy in profit tax and tax on main assets". That is why here we have more accurate calculations of general effect, and total discount cash flow will be 101,934.6 rubles. Final conclusion is the investment will improve them.

TABLE 4. EXTENDED CASH FLOW WITH GAIN ECONOMY IN TAXES

		1 year	2 year	3 year	4 year	5 year
Income		35,000	35,000	35,000	35,000	35,000
Economy in profit tax		2,928	2,875.2	2,822.4	2,769.6	2,716.8
Costs	100,000					
Current costs		5,000	5,000	5,000	5,000	5,000
Tax on main assets		2,200	1,980	1,760	1,540	1,320
Result	-100,000	30,728	30,895.2	31,062.4	31,229.6	31,396.8
Discount cash flow		26,720	23,361.2	20,424	17,855.6	13,573.7
Discount cash flow with accumulation for each year		26,720	50,081.2	70,505.2	88,360.9	101,934.6

This is how the tax payment into budget can be optimised with the help of balance costs and modernization and reconstruction of main assets. Also, this approach can be an addition to *Cash Flow* method to get more accuracy in calculations.

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## ON TRANSFORMATION OF THE WELFARE STATE IN THE KYRGYZ REPUBLIC

ADILET-SULTAN MEIMANALIEV \*

*The fundamental changes in the Kyrgyz society after the collapse of the Soviet Union and economic challenges thereafter have required of the country's welfare system to adapt to market conditions and to revise and rationalize vast universal coverage commitments, shifting to the targeted social schemes and interventions. Reforms in all parts of the welfare state have become a natural response to fiscal crisis; they acknowledged the state's inability to maintain previous commitments in the social sphere in full and limited them to a basic benefits package for all and additional targeted support to the most vulnerable.*

*Following the withdrawal of huge subventions from Moscow in the early 1990s (up to 25% of national income), such inherited from the Soviet system commitments as provision of universal and free health care and education, as well as various subsidies and benefits, could no longer be maintained in full and had to be reduced. Formally introduced user fees coupled by under the table payments to services providers levied a significant financial burden on the population.*

*This paper provides: a) a description of the reformed welfare system of Kyrgyzstan: the scope and types of services it provides, the role of the state and its commitments in the social sector; and b) an overview and discussion of gross national social spending.*

### О РЕФОРМИРОВАНИИ СИСТЕМЫ СОЦИАЛЬНОЙ ЗАЩИТЫ В КЫРГЫЗСКОЙ РЕСПУБЛИКЕ

АДИЛЕТ-СУЛТАН МЕЙМАНАЛИЕВ

Коренные изменения, произошедшие в кыргызском обществе после распада Советского Союза, и последовавшие за этим экономические трудности привели к необходимости адаптировать систему социальной защиты к рыночным условиям, пересмотреть обязательства государства по всеобщему охвату и внедрить адресную социальную помощь. Реформирование всех секторов системы социальной защиты явилось естественным ответом на фискальный кризис и манифестировало неспособность государства обеспечить былые обязательства в социальной сфере в полном масштабе, сократив их до пакета базовых услуг для всех и дополнительной адресной помощи для наиболее уязвимых слоев населения.

С утратой огромных субвенций из Москвы в начале 1990-х гг. (до 25% национального дохода) такие унаследованные от советской системы обязательства, как обеспечение всеобщего бесплатного здравоохранения и образования, а также различные субсидии и пособия, не могли более выполняться полностью и должны были быть сокращены. Официально введенные платные услуги и неформальные платежи поставщикам услуг легли значительным финансовым бременем на население.

В настоящей работе представлены: а) описание реформированной системы социальной защиты Кыргызской Республики: объем и типы предоставляемых услуг, роль государства и его обязательства в социальном секторе; и б) обзор и обсуждение валовых национальных социальных расходов.

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## 1. INTRODUCTION

The Kyrgyz Republic inherited a comprehensive Soviet-type welfare system with its widely developed infrastructure and vast commitments on the provision of social services and assistance, which it was unable to maintain following the withdrawal of huge subventions from Moscow in the early 1990s, up to 25% of national income (Koichumanov 2000, 95). In particular, the Soviet system guaranteed free and universal health care and education, full employment by specialty upon graduation from an educational institution, guaranteed provision of pensions and various social benefits and subsidies.

The economic challenges (see Table 1) brought about by the transition from a command economy to a market oriented one have required of the welfare system to adapt to market conditions and to revise and rationalize universal coverage commitments, shifting to targeted social schemes and interventions.

A comparison of the Constitutions of the Kyrgyz Republic before and after independence (see Table 2) reveals how significantly the role of the state has changed in the provision of welfare. The country has made a tremendous shift from a highly regulated, institutional system of welfare provision to a more liberal, residual, system. The state has also withdrawn its tight controls from the main source of welfare – the labor market, no longer bridging people and jobs in the country's economy, but leaving it to the labor market to do.

## 2. WELFARE STATE

The welfare system provides two types of benefits to the population: benefits in kind and cash benefits (Barr 1998). The present welfare state of Kyrgyzstan is depicted in Figure 1.

### 2.1 Benefits in kind

Benefits in kind include education, health care, social care, and housing and utilities. To provide the former three the state had set up an extensive physical and organizational infrastructure and thus these sectors encountered similar problems after the economic crisis broke out and underfinancing became a usual thing. These common problems were: i) deterioration of infrastructure; ii) low wages; iii) shortage of supplies and materials; iv) fast obsolescence of the capacities; v) resulting poor quality of services provided; and vi) increased financial burden of households.

#### 2.1.1 Education, Health Care and Social Care

The education and health care systems are depicted in Figures 2 and 3. As for the social care, it includes direct provision of social services provided through the network of social care facilities: boarding houses, departments of social care

at homes and day care centers, which render various free services along with psycho-social support to the needy, invalids, elderly and mentally ill people.

Administratively, these sectors are respectively under the Ministry of Education and Culture, Ministry of Health, and Ministry of Labor and Social Protection. All three sectors are mainly public, yet in all three the role of non-profit and non-governmental organizations has been growing. In education and health care sectors, there are also private providers, who undergo state licensing to practice; their share in the provision of services is very small though, as they mainly serve high-income contingents.

By sector, the commitments of the state are as follows:

- 1) in *education*, it is to provide free education within state educational standards and state orders in public educational facilities. The state educational standards are mandatory for all educational facilities regardless of the proprietary form; they determine basic requirements to quality of training, maximum study-load and other requirements for all types of education.
- 2) in *health care*, it is “universal access and free health care at a guaranteed level (volume) in public health facilities” (Law of the Kyrgyz Republic “On Protection of People’s Health”), which includes a package of free basic services for all, and free or partially free services for specific population categories (see Figure 4).
- 3) in *social care*, it is to provide free social services to the targeted population categories.

The reforms in these sectors have been supported by international donors and aimed at improving the infrastructure, building the capacity and knowledge base, re-structuring and modernizing service delivery, and raising the awareness of users about their rights and entitlements.

#### 2.1.2 Housing and Utilities

The housing sector consists of housing per se, i.e. flats, apartments, houses, etc., and provision of utilities, or communal services. Re-organization of large state monopolies has lagged behind the privatization of housing. As a result, the sector was the slowest to reform since independence, for example, the Housing Code has not been reformed since 1983. The reforms in the sector aimed primarily at the creation of a housing market, revision of the utilities tariffs and targeted support to the vulnerable (Government Resolution # 487).

Currently, the state's commitment in housing and utilities is in providing targeted support to the vulnerable, including those suffered from natural catastrophes, in the form of housing provision at state's expense, rental of municipal housing and utilities subsidies.

## 2.2 Cash Benefits

Cash benefits include social insurance benefits and state benefits. Cash benefits reform aimed at rationalizing various and often fragmented state commitments.

### 2.2.1 Social Insurance

“State social insurance is a system of state-guaranteed and provided for by mandatory insurance fees of employers and employees support to the insured persons in case of loss of earnings or income due to a disease, labor injury or professional disease, invalidity, pregnancy and delivery, old age, unemployment, loss (death) of bread-winner and death. State social insurance is compulsory.” (Law “On State Social Insurance”). The state social insurance is managed by the Social Fund of the Kyrgyz Republic (SF) which is comprised of four constituent funds: Pension Fund (PF), Social Insurance Fund (SIF), Mandatory Health Insurance Fund (MHIF) and Employment Fund (EF). The SF revenues are payroll tax, subventions from the Republican budget, and income on stocks of some state enterprises. The SF revenues are tax-exempt and not included in the Republican budget. The SF is responsible for pooling insurance fees and distributing them among its constituent funds according to the percentages each fund is entitled to.

#### *Pension Provision*

Pension provision was traditionally public, based on solidarity, or ‘pay-as-you-go’ (PAYGO) principle. Since 1997, however, it has been reformed to shift to a capitalized system and to foster voluntary pension schemes. A personified accounts system was developed, followed by introduction of a notional defined contribution (NDC) system, which tracks individual contributions and links them to retirement benefits (Becker and Paltsev, 2001). New pension formulas were developed and the overall capacity of the pension system strengthened. Pension age has been gradually increased from 60 to 63 years and from 55 to 58 years respectively for men and women (annual 4 months increase between 1999 and 2007). Working population eligible for pensions in the coming 10 years though, will still be receiving their pensions based on PAYGO principle. The pension provision is depicted in Figure 5.

#### *Other Provisions*

Temporary labor disability benefit (TLDB) is paid only to the insured with at least 3-months insurance record. The amount of TLDB is 75%-100% of actual earnings, but not more than 6 minimum wages. It is paid by the employer and then reimbursed by the SF in certain events, including diseases, pregnancy and birth. The duration of TLDB ranges from several days to 10 months.

Unemployment benefit (UEB) is paid only to the unemployed who have at least 12-months insurance record during the last 3 years. The amount of unemployment benefit depends on the base unemployment benefit and the insurance record.

Ritual (burial) benefit (RBB) is paid to family members or persons who buried the person died. It is paid by the SF, if the person was insured, and by state, if not. Depending on the insurance status (insured, pensioner, insured unemployed or uninsured), the lower limit for RBB amount is 5 or 10 minimum wages, 5 pension base parts or 5 guaranteed minimum consumption levels (GMCL – a social standard annually determined by the Government based on the economic and fiscal situation and minimum consumption basket).

### 2.2.2 State Benefits

State benefits system is a system of direct monetary state support targeted to low-income families and citizens, and labor disabled people ineligible for pension provision. There are two types of state benefits: 1) state monthly benefit to low-income families and citizens (SMB), and 2) monthly single benefit (MSB). Nevertheless, there are also direct cash transfers to a few population categories and stipendiary support to students. All state benefits are provided from the state budget and non-contributory, i.e. eligibility does not imply any insurance record.

SMB is paid to families, whose average total per capita income (ATPCI) does not exceed GMCL. The commitment of state is to subsidize the difference between ATPCI and GMCL. Children under 16 years, students of vocational and higher education facilities under 21 years, pensioners and labor disabled are eligible for SMB. SMB is paid as lump sum per family for all eligible members. Depending on the number of eligible members, the amount of SMB ranges from the difference between GMCL and ATPCI to 150% of GMCL. Besides, there is a one-time lump sum child benefit at birth worth 300% of GMCL. SMB is determined and granted for a year and can be changed or withdrawn if ATPCI, GMCL, family composition or invalidity group changes.

MSB is paid regardless of ATPCI. Children under 16 years with invalidity, children’s cerebral paralysis or HIV/AIDS; as well as survivors in case of a bread-winner loss and ineligibility for a pension; invalids since childhood; invalids ineligible for a pension, and mothers-heroes (who gave birth and raised 5 or more children), ineligible for a pension, have the right to receive an MSB.

### 3. SOCIAL EXPENDITURE REVIEW

Data on gross national social expenditure<sup>1</sup> presented in Tables 3 and 4 shows that private social spending increased between 1997 and 2001 both as percent of GDP and in national social expenditures. The decline in public spending over the same period has resulted in the overall decline of gross national social spending from 26.2% of GDP to 22.3% of GDP. The share of public spending in total social expenditures decreased from 41.5% to 39.2%.

The shift of financing from public to private funding is especially notable in education and health care, where the decline in public spending was accompanied by the growth in private spending. In the field of education the share of public spending declined from 89.2% in 1997 to 73.7% in 2001, while the share of private spending increased from 10.8% to 19.4%. In health care, the trends are from 72.7% to 57.5% and from 18.4% to 28.9% respectively.

For education, health care and social insurance spending has declined as percent of GDP. Only for housing and utilities it has increased. In fact, it almost doubled between 1997 and 2001. This growth has been determined by very significant growth in spending by enterprises that grew from almost 0% of GDP in 1997 to 1.6% of GDP in 2001, following the adoption of new laws on privatization of housing and utilities provider companies.

Tremendous growth in spending on social insurance from 0.2% of GDP in 1997 to 4.7% of GDP in 2001 is a result of the SF's take-over of the enterprises' responsibilities on social security and speeded reforms of the social security system.

Drastic reduction in public spending as % of GDP in 1999 and 2000 is explained by the re-allocation of funds from the social sphere to power ministries due to the invasions of militants in the southern part of the country in those years. This shows that the social sphere is very vulnerable to external shocks.

### 4. CONCLUSION

The withdrawal of huge subventions from Moscow in the early 1990s and economic and fiscal crises that followed thereafter have necessitated the need to reform all parts of the welfare state of the Kyrgyz Republic. The generous social commitments inherited from the Soviet system could no longer be maintained in full and had to be reduced.

Reforms have become a natural response to fiscal crisis; they acknowledged the state's inability to maintain previous commitments in the social sphere in full and limited them to a basic benefits package for all and additional targeted support to the most vulnerable. Yet, formally introduced user fees coupled by

<sup>1</sup> It is very important to distinguish gross social expenditure from net social expenditure. For details see Adema, 2001.

under the table payments to services providers levied a significant financial burden on the population.

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APPENDIX

TABLE 1. MACROECONOMIC INDICATORS

Indicators	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
GDP (mln. of soms)	5 355	12 019	16 145	23 399	30 686	34 181	48 744	65 358	73 883	75 240
GDP real growth rate (%)	-15.5	-20.1	-5.4	7.1	9.9	2.1	3.7	5.4	5.3	-0.5
Inflation (% end of period change in CPI)	929.9	62.1	32.1	34.8	13.0	16.8	39.9	9.6	3.7	2.3
Budget balance (% of GDP)	-14.4	-11.8	-16.8	-9.3	-9.1	-9.5	-11.0	-8.8	-5.0	-5.9
Per capita dollar GDP (in current prices)	233.8	244.3	325.0	386.9	374.1	340.6	251.9	278.1	308.9	322.6

Source: NSC for GDP and inflation data. World Bank for real GDP growth rate, budget balance, and per capita dollar GDP. Budget balance data include the state budget, interest payments, off-budget Social Fund revenues and expenditures, and the foreign-financed public investment program.

TABLE 2. COMPARISON OF THE CONSTITUTIONS OF THE KYRGYZ REPUBLIC IN THE WELFARE ASPECT

Constitution of the Kirghiz Soviet Socialist Republic as of April 20, 1978	Constitution of the Kyrgyz Republic as of May 5, 1993
<b>Property rights</b>	
<i>Article 10.</i> The foundation of the economic system of the Kirghiz SSR is the socialistic ownership of the means of production in the form of state (all people) and kolhoz-cooperative property.	<i>Article 4.</i> 1. Private, state, municipal and other forms of property are recognized and protected in the Kyrgyz Republic.
<i>Article 13.</i> The foundation of private property of citizens of the Kirghiz SSR shall be labor income. <...> Property being in the individual ownership of or in use by citizens shall not serve the purposes of generating non-labor income, <...>	<i>Article 19.</i> 1. Private property is recognized and guaranteed in the Kyrgyz Republic as an indefeasible right of man and as natural source of his welfare, business and creative activity, and a guarantee of his economic and individual independence.
<i>Article 14.</i> The source of growth of public welfare, well-being of people and of each Soviet person shall be free of exploitation labor of the Soviet people.	
<b>Welfare system</b>	
<i>Article 24.</i> There function and develop the state systems of health care, social provision, commerce and public catering, consumer services, and housing and utilities.	<i>Article 37.</i> The social activity of the state shall not bring about substitution of the economic freedom and activity and ability of citizens to achieve economic well-being for their own and their families

TABLE 2. COMPARISON OF THE CONSTITUTIONS OF THE KYRGYZ REPUBLIC IN THE WELFARE ASPECT (CONTINUED)

Constitution of the Kirghiz Soviet Socialist Republic as of April 20, 1978	Constitution of the Kyrgyz Republic as of May 5, 1993
<b>Labor/economic rights</b>	
<i>Article 17.</i> In the Kirghiz SSR, in accordance with law there shall be allowed individual labor activity in the sphere of handicraft industries, agriculture, consumer services and other industries based only on individual labor of citizens and their family members. <...>	by the state provision <i>Article 16.</i> 17. Everyone shall enjoy right to own, use and manage their property, results of their intellectual and creative activity. <...> 18. Everyone shall enjoy right to economic freedom, free use of their abilities and property for any economic activity not prohibited by law. 19. Everyone shall enjoy right to freedom of labor, as well as right to manage their abilities to labor and to choose a profession and type of work.
<i>Article 38.</i> Citizens of the Kirghiz SSR shall enjoy right to labor, - that is to have a guaranteed job with remuneration in accordance with labor quantity and quality and no less than the established by the state minimum amount, - including right to choose a profession, type of work in accordance with vocation, abilities, professional training, education and account for the public needs. This right is ensured by the socialist economic system, steadfast growth of production forces, free professional training, labor qualification upgrade and re-training in new specialties, and development of professional orientation and employment systems.	<i>Article 28.</i> 1. Citizen of the Kyrgyz Republic shall enjoy right to protection of labor in all of its forms and manifestations, to labor conditions that meet the requirements of safety and hygiene, and to social protection from unemployment. 2. The state takes care of training and upgrading professional qualification of citizens, <...>
	<i>Article 29.</i> Citizens of the Kyrgyz Republic who work under a labor agreement (contract) shall enjoy right to remuneration no less than the established by the state subsistence minimum.
<b>Pensions</b>	
<i>Article 41.</i> Citizens of the Kirghiz SSR shall enjoy right to material provision in old age, in case of illness, full or partial loss of ability to work, and loss of bread-winner. This right is ensured by social insurance of workers, employees and kolhoz-workers, temporary labor disability benefits; payment at the expense of the state and kolhozs of old-age, invalidity and loss of bread-winner pensions; employment of citizens who partially lost ability to work; care for the elderly citizens and invalids; and other form of social provision.	<i>Article 27.</i> 1. In the Kyrgyz Republic there guaranteed social provision at the expense of the state in old age, in case of illness and loss of bread-winner. 2. Pensions, social assistance in accordance with the economic capacity of the society shall provide for standard of living no less than the established by law subsistence minimum. 3. Voluntary social insurance, creation of additional forms of provision and charity shall be encouraged.
<i>Article 25</i>	

TABLE 2. COMPARISON OF THE CONSTITUTIONS OF THE KYRGYZ REPUBLIC IN THE WELFARE ASPECT (CONTINUED)

Constitution of the Kirghiz Soviet Socialist Republic as of April 20, 1978	Constitution of the Kyrgyz Republic as of May 5, 1993
<b>Education</b>	
In the Kirghiz SSR there exists and improves the single system of people's education, which ensures comprehensive and professional training of citizens, <...>	<i>Article 32.</i> 1. Each citizen of the Kyrgyz Republic shall enjoy right to education. 2. Basic education is compulsory and free, everyone has right to have it in state and municipal educational institutions. Each citizen has right to have free general secondary education in state and municipal educational institutions. 3. The state ensures accessibility of professional, secondary vocational and higher education for all in accordance with the abilities of everyone. 4. Paid education of citizens in state and other educational institutions shall be allowed on the basis of and in the procedure established by the legislation of the Kyrgyz Republic.
<i>Article 43.</i> Citizens of the Kirghiz SSR shall enjoy right to education. This right is ensured by free education of all kinds, implementation of universal compulsory secondary education of youth, wide development of professional-technical, secondary vocational and higher education on the basis of linking education to life and to production; development of part-time and evening education; provision of state stipends and privileges to pupils and students; free distribution of school textbooks; opportunity to study at school on mother tongue; creation of conditions for self-education.	<i>Article 33.</i> Citizens of the Kyrgyz Republic shall have right to shelter. This right is ensured by the development of state, municipal and individual housing fund, assistance to citizens in purchase of housing on the conditions and in the procedure established by the legislation of the Kyrgyz Republic.
<i>Article 42.</i> Citizens of the Kirghiz SSR shall have right to shelter. This right is ensured by the development and protection of state and public housing fund, enhancement of cooperative and individual housing construction, equitable distribution under public control of housing provided as the program of comfortable housing construction is implemented, and also by low utilities fees. <...>	<i>Article 34.</i> 1. Citizens of the Kyrgyz Republic shall enjoy right to health protection, to free use of the network of state and municipal health facilities. 2. Paid medical services to citizens shall be allowed on the basis of and in the procedure established by law
<i>Article 40.</i> Citizens of the Kirghiz SSR shall enjoy right to health protection. This right is ensured by free qualified medical care provided by state health facilities; extension of the network of facilities for treatment and health promotion of citizens; development and improvement of accident prevention and production sanitation; implementation of wide preventative measures; measures on environmental invigoration; special care for health of the growing generation, including ban on child labor not linked to education and labor training; expansion of scientific research directed at preventing and decreasing morbidity and at ensuring active longevity of citizens.	

TABLE 2. COMPARISON OF THE CONSTITUTIONS OF THE KYRGYZ REPUBLIC IN THE WELFARE ASPECT (CONTINUED)

Constitution of the Kirghiz Soviet Socialist Republic as of April 20, 1978	Constitution of the Kyrgyz Republic as of May 5, 1993
<b>Family support</b>	
<i>Article 51.</i> Family is protected by the state. <...> The state shows concern for family by creating and developing of a wide network of children's facilities, organizing and improving communal services and public catering, by providing child benefits, benefits and privileges to big families, as well as other kinds of benefits and assistance to family.	<i>Article 26.</i> 2. The state provides for the maintenance, upbringing and education of orphans and children deprived of parental guardianship.

TABLE 3. GROSS NATIONAL SOCIAL SPENDING, MLN. OF SOMS

	1997	1998	1999	2000	2001
GDP	30685.7	34181.4	48744.0	65357.9	73883.3
Education	1780.7	1975.8	2505.1	2938.1	3861.8
public spending <sup>2</sup>	1588.8	1681.6	1991.3	2293.0	2847.6
enterprises	0.0	87.2	163.9	99.2	265.7
private spending <sup>3</sup>	191.9	207.0	349.9	545.9	748.5
as % of GDP	5.8%	5.8%	5.1%	4.5%	5.2%
Health Care	1267.1	1474.7	1786.8	2107.4	2398.7
public spending <sup>2</sup>	920.7	962.1	1125.3	1295.9	1379.0
enterprises	57.4	54.2	75.8	96.2	253.4
SF	56.4	60.6	48.7	59.3	74.2
private spending <sup>3</sup>	232.6	397.8	537.0	656.0	692.1
as % of GDP	4.1%	4.3%	3.7%	3.2%	3.2%
Social Insurance and Provision <sup>4</sup>	4124.8	4496.9	5084.4	6413.7	6503.1
public spending <sup>2</sup>	550.9	476.6	708.6	963.6	1417.1
trade-unions	868.6	4.7	5.3	6.1	7.9
enterprises*	2076.9	956.4	876.9	515.6	163.1
SF*	1.5	2307.7	2515.2	2937.9	3388.9
private spending** <sup>3</sup>	626.9	751.5	978.4	1990.5	1526.1
as % of GDP	13.4%	13.2%	10.4%	9.8%	8.8%
Housing and utilities	877.5	1793.3	2240.1	2895.6	3693.0
public spending <sup>2</sup>	279.6	373.7	464.7	666.5	800.9
enterprises	5.7	782.9	955.9	1047.2	1218.8
private spending <sup>3</sup>	592.2	636.7	819.5	1181.9	1673.3
as % of GDP	2.9%	5.2%	4.6%	4.4%	5.0%

1 - including capital costs.

2 - including special means, or paid services provided by public organizations/enterprises.

3 - household spending (Family Budget Survey (FBS) - a panel study by NSC for 1998-2002).

4 - excluding subventions to the SF.

232.6 - an expert's estimate based on FBS. Private spending on health care is estimated from the FBS.

\*Considerable discrepancies between enterprises and the SF funding levels are due to continuous legislative changes and privatization process. \*\* Financial assistance to relatives is taken as proxy.

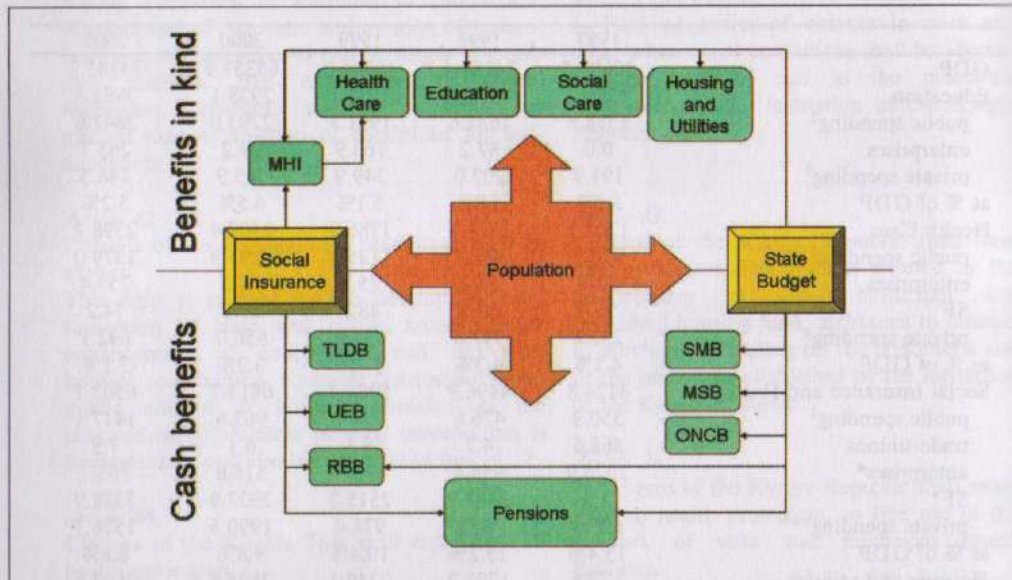
Source: NSC

TABLE 4. GROSS NATIONAL SOCIAL SPENDING BY SOURCES, MLN. OF SOMs

	1997	1998	1999	2000	2001
Social expenditures, total	8050.1	9740.8	11616.3	14354.9	16456.6
as % of GDP	26.2%	28.5%	23.8%	22.0%	22.3%
Public	3340.0	3494.0	4289.9	5219.0	6444.6
as % of GDP	10.9%	10.2%	8.8%	8.0%	8.7%
as % of total	41.5%	35.9%	36.9%	36.4%	39.2%
Private	1643.6	1993.1	2684.7	4374.4	4640.0
as % of GDP	5.4%	5.8%	5.5%	6.7%	6.3%
as % of total	20.4%	20.5%	23.1%	30.5%	28.2%
Social Insurance*	57.9	2368.3	2563.9	2997.2	3463.1
as % of GDP	0.2%	6.9%	5.3%	4.6%	4.7%
as % of total	0.7%	24.3%	22.1%	20.9%	21.0%

\*SF spending.

FIGURE 1: THE WELFARE STATE OF THE KYRGYZ REPUBLIC



Notes: MHI – mandatory health insurance; TLDB – temporary labor disability benefit; RBB – ritual (burial) benefit; UEB – unemployment benefit; SMB – single monthly benefit; MSB – monthly social benefit; and ONCB – other non-contributory benefits.

FIGURE 2: THE EDUCATION SECTOR

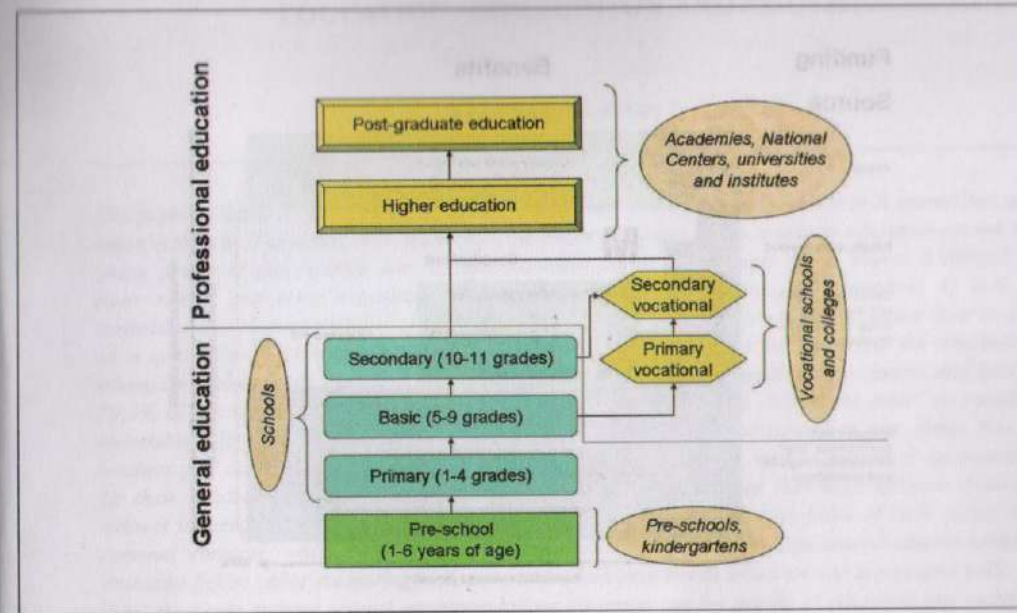
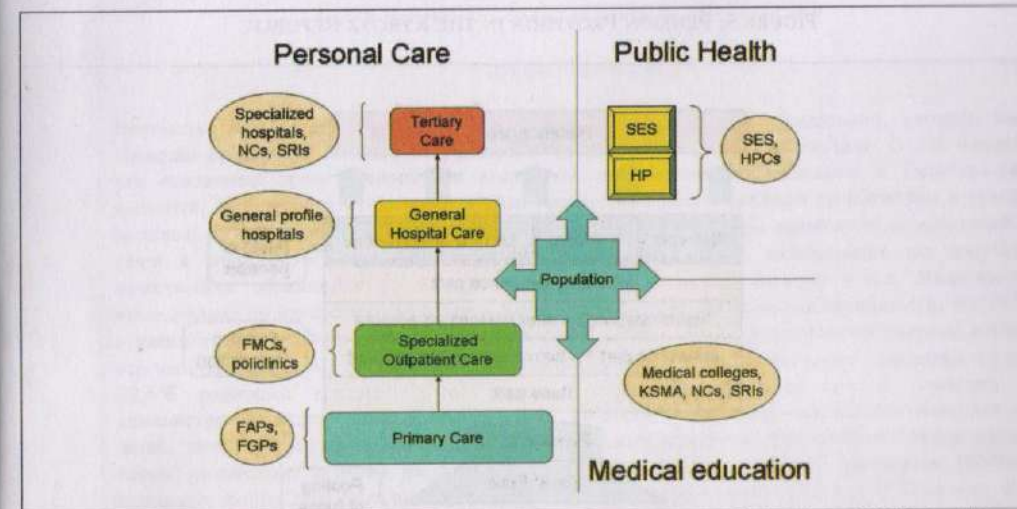


FIGURE 3: THE HEALTH CARE SECTOR



Notes: NCs – National Centers; SRIs – Scientific-Research Institutes; SES – Sanitary-Epidemiological Well-being; SES – sanitary-epidemiological stations; HP – Health Promotion; HPCs – health promotion centers; FMCs – family medicine centers; KSMA – the Kyrgyz State Medical Academy; FAPs – feldsher-obstetrical points; FGPs – family group practices.

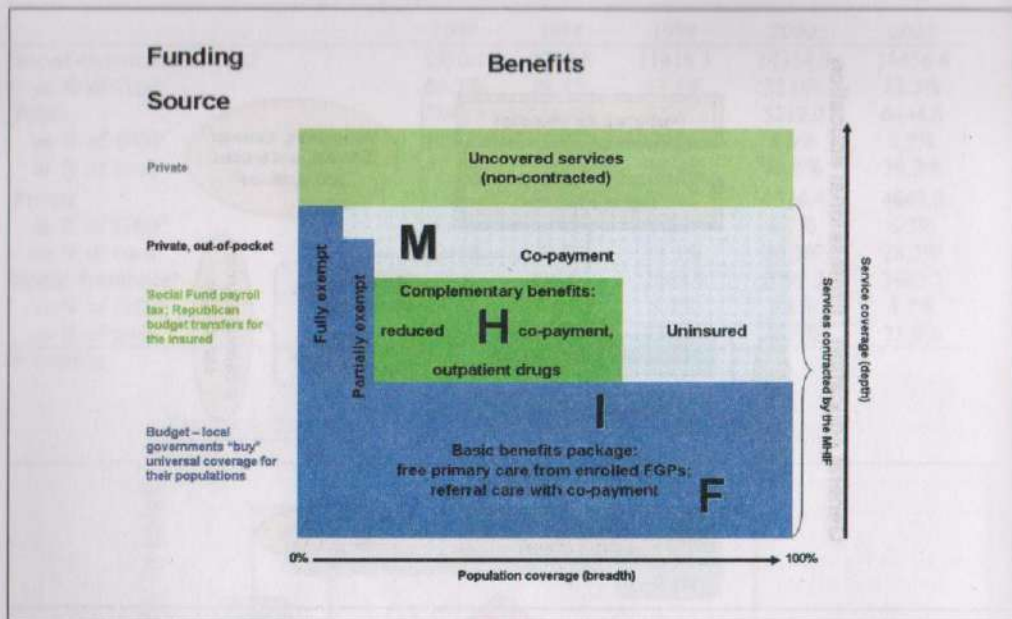
According to the European Observatory on Health Care Systems (2000):

Primary care is "the first point of contact of health system with the individual consumer and includes general medical care for common conditions and injuries".

Secondary care "refers to specialized ambulatory medical services and commonplace hospital care (outpatient and inpatient services)".

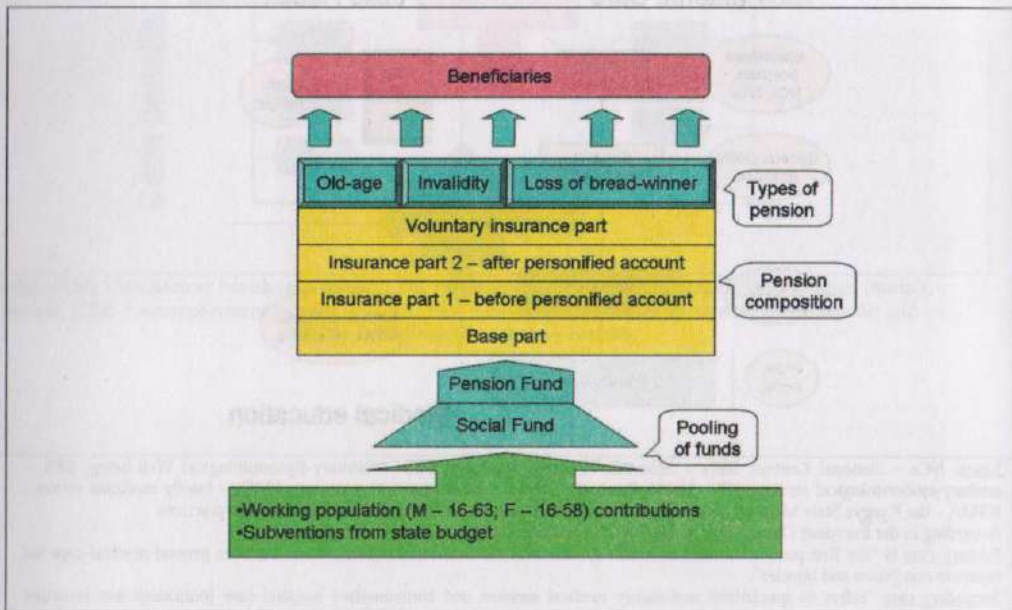
Tertiary care "refers to medical and related services of high complexity and usually high cost".

FIGURE 4: THE STATE GUARANTEES IN HEALTH CARE



Source: Kutzin et al. (2003).  
 Notes: MHIF – the Mandatory Health Insurance Fund under the Ministry of Health of the Kyrgyz Republic; FGPs – family group practices.

FIGURE 5: PENSION PROVISION IN THE KYRGYZ REPUBLIC



## CHALLENGES OF THE DEVELOPMENT PROCESS IN TAJIKISTAN: EDUCATION, CORRUPTION AND YOUTH

SHUKHRAT MIRZOEV\*

The paper is based on survey on corruption in education among 400 individuals in 6 universities and organizations in Tajikistan, and shows that the major obstacles in the access to education among the young people of this country are: 1) unemployment during study years which makes it difficult to cover tuition and other expenses; 2) insufficient access to education; 3) corruption; 4) lack of motivation due to unavailability of diverse range of options for students wishing to pursue their majors on a quality level; 5) language barrier, and so on. Survey indicators for measuring the situation in education among youth show that 84% of the students would be willing to pay for exams and passes; 39,3% of the respondents are sure that they would be offered to pay "under the table" to enroll at universities, lyceums, colleges, etc; 42,6% of the parents know that refusal to pay illegal fees to teachers and administration at secondary schools and lyceums might lead to unwanted consequences for their children who study there; and 49,7% of the surveyed noted that most effective means of indirect influence over the decisions at higher educational institutions take forms of cash money and personal contacts, while 56% of the 400 respondents had already experienced abovementioned situations before. After measuring indicators and developing trends based on the survey and collected data, the paper outlines several recommendations for improving the quality of education and reducing corrupt behavior in the education sphere.

### ВЫЗОВЫ ПРОЦЕССАМ РАЗВИТИЯ В ТАДЖИКИСТАНА: ОБРАЗОВАНИЕ, КОРРУПЦИЯ И МОЛОДЁЖЬ

ШУХРАТ МИРЗОЕВ

Настоящая работа основана на данных опроса по коррупции в образовании, который был проведён среди 400 человек в 6 университетах и организациях Таджикистана. Опрос выявил, что основными препятствиями при получении образования для молодёжи в Таджикистане являются: 1) безработица, не позволяющая полностью покрыть расходы по обучению и другие расходы; 2) недостаточный доступ к образованию; 3) коррупция; 4) недостаточная мотивация в связи с отсутствием различных возможностей для студентов, позволяющих им получать качественное образование по их специализации; 5) языковые барьеры и т.д. Индикаторы исследования по измерению ситуации в секторе образования среди молодёжи показали, что 84% студентов предпочли бы заплатить за экзамены и зачёты; 39,3% респондентов уверены в том, что им предложили бы дать «взятку» для поступления в университеты, лицей, колледжи и т.п.; 42,6% родителей понимают, что отказ в уплате определенных средств учителям и администрации средних школ и лицеев может привести к нежелательным последствиям для их детей, которые там обучаются; и 49,7% опрошенных отметили, что наиболее эффективный способ косвенного влияния на принятие решений в высших учебных заведениях (ВУЗах) принимает форму денежных выплат и использования личных связей, тогда как 56% из всех 400 опрошенных уже испытали на своём опыте подобную ситуацию. После определения и изучения индикаторов и разработки стратегии на основе информации собранной в ходе проведенного опроса, в статье представлены несколько подробных рекомендаций по улучшению качества образования и снижению коррупции в сфере образования.

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## 1. A SURVEY ON CORRUPTION IN EDUCATION

There are several definitions of corruption, among which the most popular is the one used by the World Bank, which defines corruption as "the abuse of the public service for private gain." (as cited in Mukunda, B. Pradhan 2006) A more complete definition is provided by the Asian Development Bank (ibid.): "Corruption involves behavior on the part of officials in the public and private sectors, in which they improperly and unlawfully enrich themselves and/or those close to them, or induce others to do so, by misusing the position in which they are placed." Many associate corruption with bribes. Although most examples of corrupt behavior involve payments in one form or the other, not all acts of corruption involve traditional bribes. For example, a personnel department employee in a public organization may promote and support members of his community or native town without receiving direct payment. While some payments may come in the future in the form of services, presents or money from newly promoted staff, this is not always the case.

A survey on corruption in education was carried out by the OSI Programs Alumni Association within the framework of the Economics Students' Union (ESU) between April and June 2004 in Dushanbe and Khujand, Tajikistan. A questionnaire was designed to ask about general relations between university administration and students, the government and the private sector in the field of education. Overall, 400 individuals (221 households) in 6 major universities in Tajikistan were surveyed. To better understand what the most significant problems are, respondents were asked to rate a set of 19 factors in terms of their hindrance and challenges for living and working in Tajikistan. Figure 8 in the attachment provides significant amount of information both for the government and international development agencies on how to better facilitate private sector development in the country. However, given the topic of the paper, a detailed discussion of the latter is beyond the scope of the present discussion.

About 72% of the households believe that when dealing with public universities it is either always or most of the time easier to use additional inducements rather than to follow established rules. Surveyed individuals confirmed that the most frequently applied "additional instrument" is the use of contacts (friends, relatives or third parties) to influence decisions in university administrations (see Figure 9). This is followed by the use of small presents and of money/expensive presents, and, lastly, engaging criminal organizations to influence decisions.

Most of the time corruption happens in the public sector. As put by Lui (1996, 27): "... if the resource allocation system is perfectly competitive, than corruption cannot exist... Deviations from the competitive market, caused by government regulations or interference are major causes of corruption." As Table 1 shows, surveyed households agree, in general, on the most popular situations where the use of money, presents, contacts or threats takes place. They are: border crossing at customs, education and health institutions. It is also

interesting to note that situations, which allow access to foreign exchange, public procurement and privatization are rated relatively low – an indicator of the government's progress on the macro front.

## 2. CORRUPTION IN HIGH (SECONDARY) SCHOOL

The use of payments of one sort or another in public schools is an often-debated question. The government of Tajikistan, on one hand, is dedicated to build a socially oriented market economy (often heard in the speeches of top government officials), which means a guaranteed presence of the state in the provision of social services to protect poor and vulnerable groups of the population. The consequences of the war and strained budget situation, on the other hand, will not allow (at least in the mid-term) to bring these sectors to an adequate level – salaries are among the lowest in the region (see Figure 3), the infrastructure depreciates rapidly, etc. Decreased quality of educational services was stated to be one of the most problematic factors for living and working in Tajikistan (see Figure 8) and corruption in these institutions is ubiquitous.

As shown in Figure 10, when sending a child to a public secondary school, parents may expect many additional expenses down the road. Payments may take various forms and can be either offered by parents themselves or demanded by the schools. Most often, payment is solicited for the reconstruction of the building, although other forms mentioned in the figure are also used quite often. When the school asks for payment, many find it difficult to refuse since it may cause problems on the academic front (Figure 12). The use of payments, presents and contacts also takes place when transferring a child to a better school, to build good relations with teachers, to ensure that the child receives enough attention in school, and to ensure that the child receives better grades regardless of his/her knowledge (Figure 13). Often parents have to hire private tutors for their children due to an insufficient quality of education in many public schools throughout Tajikistan. Private tutors are mostly needed to prepare pupils for entrance examinations in colleges/universities or to simply ensure a better education for the child. Sometimes, teachers in the same school offer themselves as private tutors (see Figures 14 and 15). If it works, then teachers are much better off by providing poor education in class to generate revenues as private tutors.

## 3. CORRUPTION IN COLLEGES AND UNIVERSITIES

When entering a public university, students have to pass entrance examinations. This is probably the most profitable season for those employed in the admission offices or those professors who can influence decisions of the latter. About half of the surveyed believe that the use of money, etc. is always involved in entrance examination with another 30% stating that it is involved most of the time (Figure 16). Often corrupt professors offer to facilitate admission (Figure 17) and

more than 80% are willing to pay if offered (Figure 18). Quite frequently the exact price of admission is widely known and even applicants with excellent knowledge may experience difficulties with admission unless other inducements are used (Figures 19 and 20). Passing semester tests/examinations in the course of study in universities often involves payments of various sorts. When student's knowledge is not adequate, exams can be passed with a moderate "facilitation." Often professors themselves offer such deals (Figure 21). In general, both students and professors may offer deals during examination periods in universities with equal probability; and refusal to pay when asked by a professor may have negative consequences for the students (Figures 23 and 24). Overall, over 50% of respondents stated that they have paid money in public schools and universities (Figure 26).

#### 4. STRATEGY TO REDUCING CORRUPTION IN EDUCATION

The survey results confirmed the general hypothesis: unlike the situation in, for example, tax and customs authorities, employees in educational facilities take money and presents because the government does not pay them properly (Figure 25). Other possible reasons include weak control and unlikely punishment, poor regulatory environment and access to significant discretionary power among state employees. Very few households do believe that employees' greediness, cultural traditions or clan relations are explanatory factors. Efficient anti-corruption campaign in Tajikistan should contain measures in three major areas:

1) *Sectoral policy reform*: reducing the share of the state in these sectors will allow an increase in financial support to the remainder of public institutions; elimination of the "semi-private" nature of the system will significantly reduce the scope for corruption; increasing transparency at both macro- and micro-levels (e.g. during university admissions, etc.) and central government's true commitment to reduce corruption and to raise efficiency of the educational sector are probably key factors of success. A salary increase may sometimes indeed lead to a decreased number of corruption acts. However, to avoid getting into the trap of another budget drain, one should understand that the results of this survey are not sufficient for definitive conclusions. Several cross-country studies show that salary increase is efficient in preventing corruption from happening, but often does not work to stop it once public employees start accepting bribes. The hypothesis here is that to stop corruption this way would be easier in secondary schools rather than in universities and other higher educational institutions, but there is definitely a need for further research.

2) *Reform of the legal and regulatory environment*: the absence of appropriate laws/regulations pertaining to corruption is a major gap to be filled. It is also important to make these regulations widely known and understood to have a healthy and positive feedback from the public in general.

3) *Structural and institutional reforms*: in areas, where the state would like to remain, but cannot extend its financial support further, it is important to legalize

payments for public educational services and, more importantly, identify exact sizes of fees. Some steps have been already made in this direction, but a lot more needs to be done in unifying the system throughout the country. Building a reliable and transparent accounting system in education could improve control over humanitarian and other international aid, make it more difficult to illegally sell government property (such as university diplomas, etc.); increased training / re-training of staff in educational institutions is needed in connection with the latter measure and to increase awareness of the government's policies. Finally limiting the power of professors to influence admissions decisions is needed to significantly change the system. Substitution of oral tkte-a-tkte exams with computerized tests is an example.

#### 5. CONCLUSION AND FINAL REMARKS

This work represents the first effort to systematize our knowledge about corruption in education in Tajikistan. It is crucial to realize that it is not possible to eliminate the problem entirely given that some factors are simply too strong, such as cultural traditions. Thus, one should not be too ambitious and aim at minimizing the opportunity for corrupt behavior whenever possible. Fighting corruption also means identifying a long-term strategy with a great deal of technical work aimed at improving the system. It is obvious that many of the recommended activities are either too costly for the government of Tajikistan, or do not correspond to the technical capacity of the government to implement reforms. Thus, broad financial and technical assistance from the international community is key to ensure progress of the proposed reforms. Only joint effort of the government and the donors can result in reduced corruption and increased efficiency of Tajikistan's economy.

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- Mukunda, B. Pradhan (2006) Highlights on Anti-Corruption Movements in Nepal. *FNCCI Anti-Corruption Project Articles*. <http://www.bizethics-nepal.org/articles.php?articlesid=16>

FIGURE 1. COMPOSITION OF SURVEYED HOUSEHOLDS BY LOCATION

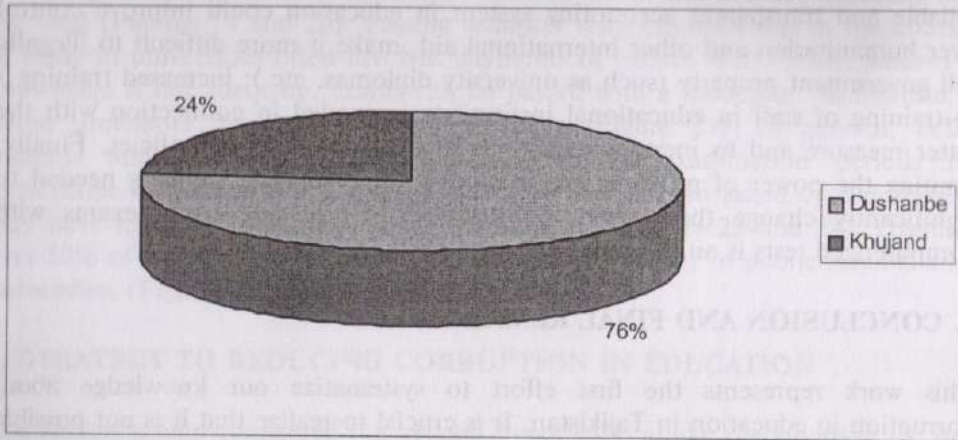


FIGURE 3. COMPOSITION OF SURVEYED HOUSEHOLDS BY MONTHLY INCOME LEVEL, %

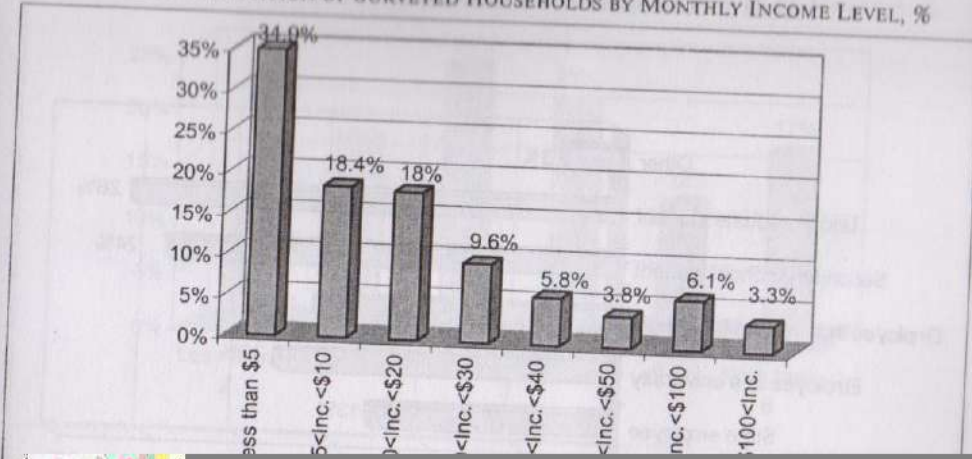


FIGURE 5. COMPOSITION OF RESPONDENTS BY OCCUPATION, %

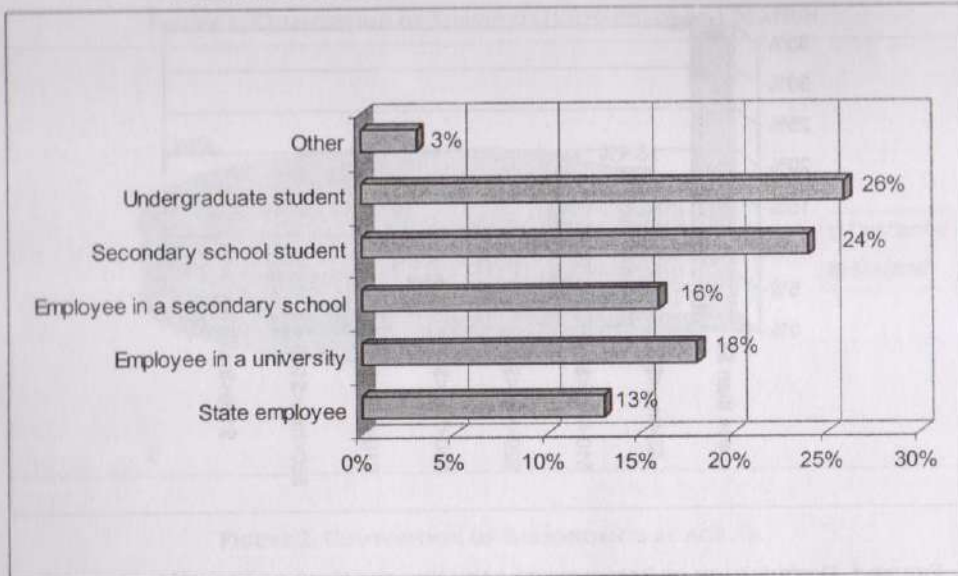


FIGURE 6. COMPOSITION OF RESPONDENTS BY LEVEL OF EDUCATION, %

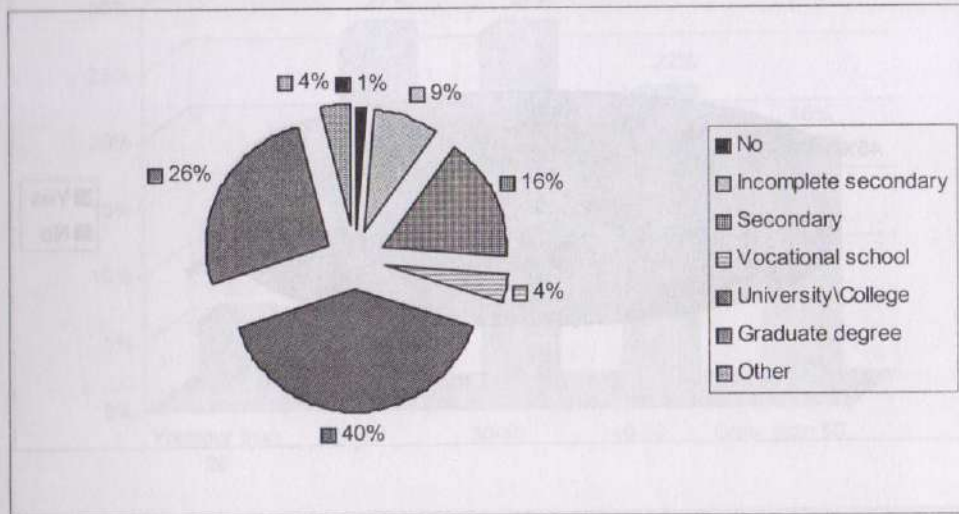


FIGURE 7. COMPOSITION OF SURVEYED HOUSEHOLDS BY THE NUMBER OF MEMBERS, %

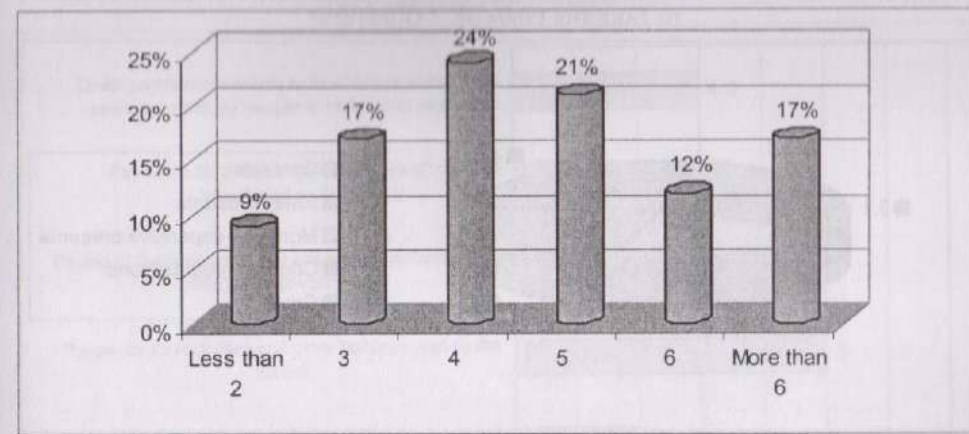
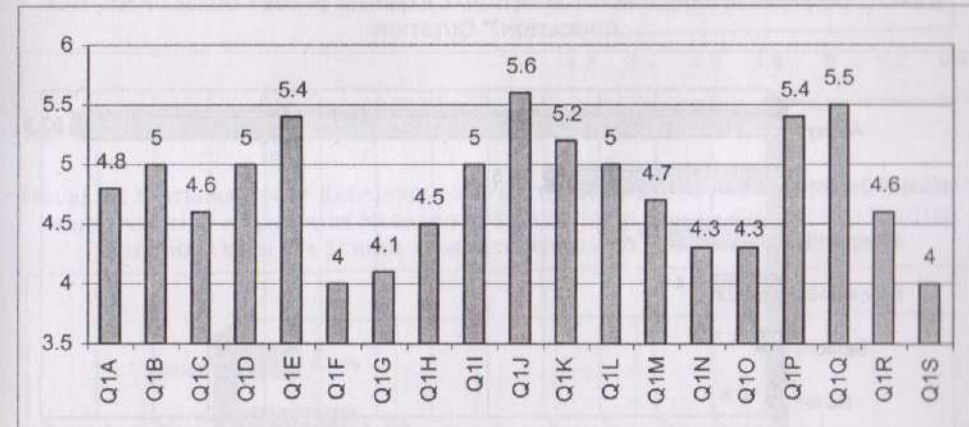


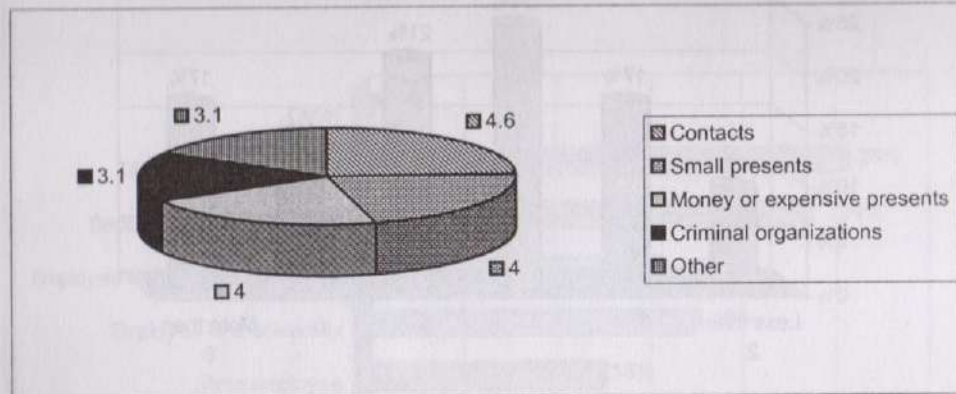
FIGURE 8. DISTRIBUTION OF RESPONSES TO "HOW PROBLEMATIC ARE THE FOLLOWING FACTORS FOR LIVING AND WORKING IN TAJIKISTAN?" QUESTION\*



Legend: Q1A Political instability; Q1B Organized crime; Q1C Harassment by the government militia; Q1D Corruption; Q1E Exchange rate instability; Q1F Regulations of foreign trade (exports, imports); Q1G Foreign currency regulations; Q1H Labor regulations; Q1I Price controls; Q1J Inflation; Q1K Inadequate infrastructure; Q1L Tax regulations/high taxes and other burden imposed by government's fiscal policy; Q1M Deficiency of skilled/qualified labor in the country; Q1N Unpredictability of changes in regulations/laws; Q1O Inadequate telecommunication services; Q1P Decreased quality of health care services; Q1Q Decreased quality of education services; Q1R Inadequate legal/regulatory environment; Q1S Regulations for starting new business/new operations. \*Scale: From 1 - not problematic to 6- very problematic

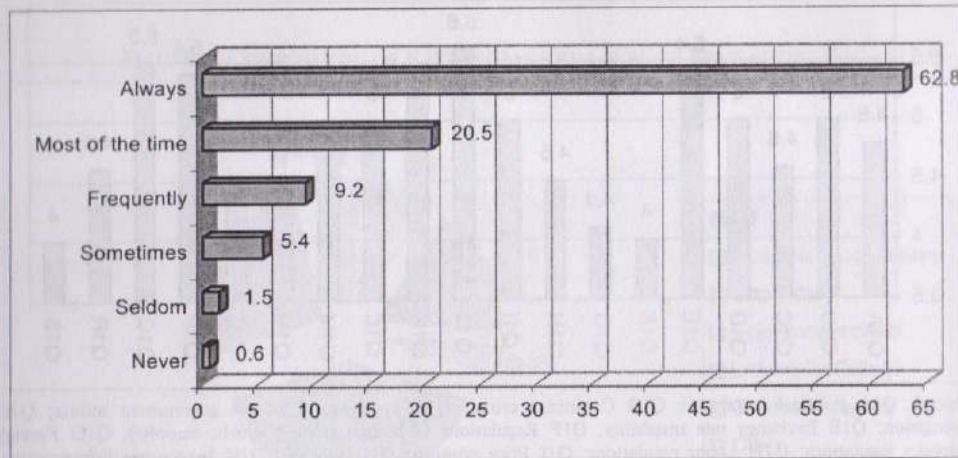


**FIGURE 9. DISTRIBUTION OF RESPONSES TO "THE ADDITIONAL INSTRUMENTS ARE MOST LIKELY TO TAKE THE FORM OF..." QUESTION\***

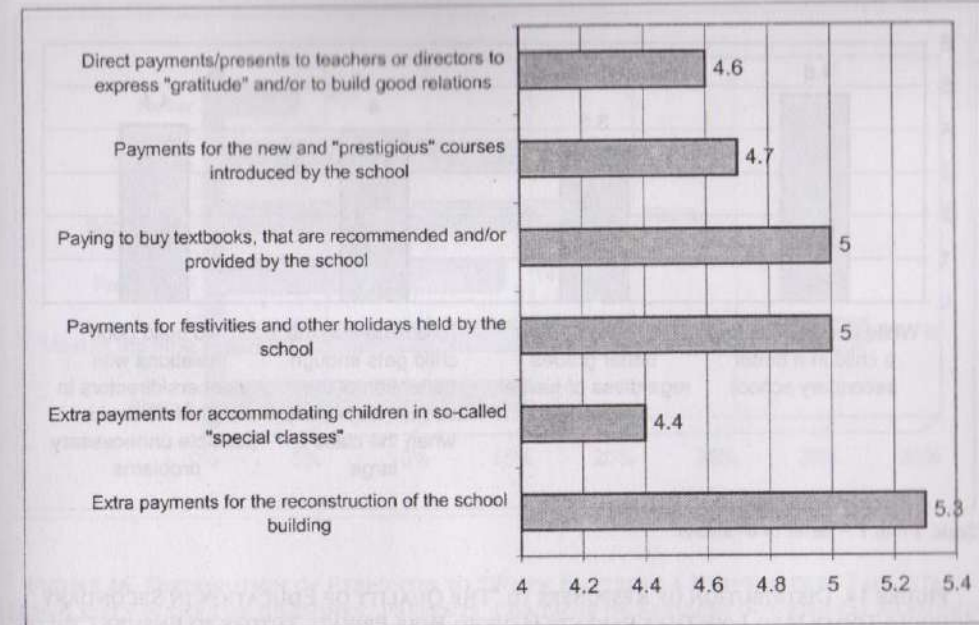


\*Scale: From 1 - never to 6- always

**FIGURE 10. DISTRIBUTION OF RESPONSES TO "WHEN SENDING A CHILD TO A SECONDARY SCHOOL, DO PARENTS EXPECT MANY ADDITIONAL EXPENSES IN THE COURSE OF HIS/HER EDUCATION?" QUESTION**

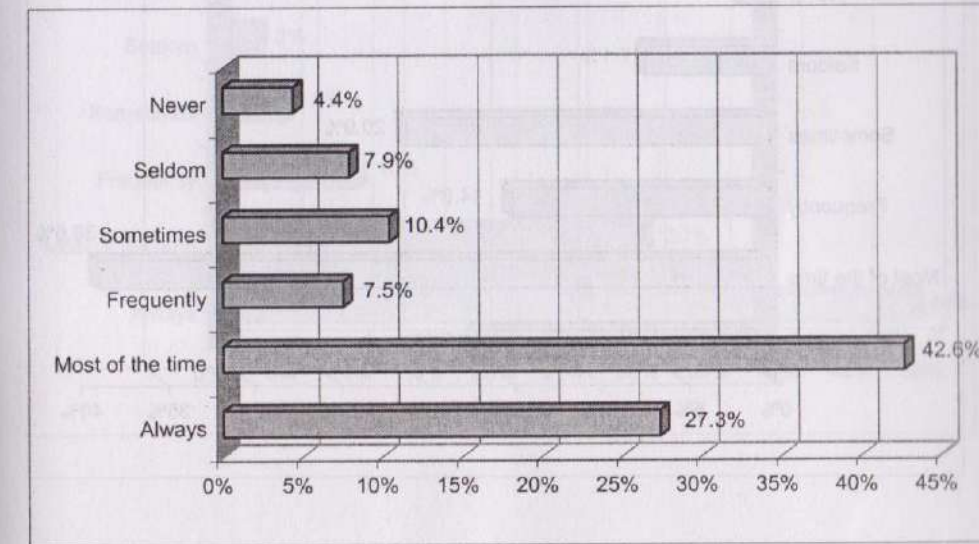


**FIGURE 11. DISTRIBUTION OF RESPONSES TO "THE ADDITIONAL EXPENSES ARE MOST LIKELY TO TAKE THE FORM OF..." QUESTION\***

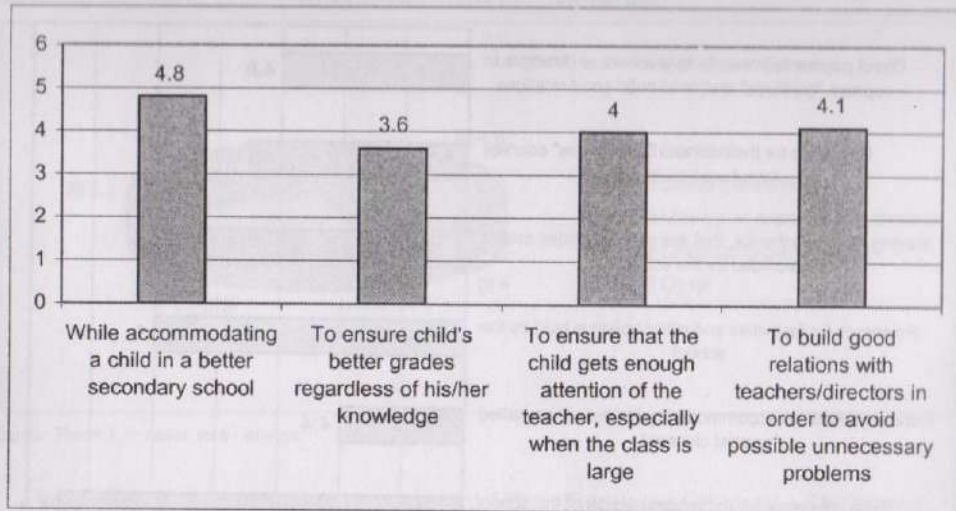


\*Scale: From 1 - never to 6- always

**FIGURE 12. DISTRIBUTION OF RESPONSES TO "WILL THE REFUSAL TO PAY ADDITIONAL PAYMENTS WHEN ASKED BY A SCHOOL BE NEGATIVELY REFLECTED IN CHILD'S GRADES AND HIS/HER RELATIONS WITH THE SCHOOL ADMINISTRATION AND TEACHERS?" QUESTION, %**

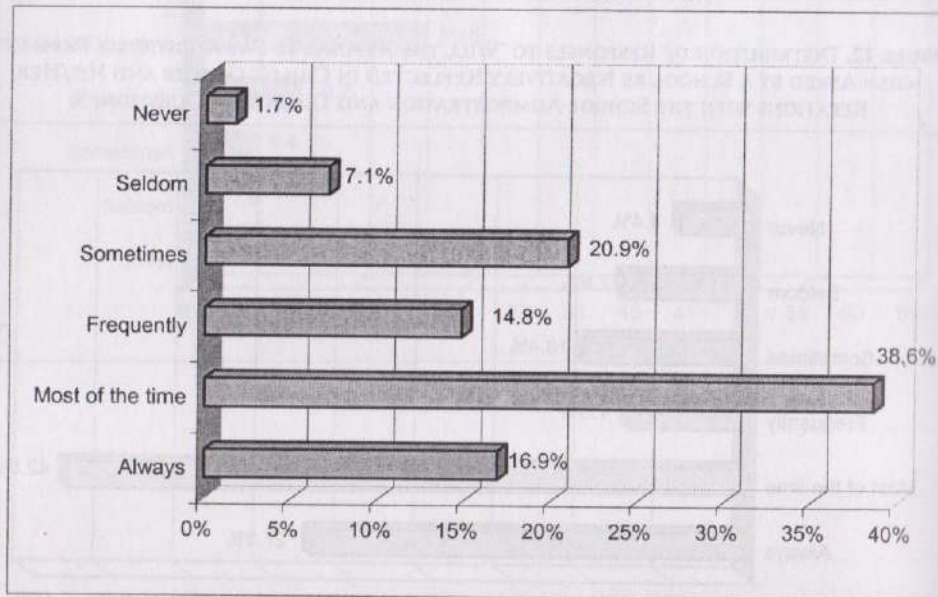


**FIGURE 13. DISTRIBUTION OF RESPONSES TO "PLEASE EVALUATE HOW LIKELY IS THE USE OF MONEY, PRESENTS AND CONTACTS TO OCCUR IN THE FOLLOWING SITUATIONS?" QUESTION\***

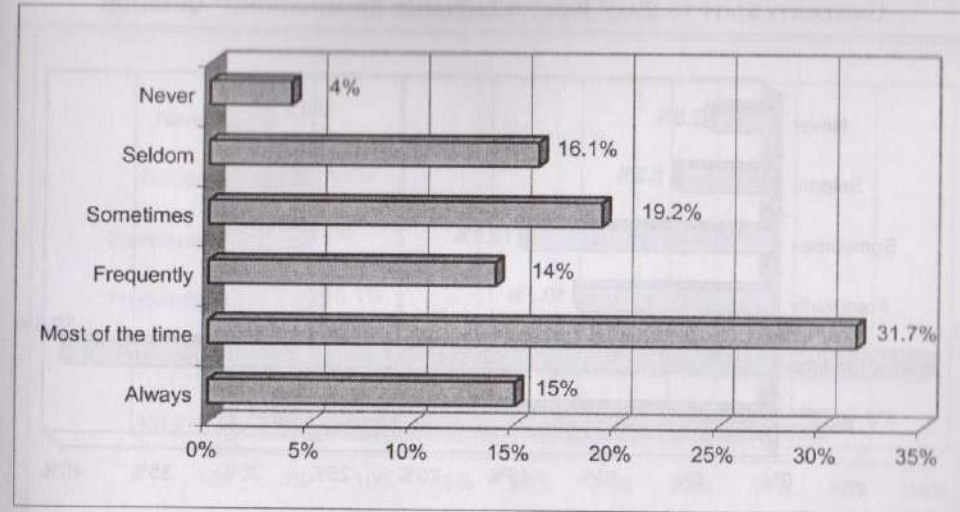


\*Scale: From 1 - never to 6- always

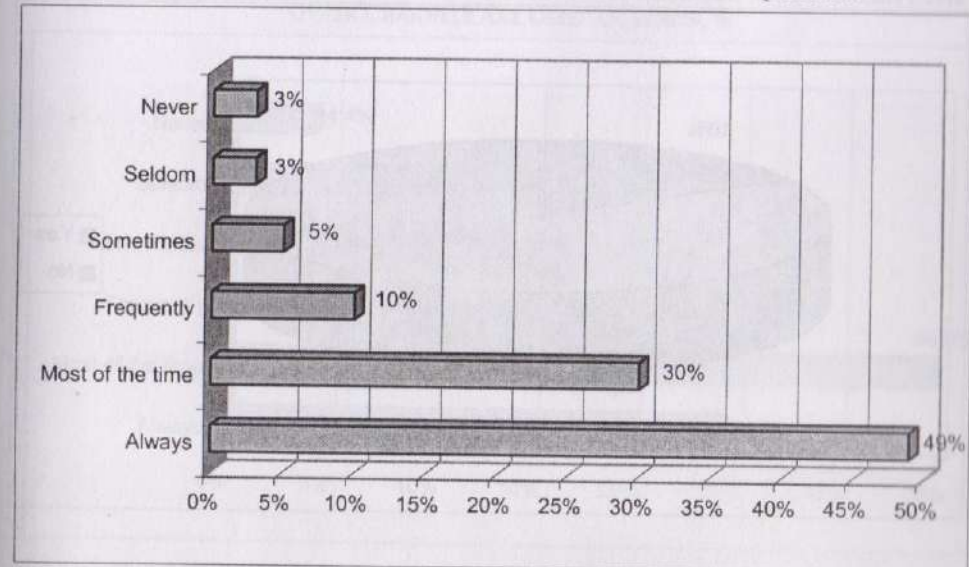
**FIGURE 14. DISTRIBUTION OF RESPONSES TO "THE QUALITY OF EDUCATION IN SECONDARY SCHOOLS TODAY IS SO LOW THAT PARENTS HAVE TO HIRE PRIVATE TUTORS TO ENSURE CHILD'S RELATIVELY BETTER EDUCATION" QUESTION, %**



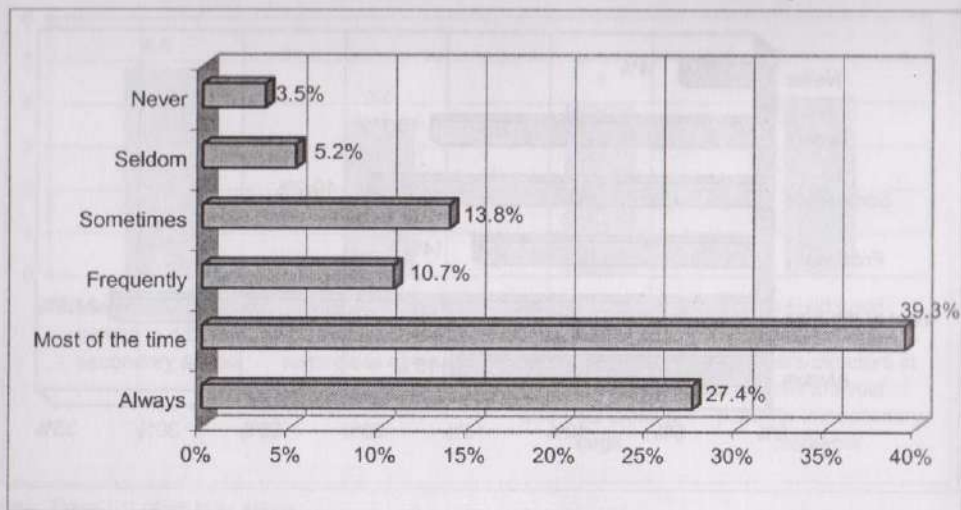
**FIGURE 15. DISTRIBUTION OF RESPONSES TO "THE SAME TEACHERS WHO TEACH IN SCHOOL OFFER THEMSELVES AS PRIVATE TUTORS" QUESTION, %**



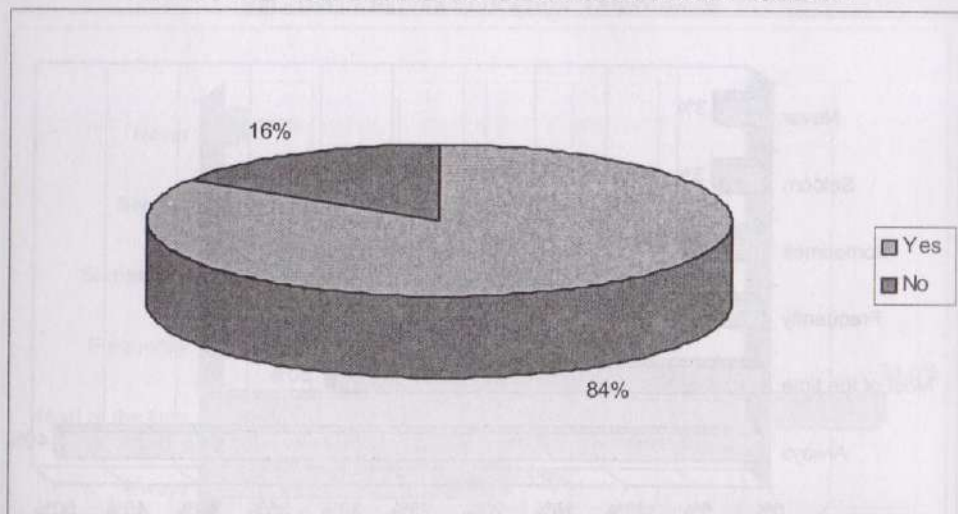
**FIGURE 16. DISTRIBUTION OF RESPONSES TO "WHEN ENTERING A UNIVERSITY IN TAJIKISTAN, HOW LIKELY IS THE USE OF MONEY, PRESENTS, CONTACTS OR SERVICES OF CRIMINAL ELEMENTS TO INFLUENCE THE DECISION OF THE ADMISSIONS OFFICE?" QUESTION**



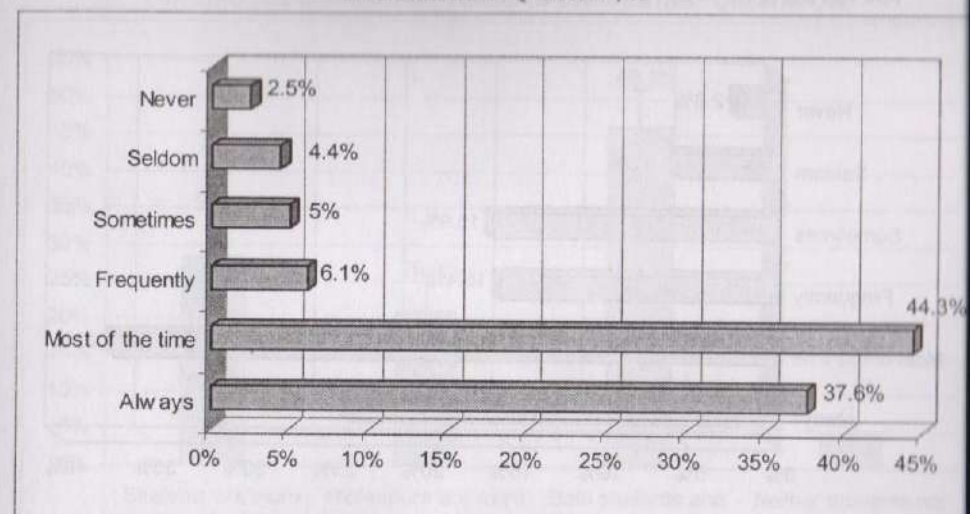
**FIGURE 17.** DISTRIBUTION OF RESPONSES TO "WHEN SUBMITTING DOCUMENTS TO A UNIVERSITY, IS IT LIKELY THAT YOU WILL BE OFFERED (INFORMALLY) TO PAY 'UNDER THE TABLE' TO THE UNIVERSITY STAFF TO 'EASE' PASSING ENTRANCE EXAMINATIONS?" QUESTION



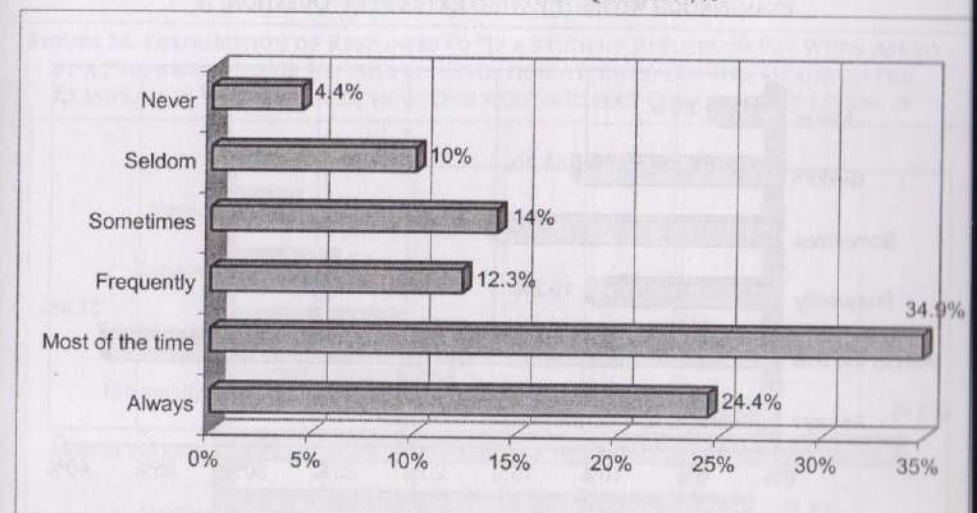
**FIGURE 18.** DISTRIBUTION OF RESPONSES TO "WHEN OFFERED TO PAY 'UNDER THE TABLE' TO 'EASE' ADMITTANCE, ARE PEOPLE LIKE YOU LIKELY TO PAY?" QUESTION



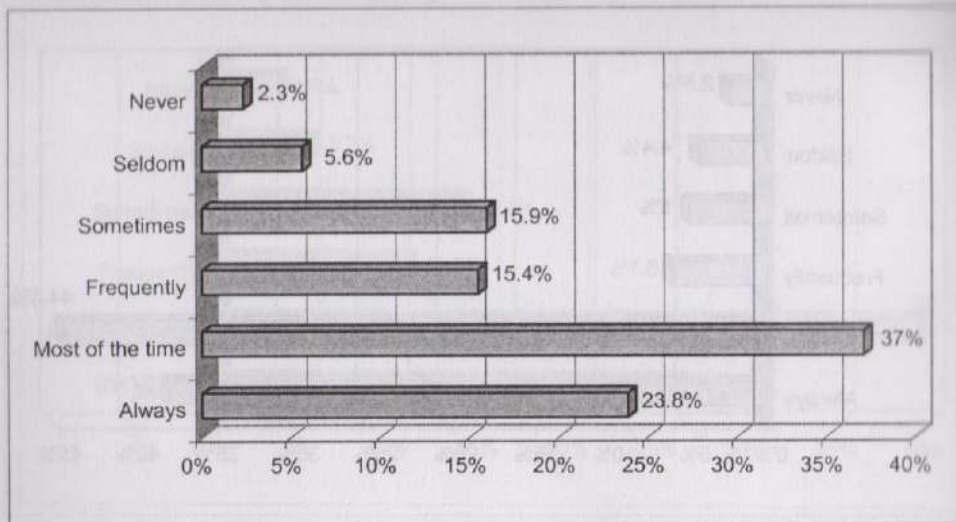
**FIGURE 19.** DISTRIBUTION OF RESPONSES TO "DO PEOPLE USUALLY KNOW IN ADVANCE HOW MUCH DOES IT COST TO PASS ENTRANCE EXAMINATIONS AND TO BE ADMITTED TO A UNIVERSITY IN TAJIKISTAN?" QUESTION, %



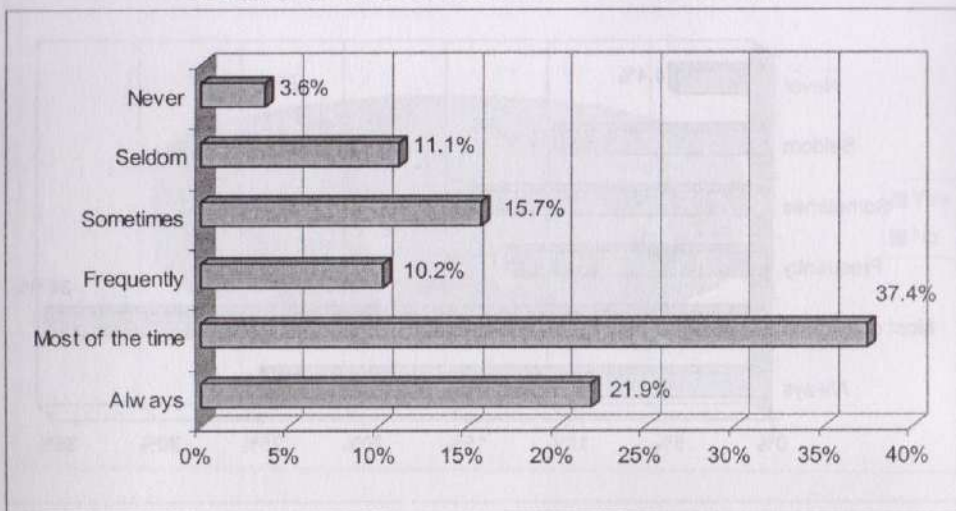
**FIGURE 20.** DISTRIBUTION OF RESPONSES TO "EVEN WHEN AN APPLICANT TO A UNIVERSITY HAS OUTSTANDING KNOWLEDGE, THE PROBABILITY OF BEING ACCEPTED IS LOW UNLESS SOME OTHER CHANNELS ARE USED" QUESTION, %



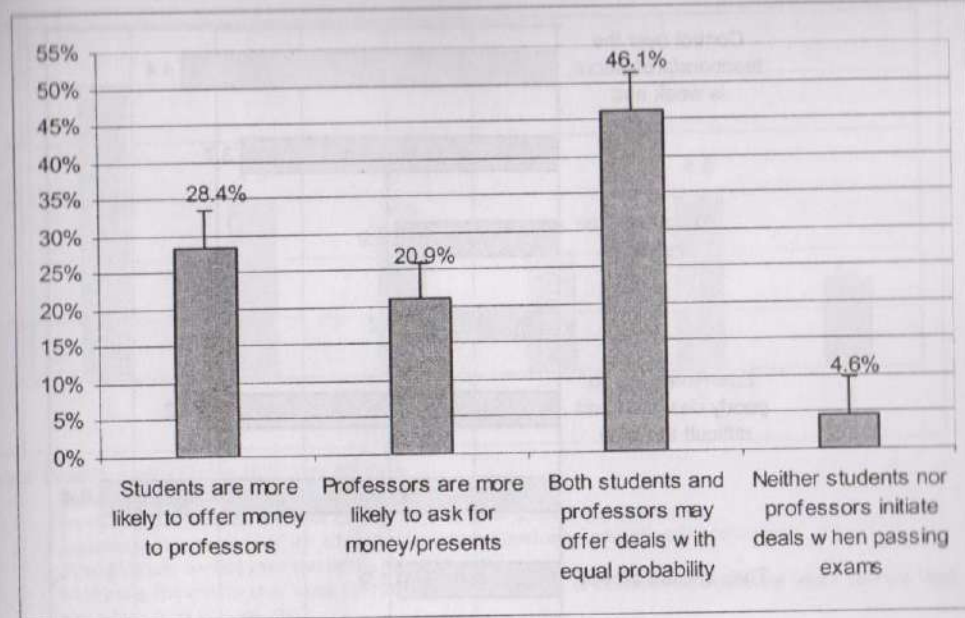
**FIGURE 21. DISTRIBUTION OF RESPONSES TO "WHEN A STUDENT IS LIKELY TO FALL AN EXAMINATION IN THE COURSE OF HIS/HER UNIVERSITY STUDIES, PROFESSOR/TEACHER MAY ASK FOR PAYMENT TO 'EASE' THE EXAM AND/OR IMPROVE THE GRADE" QUESTION, %**



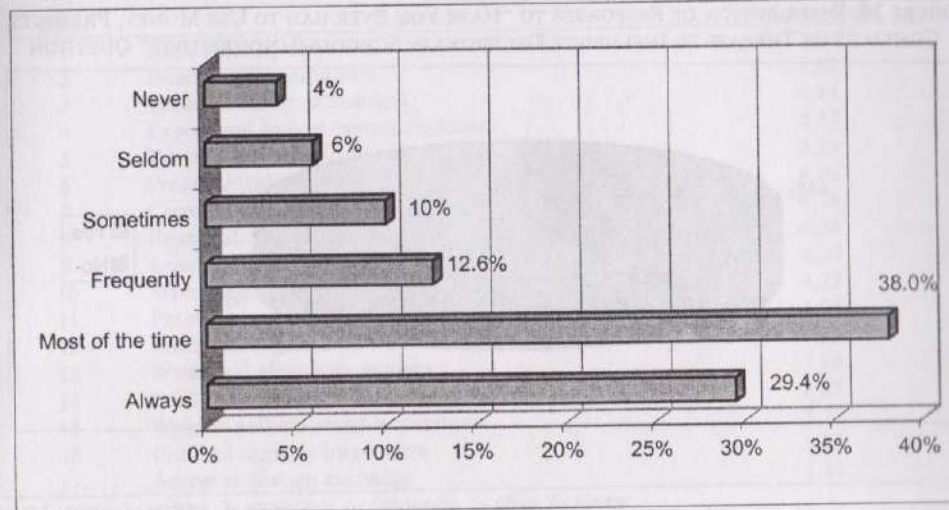
**FIGURE 22. DISTRIBUTION OF RESPONSES TO "WHEN A UNIVERSITY STUDENT POSSESSES GOOD KNOWLEDGE OF THE SUBJECT, HE/SHE IS LIKELY TO RECEIVE A GOOD GRADE ON THE EXAMINATION WITHOUT PAYING EXTRA FEES" QUESTION, %**



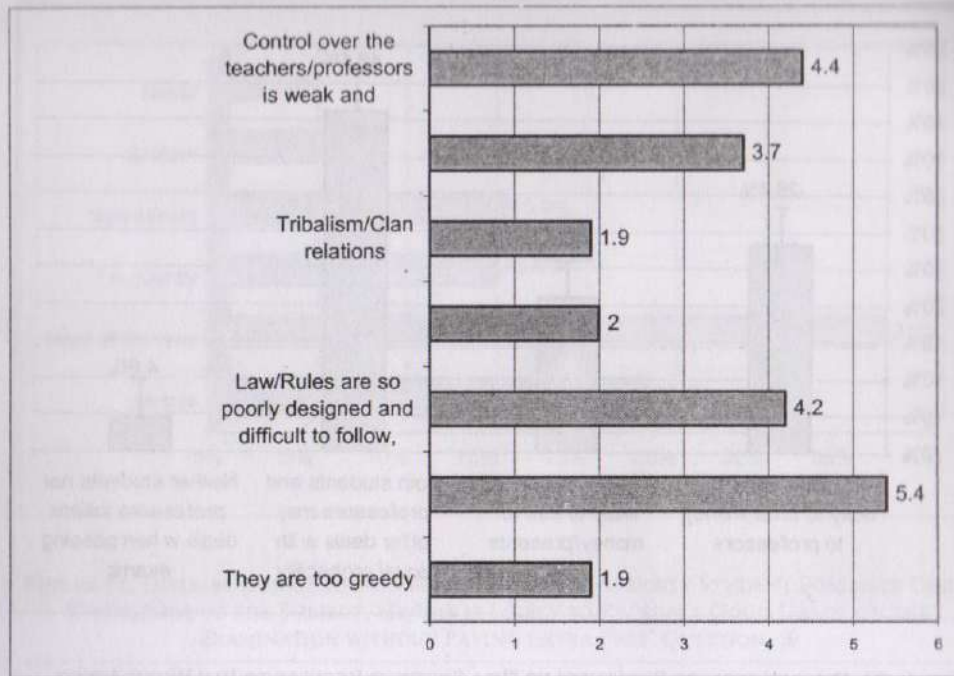
**FIGURE 23. DISTRIBUTION OF RESPONSES TO "PLEASE CHOOSE ONE OF THE FOLLOWING STATEMENTS THAT BEST REFLECTS YOUR PERCEPTION OF STUDENT-PROFESSOR RELATIONS DURING THE EXAMINATION PERIOD IN UNIVERSITIES" QUESTION, %**



**FIGURE 24. DISTRIBUTION OF RESPONSES TO "IF A STUDENT REFUSES TO PAY WHEN ASKED BY A PROFESSOR AND/OR REPORTS AN EXTORTION ATTEMPT, HIS/HER GRADE ON THE EXAMINATION WILL BE LOWER THAN ONE WOULD EXPECT OTHERWISE" QUESTION, %**

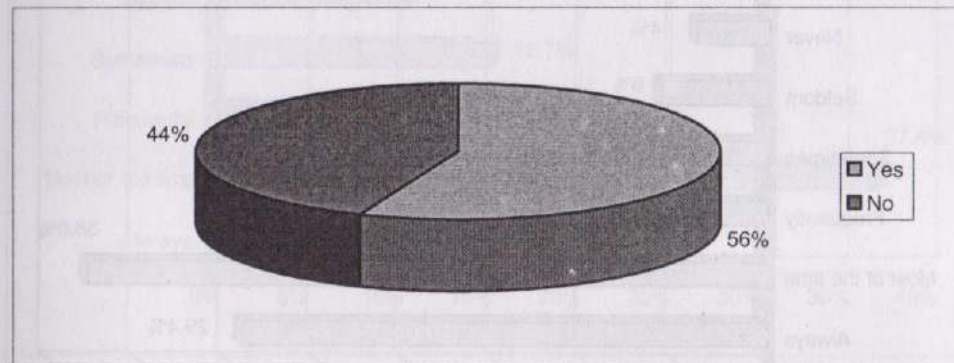


**FIGURE 25. DISTRIBUTION OF RESPONSES TO "HOW WOULD YOU EVALUATE THE FOLLOWING POSSIBLE REASONS OF WHY DO SCHOOL TEACHERS/UNIVERSITY PROFESSORS TAKE MONEY OR PRESENTS" QUESTION\***

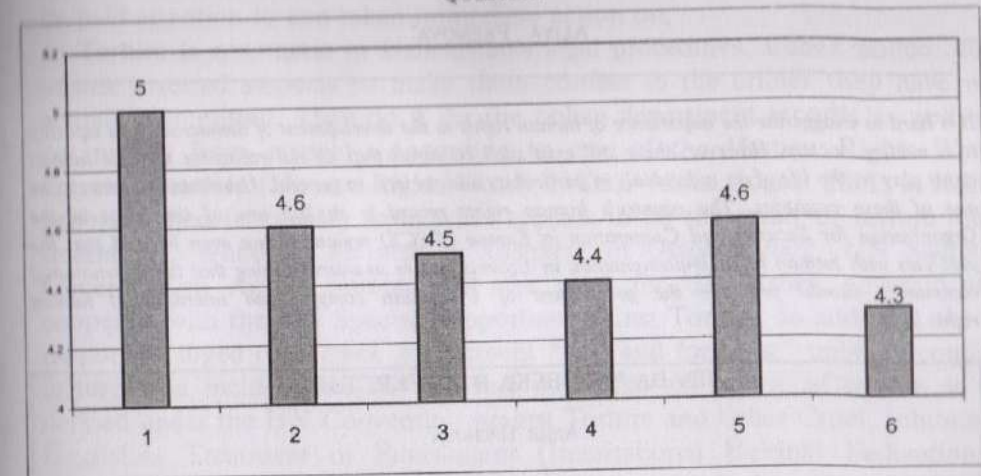


\*Scale: From 1 – no to 6- exactly

**FIGURE 26. DISTRIBUTION OF RESPONSES TO "HAVE YOU EVER HAD TO USE MONEY, PRESENTS, CONTACTS OR THREATS TO INFLUENCE DECISIONS IN SCHOOLS/UNIVERSITIES?" QUESTION**



**FIGURE 27. DISTRIBUTION OF RESPONSES TO "PLEASE JUDGE HOW EFFECTIVE COULD THE FOLLOWING MEASURES BE IN REDUCING CORRUPTION IN SCHOOLS AND UNIVERSITIES?" QUESTION\***



\*Scale: From 1 – not effective to 6- very effective

- 1 Increasing financial support from the government
- 2 Increasing punishment costs for corrupt behaviour in schools/universities
- 3 Increasing transparency of the admissions and examination in educational institutions
- 4 Strengthening control over teachers/professors
- 5 Improving the system (e.g. using computerized tests instead of oral exams, stipulating which fees are legal and which ones are not, etc.)
- 6 Conducting an anticorruption propaganda campaigns in schools and universities

**TABLE I. DISTRIBUTION OF RESPONSES TO "HOW LIKELY IS THE USE OF MONEY, PRESENTS, CONTACTS OR THREATS (CORRUPTION) TO OCCUR IN THE FOLLOWING SITUATIONS?" QUESTION\***

Rank	Situations	Average Rate*
1	High schools, universities	5,03
2	Health care institutions	4,98
3	Border crossing at customs	4,84
4	Export and import permits/licenses	4,53
5	Tax and financial inspections	4,39
6	Property registration	4,36
7	Contact with road police	4,36
8	Privatization	4,34
9	Leases of state-owned real estate	4,28
10	State banking services	4,22
11	Phone line installation	3,95
12	Enterprise registration	3,93
13	Water and electricity services	3,88
14	Public procurement	3,87
15	Weights and measures inspections	3,72
16	Fire and sanitary inspections	3,45
17	Access to foreign exchange	3,41

\*Scale: 1- never, 2- seldom, 3- sometimes, 4- frequently, 5- often, 6- always

ALIYA PRENOVA\*

*It is hard to exaggerate the importance of human rights to the development of democracy and equality in a modern society. However, there still exist such countries that do not recognize the role human rights play in the life of an individual, in particular, and society, in general. Uzbekistan appears to be one of these countries. The country's human rights record is ranked one of the worst in the Organization for Security and Cooperation in Europe (OSCE) region. It can even be said that the problems with human rights implementation in Uzbekistan are so overwhelming that the international community should persuade the government of Uzbekistan comply with international human rights law.*

## ПРАВА ЧЕЛОВЕКА В УЗБЕКИСТАНЕ

АЛИЯ ПРЕНОВА

Трудно преувеличить значение прав человека в развитии демократии и равенства в современном обществе. Однако все еще существуют страны, которые не признают ту роль, которую играют права человека в жизни индивидуума, в частности, и социума, в целом. Узбекистан, по-видимому, является одной из этих стран. Ситуация с правами человека в стране оценивается как одна из худших в регионе Организацией по Безопасности и Сотрудничеству в Европе (ОБСЕ). Можно даже утверждать, что проблемы с выполнением обязательств по правам человека в Узбекистане являются настолько подавляющими, что международное сообщество должно призвать правительство Узбекистана следовать международному праву о правах человека.

It is hard to exaggerate the importance of human rights to the development of democracy and equality in a modern society. However, there still exist such countries that do not recognize the role human rights play in the life of an individual, in particular, and society, in general. Uzbekistan appears to be one of these countries. The country's human rights record is ranked one of the worst in the Organization for Security and Cooperation in Europe (OSCE) region (International Helsinki Federation for Human Rights and the Human Rights Society of Uzbekistan 2003). It can even be said that the problems with human rights implementation in Uzbekistan are so overwhelming that the international community should persuade the government of Uzbekistan comply with international human rights law. Human rights violations in Uzbekistan can be traced back to the Soviet era, when the society was entirely dominated by moral and ideological values imposed by the Soviet State, i.e. the Communist Party. People were limited in exercising their most essential human rights such as freedom of expression and freedom of religion (Zickel 1989).

Today, some of the most eminent human rights abuses include torture, frequent violations of rights to freedom of conscience, freedom of expression, and association and assembly. Human rights issues in Uzbekistan are the ones to be paid attention to and taken immediate action on.

Torture is systematic in Uzbekistan's legal procedures. Uzbek police officers torture arrested suspects to make them confess to the crimes they have never actually committed. They do it for the police department records as well as to get money from suspects. According to one of the Human Rights Watch's reports of torture (Human Rights Watch 2003a), "since August 2002, at least six prisoners died in custody from what appears to be the result of torture and ill treatment". While on his visit to Tashkent in October 2002, UN Secretary-General Kofi Annan pointed out the need for the Uzbek government to cooperate with the UN Special Rapporteur against Torture. In addition, the UN rapporteur urged the Uzbek government "first and foremost" publicly condemn torture, and include into the national penal law the crime of torture as it is defined under the UN Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (International Helsinki Federation for Human Rights 2004). The Uzbek government says it has changed its legal definition of torture to bring it in accord with the Convention, but there is no factual evidence to the necessary steps taken by the Uzbek government so far in this sphere (United States Department of State 2003).

Breaches on freedom of expression, conscience, and association and assembly endanger the development of independent civil society institutions in Uzbekistan. As civil society is largely responsible for building democracy in the country it is crucial to secure the above rights for its representatives. The Country Reports on Human Rights Practices by the U.S. Bureau of Democracy, Human Rights, and Labor (United States Department of State 2002) state that "the government severely restricts freedom of expression and represses opposition groups and individuals". In particular, restrictions on getting legal status/registration are imposed by the Uzbek government officials. Such is a case of a nongovernmental group, *Mazlum*, which applied for registration on August 2, 2003. By October 2, 2003 the Ministry had not informed the members of the group about its decision. After filing a new application in mid-October, the group was notified by the Ministry that the applicants must wait a further two months for a response (Human Rights Watch 2003b).

The freedom of the media has been extremely limited and is reduced to mere reporting of the government line without a single newspaper, TV or radio station providing independent, critical and objective coverage. Although the number of media outlets has increased significantly over the past three years there exists what the International Helsinki Federation for Human Rights (IHF) in its 2004 Report calls a "virtual information vacuum" (International Helsinki Federation for Human Rights 2004). Among reasons allowing the government to exercise complete control over practically all media outlets is the legislation including mechanisms that make them increasingly dependent on the state in almost all

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matters pertaining to registration, operation and finance. For instance, the Law on the Mass Media permits any government agency to close a media outlet without a court decision if the outlet is registered with this particular government body. In addition, many journalists and editors avoid writing and publishing articles and materials critical of the government line. Such self-censorship results from their fear of "serious consequences" and harassment by the government (International Helsinki Federation for Human Rights 2004).

Since 1992 the Uzbek government has pursued the policy of controlling religious practices of the citizens, particularly Muslims. Anyone failing to meet the official definition of a "traditional" follower of Islam faced persecution, harassment and arrests. Members of unregistered mosques were labeled *Wahhabis* and "religious extremists" and were accused of engaging in anti-social activities and undermining the constitutional order (Human Rights Watch 2004a). As Human Rights Watch reported shortly after the explosions in Tashkent and Bukhara in March and April that "the Uzbek government has resorted to torture, incommunicado detention and unfair trials in its response to the attacks. In particular, the authorities have targeted Muslims who practice their faith outside state-controlled religious institutions" (Human Rights Watch 2004b). Rachel Denber, acting executive director of Human Rights Watch's Europe and Central Asia Division, said, "The fight against terrorism doesn't give the government free reign to violate human rights. The state can't simply dispense with core human rights even if it has legitimate security concerns." (Human Rights Watch 2004b).

In light of the recent developments characterizing the worsening of the human rights situation in Uzbekistan, there is a strong need for more involvement/participation from the international community to be applied. A considerable number of recommendations to improve the human rights situation have been proposed and thorough

On July 13, 2004 a decision was taken by the U.S. Department of State to terminate its financial aid to Uzbekistan as a result of the its failure to follow the above provisions (Human Rights Watch 2004c).

The Uzbek government's further resistance to democratic reforms may result in a number of consequences that could prove fatal to the relative stability of the whole Central Asian region (International Helsinki Federation for Human Rights and the Human Rights Society of Uzbekistan 2003). As Uzbekistan is strategically located in the middle of the Central Asian region it could potentially become a center for terrorism and *Wahhabism* in the region. As the International Crisis Group (2004) notes in its report *The Failure of Reform in Uzbekistan: Ways forward for the International Community*, "Officials are concerned that opening the political system would lead to unrest and the emergence of Islamist groups. In fact, the opposite seems to be happening. The lack of channels for discontent is feeding frustration among the population and is a primary reason for the rise of underground Islamist political groups. These remain relatively small and repressed but they constitute a potent alternative to the regime for at least a minority".

It becomes evident, at this point, that a more consistent and principled approach is required on part of both international organizations and countries committed to democratic cause in order to eliminate human rights abuses in Uzbekistan. It is worth mentioning that some progress towards liberalization of government policy in regard to human rights was achieved only after international organizations including the EBRD at its annual meeting in Tashkent had voiced their criticisms of Uzbekistan's appalling human rights record. The amnesty granted to religious and political prisoners in commemoration of the 11th anniversary of the Uzbek Constitution in December 2003 can serve as a proof of that tendency.





неопределенности и рисков, которые могут возникать при заключении международных контрактов посредством Интернета, и показывает, как можно осуществлять прогнозирование при решении подобных вопросов. Для осуществления этих целей, статья исследует подход, используемый Европейским Союзом при рассмотрении вопросов юрисдикции по электронным контрактам. В частности, будет рассматривается вопрос о том, насколько Положение Совета о Юрисдикции, а также признание и принудительное применение судебного разбирательства в гражданских и коммерческих вопросах, обеспечивают адекватные правовые принципы по отношению к коммерческим и потребительским контрактам, заключенными посредством электронных средств. Также в данной статье будет дано определение «электронной коммерции», а также описаны главные особенности контрактов, заключенных при помощи этих средств. Будет сделана попытка проанализировать правила юрисдикции согласно Американского Прецедентного Права и Правил Брюссель I, в разделе касающемся регулирования интернет-контрактов и споров, возникающих в результате таких контрактов. В работе также будет обращено надлежащее внимание на мнения ученых о методах регулирования контрактов, заключаемых при помощи электронных средств. Нужно отметить, что с одной стороны, некоторые авторы предлагают разработать специальные законодательные правила для электронных контрактов, тогда как другие — регулировать их в соответствии с международным гражданским правом. Эта статья расскажет о достижениях в электронной торговле и существующих проблемах в Правилах Брюссель I, а также проанализирует решения, предлагаемые некоторыми авторами.

## 1. INTRODUCTION

The purpose of this paper is to examine jurisdiction rules under the EU law and their application into disputes arising from Internet Banking.

channels as well as large value electronic payments and other wholesale banking services delivered electronically' (European Parliament 2000a, article 3). This paper suggests combing these two definitions and considering Internet Banking not only as an information source but also as a financial institution that delivers products electronically. Therefore, Internet Banking in this paper is defined as a system that enables banks and its customers to receive information on bank products and services, access accounts and carry out bank operations through a personal computer or intelligent device.

## 3. FREEDOM OF BANKS TO PROVIDE INTERNET BANKING PRODUCTS AND SERVICES WITHIN THE EU

In the EU, credit institutions are allowed to carry out banking activities, that is taking deposits or other repayable funds from the public, in other EU member states. However, before commencing to carry out banking activities, a credit institution needs to obtain authorization (ibid., article 1). The credit institution is defined to include two types of undertakings. Firstly, it is an undertaking whose business is to receive deposits or other repayable funds from the public and to grant credits for its own account (European Parliament 2000b, article 1). Secondly, it is an electronic money institution, that is an undertaking or any

However, the freedom to provide banking services could only be limited by rules applicable to all persons pursuing an activity in the state of destination and justified by imperative public interest reasons".

It is an accepted principle that information shall be supplied to the customers in writing, including where appropriate by electronic means (European Parliament 1997, article 3). From October 2005 the consumer, prior to the conclusion of the distance contract has to be provided "in good time" with information about distant contracts that shall include contractual clause on law applicable to the distance contract and/or competent court (European Parliament 2002, article 3[1]). Furthermore, in the EU, Member States are required to ensure that customers are identified by means of supporting evidence when opening an account, or when offering safe custody facilities (European Parliament 2001, article 3 [1]). Therefore, it can be argued that fears associated with Internet Banking contracts regarding enforceability and validity have no strong basis. However, disputes about the jurisdiction and choice of law may occur, as they cannot be avoided.

#### 4. JURISDICTION RULES UNDER THE REGULATION

As it is known, when determining jurisdiction and selecting the applicable law, private international law usually looks at geography; namely the place of the defendant's domicile. Disputes about jurisdiction between the parties" to commercial contract are solved according to the provisions of the Brussels I Regulation (The Council of the European Union 2000). The Regulation applies in civil and commercial matters excluding revenue, customs, or administrative matters. Accordingly, Internet Banking contracts are included into the scope of the Regulation. The court of the member state will have exclusive jurisdiction if one or more of the parties to the Internet Banking contract is domiciled in a member state and parties have chosen a court or the courts of a that member state to have jurisdiction over disputes arising from their contract (ibid., article 23). However, if there is an agreement between parties none of whom is domiciled in a member state that court of member state to have jurisdiction, then the courts of other member state will have jurisdiction only if the chosen court refuses jurisdiction (ibid.). Accordingly, in the EU the court will first of all examine the contract to see if there is any agreement on choice of jurisdiction in order to hear the case. However, the court will need to test the validity of the agreement on choice of jurisdiction, thus it will need to check the laws of the place where contract was formed to see if there are any rules which could invalidate or restrict the said agreement (Davies 1996). A member state court will also have jurisdiction if a defendant enters an appearance before that court, however, appearance with a purpose of challenging the jurisdiction of the court will not be considered as an appearance for the purpose of jurisdiction (The

Council of the European Union 2000, article 24). In all other cases, persons domiciled in one of the contracting states shall, whatever their nationality, be sued in the court of that member state. However, the court will stay of proceedings if the defendant has not been able to receive the document instituting the proceeding to enable him arrange his defense (ibid., article 26). In matters relating to a contract, a person domiciled in a member state can be sued in the courts of the place of performance of the obligation in question (ibid., article 5). The place of performance of the obligation in question shall be in the case of sale of goods, a member state where, under the contract, the goods were delivered or should have been delivered. As for services, the place of characteristic performance is a Member State where the services were provided or should have been provided (ibid., 1b). Accordingly, it can be presumed that the contract has closest connection with the country where the party who is to affect the characteristic performance of the contract has his location. However, when one applies "the place of performance" presumption to the transactions that are carried out in online regimes it is not clear what will be the place of characteristic performance. On one hand, it could be argued that the place of characteristic performance is a personal computer of the bank's client from which he or she obtains these products. On the other hand, it could be argued that place of characteristic performance is at the place where a bank is registered. According to the Giuliano-Lagarde Report (Giuliano and Lagarde 1980, 21): "in a banking contract the law of the country of the banking establishment with which the transaction is made will normally govern the contract". However, it is argued that this test would give different answers for different services (Reed 1999). For example, for account transaction services, the end result is a change in the account data, which is subject to the jurisdiction from which the account is controlled. For advice, the relevant location must be where the advice is received. Nevertheless, "if the performance takes place on-line, the place of performance shall not be appropriate as a connecting factor but the location of each of the parties involved shall be relevant" (The Hague Conference on Private International Law and the University of Geneva 1999). However, contrary opinion states that the place of delivery of the information - subject matter of electronic exchange, shall be relevant (Kessedjian 2000). Accordingly, the courts of member states will have to evaluate and decide what will constitute the place of performance.

##### 4.1. Branch, agency or other establishment issues on the Internet

In regard to disputes arising out of the operations of a branch, agency or other establishment, a defendant can be sued in the courts where the branch, agency or other establishment is situated (The Council of the European Union 2000, article 5[5]). At this point it would be appropriate to define if the website of the bank through which bank's clients receive banking products and services can be qualified as a branch. According to the Electronic Commerce Directive,

\*\* *Societe Civile Immobiliere Parodi v. Banque H. Albert de Bary et Cie*, (1998) 1 Common Market Law Report 115.

\* Defendant domiciled in one of the EU member states.

"established service provider" for its purposes defined as "entity who effectively pursues an economic activity by using a fixed establishment for an indefinite period" (European Parliament 2000c, article 2[c]). Further it states: "the place of establishment of a company providing services via an Internet website is not the place at which the technology supporting its website is located" (ibid., 78/4). Moreover, "branch" has been interpreted to mean a place of business which forms a legally dependent part of a credit institution and which carries out directly all or some of the transactions inherent in the business of credit institutions (European Parliament 2000a, article 1). Accordingly, the meaning of branch in EU legislator's opinion demands physical presence in the host country. Thus, a mere virtual electronic presence, in the form of a webpage cannot be considered as a domicile, branch or secondary establishment for the purposes of the Regulation.

#### 4.2. Jurisdiction over consumer contracts

Consumer is defined as a person, who enters into contracts outside his trade or profession (The Council of the European Union 2000, article 15). The Regulation provides that contract will be considered as a consumer contract if it is a contract for the sale of goods on installment credit terms; or it is a contract for a loan repayable by installments, or for any other form of credit, made to finance the sale of goods (ibid.). In all other cases, the contract will be considered a consumer contract if it has been concluded with a person who pursues commercial activities in the member state of the consumer's domicile or, by any means, directs such activities to that member state or several states including that member state (ibid., 1c). However, Regulation does not specify what the terms "any means" and "directing to" may mean and how shall be interpreted. Nevertheless, it is stated that "the concept of activities pursued in or directed towards a member state is designed to make clear that this provision applies to consumer contracts concluded via a website accessible in the state of the consumer's domicile" (European Commission 1999). Accordingly, in order to define whether bank has directed its activities to the country of consumer's domicile one has to look at the content of the web page, level of its interactivity and importantly whether it has permission to provide banking services in that jurisdiction. The general rule is that a consumer domiciled in a contracting state has a choice of suing the banking institution either before the court of the bank's or the consumer's domicile (The Council of the European Union 2000, article 16[1]). On the other hand, banks can sue the consumer only in the Member State where the consumer is domiciled (ibid., article 16[2]). A consumer is also able to sue a bank from a non-member state in the country of his or her domicile if it has entered into contract with that bank through its branch, agency or other establishment situated in a consumer's country (ibid.). For the purposes of regulation a bank registered in a non-member state is considered as domiciled

in a member state where it has a branch, agency or other establishment (ibid., article 15[2]). As it was argued earlier, mere virtual electronic presence in the form of a web page is not treated as a domicile, branch or secondary establishment for the purposes of the Regulation. The aforementioned jurisdiction rules over consumer contracts can be departed by an agreement only after the dispute has arisen (ibid., article 15[2]).

#### 5. CONCLUSION

Having examined regulations and directives containing and relevant to jurisdiction rules that are in operation within the EU, this paper concludes that Internet Banking contracts may be entered into between parties from different EU member states. Moreover, it showed that due to the Distance Marketing of Consumer Financial Services Directive, which aims to regulate entities providing financial services based on a country of origin principle, banks will be required from October 2005 to supply the customer with information about themselves and the contract that has to have a clause about applicable law and/or competent court. Accordingly, if the parties will choose the applicable law and/or competent court and it is proven to be valid, the dispute will be settled in the chosen jurisdiction, provided that it complies with mandatory rules (ibid., article 17). This paper illustrated that a person who orders banking products or services via the Internet while being outside of his state of domicile, can bring the bank to the court of his country, provided that the bank's web page is accessible in the consumer's domicile state. Though, if the parties do not choose a competent court, the court will have to evaluate and decide what will constitute the place of performance in relation to digital exchange of products. A court may decide that characteristic performance takes place at the country where the bank is located carrying out its activities or where products are delivered. For that reason, the court or legislator would need to examine the nature of the web page to see whether Internet Bank's activities were directed to the EU member state.

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## THE INTEGRATION PROCESSES IN THE EEC STATES' CURRENCY – FINANCE SPHERE

MADINA TURAEVA\*

*The article is devoted to studying of the preconditions for the formation of the monetary-financial integration (MFI) among the countries of Eurasian Economic Community's (EEC), as well as of the factors of its development and prospects of its realization.*

*The basic results of the research are expressed in the following: the analysis of MFI models showed that these models are not acceptable for the EEC countries; present condition of EEC MFI is studied, the main problems and priority directions for improvement of the institutional base and development of MFI in EEC are identified.*

### ИНТЕГРАЦИОННЫЕ ПРОЦЕССЫ В ВАЛЮТНО-ФИНАНСОВОЙ СФЕРЕ СТРАН ЕВРАЗЭС

МАДИНА ТУРАЕВА

Работа посвящена исследованию предпосылок формирования валютно-финансовой интеграции (ВФИ) стран Евразийского Экономического Сообщества (ЕвразЭС), факторов ее развития и перспектив реализации.

Основные результаты исследования нашли выражение в следующем: на основе анализа моделей ВФИ отмечено, что для стран ЕвразЭС данные модели неприемлемы; проанализировано современное состояние ВФИ в ЕвразЭС, определены основные проблемы и приоритетные направления совершенствования институциональной базы и развития ВФИ в ЕвразЭС.

The necessity of the post-soviet countries' economic integration is objectively recognized. This is inevitable while globalization and internationalization of economies are under way. Nevertheless, the formation of Economic Community is impracticable without integration of the financial markets, without the common payment network, standard tax-customs, and analogous budgetary and banking systems. They are the mechanisms by means of which this process may be carried out.

The EEC has appeared in 2000 on the Customs union's basis. This organization is actively developing. EEC declares and demonstrates strong aspiration to be integrated. Monetary financial sphere of EEC countries develops and proves to have its specific territorial, resource, historical and economic features. Nowadays, there are essential obstacles for monetary financial integration, such as: the various levels of social and economic development and

processes, common fiscal and customs policy, realization of concrete actions in financial sphere will allow the countries to use financial resources of region most effectively and protect them in case of world financial crises. In long-term perspective – successful MFI is a necessary condition for the creation of Economic Community in EEC.

The purpose of this research was to investigate scientific basis for the integration and find the key mechanisms of integration in the monetary financial sphere of EEC countries, as well as to define the future perspectives and opportunities for realization.

In the theoretical part of the research, the attention is paid to the monetary financial aspects of Economic Integration, in particular, to the contemporarity 'types of MFI'. Nowadays, only the "West-European" type is considered as the *Successful*. The types such as "Latin American", "African" and "Arabian", despite of their plans, are not ready to implement the agreements on MFI. We suppose, this can be explained by the circumstances that only the "West-European" type has as the following: approximately 'half-century history', the great desire to integrate, practical experience of several generations. The other 'types' are recently established. They have the same story and level of development, as the EEC countries have.

Consequently, the analysis has been done in two directions – legal and economic. The Inter-Parliamentary Assembly of EEC (IPA) is responsible for the foundation of the legal basis of the community. IPA represents the supranational legislative body, consisting of 70 representatives of the member countries, delegated by their Parliaments. The IPA conducts a permanent job on harmonization of the member countries' legislations. A lot of the "Module Laws" are also developed by IPA, they have been recommended to be accepted in the EEC countries (for example, the law on the bases of auditor activity). The problem is that member countries have different conditions to accept «recommended laws» and other projects as key state acts.

Very different levels of economic development within the community also disrupt the integration process. In order to compare EEC countries' economic parameters and to estimate the financial markets' development, different statistical indicators have been analyzed. By the end of 2003, the real cost of GDP in Kyrgyzstan, Russia and Tajikistan has not reached 1991 level. This indicator has exceeded the 1991 level by 6.5% in Kazakhstan and by 5.4% in Belarus. Comparing the dynamics of GDP volume, industry production and agriculture production by EEC countries, we have not addressed the growth rate, but we have analysed the growth rate dynamics. We have to note that, despite of positive dynamics as a whole, growth rate dynamics until 2003 has been *negative*.

Furthermore, we analyzed such indicators as: 'GDP per capita' and 'Incomes Level of the State Budget per capita' in 2003 for selected countries. The strong discrepancy among the member countries was also marked: the highest level of the given indicator was marked in Russia, and the lowest level – in Tajikistan (Figure 1).

The analysis of the EEC countries' export-import dynamics has shown that the volume of export-import operations in 1999-2003 in all countries has increased. Namely, the total export has increased 1.85 times, and the total import has increased 1.9 times. Nevertheless, by 2003 the share of export in transactions among the compared countries has not practically changed during the last several years. The change rate was approximately fluctuating  $12\pm 0.4\%$ . Despite the evident fact that the total import has the tendency to increase, the share of import transaction between the member countries had reduced by 14.78% in 2001 (Figure 2). Besides, the main trading partners of the countries are not part of the community.

In order to compare the approaches to the fiscal policy, the revenues of state budgets were analyzed by the shares of receipt from separate taxes in 2003 (Table 1). So, the tax burden, to a great degree, is carried by the consumers of goods and services' in Kyrgyzstan (44.7% – VAT, 9.9% – Excises, in total – 54.6% of indirect taxes) and in Tajikistan (38.8% – VAT, 6.9% – Excises, in total – 45.7% of indirect taxes). The highest share of budget income comes from the profit tax (30%), the smallest share on the revenues comes from the excises (2.8%) and the share from the income tax is about 9.4% in Kazakhstan. This situation illustrates that the direct taxation primarily prevails in Kazakhstan, contrasting the situation in Tajikistan and Kyrgyzstan and thus, we can regard it as social-oriented. On the other hand, the share of profit tax that reaches almost 30% of budget incomes in Kazakhstan, evidently confirms the comparatively successful business activity in the country.

In 2003, US dollar exchange rate grew only in Belarus, in other republics this indicator had fallen on the average by 4.5%. Contrary to the dollar, the Euro's exchange rate stably grew in 2003 in all EEC countries. Change of consumer prices (Belarus – 30%, Kazakhstan – 10%, Kyrgyzstan – 3%, Russia – 10%, Tajikistan – 20%) indicate that rate of inflation have been varied in the compared countries, but the highest rate of inflation was observed in 2003 in Belarus.

Accordingly, nowadays there are essential differences in a social and economic condition such as standards of living, fiscal and social policy approaches. MFI in EEC will be very complicated without solving existing problems and achieving the similar rates of development.

We have tried to show ways of realization of the further actions for acceleration of MFI process in EEC countries' on the basis of the given conditions and consequent conclusions. The results of the research find expression in the following statements:

1. The basic problems of the EEC countries' financial markets' integration are formulated, and the system of priorities for the monetary financial, monetary and credit policies in the Community are developed;
2. As the first step, it is necessity to synchronize the social and fiscal policy in the community, in particular, the state budget planning;

3. The mutual trade among EEC countries must be activated and the countries should make 'step-by-step'-transition from 'raw materials' trading to 'industrial production' trading;

4. The general development mechanisms of the payment network, the system of national currencies' mutual convertibility and the EEC banking systems are proposed. Particularly:

- To activate the EEC internal financial markets' development and to direct the efforts toward the improving of infrastructure for the market and domestic investment activity;
- To have approximately the same rate of inflation in order to have an opportunity to carry out the coordinated monetary policy in the community;
- To monitor strongly the credit market and the creation of general Association of commercial banks all over the community. The interest rates for credit should be the same ( $\pm$  regional coefficients) and the businessmen must have the opportunity to pay back the credits in any country of the community and so on;

5. The ways and tools of tax system improving are analyzed, namely: the preferential taxation for the businessmen conducting activity in member countries; and universal standards of educational and programs for the tax-specialists in all the EEC;

6. The common doctrine of regulation and self-regulation, as well as the executive supranational structures which may carry out administrative market regulating functions, are offered;

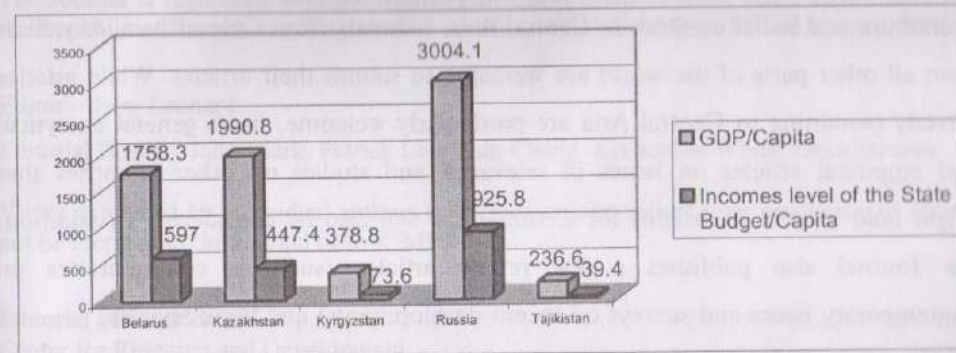
7. The creation of the "Supranational Clearing Center" in EEC is recommended. Besides the operations with currency and the accounts in national currencies, this Clearing Center can perform the clearing function on transactions with the securities. This Center can also carry out the function of International Depository. It would be irrational to create separate structures for depository and clearing operations in member countries, since there is a rather small experience of securities operations and insignificant volumes of financial instruments' trading in the majority of the EEC countries. Besides, creation of a single Supranational Clearing Center would allow prevention of additional costs.

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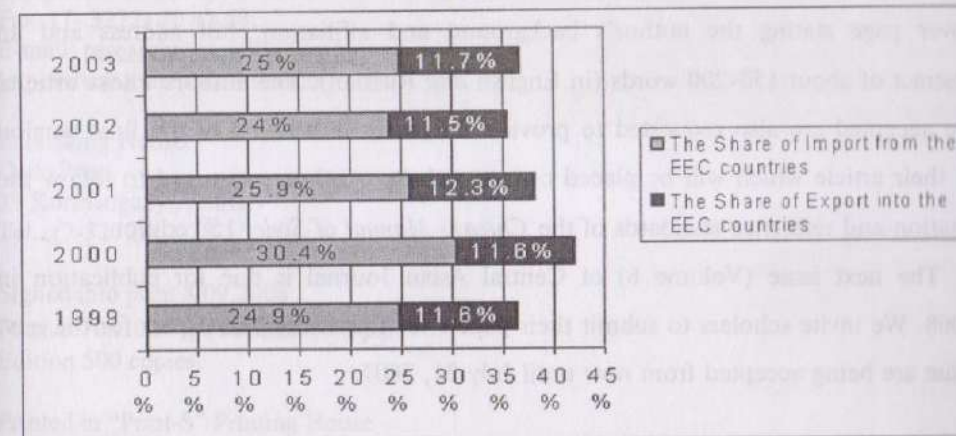
## APPENDIX

FIGURE 1. THE RATIO OF "GDP PER CAPITA" AND "STATE BUDGETS' INCOMES PER CAPITA" IN THE EEC COUNTRIES IN 2003 (\$)



Source: CIS Stat, 2004.

FIGURE 2. THE DYNAMICS OF EEC COUNTRIES' MUTUAL TRADING DENSITIES IN 1999-2003



Source: CIS Stat, 2004.

TABLE 1. THE EEC COUNTRIES STATE BUDGETS' INCOMES BY THE SHARES OF RECEIPT FROM SEPARATE TAXES IN 2003

	Income tax	Profit tax	VAT	Excises
Belarus	10.6	9.9	30.8	9.0
Kazakhstan	9.4	30.0	23.0	2.8
Kyrgyzstan	10.4	7.5	44.7	9.9
Russia	13.0	15.6	26.8	10.5
Tajikistan	7.1	3.5	38.8	6.9

Source: CIS Stat, 2004.

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