THE JAMES A. BAKER III
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UNLOCKING THE ASSETS: ENERGY AND THE FUTURE OF CENTRAL ASIA AND THE CAUCASUS

MAIN STUDY

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Introduction

Central Asia and the Caucasus are considered by many to be the next oil and gas frontier. The region's sizable energy reserves, combined with its unique political status as eight newly independent states emerging from the break-up of the former Soviet Union, have catapulted these countries into the limelight of Western media and policy-debate. Heightened awareness has spurred greater public and private Western involvement in the region's development.

The hydrocarbon reserves of the region are significant. Proven oil reserves are pegged at between 15 billion to 31 billion barrels, about 2.7% of total world proven oil reserves. Proven natural gas reserves of 230 to 360 trillion cubic feet represent about 7% of total world proven gas reserves. By comparison, proven oil reserves of the Middle East represent 55% of world proven reserves while South America equals 8%. Some geologists assert that proven reserve numbers for Central Asia and the Caucasus, commonly referred to as the Caspian Basin, are misleadingly low because huge areas of the region have not been explored. Future exploration may confirm that the region potentially holds between 60 billion to 140 billion barrels of oil. However, this figure remains speculative and should not be compared to the 269 billion barrels of proven oil reserves already discovered in Saudi Arabia. (see Tables 1 & 2)

Oil production in Central Asia and the Caucasus will never match the Persian Gulf where there are five major oil powers and several smaller producers. Many of the countries of the Caspian Basin have limited, if any oil potential. More than half of the Caspian region's proven oil reserves and 80% of its estimated possible oil reserves lie in one country – Kazakhstan. Turkmenistan holds large reserves of natural gas but its distance from key consumer markets may mean those reserves will be commercially difficult to develop. (See Table 3)

The huge distance of Central Asian and Caucasus reserves from the world's key energy consuming regions implies a considerable financial burden to bring these resources to market. In particular, the countries of the region with the largest export potential, Kazakhstan, Azerbaijan and Turkmenistan, are landlocked. Unlike competitors in other large oil-rich regions such as the Middle East, South America and even Russia, they cannot simply ship oil by tanker from domestic ports. Instead, they must rely on expensive pipelines constructed through foreign territories as the chief means for transport.

If the barriers to bringing Central Asian and Caucasus oil and gas were purely economic, then it could be assumed that market forces would eventually bring the region's resources to commercial exploitation to meet the world's growing energy requirements. But a host of complex technical, logistical, geopolitical, social, religious and cultural factors also weigh into the equation.

These obstacles to the Caspian Basin's development mean that, although its energy resources might be geologically equivalent in scale to the North Sea, the region's output is unlikely to reach that potential. Once technological hurdles were tackled, the North Sea represented a huge oil province where a stable investment climate allowed maximum exploration and development of dozens of fields simultaneously over a relatively short period of time. Central Asia and the Caucasus have far more numerous and burdensome barriers to exploration and development than those found in other areas such as the North Sea. These barriers will impede the region's ability to move rapidly to peak output levels implied by reserve figures. (See Tables 4 & 5)

North Sea oil production ended 1997 at 6.1 million barrels a day (b/d) but is expected to peak in the coming years. Venezuelan oil production stood at 3.5 million b/d in early 1998 but is expected to rise to over 6 million b/d by the middle of the next decade. Even under the most optimistic assessments, by the year 2010, Caspian oil production will likely reach little more than 3.5 million b/d and cover only 3-4% of anticipated global oil use. By contrast, Venezuelan oil is expected to account for as much as 7-8% while Middle East oil will still dominate with a 25 to 35% share, depending on market conditions.

In short, the Caspian Basin is not going to be the "ace in the hole" for international energy security. The region is by no means the only major oil and gas province in play that can help diversify world oil supplies and reduce reliance on the volatile Persian Gulf. Substantial reserves remain to be exploited in Africa, South America and offshore Asia. In particular, the payoff in terms of magnitude of incremental supply to global markets would be much higher if greater efforts were applied to unblock the significant resources lying in Mexico and Russian Siberia rather than similar efforts in Central Asia and the Caucasus. Increased attention to liberalization, or other means, to finance expanded resource development in Mexico and Russia also meets other important U.S. foreign policy goals.

History has proven that control of energy supplies is the type of matter that major powers go to war over. As Desert Storm demonstrated, few would question whether access to the vast resources of the Middle East is worth a significant commitment of time and resources. The stability of the world economy continues to rely on the steady flow of moderately priced oil from the Persian Gulf. The diversification of oil supply through development of regions like Central Asia may lessen the importance of the Persian Gulf over time. But the Gulf will require a major U.S. security commitment for many years to come. Involvement in Central Asia and the Caucasus alone cannot significantly reduce the need for U.S. to police the Persian Gulf but could prove costly in political, military and economic terms.

Beyond energy, Central Asia and the Caucasus' location between Russia, China, Iran, and Turkey makes it a magnet for foreign powers and a flash point for potential conflict between them. In addition to neighboring countries, the U.S., Europe and Japan have all exhibited interest in the region's economic potential. These factors raise the risk of a geopolitical competition in a region that already suffers from localized conflicts, economic distress and environmental disasters. Such competition, if unchecked, could cause instability both there and in neighboring countries, notably Russia, and also complicate Washington's relations with Moscow.

Greater international attention through organizations such as the United Nations, OSCE, and the World Bank to the mounting Central Asian problems could be helpful in building a stable, liberal Russia. Attention should be given not only to conflict resolution in the Caucasus and Central Asia but also social welfare issues such as poverty, environmental crises, sweeping disease epidemics, malnutrition, and power shortages. Participation of international organizations in conflict resolution, regional arms control, humanitarian assistance, and cooperation on a broad-range of economic issues, including economic reform, should be the cornerstone for devising constructive, multilateral policies toward the Caspian region.

Geology and Potential of the Caspian Basin

The exact size of Caspian resources remains open to considerable debate, with experienced Russian geologists arguing the region will have less than 20 billion barrels of oil to exploit and U.S. government analysts asserting it may have upwards of 200 billion. Proven reserves in Central Asia and the Caucasus are pegged at between 15 billion to 31 billion barrels. The region's proven reserves represent, in terms of oil, a province of the rough magnitude of the Norway or Libya, or 2.7% of world reserves. Proven natural gas reserves for Central Asia and the Caucasus are higher at 230 to 360 trillion cubic feet or roughly 7% of the world's total gas reserves.

Estimates of possible oil reserves are far greater than proven numbers demonstrate. At the low end, geologists expect the region to prove up 50 to 70 billion barrels of oil. At the high end, predictions are that the region might hold in excess of 120 to 160 billion barrels. Central Asia includes a number of petroleum basins that are different in their geological development, reservoir types, type of hydrocarbons present and amount of resources. There are five main basins believed to house major oil and gas resources, including South Caspian which extends to several regional countries, North Caspian (or PriCaspian), North Usturt, and Mangyshlak, which are mainly in Kazakhstan and Amu-Darya in Uzbekistan. (see Talwani paper "Geology and Petroleum Potential of Central Asia for more details).

South Caspian is a mature exploration basin with over 150 years of development. However, large known oil and gas fields are found in the offshore, notably Guneshli, Chiraq, and Kyapaz in Azerbaijan and are now under development. Detailed seismic surveying of the deeper parts of the Caspian offshore may reveal new untested structures that may contain commercial quantities of oil. Most of the Turkmenistan Caspian shelf remains relatively undrilled with more than 40 untested structures. Turkmenistan is also disputing the Kyapaz field, discovered by Azerbaijan. Turkmenistan claims undiscovered oil reserves on its Caspian shelf of 22 billion barrels, for example.

Northern Caspian and northwestern Kazakhstan are also areas with large proven reserves as well as a high potential for new discoveries. Almost three quarters of all Kazakhstan reserves are in two super giant fields –Tengiz (oil) and Karachaganak (gas). The recoverable reserves of Tengiz have been recently updated to 12 billion barrels of oil with estimated 25 billion barrels of oil in place. Some oil company officials speculate that the shallow offshore concession of Caspishelf is thought to hold several times the reserves of Tengiz. North Usturt and Amu-Darya basins have some potential in oil and gas exploration. Seismic surveys and extensive exploration programs are expected to reveal potential drilling targets. Amu-Darya basin contains mainly gas reserves with minor amount of oil.

It is a mistaken common perception that all the countries of the region have immense oil potential. Based on present geological knowledge, this is not the case. Rather, well over half of the possible oil resources believed to lie within the region can be found in Kazakhstan. It is the clear leader among Central Asian countries in terms of both proven oil reserves and the potential for new discoveries. The country contains four different geological basins that remain largely unexplored. This fact has clear policy implications. To the extent that involvement in the region is resource-driven, the majority of focus should be placed on Kazakhstan. New large discoveries in Azerbaijan, if made, will mostly be confined to the deep water Caspian offshore. It is also quite possible that important discoveries will be made onshore and offshore in the part of the South Caspian basin that belongs to Turkmenistan. But that country’s potential lies mainly in natural gas resources.

Taking logistical and political constraints into consideration, analysts project that the amalgamation of major deals signed by international oil companies will only allow the export of a 800,000 to 900,000 b/d of oil from the region by 2000. In 1997, regional production averaged around 800-900,000 b/d of which about a third was exported, according to the Economist Intelligence Unit. Total regional production could reach around 3.5 million b/d by 2010, assuming that optimistic assessments correctly speculate that the Caspishelf concession in the shallow waters of the Kazakh offshore sector contains 20 to 30 billion barrels. This production level would imply an increase in exports to around 2.5 to 2.8 million b/d.

Individual forecasts are as follows:

*Edinborough, UK-based Wood Mackenzie Consultants forecasts oil production to reach 1.7 million b/d by 2000, rising to 3.4 million b/d by 2010, primarily from Kazakhstan and Azerbaijan.

*The International Energy Agency (IEA) expects oil production from Kazakhstan, Turkmenistan, Azerbaijan and Uzbekistan to rise from 858,000 b/d in 1996 to 1.5 million b/d in 2000 and 3.9 million b/d in 2010. The IEA suggests exports will reach 900,000 b/d in 2000, up from 300,000 b/d in1996, and 2.3 million b/d by 2010.

*The Center for Strategic and International Studies (CSIS) of Washington, DC expects Kazakhstan, Azerbaijan, and Turkmenistan to reach a peak oil production level of about 3.5 million b/d sometime around 2010. In particular, CSIS expects Kazakh production to reach 1.9 million b/d from three main areas: the Tengiz field, the offshore Caspishelf concession and the Karachaganak field.

*Some U.S. government analysts argue total Central Asian and Caucasus oil production could reach as high as 4.5 million b/d by 2010, were political barriers to be removed.

Energy Security: Where do Central Asia and the Caucasus Fit In?

The stability of the world economy continues to rely on the steady flow of moderately-priced oil from the Persian Gulf. But what of a region with more modest resources? How important are the reserves of Central Asia and the Caucasus to world energy security? To answer such questions, one must put the development of energy resources in the Caspian Basin into the global context. In this way, it is easier to see that our interests in the Middle East are qualitatively and considreably different than our interests in the Caspian Basin.

There are special economic and geopolitical risks associated with addressing the world’s increasing thirst for oil by accepting expanded reliance on a single geographic area – the Persian Gulf, that is fraught with political instability and socio-economic challenges. Such reliance raises the possibility of a more severe dislocation if the free flow of oil from this region is threatened as well as the possibility that the frequency of oil shocks could increase. Markets, aware of the importance of the supplies from the Middle East, will be quick to react to events there. Markets tend to think of the Middle East (i.e. the region stretching from North Africa to the Persian Gulf) as an area where events in one country can easily impinge on the fortunes of others, more so than other parts of the world. The perception that political and military events in the Persian Gulf will threaten large quantities of oil means conflicts or crises there produce larger price reactions than disruptions in other parts of the world.

From the energy security point of view, consuming countries benefit when global oil production comes from as diverse a base as possible. Such diversity reduces reliance on any particular geographic country or center, thereby lessening the potential for a large scale disruption from any one area. Experience has shown that maintenance of moderate prices is more easily achieved when there is reasonable market competition within and outside of the Organization of Petroleum Exporting Countries (OPEC). Forecasts for the year 2000 reveal that, if a majority of known prospects were developed on schedule in the competitive fringe producers which seek to maximize output irrespective of market conditions, the amount of oil from the Persian Gulf needed to meet rising world oil demand requirements could be greatly reduced. These forecasts, as illustrated in Table 6, assume world oil demand will grow by an average of 2-3% per annum between 1995 and 2000.

Many analysts believe that it is possible for prospects in other countries to contribute to an increase in output outside the Persian Gulf even as production rates wane in the North Sea as predicted for the turn of the century. Under a scenario where all reasonably economic identified non-Opec prospects now down on the books for implementation could come to fruition, markets could experience oversupply of 8 million b/d by the turn of the century, meaning the world could even lose all of Saudi Arabia and still experience relatively moderate prices (See Table 6). This scenario assumes the lifting of United Nations sanctions against Iraq.

By contrast, if development of fields outside the Persian Gulf slows in the next few years and non-Opec output grows to only around 46 million b/d for the year 2000 as the U.S. Department of Energy (DOE) predicts, Persian Gulf producers will have to raise production by an additional

2 million to 5 million b/d to maintain moderate oil prices. Saudi Arabia's role in opting to raise output would be a major factor in determining oil prices under this scenario.

Many options exist to enhance the diversity of the world's oil productive base. There are still significant oil and gas deposits to be exploited outside the Middle East. The oil and gas potential of Central Asia and the Caucasus has received intensely focused attention in recent years as a possible substitute or alternative to the Middle East as a major energy supplier. This emphasis, though well-intentioned, may be misguided. In the short-term, Central Asia and the Caucasus' energy potential will be quite limited due to a wide variety of constraints to rapid development. Longer term, the region may provide a steady flow of oil and gas, but is unlikely to compare to other more investor-friendly major provinces like the North Sea or Latin America in the speed and efficiency in which large reserves can be translated into peak production rates. Some argue output from the region may never match its geological potential as logistical and political obstacles hold back the number of oil companies that can bring finds on line at any one time. Substantial reserves remain to be exploited in other less difficult areas, including Africa, Mexico, South America, offshore Asia and in Russia itself.

Forecasts for the year 2005 and 2010 reveal that if production from non-Opec provinces continues to grow at a rate commensurate with expansion seen over the past decade, the amount of oil from the Middle East needed to meet rising world oil demand requirements could be significantly lessened. Non-Opec production has expanded by 1%-1.5% per annum on average since 1988. This has been accomplished through a combination of technological advances in drilling systems and unearthing of new basins in South America, in deep water and elsewhere. Should this trend continue apace, non-Opec production would likely reach 54 million b/d by 2005 and 58 million b/d by 2010 including rising Caspian Basin production.

Under this moderate non-Opec expansion scenario, oil markets could wind up oversupplied by 2005-2010 under both high and low demand growth cases. The period is likely to witness a substantial increase in the amount of production capacity that will have to be shut in by the Organization of Petroleum Exporting Countries (Opec) or other producers to defend even moderate price levels. Under this scenario, Caspian Basin oil exports will not be critical for maintaining moderate oil prices for at least another decade assuming, as seems reasonable, that long-standing competition continues within Opec. This conclusion is illustrated in Table 9 which projects anticipated production levels for various players in the international oil market under a moderate production growth scenario that assumes continuation of average historical price trends and rates of capacity expansion. The table lists production for non-Opec countries, that is the competitive fringe countries that tend to produce at maximum capacity levels regardless of market price levels and are not members of the Organization of Petroleum Exporting Countries. These non-Opec figures assume that non-Opec growth will continue at the historical rate of the past ten years of 1.4% per annum and provide a forecast of non-Opec production of 54 million b/d in 2005 and 58 million b/d in 2010. By adding into the forecast Opec countries at the rates projected by their own governments, it is possible to illustrate the surplus between what Opec would like to produce and what volume of oil from Opec would be needed to balance supply with demand. The discrepancy between the two, as expressed in the line for the residual share left for Saudi Arabia, serves as a measure of market oversupply. It can be assumed that Saudi Arabia will want to produce at levels similar to the 1997 base case or some amount above that level. In many cases shown, Saudi Arabia's residual share is indicated as a negative number or a number substantially below the 8.7 million b/d that the kingdom is producing today. This result implies that under many scenarios, Saudi Arabia and other Persian Gulf producers will have to shut in significant volumes of production capacity to defend oil price levels. However, in a high demand scenario where oil use rises by 3% per annum between 2000 and 2010, subtracting Caspian oil would lead to a significant tightening of oil markets from current levels. In other words, rising exports from the Caspian Basin could play a significant role as a marginal supplier in arresting a jump in the price of oil under conditions of high oil demand growth conditions.

An econometrician's look at the progression of world economic growth does not suggest that either the moderate (2%) or the high growth (3%) scenario are the most likely to develop. The neoclassical model of economic growth predicts that countries converge to their own steady states. By studying the convergence in technologies, it can be calculated what increases in the consumption of energy, and by extension, oil, must follow in order for countries in the world not only to converge toward the United States per capita income level but also to a technologically-advanced energy saving production process. (See Sickles paper "Convergent Economies:

Implications for World Energy Use" and Table 7) This advanced methodology produces a prediction that global oil demand will reach 80 million b/d by 2005 and 89 million b/d by 2010. This forecast is considerably below moderate growth scenarios or high growth scenarios which predict global oil demand will reach 94 million b/d and 103 million b/d respectively by 2010 (See Tables 8 & 9)

The implications of this convergence forecast for oil producers seeking to raise output between 2005 and 2010 are relatively pessimistic. Under a scenario where oil demand growth reaches 80 million b/d in 2005 and 89 million b/d in 2010, oil markets could wind up to be oversupplied by a wide margin. In the case of this convergence forecast, the residual share for Saudi Arabia is designated as a negative number in all scenarios, including those where emerging production from the promising region of the Caspian Basin is subtracted. This indicates that Saudi Arabia and other members of Opec will have to shut in significant volumes of productive capacity --ranging from 12 million b/d to 15 million b/d-- to balance supply with demand in 2005 and 2010 under a moderate non-Opec growth scenario. By comparison, Opec only has around 1 to 2 million b/d a day of production capacity shut in at present.

Under a low non-Opec growth scenario as forecast by agencies such as the U.S. Department of Energy, Opec would have to shut in between 5 to 7 million b/d of capacity except under the scenario for 2010 where emerging production from the Caspian Basin is subtracted. Under the latter scenario, Opec can get by shutting in an incremental 2 million b/d. This forecast also indicates that maintenance of moderate prices is feasible for the period between 2005 and 2010 even if a major non-Opec province is removed. In other words, under the convergence forecast scenarios, Caspian Basin production will not be critical for maintaining moderate oil prices for at least another decade assuming, as seems reasonable, that historically- persistent competition continues within Opec.

Although it is difficult to assess which of the many scenarios is most likely to emerge, the exercise seems to illustrate the limited contribution of Central Asian and Caucasian production to the global supply-demand balance for the next decade or so. Its contribution will meet only 3-4% of world oil use. The relative importance of this supply is far smaller than output from Venezuela which is expected to account for as much as 7 to 8% of total world oil demand or the Middle

East, which could still dominate within 25-35% share, depending on other market conditions. And, in fact, it could be argued that its contribution –standing at something between 3-4% of projected world oil demand --remains only as significant as a margin of calculated error in forecast planning.

The Economics of Exports from the Caspian Basin

The huge distance of Central Asian and Caucasus hydrocarbon reserves from the world's major energy consuming regions requires a considerable financial investment to bring them to market. The countries of the region are landlocked. Unlike competitors in other large oil-rich regions such as the Middle East, South America and even Russia, they cannot simply ship oil by tanker from domestic ports. Instead, they must rely on expensive pipelines constructed through foreign territories as the chief means for transport. In some cases, such as the Tengiz field in Khazakhstan and Chiraq, Guneshli and Azeri fields in Azerbaijan, oil production could be made available on schedule but stable transportation arrangements remain in question. In other cases, such as Azerbaijan's Karabakh field and the Ashrafi field, geologic projections may not pan out as expected. It remains unclear whether there will be significant enough export flows from the region to justify a large-scale export line in the near and maybe even intermediate term. Limitations on drilling infrastructure and disappointing recent finds in Karabakh and Ashrafi indicate that the region will not be able to progress rapidly toward a production peak any time soon.

The landlocked geography of the Caspian Basin region also creates serious logistical impediments to speedy exploration and development. The region is distant from major supply centers for exploratory equipment and faces a crippling shortage of modern drilling platforms and other related materials. Constraints on infrastructure, drilling equipment and rigs are more severe in the region than in other parts of the world. Well completions take significantly longer time to complete. According to sources with major U.S. oil companies operating in the region, a well completion that would take 2-3 months in the North Sea, Middle East or U.S. Gulf can take up to 2 years in Central Asia or Azerbaijan. Lack of available rigs is a major factor but other materials are also scarce such as drilling mud, fluids and other specialized support equipment.

These constraints are aggravated by sanctions that deny American companies operating in the region access to Iranian transport routes and equipment.

The development of pipeline corridors from the Caspian Basin to international oil markets has been a slow and painstaking process. Many possible routes through Russia, Georgia, China, Afghanistan, Iran and Turkey via Georgia or Armenia have been discussed. To date, transportation problems have restricted the flow of available oil production from Kazakhstan and Azerbaijan and natural gas from Turkmenistan. Since the early 1990s, the three countries, combined with international oil companies involved in oil and gas fields in the region, have been holding negotiations to eliminate barriers to variety of export routes. Negotiations have had varying success.

Given drilling, transportation and other logistical constraints, export volumes from the region are not likely to reach significant levels for the next two to three years. This means that there will continue to be pressure to develop more limited, make-shift export solutions, such as routes that can be augmented and brought on line quickly for limited volumes of 200,000 b/d to 500,000 b/d. There are several such alternative routes. Some include the refurbishment and expansion of existing lines. Others include swaps of oil at one location for oil at another, as has been proposed with Iran. As economies in the region improve, more attention will be paid to finding customers inside the Black Sea area, reducing the volumes that can be collected for export abroad and potentially alleviating some of the pressures on the Turkey's Bosporus Straits.

The future degree of physical constraints toward transit via the Black Sea through the Bosporus Straits is a wild card in developing Black Sea options. Turkey remains committed to the 1936 Montreux Convention, which allows free shipping through the Bosporus Straits. But Ankara is concerned about tightening physical and political constraints due to increased shipping activity on the Bosporus. Sharply higher shipping accidents and mounting public safety and environmental concerns in Turkey's historic and most densely populated city, Istanbul, now represent important domestic political problems for Ankara. As a result, regional oil producers cannot rely on the status quo.

The landscape for Caspian pipeline negotiations has changed over the past seven years, mainly due to shifting political factors. It will probably continue to change long after this study is published. At present, several international oil producing consortia are pursuing short-term transport solutions. Starting in late 1997, the AIOC consortium, which groups British Petroleum, Amoco, Exxon, Pennzoil, Unocal, Ramco, Statoil, TPAO of Turkey, Azerbaijan state Socar, Lukoil, Itochu, and Delta-Nimir, began shipping a limited volume of oil from its Chiraq field in Azerbaijan through the so-called Northern route that extends from Baku to the Russian cities of Grozny and Tikhorestsk, Russia to the Russian Black Sea port of Novorossiysk. This route required both construction on the Azerbaijan side by AIOC and refurbishment by Russian pipeline company Transneft on the Russian portion of the route. Initial capacity is 120,000 b/d but could be expanded to 300,000 b/d with an additional $600 million investment. (Tariff: $2.16 a bbl for ten years)

AIOC is also in the process of refurbishing a western route from Baku to Tbilisi that will end at the Georgian port of Supsa. The project involves some new construction along the route as well as port construction and rehabilitation of a refined products line inside Azerbaijan. AIOC expects the western line to be ready by late 1998 or early 1999 and will eventually be able to carry about 200,000 b/d. (Tariff: 40c/bbl)

Regional leaders have called upon Western consortia members to declare a final plan for a long-term route for transport of over 1 million b/d by October 1998. The U.S. and Turkish government are pushing for the development of a major route from Baku to the Turkish Mediterranean port of Ceyhan. Exact routing is still under debate though companies are anxious to avoid Turkish areas under control of Kurdish rebels. At present, routes via Georgia seem the most feasible. Moscow has declared its opposition to subsea Caspian routes because of environmental risks and high seismicity in the area. The Caspian Pipeline Consortium (CPC), which groups Russia, Kazakhstan, Oman, Chevron, Lukoil, Rosneft-Shell, Mobil, Agip, British Gas, Kazak Munaigaas and Oryx, is trying to finalize plans for a private 1.34 million b/d pipeline from the Tengiz field in Western Kazakhstan to Tikhorestsk to the Russian Black Sea port of Novorossiysk, utilizing an existing Russian line from Tengiz to Grozny. It was hoped that construction of the line would begin following a definitive agreement with Moscow last May but CPC has had difficulty finalizing land right arrangements with local authorities who are looking for their own financial remuneration. Some questions also remain about the legal structure of the company's ownership. CPC members are now shooting to begin the project this summer. The CPC pipeline –if finalized- would permit the export of around 200,000 b/d of Tengiz crude during initial operations.

The development of the CPC line to Novorossiysk –coupled with lines to Supsa or other Black Sea ports- will put additional pressure on Turkey's Bosporus Straits which now handles 1.2 million b/d of oil transport. Turkey has objected to a dramatic increase of oil traffic through the already congested Straits on safety and environmental grounds. The matter is under study by several world bodies including the International Marine Organization (IMO). As a result, several Western oil consortium members are investigating construction of a bypass of the Bosporus Straits. Several bypass routes have been considered. One would begin at either the Turkish Black Sea port of Samsun or the coal port of Zonguldak and extend across Turkey to the Mediterranean port of Ceyhan, utilizing a mixture of old and new pipelines connecting to the Kirikkale refinery near Ankara. Other bypasses include a spur from Kiyikoy to Ibrikbana on the Aegean; a small bypass solely on the Turkish peninsula parallel to the Bosporus Strait; or more elaborate scheme that would bypass the Bosporus by extending a pipeline through Turkish Thrace to the Bulgarian port of Bourgas and Greece ending at Alexandroupolis.

Iran has proposed that Azerbaijan and Turkmenistan export their oil to Iran's northern refining centers at Tabriz, Tehran and Arak and "swap" it for exports of Iranian oil from its main Persian Gulf terminal at Kharg Island. The plan has the advantage of utilizing existing reversable pipeline capacity inside Iran but has run into several snags, including U.S. government objections. Iran claims it will have to make investments in its refineries to handle crude from its Caspian neighbors and therefore is asking for an expensive swap fee of $2-3 a barrel. The maximum amount of oil that could be swapped would be 400,000 to 500,000 b/d. It is likely that only smaller volumes would be practical. Industry and local officials also report that Malaysia's Petronas or China's CNPC might be willing to invest in an Iranian route that would transport their own Caspian production while at the same time grab transit fees for other producers once U.S. sanctions are lifted. Turkmenistan has signed a deal to deliver natural gas to Turkey via Iran. Such exports can take several forms. One proposal is for construction of a new line from Dauletebad or by formalizing an exchange whereby Turkmenistan delivers its gas to industries in

Northern Iran, and Iran delivers gas to Turkey from its Southern gas fields through pipeline connections already underway along the Turkish border.

China's CNPC has also proposed building a $3.5 billion pipeline from Kazakhstan to China's that might connect to future oil facilities in China's Tarim Basin. That project, along with Unocal's proposed oil and gas pipeline that would connect an existing line at Charjou, Turkmenistan through Afghanistan to Pakistan (CAOPP), is considered a long-range program that won't be implemented until the next decade. Exxon, Mitsubishi and CNPC are also studying a natural gas line from Turkmenistan to China. Numerous arguments have been advanced for favoring one route over another. Questions have arisen concerning the security of various routes given regional political uncertainties and ongoing ethnic disturbances. There are also concerns about the monopoly power that could be exerted by either privately-held pipelines or by governments of transit countries. The negotiating process has been shaped by the ambitions of various participants to capture as big a share as possible in profits that can be attained from the transport and sale of the oil from the region.

An examination of purely economic factors for export routing points to the following conclusions:

- Given reasonable expectations for economic recovery and growth, the littoral states of the Caspian Sea such as Ukraine, Romania, Bulgaria, and Turkey can absorb much of the projected export surplus of Caspian oil. Oil demand from these countries, combined with possible demand from refineries in Grozny, Russia and northern Iran could absorb as much as 900,000 b/d to 1.4 million b/d by 2010. This development will help alleviate congestion in the Bosporus, but also reduce the volumes available to fill on-land pipeline routes beyond the Black Sea. (See Table 10)
- Given the expected level of exports from the Caspian region by 2010 and the benefits of economies of scale, the use of several pipelines --instead of one large line —may not be the optimum solution. Multiple routes will result in substantially higher transport costs for exporting that "late" oil, (that is, significant oil export volumes that will be built up via sustained exploration and development) to world markets. (See Table 11)

- The geological and logistical difficulties in amassing large export volumes from the region argue in favor of a multi-party negotiation regime where inclusivity rather than competition is encouraged. This fact, combined with the economies of scale described above, suggest there might be a basis for reassessment of multiple routing as a key principle in the region's development.
- Proposals to construct a pipeline through Turkish Thrace to bypass Bosporous Straits have significant economic merit compared to other more well-known options. This route would relieve congestion in the Straits and address Turkish environmental concerns such as the risk of an accident or oil spill. (For more discussion see Soligo paper "The Economics of Pipeline Routes: The Conundrum of Oil Exports from the Caspian Basin")
- There is evidence that Saudi Arabia "subsidizes" prices through transport discounts for the sale of its oil to European markets. This fact has tended to lower the price of Saudi crude oil in Europe relative to Asia on balance over the last 10 years. However, given the costs of transit plus shipping, the countries of Central Asia and the Caucasus will still receive a higher profit for sales to Europe than for sales to Asia via Iran. This, combined with the security concerns of adding to the already dangerously concentrated amount of world oil supply that must transit the Persian Gulf, argues against an Iranian route from either Azerbaijan or Kazakhstan, regardless of the state of U.S.-Iranian relations.
- Natural gas exports to Asian consumers have more promising longer-term economic potential for Turkmenistan and should not be abandoned due to political barriers, for example those relating to the conflict in Afghanistan. Proposed Turkmen projects will have to compete with an Iranian project to bring Iranian gas from the South Pars field via Iran's southern coast to Pakistan.
- Selling Turkmen gas in Turkey and Europe at current European price levels, while not impossible, would require a drop in production costs to realize profits. Azerbaijan has an advantage in so far as much of its natural gas production is associated with oil production, lowering the threshold for profitability.

There is mounting evidence that competitive multi-party, multi-level negotiations are significantly complicating prospects for a quick resolution of long-term pipeline routing for major export volumes. Current negotiating dynamics under which competing consortia and regional powers are working to conflicting ends have worked against settlement of the routing question. Instead, countries seeking an early settlement of routes such as Kazakhstan, Azerbaijan, Georgia, and Turkmenistan have been disadvantaged while those parties that gain from postponing an early settlement, notably Russia and Iran who are energy export competitors to the Central Asian and Caucasus producers, have every incentive to hold out. Both Russia and Iran are constrained in expanding output at present by political and capital constraints but expect to be able to increase oil and gas export capacity in the future.

For its part, the U.S. government should try to assist in the process of moving transport corridor negotiations forward. One means to accomplish this would be to encourage as many oil production consortia as possible to pool resources to amass line fill for a major non-exclusive pipeline route. Such inclusivity might accelerate the conclusion of a large-scale export pipeline deal. Agendas for future U.S.-Russian bilateral talks should also include discussion of access to Russia's export network for Caspian energy producers. Russia has an interest in international assistance in financing improvements in its own oil export infrastructure. A pipeline bypass to Turkey's Bosporus Straits, if accompanied by investment in Russia port expansions, would benefit Russian domestic exporters as well as Azerbaijan and Kazakhstan. A Turkmen natural gas export line through Afghanistan to Pakistan could some day also be utilized for incremental Russian gas exports to Asia.

Social, Cultural and Religious Factors

A host of complex geopolitical, social, religious and cultural factors will influence the future of the Caspian Basin region and its ability to be a secure supplier of energy to world markets. The countries of Central Asia and the Caucasus, having achieved independence from the Soviet Union a mere seven years ago, are in their relative infancy. They have hardly begun the task of building post-Communist institutions or creating new national identities. Divisive ethnic tensions simmer beneath the surface in many of the countries of the region, and few, if any, boast an institutional framework for the rule of law, political dissent, equitable distribution of resources or the smooth succession of leadership. Security arrangements are equally ill-defined, leaving the region prone to instability and threatening its economic development. The importance in energy sales from the Caspian region may not be so much in the marginal supplies to global oil markets but in what the revenues from energy sales mean for the politics and economic and social development of the region. The oil producing states of the region, mainly Kazakhstan, Azerbaijan and to a smaller degree Turkmenistan, can expect added revenues of $10 to $20 billion a year once oil export rates begin to build around 2010. Turkmenistan and Azerbaijan may also have revenues from natural gas sales.

Inside the Central Asian and Caucasus region, it is generally assumed that enhanced oil revenues are needed to maintain the political stability in the intermediate term and the survival of existing regimes over the longer term. It is reasoned that the economic prosperity resulting from the large-scale export of oil will foster national unity in the oil producing states of the region and diffuse ethnic tensions by improving social conditions for all groups, thereby strengthening the legitimacy and political status of ruling elite. The region's current leaders share this point of view, and their aggressive pursuit of oil development and transport reflects such perceptions. The population also holds high expectations for the benefits that will come from oil and gas development. The region desperately needs income to combat the human misery and tragedy that the Caucasus' have plunged into since the break-up of the Soviet Union. The region's populations are increasingly having to cope with wide-spread poverty, environmental crises, high mortality rates, sweeping epidemics of disease, malnutrition, power shortages, closures of educational facilities, rising rates of criminality, and a steady deterioration in public social and health care programs. (see Kortunov paper "Russia and Central Asia: Evolution of Mutual Perceptions, Policies, Interdependence for more details). While increased oil and gas revenues seem to be a possible solution to the above problems facing the region, cultural, social, ethnic and religious trends may render a rosy scenario hard to accomplish.

It is true that regional leaders seek international investment to bring more capital into their beleaguered economies. The climate for such investment is mixed, however. The leadership and population of the region favor development of national resources, and for the most part, anti-Western sentiment is not prevalent. There is a general openness and receptivity to Western and American ideas, including commercial business practices and economic organization. But there has been some resistance to creating the institutions and conditions needed to foster a stable investment climate to attract foreign capital. To begin, local nationalism could easily be turned against "western interference" from such organizations as the International Monetary Fund.

Moreover, there remains a pervasive suspicion of foreign capitalists that could add difficulties to oil and gas contract negotiations. Many in the region believe that Western companies will tolerate almost any hurdle, leaving open the possibilities of contract renegotiations or cancellations. Western oil companies have been able to conclude major agreements for private investment in oil and gas development under contracts conforming to international commercial standards. But dormant negative attitudes about capitalists, combined with weak rule of law means some regional players may not honor such deals to the same degree as other oil producing nations. Evidence of this trend has been seen in Turkmenistan where several parties continue to vie for gas field and pipeline deals that were contracted to more than one international company. Even in Kazakhstan, sale of the largest gold field, Vasil'kovskoye, has been derailed by expensive flip-flops and renegotiations, while Chevron has spent years renegotiating ownership in the Caspian Pipeline Consortium (CPC) in an effort to get the deal off the ground.

Meanwhile, even as increased energy revenue flows into the region, it remains unclear what conditions will be fostered. Religious, ethnic and other cultural factors could still influence the stability of Central Asia and the Caucasus, and thereby its reliability as an energy supplier. This is particularly true since the land-locked oil and gas producing states of the region will be dependent on neighboring states (some of whom are supply competitors and some of whom are resource poor), to provide access to export outlets via pipeline. The region has not made the political and economic transition from post-communist rule. It lacks stable institutional framework for political dissent, equitable distribution of resources, and orderly succession of leadership. In addition, corruption exists as a major hold-over from the communist system and threatens transparency and efficiency in the development of local economies. The danger to oil and gas development could come if oil revenues do not contribute to the general public good and Western companies become associated with the political repression, graft, and wastefulness of the ruling elite. Under those circumstances, opposition groups -Islamic or otherwise- might see oil interests as a detriment to their aspirations. This could prompt terrorist attacks on oil export pipelines and other facilities and Western oil personnel, rendering Central Asia and Azerbaijan an insecure supplier.

The Problem of Succession and Social Expectations

At first glance, the vigor with which any attempt at political opposition has been stamped out in Central Asia and in Azerbaijan seems to have created a form of stability. However, the intense concentration of privilege of the existing elite makes it all but impossible for new political figures or ideas to enter the national arena save in catastrophic and revolutionary ways. By attempting to eliminate the messy ups-and-downs of democracy, the leaders of Central Asia and Azerbaijan have made it more likely that political change, when it finally comes, will be convulsive. The lack of predictability regarding succession is likely to breed instability.

To a certain extent, the unimpressive showing of opposition candidates in the presidential elections might be attributed to outright fraud, intimidation of voters, or discriminatory electoral regulations. More importantly, however, the presidential elections have underscored the absence of viable opposition parties or movements across the region. In Turkmenistan, democratically-oriented figures were quickly relieved of their governmental posts and forced into exile. In Uzbekistan, Karimov summarily abolished the vice-presidential institution, when its holder Sukrullo Mirsaidov turned out to have the potential to become a political rival. Uzbekistan's Karimov and Turkmenistan's Niyazov hold such a tight grip on the societies that they could afford to ban religious movements, which might threaten the unity of the state or the stability of the regime.

Even in Kazakhstan and Kyrgyzstan, the countries with the highest degree of pluralism in the region, the opposition parties and movements hardly offer a viable alternative to the current governments. In Kyrgyzstan, the figures who aspire and might have a chance to succeed Akaev are also either Communist party functionaries, or Kyrgyz nationalists with less democratic inclinations than the current president. In Kazakhstan, the most prominent opposition movement is Azamat, whose leader Murat Auezov has consistently pledged commitment to democracy. Azamat will probably dominate the about-to-be-created Popular Front, whose professed goal is to unite all opposition parties in the country. Such a development, however, does not necessarily bode well for the opposition movement. While the participation of the bigger Communist party, and the other political groupings might increase Auezov's popularity beyond Almaty, the ideological stand of Azamat as a pro-democracy formation will probably be diluted even further. (For more details, see Olcott paper “Central Asia: Confronting Independence”).

Ironically, closer American ties to the regimes of the Caspian Basin - whether to ensure stability, contain Russian influence, or both –might adversely, rather than positively, affect the region. At present, little anti-Western sentiment in the region, but too intimate an American relationship with authoritarian and secular local regimes could feed it. The lessons of the Iranian Revolution provide a clear demonstration of this probability.

Leadership successions are likely to occur in most of the Central Asian and Caucasus states over the coming decade, with the prospects of a younger generation of nationalists emerging to replace old guard communist elite. Unlike the communist elite who have generally tried to hold their fragile patchwork societies together, these new nationalist leaders will likely focus increasingly on forwarding the interests of indigenous majorities. They are therefore more likely to clash with large ethnic minority communities who have already exhibited separatist inclinations. However, before they are faced with the problem of succession, the Central Asian and Caucasus governments could see the stability of their states endangered by socio-economic problems. The leaders of the new states have generally performed poorly in keeping the social “bargain” which their constituents had come to expect from Soviet-style government. Living standards have slumped tremendously in the region, with each country plunging at least twenty-some rungs down the UN-calculated ladder of human-development. Run-away inflation in the early 1990s drained savings accounts. The breaking of inter-republic connections has led essentially to economic collapse, which has meant an accumulation of enormous wage and pension arrears, as well as the gradual deterioration of the educational, social welfare, and healthcare systems. By 1997, Central Asians spent more than 60 per cent of their income on food. Human emergencies have also increased including a rapid rise in the spread of disease, malnutrition, energy shortages and a crisis in public education.

Corruption and Economic Disparity

A growing disparity between the wealthiest and poorest elements of the population, combined with blatant government corruption, will seriously limit the potential of increased oil and gas revenues in promoting stability. Corruption at the highest levels in several countries in the region has already widened the gap between the political elite and the rank and file of the indigenous population. As oil revenues increase dramatically, this trend could accelerate, potentially leading to internal instability that could affect the flow of oil from the region.

The problem of corruption festers at both the local and national levels. As in other parts of the former Soviet Union, the 1990s have witnessed a major growth in corrupt practices. The involvement of state officials at the local and national levels in such questionable practices is a fact of life in many of the new republics. These activities can only undermine the legitimacy of those in authority, particularly if they continue over time. Corruption by the indigenous political elite during the Soviet-era was viewed within the context of (and as a pretext for) expression of a form of nationalistic spirit in Central Asia and the Caucasus. As such, it did not foster resentment from the local population. Today, such corruption at the top is creating a rift between the ruling elite and the indigenous population. Corruption in Central Asia and Azerbaijan under the Soviet system was viewed as a means for the local party leaders to "steal" from Russia and give back or preserve economic spoils inside the "nation" of the local republic. The local populations considered themselves the beneficiaries of such illegal activities. In some cases, funds due to Moscow were actually diverted for local construction, renovation or maintenance of public facilities, and they provided a means of upward mobility for local leaders who would otherwise become the victims of Moscow's practice of unfair underpricing for commodities sent from the region. (see Seminar paper “Social, Cultural and Religious Factors Influencing Oil and Gas Development”)

However, corruption in the region does not appear to be as rampant as in certain parts of Africa or the Middle East. Central Asia and the Caucasus has seen its share of resignations from government scandals. Public awareness and grassroots support for reformist programs can be tapped to aid in the implementation of new institutional systems that promote transparency. Economic reform programs can discourage wasteful spending and large-scale corruption. In Azerbaijan, for example, the International Monetary Fund (IMF) ensured that oil exploration contract signing bonuses sent into a special account at the Central Bank be fed into the national budget on a predetermined, staggered schedule. Before energy exports begin to take off in large volumes, it would be useful for Caspian governments, local authorities, the energy industry, and international financial institutions to assess prospects for the establishment of social equity funds and business partnerships. Both instruments could be part of a broader strategy to strengthen the internal cohesion of states through internal wealth redistribution and conflict resolution, promote interstate cooperation and encourage long-term stability. Social equity funds are government sponsored funds that are typically directed at economic development and social services. Such funds allow for a more even distribution of wealth within a society over time. Several states are considered to have successfully organized their resource windfalls in this manner, including Botswana, Canada and Norway. Business partnerships involve projects on regional infrastructure development, transport, power generation, water management and the environment. In the Casanare province of Colombia, for example, British Petroleum has worked with national government and local leaders to ensure that some portion of energy rents are used to address the developmental needs of the area. Similar efforts are being made by Chevron in the Cabinda region of Angola.

Key representatives of regional governments, breakaway enclaves, the business community and non-governmental organizations share strong interests in exploring prospects for the establishment of mutually beneficial business partnerships. National governments could make effective use of a policy instrument that could help improve prospects for peaceful settlement and overall stability. Local authorities could strengthen their cooperation with national governments but can do so within the context of an expanding resource envelope. Companies, for their part, could support federal arrangements as they consider the potential for innovative business partnerships involving the enclaves. In this way, they would have the prospect of building their stature in the community while mitigating their exposure to the political risks in the region.

The Role of Religion

At present, the threat of the revival of Islamic religion to the political and economic environment in Central Asia and Azerbaijan is remote. Muslims in the region tend to be divided by sect and degree of secularization, and weak leadership and organization have hindered political activities. For now, the revival of interest in Islam among the peoples of Central Asia and Azerbaijan is highly decentralized and so far, remains distinct from the political arena. No organized, broad-based, monolithic Islamic fundamentalist movement exists today in Central Asia or Azerbaijan, nor have charismatic Islamic politicians emerged to rally the indigenous population around a political banner. More likely, the process of reclaiming Islam and reconstructing a viable Muslim civil society will take generations.

This rekindling of interest in Islam comes after decades of Soviet efforts to weaken its public and private influence. External manifestations of Islam's progress in the region can be seen in the increase in the number of mosques, schools, and Muslim religious organizations. The opening of new mosques and religious schools had begun during the last years of the Soviet era, but increased exponentially after independence. Studies show that, for example, in Uzbekistan some 3,000 mosques had been built or restored by 1992 and 130 main town mosques were operating in Tajikistan that same year. A 1995 analysis, while recognizing problems of statistical reliability found some 1,500 mosques (including those under construction) in the Kyrgyz Republic, 500 in Kazakhstan (again, including those under construction), about 300 registered mosques in Tajikistan in 1992, and in 1994, there were 204 registered mosques in Turkmenistan. In 1997, it was reported that there were 4,000 registered and 6,000 other mosques in Uzbekistan alone. By contrast, during the mid-1980s there were few more than 230 functioning mosques. (See Von Der Mehden paper "Islam and Central Asia).

In addition to these institutional changes, there has also been an increased observance of Islamic rituals. There has been a greater interest in regular prayer and attendance at the mosque on Fridays. Observance of Ramadan has apparently increased. After the years of Soviet control, there has also been growth in the number of individuals making the pilgrimage to Mecca, although the numbers remain quite low. It should be underscored that this pattern is by no means universal and there remains a significant portion of the populace of the Central Asian republics that is either secular or weak in its knowledge of Islamic tenets and lax in its ritualistic practices. Islam in the region has often been described as more traditionally cultural than religious. In fact, given the suppression of political Islam in the region, the major efforts of the many Muslim "revivalists" has been to expand the knowledge of the basic tenets and practices of Islam among the believers.

An increased awareness among Central Asian Muslims of their religious inheritance or the practice of the tenets of Islam presents no intrinsic danger to Western energy interests in the region. Islam as a faith need not hinder close economic relations between Western firms and Muslim states, as seen in long-term partnerships with many Islamic governments. But, as the population of the region becomes more educated about Islam, the utilization of Islam for political ends could become more prevalent. The danger also exists that a strengthening in Islamic identity in the region could aggravate already problematic religio-ethnic tensions. Governments in Central Asia, fearing the potential influence of the Islamists, have employed an array of control mechanisms to assure the movement remains politically weak. The forcing of radical Islamic organizations underground makes it difficult to assess their present strength and from time to time there have been outbreaks of religiously influenced violence. However, at this time, the domestic strength of political Islam remains ineffective, and domestic players have received little international support. Notably, Iran has not been a disruptive force in the region, and if anything, has lent its support to Christian Armenia against Muslim Azerbaijan. And, as experience demonstrated in Tajikistan, when there was a more serious danger of Islamist success, Russia and other regional governments were not cautious in sending their own armed forces into another republic to bolster regimes more secular in nature. China, sensitive to its own Muslim population in the Western province, is in agreement with the government leadership of Central Asia as to the need to control political Islam.

To the extent that outward political expression and dissent are repressed by dictatorial regimes and driven underground, the growing network of mosques and religious schools will provide an efficient, alternative framework for organization of opposition movements and a forum for mobilization. While there appear to be few institutions or groups promoting the spread of political Islam at present, conditions could develop in the future that would foster the kind of underlying conditions and forces that fuel political Islamic movements. These include: high incidence of political repression and a lack of democratic processes; visible corruption among members of the ruling elite; an increasingly younger population with diminishing employment and educational opportunities, particularly outside of urban centers; the creation of a new network of mosques and religious schools that could someday serve as an alternative network for political activity against the state; and a growing disparity between the richest and poorest segments of the population.

Ethnic Conflicts

Inequitable distribution of oil revenues among competing ethnic groups in the region could also fuel continued or even accelerated ethnic unrest which could similarly negatively impact the steady flow of oil exports. To the extent that oil production and transport revenues are perceived as contributing to the relative deprivation of any particular ethnic group by another, indigenous ethnic groups seeking to assert their claims through acts of terrorism could target oil facilities or personnel.

Most proposed pipeline routes from the Caspian region are affected by actual or latent conflict situations. (See Table 12) Instability in the north Caucasus is a problem for northern routes from Kazakhstan. Various western routes could become targets should the war between Armenia and Azerbaijan over the territory including Nagorno-Karabakh resume. Renewed hostilities in Georgia among ethnic minorities could result in periodic guerilla attacks. Southerly routes to Asia are blocked by the seemingly intertwined civil wars in Tajikistan and Afghanistan.

Each conflict is unique and will require case-specific approaches for resolution. The conflict between Armenia and Azerbaijan over the territories of Nagorno-Karabakh is deeply entrenched and threatens the stability of a westerly oil export route from Azerbaijan. In Azerbaijan, the large-scale refugee population lends a human face to the military occupation by Armenia of Azeri territory as a result of fighting between the two countries. The Armenian population of Nagorno-Karabakh, supported by ethnic brethren in Armenia and abroad, demand autonomy and self-rule, if not outright statehood in affiliation with Armenia, on the basis of principles of self-determination and historical claims. Multilateral mediation should continue either through the auspices of the OSCE or under the direction of the United Nations, leaving open the possibility of international peace-keeping forces if needed. Efforts should be made to accelerate regional arms control, including in the enclaves. Benefit could come from a reassessment of financial assistance to the region as part of a strategy to discourage a renewal of hostilities.

Since independence in 1991, Georgia has been struggling with numerous territorial conflicts and separatist movements that have hindered its status as an oil transit nation. One of the most serious threats to Georgia's stability has been the danger of Abkhazia's aspirations for independence. Russian military support, which played a critical role in Abkhazia's wartime gains in 1993, waned as Russia reestablished extensive military basing rights inside Georgia. Moscow now seems more interested in peaceful resolution of Abkhaz status. Other points of instability in Georgia include South Ossetia, Ajaria and the Javakheti region and in Azerbaijan, the Lezgin provinces. Building on progress already made, prospects for a stable, democratic, federal Georgia could be enhanced through business partnerships financed by shared transit rents. Such partnerships could broaden distribution of the benefits of development by contributing infrastructure and other development projects throughout Georgia, building on programs already underway in Ajaria.

The Special Problem of Iran

The ongoing conflict between the U.S. government and Iran also blocks a pivotal route in and out of Central Asia. U.S. economic sanctions against Iran have to date inhibited investment in an Iranian route, but down the road, may not be effective against Asian investors like Malaysia's Petronas or China's CNPC, who may be inclined to take a long-term view of such investment. U.S. sanctions policy directly affects Caspian pipeline development and importation of drilling rigs from the Persian Gulf, notably because of the Iran-Libya Sanctions Act (ILSA). In practical terms, ILSA prohibits foreign direct investment in Iran's energy capability and infrastructure and applies to U.S. business as well as third parties, although there is little provision to date for international coordination or enforcement. (For more details on ILSA, see Sheila Heslin's paper "Key Constraints to Caspian Pipeline Development: Status, Significance and Outlook" and T. Clifton Morgan's paper "United States Policy Toward Iran: Can Sanctions Work?")

Despite recognition that ILSA could have an adverse impact on Caspian Energy development, an implicit trade-off was made in favor of containing Iran. However, the U.S. Government sought to soften the adverse impact of the sanctions regime on the early phase of Caspian development. In theory, provisions were made for licensing small-scale, short-term swaps of

Caspian crude with Iran as a means to expand Caspian exports and circumvent exporting constraints imposed by Russia's pipeline monopolies, Transneft and Gazprom. In practice, however, the U.S. Government has successfully discouraged U.S. companies from applying for licenses to swap crude so as to avoid domestic criticism. Meanwhile, Kazakstan and Turkmenistan, working with European and Asian partners, have resorted to small-scale oil swaps and gas shipments to Iran to maintain and boost their production.

ILSA's impact on Caspian energy development is not limited to transport issues solely. The shortage in drilling equipment could be addressed more economically if excess drilling equipment located in Abu Dhabi could be trucked through Iran. Despite the small benefit Iranian truckers would derive from such transshipment, the U.S. Government has discouraged companies from applying for a license to move such equipment. The expectation in industry circles is that the trend to grant Iran minority participation in Caspian consortia will accelerate. Caspian countries are motivated to seek political accommodation with their large southern neighbor as well as a bargaining lever to change Iran's position favoring condominium ownership, that is joint possession, for the legal status of the Caspian Sea. It is ironic that ILSA could turn out to be the lever by which Iran manages to significantly curtail U.S. presence (and influence) in Caspian development-- an outcome in direct contrast to official U.S. government policy in the region.

The question regarding the effectiveness of sanctions against Iran has been subject to considerable debate. Study of sanctions through political bargaining modeling demonstrates several basic principles on the conditions under which sanctions should be most effective. Firstly, the more at stake philosophically, politically or economically in making a concession driven by sanctions, the less likely a state is to make that concession. Furthermore, sanctions are more likely to cause a desired outcome if they are costly to the target while relatively cost free for the sanctioner. Costs must be evaluated relative to the value of the issues under dispute, rather than to some absolute scale such as the GNP of the country. Finally, sanctions will be most effective to the extent that they target domestically powerful actors involved in decision-making on the issue in question. Sanctions are less likely to bring about change when their costs are borne by domestic elements that have little control over the policy that the sanctioner wants changed.

There has been some movement on the part of Iran toward the American position, but this movement appears to be the result of factors internal to Iran. The cost of U.S. sanctions on Iran does not appear to be costly enough, relative to the value of the issues under dispute. This is not because the sanctions impose a low economic cost; quite the contrary, it is because the U.S. demands are too great (See Morgan paper). Fundamentally, the dispute between the U.S. and Iran can be characterized as one involving critical political, social and economic philosophy. In essence, the U.S. wants Iran to behave more in accordance with Western, liberal principles. Such principles diverge significantly from the Islamic Republic as originally conceived where ideology and collective orientation took precedence over the rights of individuals and international stability.

The U.S. has demanded that Iran end its support of international terrorism, cease efforts at developing weapons of mass destruction, end its active opposition to the Mideast peace process, and improve its record on human rights. While these demands seem simple and clear from the American perspective, they may be less so from the Iranian perspective. For example, demands to stop supporting terrorists can be interpreted as attempts to stop the Iranian regime from protecting itself from its opponents or to undermine Islamic brothers that are fighting against injustice and imperialism. Complaints about the development of weapons of mass destruction can be seen as efforts by anti-Iranian hegemons to maintain military and economic prerogatives in the Middle East.

But the effectiveness of sanctions aside, Iran's attractiveness as a short-term export option shouldn't detract countries in the region and Western policy-makers from forgetting the disadvantages of Iranian participation in Caspian oil exports. Consuming countries' interest in diversification away from dependence on Middle East oil has one very specific policy consequence in relation to export routing from the Caspian Basin. It strongly argues against favoring reliance on a pipeline route through Iran. This preference is independent of troubled U.S. relations with Tehran or the Islamic republic's external policies. Even were those latter factors to change, Iran would remain problematic as a transport route. Caspian Basin oil would become interchangeable with Middle East oil in energy security terms, as it would still have to flow out the Persian Gulf, the location of two major wars in as many decades. Moreover, Iran is, and will remain, an energy competitor with the Caspian Basin. Simply put, if Iran is allowed to control the region's access to western and Asian oil and gas markets, it would be well positioned to negotiate itself as the main importer of cheap Caspian product (discounted due to lack of global access). This way, Tehran, fueled by cheap Caspian energy, could increase exports of its own energy resources and grab the higher profits in export markets in Europe and Asia for itself.

This competitive attitude is demonstrated most clearly in current negotiations for the development of Turkmen natural gas export projects. In less than a year, Iran built a spur line to send Turkmen gas to Iran's northeastern industrial areas. The pipeline, running from Korpedzhe in Turkmenistan to Kord Kuy in Iran, was opened this past winter. Its capacity is a relatively modest 400-Million cubic feet a day (mmcf/d) compared to the 2-billion cubic feet a day (bcf/d) proposed to be transported to Turkey down the road. Iran paid about 80% of the $195 million in construction costs, and Turkmenistan will pay back its debt in natural gas supplies within three years. Iran's own gas resources are located in areas distant from its northeastern provinces.

Iran's interest in the longer-term pipeline may have more to do with its own plans to export gas than enthusiasm to serve as a transit route. (See Ira Joseph Paper "Caspian Gas Exports: Stranded Reserves in a Unique Predicament") With 740-tcf of reserves, only 3.5-bcf/d of production and only tiny exports to Armenia, helping Turkmenistan export through Iran would facilitate Iran's long-term goal of becoming an even greater gas exporter than oil. Eventually, Iranian gas could displace Turkmen gas along the route. Going East Iran may also become a potential competitor for Turkmenistan. Iran is already opening up sizable gas fields to foreign investment and has its eye keenly fixed on Pakistan and India as markets. Iran is investigating whether to build a pipeline along its southern coast that would connect its huge South Pars offshore gas field to the Pakistan grid. This project has developed to the point where foreign partners like Royal/Dutch Shell and Russia's Gazprom have been brought in to assist. At some point, Iran's willingness to cooperate with Turkmenistan could quickly evaporate if it believes it can attract the market and capital on its own. Political situations make this unlikely at the moment, but five years from now, things could be considerably different. If either Turkmen deal to Turkey or Pakistan is not completed in the next five years and Iran continues its warming trend with the U.S., Tehran may find itself in a position to export gas on its own and cut Turkmenistan or any other Caspian supplier out of the equation. In other words, beyond low volumes, the interests of Iran diverge with those of the new producers, the Caspian states.

Still, the U.S. needs to understand and actively reduce the negative impact of Iran sanctions on Caspian development. Several principles should guide U.S. action: boosting Caspian production, ensuring robust U.S. commercial involvement, and protecting American companies against undue discrimination vis-a-vis their European and Asian counterparts due to ILSA. Specifically, the Administration should consider licensing those activities that give an early boost to Caspian production, particularly transshipment of rig equipment across Iran and oil swaps across Iran. With regard to the latter, the Administration would have to make a judgment on appropriate volumes and timeframe of contracts. Ideally, while significant leeway might be granted in the short-term, the Administration would need to ensure that such contracts do not reach a volume or extend over a long-enough time period as to undermine prospects for alternative long-term routes.

The Great Game: The Stakes of Geopolitics

Independence after over 80 years of direct rule by Moscow has created a strategic power vacuum in the region that has unleashed rivalries among large neighbors and distant superpowers. A multitude of countries has shown commercial interest in the region, especially its natural resources. They include neighbors Russia, Turkey, Iran, and China as well as nearby Pakistan and India; and the United States, Europe, Japan, Saudi Arabia and even Israel. Through long-term project developments and reform packages, Japanese industry leaders hope to secure a presence in Central Asia which alleviates some of Tokyo's energy import dependence on the Middle East while yielding mutually beneficial relations.

But, for the regional powers, interest extends well beyond commercial considerations. Historical factors play a role. For Russia, the region represents an area of traditional Russian dominance. For Turkey, it holds the cultural attractions of "Pan-Turkism." The reemergence of Islamic practices in the region is a magnet for attention from both Saudi Arabia and Iran in their rivalry for leadership of a broader Islamic revival. To some extent, regional powers also seek to reach into Central Asia and the Caucasus to help control ethnic movements in their own hinterlands, including Russia's southern regions, Kurdish borderlands in Turkey, ethnic Azeri borderlands in northern Iran and the Xinjiang province in Western China. But geo-strategic considerations also loom large. While talk of a new "great game" may be exaggerated, a number of major powers view the region at least in part in terms of a broader contest for spheres of influence. For this reason of geopolitical setting, much more than for reasons of energy security, the future of Central Asia and the Caucasus matters on an international level.

To big energy importers like the U.S., Europe, Japan and down the road, China and India, Kazakhstan and, to a lesser extent Azerbaijan and Turkmenistan, can play a role as a marginal supplier of energy over the coming decade. But the moderate size of potential supplies to be available in the next five to ten years will likely dictate that no substantial allocation of national resources and diplomatic efforts should be applied to garner these supplies on the basis of energy security policy. Much could change in energy security demands in the coming ten years through technological breakthroughs, global recession or privatization and market reform in more promising basins such as Mexico, Iraq, Russia or China. Such changes could dwarf the contribution of Caspian Basin supplies to energy supply diversification. Indeed, it could be argued that Central Asia and the Caucasus finds its central importance not so much as an energy basin but to the extent a power vacuum there serves as a magnet and flash point for geopolitical competition.

Though political attitudes inside Russia are often contradictory and more complex than many think, Russian leadership is sensitive to the West exploiting what it considers its temporary weakness in the Caspian Basin. Russia will be particularly sensitive to close U.S. involvement with Almaty where the fate of a large Russian population in Kazakhstan could have significant impact on Russia’s internal conditions. China, too, will view foreign involvement in the Caspian, especially U.S. involvement, through a geopolitical prism. The Xinjiang province, which borders Kazakhstan and maintains close cultural and linguistic relations to Central Asia, is also reportedly the locale for much of China’s nuclear testing. China will likely view American involvement in Kazakhstan through the prism of these security concerns. In late 1996, China unveiled a plan to attain around one-third of its future energy needs from exploration and acquisition activities abroad, and state concern China National Petroleum Corp. (CNPC) became involved in two major energy development projects in Kazakhstan. China’s net oil imports alone may soar from minimal amounts in 1997 to over 2 million b/d by 2010 and 3 to 4 million b/d by 2015. (See Xu paper, The Oil and Gas Linkages between Central Asia and China: A Geopolitical Perspective) China has also been conducting several studies of oil and gas transportation deals to supply China from vast resources in Western Siberia, Eastern Siberia and the Russian Far East and is involved in pursuing some exploration projects in Iraq, awaiting the lifting of United Nations sanctions against that country. Seemingly, Chinese activities in Central Asia, the Middle East, and Russia aren't yet integrated. But by building transportation corridors from Kazakhstan and Turkmenistan to Northern Iran to reach the Persian Gulf and then forging another connection to Russia, China would create a geo-economic space with potential for future aspirations. (see Xu paper)

In the 21st century, the rising dependence of China's economy on Middle East oil supplies and its vulnerability on energy security issues will influence U.S.-Chinese relations. China may seek alliance with Russia as a counterbalance to Western involvement in the Caspian basin energy development and Western dominance in the protection of Middle East oil supplies. Or China could foster ties with the West and lower energy cooperation with Russia if it can gain more benefits in that fashion. In either case, the possibility remains strong that China could view the activities of the U.S. and Russia in Central Asia through a balance-of-power perspective. U.S.-Russian competition in the region may encourage Beijing to form new alliances to enhance its own geopolitical power on the world stage, arguing for caution on all accounts.

Given budgetary constraints and the low level of support from the American public for foreign involvement lacking clearly defined, vital interests at stake, the individual countries of Central Asia and the Caucasus are unlikely to become a U.S. priority in terms of major economic assistance or security guarantees. American interest in stability in the region is likely to be case-specific and part of a broader focus related to stability in Russia, China, Turkey and the Persian Gulf, and U.S. diplomacy in the region should clearly articulate these realities. (See Barnes paper "U.S. National Interests in the Caspian Basin: Getting Beyond the Hype"). In American foreign policy terms, the countries of Central Asia and the Caucasus, taken out of the context of its neighboring environs, are geographically remote from the United States, militarily insignificant, sparsely populated and economically disadvantaged. Its energy sector will create significant commercial opportunities for American firms, and development of the region's energy resources is an important goal for the U.S. in terms of its contribution to diversification of supply. But the region's political importance is likely to be derivative from the U.S. perspective.

Given the current preeminent status of the U.S. on the world stage, Washington is an essentially conservative power. In other words, in most cases, it has more to lose than gain by a change in the international status quo. As such, its preference will be for stability. In the Caspian Basin, American interest in stability is likely to be case-specific, but subordinate to vital interests in stability in other regions such as Western Europe or Northeast Asia. U.S. policy focus will continue to define its interests in the Caspian region largely as they relate to stability in Russia, Turkey and the Persian Gulf.

Moscow's emerging attitudes toward the newly independent states of the Caspian Basin will have unique influences on their political and economic development. A shared interest in regional stability and economic opportunity could promote cooperation among the major powers involved in the region. But a foreign competition for influence could also feed existing ethnic, religious and socio-economic tensions. Conflicts, if elevated, chave the potential to affect international stability.

Russia's Unique Problems

The Caspian Basin's bearing on internal Russian conditions is a very important factor and needs to be heeded by the international community. Russia must avoid political choices where its headway toward social and economic progress at home is hindered by the high costs of substantial engagement in the Caspian region. If Russia can draw anything from its experiences in the region since independence, it is that it cannot necessarily control events once they are set in motion as demonstrated during recent civil wars in Georgia and Tajikistan.

Russian military expeditions in the region have been costly both in terms of internal resources, economic development and political impact within her borders. Russian populations inside the Federation remain wary of their regime's military involvement outside Russia's borders. The bitter experience of Afghanistan, combined with the tragedy of "restoring constitutionality" in the Chechen republic, contribute to a cautious mindset. Moscow's attempts to police the Tajik-Afghan border remain unpopular with average Russians. While conflicts in Georgia and Tajikistan appear to have reestablished the legitimacy of basing rights for the Russian military, the purpose of such bases in the post-Cold war era also remains subject to domestic debate.

In view of recent experiences in Central Asia and the Caucasus, Russia's leadership is beginning to pay more attention to the negative consequences of instability in the region. Military conflicts or ethnic separatist movements in the southern Caucasus, for instance, could easily spill over into contiguous Russian areas, themselves a patchwork of ethnicities. Moreover, related issues are increasingly entering the Russian domestic political landscape. The prominence of ethnic issues in Russian politics is mounting at the same time populations are increasingly sensitive to the heavy economic and social burden of caring for immigrant and refugee populations. There remains domestic concern for Russian populations outside Russian borders, especially in non-Christian, Islamic environments; these concerns will continue to drive external policies.

Russia must also concern itself with an arms build-up in the region that could be financed with emerging oil export revenues or oil transit revenues in Central Asia and the Caucasus. Such concerns will likely need to be addressed before Russia can take a relaxed view of providing transit corridors for large exports of oil and gas from the Caspian Basin. Moreover, there are other less visible problems that have direct bearing on regional stability and, thereby Russian stability given its deep ties to the nations of the region. These are: production and trafficking of narcotic substances; illegal trade in arms; disruption of communication infrastructures; spread of corruption and criminality; and ethnic violence.

Internal divisions within Russia's current political make-up and its own domestic problems are likely to create contradictions and inconsistencies in Moscow's Caspian policy for the foreseeable future. There are those inside Russia who believe the country's interests will be served through integration with the West. They argue Central Asia is irrelevant to Russia's long-term interests. But other factions believe linkages to the West will prove illusory and would like to see Moscow reassert control in its periphery. Influential industrial groups continue to rely on Central Asian raw materials and semi-finished industrial products as well as on local markets for their own goods. They argue that Russia cannot afford a disruption of its economic ties with Central Asia without precipitating the collapse of numerous enterprises and whole branches of the national economy. Communist factions would like to preserve ties to the "periphery" as a means to restore the Soviet legacy. Russian leadership is sensitive to the West exploiting what Moscow considers to be its temporary weakness following the break-up of the Soviet Union. For others in Russia, involvement in the region remains sensible way of resolving the painful problem of Russian-speaking minorities in Muslim sections of the Newly Independent States. Segments of Russia's military-industrial complex perceive the disintegration of the former Soviet strategic space, especially in the South, as a direct threat to Russian security interests.

The view from inside Russia's oil sector also seems to point toward an aggressively integrationist approach. This could change eventually as private Russian oil companies become more focused on garnering profits from their commercial investments in the region. Russian corporations enjoy substantial economic and political power and may therefore be able to force changes in Moscow's future policy in the Caspian Basin. To date, Russia has attempted to retain influence over Caspian oil developments via three main policies:

1. Maximizing the role for Russian companies in the area

2. Controlling transport out of the landlocked region

3. Using the uncertain legal status of the Caspian Sea to undermine confidence in or to prevent unilateral offshore oil developments by arguing that resource development should not be advanced in the area unless sanctioned by all five surrounding states including Russia, Azerbaijan, Kazakhstan, Iran and Turkmenistan .

This three-pronged strategy can only be effective if domestic oil and gas companies, active in the Caspian, are willing to act as agents of government policy. So far, only two Russian companies, LUKoil and Gazprom, have had the political contacts, cash and organizational means to build a significant presence in the Caspian region. Until Prime Minister Viktor Chernomyrdin was dismissed this March, Gazprom's willingness to act as an agent of government policy, or at least as an agent of those policies advocated by Chernomyrdin, was virtually guaranteed. As Moscow's unofficial ambassadors in the Caspian, LUKoil and Gazprom have enjoyed enormous commercial advantages both over domestic and foreign competitors. In particular, LUKoil has made impressive advances in the Caspian that would not have been possible without political support. (for details see Isabel Gorst Paper "Petroleum Ambassadors of Russia: State Versus Corporate Policy in the Caspian Region") The spoiling game played by Russia during negotiations for the Caspian Pipeline Consortium's export line between Kazakhstan and the

Black Sea, not to mention the sporadic warnings from Moscow's Ministry of Foreign Affairs that Caspian Sea projects are all illegal, have served as uncomfortable warnings to investors in the region that nothing can happen without Russia's blessing. However, in the long term the policy is not sustainable. LUKoil will eventually want to make a commercial success out of its Caspian properties and for that it will need both pipelines and a concrete resolution of the dispute over Caspian resource ownership.

LUKoil's impatience with political restrictions is already evident even though profit is just entering the delicate balancing act between the company's commercial goals and the political mandates that come with privilege. If the company finds its virtual monopoly on Russian Caspian operations challenged by other domestic investors such as Yukos, tension between LUKoil and the Kremlin will build. Russian corporations enjoy enormous economic and political power and may therefore be able to force changes in Moscow's political policy in the Caspian. But however rapidly these companies are evolving, they are unlikely to abandon their instinctive desire to protect Russian interests altogether. Acknowledging the strong cards Russia holds in its Caspian pack, foreign oil companies are willing to form partnerships with Russian companies to facilitate oil development and transport projects. Cooperation of this sort could help promote understanding and compromises that will lead to huge commercial benefits for all investors. But for the time being, both sides remained concerned that they may just be taken for a ride.

Given the complexity of Russian interests in Central Asia and the Caucasus, policies can not be set based on the view of Russia as a monolithic hegemon bent on controlling as many neighboring regions as possible. Instead, nuanced, comprehensive goals should be developed that acknowledge the impact of Caspian instability on internal Russia affairs. The pluralism involved in Russian policy-making on Caspian issues complicates involvement of other international powers there. However, it will serve Western interests to pursue policies that undermine, rather than embolden, neo-imperialists in Moscow. In particular, absent real resources and guarantees, U.S. talk of "containing Russia" in Central Asia and the Caucasus can only be counterproductive. Participation of international organizations in conflict resolution, regional arms control, cooperation on a broad-range of economic issues, including economic reform, should be the cornerstone for devising a comprehensive international policy toward the Caspian region. Unilateral approaches will invite division and potentially dangerous competition and geopolitical rivalry that will benefit none of the players in the region but potentially threaten all of them.

Recommendations that the United States forcefully counter Russia in the Caspian Basin now, while Moscow is weak - possibly by making Uzbekistan the U.S. de facto regional surrogate - may only increase the likelihood of a Russian effort to re-exert more direct control over the region. The argument that a firm anti-Russian stand in the Caspian Basin will undermine, rather than embolden, neo-imperialists in Moscow only makes sense if the U.S. is willing to commit the huge resources and offer the guarantees necessary to back up its position. This is especially true were America to move forward, as some in the Clinton Administration have intimated, with expanding NATO to include the Baltic States. Combined with a more assertive American stance in the Caspian Basin, such an effort would play into the hands of those in Moscow calling for an aggressive re-imposition of Russian might in Central Asia and the Caucasus. As Russia has perceived Western intentions more negatively with NATO expansion plans and the like, Moscow's approach to third party involvement in Central Asian politics and economics has shifted. More attention has been given to arguments that Russia's reduction of presence in the region has simply led to vacuums being filled by others, such as Turkey, China, the U.S., Iran and Pakistan.

At this point, a direct Russian takeover of the region is remote; a use of the region by Russia as a direct threat to American interests elsewhere - for instance in Turkey or the Persian Gulf - is more remote still. There may or may not be a Russian future "threat" to the region and American interests there or elsewhere. But a premature American effort to exclude Russia from influence in the Caspian basin is liable both to increase the likelihood of such a threat and to intensify its severity should it appear. Instead, Russia should be supported in its efforts to refine multilateral mechanisms that may assist it in the performance of onerous duties of conflict resolution in Central Asia and the Caucasus.

Greater international attention through organizations such as the United Nations, OSCE, and the World Bank to the mounting Central Asian problems could be helpful in building a stable, liberal Russia. Attention should be given not only to conflict resolution in the Caucasus and

Central Asia but also social welfare issues such as poverty, environmental crises, sweeping disease epidemics, malnutrition, and power shortages. Participation of international organizations in conflict resolution, regional arms control, humanitarian assistance, and cooperation on a broad-range of economic issues, including economic reform, should be the cornerstone for devising constructive, multilateral policies toward the Caspian region.

Policy Recommendations:

- Geological and logistical difficulties in amassing large oil export volumes from Central Asia and the Caucasus region argue in favor of a multi-party negotiation regime where inclusivity rather than competition is encouraged.
- Expected regional oil production constraints for the next several years and economies of scale analysis suggest there might be a basis for reassessment of multiple routing as the key principle in the Caspian region’s development.
- Proposals to construct an oil pipeline through Turkish Thrace to bypass the Bosporous Straits have significant economic merit, suggesting a reevaluation of the relative priority being given to the longer, more expensive overland Baku-Ceyhan route might be beneficial. The Turkish Thrace route would relieve congestion in the Straits and Turkish environmental concerns.
- American interest in stability in the Caspian region is likely to be case-specific and part of a broader focus related to stability in Russia, China, Turkey and the Persian Gulf. U.S. diplomacy in the region should clearly articulate these realities and be developed in a more comprehensive fashion.
- A growing disparity between the richest and poorest segments of the population in Central Asia and the Caucasus, combined with blatant government corruption, will hinder the potential for increased oil and gas revenues to promote stability. Economic reform programs can and have discouraged wasteful spending and large-scale corruption. The International Monetary Fund (IMF) and other multilateral economic advisory organizations should encourage and enforce elements in economic reform programs that promote transparency.

- Government-sponsored social equity funds should be established in the countries of the region to enhance equitable distribution of energy income. Such funds should be directed at economic development and social services. Business partnerships could also be fostered that involve oil company-promoted projects on regional infrastructure development, transport, power generation, water management and the environment.
- Russia and the United States should encourage the countries of the region to establish arms control agreements that will prevent energy income from fostering an arms race within the Caspian Basin.
- Russia should be supported in its efforts to refine multilateral mechanisms that may assist it in the performance of onerous duties of conflict resolution in Central Asia and the Caucasus.
- Greater international attention through organizations such as the United Nations, OSCE, and World Bank to the mounting Central Asian problems could be helpful in building a stable, liberal Russia. Attention should be given not only to conflict resolution in the Caucasus and Central Asia but also social welfare issues such as poverty, environmental crises, sweeping disease epidemics, malnutrition and power shortages. Participation of international organizations in conflict resolution, regional arms control, humanitarian assistance, and cooperation on a broad-range of economic issues, including economic reform, should be the cornerstone for devising constructive, multilateral policies toward the Caspian region.
- Russia now faces a broad array of internal divisions within its current political make-up. While public wariness and the existence of differing political foreign policy camps seem to imply that Russia's Central Asian policy will be characterized by contradictions and inconsistencies for the foreseeable future, there exist several influential groups that would like to see Moscow reassert control in Central Asia and the Caucasus. American policy towards the region should recognize this reality. Talks of "containing Russia" in the region is likely to be counterproductive and absent real financial resources and security guarantees, empty. Washington's policy toward the Caspian region should bear in mind the region's impact on Russia's internal stability and take into account parallel efforts to integrate Russia more closely with the West.

- Increased multilateral efforts to promote conflict resolution on the status of the territory of Naborno-Karabakh should be pursued. Greater efforts should be made to implement arms control agreements in the region, and financial levers should be utilized to discourage a renewal of hostilities. The repeal of Section 907 of the U.S. Freedom Support Act which limits U.S. assistance to Azerbaijan should be considered as an inducement to Baku in return for cooperation in conflict resolution negotiations with Armenia. At the same time, Armenia should be encouraged to enter into meaningful negotiations with Azerbaijan to resolve the Naborno-Karabakh issue peacefully.
- The U.S. should reassess the impact of Iranian sanctions on the timely, efficient development of Caspian energy resources as part of an overall review of U.S. policy toward Iran. Consideration should be given to the pros and cons of licensing activities of U.S. companies including transit of drilling equipment that would give an early boost to Caspian production.