

The Newsletter About Reforming Economies

Beyond Transition

April – June 2006 • Volume 17, No. 2

<http://www.worldbank.org/transitionnewsletter>
www.cefir.ru

Theme of the Issue: Energy

Interview with Kenneth Rogoff: "No country should plan on US\$70 oil ... forever" 3

World Crude Oil Markets: Monetary Policy and the Recent Oil Shock

Noureddine Krichene 5

The Oil Supply Potential of the CIS

Rudiger Ahrend and William Tompson 7

Insert: The Resource Curse and Media Freedom

Sergey Guriev, Konstantin Sonin and Georgy Egorov 8

Management of Energy Resources in China

Jiang Kejun 9

Caspian Oil: Changing the World's Energy Outlook

Yadviga Semikolenova 11

Interview with Vladimir Milov: "The state should leave the energy sector" 12

Human Capital and the "Resource Curse"

Natalia Volchkova and Elena Suslova 14

New Findings

Energy Poverty in Macedonia and the Czech Republic
 Stefan Buzar 15

The Productivity Effects of Services Liberalization in the Czech Republic

Jens Arnold, Beata S. Javorcik and Aaditya Mattoo 17

The Media's Effect on Corporate Governance in Russia

Alexander Dyck, Natalya Volchkova and Luigi Zingales 19

Is there a "Glass Ceiling" in the Czech Republic?

Stepan Jurajda and Teodora Paligorova 21

Foreign Ownership vs. Production Efficiency

Valentin Zelenyuk 23

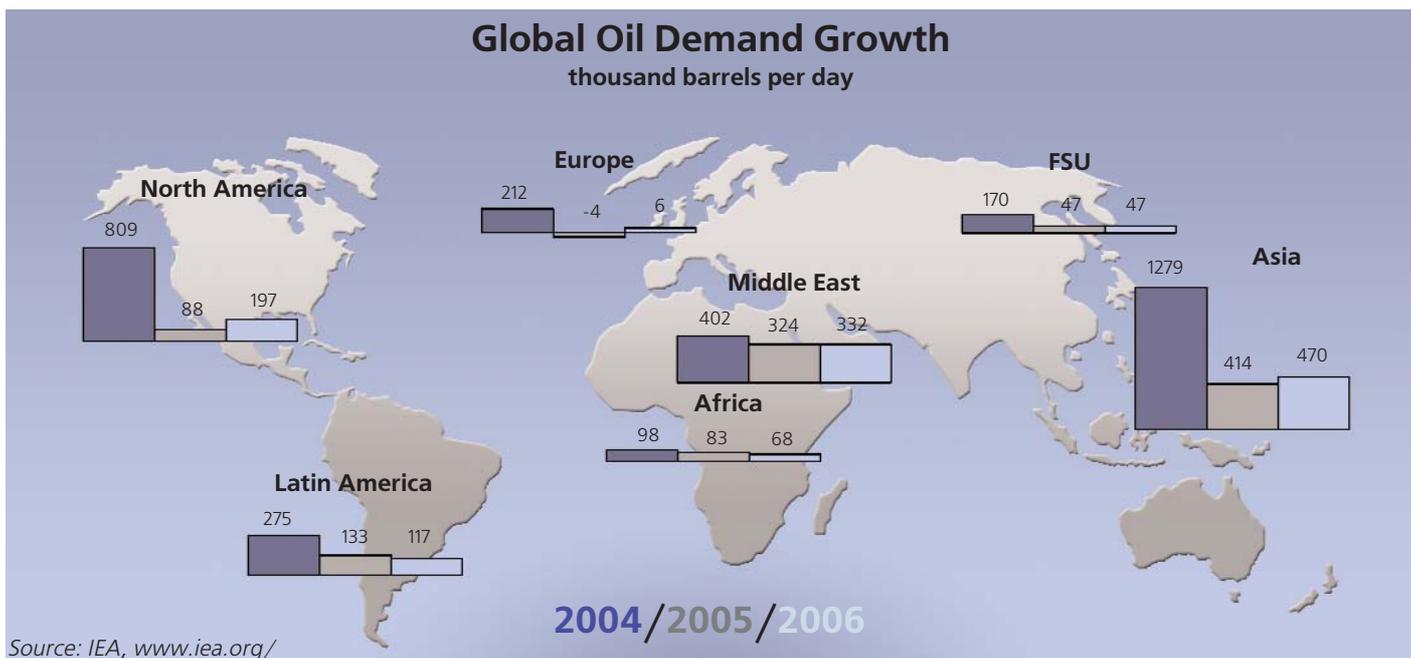
Russia and the WTO: The "Gravity" of Outsider Status

Bogdan Lissovlik and Yaroslav Lissovlik 24

World Bank Agenda 25

New Books and Working Papers 27

Conference Diary 30



From the Editor:



Dear Reader,

High and highly volatile oil prices over the last few years pose different problems for energy exporting and importing countries. On the face of it oil importers would seem to suffer more. Kenneth Rogoff, however, argues in his interview to BT that in fact oil exporters face much bigger challenges than importers. Rogoff believes, and his view is supported by evidence presented in Noureddine Krichene's article, that the 1970s output decline was due to monetary policy rather than oil shocks. In the last 30 years, oil importing countries have strengthened their financial systems, and improved monetary policy. As a result, they have good chances to withstand current price rises without big output losses. Moreover, the current price highs, like all the previous ones, will not last forever. According to Rogoff, we will see oil prices decline within the next five to seven years and this will certainly lead to economic turmoil in oil exporting countries, whose financial systems and macroeconomic policies are not strong enough to adapt to lower prices.

One way to make oil exporting countries less vulnerable, according to Rogoff, is to increase private sector participation in the oil sector. Instead we have been observing the increase of state control in oil and gas in many oil producing countries. The energy-rich CIS countries, such as Russia and Kazakhstan, which had previously relied to a large extent on private or foreign ownership, are now going in the same direction of increased state control in the energy sector. As shown by Ahrend and Tompson, this strategy immediately resulted in the sharp decline of output growth and investment rates. Major problems are awaiting these countries in the future, as state owned companies have proved to be much less efficient in developing new fields than the private ones. For example, Gazprom, the Russian natural gas monopoly, has not developed a single large gas deposit in the past 15 years (Milov).

Even state-owned companies can have incentives to increase efficiency if they face strong competition. Recently built pipelines, which bypass Russia, will certainly intensify competition between the oil and gas producing companies of the CIS region. In terms of competition the bad news is that Azerbaijan seems to be increasingly out of the game, as its oil reserves proved to be much smaller than was expected (Semikolenova).

In contrast to developed oil consuming countries, which according to Rogoff are well prepared for the current price rise, many developing countries find the current situation very challenging. For China, whose fast-growing economy is widely believed to have contributed to increased oil prices, the situation is extremely complicated. To be able to continue its fast and robust development it has to develop a comprehensive energy management strategy. Jiang Kejun provides different scenarios for China's future demand and supply, and suggests policies needed to moderate the current demand growth rate.

At the G8 meeting, which takes place in St.Peterburg in mid July, energy security will be a major topic to be discussed. The articles in this volume demonstrate that the best way to achieve energy security in both oil exporting and oil importing countries is to improve institutions. The first step in this direction may be to secure media freedom, which will help improve control over reform implementation by bureaucrats (Guriev, Sonin, and Egorov) and also improve corporate governance in private firms (Dyck, Volchkova, Zingales). Building better services, particularly in the finance sector, is another important step in the right direction. As argued by Arnold, Javorcik and Mattoo, the liberalization of this sector for foreign direct investments is one of the fastest ways to get results.

Ksenia Yudaeva, Managing Editor

Kenneth Rogoff: "No country should plan on US\$70 oil ... forever"

Kenneth Rogoff is Thomas D. Cabot Professor of Public Policy and Professor of Economics at Harvard University. He has extensively published on international finance, including exchange rates and current accounts, central bank design, and financial globalization, and is currently working on a book "Oil and the Global Economy". He shared his findings and views with **BT**'s Olga Mosina during his recent visit to Moscow

BT: Oil today trades at over US\$70 per barrel and prices are expected to stay high in the near future. Are we anywhere near an oil crisis similar to the one back in the 1970s?

No, I do not think it is a crisis situation, in the sense that a global recession is imminent. High oil prices are an important issue in the global economy first and foremost because they imply huge gains for oil exporters and huge costs for oil consumers. However, a significant part of the past few years' price growth has been driven by a strong global growth, as opposed to actual or prospective supply interruptions.

In fact, academic researchers have long doubted oil's reputed role as the main culprit for the low productivity growth and high inflation years of the 1970s in industrialized countries. Over the past ten years especially, academic work has reached a broad consensus that weak monetary policy was a much bigger factor. During 1971—72, the Federal Reserve increased the money supply by over 30% in an effort to boost demand, and help US President Richard Nixon's 1972 re-election bid. Even without the oil shock, the Fed would have been forced to undo part of this massive increase to avoid having inflation go into the stratosphere. So a post-election recession was on the cards long before OPEC decided to break free from Western control of oil prices. The oil increase magnified the recession but was not the primary driver.

BT: Is today's global economy better adapted to high energy prices than it was in the 1970s?

The most important change is that central banks can be more patient when oil prices rise than used to be the case. Over the past twenty years we have been



living in an era which economists call "the Great Moderation". Volatility has been going down and financial markets have improved, goods and labor markets have become more flexible. Thanks to globalization and more independent inflation-minded central banks, monetary policy has distinctly improved. Monetary authorities do not have to raise interest rates quite as quickly as they used to, when inflation rose due to energy price hikes.

It also helps that the share of energy in the industrialized countries' output has decreased almost by 50% since the 1970s. Equally important, oil use is now much more concentrated in transportation rather than manufacturing. Thus oil price hikes do not have the same knock-on effects through the economy that they used to.

All this is not to say that we should be totally calm about high prices. One important issue is the effect of oil prices on the already huge United States current account deficit, which has now topped 6% of US income. The IMF estimates that 50% of the increase in the US current account deficit over the past two years has been due to oil imports. Given that a disorderly adjustment of the US

current account poses significant risks to the global economy, and that the problem is being exacerbated by oil price rises, there is a chance that this recent oil price cycle may not have a happy ending.

BT: Which countries are more vulnerable to oil shocks?

I am actually far more concerned about the oil-exporting countries than the oil-importing ones right now. High prices are great for them, but part of this rise is cyclical and the question is how they will react when lower prices hit. Most of the oil-exporting countries have very weak financial systems, making it hard for them to deal with macroeconomic volatility. High prices also make it difficult to sustain important structural reforms to diversify their economies. Because of these obstacles, most oil-exporting countries have not enjoyed "the Great Moderation" to nearly the same degree as the industrialized countries.

Russia, in particular, is certainly still extremely vulnerable to oil price volatility. Its financial system is still dominated by state banks, with other forms of finance being woefully undersized. In order for it to develop better financial markets, it will need greater transparency, stronger institutions and stronger governance. Russia has a lower degree of central bank independence than would be desirable over the longer term for anchoring inflation and the economy. It has not joined the WTO yet. So on all these fronts Russia is more vulnerable than say Canada, another G8 energy exporter.

The bottom line is that despite the trend for increasing prices in oil, thanks to India and China, no country should plan on US\$70 oil being around forever. At some point in the next five to seven years, we will surely have at least a brief period of US\$20 oil.

I should also note that there are countries in Africa that spend 15% of their GDP on oil and energy imports, so obviously high oil prices mean a huge cost to them. However, some of these countries are still making out all right thanks to the fact they export other commodities whose prices have also been soaring.

BT: What policies could help to mitigate macroeconomic risks resulting from oil price volatility?

For oil-producing countries there are a host of issues. At the most basic level, they need deeper financial markets to help handle all kinds of volatility, including oil volatility. The ability to internationally diversify some of their risks would also help. Unfortunately, the nationalization of oil companies makes it very difficult to diversify the risk; roughly 70% of the world's oil reserves are in the hands of national oil companies. State-owned oil companies could achieve some diversification through financial contracts, but they cannot carry this approach very far without

In Latin America it is really hard to see any upside to the recent nationalizations

effectively giving up ownership. Having a more flexible exchange rate would help a little, though diversification is the big issue.

By the way, there are those who argue that oil wealth is a "curse." This idea was coined by the Harvard economic historian David Landes, who argued that when a government can tap a lot of natural resource wealth it is under much less immediate pressure to develop a middle class to generate economic growth because it can get growth from the natural resources. But I think this idea has been grossly oversold. The United States has lots of natural resource wealth, so do Canada, Australia and New Zealand. So if I was asked whether I would like to have mineral resources in the country where I live, I would take a chance and say "yes." The key is to have good institutions.

BT: What about oil-consuming countries?

Most oil-consuming countries have done a lot of homework already, and are

reaping the benefits today. They have deeper financial markets, better regulation, and better monetary policy. If oil-exporting countries were able to achieve the same, they would surely face far less difficulties.

BT: Do these include the new EU members?

No, those countries still face a lot of issues and high oil prices pose a lot of problems. The new EU members still use a lot of oil in manufacturing which, as I have already noted, causes far bigger knock-on effects for the economy than when oil is concentrated in transportation.

BT: Coming back to nationalization, how do you explain the recent string of nationalizations in the oil and gas industries?

It has been a long trend, and the situation differs by region. Middle East countries are rich in some dimensions but very underdeveloped in many others. They are still very much developing countries working on building institu-

tions and decentralizing the economy. When these countries took over control of their oil wealth from foreign oil companies a few decades ago, most of their citizens surely benefited enormously. But that day is past and now they need to think about how to expand their private sectors.

Russia is clearly a different case. Russia's chaotic privatization in the 1990s ended up in giving away a lot of the country's riches to a small number of people. This virtual theft of national resources has created all kinds of legitimacy and governance problems. The present-day government's desire to redress some of the resulting problems is very understandable, though reversion to state control is not a solution, either. I agree with Illarionov [former economic policy advisor to President Putin], who has made the point many times that countries with privately-owned oil tend to do better.

BT: How would you comment on the recent events in Venezuela and Bolivia?

In Latin America it is really hard to see any upside to the recent nationalizations. In Venezuela, oil output is now 60% of what it was before Chavez took control. It would have been better to improve the redistribution of income and enforcement of tax laws than to nationalize the oil companies. Bolivia's case is also problematic. It is a classic expropriation of foreign assets with a short-term gain but potentially very big long-term costs. Unfortunately, the recent nationalizations of energy resources in Latin America is a giant step backwards that will likely haunt the region for decades to come.

BT: There is much discussion in Russia today about what to do with the stabilization fund, which has accumulated over US\$60 bln. How do you think the fund should be best dealt with?

In general it is a good idea to set aside a portion of windfall gains from temporarily high oil prices. I hope the government ultimately finds a way to redirect some of its higher revenues towards achieving growth in some of the poorer regions, where infrastructure, health and education are all weak. Unfortunately, as has so often been the case through Russian history, a lot of money is ending up in Moscow, with a bit spilling over to St. Petersburg.

BT: One of the main arguments against using the funds is the risk of higher inflation...

In fact, saving money in an oil fund takes pressure off inflation, because it pulls resources out of the economy. Anyway, a faster rate of ruble appreciation would go a long way to solving Russia's double digit inflation problems, which are among the worst in the world. Many in Russia have the view that exchange rate intervention has been helpful in keeping the real exchange rate low, but I doubt the cumulative effect on the real exchange rate has been more than 10 — 15%. Instead, the main effect has been to force inflation to carry the burden of real exchange rate adjustment. This is not a desirable trade-off. By pursuing its current policy of very low nominal appreciation, all Russia gets is high inflation. Russia could get just as good growth by allowing the nominal exchange rate to appreciate. **BT**

World Crude Oil Markets: Monetary Policy and the Recent Oil Shock

An oil demand shock, caused by record low interest rates, led to the exorbitant price increases in 2004-2005

Noureddine Krichene

Crude oil prices rapidly increased from around US\$30/barrel (bbl) in 2004 to close to US\$70/bbl in September 2005, equivalent to an increase of about 133%. In spite of this rapid price increase, crude oil supply has been almost stagnant at 84 — 85 million bbl a day, implying that crude oil production has been seriously constrained by resources availability.

Oil price volatility was also high during the period. The implied volatility from crude oil call options reached high levels between February 2005 and September 2005, averaging about 30% and showing that the market was experiencing major uncertainty regarding expected price developments (see Figure 1). Volatility increased even further, rising to 40%, indicating that markets had become very sensitive to small shocks and to news. For instance, after temporary damage to U.S. oil refineries in the Gulf of Mexico caused by hurricane Katrina in September 2005, oil prices soared beyond the \$70/bbl mark.

Inelastic Demand, Rigid Supply

What are the basic properties of oil markets that cause high volatility in oil prices?

A simultaneous equations model applied quarterly (for 1984Q1 — 2005Q2) and annually (for 1970 —

2005) provides data supporting the hypothesis of low short-run price demand elasticity (ranging between -0.02 and -0.03), implying that changes in oil prices have a small partial effect on demand for crude oil. The volatility of oil markets and their vulnerability to small shocks is thus explained by the fact that energy consumption is determined in the short-run by fixed equipment and prevailing technologies and offers limited scope for substantial variation in relation to price movements. The long-run demand for crude oil is also price inelastic. Even though the long-run demand price elasticity is higher than the short-run one, it is still low, ranging between -0.03 and -0.08.

Short-run income elasticity ranges between 0.12 and 0.19, clearly demonstrating that oil demand is responsive to changes in economic activity. Higher economic activity would entail an increase in demand for oil.

Both the short-run and the long-run demand for crude oil are negatively related to the U.S. dollar nominal effective exchange rate (NEER). The NEER elasticity ranges between -0.03 and -0.09: an appreciation of the U.S. dollar would tend to make oil more expensive and would reduce the demand for crude oil. The interest rate tends to act negatively on the demand for crude oil; an increase in the interest rate would act to reduce the demand for crude oil and vice-versa. Changes in interest rates are

not transmitted instantaneously to the economic activity and prices; their effect is known to work with a delay.

The short-run supply of crude oil is price inelastic. Producers do not expand output in the face of a price increase because of short-run capacity constraints, quota fixation, or to preserve significant price increases. Similarly, producers do not reduce output in the face of large declines in prices. In some circumstances of depressed oil prices, oil producers may supply more than the quotas in order to generate badly needed budgetary revenues. Short-run crude oil supply is significantly influenced by natural gas production. Short-run elasticity ranges between 0.11 and 0.26. For this reason, an increase in natural gas production may be accompanied by an expansion in crude oil production.

Long-run price elasticity remains low at 0.08, implying that long-run oil supply is determined by technological factors and discoveries, and is less responsive to prices. Natural gas continues to play an important role in the supply of crude oil. These two products were perfectly correlated over 1970 — 2005.

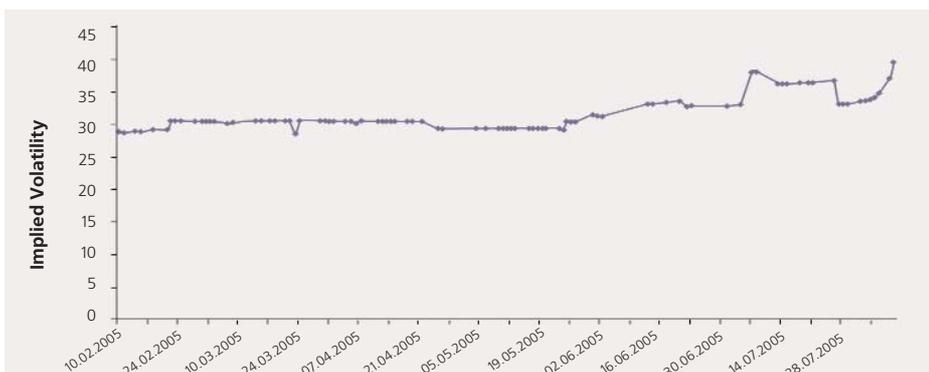
Thus the basic properties of the oil markets are the combination of low price, high income elasticities, and rigid supply that explains high and persistent volatility in the oil markets and the market power of producers.

Two-Way Causality

During 1970 — 2005, three epochs can be distinguished:

- The oil supply shocks of 1970 — 1986, with the oil price peaking at US\$41/bbl in 1980. As a result, world inflation rose to two-digit levels, averaging 10.1% during 1974 — 81. Monetary policy had to be deployed to cope with the oil shock and the oil-induced inflationary pressure. Interest rates kept chasing oil prices and peaked only after oil prices had reached a peak. Indeed, the federal funds rate peaked at 19.08% in 1981. Because of high interest rates, the

Figure 1: Crude Oil Implied Price Volatility, February — August, 2005



NEER appreciated significantly, making oil more expensive. Ultimately, world economic growth contracted sharply to a meager average growth rate of 0.8% during 1980 — 1982, forcing a sustained decline in both crude oil prices and the world inflation rate during 1981 — 1986.

- The period of relative oil price stability and stationary NEER during 1986 — 1999. Interest rates were, however, highly nonstationary, implying that monetary policy remained active and was mainly geared toward maintaining the growth and price stability momentum.

- The period of record low interest rates and a depreciating NEER during 1999 — 2005. Interest rates were ostensibly taking the lead over crude oil prices. The federal funds rate was maintained at 1% during 2003 — 2004. Crude oil prices started rising rapidly, exceeding the mark of US\$70/bbl in September 2005.

The relationship between crude oil prices, interest rates, and the NEER is characterized by a two-way causality, depending on the type of shock. During an oil supply shock, oil prices affect interest rates; whereas during a demand shock, interest rates affect crude oil prices.

Tight Monetary Policy Helps to Stabilize Oil Markets

During the oil supply shock period of 1974 — 1981, under stable oil demand conditions, oil prices led interest rates. Monetary policy was deployed to push oil prices down by forcing a downward adjustment in the demand for oil commensurate with the supply disturbances. Such an adjustment was brought about by substantial increases in real interest rates through targeting non-borrowed reserves. Interest rates increase by six percentage points for each 100% increase in oil prices. Indeed, the data show that

crude oil prices went up from US\$11.17/bbl to US\$40.97/bbl during the period, while the federal funds rate went up from 4.61% to 19.1%. During the declining phase of oil prices in 1982 — 1986 monetary policy was progressively eased in response to the abatement of the rise in oil prices.

The stabilization of oil markets requires a tightening of monetary policy and an increase in real interest rates

During the oil supply shock period, powerful actions on interest rates had to be undertaken to choke off oil price increase, thereby causing a severe contraction of world economic growth. These actions were reinforced by other measures that were simultaneously adopted to curb oil prices, such as high taxes on petroleum consumption, energy substitution and conservation, and technological change oriented toward higher energy efficiency.

During the demand shock of recent years, under stable oil supply conditions, interest rates led oil prices. Low interest rates caused excess demand for crude oil which fed into higher prices. Consequently, an important increase in real interest rates, similar to those experienced during the oil supply shock, might be required to bring demand in line with supply and contain the inflationary effect of high oil prices. This may cause a temporary contraction in world economic growth.

The model predicts that a 1% increase in income leads to an increase in crude oil output by 0.49% and crude oil price by 2.8%. Thus, an expansion of world economic growth could exert a strong upward pressure on oil prices. For natural gas production, a 1% increase leads to an increase of 0.30% in the crude oil production and a decline in oil price of

1.47%. An increase in the interest rate leads in the long-run to a decline in both crude oil demand and prices.

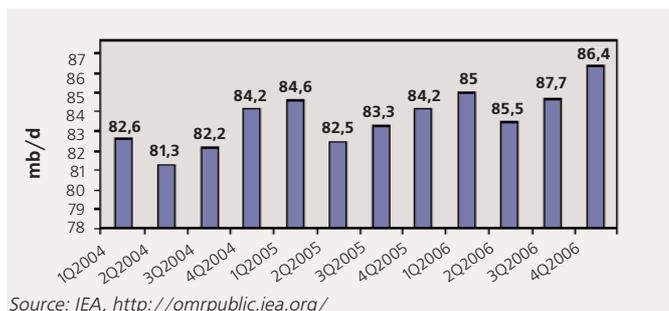
Thus, monetary policy, conducted through changes in interest rates and monetary aggregates, has a significant and protracted effect on aggregate demand for goods and services as well as on asset

prices such as exchange rates, housing and stock prices. The sustained pressure on oil prices observed in 2004 — 2005 can be explained by an excessively expansionary monetary policy, with interest rates falling to record levels in an integrated international capital market. Stimulated by low interest rates and a depreciating U.S. dollar, demand for oil has expanded faster than supply. Given the short-run price inelasticity of both oil demand and supply, equilibrium is obtained through a large increase in oil prices.

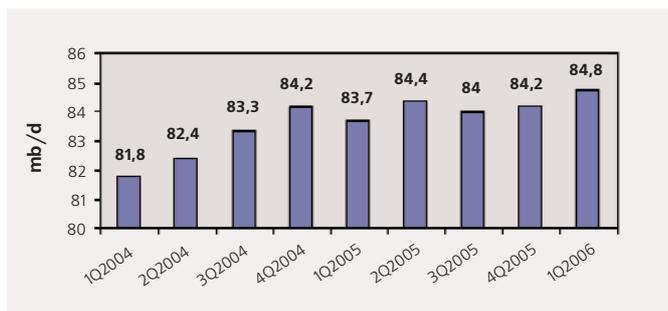
The main conclusion is that the stabilization of oil markets requires a tightening of monetary policy and an increase in ex-ante real interest rates. Based on data for 1970 — 86, the degree of monetary tightening to rein in oil prices and their inflationary implications may be substantial and may involve a trade-off between inflation and output. In the same vein, based on data for 1986 — 2000, sustained noninflationary world economic growth would require a degree of stability in oil markets.

Noureddine Krichene is an Economist at the IMF. The full paper can be accessed at: <http://www.imf.org/external/pubs/cat/longres.cfm?sk=18890.0>. The views expressed in the article are those of the author and do not necessarily represent those of the IMF. BT

Quarterly World Oil Demand



Quarterly World Oil Supply



The Oil Supply Potential of the CIS

During 1998 – 2004, the CIS accounted for 60% of the growth in global oil supply

Rudiger Ahrend and William Tompson

During 1998 – 2004, the Commonwealth of Independent States (CIS) accounted for 60% of the growth in global oil supply. The IEA expects the region's share of world supply will continue growing until 2010, albeit with Kazakhstan and Azerbaijan accounting for an increasing proportion of incremental CIS supply. The CIS appears set to remain the most important oil region outside the Middle East, though it is not destined to become a real rival or alternative to OPEC, whose market share is set to rise from about 40% in 2002 to 53% in 2030.

Market-Oriented Strategies Pay Off

During the 1990s, policies towards the oil industry in the three largest CIS producers — Russia, Kazakhstan and Azerbaijan — were all broadly market-oriented and largely reliant on private-sector initiative:

- Russia largely privatized its oil industry domestically to either oil industry insiders or financial groups. The state retained ownership only of infrastructure and some residual production and refining assets. Despite the impediments to foreign entry, the questionable nature of many privatization deals, and the conflicts between the new owners and the authorities, the sector that emerged from this process was very dynamic. Investment,

output and exports all began to recover rapidly following privatization, made possible by the application of new technologies in established fields and, in many cases, the employment of western oil service companies (see Graph).

- Kazakhstan and Azerbaijan opted for much greater foreign involvement, owing to their acute need for foreign capital and expertise after independence. Kazakhstan privatized its oil-sector enterprises and proceeded to develop its major fields on the basis of concessions and production sharing agreements (PSAs) with foreign investors. Azerbaijan also opted for PSAs involving foreign oil companies, albeit with the state-owned oil company a party to all of them. Thanks to the on-going development of major new fields by foreign consortia Caspian output and exports took off.

- The two minor CIS producers, Uzbekistan and Turkmenistan, opted for a third path, combining continued state ownership with little or no foreign involvement. The presence of alternative sources of export earnings (cotton) meant that developing their hydrocarbon sectors was not such an urgent priority. Both countries are relatively marginal producers at present and neither shows any sign of raising production in the coming years. Geological assessments, however, suggest that Turkmenistan may have much greater potential as an oil producer than is generally recognized.

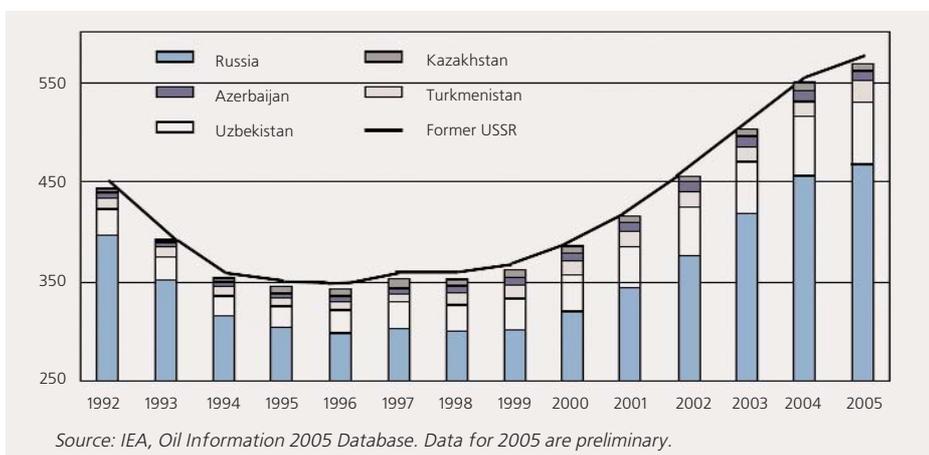
Greenfield Developments Needed for Sustained Growth

The trend towards increasing state control over oil and other "strategic sectors" in Russia casts doubt on the prospects for much-needed greenfield projects. The attack on Yukos revived uncertainties about the security of property rights even as the authorities increased the tax burden on the sector. Arbitrary official behavior has been evident in both tax administration and the administration of the licensing regime. Some increase in oil-sector taxation was certainly warranted, but recent changes have tended to aggravate the distortions created by Russia's profit-insensitive system of oil-sector taxation, which creates significant disincentives both to raising current production and to investing in exploration and greenfield development. At the same time, geopolitical rather than commercial considerations have gained importance in infrastructure policy. This has contributed to a tightening of transport constraints on exports, even as tax changes have made oil exports less profitable.

In Kazakhstan, too, friction between the state and private (in this case, foreign) investors has increased markedly in recent years, chiefly as a result of the state's increasingly aggressive interpretation of concession contracts and PSAs. A major contract term in the country's largest PSA was overridden by legislation, despite previous commitments to contract stability, and there have been repeated threats to force a renegotiation of major contracts. The new tax and regulatory regime adopted in 2004 – 05 is a major deterrent to new projects, as is the requirement that investors allow the state-owned oil and gas company, Kazmunaigaz, a 50% stake in any new project.

These policy changes have already contributed to a slowdown in oil-sector growth. Oil-sector investment fell sharply in Russia in 2004, soon followed by a sharp slowdown in the growth of output and exports. The impact on Kazakh growth has been much more muted, because many of the new measures apply only to projects undertaken

Production of Crude Oil and NGL (Millions metric tons)



from 1 January 2004. Even so, tougher regulatory policies do appear to have constrained production growth. Azerbaijan has arguably remained the most investor-friendly of the three states, and production there has boomed since the opening of the Baku-Tbilisi-Ceyhan pipeline in 2005. However, its long-term sustainability is in doubt, as a number of projects have been wound up after failing to find the anticipated volumes of commercially recoverable reserves.

Looking to the Future

The growing openness of both Uzbekistan and Turkmenistan to greater foreign involvement in their respective hydrocarbon sectors reflects a welcome awareness that they will need outside investment and technology to realize their potential. At present, both foreign policy considerations and the weakness of the investment environment suggest that this role will be played increasingly by Russian state-controlled companies and by the national oil companies of fast-growing consumer countries like China and India, which have been seeking to expand into the CIS and the rest of the developing world.

The trend in Russia and Kazakhstan is towards higher taxation, greater state ownership of oil-sector assets, and increasingly aggressive and arbitrary

administration of licensing and other regulatory regimes. Russia is now working to address the distortions created by its profit-insensitive system of oil-sector taxation, but the long awaited — and badly needed — reform of subsoil legislation has stalled. Greater state intervention is likely to result in more confusion and delay when it comes to major decisions, such as exploration and investment in greenfield projects. A common feature in both countries has been the weakness of the administrative, regulatory and rule enforcement capacities of both states, and the authorities' frustration at their inability to capture oil rents in an environment of very high prices. Yet it is far from clear that greater state ownership will ensure that the state does capture these rents. It may simply lead to their dissipation via poor performance and rent-seeking by insiders.

In late 2003, state-controlled companies in Russia accounted for about 17% of crude production. This figure has since more than doubled and could reach 45% by the time Yukos's assets are sold off. Given the poor performance of most Russian state companies with respect to cost control, productivity, corporate governance and innovation, this bodes ill for the future. Moreover, greater state ownership of oil-producing assets is likely to distort the incentives facing the remain-

ing private oil companies, because they fear unfair treatment when competing with large state-owned producers.

Given the sums already committed to existing projects, Kazakhstan is still well placed to deliver strong growth over the years ahead. However, major new projects are unlikely under the present tax and regulatory regime, and it is far from certain that the country will triple output by 2015 as planned, not least because of conflict with investors over the development of export infrastructure. Russia is another matter. It accounts for almost 80% of CIS production today and has considerable potential for further, albeit undramatic, growth. However, it faces a much greater risk than Kazakhstan of stagnating or even falling output over the medium term if significant new greenfield projects are not developed in a timely manner.

Rudiger Ahrend is an Economist and William Tompson is a Senior Economist at the OECD Economics Department. The article is based on the author's paper "Realizing the oil supply potential of the CIS: the impact of institutions and policies", available at: [http://www.oilis.oecd.org/oilis/2006doc.nsf/linkto/ECO-WKP\(2006\)12](http://www.oilis.oecd.org/oilis/2006doc.nsf/linkto/ECO-WKP(2006)12). The opinions expressed in the article are those of the authors and do not necessarily reflect the views of the OECD or its member states. **BT**

The Resource Curse and Media Freedom

In 1985, Mikhail Gorbachev faced a difficult dilemma. Without allowing free speech, the reforms of the highly inefficient bureaucracy and the command economy seemed all but impossible. At the same time, free flow of information would threaten the foundations of the Communist Party's rule.

Such a dilemma is quite typical for any autocratic ruler. In non-democratic societies, the ruler needs independent sources of information on the outcomes of his policies, such as free media. Otherwise he cannot provide incentives to the bureaucracy, which may result in poor economic performance and may eventually cost him his job. The ruler may choose to allow media freedom; however, independent media will provide all (even negative) information to citizens, thereby increasing risks of overthrowing the ruler. Alternatively, the ruler may build a secret service that would report on the bureaucracy directly to him. In this case, there is a risk of collusion between the monitoring organization and bureaucrats.

The trade-off between incentives for bureaucracy and the need to "divide-and-rule" via suppressing information flows is especially visible in developing countries with abundant natural resources. On average, such countries perform less

successfully than resource-poor countries. There is now an emerging consensus that the major reason for the resource-rich countries' slowdown in economic growth is institutions. Our theoretical model predicts a negative relationship, which should be especially strong in less democratic countries, between resource abundance and media freedom. In the presence of abundant resources, it becomes less important to provide proper incentives for bureaucrats, which in turn reduces the ruler's willingness to have free media.

The empirical analysis confirms theoretical implications: using Freedom House data on media freedom, Polity IV scores for democracy and autocracy, and BP data on oil reserves, we find that, controlling for the level of development and democracy, media are less free in oil-rich countries. The effect of natural resources on media freedom is especially strong in less democratic countries, while mature democracies are relatively safe from the adverse effect of oil.

Sergey Guriev is Associate Professor and Rector of New Economic School (NES), Moscow. Konstantin Sonin is Assistant Professor at NES. Georgy Egorov is a Ph.D. student at Harvard University. The piece is based on the working paper available at: <http://www.cefir.ru> (#63). **BT**

Management of Energy Resources in China

By 2030, China's fossil energy imports could reach 680 million tons of oil equivalent

Jiang Kejun

Due to rapid economic growth in China, total primary energy consumption increased from 400 Mtoe in 1978 to nearly 1.32 billion toe in 2004, with an annual average growth rate of 4.7% (see Figure 1). The major reason for the energy demand surge is the rapid expansion of energy intensive production. For example, steel output increased from 131 million ton (Mt) in 2000 to 297 Mt in 2004, other energy intensive products increased by similar amounts.

The World's Largest Coal Producer

- **Coal.** China is the world's largest coal-producing and coal-consuming country. Between 1980 and 2004, total raw coal output increased from 620 Mt to more than 1900 Mt, with an average annual growth rate of 4.8% per year. The heavy dependence on coal has led to serious environmental problems and is a burden for the transportation system.

- **Electricity.** The total installed capacity of electrical power generation increased from 66 gigawatt (GW) in 1980 to 440 GW in 2004, of which hydropower accounted for 23%. It is reported that 24 provinces out of 31 suffered from power shortage during the summer of 2004.

- **Oil.** Between 1980 and 2004, total crude oil output increased from 106

Mt to 175 Mt. Crude oil output in China accounts for 4.7% of the world total. However, due to the rapid increase of petroleum demand, oil imports are becoming a significant factor in China's energy supply. This has a significant impact on the international oil markets and Chinese oil companies' future strategies.

The recent energy demand increase has caused energy supply shortage and environmental problems. Recognizing the seriousness of the situation, the Chinese government has introduced various policies and regulations. Energy efficiency improvement and energy conservation are given high priority in the energy development strategy, as is the efficient and clean use of coal and other fossil fuels. The government has set up a target of 20% energy intensity reduction by 2010 compared with that in 2005.

Energy Demand 1.9-2.4 Billion Toe in 2020

We explore future energy demand, production and supply based on energy resource availability, environmental constraints, and develop three scenarios based on the global IPAC-Emission model and IPAC AIM/ Technology model for China. The models project future energy demand and output. The major assumptions include population

growth to 1.53 billion by 2030, and GDP growth by 8.2% until 2010, 7% between 2010 and 2020, and 5.6% between 2020 and 2030.

- The baseline scenario assumes growing international trade and increased globalization of China's economy. Therefore China will be able to rely on international energy markets and resource imports to meet part of its energy supply needs.

The results of the model show that primary energy demand in the baseline scenario could go up to 2.1 billion toe in 2020 and 2.7 billion toe in 2030. Coal remains the major energy source in China with a 58% share in total energy demand, but the natural gas share in the energy demand increases rapidly, from 4% in 2000 to 17.3% in 2030. Electricity demand almost quadruples to 451 Mtoe by 2030. Demand for oil products used in transport increases 5.5 times to 410 Mtoe by 2030, due to the rapid growth of the number of vehicles in China.

- The high demand scenario assumes a higher demand for energy in the future due to China's role as a global manufacturing center following WTO accession, which will bring more energy-intensive production to China, such as steel, non-ferrous products and building materials. At the same time, the scenario assumes growing technology transfer

Figure 1. Energy Production and Consumption in China

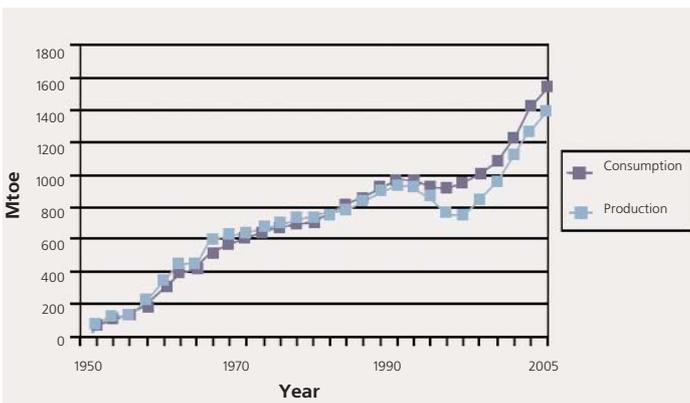
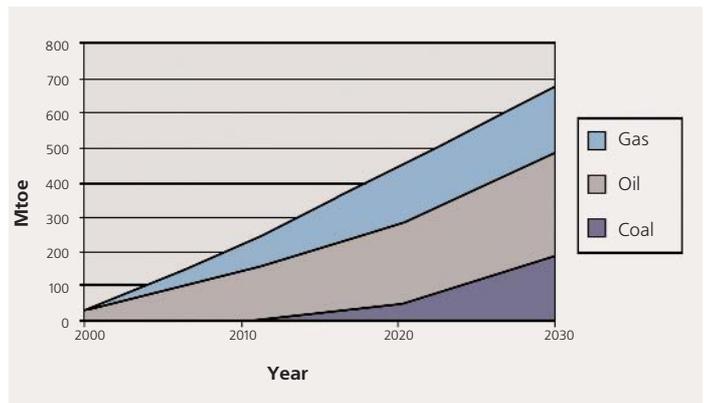


Figure 2. Energy Imports in High Demand Scenario



and the application of energy efficiency technologies.

This model results in primary energy demand reaching 2.9 billion toe by 2030, which is 250 Mt higher than the baseline scenario. Of the total primary energy demand, coal provides 59.1%, oil 16.1%, natural gas 17.8%, and nuclear energy 1.2%. Because this scenario assumes better integration in international markets, there is greater reliance on imported natural gas and oil.

- The policy scenario assumes the implementation of various energy and emission control policies and a lower energy demand, which reflects energy supply and environmental constraints. The policies include: end use technology efficiency promotion; introduction of energy efficiency standards for buildings; vehicle and energy taxes; renewable energy development; increasing share of public transport in cities; transport efficiency improvement and use of fuel-efficient vehicles; increased efficiency of coal fired power plants; enhancement of natural gas supply; and nuclear power development.

Compared to the baseline scenario, the energy demand would be lower by nearly 280 Mtoe by 2030. In order to achieve such a reduction in demand, this scenario requires timely implementation of the policies mentioned above.

Abundant Alternative Energy Resources

As for the energy resources, coal is expected to continue playing a key role in providing energy security for the country, but it will perhaps take a smaller share in the total fossil fuel resources compared to the current share of 96%. Natural gas has historically received less attention, but in the past two years three very large natural gas fields were discovered in

mainland China. Regarding hydropower, transmission from the hydro resource-rich south-west of China to the eastern part, and small-scale hydropower development are the main priorities. China also has good prerequisites for developing nuclear power. These include producing energy, supplying nuclear fuel, processing used fuels, and having the necessary technologies at hand.

As for alternative energy resources, biomass resources from agriculture, forestry and timber industries, and municipal waste have the potential for playing a decisive role in China's energy supply, with, as one example, wastes from agriculture potentially yielding nearly 80 billion m³ of biogas. With a large land mass and long coastline, China has relatively abundant wind resources for the further development of large-scale wind power. According to estimates by the China Meteorology Research Institute, land-based and ocean-based exploitable wind resources represent a potential power generation capacity of about 1,000 GW. China is already tenth in the world in terms of total installed wind power capacity and has 40 wind farms established.

Energy Supply Scenarios

Having simulated future energy production in China, we find that

- Coal production could reach 1.48 billion toe by 2030. Coal demand, therefore, could exceed domestic coal production in China.
- Oil production is projected to reach 175 Mt by 2030.
- Natural gas production is expected to reach 312 billion m³ by 2030.
- Nuclear power generation will increase quickly in the future reaching 344 TWh by 2030 (compared with 16.7 TWh in 2000), but will still represent a

small share of the total energy production, because of its high cost.

- Hydropower output will increase from 224 TWh in 2000 to 722 TWh by 2030, with capacity reaching 201 GW by 2030.

Consequently, the need for future fossil energy imports in the baseline scenario is 375 Mtoe annually by 2020 and 562 Mtoe by 2030. As a comparison, in 2000, the USA imported 870 Mtoe. Oil will top the energy imports, but even coal needs to be imported after 2020, with 129 million tons of coal needed annually.

In the high demand scenario, energy imports are much bigger (see Figure 2). Total fossil energy import will be 445 Mtoe by 2020 and 680 Mtoe by 2030. Even more coal needs to be imported in this scenario.

To ease the pressure on energy supply, well-designed energy strategies should be developed. These include development of new generation technologies, use of energy tax, resource tax and export tax for energy-intensive products in order to promote energy saving, development of renewable energy and the establishment of a diversified energy supply. Clean coal technology should be emphasized in order to mitigate emission from coal combustion. Due to low production costs China is likely to become the global manufacturing center relying on energy and resource-intensive production. This trend should be carefully controlled, and external costs to the environment should be included in production costs.

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Coordinated efforts by the international community can play a significant role in promoting energy security. An agenda for action could include the following key elements:

- Actively promoting more efficient use of energy in all economies through developing programs to agree broad sets of objectives and international benchmarking, and facilitate exchange of information and technologies;
- Facilitating the access and security of cross border energy investment and transit, so as to allow global and national fuel and supplier diversity;
- Building on the G8 commitment at Gleneagles to a low carbon economy and adaptation to climate change by integrating this with the energy security agenda;

- Supporting and strengthening initiatives by international institutions and others to support the poorest countries in their adjustment to short term energy price shocks, and, in the longer run, to make healthy, clean affordable energy available to all their citizens;
- Promoting transparency about energy resources, use and production through the whole energy chain, especially in the critical oil market, by supporting and supplementing current initiatives and approaches as needed.

Source: World Bank briefing paper: Energy Security Issues, http://siteresources.worldbank.org/INTRUSSIANFEDERATION/Resources/Energy_Security_eng.pdf **BT**

Caspian Oil: Changing the World's Energy Outlook

Competition from two new pipelines marks the end of Russian dominance on European energy markets

Yadviga Semikolenova

After the collapse of the Soviet empire, the Caspian states of Azerbaijan and Kazakhstan managed to generate a great deal of excitement over wildcat exploration of its poorly researched oil and gas fields. Despite falling oil prices, uncertain reserve sizes and a non-existent legal framework, an extraordinary volume of international investment poured into the region in 1997 — 1998. By 1999, over 20 oil exploration contracts were signed in Azerbaijan alone, which represented over US\$30 billion in long-term capital investment with some US\$2.5 billion in committed investment. In Kazakhstan, direct foreign investment in oil and gas amounted to US\$2 billion for 1991 — 1996. It was widely expected that the poorly explored, but high-potential Caspian oil reserves would change the world energy market and provide an alternative to Middle Eastern oil.

However, the expectations over Caspian oil turned out to be quite exaggerated and soon the Caspian hype was over. Most of the projects failed to find enough reserves to justify commercial development of the fields. After 1999, most contracts were either closed or put on hold; and, two oil companies, Arco and Conoco, decided to exit the region.

Caspian Oil Boom 1997–98: Information Herding?

The mid 1990s Caspian frenzy is difficult to explain.

- The size of the Caspian proven reserves was not significant enough to attract such a massive investment flow in such a short period of time. Azerbaijan and Kazakhstan's proven oil reserves were 3.6 and 10 billion barrels respectively, which were much smaller than, say, Russia's 56 billion barrels.

- The potential size of Caspian reserves was quite uncertain for prospective investors. The estimates of the upper boundary of probable reserves varied from the US Department of the Interior's approximation of 13.2 billion barrels in Azerbaijan to the estimate of 27 billion

barrels by the US State Department.

- World oil prices were falling when most oil companies entered the Caspian exploration projects in 1997 — 1998. By the time the oil prices recovered in 2000, the Caspian frenzy had died.

However, the dynamics of the Caspian frenzy may be explained by information herding. A lot of investors could have come to the Caspian region as a part of the herd that was created by available public information, such as investment decisions by first-comers to the region, the results of the first drillings, and various reports of credible agencies. The majority of the companies came to the region in 1997 — 1998, after the US Department of State released its high estimates of Caspian potential reserves, and after the first project moved to the development stage in November. The frenzy was over after the news of empty wells and closed projects became available in late 1998 and early 1999.

BTC: A New Energy Order?

Everything changed, however, in the spring of 2006 when the Baku-Tbilisi-Ceyhan (BTC) pipeline, connecting Caspian oil with the Turkish port of Ceyhan, became operational. A few days earlier natural gas began passing through the newly completed South Caucasus Pipeline (SCP), which will deliver gas to the Georgian and Turkish markets.

The talks about the possibility of an oil transit route bypassing Russia started as early as 1994. As part of a Production Sharing Agreement between Azerbaijan and BP signed in 1994, foreign investors were supposed to find an export route for land-locked Azeri oil. Several possible routes were looked at, included the Baku-Novorossiysk pipeline through Russia, Baku-Supsa to the Georgian Black Sea port, and BTC to Turkey.

Before 2003, none of the bypasses seemed threatening enough to affect the Russian regional monopoly on oil transportation. According to experts, the

existing Baku-Supsa route together with the Russian route to Novorossiysk could only have been expanded to transport 450,000 barrels of Caspian oil a day, not enough to transport Caspian crude when Azerbaijan's fields of Azeri, Chirag and deepwater Guneshli (AIOC contract lead by BP) would come to full production stage in 2007 — 2010 averaging 700,000 — 800,000 barrels per day. Thus, before 2003, it looked quite likely that after AIOC moved to the full production stage Russian pipelines would be the only export solution for the Azeri oil.

However, in late 2003 the threat of a bypass became much more credible. As oil prices were going up, the BTC Pipeline Company, formed in 2002 and led by BP, found enough investors to go on with the project. The following year, Azeri and Kazakh officials launched talks on directing Kazakh oil flows through BTC. In the fall of 2005 the pipeline was completed and in June 2006, the first BTC oil reached the Ceyhan terminal.

The competition of the Baku-Tbilisi-Ceyhan and the South Caucasus pipelines is a huge milestone marking the end of Russian dominance on the European energy markets. The pipelines will re-shape energy consumption and the geopolitics of the region. First, they will decrease Russian near-monopoly on energy transit from the Caspian states to global markets. Second, Russia will have to adapt to international competition, but the way it does so is difficult to predict. Third, European consumers now have access to Caspian energy avoiding Russia all together, both as an energy producer and transporter. Finally, Turkey will gain an important position on the European energy market as a new energy crossroads.

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BT

Vladimir Milov: "The state should leave the energy sector"

Vladimir Milov is President of the Energy Policy Institute in Moscow and a former Deputy Minister of Energy of the Russian Federation. He shared his views on energy security and the problems of the Russian gas sector with **BT's** Olga Mosina

BT: Energy security will be one of the key topics at the G8 Summit in St. Petersburg this year. What do Russia as a whole and Gazprom in particular, mean by energy security?

Because energy resources are highly unevenly distributed among different countries, it is fair to say that the concept of energy security varies from country to country depending on their resources or their access to resources in other countries. The term itself appeared in import-dependent developed countries after the Arab oil embargo in the 1970s, but a consensus understanding of energy security has never been achieved. Although Russia proposed the theme of energy security for the G8 summit a year ago I regret to say that during the past year the world has not moved any nearer to common understanding. Preparation for the summit has been an intellectual debacle and Russia, unfortunately, has only been able to offer the world a set of clichés that are removed from the real situation. Indeed, by our practical actions we merely compounded the uncertainty in this sphere.

BT: Why should countries be interested in achieving a consensus?

President Putin quite rightly wrote in his article in *The Wall Street Journal* last February that energy egoism does not pay. About three quarters of world energy resources are concentrated in some ten countries which produce a little over 5% of world GDP in purchasing power parity. The countries which produce more than 70% of world GDP own only 10% of oil and gas resources, which are gradually being depleted. Such a global imbalance is fraught with serious conflicts. Unless humanity creates a system that guarantees the stable supply of energy resources in required amounts from several resource-rich countries, we will face resource wars. I think it will depend in the



first place on the situation in such countries as Russia, Saudi Arabia and Iran.

The role of Russia in oil is not as global as that of Saudi Arabia, however, Russia controls more than a third of the world's proven gas resources and, if adding yet-to-be-found resources, then this figure may rise to almost 50%. The global gas demand will only be increasing: over the past 15 years gas consumption has been growing much faster than that of any other fuels in practically all the regions of the world.

At present, especially now that the state has gained control over key resources, primarily over Gazprom, Russia is behaving in a rather selfish way and claims special terms for the energy supplies into international markets. This violates a kind of tacit understanding with the West dating back to the times of the Soviet Union: we provide you with energy in return for very good money, an arrangement that earned the country the reputation of a reliable supplier. Now Russia wants something more. Today the Russian authorities say that they want to gain access to distribution networks in European countries in exchange for access to Russian resources. But what will they demand tomorrow? If all the resource-rich countries start behaving like this a serious situation may arise.

Energy security can be approached in a different way, namely, by finding a basis for a global consensus and offering long-term guarantees to resource-rich countries that they would be able to invest in energy with a minimum risk.

BT: What guarantees do you see? Long-term contracts?

I wouldn't like to speak about concrete mechanisms, there are many, and long-term contracts are the simplest of them. What is important is to recognize that producing countries need some commercially attractive terms for developing their resources, while the importing countries need guarantees that they will get enough resources on market terms. And no country will try to usurp resources or claim any special political privileges in the international arena.

BT: Many experts and investors are worried about declining production in Gazprom's main fields in Western Siberia. But its CEO recently struck an optimistic note at the world gas congress when he said that "in 2005 Gazprom registered the largest growth of gas resources since 1993." How justified are the fears of a possible shortage of gas and how serious can the consequences be for internal and external consumers?

The problem is not that Russia has no reserves in the ground: at current levels of production, the resources will last more than 80 years. There is a huge problem with the economic system and incentives to ensure timely extraction of the reserves from the ground and their delivery to market. In 1992, when Gazprom was created, the idea was mooted of creating several private independent gas companies that would compete among themselves. In the event, the advocates of a centralized system prevailed, their main argument being that only a powerful vertical-

ly integrated company could develop the giant gas fields. It is true that Russia has very large deposits, for example, just two of them on the Yamal Peninsula, account for more than 10% of all proven Russian gas resources. The problem is that 15 years later, Gazprom has only developed a draft feasibility study for one of the deposits, which was rejected last year because of the inferior quality of the materials. In my opinion, that is an indictment of Gazprom.

The very large gas condensate fields put into operation in the Soviet times, such as the Urengoy and Yamburg, which today provide the bulk of Russian output, are rapidly being depleted. All Gazprom can do in the near future in order to prevent a slump in production is to put nearby satellite fields into operation. But that potential will be quickly exhausted.

Gazprom's accrued investments in gas field development over the past seven years, amount to a mere US\$12.5 billion in current prices. As a comparison, investments in oil production reached US\$37 billion between 1999 and 2004, and the growth of oil production in recent years has truly been an investment growth. Gazprom, by contrast, prefers to invest in other projects. In previous years it prioritized pipeline construction (mainly export pipelines), and the purchase of assets in oil, power and petrochemistry industries.

Gas shortage is not a "prospect", it is already here. Because gas demand is highly seasonal, the shortage is visible only during peak periods, in winter. All consumers, both Russian and foreign, suffered during the last winter chills. The supply of gas to the power industry (the main consumer of gas in Russia) in several energy zones dropped to 15% of the agreed amounts on certain days. At the same time Gazprom could not provide enough gas for Ukrainian and European consumers. The Ukrainians, who have first access to the pipeline, could tap into gas supplies, but the Europeans missed out on substantial volumes of gas.

BT: Are Gazprom's real interests not in extracting gas, but its export, processing and sale?

Gazprom prefers to invest in strengthening its monopoly power. The company only has an annual budget and does not do long-term financial planning. Implementing long-term risky proj-

ects runs counter to the economic logic of the very existence of the company. Gazprom looks exclusively to short-term transactions, and it views borrowing not as a source of financing new projects but as a means to cover the cash gaps. One could perhaps understand Gazprom's difficulty in balancing the budget at times of payment arrears by Russian consumers and low gas prices in Europe. But today, with soaring prices in Europe

Gazprom prefers to invest in strengthening its monopoly power and looks exclusively to short-term transactions

and a threefold increase of domestic real prices in the last six years, the company is still barely making ends meet. In my opinion, it proves that Gazprom's economic system has no economic and investment logic, but is merely a tool in the hands of external and internal lobbyists. As a result, Gazprom invests in those projects that may bring profits to insiders or may increase its monopoly power and bring quick returns.

BT: What do you think of Gazprom's statements about exchanging assets with European companies?

It is a natural way of integrating Russian business into international business. Russian oil and gas companies established through privatization in the early 1990s are not competitive in the international market. They need access to new technologies and expertise in investing in complex long-term projects that large international corporations possess. The value of integration in which the interests of various nations intertwine lays the foundation for non-political, effective, and stable interaction between resource-rich and resource-poor countries. Integration with European companies would have been possible if our leaders did not meddle in pursuit of their own personal interests or attempt to control everything.

BT: Should the Europeans, then, be afraid of Gazprom investments in their gas distribution networks?

Gazprom is not perceived as the best agent for cooperation. First, the company has a host of internal problems and massive inefficiencies, which impedes the creation of alliances based on commercial considerations. Second, Gazprom is a

state-owned company and it is feared for political reasons. But Russia itself behaves in a similar way. For example, the state-owned Chinese CNPC was blocked from the Slavneft auction in 2002.

Gazprom brags about its agreement with BASF/Wintershall to sell a share in the South-Russian field, but so far it has been a one-off case and most probably an exception from the rule, especially since Wintershall has a long history of

relations with some Gazprom insiders. Gazprom has no other examples of successful partnership, and has so far been unable to agree with the German EON-Ruhrgas, Italy's ENI and Enel. The main reason for failing partnerships is Gazprom's political background.

BT: Could asset exchange lead to dividing up Gazprom? Or, because you are skeptical about cooperation as such, what future awaits the company?

I think Gazprom's future is even worse than the Soviet Union's in the late 1980s. I don't want to be a prophet of gloom and doom, but I think we will see a complete disintegration of the sector with very grave consequences for the gas market.

Gazprom holds licenses for huge fields which are not being developed. The sale of licenses or an equity share in companies that develop the fields to outside investors could solve the problem of Gazprom's accumulated debt and enable its restructuring. At the same time, outside investors could have an opportunity to quickly develop the fields.

In the meantime, Gazprom is insisting on keeping the controlling stake in every project which, given its present financial situation, decision-making process and general effectiveness, makes equity financing of major projects impossible.

The development of oil fields by private foreign investors, for example the Sakhalin-1 and Sakhalin-2 projects, has shown that assets that fall into private hands are already yielding returns. These projects seem to be fairly successful, unlike other major Sakhalin projects in which the state has chosen to be in the driving seat and where nothing has been happening. The state must leave the energy sector and open it up to foreign companies if there is to be any progress. **BT**

Human Capital and the "Resource Curse"

Intensive use of natural resources depresses growth in sectors employing workers with a high level of human capital

Natalia Volchkova and Elena Suslova

One of the main issues on Russia's development agenda is accelerating economic growth and creating an infrastructure capable of sustaining that growth. The so-called "resource curse", which refers to an empirical regularity suggesting that the economies of resource-rich countries on average grow more slowly than those of resource-poor countries, can be a major obstacle along that road.

Three Channels

Modern economics has three main groups of hypotheses regarding the channels through which the "curse" is spread:

- *The macroeconomic channel* is connected with the high resource price volatility in the world markets and the resulting volatility of GDP and national revenues of resource-rich countries, which may be a serious obstacle to achieving sustained long-term economic growth.

- The most frequently discussed *microeconomic channel* is the so-called "Dutch disease", which refers to the flow of production factors from the manufacturing industry into the sectors that produce goods exclusively for the internal market (primarily, the service sector) and extractive sectors, in response to growing incomes in the extractive sectors. However, empirical studies of many resource-dependent countries do not bear out the hypothesis of the negative correlation between the rate of long-term growth and volatility of trade terms, nor of the negative impact of the size of the extractive sector of industry on the size of the manufacturing sector. Studies of the dynamics of the extractive and manufacturing sectors in the Russian economy over the past 15 years has not provided any evidence of a "Dutch disease" in Russia.

- More and more scholars are inclined to think that the main obstacle to further development of resource-dependent countries are *insufficiently developed institutions*. However, in commodity-oriented economies, because of the high economic rent created in the extractive industries, institutional backwardness may make economic policy measures aimed at stimulating the econ-

omy counter-productive, still further increasing the country's dependence on raw materials.

A combination of a significant resource rent, poor property rights protection, undeveloped and imperfect markets and a poor legal system may be very destructive to economic development. Many of the civil conflicts in the 20th century stemmed from attempts to seize control of the rent; the fight for the rent entails corruption in business and the state, which substantially distorts resource allocation in the economy.

The availability of vast resources and the constant flow of revenue they generate are not conducive to creating incentives for the state to carry out economic reform, the streamlining of public administration and improving the quality of institutions. In other words, vast stocks of resource capital squeeze out the social capital.

Underdeveloped Human Capital ?

Our analysis of 44 countries and 11 sectors in the period between 1980 and 1990 warrants some conclusions regarding the development of human capital in resource-dependent economies and its impact on economic growth.

The hypothesis about the existence of this channel for the spread of the "resource curse", as a part of the institutional channel, is based on two premises. First, many studies point out that resource-rich economies sometimes tend to underinvest in human capital compared with resource-poor economies. Resource-intensive sectors in the economy absorb the bulk of investments in the economy without creating highly skilled jobs. This is a disincentive for both private and public sectors to invest in education.

Second, both the classical and new growth theories stress the importance of accumulating human capital for generating long-term economic growth. So, one can expect that resource-rich countries lose out to resource-poor countries in terms of the rate of growth because human capital in the former is not sufficiently developed.

Our approach to the study of the "resource curse" is based on the "difference-in-difference" method, which makes it possible to track down the difference in the growth rates of various sectors of industry in various countries while controlling for country and sectoral variables. Sectors of industry are ranged according to the particular sector's demand for human capital at a certain level, and countries are ordered according to the availability of natural resources.

Human Capital-Intensive Industries Suffer

Analysis has shown that the difference in the growth rates of the sectors that need a large number of workers with a high human capital level and the sectors that have less need for such workers is less in countries with a high share of primary exports. In other words, in the resource-rich countries the sectors that rely more on workers with a high level of human capital — and these are the petrochemical industry, engineering (other than electronics) etc. — are in a less favorable position compared, for example, with the food industry, than in resource-poor countries. The result has also been confirmed for yet another criterion of resource wealth, the production of oil and other hydrocarbons.

Summing up,

- Intensive use of natural resources suppresses growth in sectors that need workers with a high level of human capital;

- The more a sector depends on human capital the more it loses out at the hands of natural resource development.

The results undoubtedly stress the role of investments in education as a mechanism for overcoming the "resource curse".

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Energy Poverty in Macedonia and the Czech Republic

Energy poverty arises out of the inadequate co-ordination of energy, social welfare and housing policies

Stefan Buzar

Energy poverty is a condition where households are living in inadequately heated homes, which can mean that either the average daytime indoor temperature is below the biologically determined limit of 21°C, or that the amount of warmth in the home is lower than the subjective minimum which allows an individual to perform his/her everyday life.

Many countries in Central and Eastern Europe and the former Soviet Union have undertaken significant energy price increases, with the aim of removing the inherited price structure. As most governments have been unable to develop the necessary social safety net to protect vulnerable households from price increases, there is a danger that energy poverty may affect millions of households in the region

60% of the poorest Macedonian households would have to receive additional income to maintain their 1995 energy expenditure

leaving them with no option other than to cut back on energy purchase.

Energy poverty may create, and be perpetuated by, vicious circles between investment patterns, politics, and social deprivation. This is because the level of final useful warmth in the home is related to the energy efficiency of the built fabric, energy distribution installations, and domestic appliances. Patterns of energy poverty are thus contingent on levels of investment and maintenance of these capital stocks. In the countries where energy reforms have been slower, one of the reasons for the persistence of cross-subsidies is the fear that energy price increases may push significant numbers of households into domestic energy deprivation, thus causing social and political unrest. But the maintenance of below-cost pricing in the residential sector hampers investment in the capital stocks of energy efficiency, while encouraging wasteful energy practices.

The study of the institutional, spatial and social underpinnings of energy poverty in Macedonia and the Czech Republic relies on semi-structured interviews with

policy-makers, professionals, and households in the two countries, as well as analyzes of income and expenditure patterns, subjective perceptions of well-being, and assessments of housing quality.

Macedonia: Energy Poverty is a Lower- and Middle-Class Phenomenon

One of the main aims of recent Macedonian economic policies was the restructuring of the state-owned Electric Power Company of Macedonia that managed all of the country's electricity generation, transmission and distribution facilities. In order to prepare the state-owned electricity monopoly for privatization, household electricity tariffs

and disconnection rates were more than doubled during the 1990s. Yet the country failed to develop a comprehensive energy efficiency investment program in the residential sector. So far Macedonia lacks an adequate legal and institutional framework for the formulation and implementation of energy efficiency policies, as well as effective mechanisms to regulate the thermal efficiency of new housing. This is despite the fact that nearly all housing in Macedonia is private and owner-occupied.

The emergence of the energy poverty problem has transpired against the backdrop of a rapid increase in general poverty. The percentage of the population living under the relative poverty line now stands at nearly 30%, up from 4% in 1991. Yet Macedonia still lacks a targeted energy poverty-amelioration policy. The only mechanism is a relaxed disconnection policy tacitly implemented by energy utilities, who often allow residential consumers to continue using electricity or district heating despite months of non-payment. As a whole, these developments have led to a shift towards biomass (mainly wood) in

the national residential energy balance, so that approximately 70% of the population currently relies on it for domestic heating, especially in rural areas. District heating networks outside of the capital, Skopje, are almost completely nonexistent. In medium-sized towns without district heating, households have been forced to rely on electricity for heating, and the number of such households has grown to approximately 30%.

The demographic extent of energy poverty remains unknown, as there have been no direct surveys on the subject. However, the size of the problem can be estimated with the aid of the "compensating variation," which is applicable to national household expenditure surveys. This method quantifies the percentage by which household incomes would have had to change in 2004 in order for them to be able to retain the same ratio of energy expenditure relative to the national average in 1995, when energy prices were still relatively low.

It transpired that the 60% of households with lowest incomes would have to receive additional funds ranging between 27% and 1% of total equivalent income. At the same time, income would have to be "taken away" from the top 30% of households in order for their energy expenditure ratios to remain the same in 2004 and 1995. This means that the relative energy expenditures of better-off households have increased in comparison to the 1995 level, while the bottom 60% have been forced to cut back on their energy purchases (see Table).

The 60% figure is matched by surveys of subjective well-being, according to which only 38% of all households thought that they were able to keep their home adequately warm in 2003, although the share was 46% only three years earlier. Thus, energy poverty has a much wider demographic extent than statistically defined income poverty. The results of the compensating variation analysis also indicate that residential energy efficiency improvements have yet

to be felt among the wealthiest parts of the population. In normal circumstances, their energy expenditures would decrease as a result of more efficient installations and/or fuel switching.

Based on this analysis, as well as two smaller surveys undertaken within representative urban areas, the study found that the vulnerable strata to energy price increases include:

- The general low-income group: welfare beneficiaries, households headed by unemployed adults, households with several children, and families who depend on agriculture for all their income;

- Families who are at risk by virtue of their housing circumstances, mainly pensioners and families with young children. In their case, the emergence of energy poverty can be attributed, in part, to the poor energy efficiency of the home, and above-average daily energy needs.

Due to its contingency on a wide set of housing and social conditions, beyond simply low income, energy poverty is both a lower and middle-class phenomenon in Macedonia.

Czech Republic: Concentrated Patterns of Deprivation

In the Czech Republic, the implementation of energy reforms has resulted in the formal breaking up of the electricity monopoly. The state-owned Czech Electricity Company (CEZ) operates 10TW of generation capacity, mainly nuclear and coal-based. The high-voltage grid is run by a fully owned subsidiary of CEZ, while the distribution network is divided among eight regional electricity companies. Ownership of district heating network ranges from municipally owned to entirely private; the national gas transmission system is wholly owned and operated by a multinational energy company, which also maintains a dominant share in most gas distribution enterprises.

The country has been a leader in energy efficiency among transition coun-

tries, having established a wide range of capital investment programs. However, relative to other policies, energy efficiency support has been underfunded and its administration fragmented across several government departments.

In the housing sector, the state has attempted to use rent control as an across-the-board social protection mechanism. This has created an incongruous combination of below-market rent levels and distorted tenant-owner relations, which has negative effects on the maintenance — and, hence, energy efficiency — of the housing stock, as well as the spatial mobility of households.

Price rises in the Czech Republic have been far less dramatic in relative terms compared with Macedonia. Moreover, the country has a more diverse fuel mix in the residential sector compared to Macedonia. Gas stands for approximately 40% of total energy, with the remaining 50% split almost equally between electricity and heat.

The compensating variation analysis for the period 1995–2004 (see Table) indicates that Czech households have responded to energy price increases in one of three ways.

- The bottom decile has decreased its energy expenditure by 6% of monetary income, a sign of energy poverty. Indeed, the surveys of well-being have established that 8.2% of households are not satisfied with the level of heating in their homes.

- Deciles 2–6 have seen a relative rise in their energy expenditure, reaching as much as 49% in the third decile. Although this increase is probably related to the rapid growth of energy prices since 1995, the households may have allocated additional income for energy.

- The energy expenditures of the top four deciles have actually fallen since 1995, most likely due to the availability of cheaper and/or more efficient fuels, coupled with the improved tech-

nical quality of the residential stock.

Clearly, the Czech Republic has a more concentrated demographic structure of energy poverty, encompassing up to 10% of the population. Single parents, households with several children, and pensioners appear to be most vulnerable to energy poverty. Based on the available evidence, it can be concluded that the income dimension of energy poverty is stronger in the Czech Republic than in Macedonia, although housing infrastructures also play a role, especially in the case of pensioners.

Conclusions

A significant number of households in Macedonia and, to a lesser extent, in the Czech Republic, may be living in energy poverty, an emergent form of domestic energy deprivation in the post-socialist world. The problem may have extensive socio-economic ramifications across the region, as transition countries, while being located in cold climates, have been subject to energy price and income shocks, inefficient energy use, lack of policy co-ordination, and decaying infrastructures.

The reviewed evidence connects energy poverty to the poor co-ordination of energy, welfare, and housing policies in the relevant government departments. One of the main problems in this regard stems from the policy-makers' failure to perceive problems of social policy transformation, energy efficiency, poverty, and affordability in an integrated manner. The rise of domestic energy deprivation also appears to be related to the lack of a comprehensive system for domestic energy efficiency support in both countries.

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Energy Expenditures of Households per Income Decile

Decile	I	II	III	IV	V	VI	VII	VIII	IX	X
Macedonia	6.1%	-2.7%	-48.6%	-44.4%	-13.9%	-10.4%	18.0%	25.3%	14.8%	2.3%
Czech Republic	26.8%	13.9%	9.3%	6.4%	3.8%	1.1%	-0.1%	-2.5%	-0.7%	-6.0%

Note: Author's calculations of the compensating variation values between 1995 and 2004, per equivalent income decile, are calculated based on data from the Household Expenditure Survey (Macedonia), and Family Budget Survey (Czech Republic).

The Productivity Effects of Services Liberalization in the Czech Republic

Restrictions on foreign presence in services industries can dampen the productivity growth in manufacturing industries

Jens Arnold, Beata S. Javorcik and Aaditya Mattoo

While there is considerable empirical evidence on the impact of liberalizing trade in goods, the effects of services liberalization have not been empirically established. Services such as telecommunications, finance, consulting, insurance, or transport are an essential part of a wide range of manufacturing and services industries. Large gains could potentially be achieved in the quality and availability of services through the liberalization of service sectors. Given the limited scope for using cross-border trade to substitute for domestically produced services inputs, one would expect the performance of downstream sectors to be tied more directly to the quality and availability of services supplied by providers operating domestically than is the case for physical intermediate inputs. The results of our study, based on detailed firm level information, suggest a positive association between the extent of policy reform in services industries and the productivity of the manufacturing sectors using services inputs.

The Czech Republic introduced far reaching service industry reforms including opening the sector to foreign

investors. During 1998 — 2003, inflows of foreign direct investment (FDI) into Czech service sectors have consistently been higher than inflows into manufacturing industries (see Figure 1).

By inducing the entry of new domestic or foreign providers, the liberalization of service industries is likely to increase the choice of providers for downstream users of services. This may improve the quality of services available to firms. For instance, international phone communications or electricity provision may become more reliable due to investment in infrastructure by new domestic owners or foreign shareholders, or credit decisions may be made faster as competition among banks increases. This will in turn limit disruptions to production and decrease the operating costs in downstream manufacturing sectors.

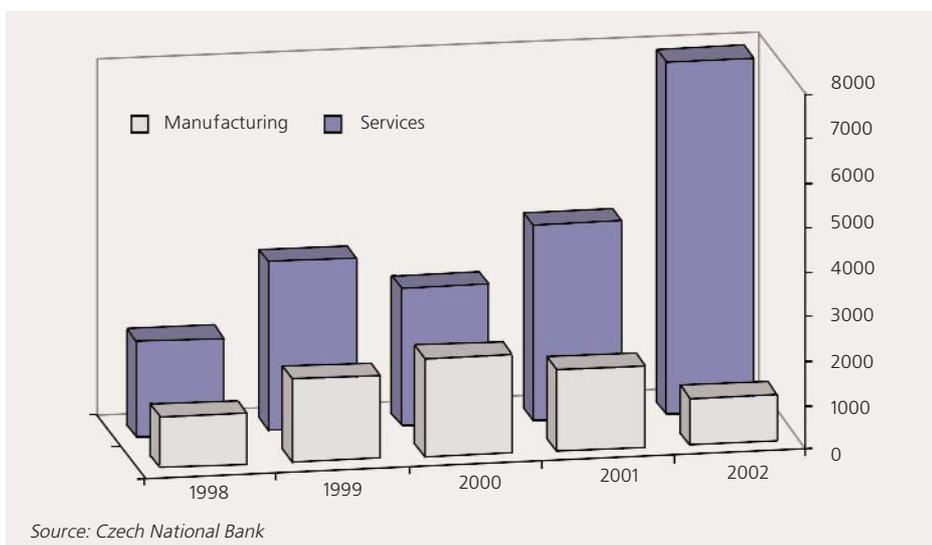
Additionally, new services may become available with the introduction of international best practice. Examples include new financial instruments and cash flow management tools, multi-modal transport services, or digital value-added services in telecommunica-

tions. The availability of such services may allow manufacturers to introduce productivity-enhancing changes to their operations, such as receiving production orders online or setting up online bidding systems for suppliers.

The entry of foreign providers may play a particularly important role. Foreign providers can bring know-how and knowledge about new products and international best practice into the country. By setting a higher standard and introducing new products, they may also induce domestic suppliers to make similar improvements. A large Austrian-owned bank, for example, was the first bank to offer remote banking services via phone or internet, and 70,000 Czech customers signed up for the new service within the first two months. The service now has about 800,000 users and other banks have started to offer similar services.

In telecommunications, the Czech Republic was lagging behind all its western European neighbors with respect to the use of cellular phones in 1998, which is the first year considered in our analysis. By 2003, however, it was second only to Italy and Sweden with respect to the number of cell phones per 100 inhabitants.

Figure 1. FDI Inflows into the Czech Republic 1998 — 2002 (Millions of Euros)



Liberalization Improved Quality, Affordability and Availability of Services

The potential positive effect of liberalization and foreign presence in services sectors is reflected in the results of a firm survey conducted by the World Bank in the Czech Republic in 2004. A majority of the 350 Czech enterprises interviewed believed that the liberalization of service industries contributed to improvements in the quality, range and availability of service inputs in their country. Figure 2 shows the perceptions of Czech firms with respect to the liberalization of the telecommunications sector. Similar results (not reported here) were obtained

for banking, accounting, insurance, and transport services.

A closer look at service industries in the Czech Republic reveals substantial differences between domestic and foreign-owned services providers. Foreign-owned providers exhibit higher labor productivity than their domestic counterparts and have a higher propensity to

Policy reforms, the presence of foreign service providers and the extent of privatization in the service sector are correlated with each other

invest. The data also documents increases in productivity and investment taking place following foreign acquisitions of Czech services firms. Moreover, the data show that following a foreign acquisition, target firms experience an increase in their market share, indicating a revealed consumer preference for the services provided by foreign-owned companies.

To examine the link between service sector reforms and the performance of services users this study tests the reliance of each manufacturing sector on each service sector, assessed on the basis of the national input-output matrix, as a weight to reveal manufacturing sectors' exposure to services reform. These weights are then used to relate total factor productivity in manufacturing firms to the state of liberalization in service sectors. The analysis is based on firm level data from Amadeus, a commercial data base including financial statements and ownership information for approximately 10,000 Czech companies for the period 1998 — 2003.

The study uses several proxies to capture the extent of liberalization in service sectors. The first measure is a set of policy reform indices published by the European Bank for Reconstruction and Development. Time-varying indices are available for banking, telecommunications, electric power, railway transport, road transport and water distribution. The indices reflect the overall state of policy reform in a given service industry. The other measures capture particular aspects of liberalization: (i)

the extent to which foreign investors have entered Czech service industries, proxied by the share of an industry's output produced by foreign-owned companies; (ii) the progress of privatization in service industries, proxied by the share of an industry's output produced by private companies; (iii) the level of competition in service industries, measured by

the market share of the four largest providers.

In addition to proxies for services liberalization, the empirical analysis includes a comprehensive set of controls for other channels through which increased openness may affect firm performance. In particular, we control for the availability of material inputs provided by foreign-owned companies operating in upstream manufacturing sectors and for tariffs on imported intermediate inputs. To capture the level of competition in the output market, we control for foreign presence and tariff protection in the same sector. The empirical specification further includes firm fixed effects which control for unobserved firm heterogeneity and capture time-invariant effects specific to the industry and the region in which a firm operates.

Foreign Presence in Services Positive for Manufacturing Productivity

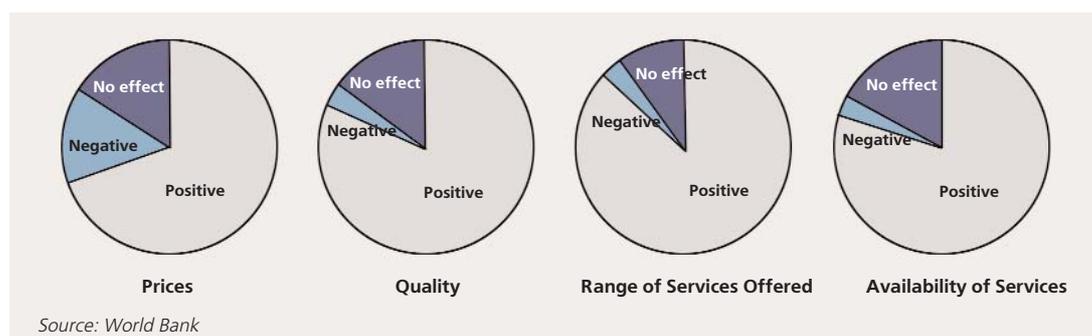
The results demonstrate a positive correlation between liberalization in service sectors and the productivity of manufacturing firms relying on services inputs. A positive and statistically signif-

icant relationship is found for the policy reform index, the presence of foreign providers in services sectors and the extent of privatization in service industries. The relationship between the presence of foreign providers in service sectors and the performance of manufacturing firms relying on services inputs is the most robust, suggesting that opening service sectors to foreign providers may be a key channel through which service reforms affect downstream productivity in manufacturing. The results consistently show an association between service sector liberalization, and in particular FDI inflows into these sectors, and the improved availability, range and quality of services, which in turn contribute to improved performance of manufacturing firms using services as inputs.

As reflected in recent policy debates in the European Union and the World Trade Organization, the liberalization of service sectors has been a highly controversial subject. Most of the barriers to foreign investment today are not in goods but in services, reflecting the unwillingness of governments, particularly in developing countries, to allow unrestricted foreign presence in what they believe are "strategic" sectors. Our analysis suggests that such restrictions on foreign presence in producer services can seriously dampen the growth of productivity in downstream manufacturing industries.

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Figure 2. Firm Perceptions about Service Reforms in the Czech Republic
Perceived Impact of Liberalization of Telecommunications Sector on:



The Media's Effect on Corporate Governance in Russia

The coverage of a corporate governance abuse in the Anglo-American press affects the probability of the company changing its behavior

Alexander Dyck, Natalia Volchkova and Luigi Zingales

In two Russian companies, Sidanco in the oil and gas sector and MGTS in telecommunications, large shareholders attempted to dilute other shareholders by issuing shares below the market price to insiders. The oil company's actions received significant coverage in the international business press, and later the Security Market Federal Commission canceled the share issue. The telecom company received much less media attention, and the issue subsequently went through. Can media reporting indeed trigger a change of action?

The media can matter in cases of corporate governance violations by affecting the reputation of the parties involved. This is an effective constraint only if the audience that we care about for our reputation becomes informed. Very often, however, the relevant audience does not find it in its interest to collect information about the behavior of corporate managers and/or politicians, unless this information is not costly to obtain or it is packaged in a way that makes it entertaining. Only when this occurs do corporate managers find it worthwhile to develop a reputation of acting in the interests of shareholders. The same is also true for the regulators who are supposed to enforce corporate governance rules: they are more likely to enforce these rules when they know a large audience is watching.

The data on Russia is very suitable for studying the media's effect on corporate governance. First, during the late 1990s corporate governance abuses in Russia were very extreme, very common, and very visible. Second, in Russia the standard mechanisms to redress these abuses were either non-existent or completely ineffective (for example, corruptible courts), which allows us to identify whether media had an independent effect on outcomes. Third, and most important, in Russia there exists an investment

fund, the Hermitage Fund, that consciously employs a strategy for using the media, which allows us to test whether the effect of the media is causal.

Founded in 1996 as a generic hedge fund with a Russian focus, the Hermitage Fund found itself drawn into corporate governance battles. As the largest foreign investor in Russian equities, it could not remain passive in front of major corporate governance abuses. With weak legal remedies at its disposi-

In Russia, there exists an investment fund, the Hermitage Fund, that consciously employs a media strategy

tion, to protect its investments the Fund chose to actively shame Russian companies in the international press, hoping to hurt their reputation and that of the government officials who regulated these firms. But the Hermitage Fund has an incentive to act only for companies it owns shares in.

A case study of the two companies mentioned above is quite illustrative of the relation between the Hermitage Fund and press coverage. While in both large shareholders attempted to dilute other shareholders, the companies differed in owners: Hermitage had a significant stake in Sidanco, and no stake in MGTS. We find that Sidanco's actions were reported in 23 news articles, 14 of which were in credible international publications (9 in the Financial Times, 4 in various editions of the Wall Street Journal and 1 in The Economist). By contrast, MGTS had only 3 articles in credible international press (all in the Financial Times). In the Sidanco case, the dilution was reversed, in MGTS it went through quickly.

Out of 57 Violations, 17 Redressed

We took an initial sample of 250 potential corporate governance viola-

tions between 1998 and 2002 from descriptions of events published in a corporate governance weekly by Troika Dialog, a prominent Russian investment bank. We have only focused on those events that had the potential to significantly harm the interests of minority shareholders, and where the proposed action could, in principle, be limited through actions by minority shareholders and allies, leaving us with 57 events. For 24 of these, for which we have reli-

able stock price data, we confirm the correctness of our assessment by the stock price reaction. To the extent that the corporate violation is a surprise, it should have a negative impact on stock prices. Indeed, the response was overwhelmingly negative, with a mean decline in cumulative excess returns of 15.3%. As for the actual outcomes, there was a positive outcome in terms of a significant redress or partial redress in 17 of these 57 cases.

Foreign Press Coverage Has an Effect

The first question we address is whether press coverage has any impact on the probability that a corporate governance violation is partially or completely redressed.

In a country where legal remedies are not available, the only source of leverage against these violations is international reputation, which we try to capture through three proxies:

- The percentage of foreign ownership in the firm;
- The presence of the European Bank of Reconstruction and Development (EBRD) among the company's lenders;

- The number of joint ventures between a company and foreign partners. Of these, only the presence of the EBRD as a creditor has a significant impact on outcome, increasing the probability of full redress by 18 percentage points.

- When adding a measure of foreign press coverage (number of articles published in the Financial Times (FT) and Wall Street Journal (WSJ) in the two months following a violation) to the basic specification, press coverage has a positive and statistically significant effect. One standard deviation increase in the number of articles published in foreign newspapers increases the probability of full redress by 10 percentage points.

Publication in WSJ seems to have more impact: one standard deviation increase in the number of WSJ articles increases the probability of a good outcome by 10 percentage points versus 1 percentage point for FT articles. Newspapers in Russian, even when credible, do not seem to play much of a role. Hence, we infer that the main source of leverage is the access to an international audience.

The presence of the Hermitage Fund among the shareholders more than triples the average coverage and emphasizes the causality of the effect — media coverage has a direct effect on corporate governance.

Media Pressure Leads a Regulator to Intervene

What are the main mechanisms through which the press could have an effect? When grouping the positive out-

comes according to the main force behind a reversal, we find that:

- Roughly 30% of the cases reach (at least partially) a positive outcome as a result of the intervention of a regulator. What does press coverage have to do with the decision of a regulator to intervene? By overcoming ignorance press coverage makes more people aware of the issues involved, increasing the reputation costs of non-action.

- Another 18% of the cases get resolved because of political intervention. In a typical democracy, politicians would feel compelled to intervene on highly visible issues because their politi-

Publications on corporate governance abuses in the Wall Street Journal have more impact compared to other media outlets

cal reputation is at stake. In Russia the important factor is the reputation vis-a-vis foreign, in particular Anglo-American, investors.

- In another 24% of the cases, a more positive resolution is due to the fact that press coverage strengthened the already existing opposition. For example, in the truck maker KamAZ case, the EBRD was fighting the share dilution approved by the company. Press coverage strengthened the EBRD case because it increased the awareness of investors and in so doing increased the reputation cost of misbehavior.

- In the remaining 24% of the cases, it looks like the company voluntarily changed its course of actions, and it is more difficult to establish media's role.

In sum, it looks like the primary mechanism through which media coverage has an effect is by increasing the reputation cost of misbehavior vis-a-vis a relevant audience (in this case Anglo-American investors). Obviously, the success of the strategy is highly dependent on the importance the key actors attribute to their reputation in regard to this audience. Thus, our findings might be contingent to the particular period Russia was living through shortly after the default on its public debt, when it was particularly concerned with restoring its international credibility.

Thus, by interacting with developing

countries the developed countries can exert a positive influence not only in public governance, but also in corporate governance. Since politicians and businessmen are eager to "look good" in Anglo-American public opinion, they can be levered into improving their governance standards.

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Corporate Governance, Growth and Development

The literature identifies several related channels:

- Increased access to external financing by firms, which can lead to greater investment, higher growth, and more employment creation. Financial and capital markets are better developed in countries with strong protection of property rights.

- Lower cost of capital and associated higher firm valuation, which makes more investments attractive to investors and leads to growth and employment. Outsiders are less willing to provide financing and more likely to charge higher rates if they are less assured that they will earn an adequate rate of return.

- Better operational performance, through more efficient management, better asset allocation, better labor policies, or similar efficiency improvements, which creates wealth.

- Reduced risk of financial crises, a particularly important effect, as financial crises can impose large economic and social costs. During the East Asian financial crisis, cumulative stock returns of firms in which managers had high levels of control rights but little direct ownership were 10 — 20 percentage points lower than those of other firms.

- Better relationships with all stakeholders, including banks, bondholders, labor, and local and national governments. Each of these groups monitors, disciplines, motivates, and affects management and the firm in various ways. This helps improve social and labor relationships and areas such as environmental protection.

Source: Stijn Claessens, "Corporate Governance and Development", <http://www.gcgf.org/lifcext/cgf.nsf/Content/Reports> BT

Is there a "Glass Ceiling" in the Czech Republic?

Of Czech executives only 7% are women, and they earn 20% less than their male counterparts

Stepan Jurajda and Teodora Paligorova

There is growing evidence that in the Czech Republic women face a "glass ceiling" — a barrier to career prospects, which precludes them from achieving high-paying positions and having equal wages with men especially in the upper part of the wage distribution. Analysis of managerial gender gaps is particularly significant in the post-communist economies of Central Europe, where firm personnel strategies and corporate governance are converging towards Western standards.

Our study of Czech managerial employees covers not only top executives, but also mid-level managers and employees, thereby allowing us to link the relative position of women across firm hierarchy levels. We classify chief executives and directors as top-level managers, and production and specialist managers and supervisors as lower-level managers. We use data from a national employer survey, the Information System on Average Earnings, from 2000 to 2004. We work with salary information only, as data on total compensation is not available. The data do not cover the public sector (education, health and public administration), where wage determination follows budgetary rules and is based on wage grids. In our analysis we focus only on large firms with more than 250 workers. The total sample includes wage records of 1,692 top-level managers and over 36,000 lower-level managers.

Lowest Gender Wage Gap in State Firms

Top-level managers in our data make on average 2.69 times more per hour than lower-level managers who, in turn, enjoy wage rates 2.46 times higher compared to those of ordinary employees. How well are women represented among these high-paid groups of workers? If the gender of

managers was assigned randomly in a fashion reflecting the overall employment patterns, the share of female managers would be around 46%. In contrast, our data show that only 7% of top managers are females, while women constitute 32% of all lower-level managers. Female top-level managers make on average 41% less per hour than their male equivalents, while the gender wage gap of ordinary employees is 22%.

Women are relatively highly represented among younger and especially

State-owned firms have the lowest gender wage gap and more women at the top of the firm hierarchy

among less educated top managers — though these groups of managers are also the least highly paid. Among lower-level managers, the wage gap is small among highly educated people, though in this group there are also relatively few women. The representation of women and the gender wage gap are more equalized among ordinary employees.

A cross-country comparison of the relative gender employment among managers of large firms (occupation group 12 of the ISCO-88 classification), using data from household surveys harmonized in the Luxembourg Income Study, shows that the share of female managers of large firms varies widely from 17% in Belgium to 43% in the USA. The hourly pay gap, defined as the ratio of female to male average wages minus one is high in Russia, Spain, and the U.S., and the smallest for Ireland and Slovenia. In the Czech Republic females constitute only about 23% of the ISCO group 12 of corporate managers and the corresponding gender pay gap, at 24%, is then close to the average gap of this sample of countries.

Stepan Jurajda, Teodora Paligorova, "Female managers and their wages in Central Europe"

In looking at patterns of employment and wages across firm ownership types, sizes, and industrial sectors we find that state-owned firms have the lowest gender pay gap and more women also feature at the top of the firm hierarchy. Dividing firms into four quartiles by size (total employment) demonstrates that females are more likely to be at the top of the few very large firms. Finally, the "femaleness" of the top brass is highest in the relatively low-paying retail and transport and communication industries,

where 38% of all female executives work. The gender wage gap for top managers fluctuates across all industry branches, but is particularly high in the retail industry.

Shifting attention to lower-level managers, female representation in the managerial workforce is highest in state-owned and very large firms, similar to the case with top-level managers. The gender wage gap is relatively more equalized across firm types compared to the higher level positions, and again, the retail and transport industries have the highest share of women.

Thus, at 7% women are severely under-represented in top managerial positions, and there is a clear gender divide between lower and top-level managerial ranks. The fact that the average pay gap between men and women increases with firm hierarchy level suggests an increasingly female-unfriendly environment as workers progress towards higher levels.

Can We Account for the Sources of the Wage Gap?

To what extent can the gender wage gaps be explained by the gender employment patterns and differences

in demographic characteristics of managers?

Using the traditional Oaxaca-Blinder technique, we find that approximately a third of the gender wage gap for both top and lower-level managers can be explained by the gender differences in age and education. This is in contrast to the situation with ordinary employees, where the demographic composition of the workforce is actually more favorable for women. We also find that female managers, both at top and lower-levels are more often found in less "generous" firms. Yet, the analysis suggests the presence of a sizeable "unexplained" compo-

Among the five highest-paid managers in Czech firms there are 9% females, who are paid 74% of their male counterparts' wages

nent of the managerial gender wage gap. Using matching decomposition techniques, we find that this "unexplained" wage gap (for men and women comparable in terms of demographics and employer type) is about 20% in each employee group; this includes both types of managerial posts as well as ordinary employees.

Next, we link the relative position of women across our three firm hierarchy levels. We find that there is a statistically strong positive link at the firm level between the fraction of women at all three hierarchy levels, and a negative link between the gender wage gap at a given hierarchy level and the presence of women at other levels. These results are in accord with those Bell (2005) reports for the U.S.; they are consistent with Czech firms differing in a systematic way (within industry and size categories) in how friendly they are to women. The estimates particularly support the notion

that lower-level managers are promoted from among the employees.

Putting the Czech Glass Ceiling into International Perspective

In order to compare the Czech managerial gender gap to the U.S. one (specifically, to the Bertrand and Hallock 2001 study), we examine the five highest-paid managerial employees from each firm in a sample.

The share of females among the five highest-paid managers in each of the Czech firms in our sample is 9%, which

compares favorably to the recent 6% in the U.S. The ratio of female to male pay among the Czech managers is 74%, which is comparable to the 73% ratio for the U.S. However, the U.S. gap, based not on salary but on total compensation, is larger at 67%. Comparing the combined group of top and lower-level Czech managers to the U.S. ones, the Czech raw wage gap appears about a third smaller.

How does the structure of the Czech wage gap for the highest-paid managers compare to that estimated in the U.S.? About a fifth of the Czech gap can be accounted for by the lower participation of women in higher-paying firms, compared to about a third in the U.S. In the Czech Republic, 74% of the five highest-paid female managers work in the smallest firms. The occupational structure of female managerial employment explains a substantial part of the overall gender compensation differential in both economies. Unfortunately,

the Czech data do not allow us to fully identify the CEO, which may be one of the reasons why the Czech "unexplained" gap remains higher than the U.S. one.

Overall, we find the relative position of women at the top of U.S. and Czech firms quite similar. We also conclude that the size of the Czech gender wage gap that cannot be linked to observable differences between men and women and their employers is quite similar across firm hierarchies. To the extent that this conditional wage gap can be interpreted as on-the-job discriminatory wage setting, this suggests that women are treated similarly at the top and bottom of firms, once they are there. A large part of the average wage difference across genders among top managers is related to the different types of firms that women and men typically head: female employees tend not to be present at the top of the highest-paying companies. The policy implication of these findings is that equality-enhancing policies aimed at the highly visible group of executives are more likely to be effective in equalizing wages of male and female top managers if they focus on promotion policies in the most prestigious companies.

Stepan Jurajda is the Deputy Director for Research and Associate Professor at CERGE-EI, Prague. Teodora Paligorova is Junior Researcher and a Ph.D. student at CERGE-EI. The full text of the paper "Female managers and their wages in Central Europe" can be accessed at: <http://www.cergeei.cz/pdf/wp/Wp296.pdf>. This research was part of the EU Equal project "Fifty-Fifty: Equal Opportunities for Women and Men" and was co-financed by the European Social Fund of the EU and the state budget of the Czech Republic. **BT**

Female Legislators, Senior Officials and Managers (% of total) in Some Countries

Country	%	Country	%	Country	%
Philippines	58	Germany	36	Bulgaria	30
Fiji	51	Hungary	34	Georgia	28
Tanzania	49	Poland	34	Czech Republic	26
United States	46	United Kingdom	33	Hong Kong, China (SAR)	26
Latvia	40	Slovenia	33	Japan	10
Moldova	40	Romania	31	Turkey	6
Russian Federation	39	Mongolia	30	Pakistan	2

Note: Data refer to the most recent year available during the period 1992 – 2003.

Source: calculated on the basis of occupational data from ILO (International Labour Organization) 2005. <http://hdr.undp.org/statistics/data/indicators.cfm?x=240&y=2&z=1>

Foreign Ownership vs. Production Efficiency

In China and Ukraine, private domestic firms in some industries are catching up with foreign competitors and are even outperforming them

Valentin Zelenyuk

There is little doubt among economists that in most industries, on average, private companies should outperform state-owned ones. The situation regarding foreign vs. local ownership, however, is not so clear. Does the advantage of one over the other depend on the type of industry? Indeed, different industries might have different levels of adaptability (e.g. due to local culture) for foreign firms. On the other hand, advanced technologies brought by foreigners can also have different levels of absorption and rates of diffusion by local companies.

We examine the issue by conducting an efficiency analysis for China and Ukraine, following a two-step methodology. At first we estimate efficiency scores for each province/region in each type of industry then we analyze these individual efficiency scores.

Ukrainian Firms More Efficient Than Foreign Ones

In Ukraine, the analysis using firm-level data produced quite an intriguing result: purely domestic private firms tended to be more efficient than the firms with foreign ownership. Because of the small sample size for each industry we did not examine the question whether this difference in the efficiency of foreign

and domestic firms was characteristic of all industries or only some of them.

In the study of Chinese enterprises, we used the most recent aggregate ownership data for 29 provinces. The results, firstly, confirmed that non-state ownership was superior to state ownership. We also found evidence of a pronounced agglomeration effect in light industry, but not in heavy industry. Furthermore, foreign ownership performed distinctive-

Firms in light industry, which tend to be more labor intensive and reliant on local culture, outperform foreign firms

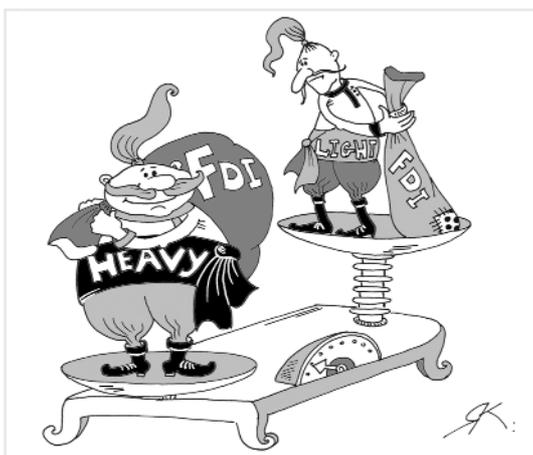
ly better than all other types — but only in the case of heavy industry. Most interestingly, our results for China clearly show that foreign ownership in light industry appeared to be less efficient, on average, than private ownership. The Ukrainian data confirmed a similar tendency: namely, domestic firms tended to outperform, on average, their foreign competitors in light industry, but not in heavy industry.

What are the likely reasons behind these somewhat unexpected results? Further analysis and discussions with practitioners clarified the phenomenon and provided support for the theory of technology diffusion/adoption. The point is not whether the industry is "light" or "heavy" but how capital intensive it is. Heavy industry, on average, is more capital intensive and so the purchase of newer technology and its adoption requires larger financing than in light industry. As a result, foreign investors in such industries — which are usually the gigantic multinational corporations — are likely to have an advantage over the local firms in bringing more advanced capital and expensive technologies, which leads them to outperform local firms.

On the other hand, even when foreigners have initial technological and capital advantages, local private firms should be able to absorb, adopt and adapt technologies to local specifics easier and faster in light industry than in heavy. Moreover, because light industry tends to be more labor intensive compared to heavy industry, its performance is likely to be more dependent on the local culture, traditions, habits, etc. This

gives an advantage to the local firms which, given similar levels of technology adoption, can make them more efficient than the foreign ones.

Therefore, it is possible that in China and Ukraine the flow of foreign investments might slow down in (or even be diverted from) light industry, where some locals are already outperforming foreigners. Meanwhile, new foreign investment will continue to flow into more capital-intensive industries, where foreigners can enjoy their technological and capital advantages for a long time. A policy recommendation for the transitional countries, therefore, would be to promote education aimed at human capital development primarily oriented at the capital-intensive industries, especially the high-tech industries, which will help to increase the speed of technology adoption and diffusion in these industries.



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BT

Russia and the WTO: The "Gravity" of Outsider Status

Upon entering the WTO, Russia's exports to its members could expand by up to 50% in the long run

Bogdan Lissovolik and Yaroslav Lissovolik

Russia's accession to the WTO has emerged as a key step for further market-oriented reform. On the one hand, this accession could harmonize Russia's domestic legislation and practices with those of its major trading partners. On the other, it would remove the main remaining obstacles to Russia's exports to WTO members, amplifying the substantial gains from trade that Russia has already been able to generate. The unused potential for further trade reorientation is illustrated by the fact that Russia's exports to the WTO accounted for "only" about 80% of its total exports in 2002, compared with the 95% share of WTO members in world trade. Furthermore, the share of Russia's exports to WTO countries that became members of the organization in 1995 hardly changed during 1995 — 2002, with the growth in the share of exports directed to all WTO countries largely accounted for by the increase in WTO membership.

However, despite these arguments and the proclamation of WTO entry as Russia's key policy priority, the debate on the benefits of Russia's membership has become more ambiguous lately, causing substantial delays in the already protracted accession process. Domestic opponents of Russia's WTO entry have argued that additional gains from membership would be limited, since the country already enjoys most favored nation (MFN) status with many WTO members, and some advanced countries have accorded preferential treatment to Russia under the Generalized System of Preferences. A careful assessment of the accession benefits for trade, particularly exports, would be important for understanding this debate.

To shed light on the factors behind Russia's export performance, we apply the gravity model to gauge whether the "outsider" status has been affecting Russia's export structure. The data set spans a period of eight years from 1995 to 2002 and encompasses 171 countries, most of which are WTO members, including the recent entrants.

The main result of our analysis is that the structure of Russia's trade remains in some sense "suboptimal" or "different" compared with the benchmark offered by the model, in that it trades "too little" with the WTO members and/or "too much" with non-WTO members. This may not seem surprising, given that many non-WTO members are former socialist economies, with significant historical and systemic ties with Russia. However, these results are somewhat surprising, since we

Russia currently trades "too little" with the WTO members and "too much" with non-WTO members

control for these specificities through various regional dummy variables.

Why does the structure of Russia's trade differ from that suggested by the gravity model? Clearly, various factors could account for Russia's particular trading pattern, ranging from statistical and historical reasons to more substantive economic and policy issues. Two factors come out as plausible from our empirical analysis. First, Russia's exports may be constrained by restrictions imposed by its WTO trading partners, either because these do not enjoy the full benefits from the trade liberalization rounds, or owing to barriers-formal or informal-levied by individual WTO members. WTO member countries may impose these barriers on nonmembers more readily than on members, because the former cannot retaliate, because they do not belong to the WTO's dispute settlement bodies, or for other reasons.

Second, the export pattern may have been influenced by Russia's domestic export restrictions. While most of Russia's export duties were gradually dropped by mid 1996, some duties were introduced or reintroduced in 1999 — 2000. There is at least some evidence pointing to the role of these domestic export restrictions: the significance of the WTO variable becomes much lower in 1997 and essentially breaks down in

1998, when domestic export restrictions were minimal.

Other plausible factors, such as Russia's exceptionally good bargaining position vis-a-vis some non-WTO members, do not come out as very significant.

The numerical coefficients in our regressions imply that, in the long run, Russia's exports to WTO members could expand by a very large amount — around 50%. A major issue is the extent to which this correction of trade diversion would

occur through export expansion as opposed to reorientation. In all likelihood, both expansion and substitution effects would be present. In particular, if the economic reasons for our underlying results are trade restrictions of any type, it is unlikely that the trade-off between exportables and non-traded goods would be unaffected after the restrictions on exports have been relaxed.

Thus, entering the WTO appears to be the most logical way to address an underlying bias in Russia's trade structure. Regarding current trade policy, Russia should, through WTO membership, benefit from a stronger focus on ensuring uniformity and a level playing field across regional trading patterns. The sheer size and diversity of the country favor trade integration via WTO membership rather than through regional arrangements. Also, Russia's entry would make the WTO nearly universal, thereby possibly giving a multilateral boost to global trade.

Bogdan Lissovolik is a Senior Economist in the European Department of the IMF, Washington, DC. Yaroslav Lissovolik is a Chief Economist with United Financial Group in Moscow. See the full paper at: <http://www.imf.org/External/Pubs/FT/staffp/2006/01/pdf/lissovol.pdf>, IMF Staff Papers Vol. 53, No.1.

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Third International Conference on Conditional Cash Transfers

As a follow-up to previous conferences, the World Bank and the Government of Turkey are cosponsoring the Third International Conference on Conditional Cash Transfers on June 26 — 30 in Istanbul, with support from several donors. The goal is to share experience and knowledge between countries on what works and what does not work, both from a policy and an operational perspective. Conditional Cash Transfer programs provide money to poor people conditional on them investing in their children's human capital, for example, ensuring they attend school or receive regular medical check-ups and get vaccinated. Such programs are relatively new, but have been adopted already in a number of countries. Evaluation results from the first generation of programs show them to be effective in promoting human capital accumulation among poor households. There is clear evidence of success in increasing enrollment rates, improving preventive health care, and raising household consumption, but there are also concerns that must be addressed.

World Bank Moves Ahead with Partnership Strategies for Soon-to-Be EU Member States

The World Bank's Board of Executive Directors discussed Country Partnership Strategies (CPS) for Bulgaria and Romania on June 13. The strategies cover the period 2006 — 2009, during which both countries plan to join the European Union. A CPS provides the basis for the Bank's operations in a country, and the Bank is helping both countries converge with the EU and better absorb EU funds. In Bulgaria, the CPS focuses on productivity and employment, fiscal sustainability and absorption of EU funds, and social inclusion. The Romania CPS is organized around 3 central themes: accelerating structural and institutional reforms to support economic growth, addressing fiscal vulnerabilities and modernizing the public sector, and reducing poverty and promoting social inclusion. For more information on the World Bank's work in these countries, visit:

<http://www.worldbank.bg>

<http://www.worldbank.org.ro>

Job Creation Forum Addresses Labor Market Reform

A *Forum on Job Creation in Eastern Europe and Central Asia* was held in Istanbul on June 12 — 13, hosted by the World Bank's Europe and Central Asia Human Development Department and the Government of Turkey's State Planning Organization. The conference brought together experts from across the region to share information on recent country experiences with labor market reform; discuss the policy implications of the latest World Bank and external research; attempt to arrive at a broad consensus on necessary reforms to increase employment and improve the quality of jobs in the region; and discuss how the Bank and other donors can operationally support client countries in pursuing needed reforms. The conference used a multi-sectoral approach to address the employment agenda. To read the new Turkey Labor Market Study, go to:

<http://www.worldbank.org/t/WBSITE/EXTERNAL/COUN->

[TRIES/ECAEXT/TURKEYEXTN/0,,contentMDK:20873325~pagePK:141137~piPK:141127~theSitePK:361712,00.html](http://www.worldbank.org/external/press/2006/06/2006061201.html)

European Commissioner Pledges Support for Europe's Roma Community

The European Commission pledged to make EU financial resources available to fund Roma programs in Central and Southeast Europe, including Structural Funds for the new EU member states and Pre-Accession Funds for countries on the EU membership track. Commissioner Vladimir Spidla made these remarks at an international meeting in Brussels, which he co-hosted with Romanian Vice Prime Minister Marko Bela. The June 12 meeting brought together senior representatives of the eight countries that established the Decade of Roma Inclusion in 2005. Roma leaders and representatives of international organizations, including the Open Society Institute and the World Bank, participated. The Bulgarian Government will take over the rotating chairmanship of the Decade's International Steering Committee from Romania on July 1. Its plans for the coming year include improving cooperation between national governments and the EU. Nikolaus Van Der Pas, the EU's Director General of Employment, Social Affairs, and Equal Opportunity, concluded the meeting by emphasizing the importance of making the most of the potential of young Roma. Greater Roma participation in the labor market will bring substantial economic benefits to a Europe facing a demographic crisis as its youth population declines, he said. For more information, visit

<http://www.worldbank.org/roma>

Russia and World Bank Announce New Cooperation In Support Of Global Development

World Bank President Paul Wolfowitz and Russian Finance Minister Alexei Kudrin agreed on June 9 to work together to help poor countries in the areas of debt relief, infectious diseases, and energy and development. Their announcement was made in the context of a G8 finance ministers' meeting. Mr. Wolfowitz and Mr. Kudrin agreed to collaborate in developing a debt-for-development swap arrangement to channel US\$250 million for priority needs in Sub-Saharan Africa. Joint World Bank-Russia efforts on infectious diseases will focus on Sub-Saharan Africa and Central Asia. The World Bank and Russia also agreed to scale up access to modern energy services in the least developed countries, with a special emphasis on Africa. The World Bank will provide technical assistance to the Russian authorities in establishing a national system for official development assistance. In concluding, Mr. Wolfowitz and Mr. Kudrin agreed to take stock of implementation of their program of cooperation twice a year at the time of the World Bank/IMF Spring and Annual Meetings, to be held in Singapore September 19— 20.

More Countries in ECA Receive Funding to Combat Avian Flu

Armenia and Georgia joined several other countries in the ECA Region as the Bank's Board of Directors approved funding on June 1 to raise awareness of and halt the spread of avian flu. Although Armenia has not yet experienced an outbreak of

avian flu, the virus's spread to neighboring countries, such as Georgia, prompted an early response. Both projects address three components: animal health, human health, and a public awareness campaign. While the first two components will strengthen government offices and the health sector to ensure thorough preparation and an effective response in case of outbreaks, the public awareness portion plans to increase knowledge among civil society and the general population about the risks and potential impact of avian flu. For more information about the Bank's work in Armenia and Georgia, visit:

<http://www.worldbank.org.am>,
<http://www.worldbank.org/ge>

Regional AIDS Fund Announces First Round Grants to Fight HIV/AIDS in Central Asia

At the end of May, the Regional AIDS Fund announced the launch of a grant program for countries benefiting from the Central Asia AIDS Project, co-financed by the World Bank and the UK's Fund for International Development. The countries covered by the project include Kazakhstan, Kyrgyzstan, Tajikistan, and Uzbekistan. Grants will be awarded to national and regional initiatives (sub-projects) of NGOs, and governmental, public, and private sector entities on a competitive basis. Application criteria are detailed on the regional project website: <http://www.caap.info/>. The Fund is particularly keen to fund work in such areas as: HIV/AIDS prevention; scaling-up voluntary testing for HIV/AIDS antibodies and counseling; improving access to treatment, care and support for people living with HIV/AIDS; conducting sentinel epidemiological surveillance; promoting tolerance towards people living with HIV/AIDS, fighting stigma and discrimination; strengthening the capacity of organizations of people living with HIV/AIDS, and prevention of drug use, treatment, and rehabilitation of drug dependency. The deadline for submission of sub-project proposals is August 9, 2006. Full information is available in Russian language at: <http://aids.uz>.

Eastern European and Central Asian Countries Share Global Best Practice on HIV/AIDS

A three-day conference called "Facing the Challenge," organized by the Russian Government with the support of UNAIDS, the World Bank, and other international partners, opened on May 15. Its goal was to strengthen the collective capacity of Eastern European and Central Asian governments, civil society groups, experts, people living with AIDS, and donors to respond to the epidemic, nearly 25 years after HIV/AIDS was first identified. The event gave the countries in Eastern Europe and Central Asia an unprecedented opportunity to learn from the experience of the rest of the world in fighting HIV/AIDS. The World Bank organized satellite sessions focusing on strengthening health systems and on implementing a successful regional strategy in Central Asia. The World Bank also supported the participation of high-level delegations from several countries where it is funding ongoing AIDS projects. The director of the World Bank's Global HIV/AIDS program, Debrewerk Zewdie, headed the World Bank's delegation.

New EU8 Quarterly Economic Report Generally Optimistic

The latest edition of the EU8 Quarterly Economic Report, launched in Warsaw and Bratislava on May 30, finds that economic growth in the EU8 countries in 2005 proved to be robust and resistant to domestic political uncertainty and difficult external conditions. Despite recent signs of weakening emerging market sentiment, short-term economic prospects remain favorable. The analysis of the links between public finances and growth in the region shows that progress has been made on making public finances more growth oriented, but much more could be done. The report also looks at the economic impact of avian influenza, the planning of EU structural funds for the budgetary period 2007-2013, progress in meeting Lisbon Agenda targets, and the role of incentives in attracting foreign direct investment. The report is available at <http://www.worldbank.org/eu8-report>.

World Bank President Delivers Lecture on Turkey

World Bank President Paul Wolfowitz delivered a speech titled "Turkey: Embracing East and West" at the Second Annual Sakip Sabanci Conference held by Sabanci University and the Brookings Institution in Washington D.C on May 23. Mr. Wolfowitz touched on Turkey's economic and social improvements and stressed that they are important both for its neighbors and the rest of the world. However, he indicated that despite Turkey's significant economic reforms, unemployment is still too high. Wolfowitz indicated that Turkey's EU accession would bring several benefits to the EU. He added that Turkey should focus on its education system and employment. Mr. Wolfowitz also emphasized Turkey's secularism and its respect for religion. To read the speech, go to <http://www.worldbank.org.tr/WBSITE/EXTERNAL/COUNTRIES/ECAEXT/TURKEYEXTN/0,,contentMDK:20933010~menuPK:361718~pagePK:141137~piPK:141127~theSitePK:361712,00.html>

2006 Western Balkans Development Marketplace Rewards Innovation

The first ever West Balkans Development Marketplace took place in Belgrade on May 17 — 18. A total of 55 finalists from Albania, Bosnia and Herzegovina, Macedonia, Serbia and Montenegro, and Kosovo-selected in a competitive process at the national level-presented their innovative ideas for job creation in the formal sector and competed for grants of around US\$35,000 per project. An international jury chaired by Country Director Orsalia Kalantzopoulos selected 21 projects from the region, winning a total of US\$712,000 raised from donors. As a complementary activity, a Knowledge Forum focusing on youth employment was held on May 17, organized in partnership with the prominent local NGO Civic Initiatives. The event was an opportunity to exchange experience with a focus on models of youth empowerment and youth inclusion in the labor market.

This section has been provided courtesy of Merrell Tuck and Christina Lakatos, Europe and Central Asia External Affairs **BT**

World Bank Working Papers

<http://econ.worldbank.org>

Neil Parison, Yelena Dobrolyubova, Gord Evans, Nick Manning, and Yulia Shirokova

Increasing Government Effectiveness: Approaches to Administrative Reform in the Russian Federation

Report 36142, May 2006

In the Russian context, administrative reform denotes reforms connected to the structure and functions of government; approaches to managing government performance (strategic planning, performance management, internal accountability); and approaches to improving service delivery and responsiveness (transparency, service quality programs and external accountability). This paper attempts to raise issues and explore options relevant to the next generation of Russian administrative reforms by: a) summarizing administrative reform approaches and methodologies from other countries appropriate to the context and specific reform agenda in Russia, including brief case studies and lessons learned; b) providing an index of websites with links both to the actual tools used by officials and practitioners from the selected countries, as well as to the resulting products (the index is included in the References section at the front of this paper); and c) assessing the implications of international experience for the further development and implementation of administrative reform in the Russian Federation.

Roberta Gatti and Inessa Love

Does Access to Credit Improve Productivity? Evidence from Bulgarian Firms

WPS3921, May 2006

Although it is widely accepted that financial development is associated with higher growth, the evidence on the channels through which credit affects growth on the micro-level is scant. Using data from a cross section of Bulgarian firms, the authors estimate the impact of access to credit (measured by whether firms have access to a credit or overdraft facility) on productivity. The authors use information on firms' past growth to instrument for access to credit and find credit to be positively and strongly associated with total factor productivity.

Anqing Shi

Migration in Towns in China, a Tale of Three Provinces: Evidence from the 2000 Census Preliminary Tabulations

WPS3890, April 2006

There is a concern that the growth of towns in China has been stalled recently and with it, the creation of nonfarm jobs in rural industries. The author uses the 2000 census tabulations to look at this issue by examining the educational attainment, original place, and occupational composition of immigrants in towns in three provinces in China-Zhejiang, Henan, and Sichuan. In addition to the diversified patterns of town immigrants revealed in the three provinces, the author finds that town immigrants generally possess a higher level of educational attainment than the local population in the towns, especially in the less developed western and central regions. This inflow of

human capital could foster development in towns. There is also evidence that as economic opportunity increases in towns, such as in the richer coastal province of Zhejiang, better educated people in rural areas are likely to shift their jobs from the farm to the nonfarm sector in towns nearby, instead of leaving the countryside to migrate to other provinces. This could reduce migration pressure on big cities. Finally, the labor market in towns in the less developed west and central regions is more flexible in accommodating immigrants, whereas in the developed province of Zhejiang the labor market is segregated between immigrants and the local population.

Paloma Lopez-Garcia

Business Environment and Labor Market Outcomes in Europe and Central Asia Countries

WPS3885, April 2006

New firm entry has been fundamental for job creation in the transition economies. Hence the urge to reform the framework in which firms operate. This paper aims to improve our understanding of the business environment of the Europe and Central Asia (ECA) countries, as well as to assess which of the institutions that shape it are most important for labor market performance. To achieve that aim, the author groups the institutions into those affecting firm entry and those affecting business survival and growth, and proceeds to construct indicators to summarize them. Next, she analyzes the impact of the business environment institutions on the employment generated by the private sector of the countries, measured by the service employment rate. The author finds that access to finance is the most important institution across all ECA countries. On the other hand, the poor access to finance in Bulgaria, Croatia, and above all, Romania, is the main factor behind their poor development of the private sector. Market regulation, start-up costs, and the tax burden are also found to significantly affect employment.

Paolo Verme

Constraints to Growth and Job Creation in Low-Income CIS Countries

WPS3893, April 2006

Despite sustained output growth since 1997, low-income Commonwealth of Independent States countries (CIS-7) have not experienced growth in employment, a phenomenon observed elsewhere in transitional economies and labeled as "jobless growth." The author addresses the causes of this phenomenon in the CIS-7. He argues that the lack of job creation is explained by a combination of structural factors, including capital-intensive growth, large potential for productivity gains among existing workers, and compartmentalized economies best depicted by a dual labor market framework. With governments and the international community currently refraining from investing in agricultural and industrial policies focused on reviving manufacturing, jobless growth is likely to persist.

Jan Rutkowski

Labor Market Developments during Economic Transition

WPS3894, April 2006

The paper reviews labor market developments in the transition economies of Europe and Central Asia. It argues that the

scarcity of productive job opportunities and the growing labor market segmentation are the two main labor market problems facing the transition economies. In the European transition economies, the lack of jobs has led to persistent and open unemployment. In the CIS it has led to hidden unemployment. Unemployment in the European transition economies is supported by a developed social safety net. In the CIS most workers either stick to their old, unproductive jobs in unstructured enterprises, or work in the informal sector, or resort to subsistence agriculture. The high employment-to-population ratios in many CIS countries often indicate delayed enterprise restructuring, the maintenance of unsustainable jobs in uncompetitive firms, and the existence of a large informal sector as an employer of last resort. Labor market segmentation, which is more pronounced in the CIS, has been caused by a sharp increase in earnings differentials and the attendant increase in the incidence of low-paid jobs, by the polarization of regional labor market conditions, and finally by the growth of the informal sector offering casual, low-productivity jobs.

Peter Huber

Regional Labor Market Developments in Transition

WPS3896, April 2006

The author finds that large and persistent regional labor market disparities developed in virtually all transition countries and that there is some evidence of polarization. Differences in starting conditions and market access seem to be the major reasons for regional divergence in transition. Regional wages are only slightly more flexible than in many European Union labor markets, interregional migration is low, and capital seems to move toward high wage and low unemployment urban centers rather than to the most backward regions. Policy should thus take a long-term perspective on the existing regional disparities, focus on removing barriers to mobility, review existing institutions for implementing regional policy, and aim at the close coordination of regional and labor market policy instruments.

John S. Earle and David J. Brown

The Microeconomics of Creating Productive Jobs: A Synthesis of Firm-Level Studies in Transition Economies

WPS3886, April 2006

The challenge for labor market policy in transition economies has been to redress the sharp drops in employment in a way that fosters the creation of productive jobs. The authors first document the magnitude and productivity of job and worker reallocation. They then investigate the effects of privatization, product and labor market liberalization, and obstacles to growth in the new private sector and its productivity in Hungary, Romania, Russia, and Ukraine. The authors find that market reform has resulted in a large increase in the pace of job reallocation, particularly that occurring between sectors and through firm turnover. Unlike under central planning, the job reallocation during the transition has contributed significantly to aggregate productivity growth. Privatization has not only stimulated intrasectoral job reallocation, but the reallocation is more productive than that among remaining state firms. The effect of privatization on firm productivity varies considerably across countries and is not always positive. The productivity gains from privatization have generally not

come at the expense of workers but are rather associated with increased wages and employment.

Felix Eschenbach and Bernard Hoekman

Services Policies in Transition Economies: on the European Union and the World Trade Organization as Commitment Mechanisms

WPS3951, June 2006

The authors analyze the extent to which the EU-15 and 16 transition economies used the WTO General Agreement on Trade in Services (GATS) to commit to service sector policy reforms. They compare GATS commitments with the evolution of actual policy stances over time. While there is substantial variance across transition economies on both actual policies and GATS commitments, the authors find an inverse relationship between the depth of GATS commitments and the "quality" of actual services policies as assessed by the private sector. In part this can be explained by the fact that the prospect of EU accession makes GATS less relevant as a commitment device for a subset of transition economies. But for many of the non-EU accession candidates, the WTO seems to be a weak commitment device. One explanation is that the small size of the markets concerned generates weak external enforcement incentives. The authors' findings suggest greater collective investment by WTO members in monitoring and the need for transparency to increase the benefits of WTO membership to small countries.

BOFIT

<http://www.bof.fi/bofit/fim/6dp/index.stm>

Olena Havrylchuk and Emilia Jurzyk

Profitability of Foreign Banks in Central and Eastern Europe: Does the Entry Mode Matter?

BOFIT Discussion Papers No 5 / 2006

Using data for 265 banks in Central and Eastern European countries (CEECs) for the period 1995-2003, this paper analyzes the differences in profitability between domestic and foreign banks. The authors show that foreign banks, especially greenfield institutions, earn higher profits than domestic banks. However, this effect is acquired rather than inherited, since there is evidence that foreign banks tend to take over less profitable institutions. Profits of foreign banks in CEECs also exceed the profits of their parent banks, explaining the reasons for their entry. Further, the authors study the costs and benefits of foreign ownership by analyzing determinants of profitability for domestic, takeover, and greenfield banks. The profits of foreign banks are less affected by macroeconomic conditions in their host countries. However, greenfield banks are sensitive to the prevailing situation of their parent banks. Only domestic banks enjoy higher profits in more concentrated banking markets, whereas takeover banks suffer from diseconomies of scale due to the fact that they acquire large institutions.

Laura Solanko

Coping with Missing Public Infrastructure: An Analysis of Russian Industrial Enterprises

BOFIT Discussion Papers No 2 / 2006

During the Soviet period industrial firms not only formed the backbone of the economy but also directly provided a wide range of benefits to their municipalities. Firms were in charge of supplying a great variety of social services, such as housing, medical care and day care. The need to divest at least some of these functions was generally accepted in the early 1990s. Industrial firms' engagement in the provision of infrastructure services, such as heating, electricity and road upkeep has to date received much less attention. Using a dataset of 404 large and medium-sized industrial enterprises in 40 regions of Russia, this paper examines public infrastructure provision by Russian industrial enterprises. The authors find that, first, to a large degree engagement in infrastructure provision — as measured by district heating production — is a Soviet legacy. Second, firms providing district heating to users outside their plant area are more likely to have close relations with the local public sector along many other dimensions.

CEFIR

<http://www.cefir.org>

Tuuli Juurikkala and Olga Lazareva
Lobbying at the Local Level: Social Assets in Russian Firms
WP 61, January 2006

In the planned economy firms were made responsible for providing their workers with social services, such as housing, day care and medical care. In Russia during the transition of the 1990s, social assets were to be transferred from industrial enterprises to the public sector. The law on divestment provided little more than general principles. Thus, for a period of several years, property rights concerning a major part of social assets, most notably housing, were not properly defined, as transfer decisions were largely left to the local level players. Strikingly, the time when assets were divested varied considerably across firms. The authors utilize recent survey data from 404 medium and large industrial enterprises in 40 Russian regions and apply survival data analysis to explore the determinants of divestiture timing. The results show that in municipalities with higher shares of their own revenues in the local budget and thus weaker fiscal incentives, firms used their social assets as leverage to extract budget assistance and other forms of preferential treatment from local authorities. The authors also find evidence that less competitive firms were using these social assets to cushion themselves from product market competition.

CASE

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Alexey Kisenkov, Piotr Kozarzewski, Irina Lukashova, Maria Lukashova, and Julia Mironova
The System of Corporate Governance in Kyrgyzstan
Studies and Analysis # 326, June 2006

The paper looks at the formation of the modern corporate governance system in the Kyrgyz Republic. The main factors that influence this process have been studied, e.g., legal back-

ground and the practice of privatization; corporate and anti-monopoly law; financial markets; stakeholders' activities, etc. The authors conclude that there were significant positive changes in the sphere of corporate governance in the Kyrgyz Republic. In a country without previous experience of private property and the market, institutions of corporate governance have been formed, and a learning process by both owners and managers about how to govern a company using the given set of laws and regulations has been going on. This process is far from complete, since existing corporate relations are still very dysfunctional. Further improvements require the upgrading of legislation accompanied by active measures aimed at improving the situation in all spheres that influence the quality of corporate governance. The main task is the creation of a favorable legal and institutional climate which would lead to improvements in common norms of corporate governance and the attraction of external investments.

Jens Holscher, Mariusz Jarmuzek, Roman Matousek, and Eva Katalin Polgar

Fiscal Transparency in Transition Economies
Studies and Analysis # 328, June 2006

Fiscal transparency became a topic of public and academic debate in the aftermath of the Mexican and Asian financial crises. The concept of fiscal transparency is, however, largely of a qualitative nature and is therefore something of a challenge to measure. This paper proposes an index of fiscal transparency that comprises various aspects of fiscal policy formulation. The index is compiled for twenty seven transition economies and is based on a detailed analysis of the actual information disclosed. Analysis of the fiscal transparency index shows a clear pattern indicating that the group of Central and Eastern Europe (CEE) countries stands out across all categories from the other two groups of countries in the analysis, South Eastern Europe (SEE) and the CIS. This seems to be the result of the anchoring of the New Member States in the EU's structures and procedures. SEE countries come behind this first group, experiencing serious difficulties in budgetary process and reporting standards. The CIS countries still have a long way to go to meet international standards. They must enhance budgetary practices and accounting procedures, as they lag behind the above groups most clearly in this regard.

Call for Papers

<http://www.sant.ox.ac.uk/jcr/STAIR>

St Antony's International Review is soliciting book reviews for its next issue on democratization. Practitioners, academics and graduate students are invited to suggest relevant books they wish to review by e-mailing Kalin Ivanov, Book Reviews Editor at Kalin.ivanov@politics.ox.ac.uk. Final submissions are due on 1 September 2006. Please consult the guidelines at: www.sant.ox.ac.uk/jcr/STAIR/files/ReviewerGuidelines.pdf

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21st Annual Congress of the European Economic Association and the Econometric Society European Meetings

August 24 — 28, 2006, Vienna, Austria

The European Economic Association (EEA) and the Econometric Society (ES) are international scientific organizations that are dedicated to the promotion and dissemination of contemporary economic research, including theoretical, empirical, and policy-relevant contributions. The local organization 2006 EEA-ESEM meetings will be jointly conducted by the Institute for Advanced Studies, Vienna (IHS) and the University of Vienna.

More information: <http://www.eea-esem2006.org/>

European Summer Symposium in Labor Economics 2006 (ESSLE)

September 14, 2006, Ammersee, Germany

ESSLE is designed to bring together labor economists from across Europe and researchers from outside the region. The symposium provides an opportunity for researchers from different universities and countries to discuss their work in a relaxed atmosphere and to develop long-term collaborative relationships. Another important aim of ESSLE is to provide young researchers with the opportunity to meet and discuss their work with senior economists.

http://www.iza.org/conference_files/essle2006/call_for_papers

2006 Annual Meetings of the International Monetary Fund and the World Bank Group

September 16 — 18, 2006, Singapore

Centered on the theme "Asia in the World, the World in Asia", the 2006 Program of seminars will feature over 30 sessions on international finance and development issues affecting the lives of people and businesses regionally and globally:

- Capital Markets and the Financial Sector in the Emerging Markets

- Corruption, Governance and Growth
- Infrastructure for the 21st Century
- Investment Climate; Trade and Investment
- Energy and Security
- Growth and Equity
- Innovation and Technology.

<http://www.imf.org/external/aml/2006/schedule.htm>

Global Financial and Monetary Governance, the EU, and Emerging Market Economies

September 27 — 29, 2006, Amsterdam, the Netherlands

The financial crises in the last decade have generated a consensus that there is room for improvement in the global financial architecture. This conference wants to help broaden its scope, in particular in relation to poverty reduction, development goals and financial stability issues in a range of countries around the world. The following issues will be considered:

- Monetary politics, financial regulation and "economic development". Expertise focusing on the national, the regional (European and other) and the global level.
 - Issues confronting highly industrialized countries, emerging market economies, developing countries and countries in transition.
 - Normative and empirical questions.
- <http://wi-garnet.uni-muenster.de/index.php?id=196>

Advancing Health Equity

September 29 — 30, 2006, Helsinki, Finland

The conference will bring together researchers and practitioners, from both developed and developing countries, to analyze the causes and consequences of health deprivation and inequality, to examine patterns and trends in these outcomes, to evaluate alternative policy options, and to identify future research directions.

<http://www.wider.unu.edu/conference/conferences.htm>

The Role of the State in the Economy in the 21st Century

October 13 — 14, 2006, Moscow, Russia

Organizers: the Global Institute, BP, CEFIR at NES (Russia), CSR (Russia), CCWE (China), and CCER (China). The experience of Russia, China and India will be compared and shared in the following panels:

- The Development Strategies of the XXI Century: Striking the Balance between the State and the Market
- Incentives within Government Bureaucracy
- The Macroeconomic Role of the State: Targeting Real Exchange Rate or Inflation?
- The Nation State in the Global Economy
- The State and the Knowledge Economy
- The Energy Challenge
- Inequality and Social Stability.

More information: www.cefir.ru

Marie Curie Training Course on Cooperatives in Transition Countries

October 9 — 13, 2006, Sofia, Bulgaria

The course will be organised by the Institute for Cooperative Studies, Humboldt University Berlin, Germany, and the Institute of Agricultural Economics, Sofia, Bulgaria. It is the first training course in the series of events offered by the Marie Curie Project on "Modern Agriculture in Central and Eastern Europe: Tools for the Analysis and Management of Rural Change". It will introduce the participants to the present state of research and will deal with empirical methodologies for analysing co-operatives, their institutional design, institutional performance and institutional change. Deadline for the application and the abstract: August 31, 2006.

Information: www.mace-events.org. Contact: Marlis Werner, Institute for Cooperative Studies, Humboldt University Berlin, phone +49 30 2093 6500, fax +49 30 2093 6501, email: ifg@agrar.hu-berlin.de **BT**

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