



Russian Oil Futures

Richard G. Gordon
Executive Vice President
John S. Herold, Inc.

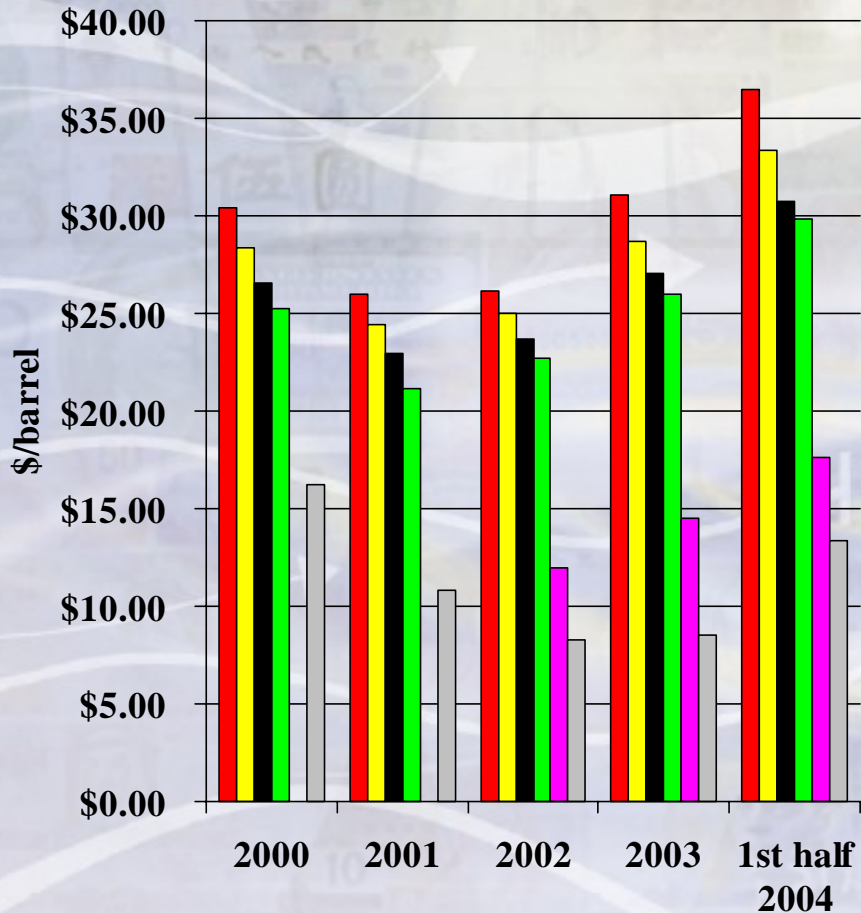
Study Focus

- Forward-looking evaluation of the domestic and potential emerging international strategies of leading Russian oil companies
- Companies included in the analysis:
 - Yukos
 - Sibneft
 - Lukoil
 - Tatneft
 - Surgutneftegas
 - TNK

Results Generated in the Analysis and Methods Used

- Forecasts of likely future oil production by company and future export potential
- Evaluation of future financial performance under alternative international and domestic price scenarios
- Incorporate the likely role of financial and operational constraints on the companies' decision-making and performance
- Quantitative results are generated using Herold's newly released Capital Strategies model
 - This is a dynamic capital allocation simulation and forecast model
 - Integrates operational and financial decision-making to evaluate the full spectrum of capital allocation strategies and their implications for performance

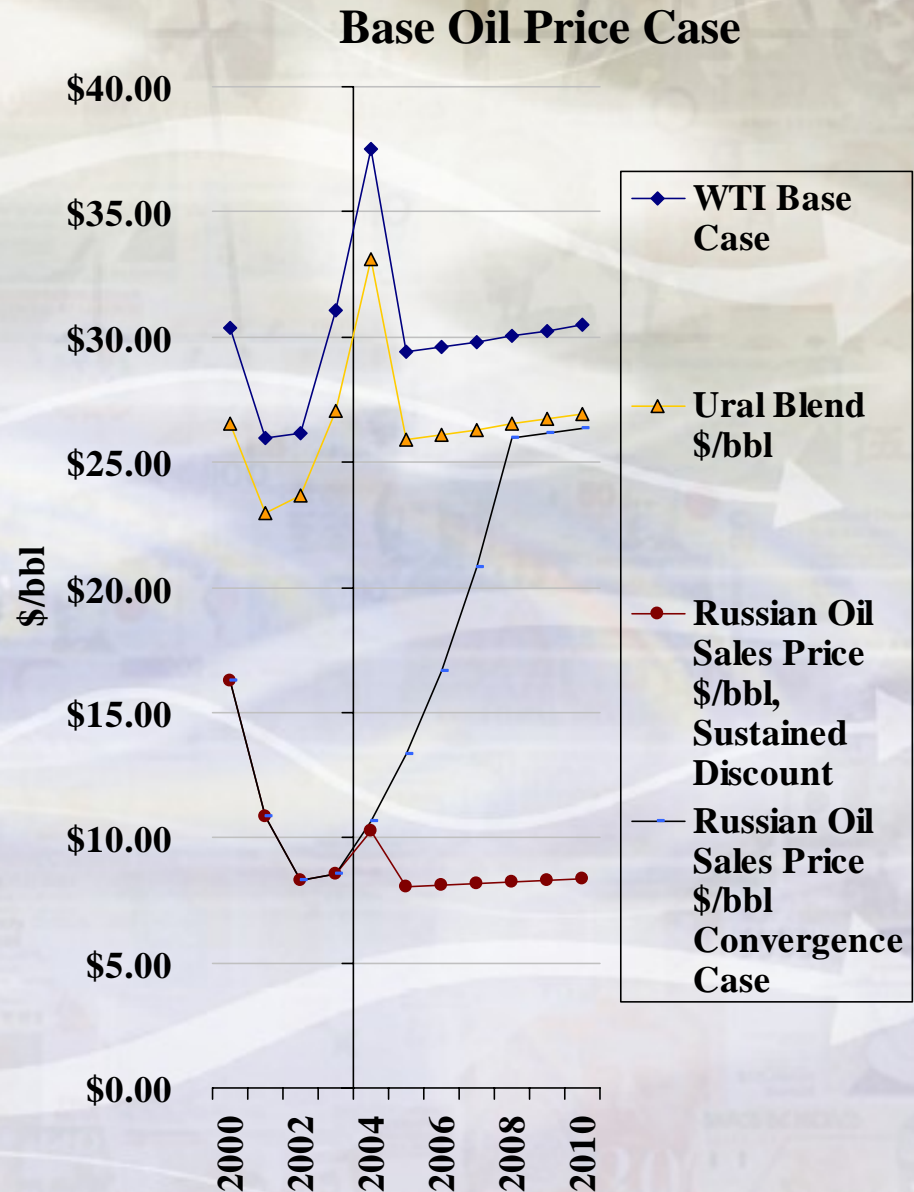
The Strategic Imperative for Exports



- Transport barriers create artificially low oil domestic sales prices and a uniform strategy among the Russian companies of:
 - Production growth focused on the export market and
 - Diversion of domestic sales to the export market
- The current subsidy to the non-energy sector of the Russian economy is clear
- Oil price convergence in the Russian economy will have profound effects on company performance

Assumptions and Implications

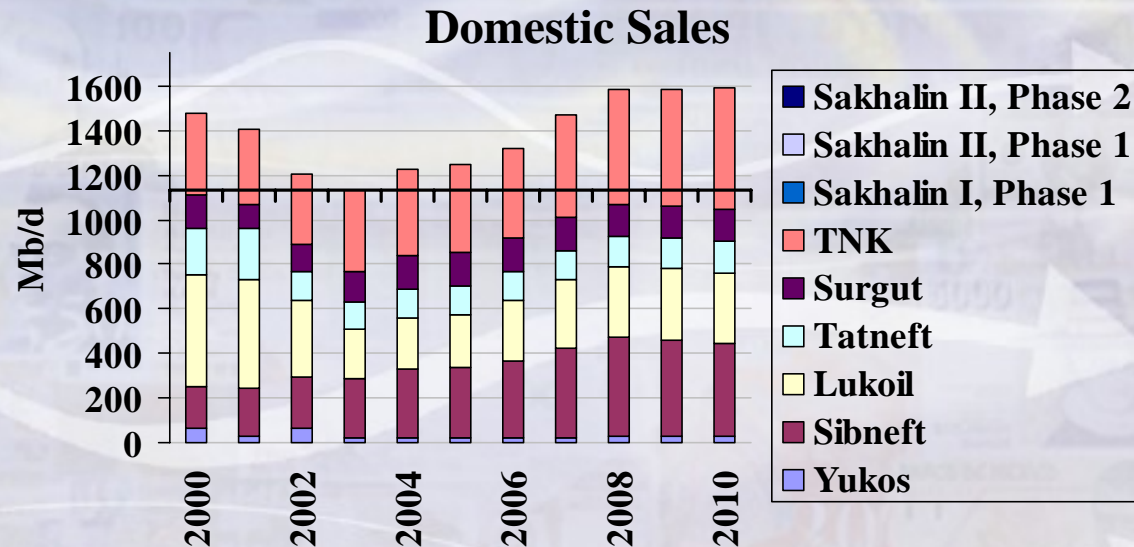
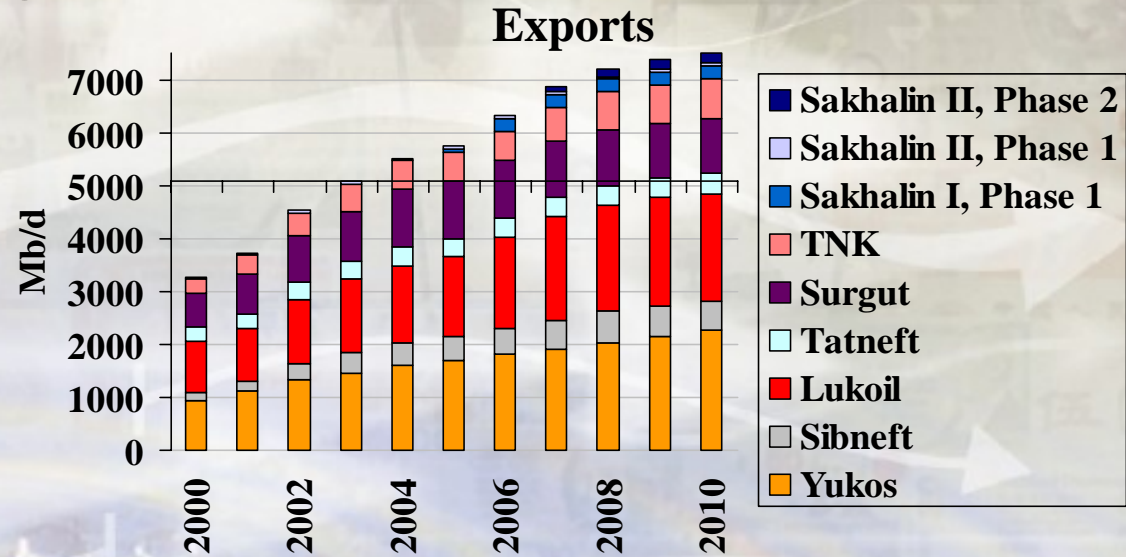
- The projection assumes that
 - One or more additional outlets to sea such as the Murmansk pipeline proposal are realized and
 - Pipeline bypass of the Bosphorus is achieved
- Three world price scenarios are used with different assumptions about Russian domestic prices



Summary of Key Results

Oil Volumes

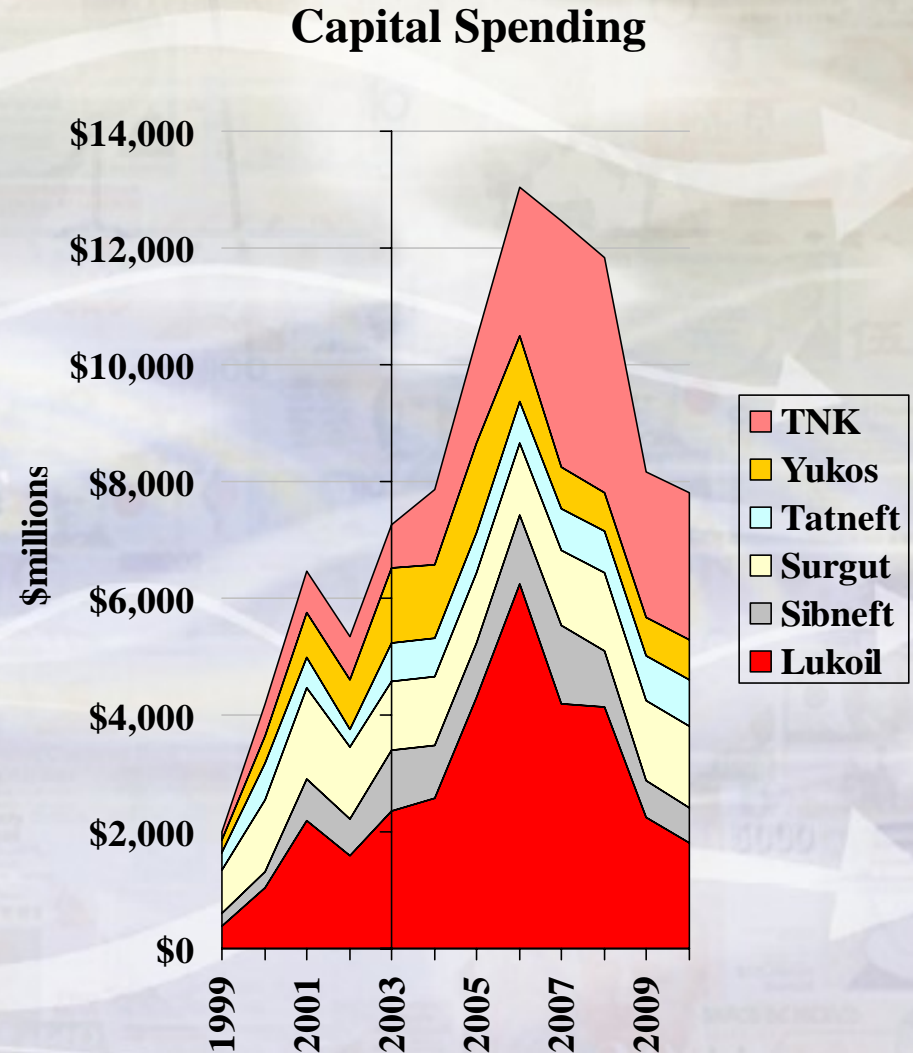
- Output rises substantially by 2010 relative to 2003
 - Exports up by as much as 2 mmb/d by 2008
 - Further 400 mb/d potential diversion from domestic sales
- Rate of growth is diminishing and likely to stall out by 2008
- Results are not uniform – look for Tatneft and Surgut to fall behind
- Volume additions are significant for individual Russian companies.
- However, the indicated volumes are unlikely to be sufficient to undercut current high oil prices globally



Summary of Key Results

Capital Spending and Funding

- Production growth will require much higher levels of capital spending
- Despite the projected rapid escalation in capital spending requirements,
 - High oil prices enable funding from Russian company capital inflows for 3 companies
 - Three others face additional funding needs
- Prices have risen above our scenarios – multiple changes are likely but they only reinforce our conclusions

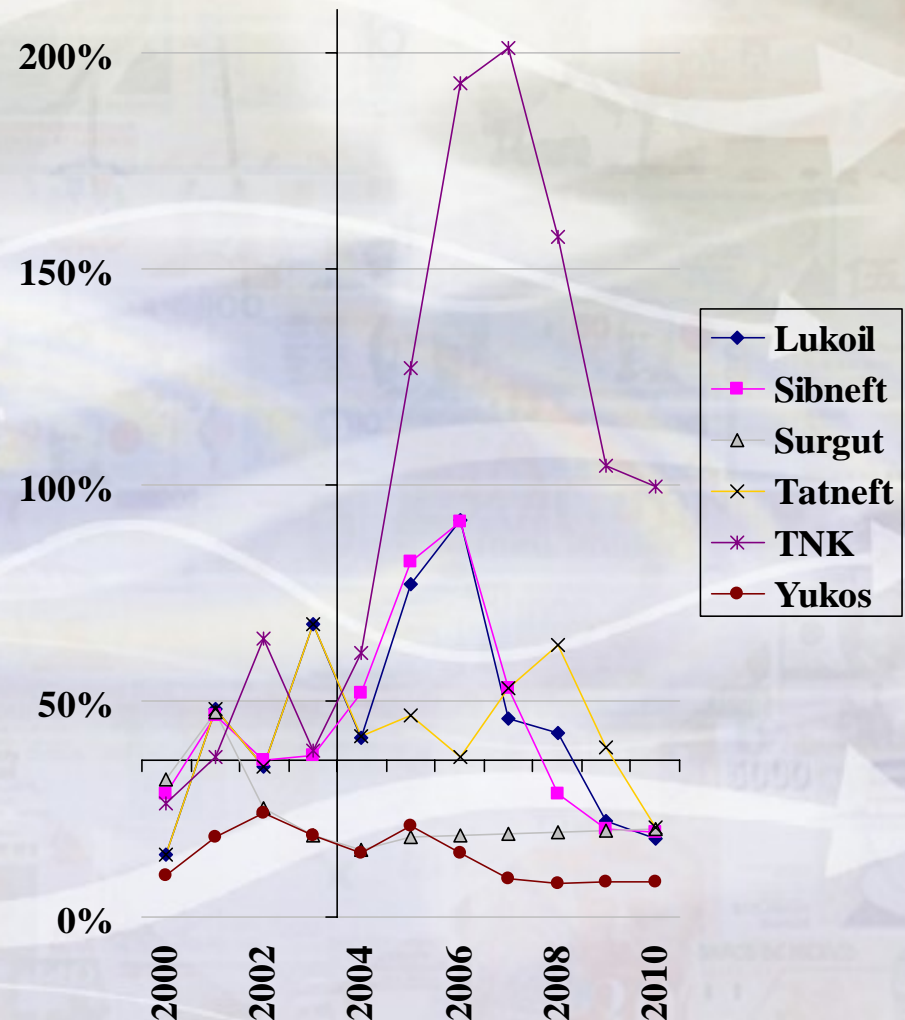


Summary of Key Results

Capital Reinvestment Requirements

Capital Spending: % of Capital Inflows Base Oil Price Case

- Considerable variance emerges in company capacities to fund their capital investment programs internally
- Yukos and Surgut display substantial shortage of investment outlets relative to capital inflows
- TNK, Sibneft and Lukoil
 - Confronted with sharp increases in capital requirements relative to inflows in near to medium-term
 - Rapidly emerging capital surpluses in the longer-term

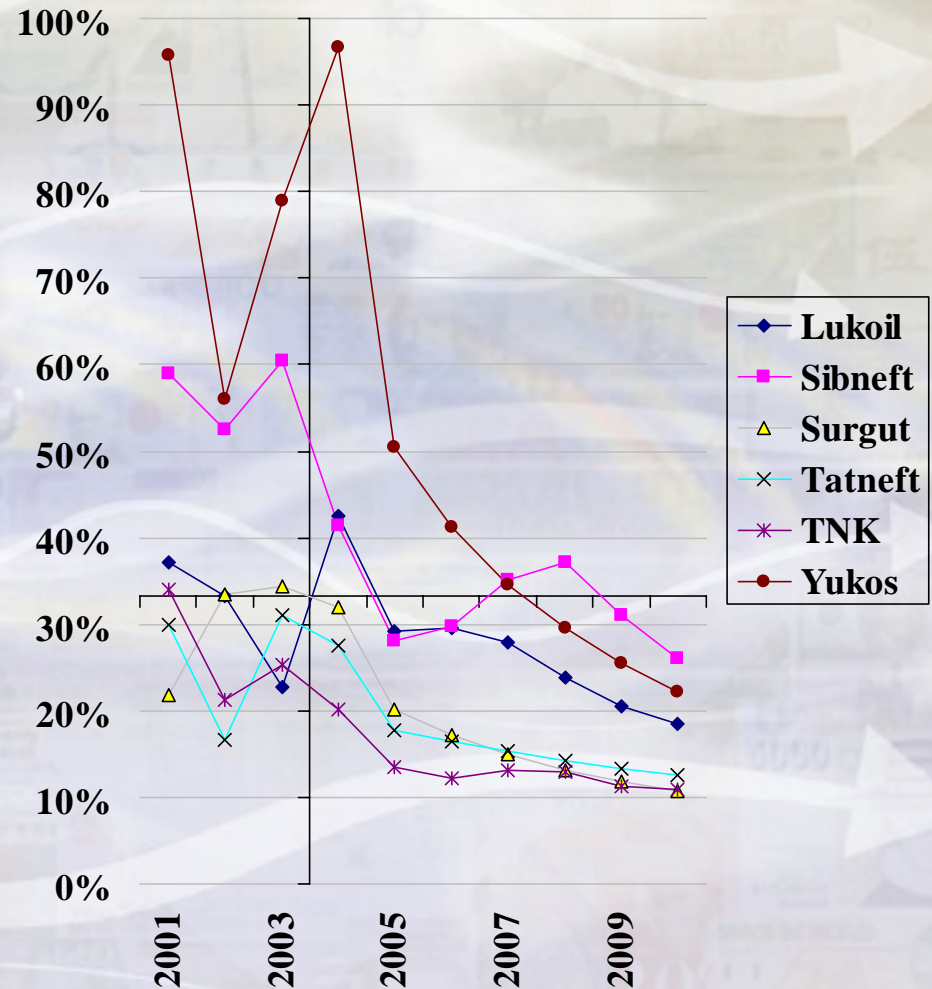


Summary of Key Results

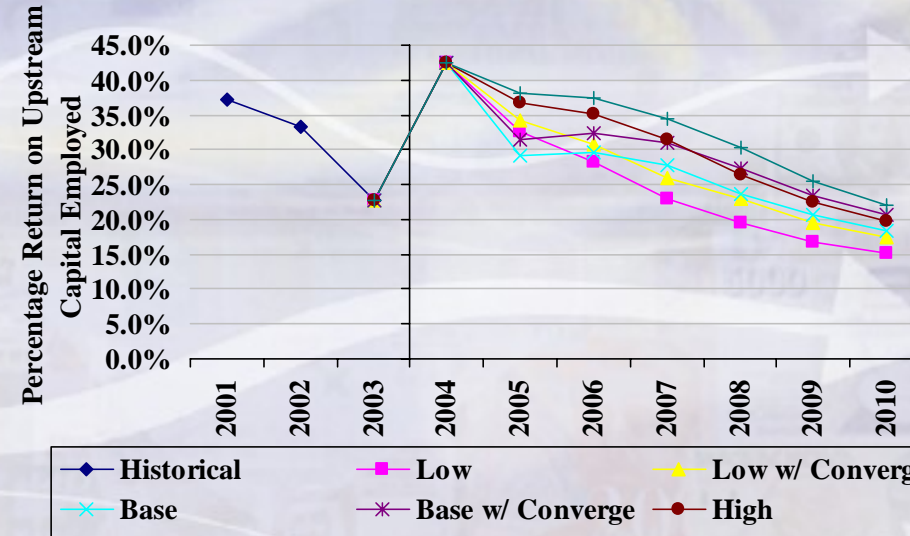
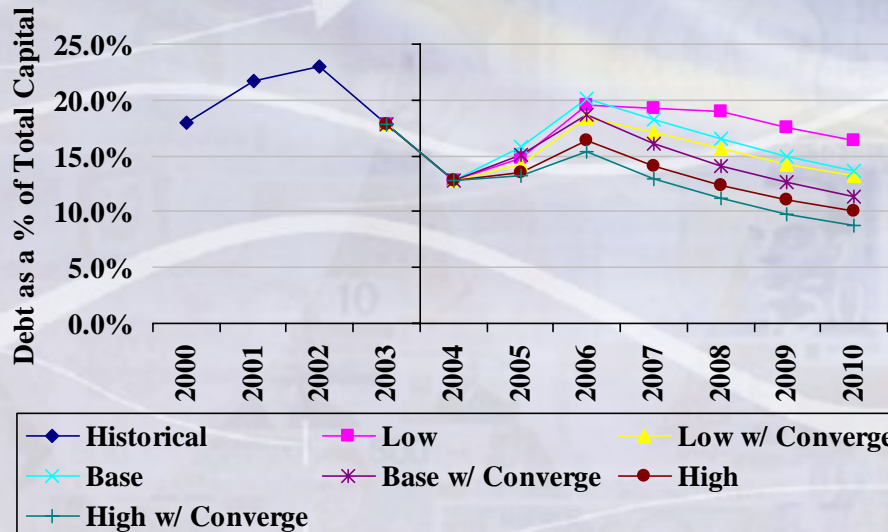
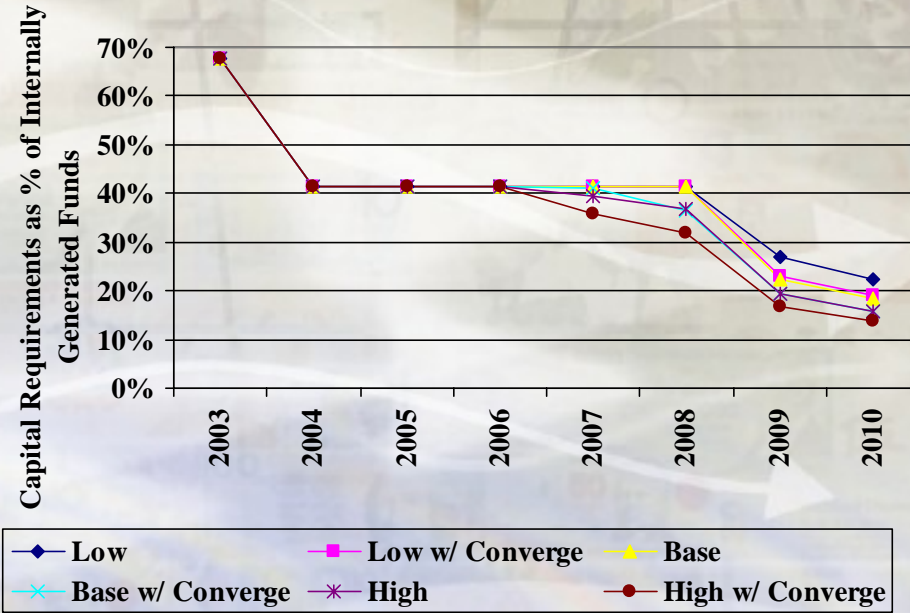
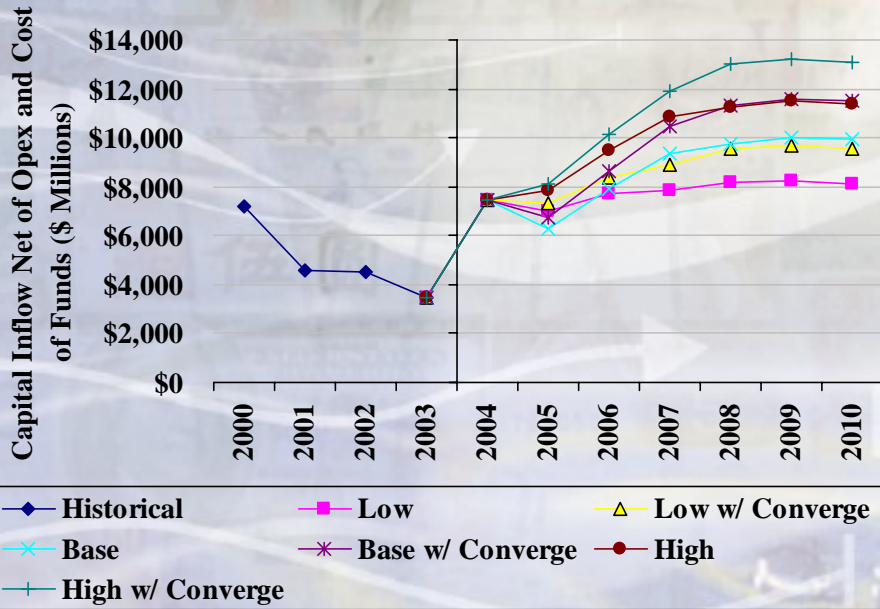
Returns on Capital Employed

- Russian oil companies face an emerging investment challenge
- At current oil prices, the Russian companies will
 - Yield more profitable results and much higher capital inflows in the near to medium-term
 - However, long-term profitability will erode if the companies do not find sufficient new capital outlets or divest themselves of the excess capital

Return on Upstream Capital Employed
Base Oil Price Case



One Expanded Example: Lukoil



Responding to the Challenge

- The investment challenge will likely manifest itself in any or all of 3 related forms of behavior
 - Growing pressure to increase re-investment rates in Russia
 - Likely adverse effects on costs due to demand-pull inflationary pressure in the oil-related industries and shifts in capital spending to more costly forms of production enhancement
 - Also, will only further stress the Russian institutional structure
 - Capital distributions to shareholders
 - More substantive moves towards building international E&P operations
- The pressure to expand internationally is likely to be reinforced by
 - A public policy and internal corporate perceived need for international operations to secure one or more Russian companies' standing as true peers of the leading world oil companies
 - Institutional rigidities within Russia are likely to become binding constraints on Russian production growth

Institutional Rigidities within Russia

- A key deficiency in Russia is the institutionally mandated decoupling of the strategic and economic roles of infrastructure and upstream investments
 - Transneft's role is a legacy of the past
 - The logic of Transneft's status is contradicted by industry history and current experience in most world class plays elsewhere in the world
 - In petroleum provinces where this decoupling is not present, investor strategic priorities with respect to infrastructure are directly linked to the upstream values that are commercially viable only because of the infrastructure
- The newly emerging national oil company is an institutional need – not an economic need
- The Russian fiscal system is inadequate to the task

Investment Opportunities by Non-Russian Companies in Russia will Likely Deteriorate

- Capital inflows of Russian companies will increase substantially over time – probably more than indicated in our base case
- The need for non-Russian capital will rapidly decline – in fact such capital will be perceived by both the Russian companies and the Russian government as unwanted and unnecessary competition
- Current Russian company strategic agendas for growth and diversion of output to export markets are already placing substantial stress on the Russian institutional framework and the transport grid
- How to succeed within Russia under these circumstances?

A New Model for Russian Entry Strategy? Or a New Model for Russian Diversification?

- The results of this study suggest a diminishing perceived need for non-Russian oil companies.
- This, coupled with a growing perceived value of international diversification among the Russian companies
 - may suggest trans-national alliances as an effective tool for new entrants to Russia
 - the ConocoPhillips/Lukoil arrangement is somewhat suggestive of this approach
- But ... Turn this solution on its head
 - Russian companies as acquirers of non-Russian companies with significant international assets
 - The Chinese/Indian models of international expansion through acquisition expanded

One Final Prediction

- Under the scenarios of this paper, the Russian fiscal system is unlikely to be stable in the current price environment or in the emerging financial status of the Russian companies
- Elements of an emerging shift in power back to governments and to higher taxes is already becoming evident elsewhere in the world: Venezuela, Bolivia, Trinidad are three recent examples
- Government take under the Russian system lacks the mechanisms that are likely to satisfy the government's demands for revenues and its sense of fairness of its share
- The result is a volatile business environment.
- Look for government take on oil and gas operations in Russia to rise substantially in the not too distant future.