

# The Modernization Debate in Russia

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September 23, 2010  
Prepared for CERES Seminar, Georgetown

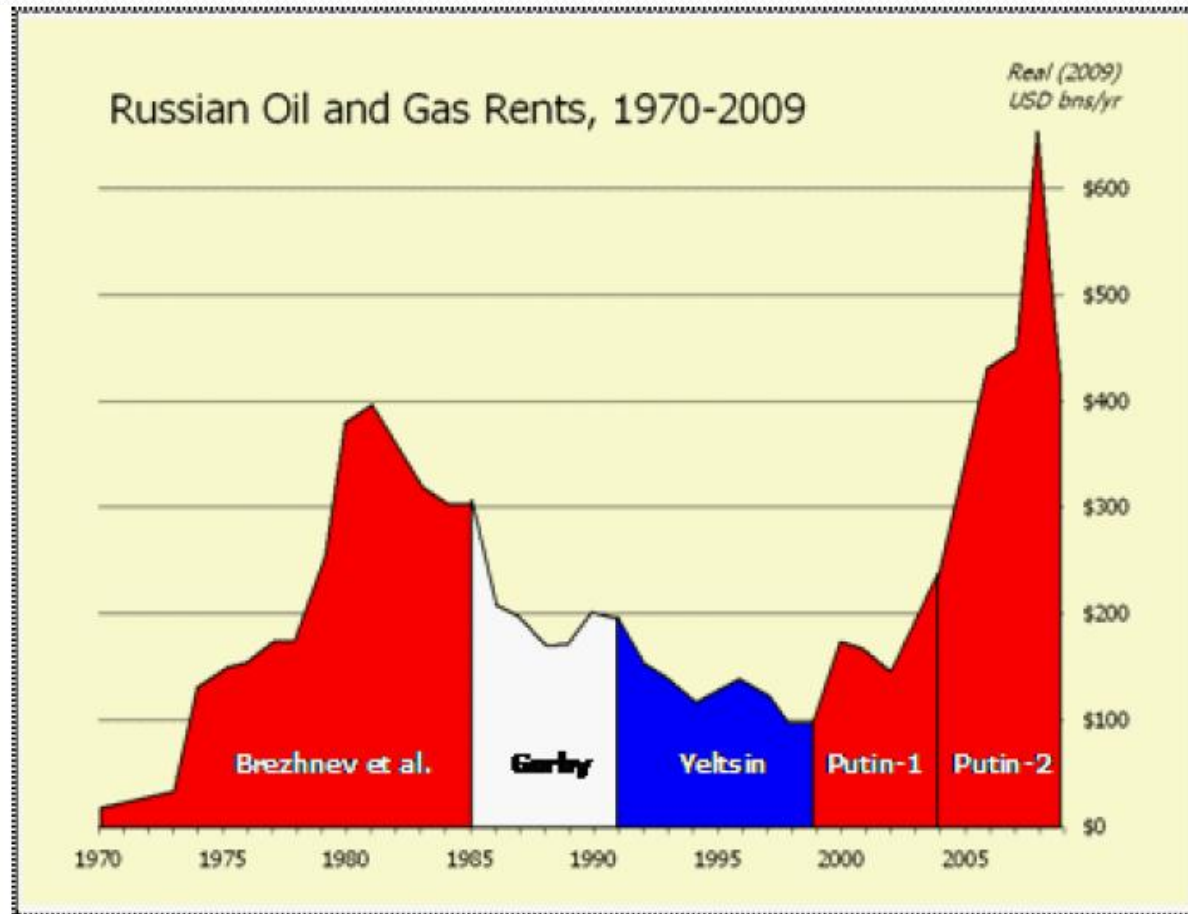
# Modernization

- Key Questions
  - What does it mean in this context?
  - Does it make sense for Russia?
    - Subject of Gaddy-Ickes, *Bear Traps*
  - What are the likely consequences? Is a Bear Trap?
- Context
  - Russia is resource dependent economy
    - Medvedev argues that Russia's resource-based economy is primitive and noncompetitive.

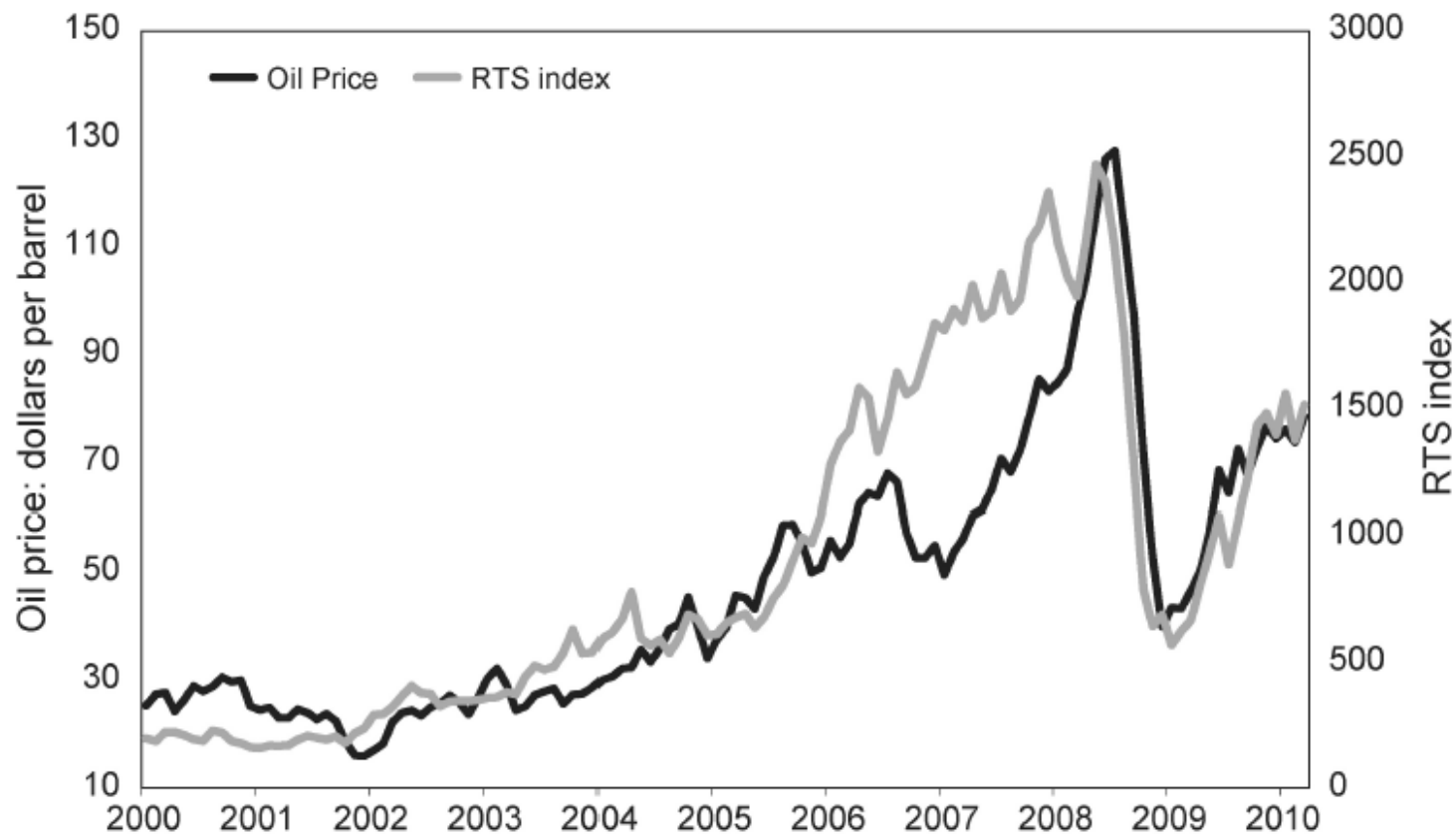
# Resource Dependence

- Resource dependent economies face two critical problems
  - How to control and distribute rents
    - This requires a rent-management system
  - How to control addiction to rents
    - This is most important in post-Soviet economies where addiction takes place through production
  - Russia is key example of resource dependence

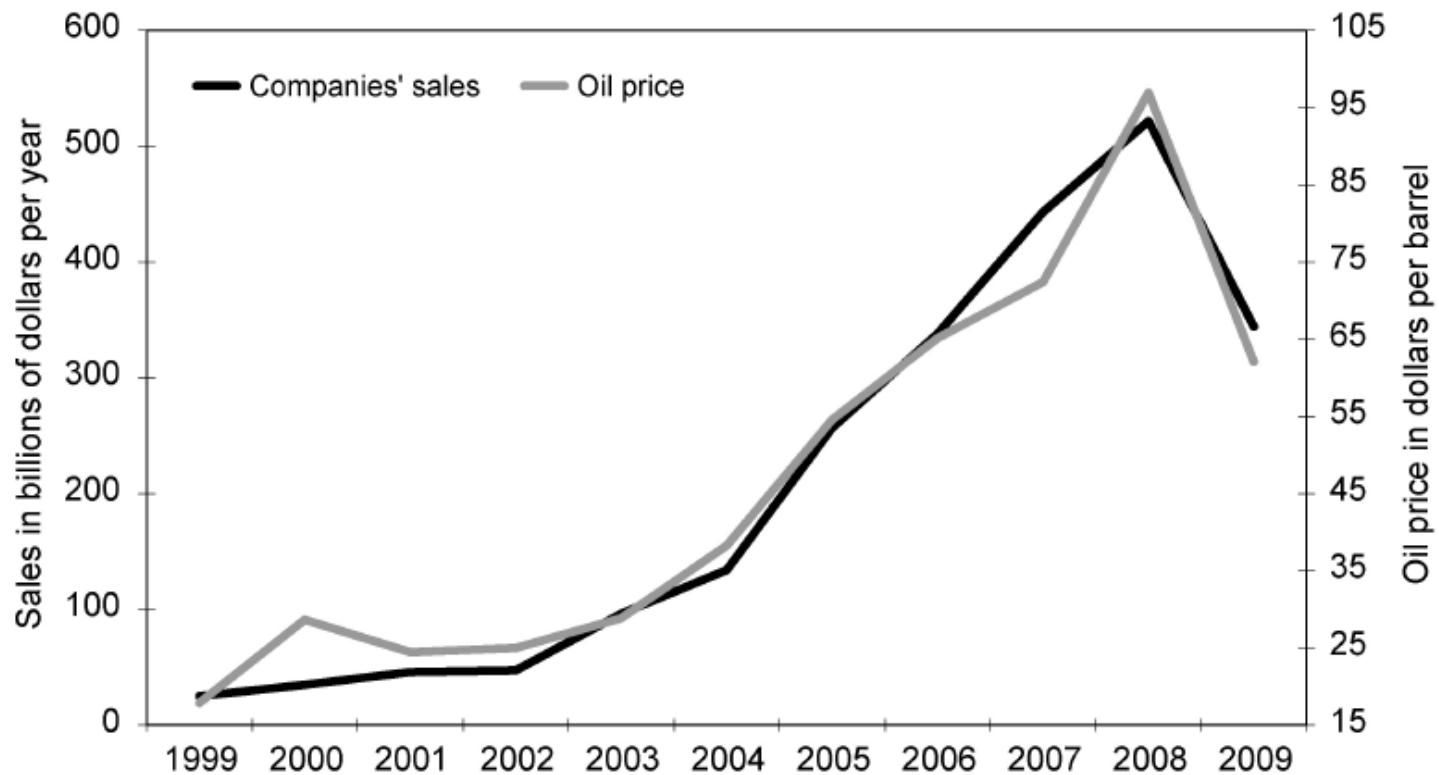
# Russia is all about Oil and Gas



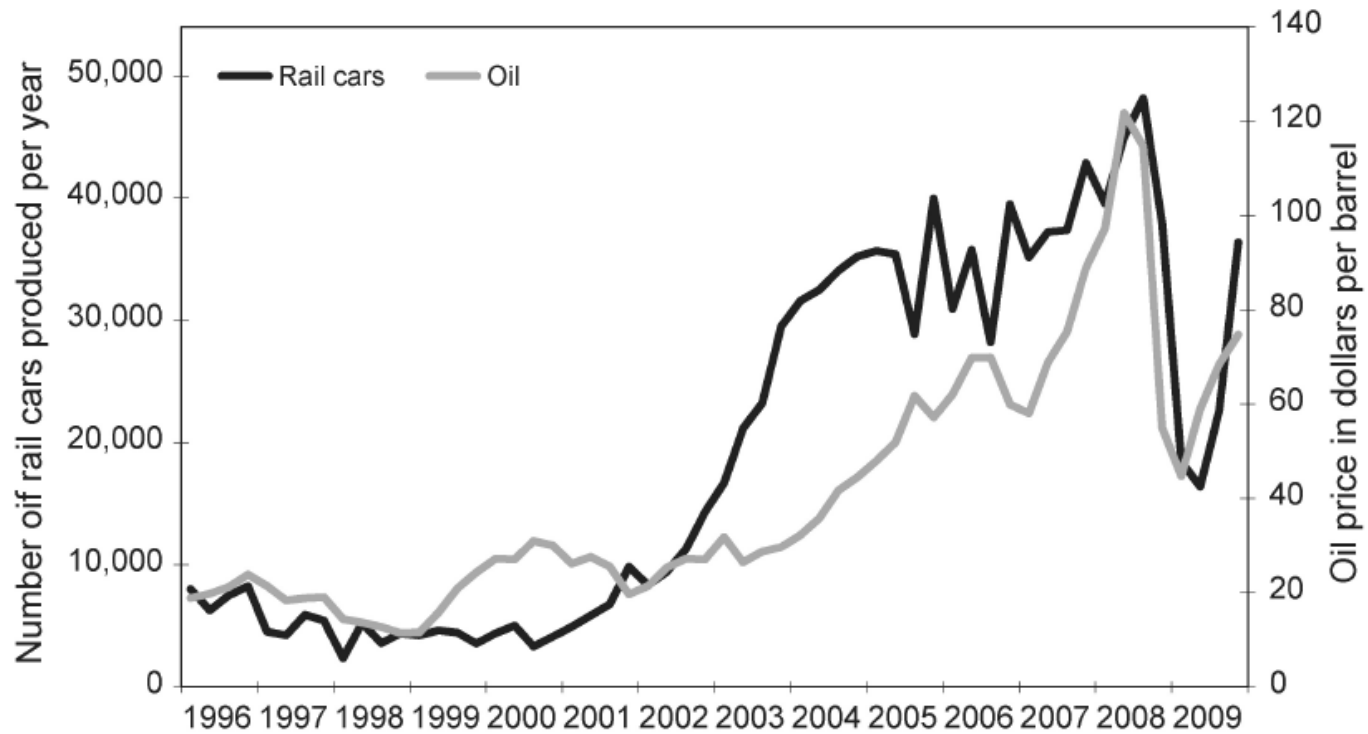
# Oil Prices and the Stock Market



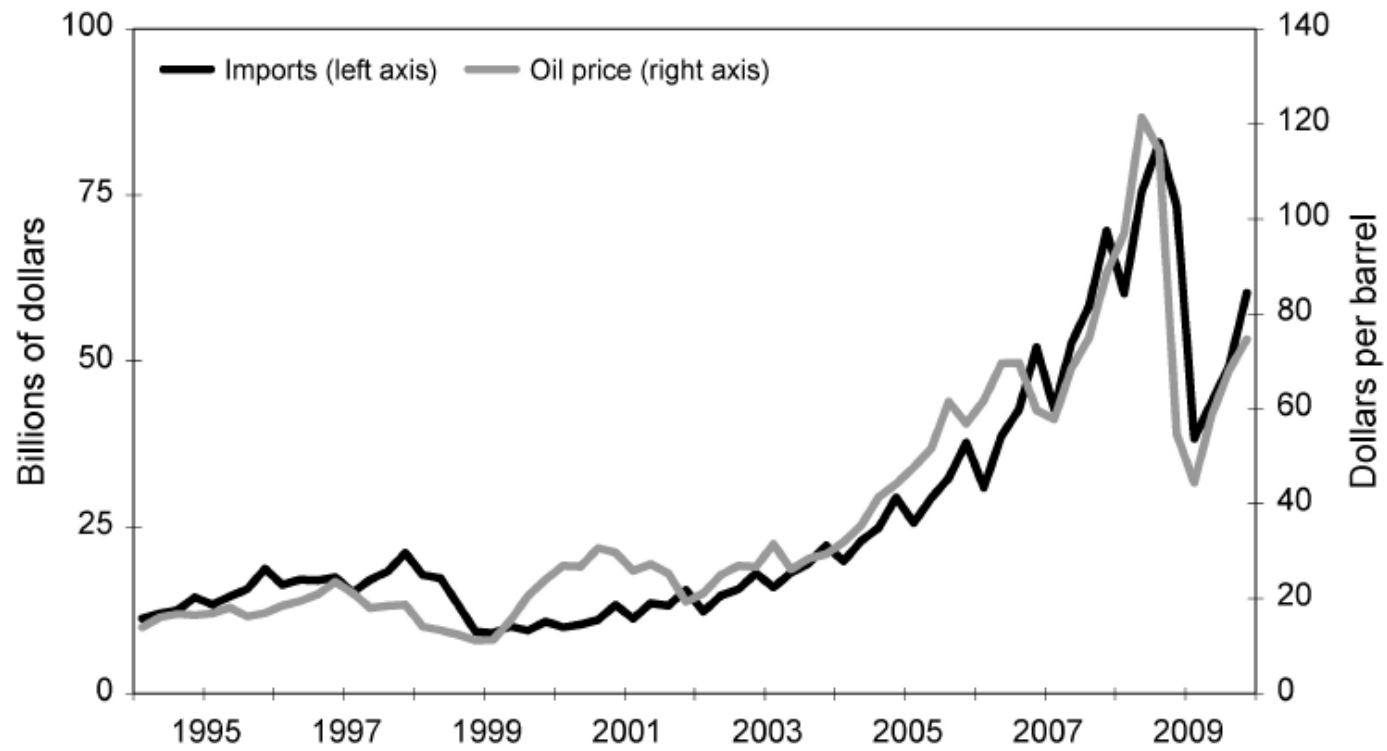
# Oil Prices and Retail Sales



# Oil Prices and Railway Car Production

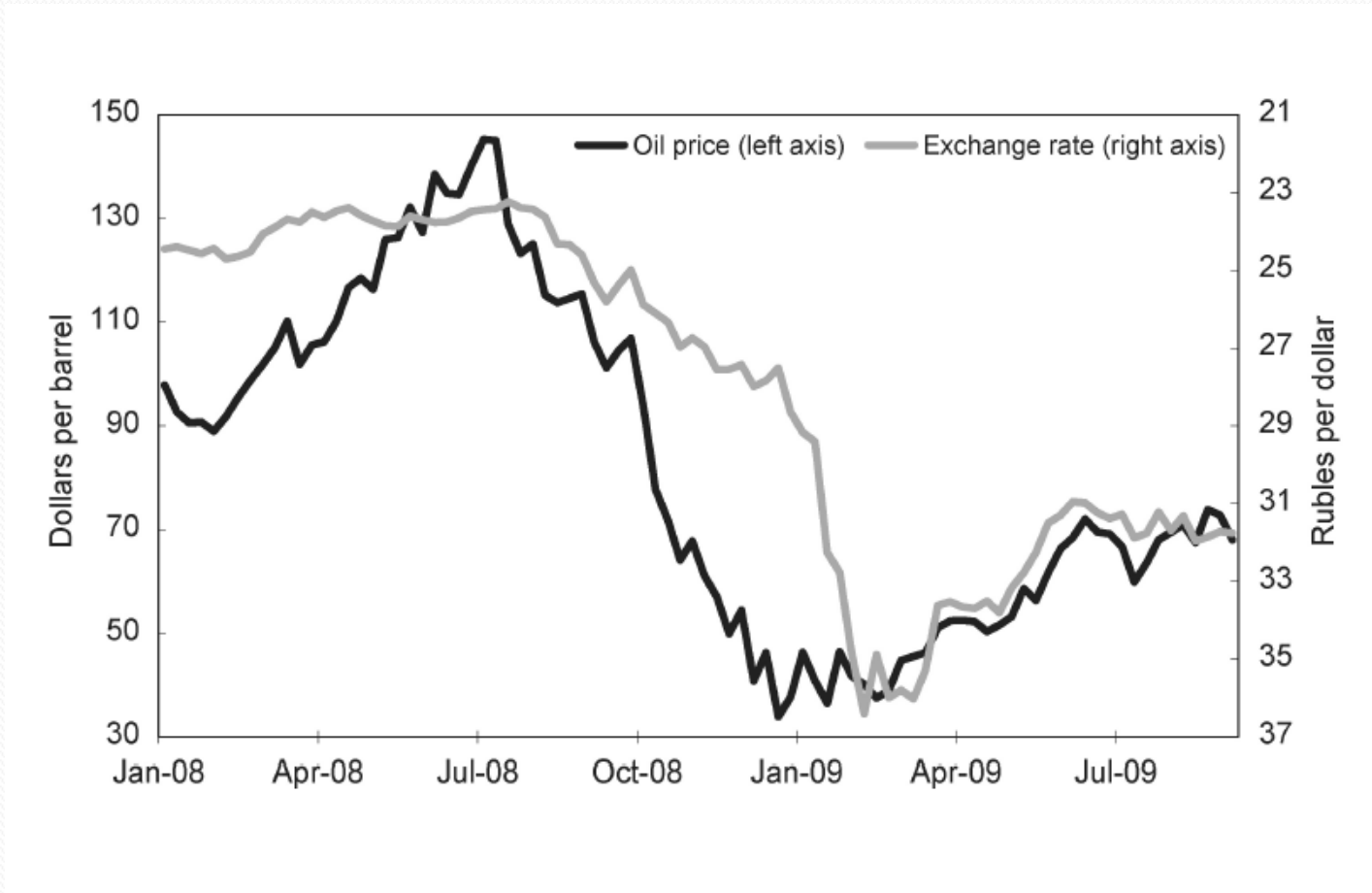


# Oil Prices and Russian Imports





# Oil Prices and the Exchange Rate



# Oil Caused Boom and Bust

- Russia suffered severely because of its dependence on oil
  - 1998 crisis and in 2008
- But it grew dramatically from the same cause
- Russia was better prepared in 2008 than in 1998
  - Putin's policy of reduction of leverage
- Did not expect world financial crisis to be the shock

# Russia is Addicted to Oil *Rents*

- Addiction refers to a condition in which there is an imperative to allocate rents to maintain and expand specific production sectors of the economy, notably those that the Russian economy inherited from its Soviet predecessor
- Structural change in the economy due to production for production's sake
  - Big problem for post-Soviet economies
- Addiction leads to
  - Tolerance, withdrawal, and willingness to sacrifice for addiction
  - Crisis has not ended addiction
  - Putin used Bretton Woods II to limit addiction
  - He did not expect western financial system to implode

# Rent Management Systems

- All resource abundant economies need a RMS
- The purpose of the RMS is to prevent the dissipation of rents.
  - If the RMS is weak then rents will be appropriated at the source of production.
  - If the RMS is centralized and powerful rents will flow upwards to the leadership.
  - RMS can be strong or weak, depending on whether rents are grabbed or not

# Rent Management System

- Putin Built a new Rent Management System
- Putin's Protection Racket
  - system centers on monopoly control of financial information
  - mutually beneficial system
    - Controls the oligarchs from fighting over rents
- Survived the crisis

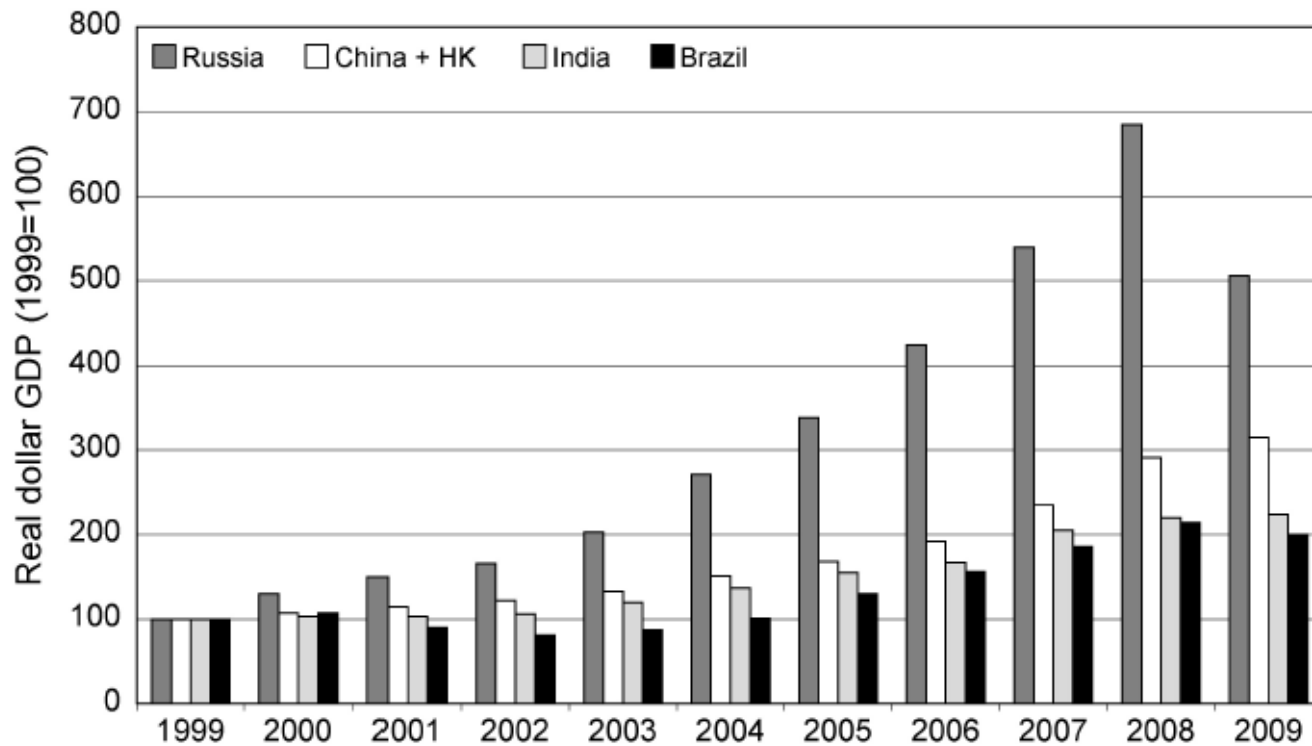
# Diversification

- Recognition of Oil Dependence is the driver of the modernization drive
- Desire not to be “raw material appendage”
- Desire to lessen sensitivity of economy to oil prices
  - But the “new” industries have to be un-( or negatively) correlated with oil economy to smooth consumption (since returns will be lower)
  - Have to be huge to dampen swings significantly
  - Is this consistent with comparative advantage?

# Details

- How much will it cost to create large enough sectors that are uncorrelated with oil economy?
- Where will the resources come from to accomplish that?
  - Competing claims
    - Search for new oil and gas reserves
    - Need for a bigger stabilization fund (including for informal rent distribution)
- Risks
  - Low returns
  - New addicts: it would be better to flush resources down the toilet than invest in ways that create new addicts

# Should Russia Have Diversified?





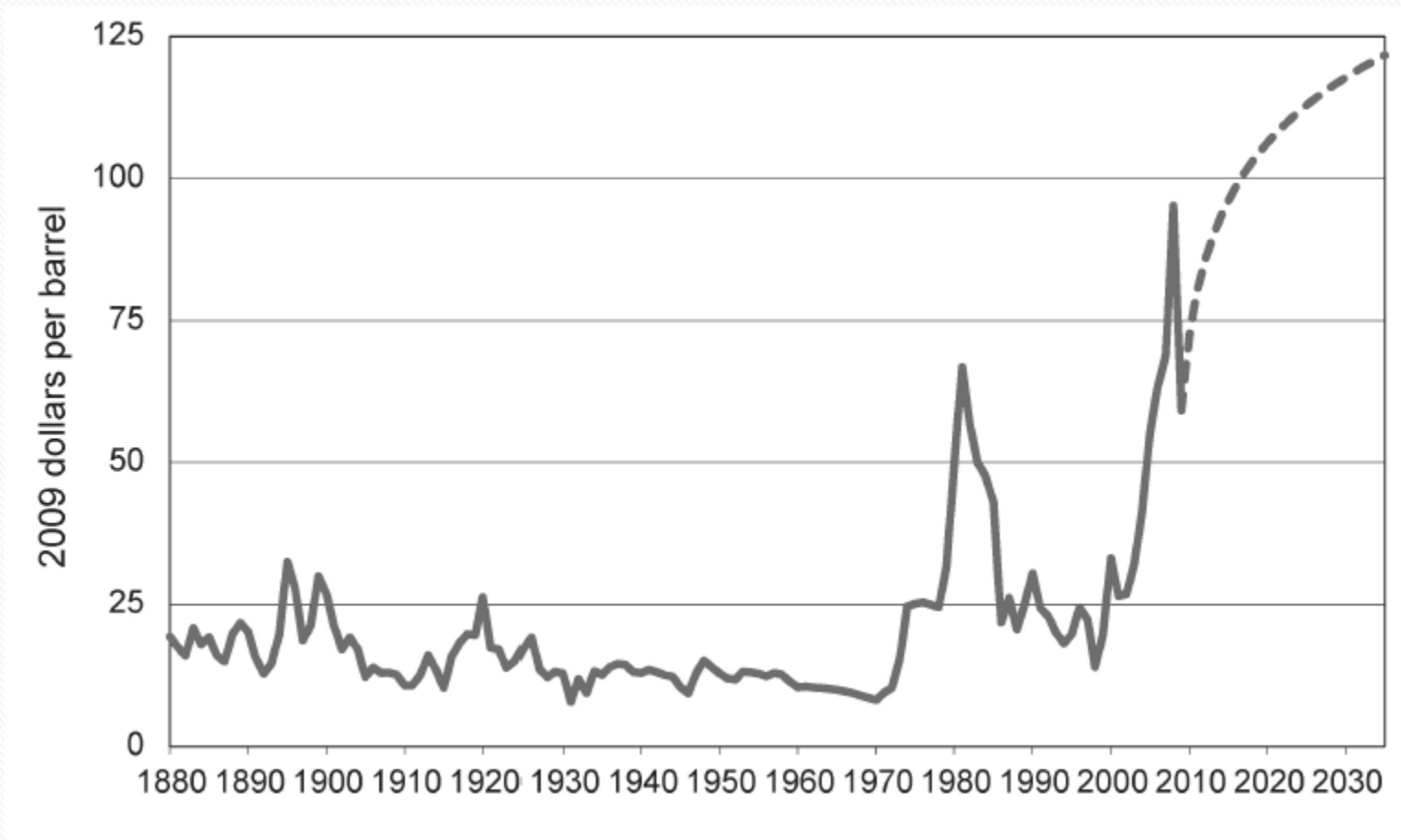
# David Friedman on Diversification

- [There] are two technologies for producing automobiles in America. One is to manufacture them in Detroit, and the other is to grow them in Iowa. First you plant seeds, which are the raw material from which automobiles are constructed. You wait a few months until wheat appears. Then you harvest the wheat, load it onto ships, and sail the ships eastward into the Pacific Ocean. After a few months the ships reappear with Hondas on them... . International trade is nothing but a form of technology.

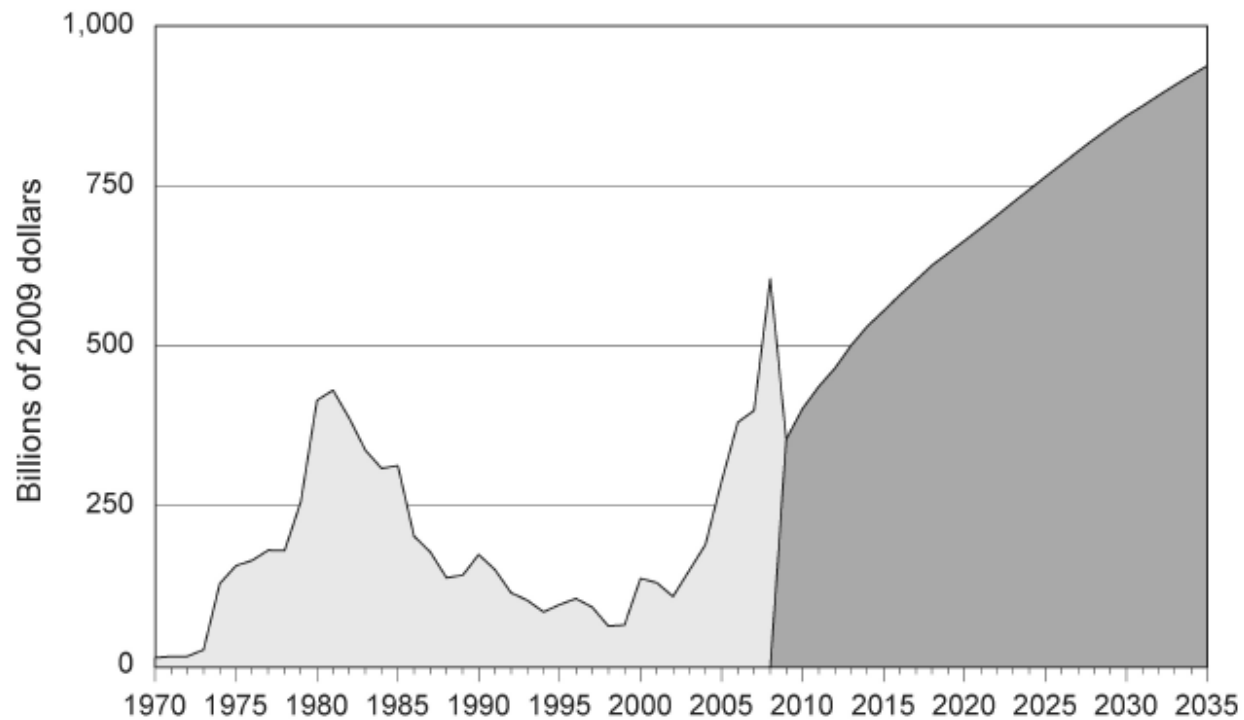
# Key Problem

- Key problem for energy-abundant economies is volatility of the oil price
- Oil prices close to random walk in postwar period
- Price uncertainty puts risk on producer countries that are relatively high cost producers
- If current trends were to continue Russia (and similar countries) “owns” the world
  - Is that likely?

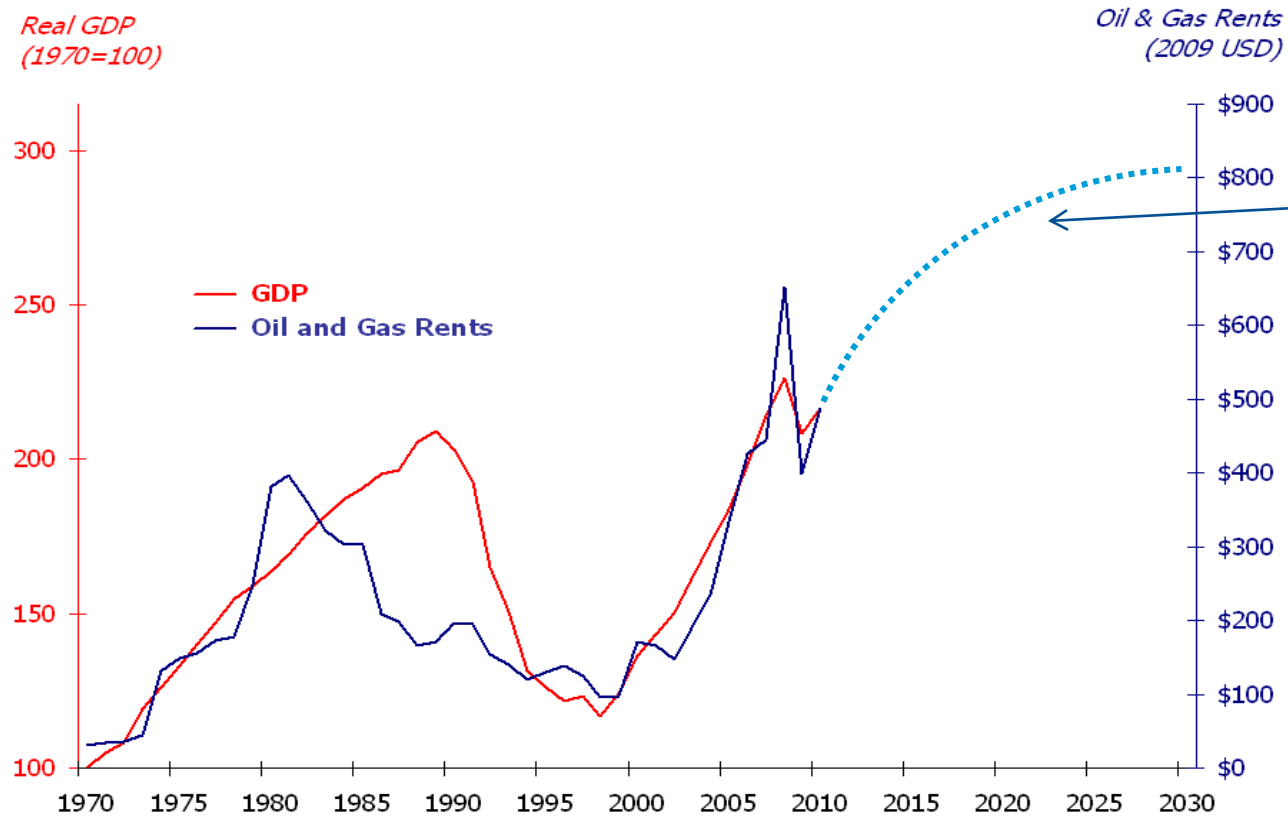
# Oil Prices: History and Future



# Resource Rent Projections



# Russian Oil and Gas Rents and GDP, 1970-2030



Still only  
2.1% growth  
in GDP per  
year

# Russia's Long Run Problem

- How to share risks of investing for future oil
  - Russia needs more production, cannot rely only on price growth
- Price volatility may remain
  - International risk sharing is the sensible solution for resource dependent economies
    - Invest surpluses in ROW, let western companies invest in new resources
- International risk sharing in the wake of the world financial crisis

# Modernization?

- Nothing illustrates the problem better than this:
  - "Russian billionaire Viktor Vekselberg plans to renovate a moneylosing, Soviet-era synthetic oil plant as President Dmitry Medvedev demands the rich invest in towns left impoverished by dying industries." The largest oil producer in the world will make synthetic oil to save a dying one-plant town. According to a spokesman for Vekselberg: "While the Zavod Slantsy plant is the only hope for the town's economy, the potential for 'innovation and efficiency' sparked Vekselberg's interest .... [Vekselberg] aims to upgrade the plant and produce synthetic fuel that can compete with petroleum...."(Bloomber News, May 26, 2010, "Vekselberg to Revive Soviet Oil Plant to Save Town").
- Modernization for modernization's sake

# Problem with Modernization

- Current modernization programs fail to address to real causes of Russian backwardness
  - Inherited structure of production
    - Physical and Human capital, and their spatial allocation
  - Rent addiction
    - imperative to distribute a large share of Russia's oil and gas rents to the production enterprises that employ this inherited physical and human capital
- Unless these are addressed, modernization just distributes more rent to addicts



# Misdiagnosis of Russia's Problem

- This results from  $\tau$ -effect
  - Input levels are over-estimated
  - Residuals are under-estimated
- Over-estimate of input use indicates that corruption or efficiency is the problem
- But the real problem is misallocation of assets leads to low productivity
  - If the structural problems are not addressed innovation and reducing corruption will have less impact
- Failure to recognize this is the real Bear Trap