

# **Sino-US Energy Security: taking out the emotion**

**Wilson Centre Seminar  
“Competition or Cooperation for Energy:  
China and the North American Response”**

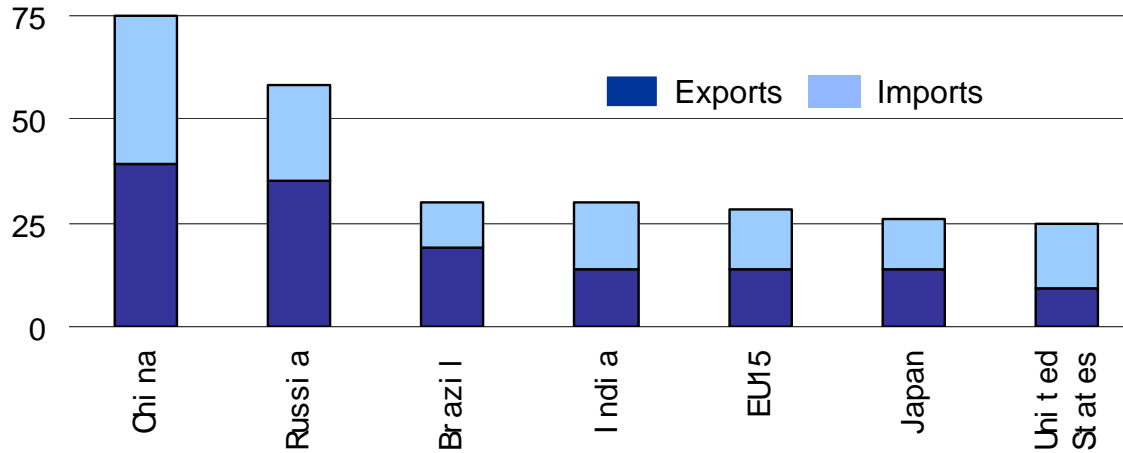
**Dr. Xavier Chen, BP China  
Washington DC, 29 March 2006**

# Agenda

1. Context of China's energy security
2. Nuances on energy security:
  - Perception vs reality
  - Energy security vs oil security
  - Oil security vs oil market security
3. Drivers of China's global oil search
4. Conclusions

# China today

*Trade in goods and services as % of GDP, 2004*

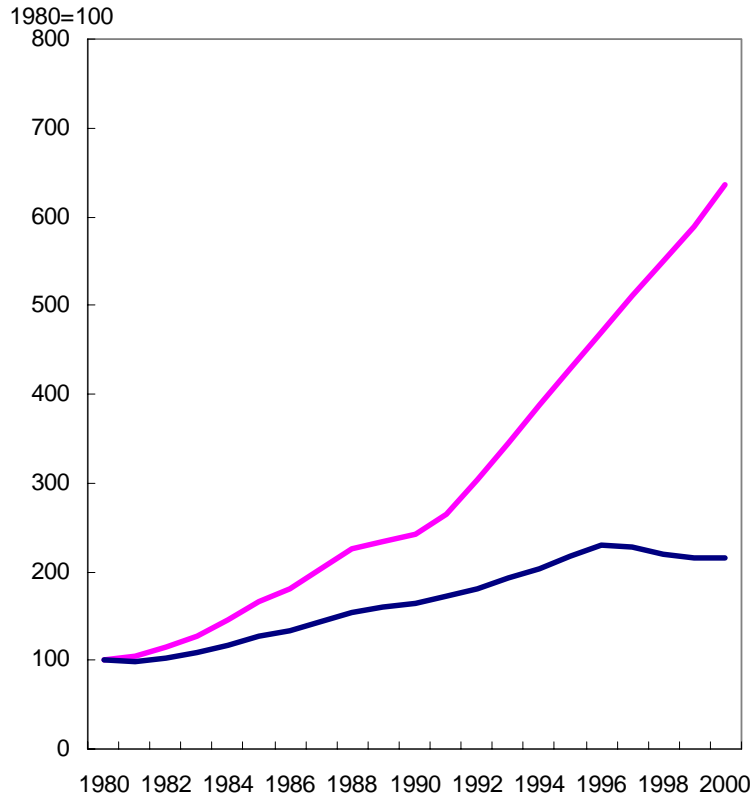


## China today:

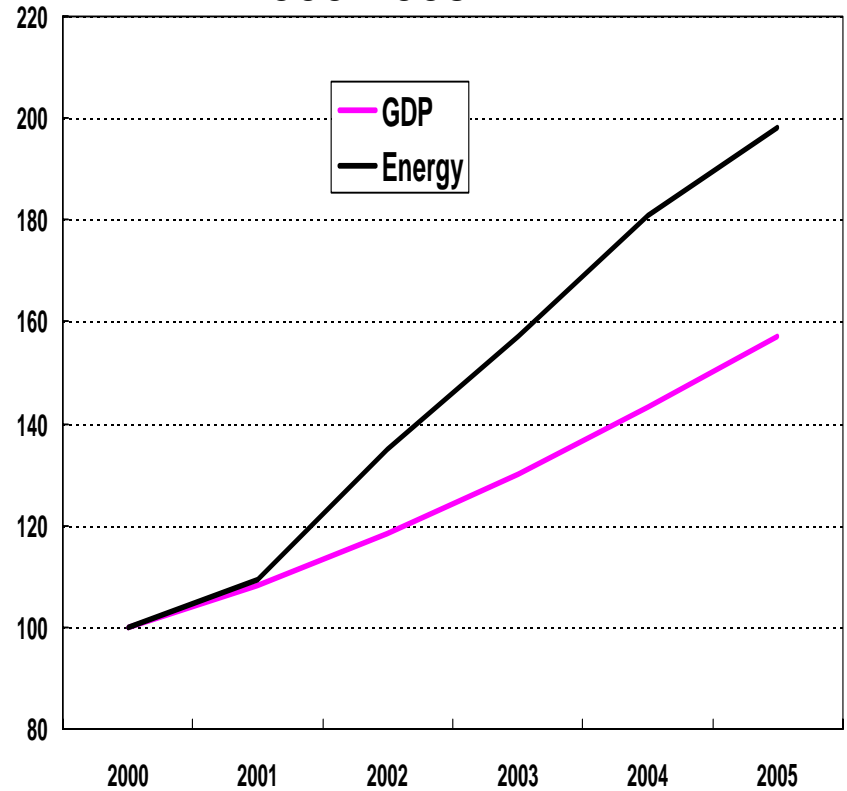
- 2<sup>nd</sup> largest energy producer
- 2<sup>nd</sup> largest energy consumer
- 3<sup>rd</sup> largest oil importer
- 2<sup>nd</sup> largest CO2 emitter
- 2<sup>nd</sup> largest power market
- Largest SO2 emitter, has world's 16 of 20 most polluted cities
- 4<sup>th</sup> largest economy
- 4<sup>th</sup> largest FDI stock, 2<sup>nd</sup> FDI inflow
- “World factory”
- Highest trade dependent economy
- “Open-door” as basic national policy

# China Energy and GDP Growth

## 1980-2000

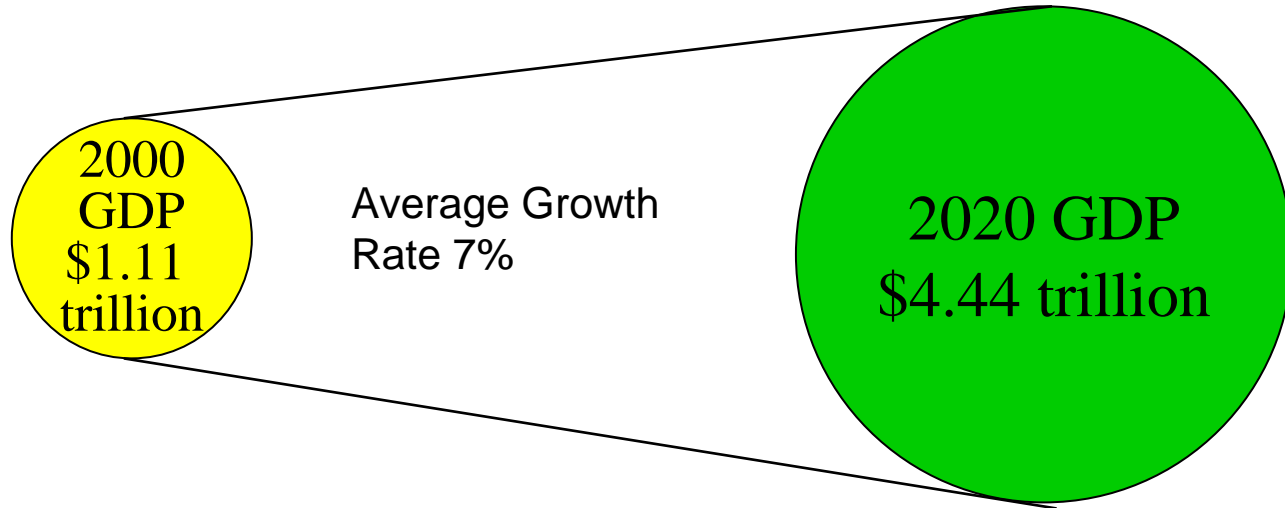


## 2000-2005



**GDP in 2000 was 6.4 times the level of 1980, energy was 2.16. By 2005, while GDP is 57.3% above 2000 level, energy is 98% above.**

# Government's 2020 Vision



## Necessary Conditions

- ◆ Capital: OK
- ◆ Labor: OK
- ◆ Natural resource: **problems**
  - > Energy
  - > Minerals
  - > Water
  - > Arable land

## Sufficient conditions

- Income gap/social stability
- Financial efficiency
- Human capital development
- SOE reform
- Energy efficiency
- Environmental sustainability
- Peaceful environment

# China's Energy Challenges

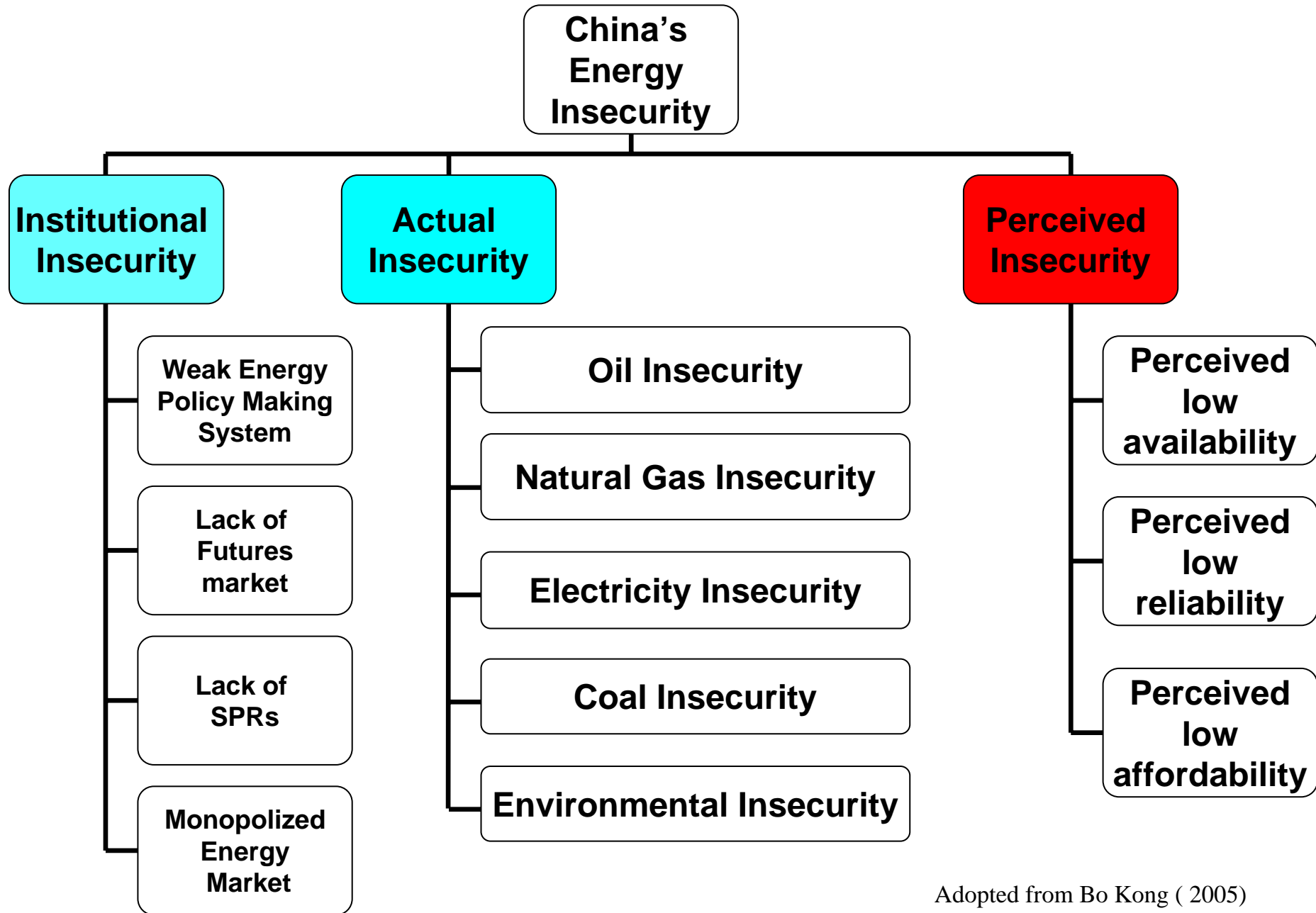
- Sustained demand growth created supply tension;
- Resource shortage constraining further development;
- Coal dominance causes environmental damages;
- Backward technologies inhibits supply growth and efficiency improvement;
- Greater impacts by international market fluctuations.

# Latest policy developments

- ✓ **Energy conservation as top priority: 20% reduction in GDP energy intensity by 2010 as compulsory target**
- ✓ **Resource saving as Basic National Policy: recycling economy, 30% reduction in water use intensity of industrial activities by 2010 as compulsory target**
- ✓ **Environment: 10% reduction in major pollution discharge by 2010**
- ✓ **Renewable Energy Law and regulations: effective 1<sup>st</sup> January 2006**
- ✓ **New pattern of industrialization: from energy and resource intensive to knowledge and labour intensive**
- ✓ **Energy market reform: pricing policy, SOE reform**



# Energy insecurity: perception vs reality



# Energy Security vs Oil Security

- ◆ **The core of energy security is to ensure energy supply whenever and wherever it's needed to fuel the national economic growth and social development, in terms of availability, affordability and compatibility, both with consumers' needs and environmental requirements.**
- ◆ **Energy security is not only about oil, it also involves other types of energy, such as electricity, natural gas and coal etc.**
  - **Oil supply security most internationalised;**
  - **Electricity supply security is the most important;**
  - **Gas supply security needs particular attention;**
  - **Long term coal supply security is vital for countries like China**

# Oil Security vs Oil Market Security

- ◆ **Oil security means two aspects for a country like China with a growing important dependency:**
  - ◆ **Internationally, to secure a long-term, reliable, reasonably priced and low risk supply of crude oil to the country's refineries;**
  - ◆ **Domestically, to provide with consumers without shortage or interruption the right kind of oil products they need at reasonable price in an environmentally responsible way.**
- ◆ **Efficient operation of international oil market is critical to oil security, so is the efficient operation of a domestic market.**
- ◆ **International oil market is a public good for all producing and consuming countries.**
- ◆ **All nations should work to ensure international oil market security, rather than just defending their individual country's oil security.**

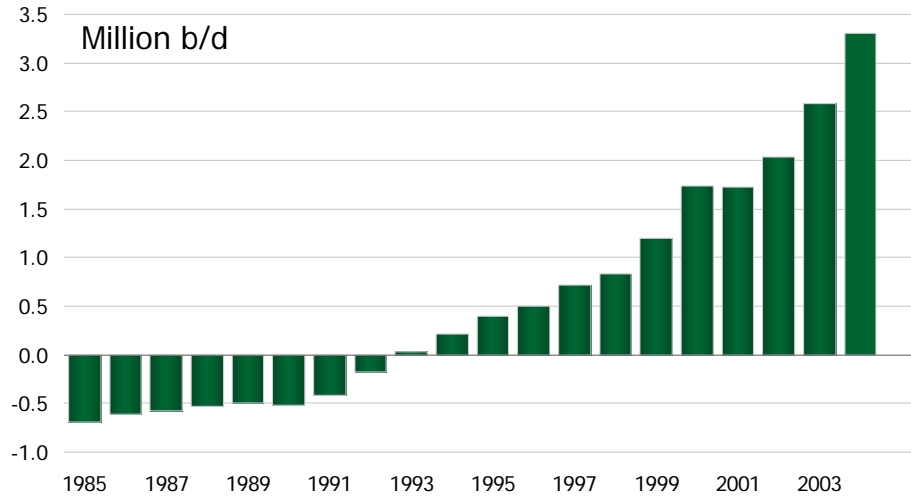
# China's Overseas Oil Investment

1. Part of China's integration in world economy;
2. Perception of resource scarcity, prime on resource investment ;
3. NOC desire to grow international and share rent between production cost and market price;
4. Better use of foreign exchange reserves
5. Trust or not in international oil market
  - Perception that prices are determined elsewhere
  - Perception of oil market being dominated by Western powers

**Results: No serious assessment, but according to CNPC, 90% of Chinese equity oil is sold in international market.**

# Turn one problem into the solution for another ?

## China's net oil imports 1985-2004

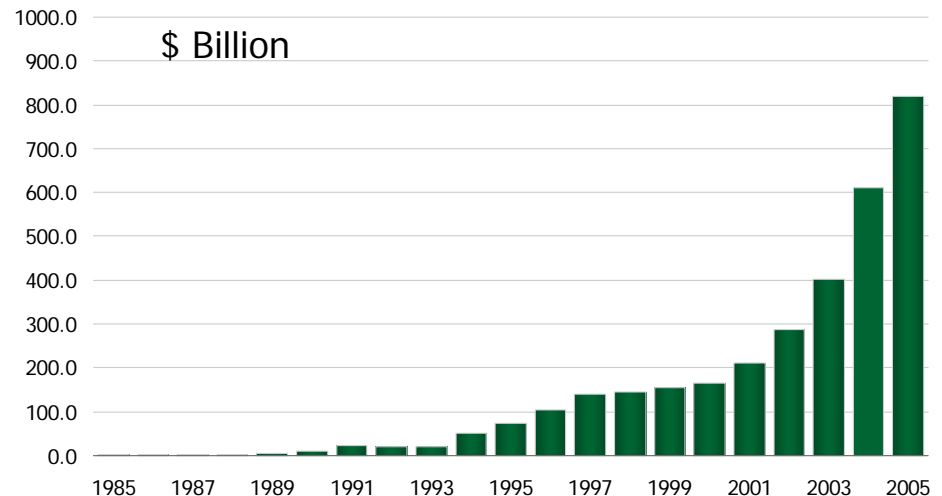


Growing oil imports bring the problem of oil security

Excessive forex reserves create two major problems

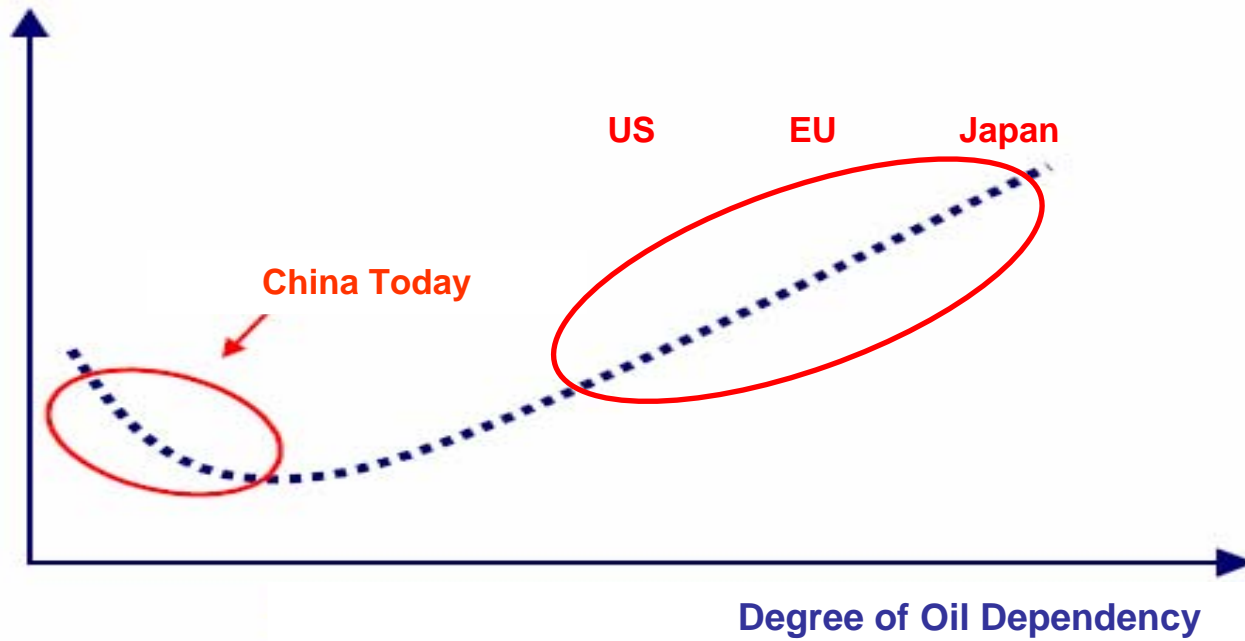
- 1) pressure on RMB appreciation;
- 2) opportunity costs

## China's forex reserves 1985-2005



# Market Confidence: the learning curve

Confidence in World Market



Adopted from Pierre Noel, IFRI

# Conclusions

1. China's energy security challenges are wider and more profound than they are perceived.
2. China can not have energy security without energy security for the rest of the world, and vice-versa.
3. International oil market is a public good for both consumers and producers. US and China are the biggest “responsible stakeholders”, they together could shape the future.
4. China is in the learning process about market and physical control, from unilateral quest to multilateral co-operation. The West needs to engage China, to channel China's power to develop common sources of supply and common solutions for the world.

