

15th U.S. - China Oil & Gas Industry Forum

Oil Companies' Capital Expenditure : Business Cycle Perspective



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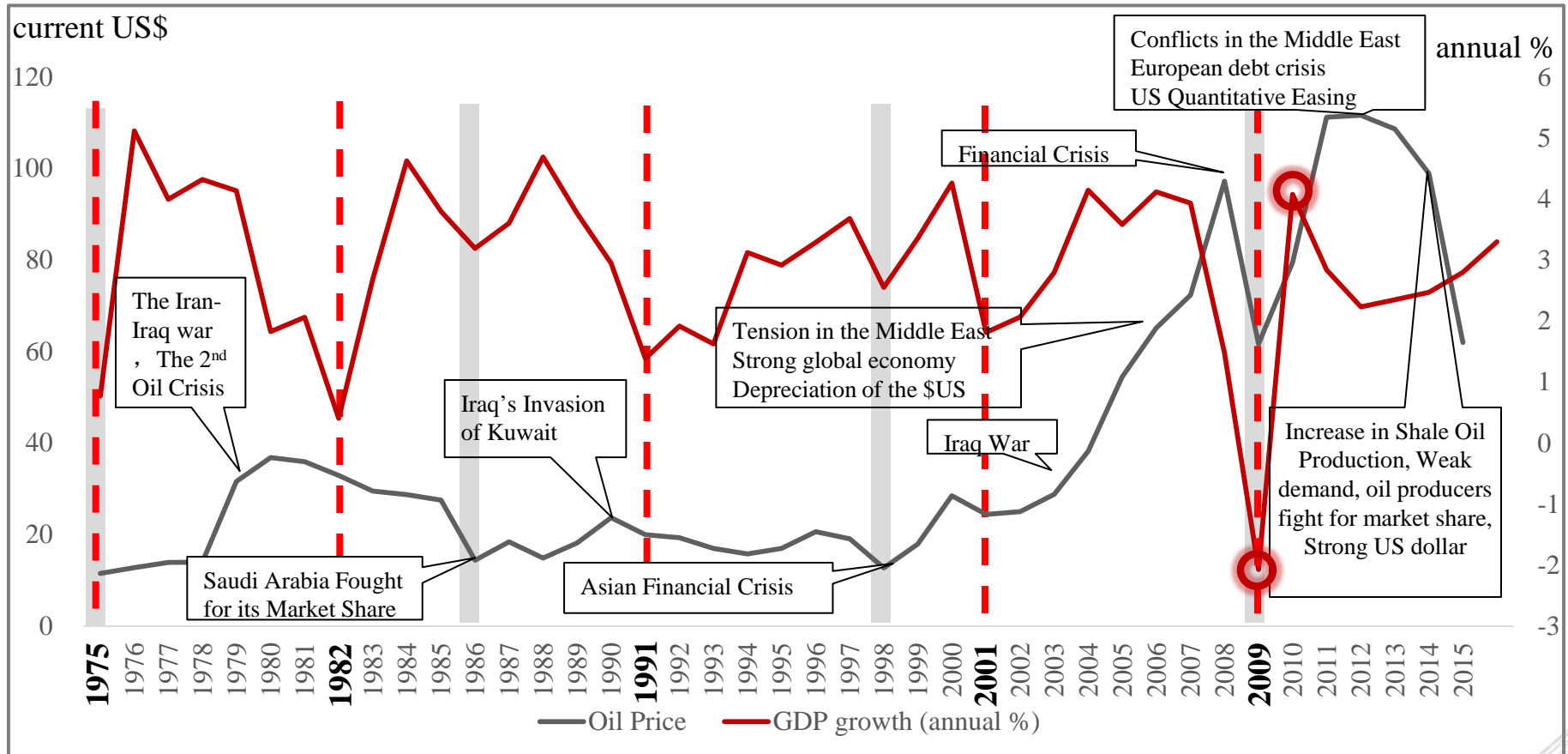
Outline

- ④ **Business Cycle, Oil Price and Capital Expenditure**
- ④ **New Business Cycle and Trends in Oil and Gas Industry**
- ④ **Business Cycle and Strategies of Oil and Gas Companies**



Business Cycle, Oil Price and Capital Expenditure

Global Economy Cycle and Oil Price

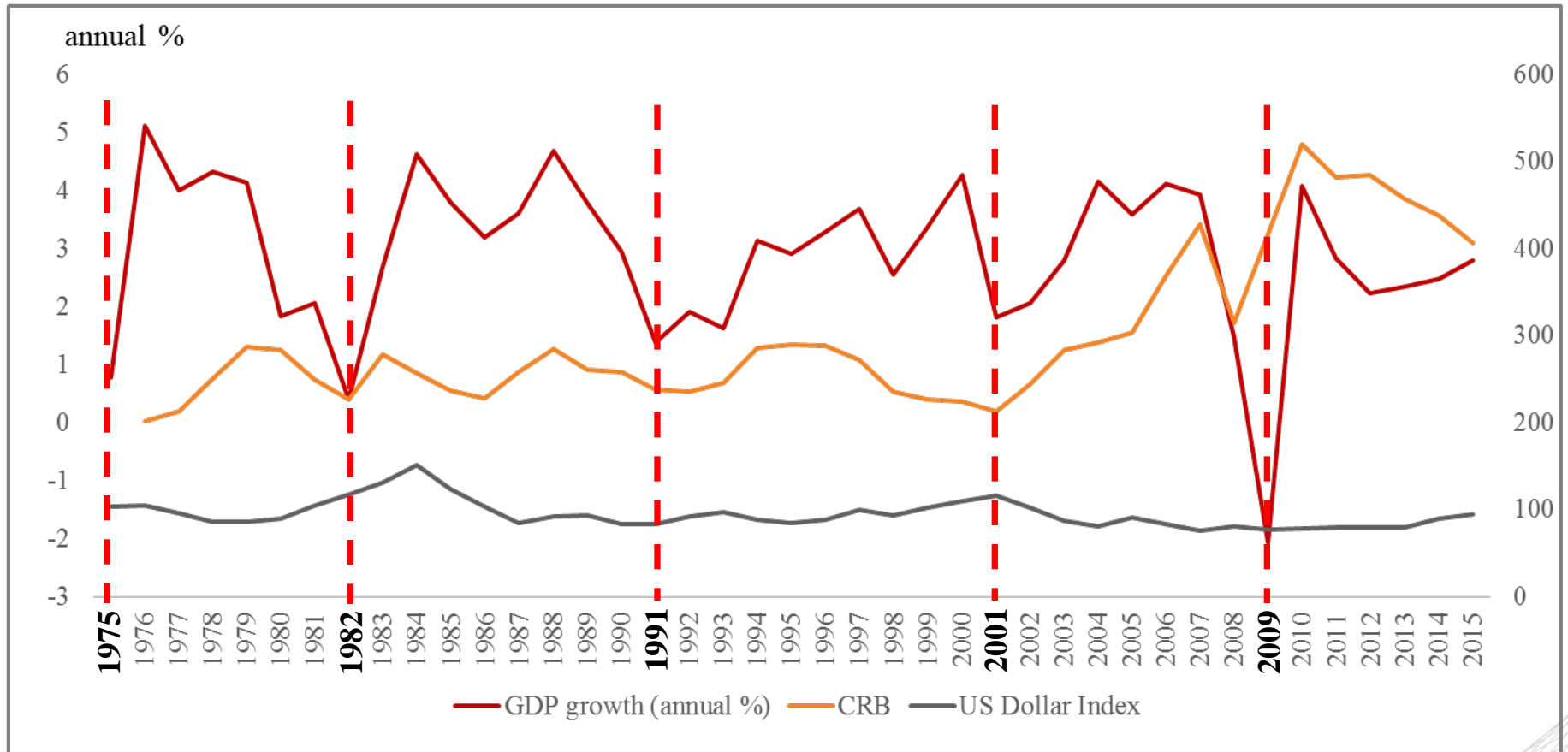


- The global economics has gone through several business cycles and is gradually recovering, which sustains the world's energy demand to continue to grow
- Oil prices are subject to special issues, such as geopolitical events, thus cycle of oil price is not entirely consistent with that of global business cycle



➤ Business Cycle, Oil Price and Capital Expenditure

Global Business Cycle and Commodity Price

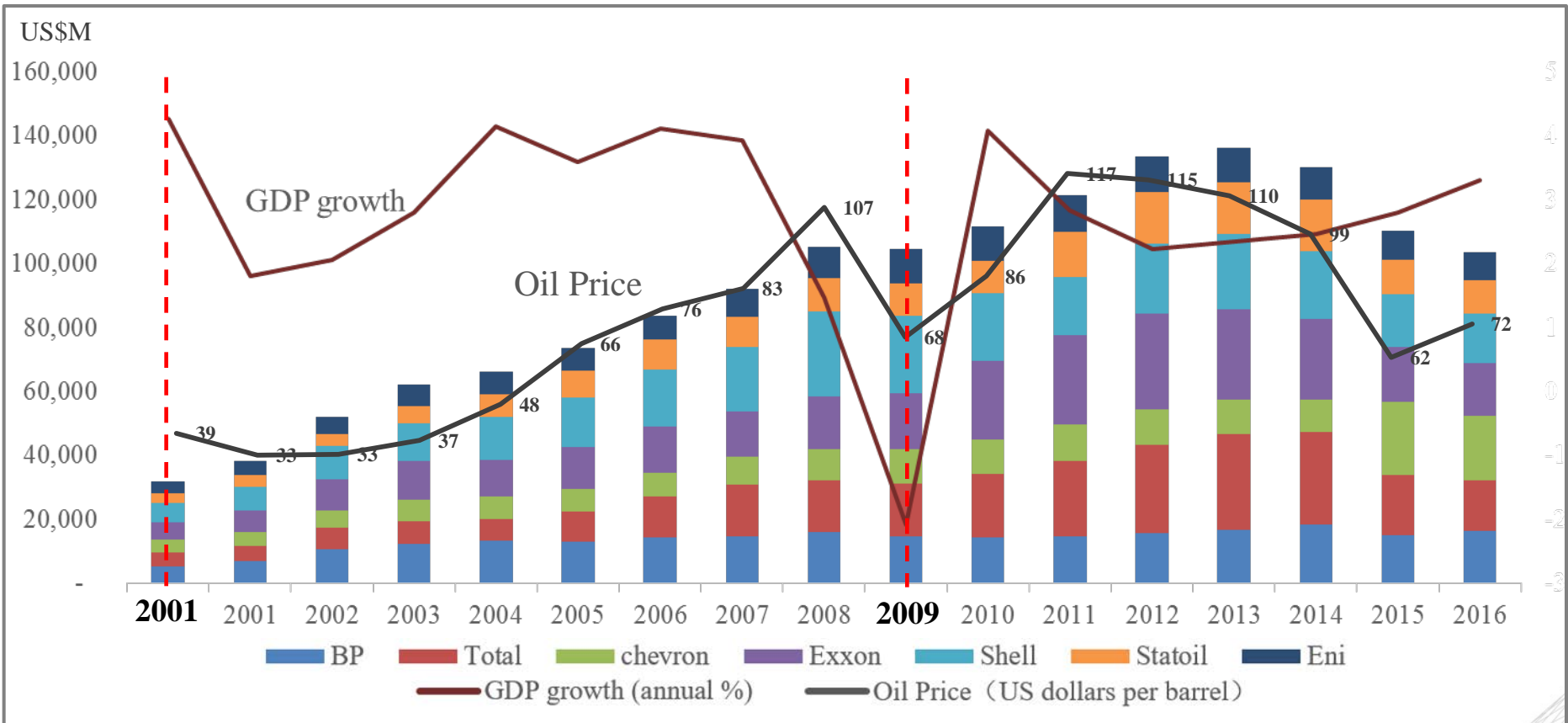


➤ Commodity price entered into a long business cycle since 2001



➤ Business Cycle, Oil Price and Capital Expenditure

Global Business Cycle and Development Cost of Oil Majors



- Capital expenditure of oil company has a certain stability
- Capital expenditure is more affected by volatility of oil price, and less affected by the business cycle



1. Statistic Analysis shows that the economic development itself is cyclical, and commodity prices are also featured by cyclical characteristics. But oil is also subject to geopolitical and other special events, in the context of demand dominated environment, oil prices almost consist with the business cycle, whereas in the context of supply driven, oil prices and business cycle is not entirely consistent.

2. Taking into account oil project lasting long, even if current world economy is bottoming stabilized and oil price remains low, capital expenditure made by oil companies is relatively stable, expenditure cuts are far less than the rates of decline in oil prices.



Outline

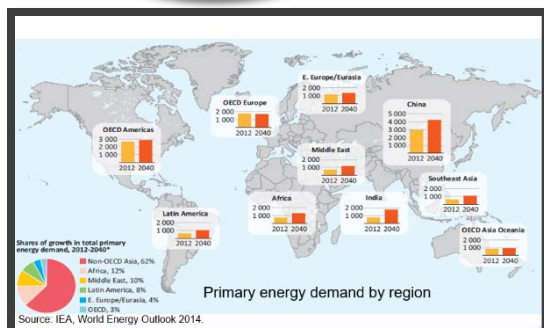
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➤ New Business Cycle and Trends in O&G Industry

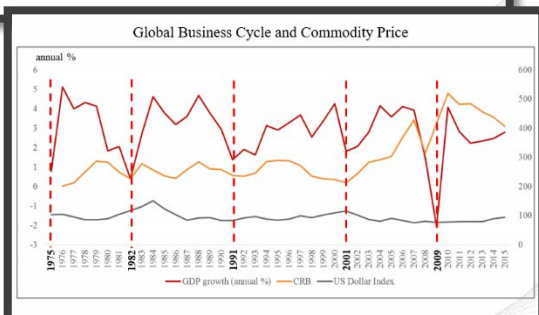


Overview

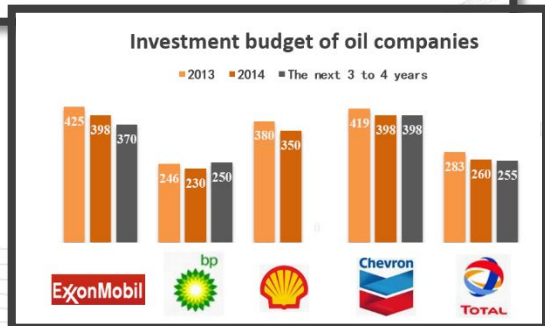
Situation Prediction for Future O&G Industry Based on Current Business Cycle



On the whole, the world economy is recovering from the financial crisis. The population and economic growth can further push up the demand for energy.



Commodity prices are in a period of adjustment, and the more sharply oil prices declines, the larger rebound can be expected.



In the short term, investment scale of oil companies will be reduced, but the cut is relatively mild and smooth.



**Crude
Oil**

The Oil Market Will Return to a New Normal State

Current Oversupply and Sluggish Demand



On one hand, supply gives its way to demand to drive oil price

On the other hand, the recovery of the world economy will gradually restore demand



The gap of supply exceeding demand will gradually narrow down, and the oil market will return to a new normal state



**Natural
Gas**

The “Golden Age” is coming but with outstanding structural contradictions

The short-term growth in natural gas demand is lower than expected, but the long-term high growth trend will not change.

The flexibility of LNG trade will be further strengthened, and the proportion of LNG trading amount in global natural gas transaction will continue to rise.

The pricing mechanism of regional gas transaction is changing, and the price linkage of each region will be enhanced.

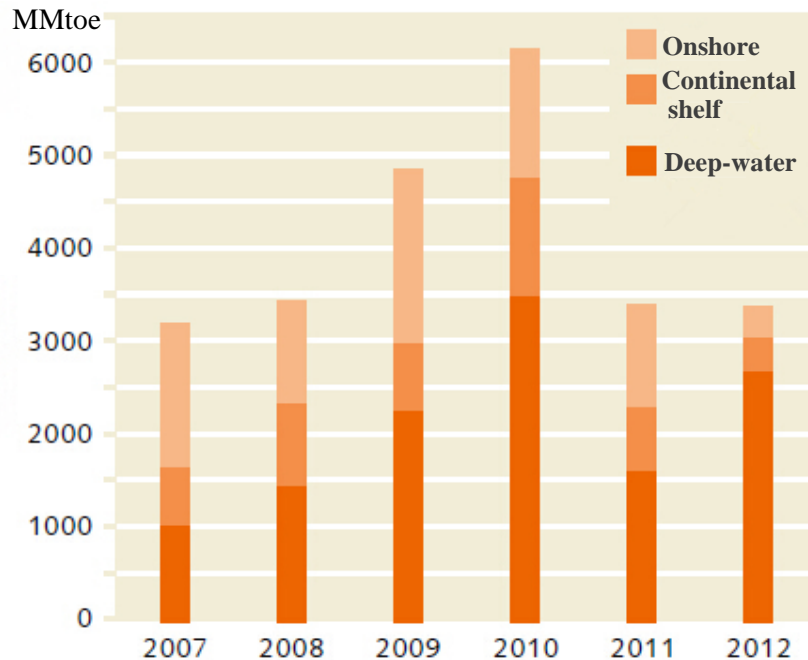
➤ New Business Cycle and Trends in O&G Industry



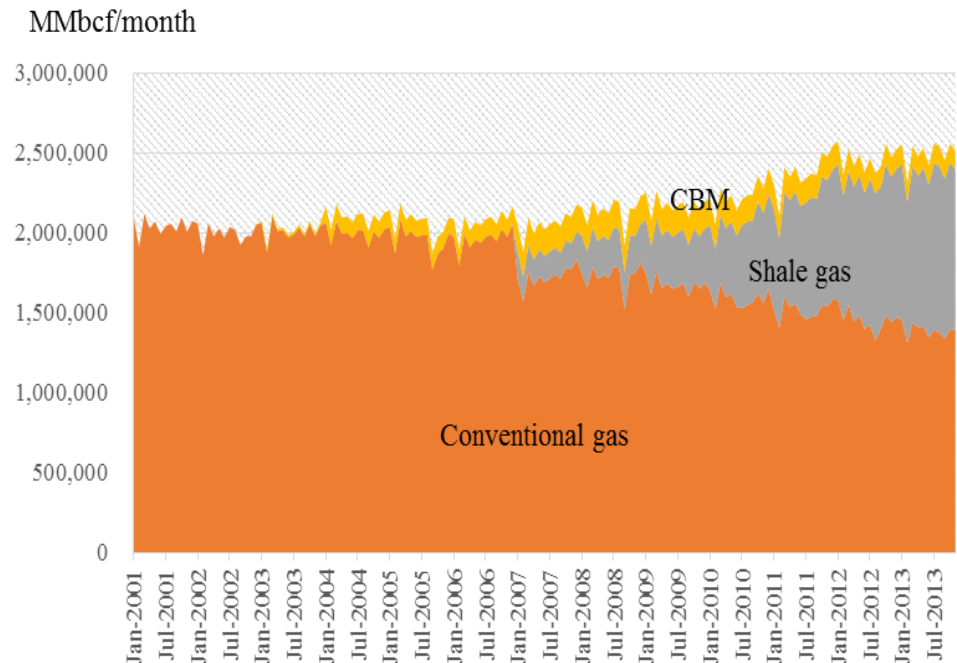
Unconventionals

Unconventional energy and deep-water resources will contribute most of the incremental output

Annual proved resource in the world



The structure of natural gas production in the U.S.



➤ **The global O&G development is going towards the unconventional and deep-water resources, thus will affect the investment scale of oil companies**

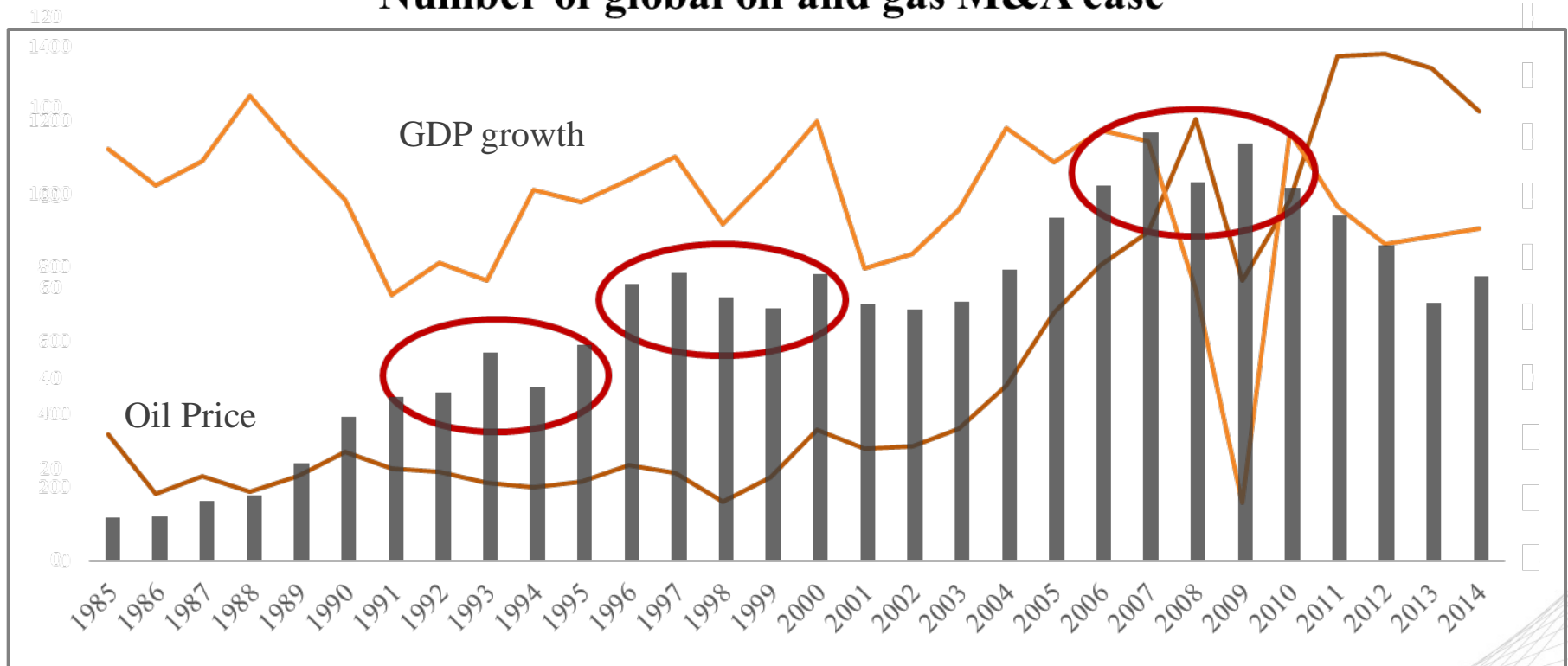
➤ New Business Cycle and Trends in O&G Industry



M&A

Low oil price will promote a new tide of O&G merger and acquisition

Number of global oil and gas M&A case



➤ **International oil and gas M&A is affected by oil prices, and a low oil price environment often brews mergers and acquisitions climax**

➤ Summary



1. Oil and gas will continue to be the main source of the global energy supply, and the golden age of natural gas is coming.

2. The growth rate of supply will drop as a consequence of low oil prices on high cost investment, so supply stability will confront some threats; while the low oil prices will stimulate demand, thus will ease the dilemma of oversupply and sluggish demand.

3. The oil industry is facing a new round of mergers and acquisitions based on our retrospect on past business cycles.



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Three long-term strategies of oil majors



**Portfolio
optimization**



**Innovation
driven**



**Cost
control**





Portfolios Optimization

- The upstream activities aim to pursue high efficiency and more profits instead of large scale. Pay more attention to their oil and gas asset portfolios and optimize them according to the international market price. Keep dynamic adjustment of the proportion of resources to avoid the risk of a crash in oil or gas price.
- Adhere to the diversification strategy, making reasonable allocation of conventional and unconventional assets ratio. Balance the company's current interests and future sustainability: in the period of low oil price, focus on low-cost and good-performance conventional oil and gas assets; in the period of high oil price, expand unconventional oil and gas production.



Cost Control

- Since the financial crisis, the investment of oil companies have been characterized by rising expenditure, low return and capital-strapped.
- As the international oil prices go down, companies start to review their investment plans, looking for reasonable room to adjust or even cut down expenditures. Stick more firmly and more strictly to enforce investment plan.
- Streamline administration agencies and cut jobs to lower the cost especially operating cost.



Innovation Driven

- Investment in technology innovation should be a long-term strategy to meet the engineering and technical challenges of today's oil and gas business.
- For the exploration and exploitation of unconventional, deep-water, polar and other resources, research of complex oil and gas reservoir and complicated geographical environment need to be further strengthened.
- With the revolution of energy use driven by the idea of “Energy Internet”, management innovation will become a competitive advantage for oil companies.



Any Comments Are Welcome!