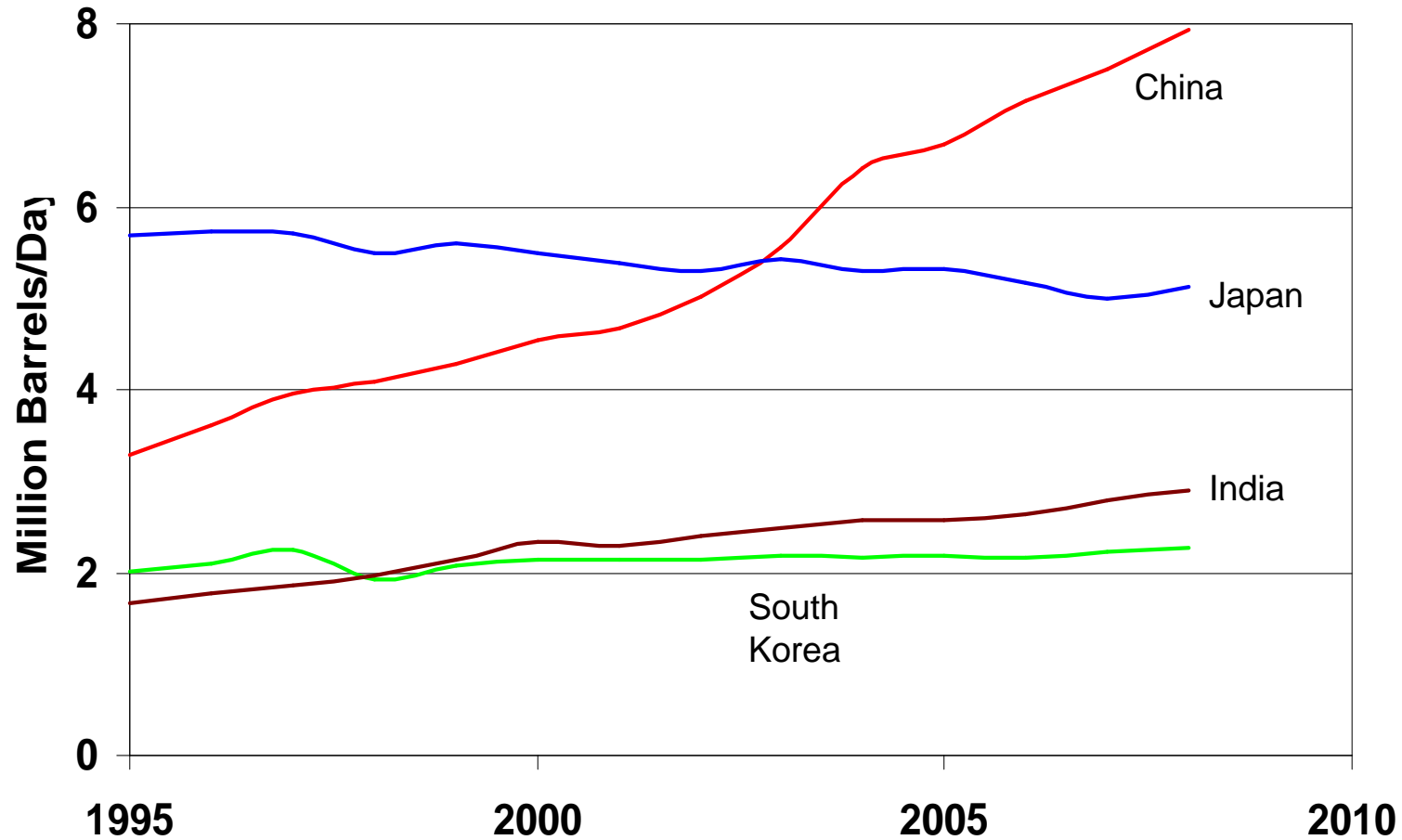


Chinese Oil Demand: *Steep Incline Ahead*

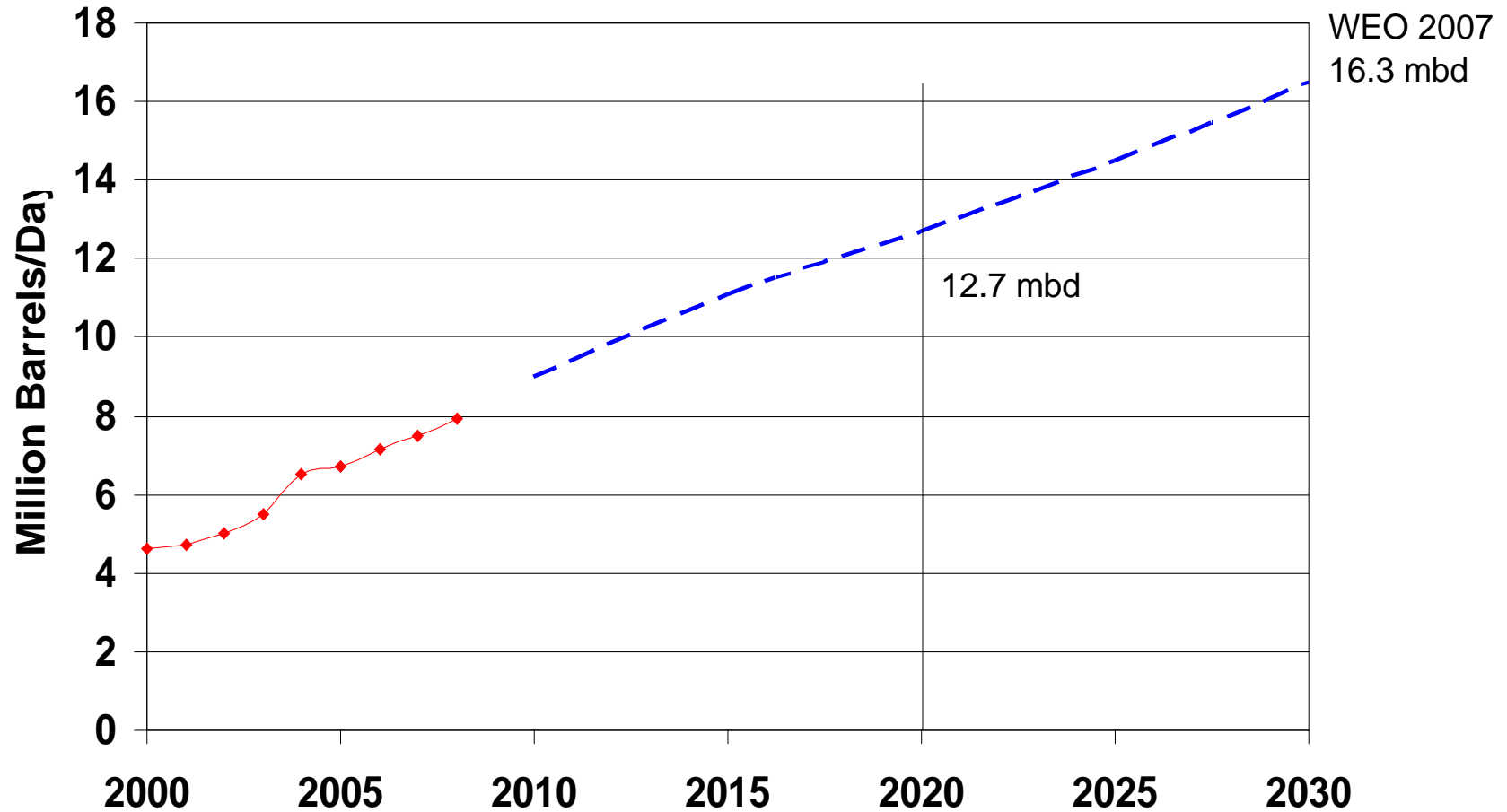
Malcolm Shealy
Alacritas, Inc.

April 7, 2008

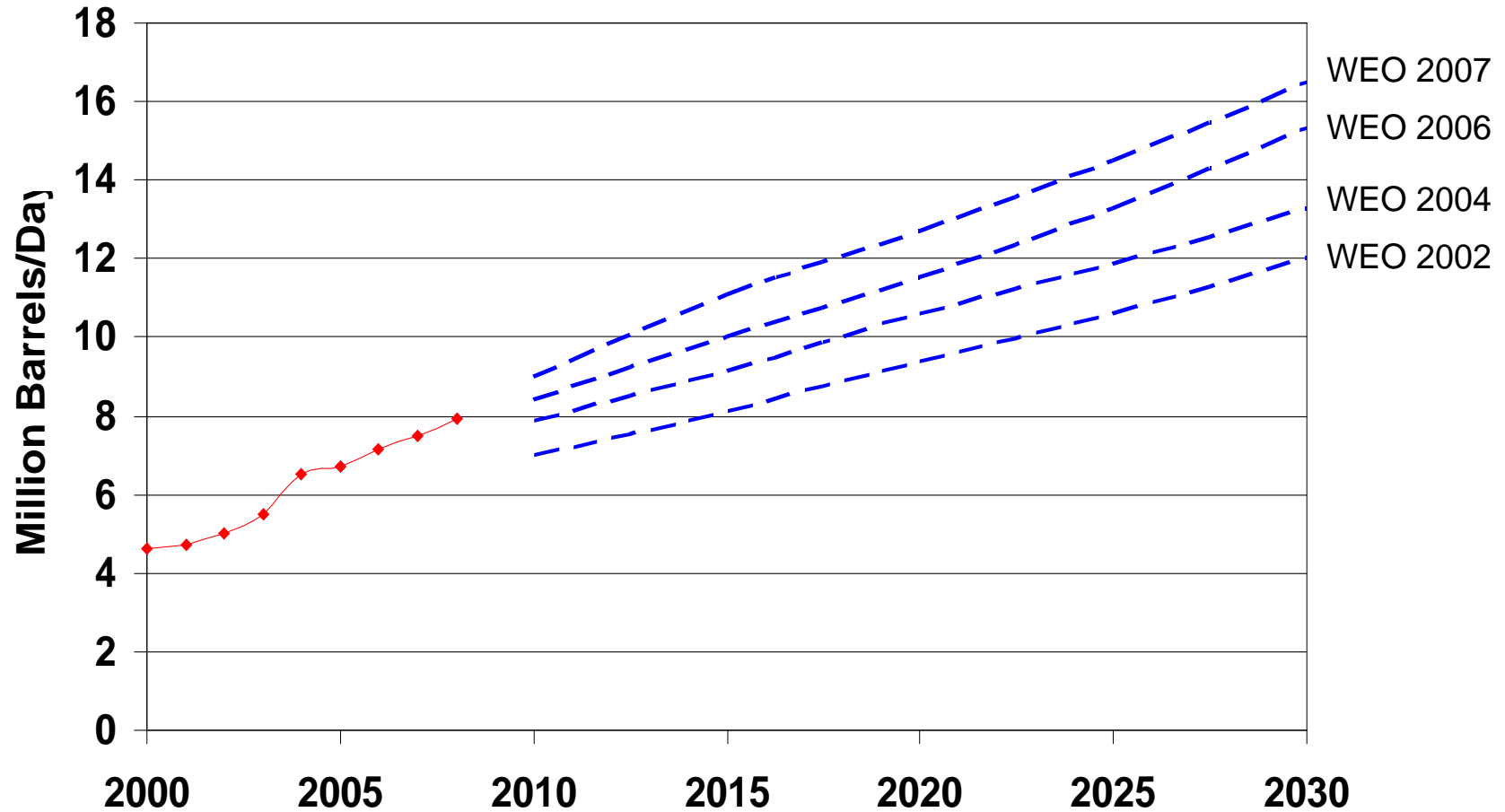
Oil Demand: China, India, Japan, South Korea



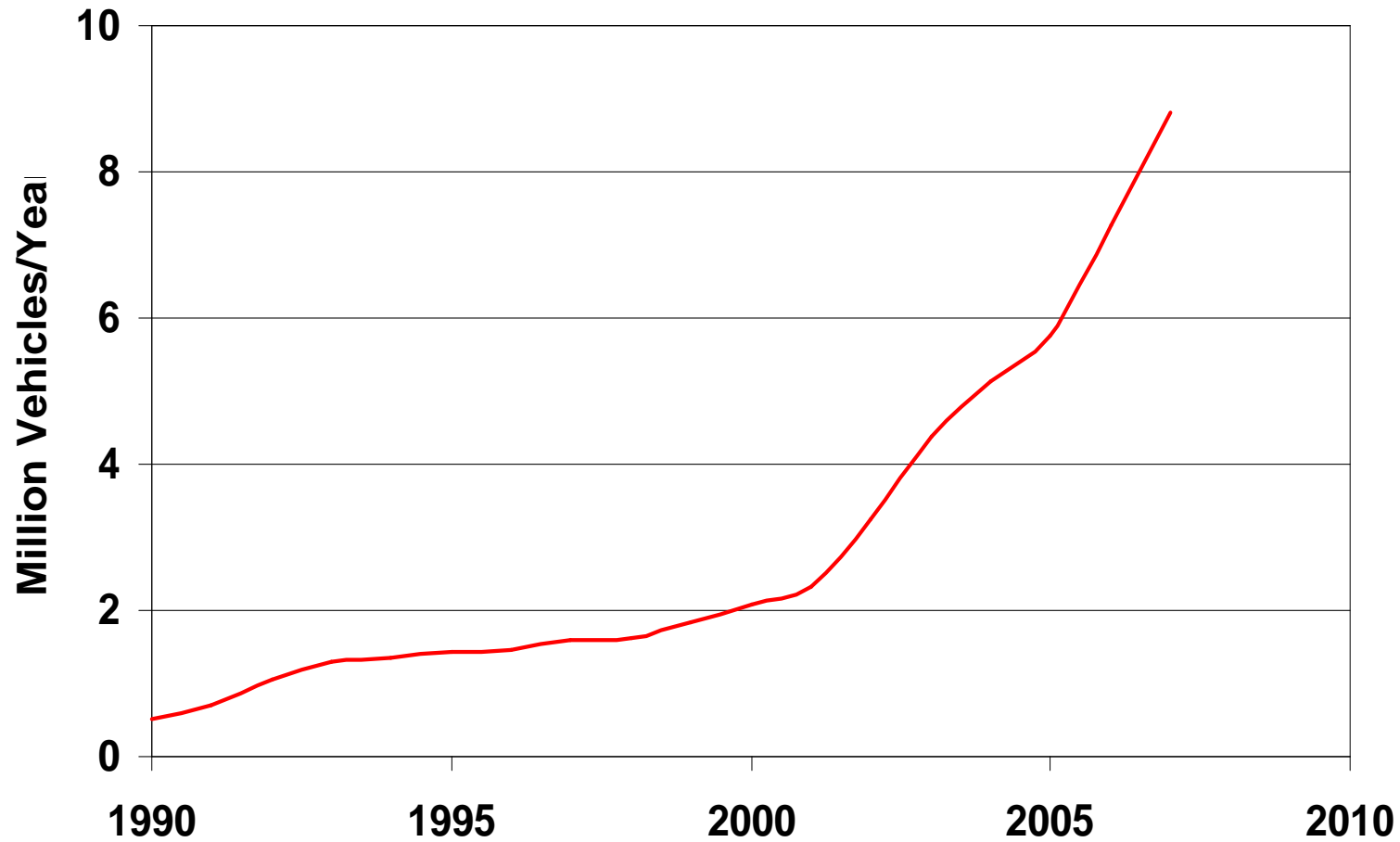
IEA China Oil Forecast



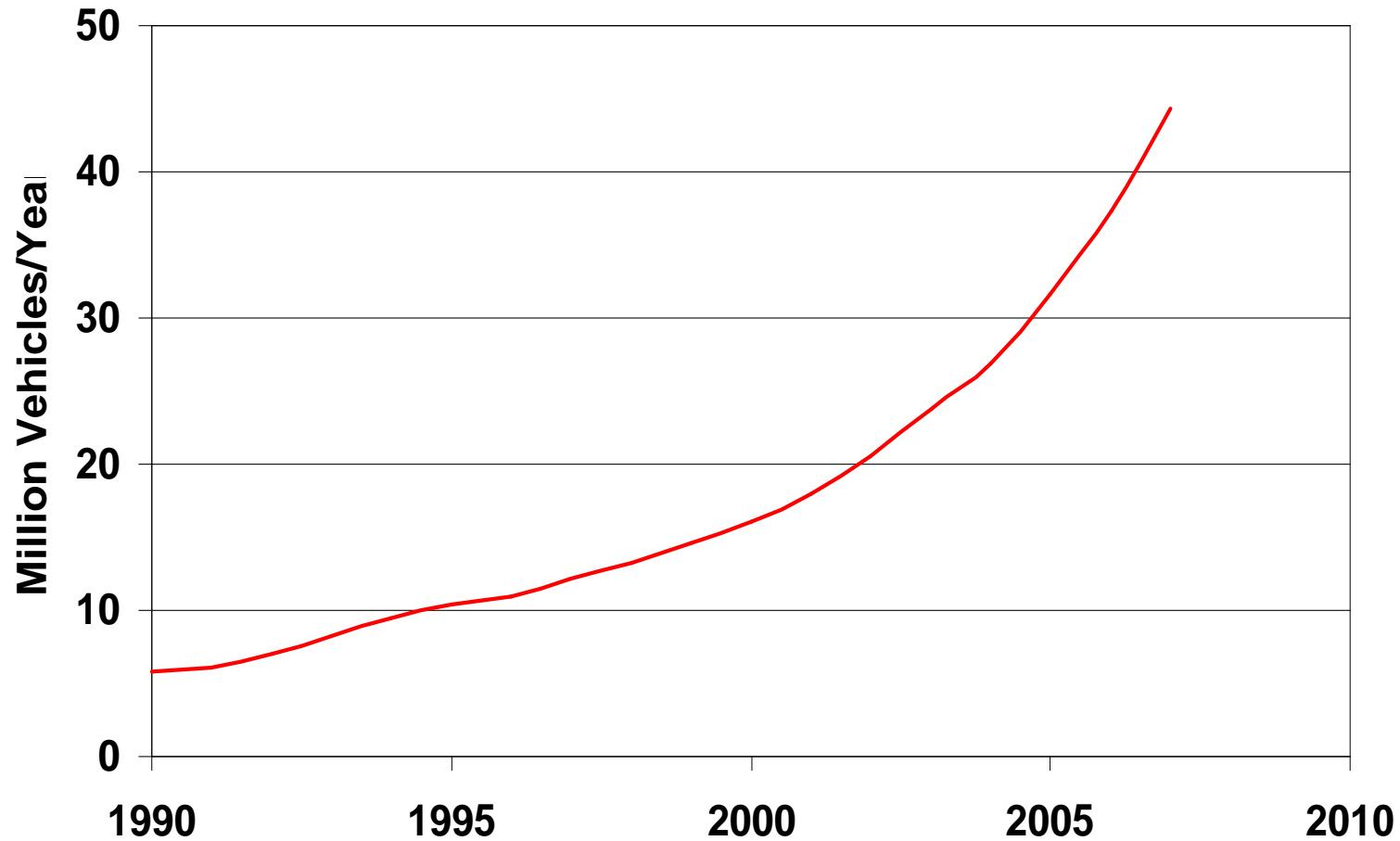
IEA China Oil Forecasts



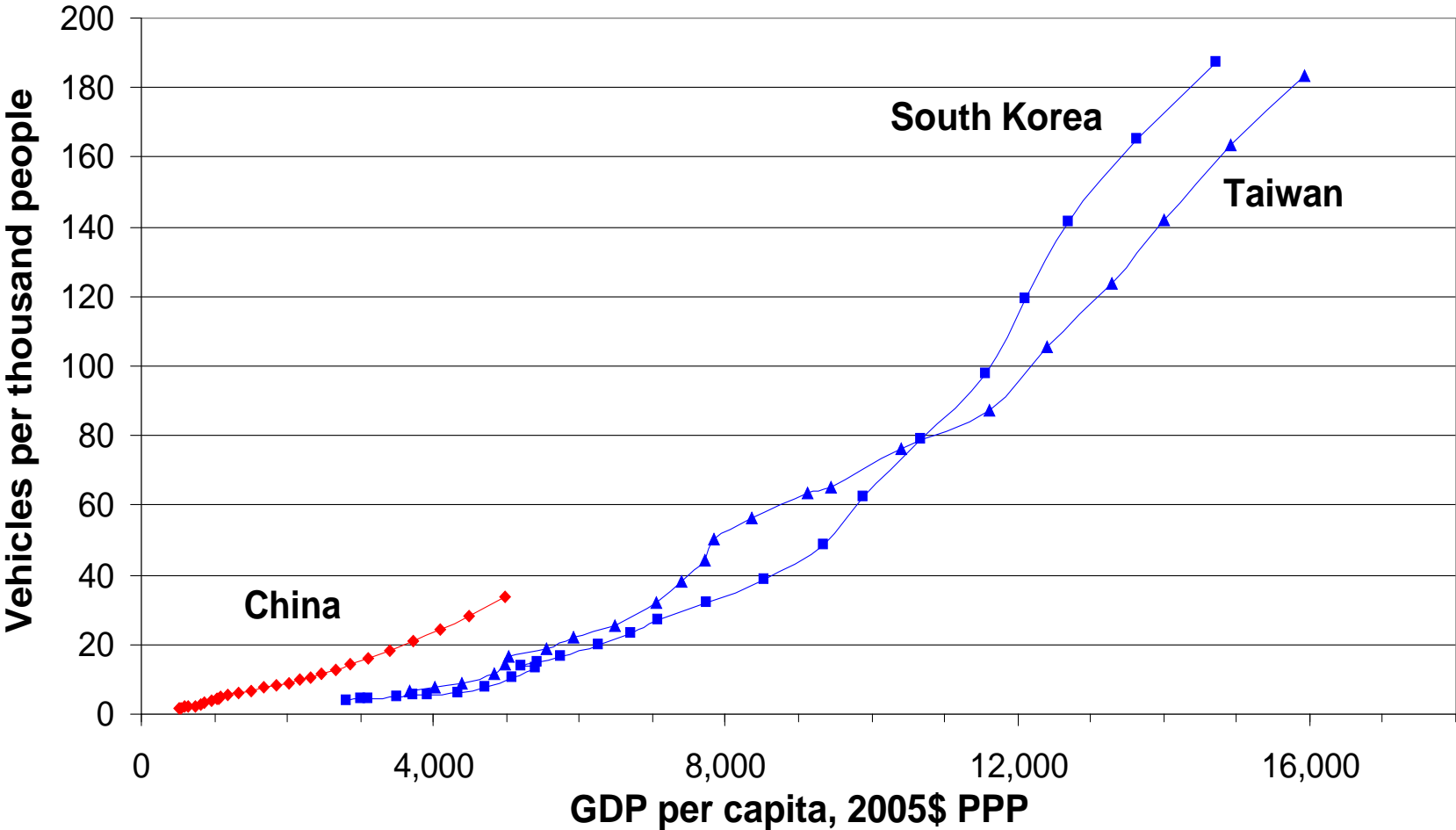
Vehicle Sales in China



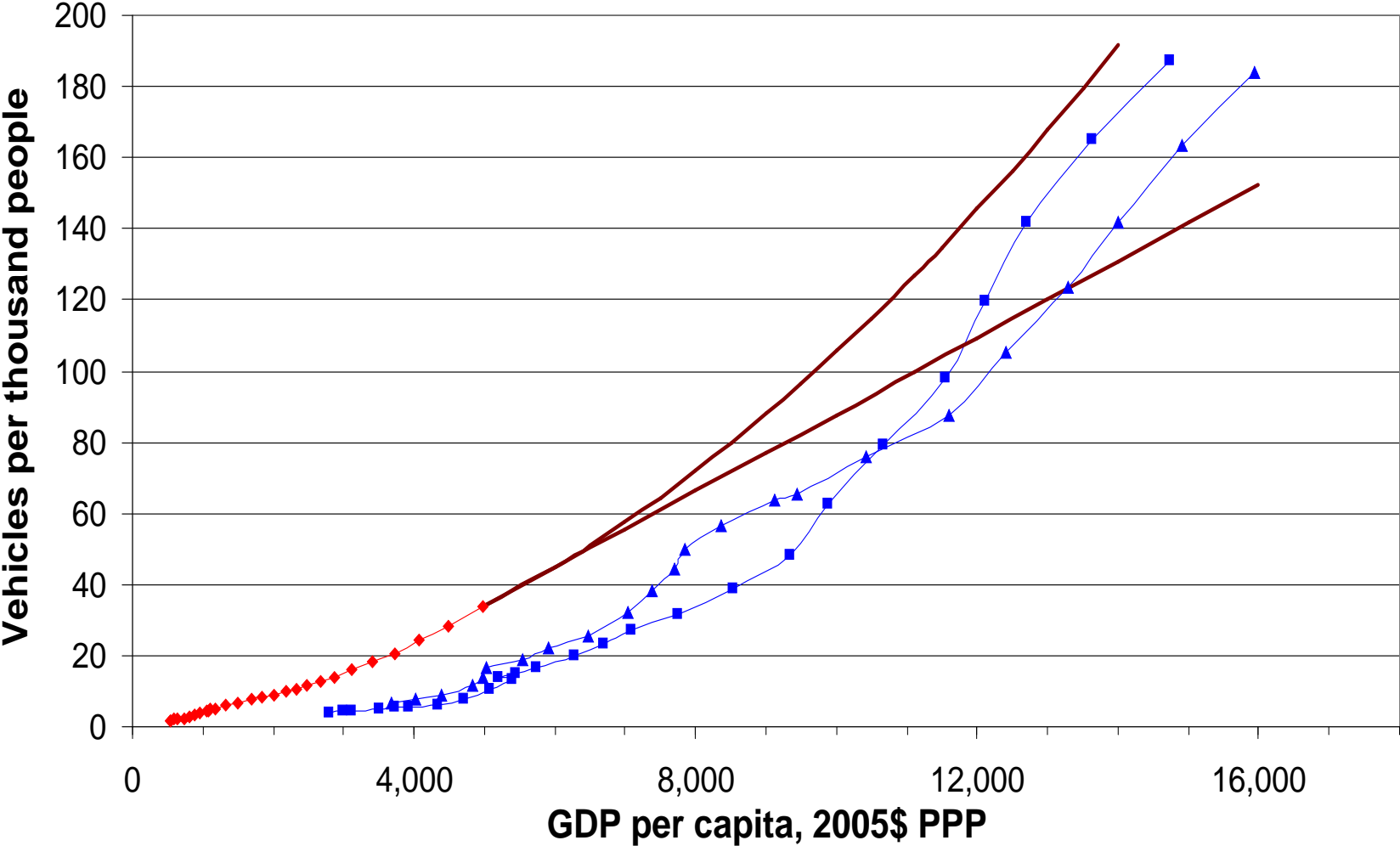
Vehicle Registrations in China



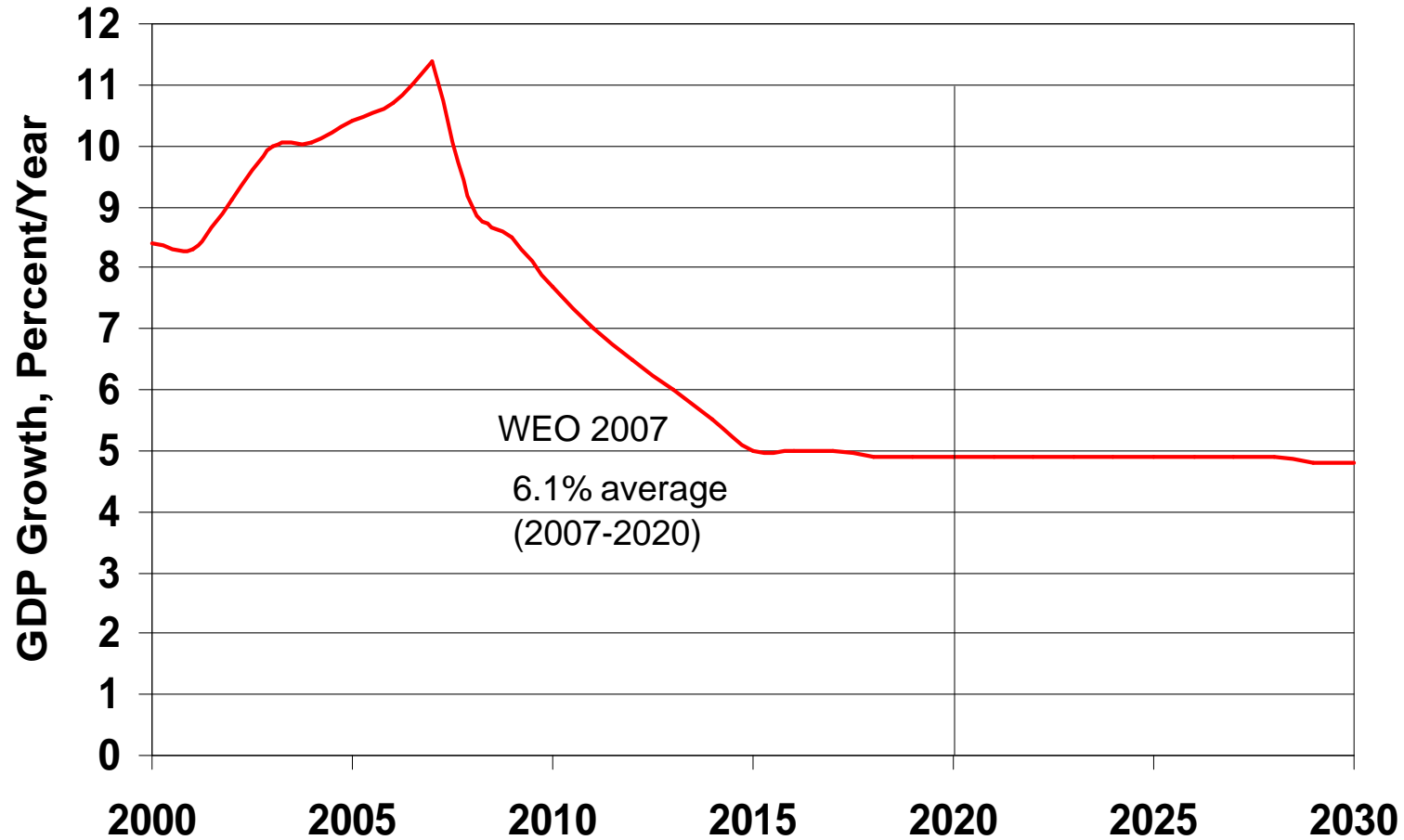
Vehicle Density vs GDP per Capita



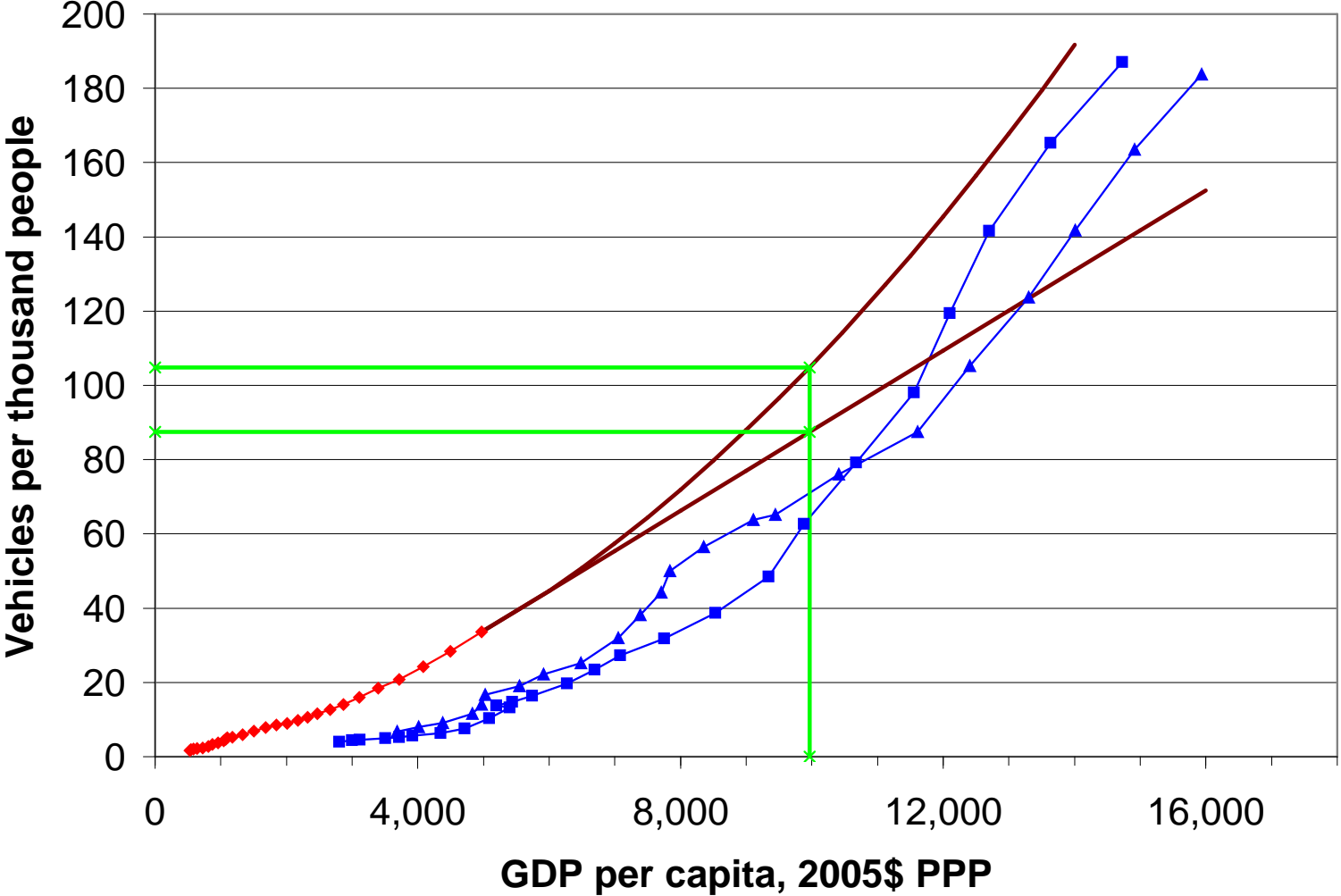
Vehicle Density vs GDP per Capita



China GDP Growth Forecasts



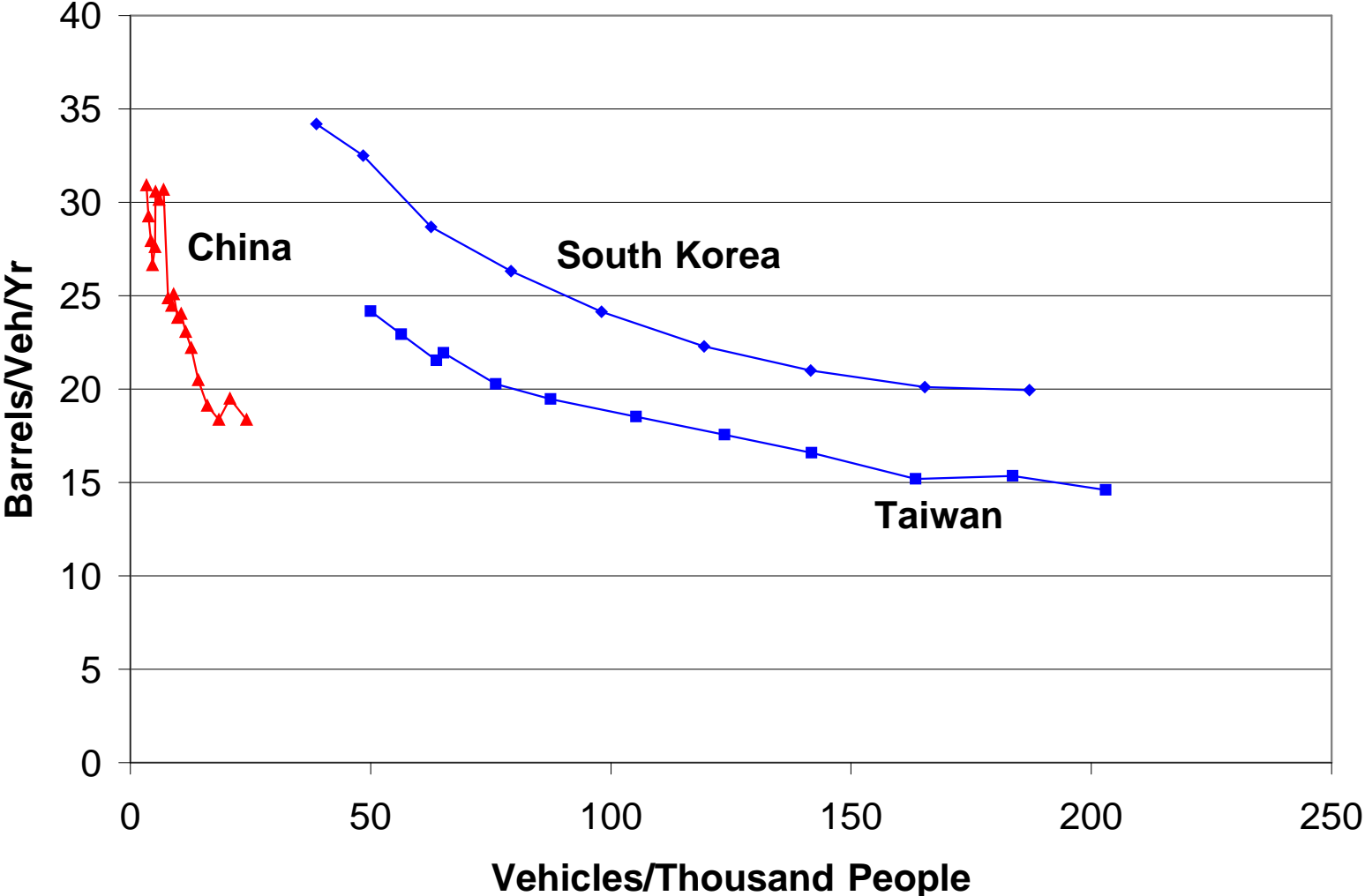
Vehicle Density vs GDP per Capita



China Oil Demand Forecast

	<u>2005</u>	<u>2020 Low</u>	<u>2020 High</u>
GDP/capita	4,083	9,963	
Vehicles/thous people	24.2	87.4	105
Population, millions	1,306	1,431	
Total Vehicles, millions	31.6	125	

Fuel Use per Vehicle per Year



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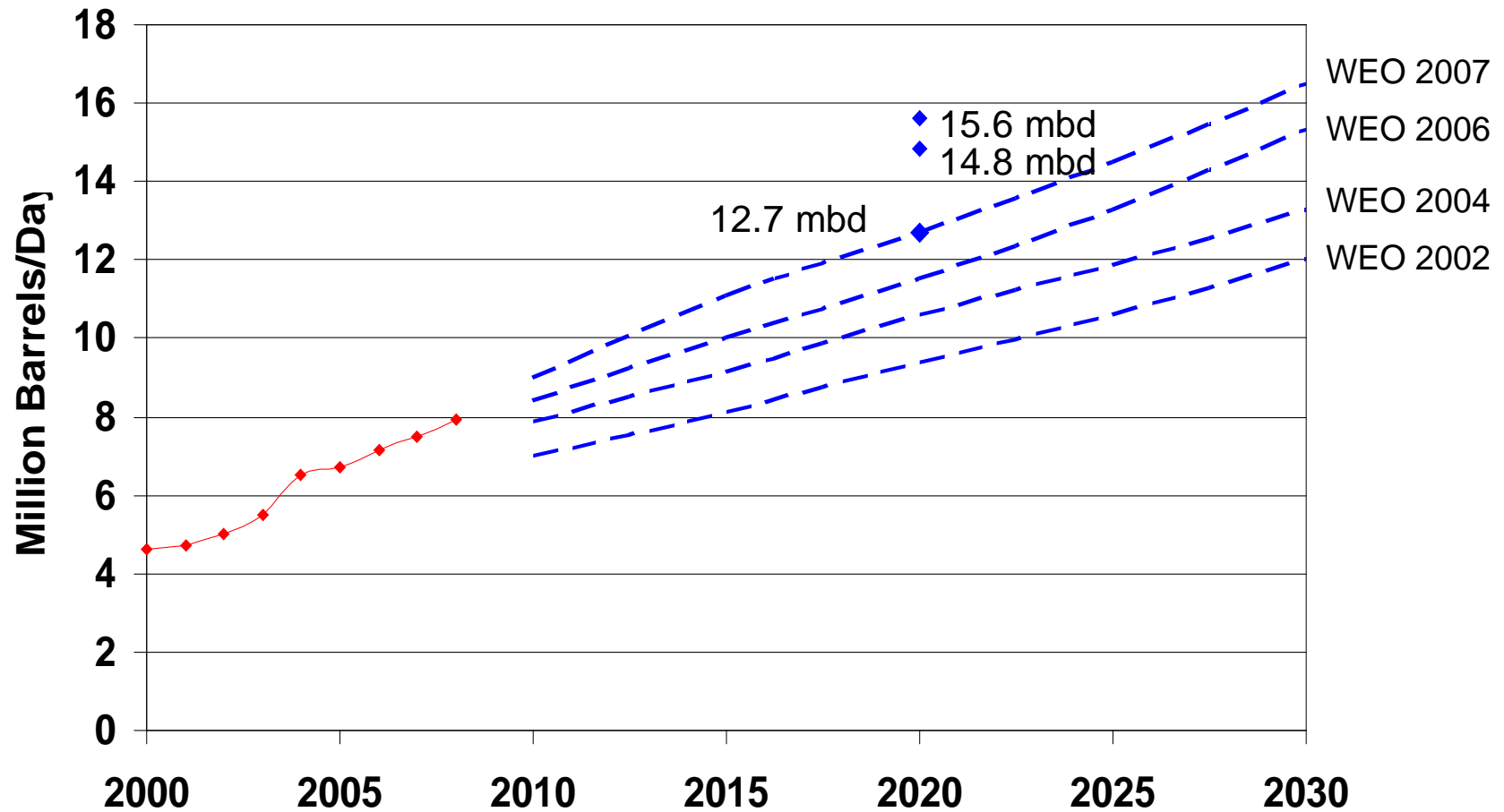
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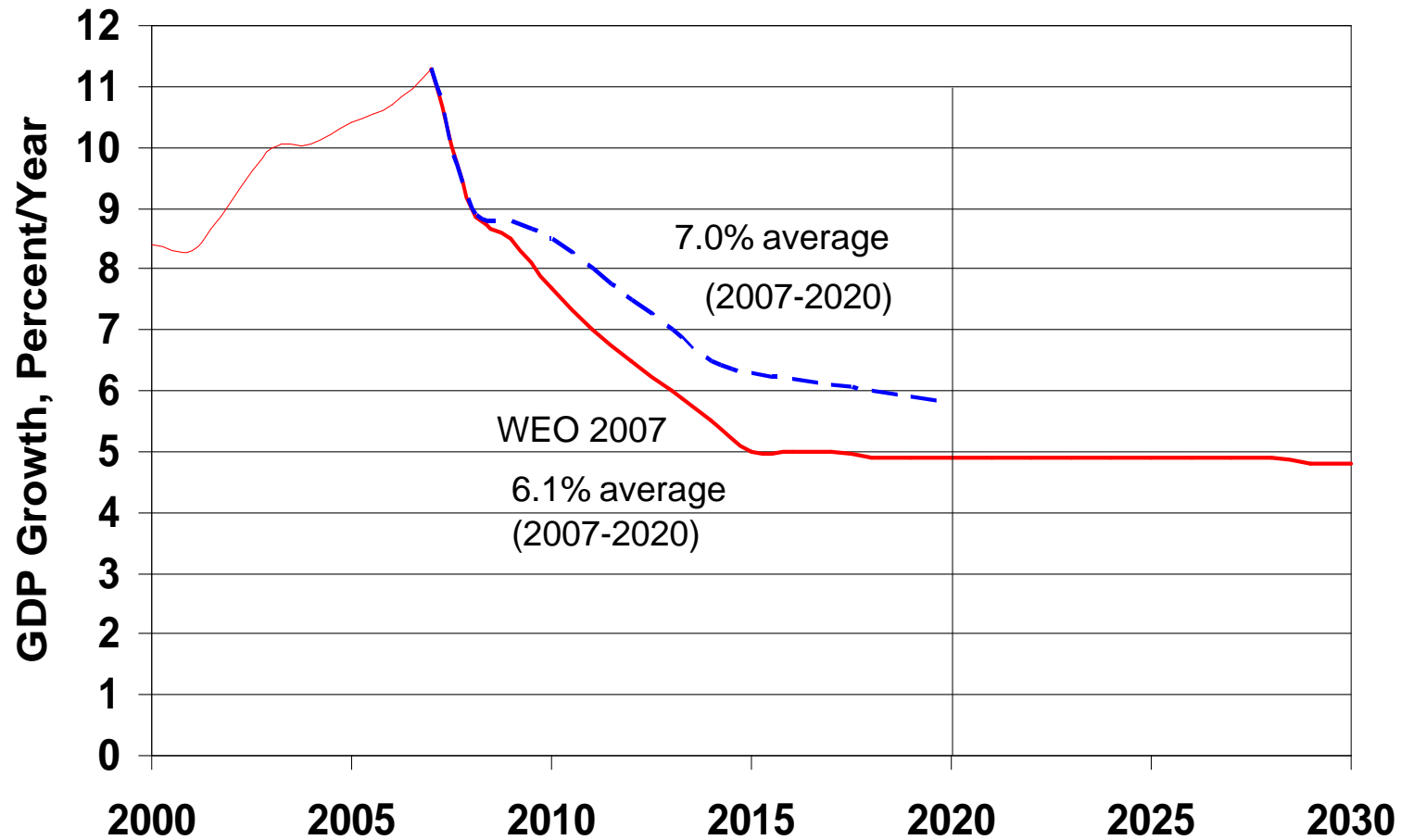
China Oil Demand Forecast

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IEA Forecast, 2007			12.7
EIA Forecast, 2007			11.9

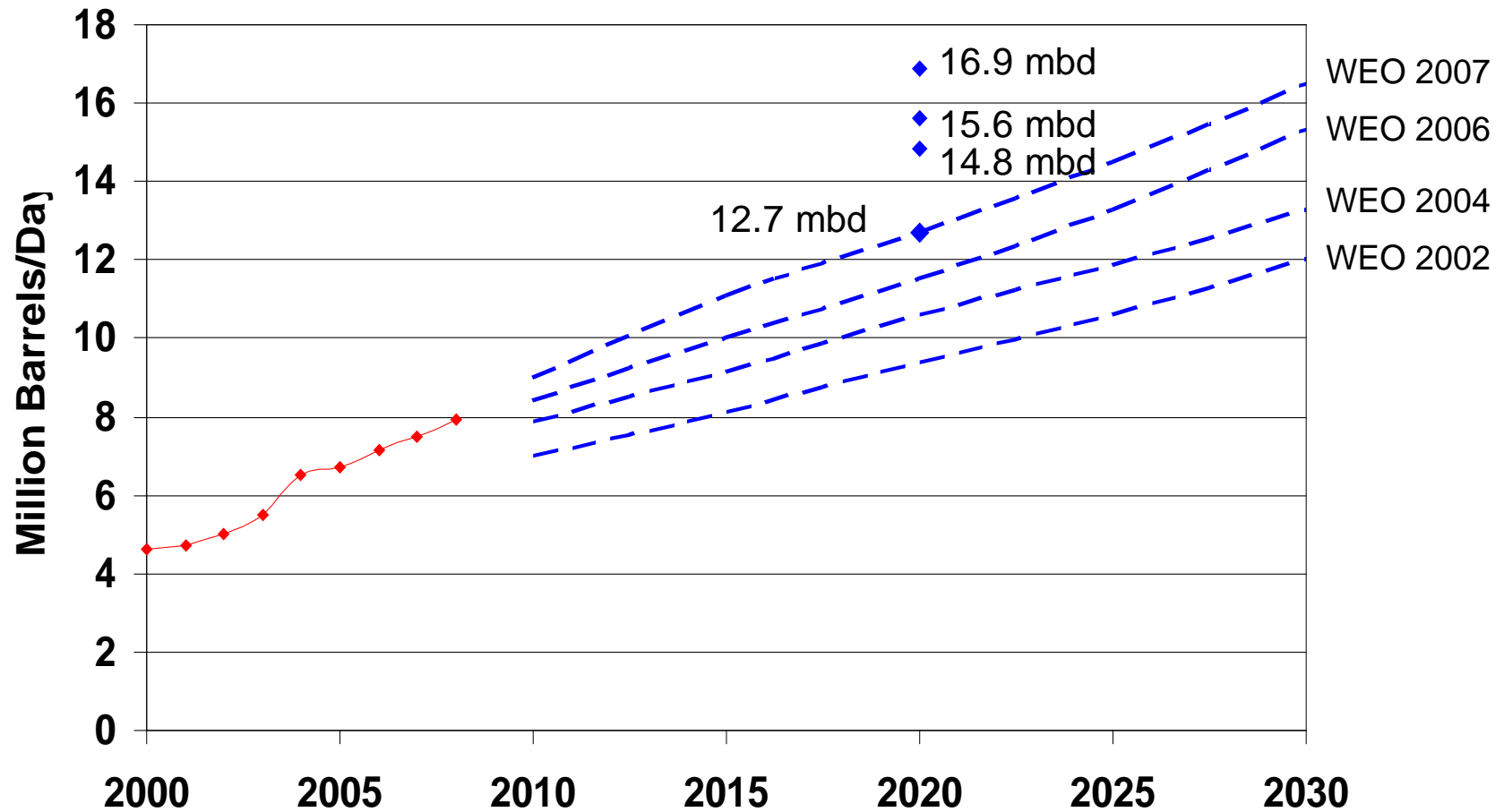
IEA China Oil Forecasts



China GDP Growth Forecasts



IEA China Oil Forecasts



Is Another 3-4 Million b/d from China a Big Deal?

- Yes, but...

Development is the Real Issue

- Current Oil Intensity (barrels/person/yr)

US 25.2

Japan 14.3

World 4.8

- 2020 Oil Demand at Different Intensities

<u>Oil Intensity</u>	<u>World Oil Demand</u>
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14.3	300 mbd
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10	210 mbd
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6	125 mbd
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Feedback Mechanisms

Higher Oil Price

Slower GDP Growth

Conclusions

IEA Chinese oil forecasts probably low—don't adequately capture rapid growth in transport

Current transportation technologies are incompatible with economic development

Can expect higher oil prices, slower GDP growth

Systematic Underforecasting

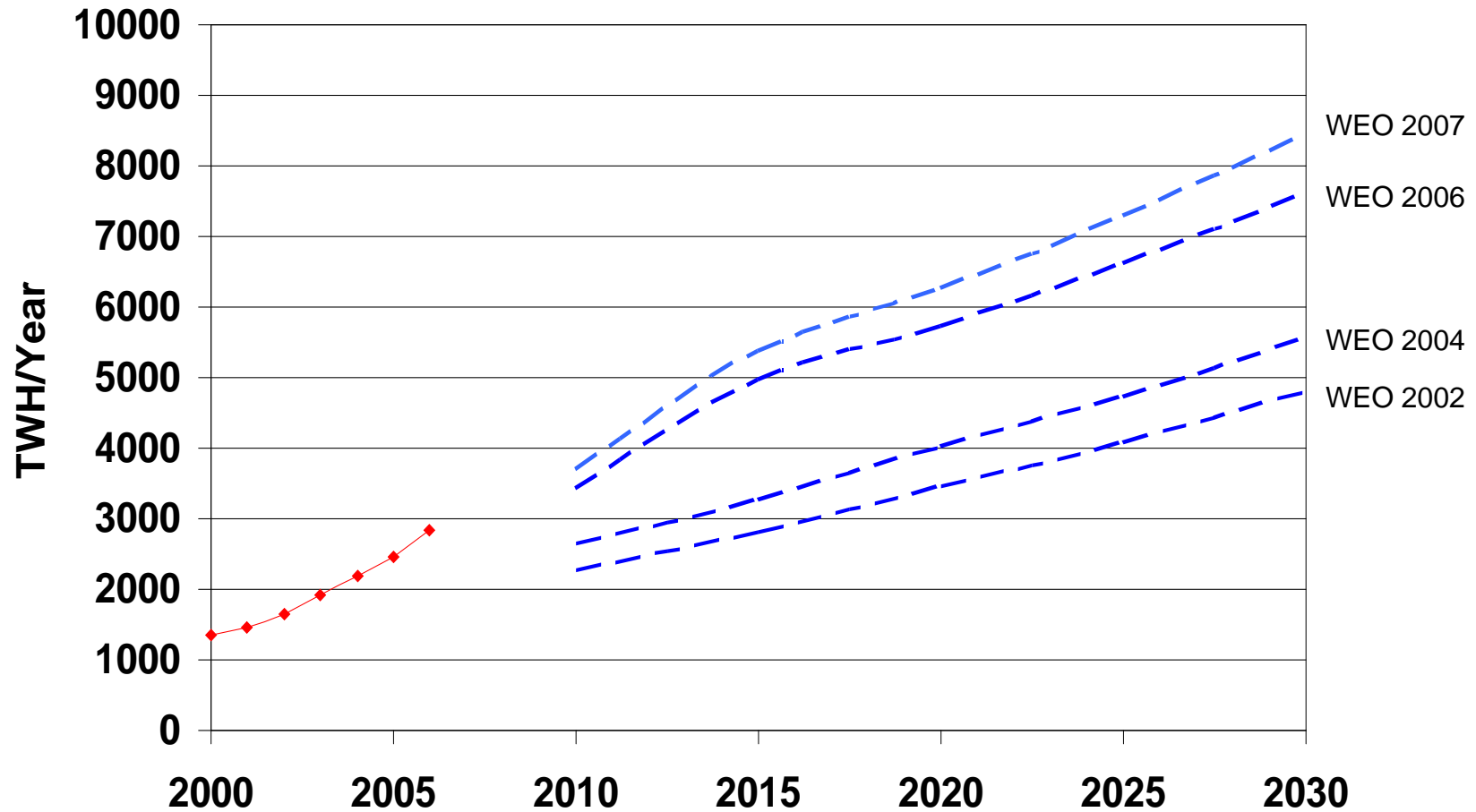
Underforecasting of China Includes:

Oil

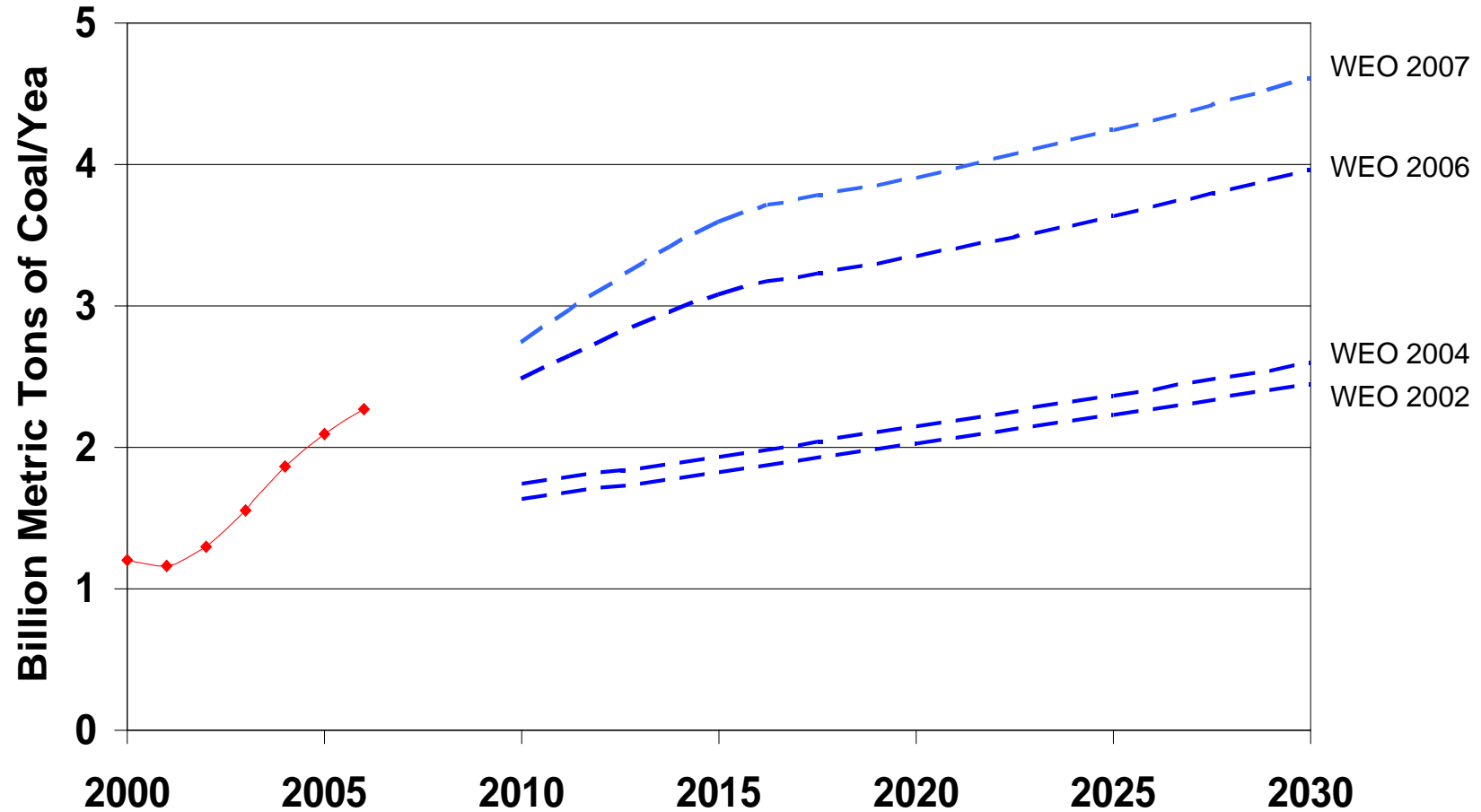
Electricity

Coal

IEA China Electric Forecasts



IEA China Coal Forecasts



Additional Reading

CSIS Publication:

“Growing Chinese Energy Demand: Is the World in Denial?” by Malcolm Shealy and James P. Dorian, October 2007