



Energy Markets

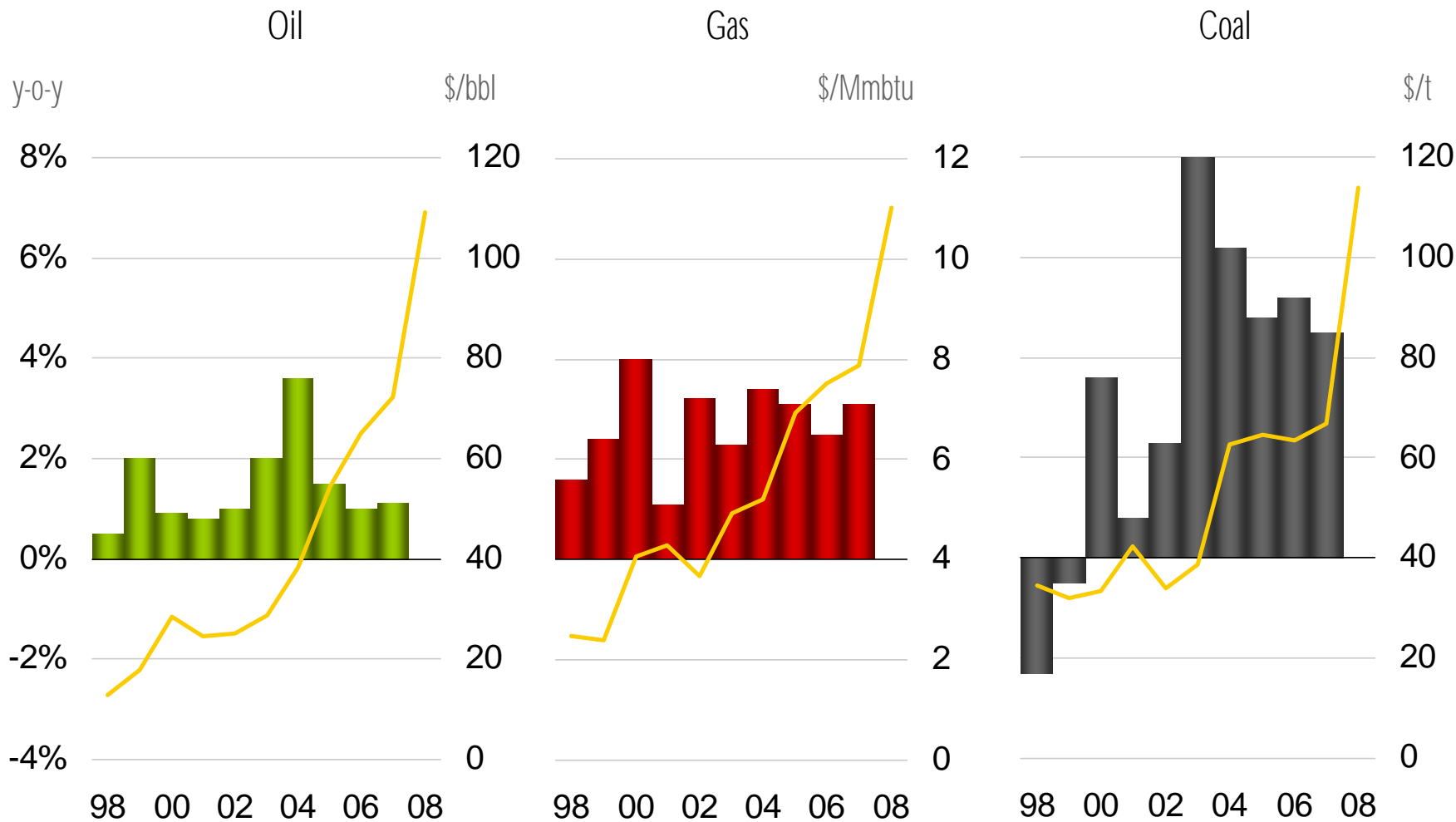
The Long and the Short Term

Christof Rühl, Group Chief Economist

Edinburgh, October 2008

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- Introduction
 - The Long Term and the Short Term
 - The Oil Market
 - Wealth Transfer and Producer Finances
 - Conclusion

Energy Consumption and Energy Prices

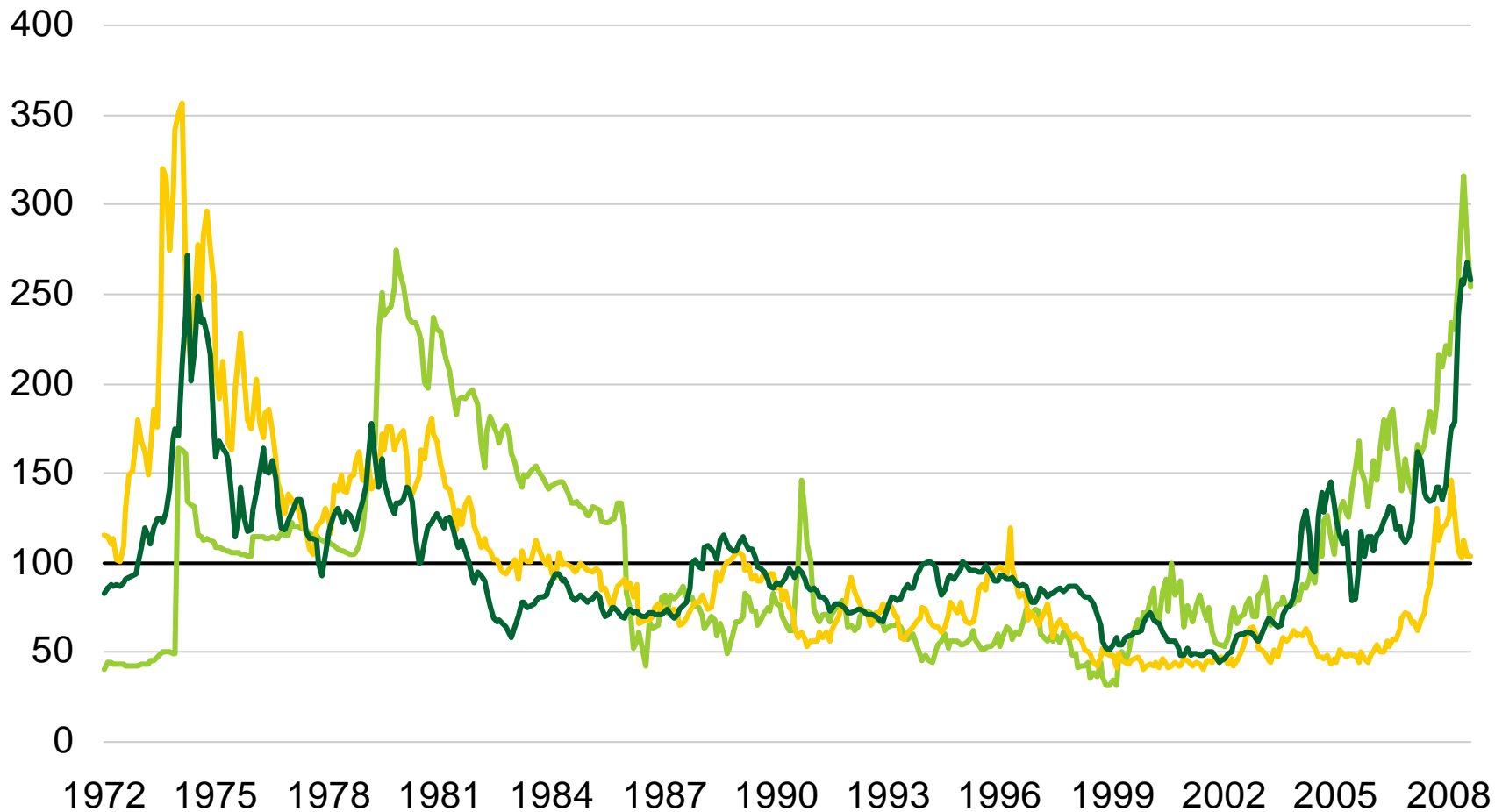


Real Commodity Prices

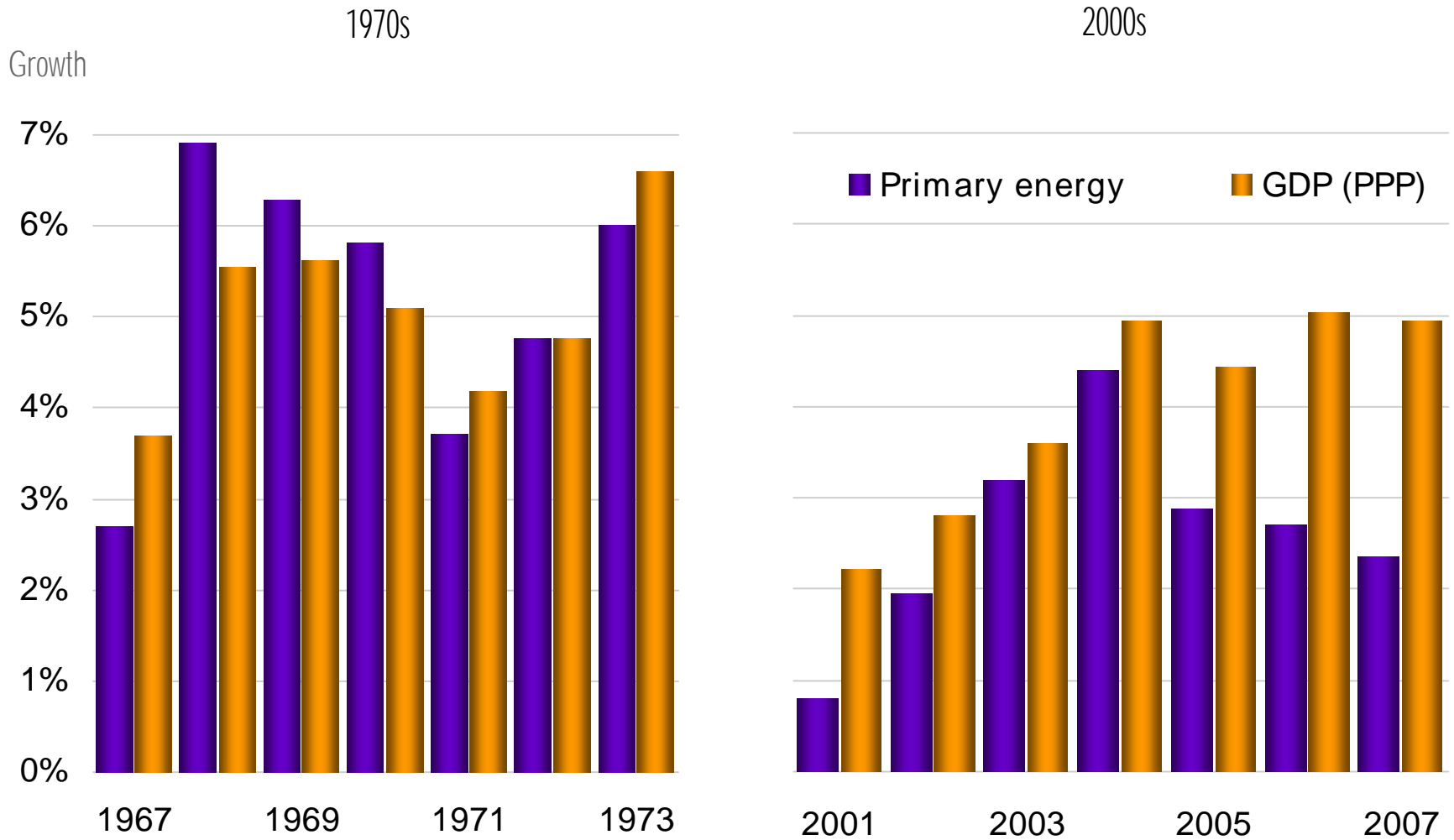


Index: average 1970-2008 = 100

Oil Wheat Iron & Steel



GDP and Primary Energy Growth



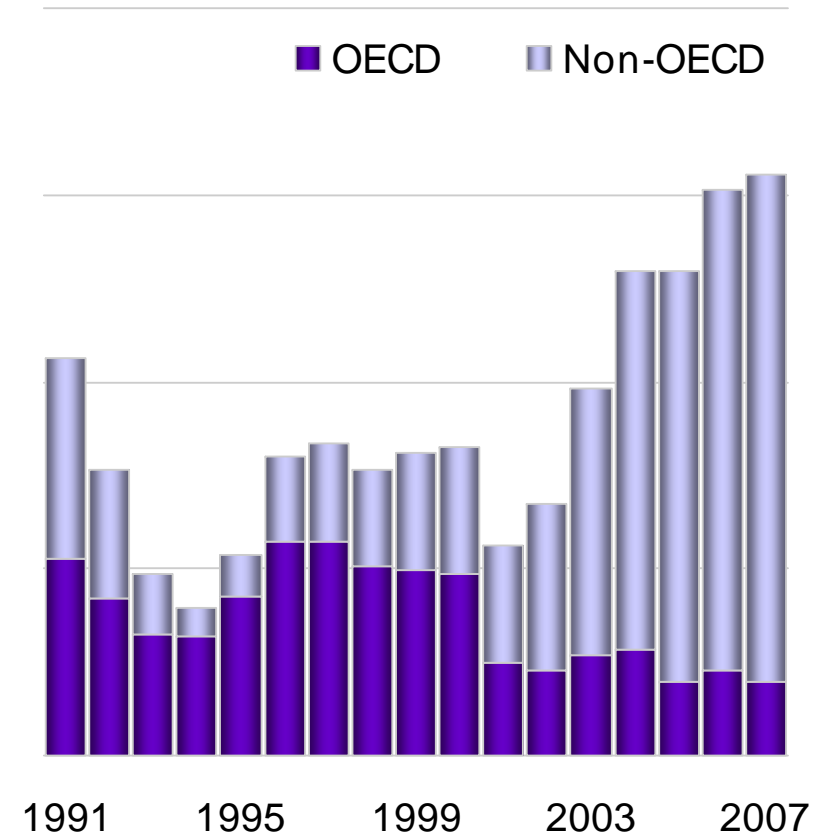
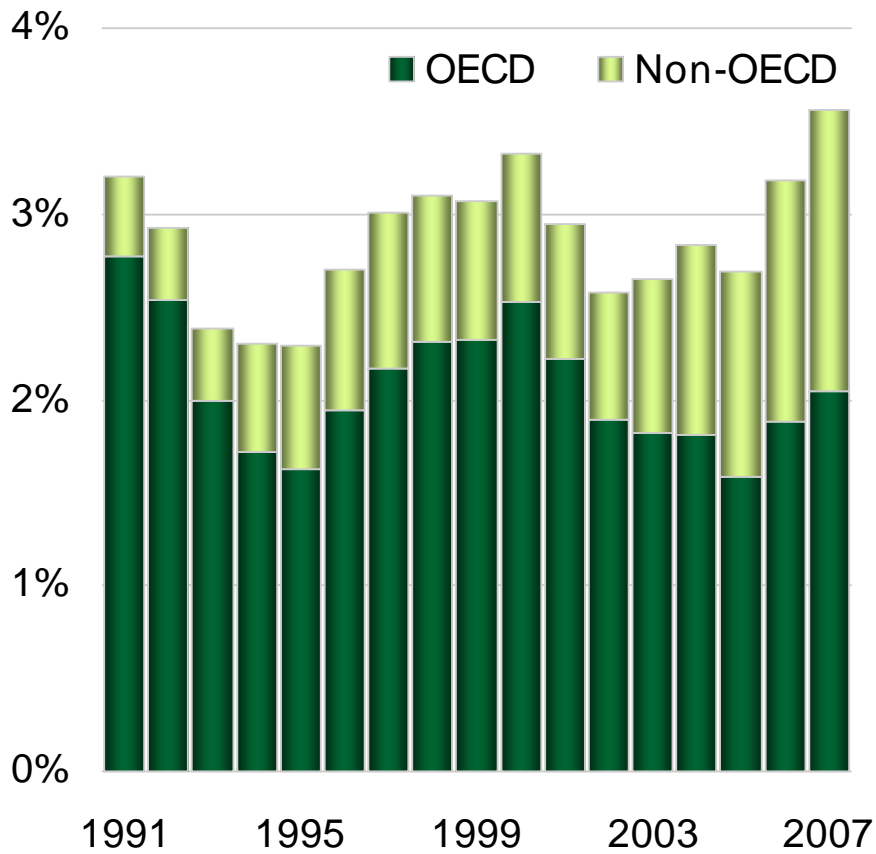
Contributions to Growth



GDP

Primary energy

5-year moving average

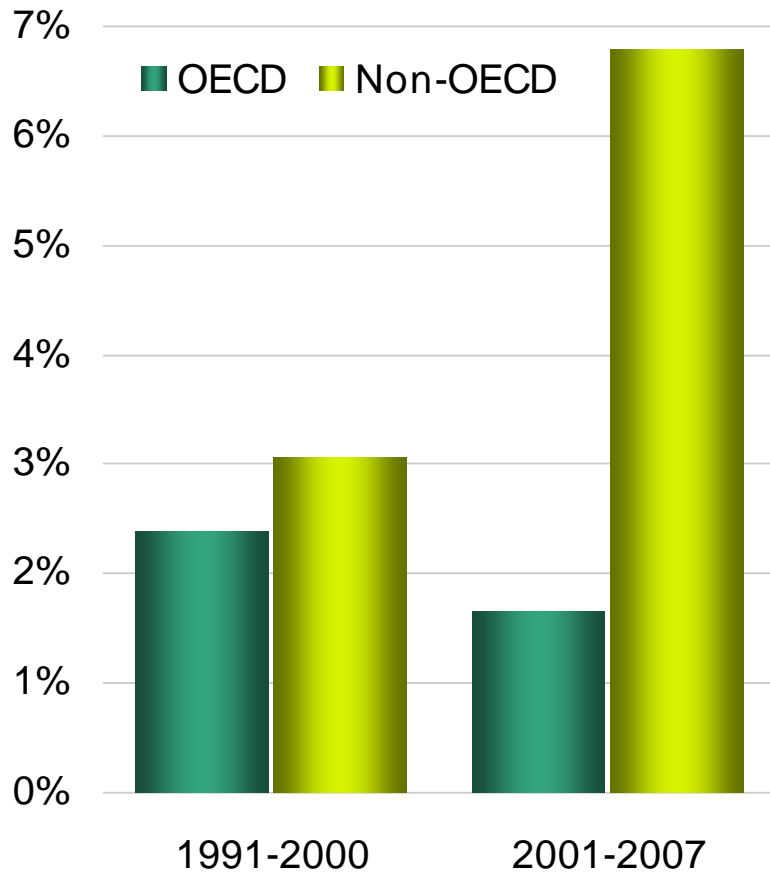


Power Generation and Primary Energy

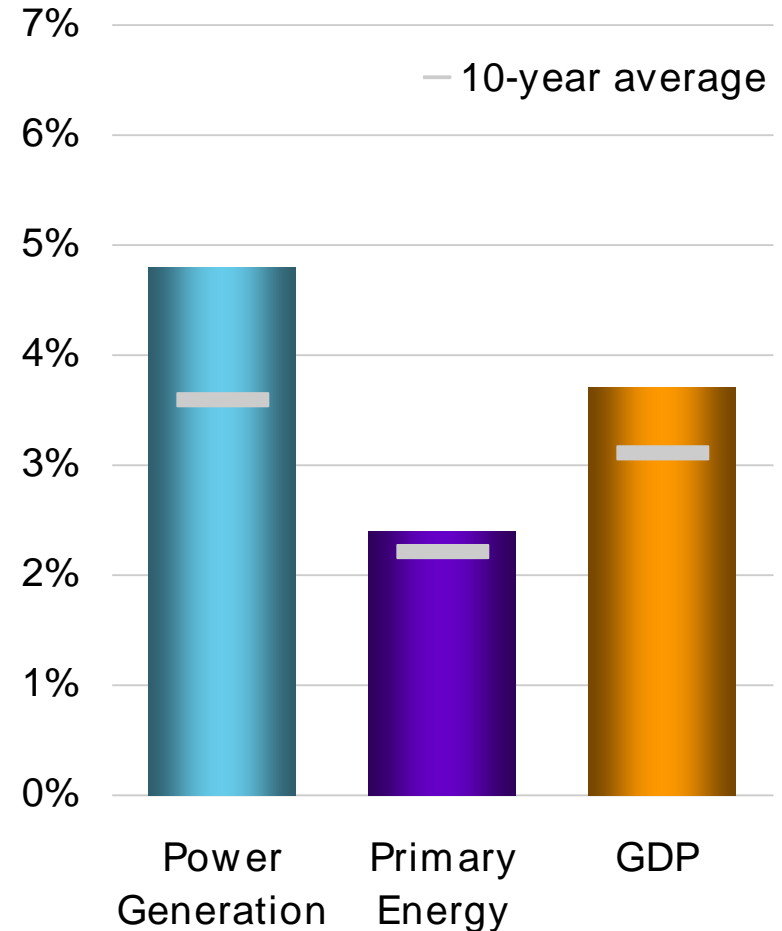


Power generation

Average growth p.a.



2007 global growth

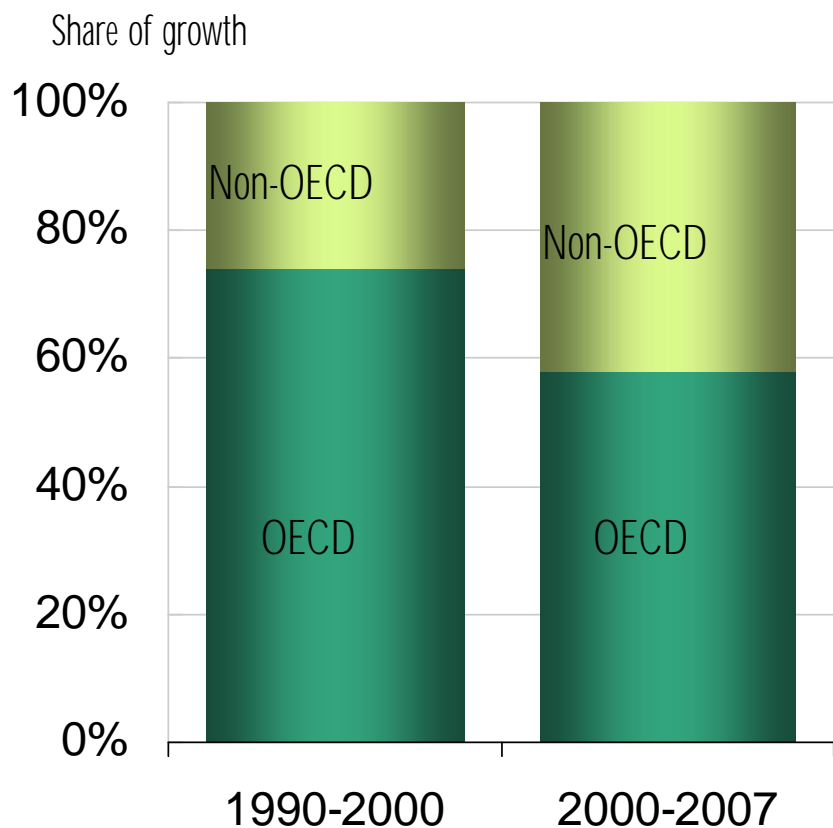


Economic Growth and Oil Consumption Growth

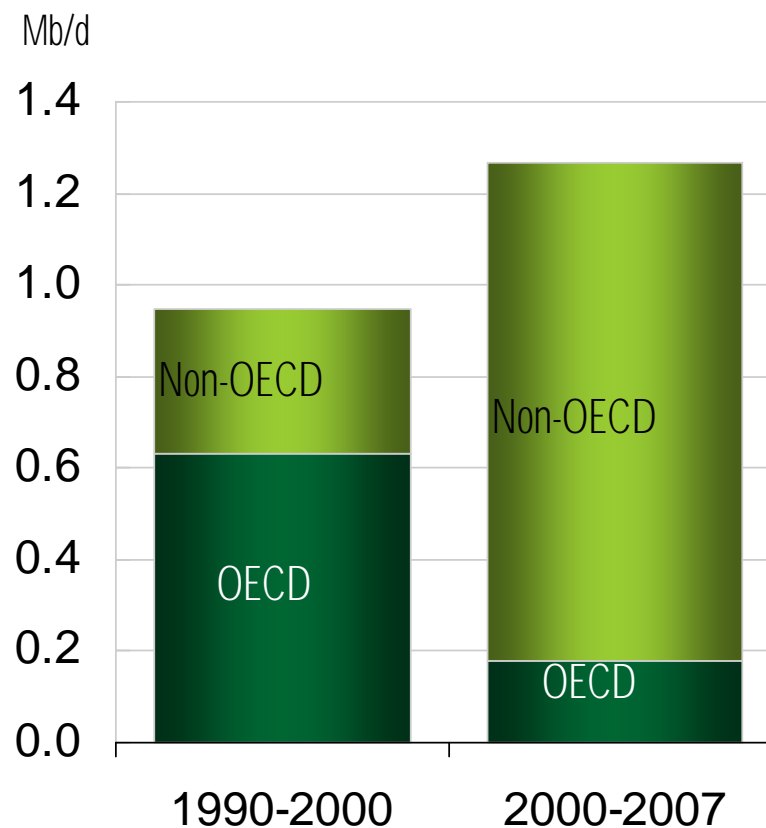


Average annual growth of oil production and consumption

Contribution to GDP growth



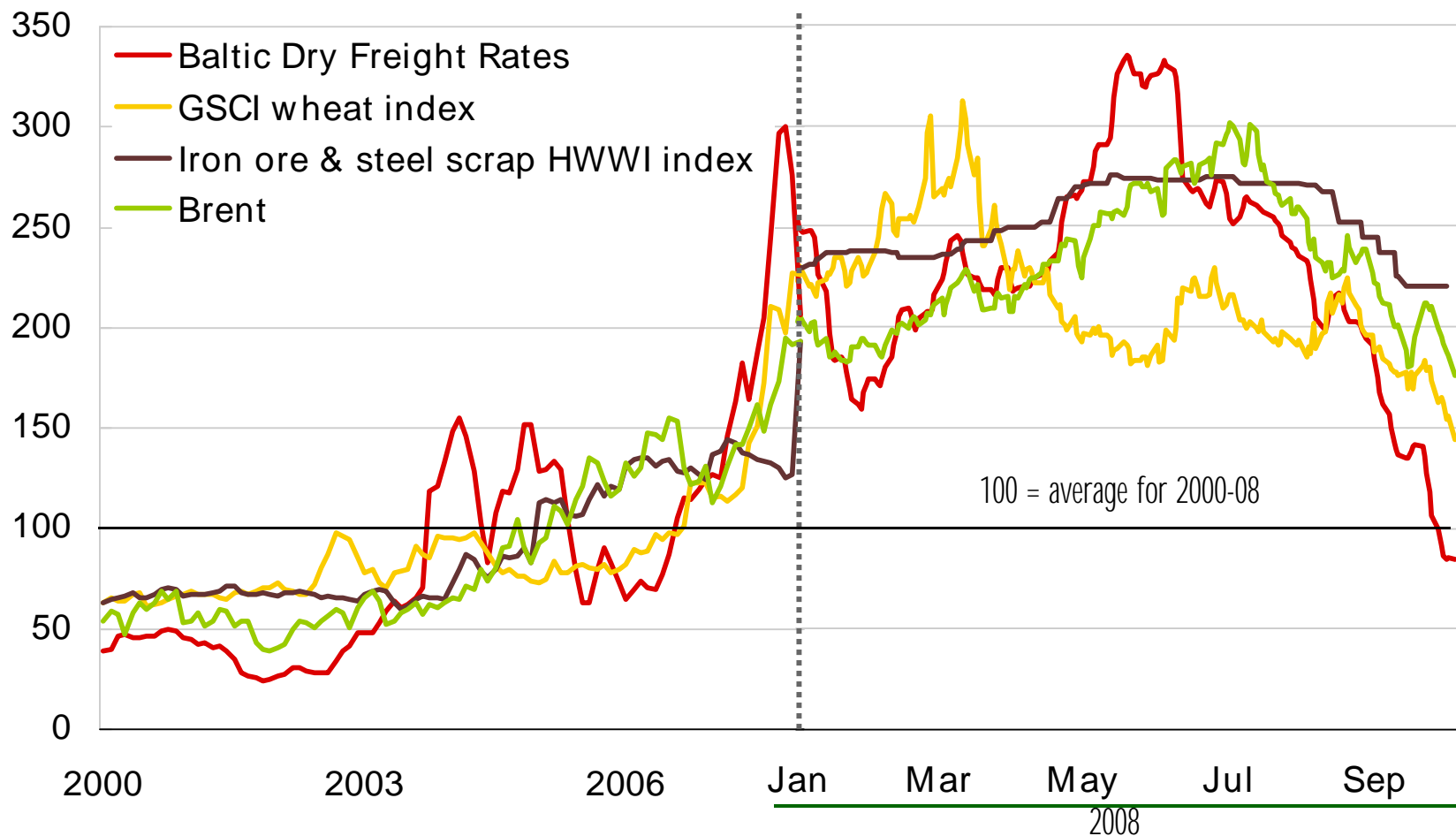
Oil Consumption growth



Turn of the Commodity Price Cycle?



Index: Average for 2000-08 = 100



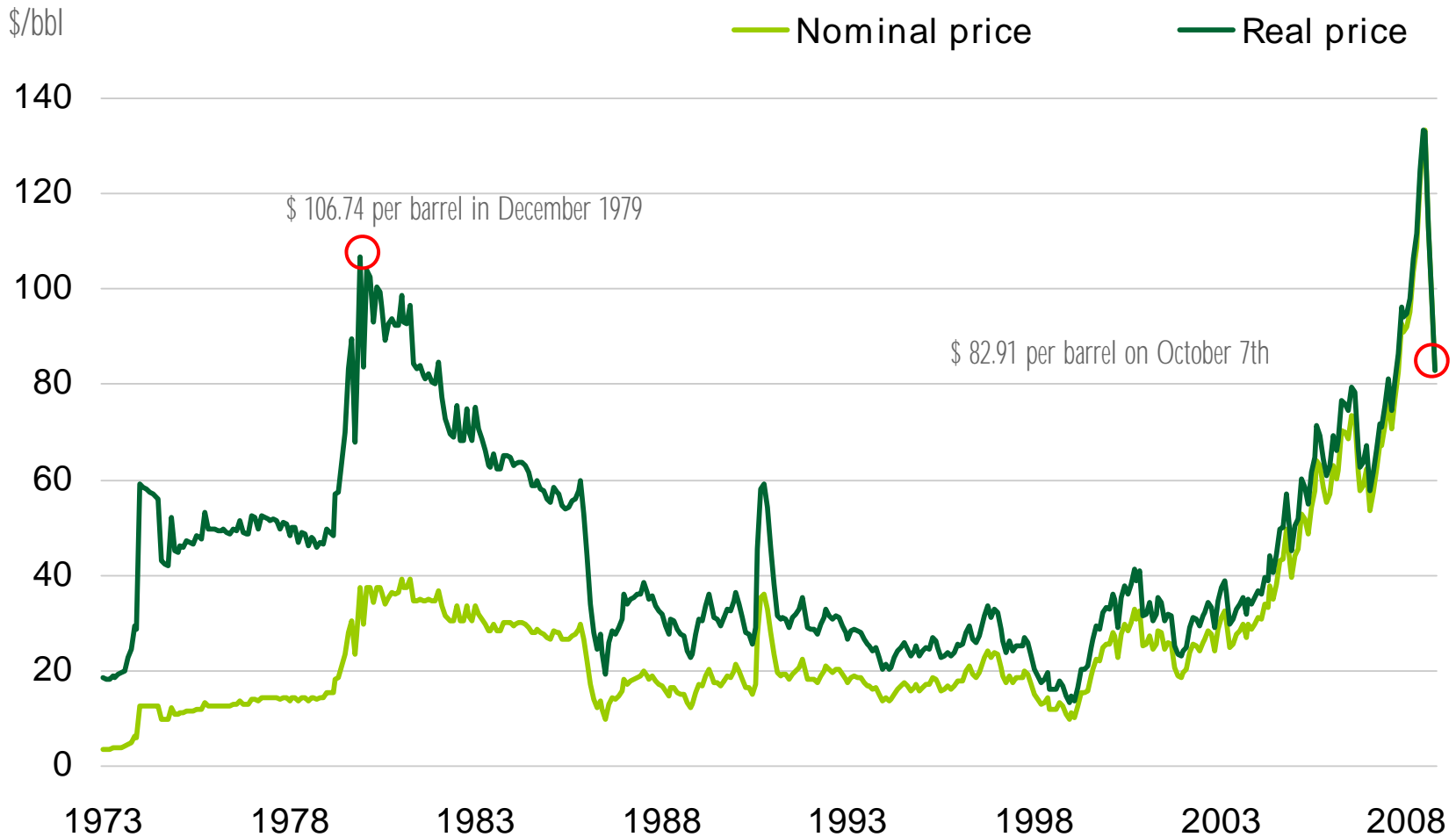
Brent Spot and Futures Price, 2007 and 2008





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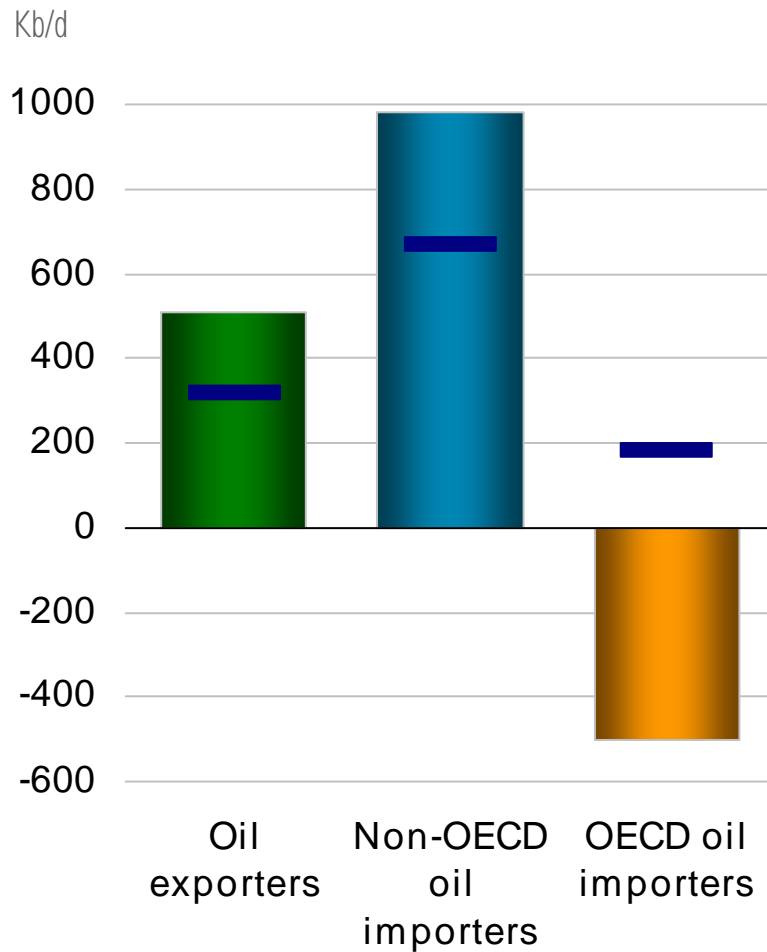
Real and Nominal Crude Oil Price



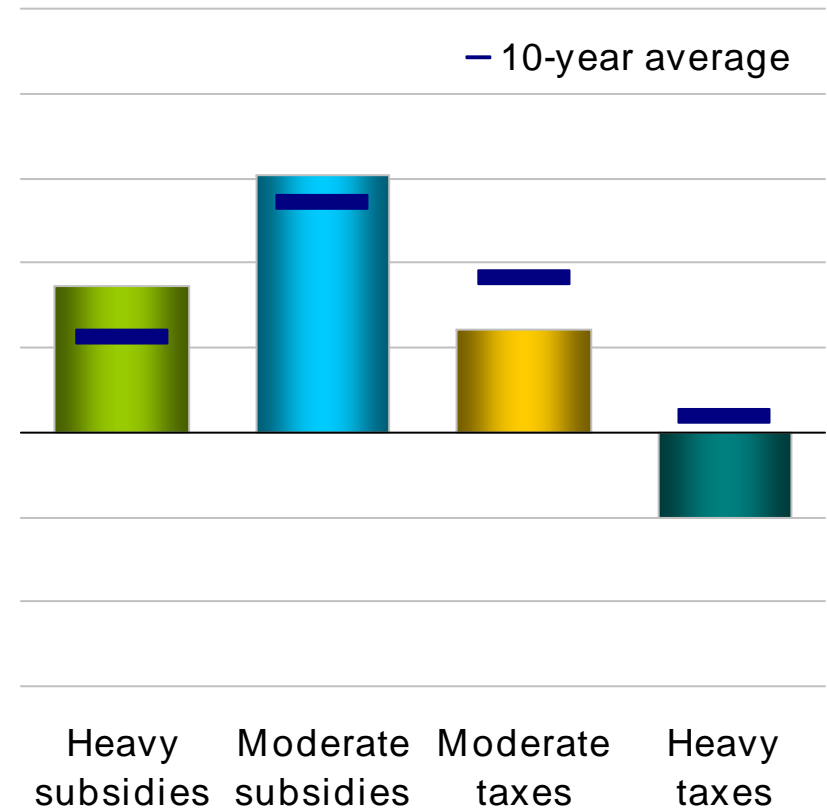
Global Oil Demand Growth Has Slowed...



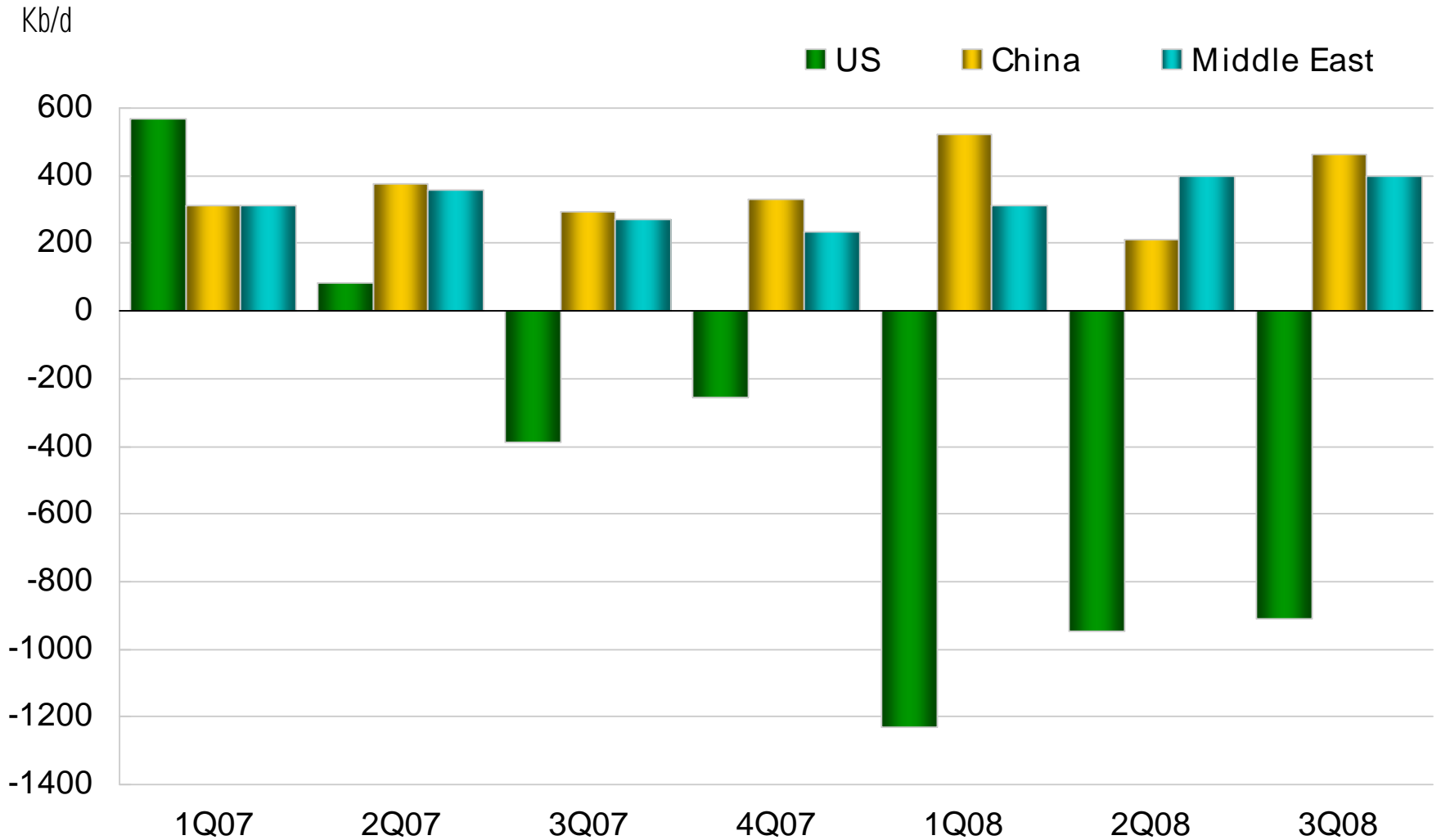
Exporters and importers



Taxes and subsidies



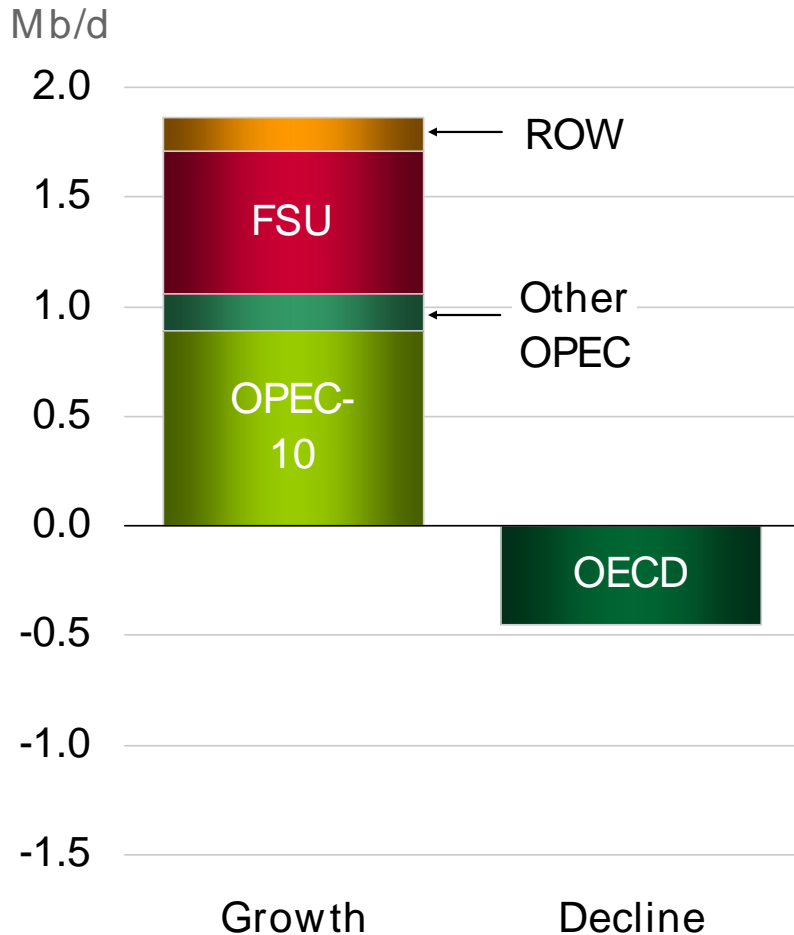
Oil Consumption Growth



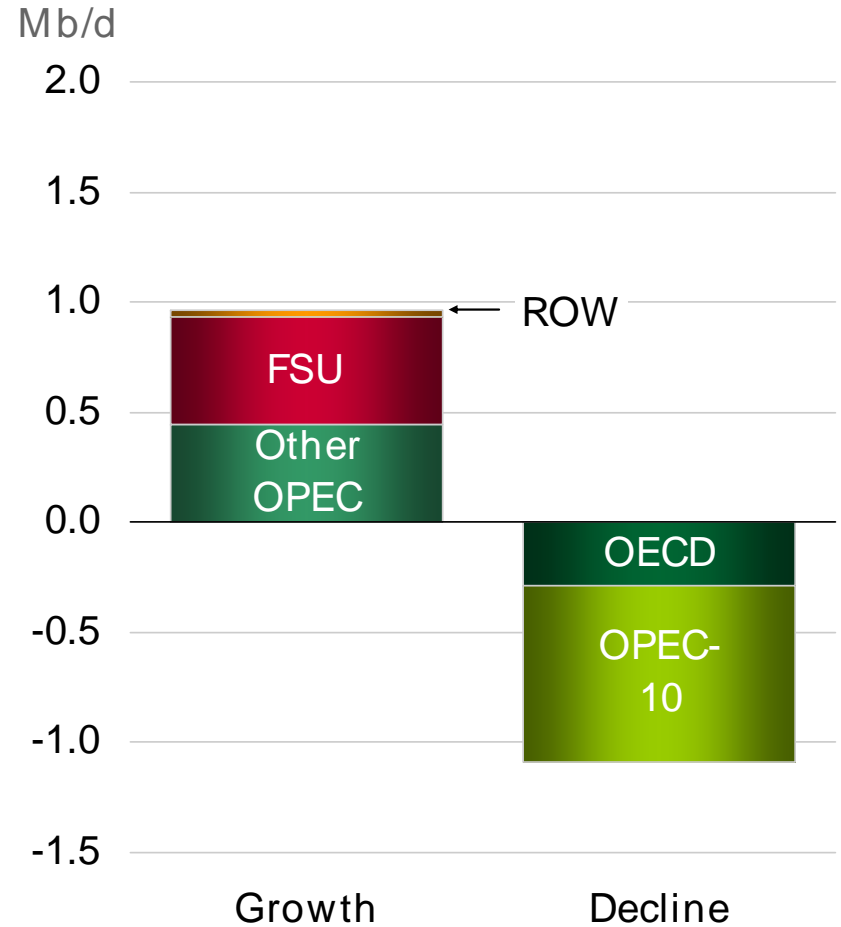
Recap: Supply Management 2007...



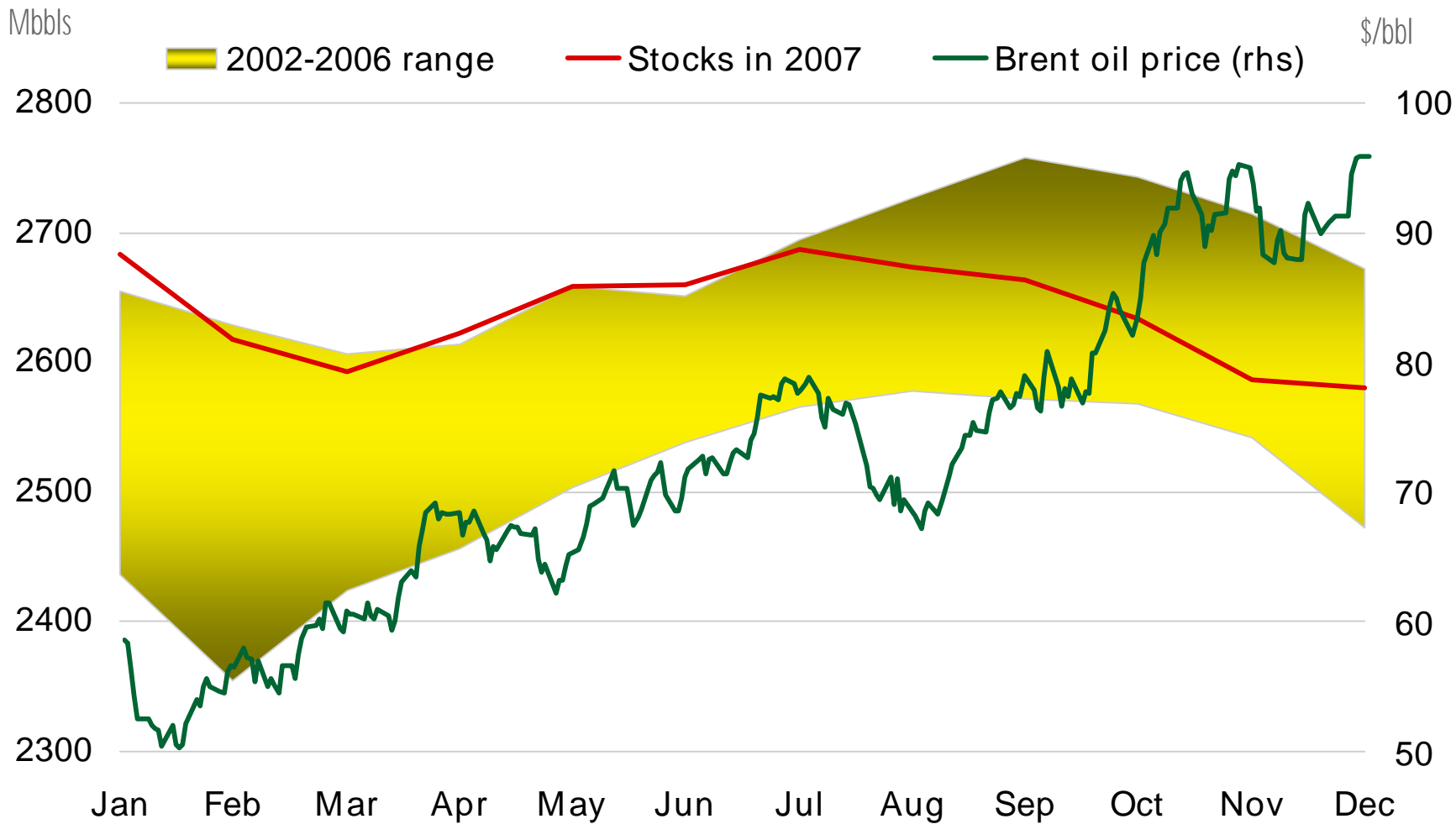
Average annual change, 2003-2007



Change 2007



... And OECD Commercial Inventories 2007



Sources: IEA, Platts

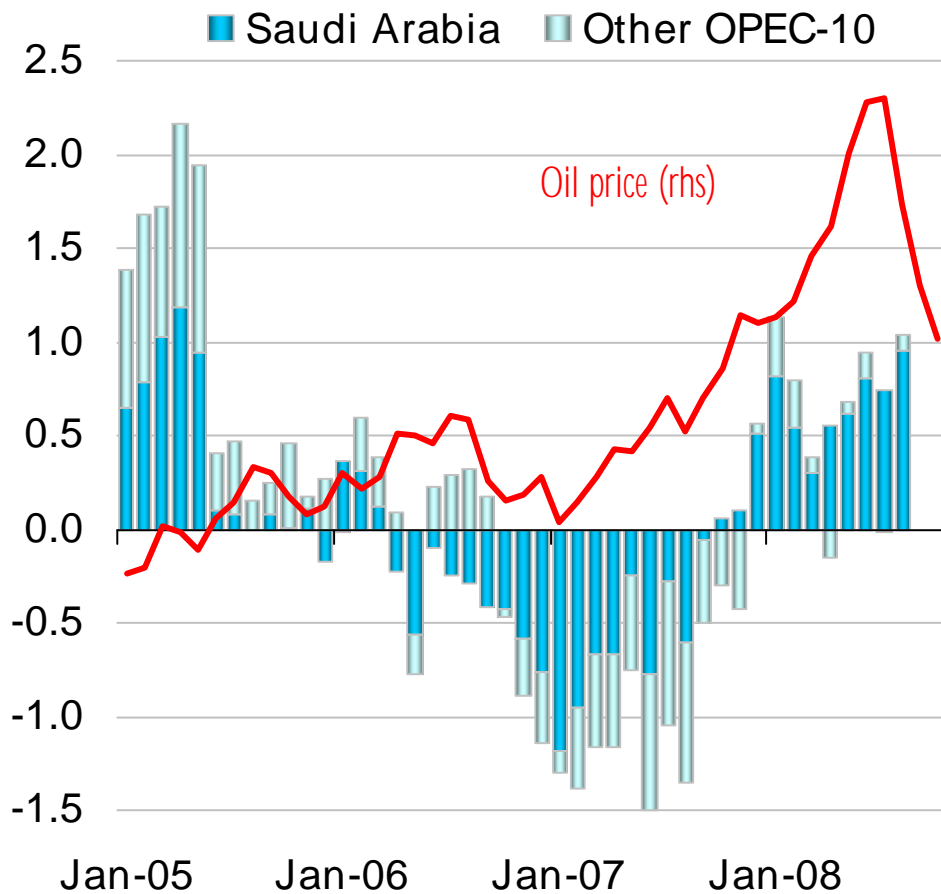
© BP 2008

Production Increase in Saudi Arabia...



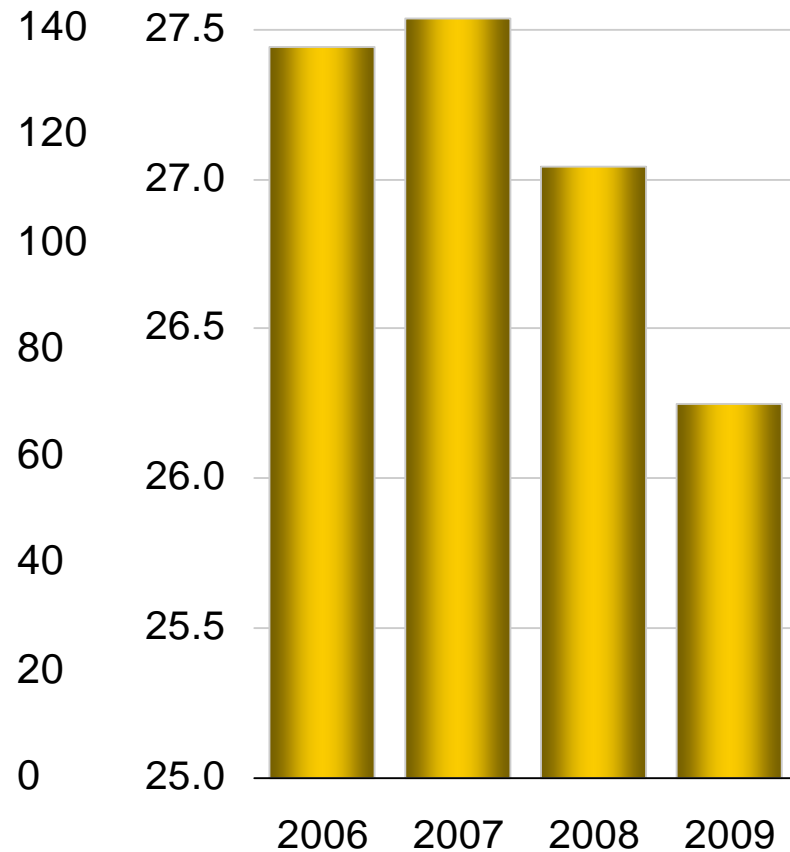
OPEC-10 Crude Production

y-o-y change, Mb/d

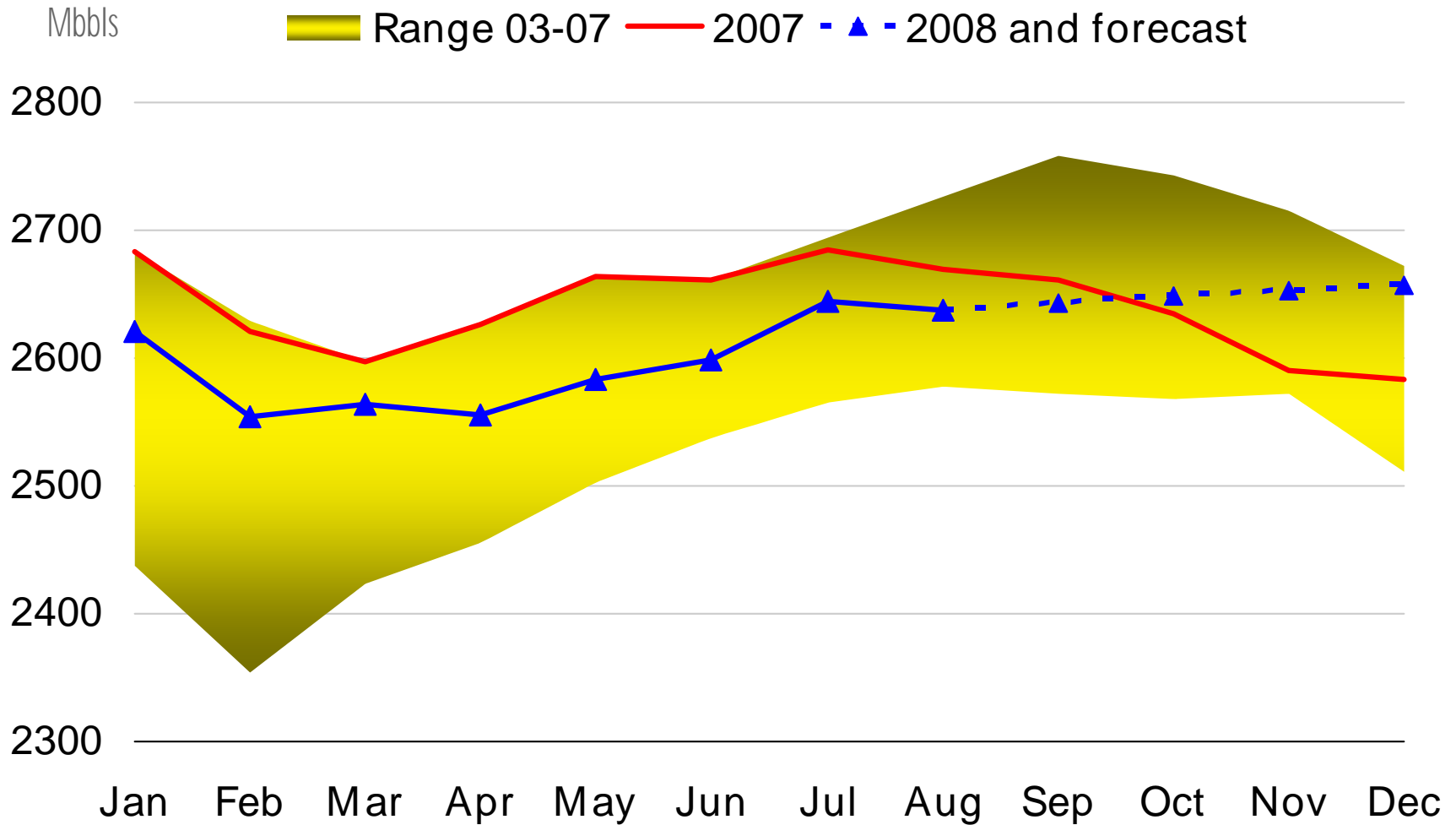


Call on OPEC-10 Crude

Mb/d



... And What a Difference a Year Makes

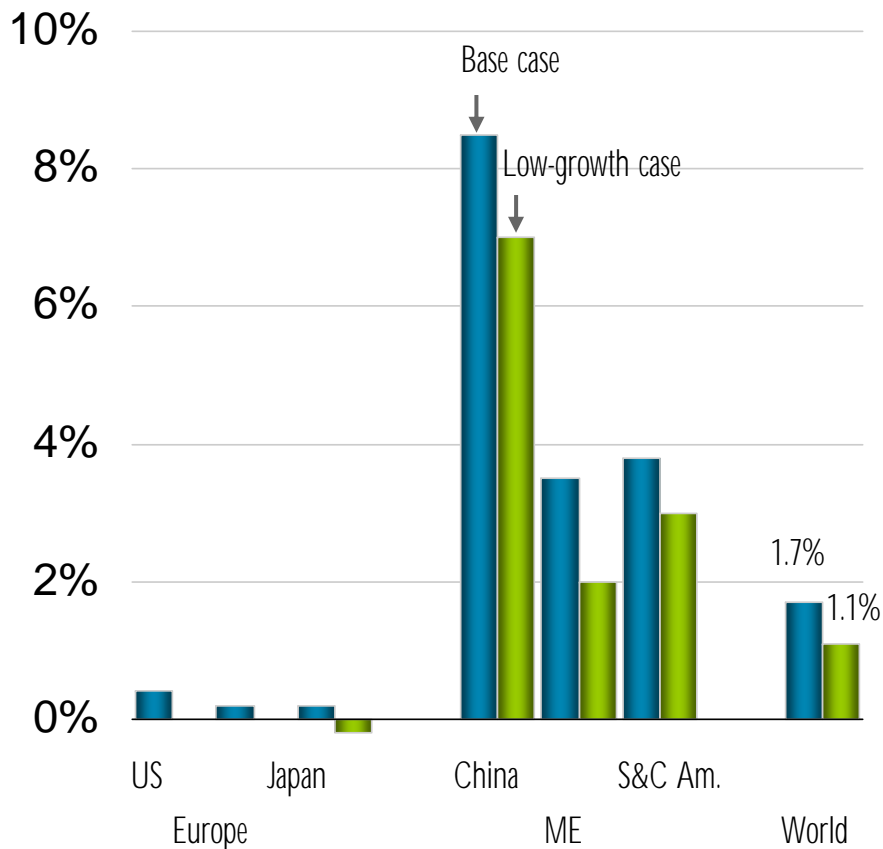


Global Demand Growth



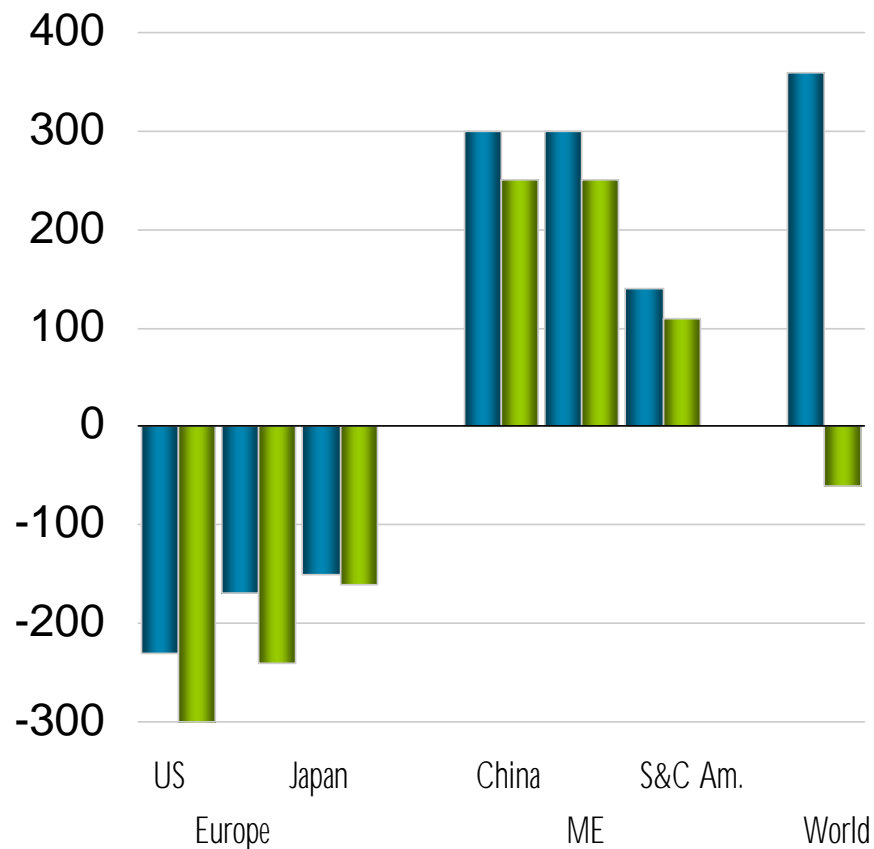
GDP

y-o-y growth



Oil consumption

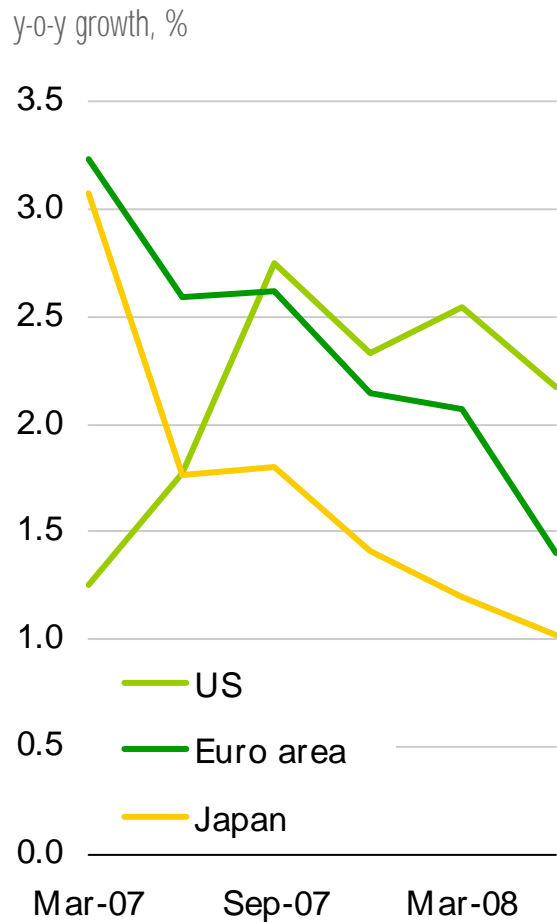
Kb/d



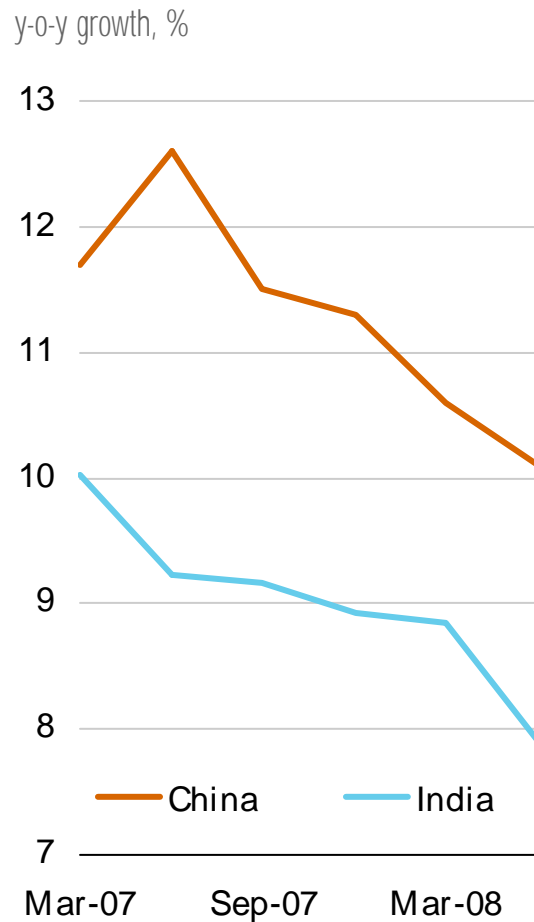
Risk: Global Economic Growth Slowing



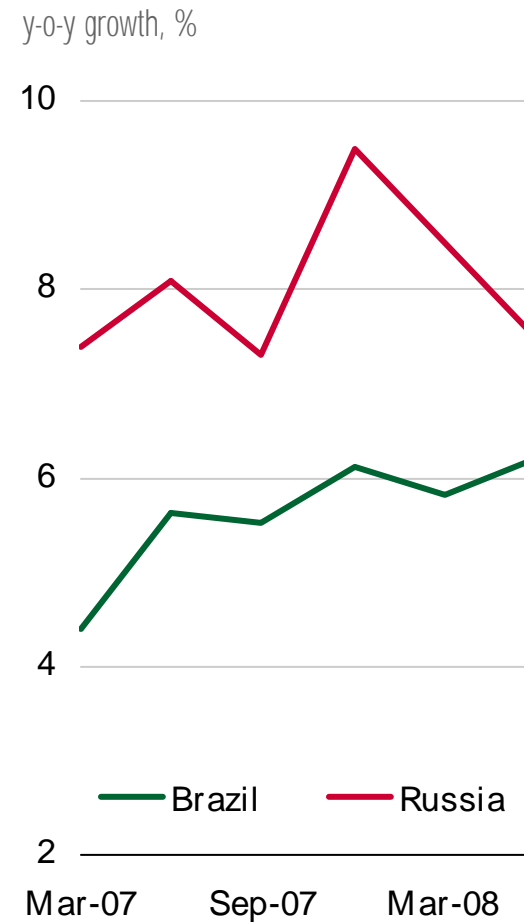
OECD



Non-OECD goods exporters



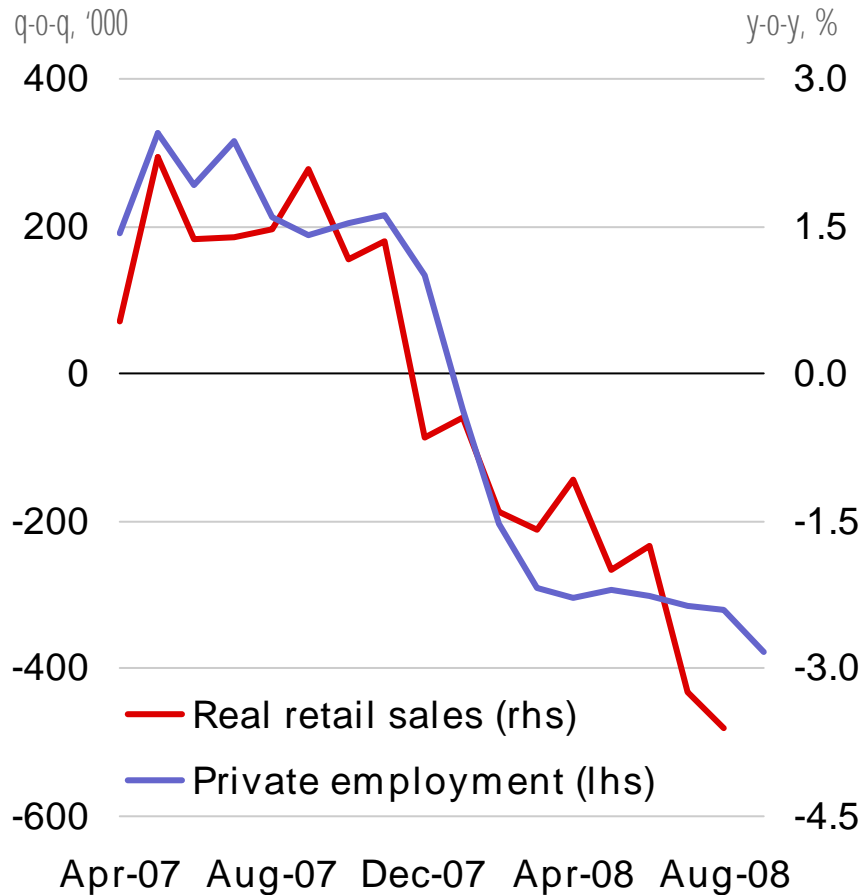
Non-OECD commodity exporters



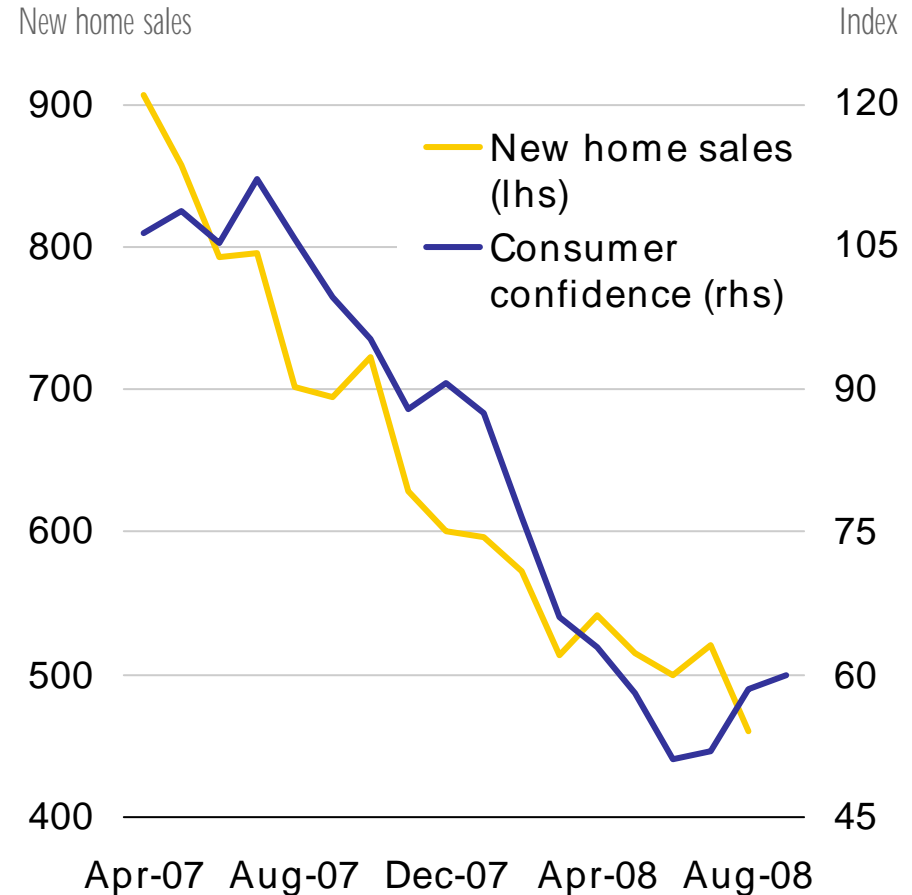
The Crisis Affects US Consumption...



Weak labour market affects retail sales...



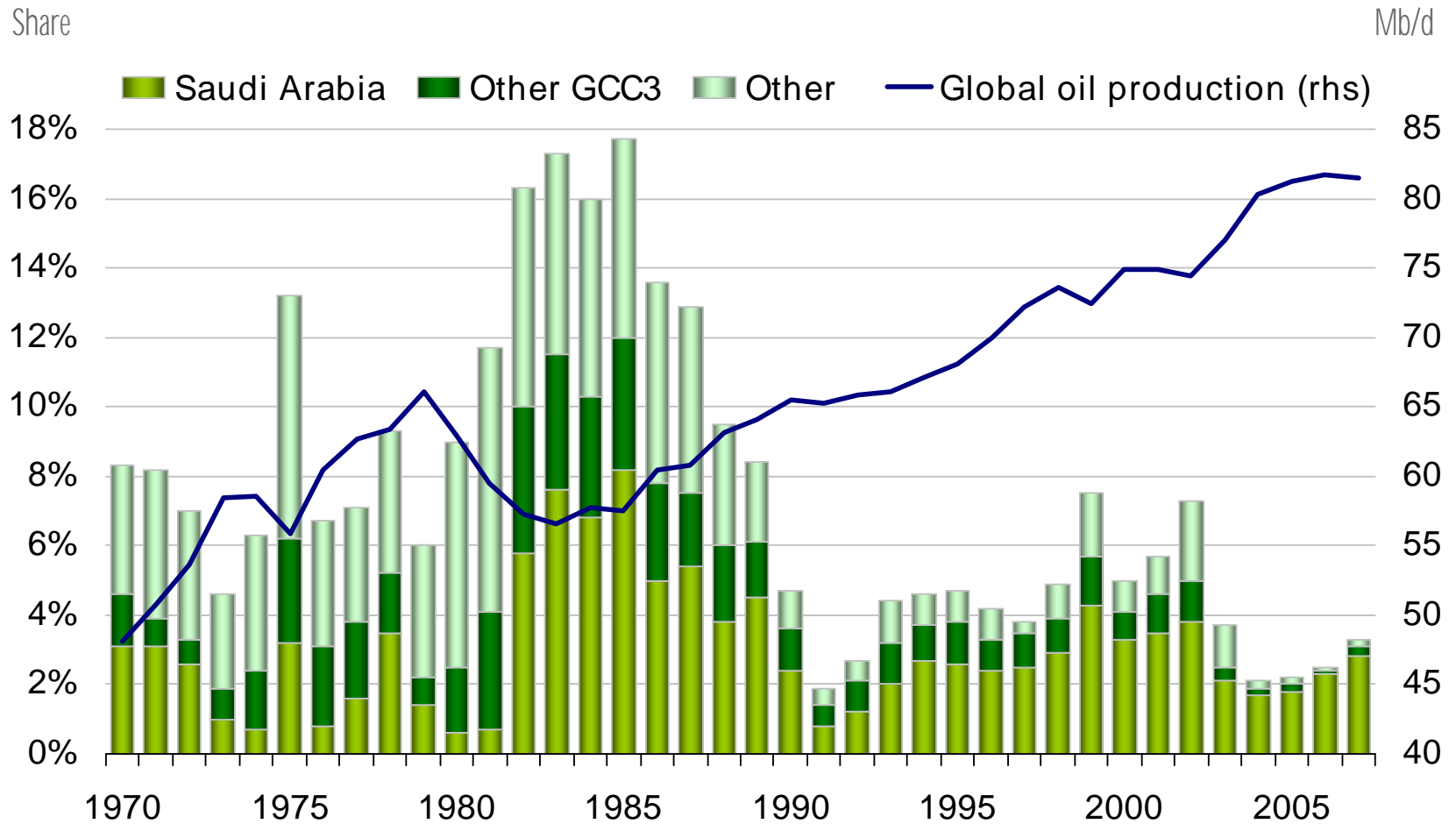
...and consumers getting more pessimistic because of the housing market



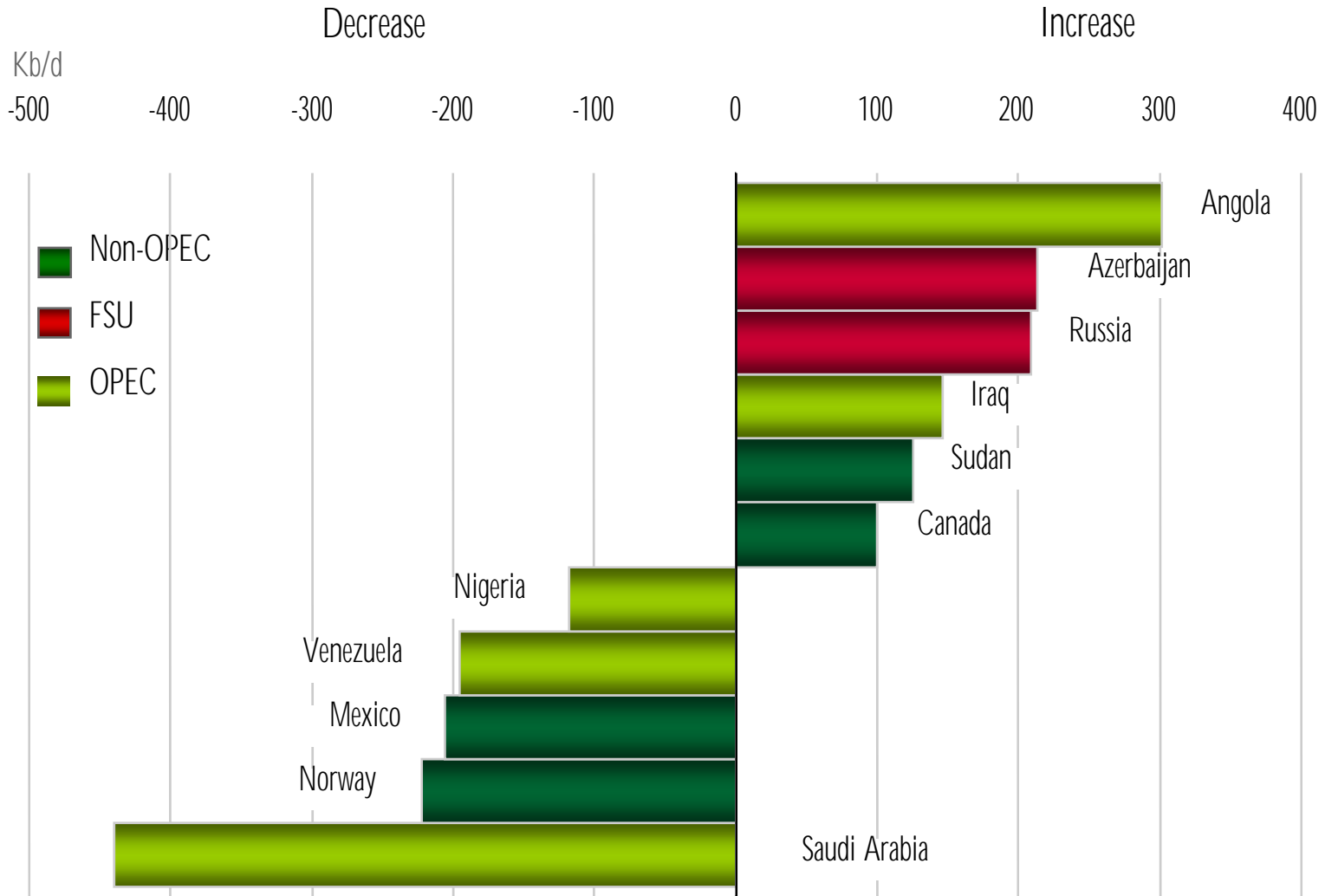
Long Term: Spare Capacity



Spare capacity as share of global oil production



2007 Oil Production: Largest Changes



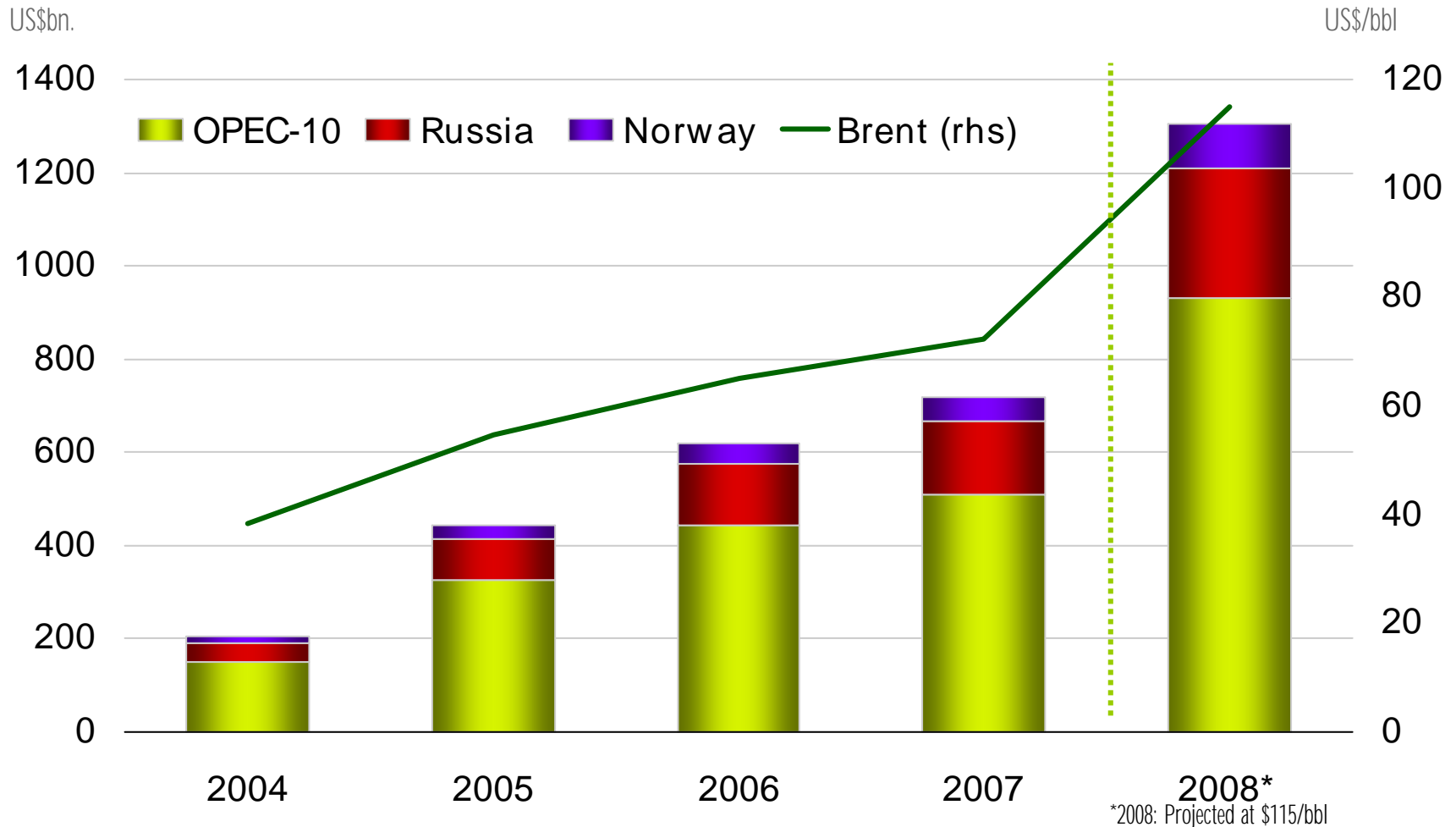


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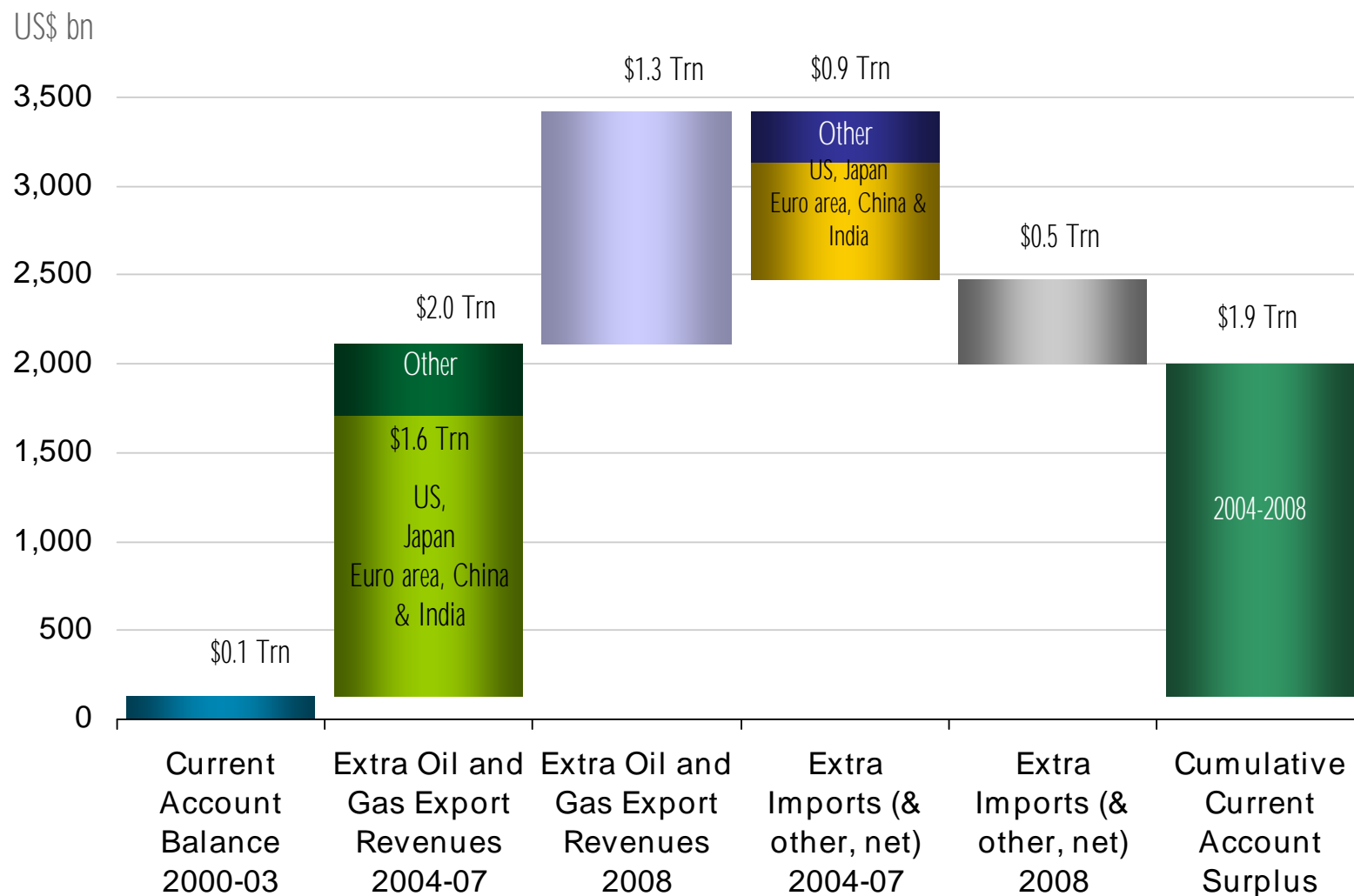
Oil and Gas Export "Windfall", 2004–08



Oil and gas export revenues over and above average revenues 2000-03

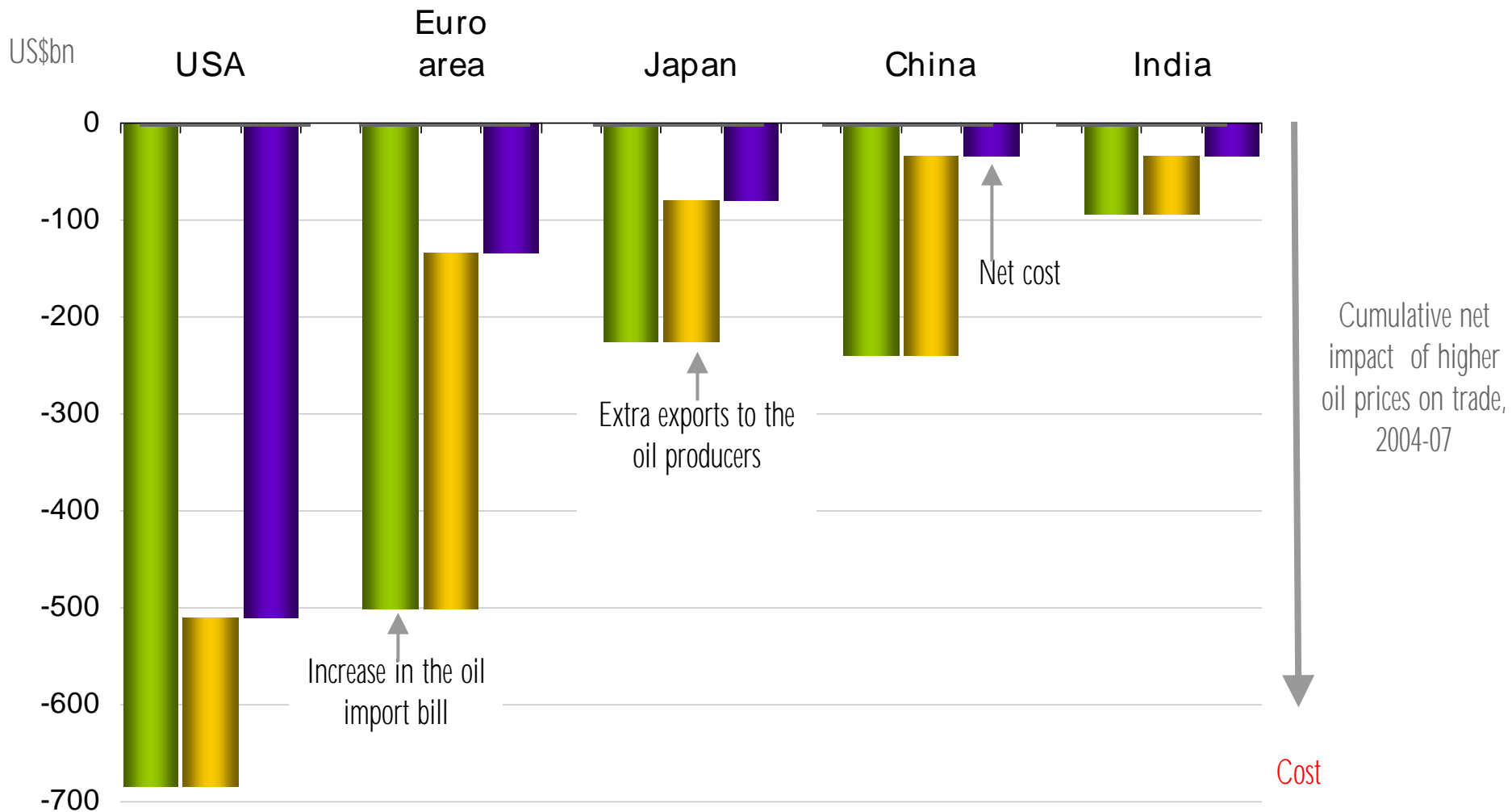


The Transfer* Can be Recycled in Two Ways...



Note* : OPEC-10, Russia and Norway: cumulative windfall, 2004-08

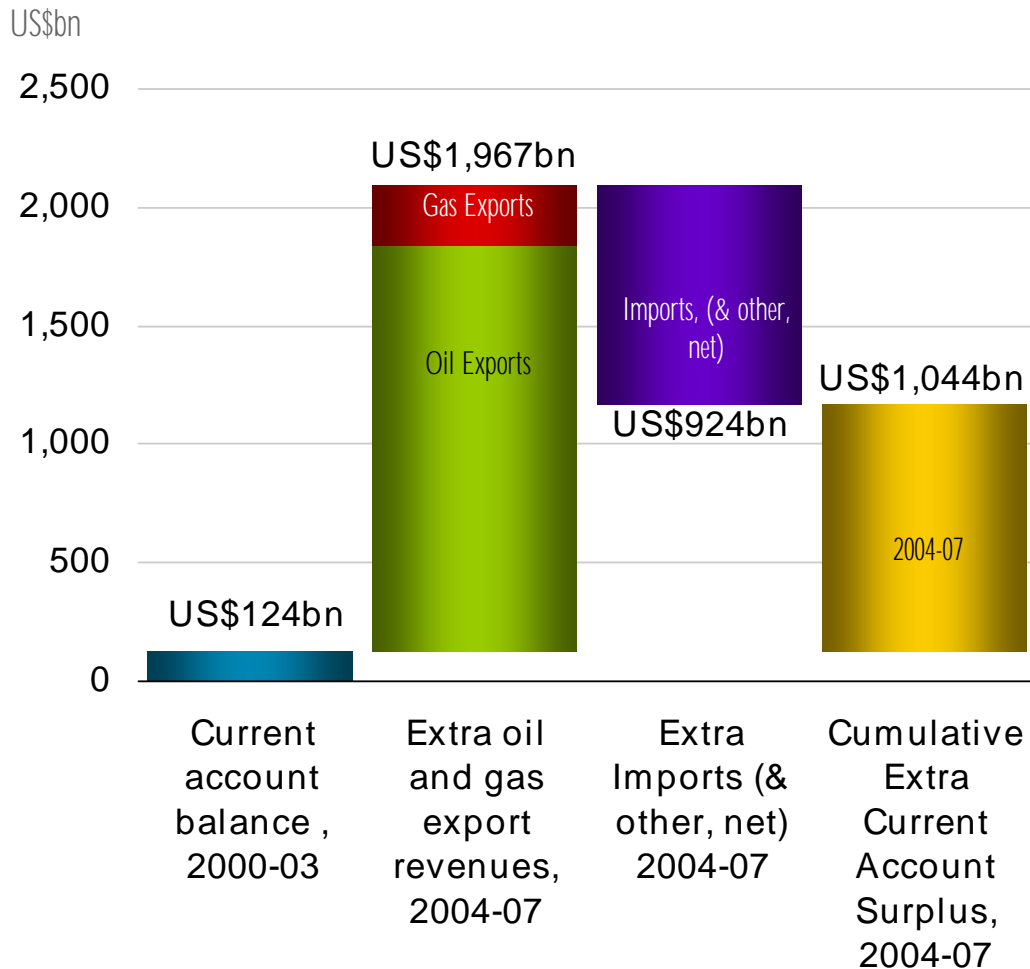
Terms of Trade: Winners and Losers



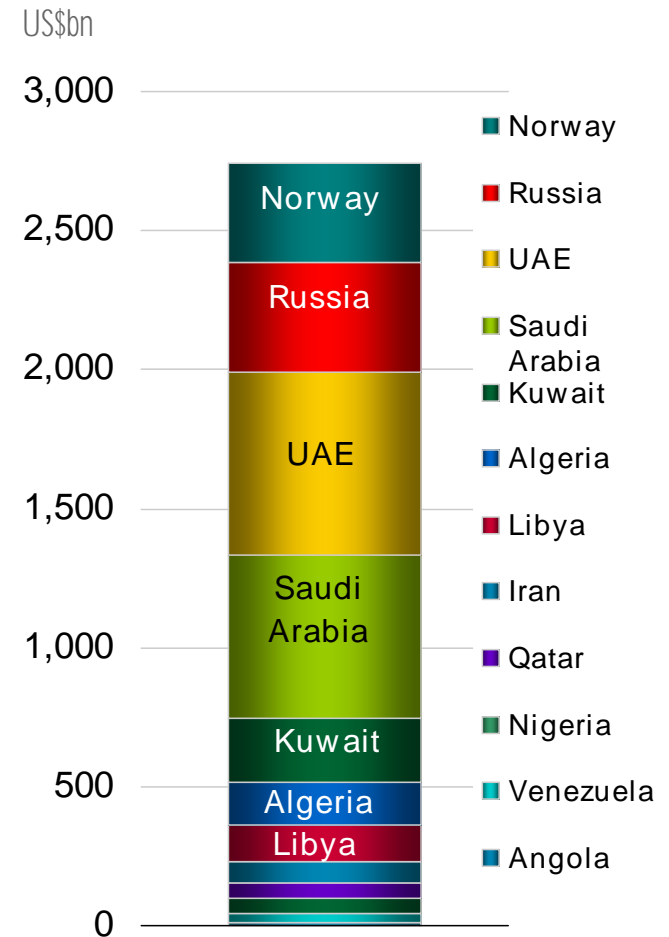
Balance of Payments



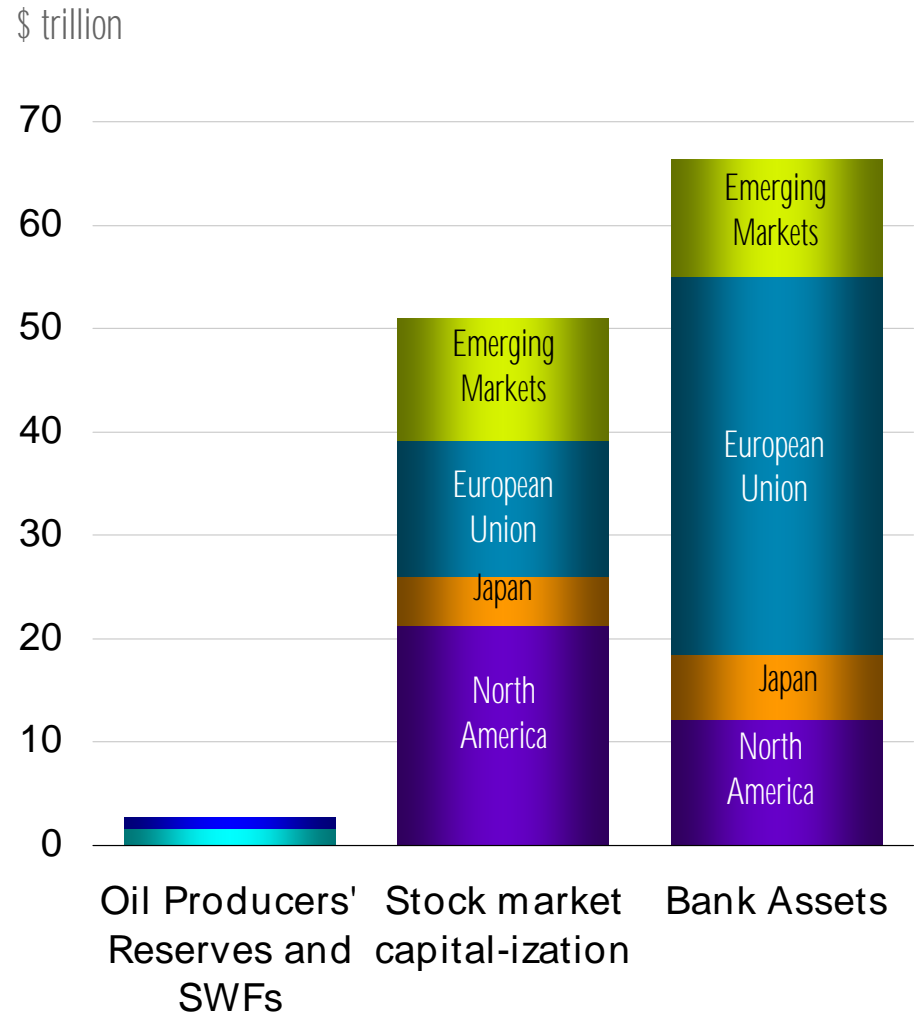
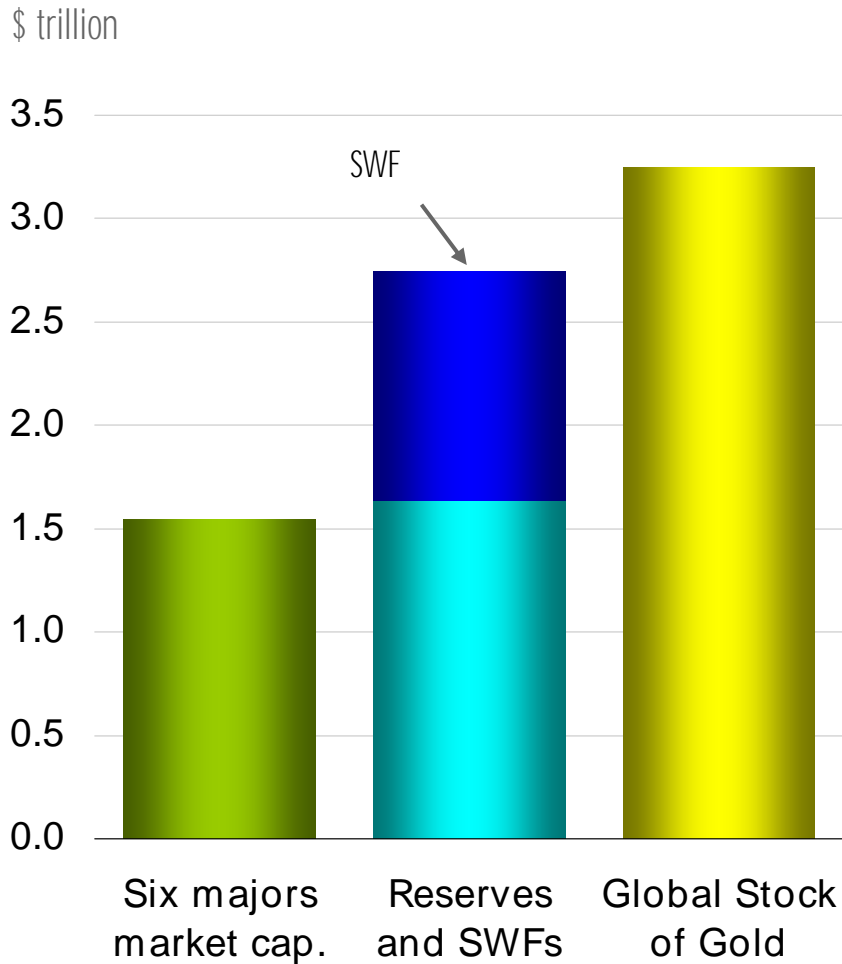
Strengthening external current account



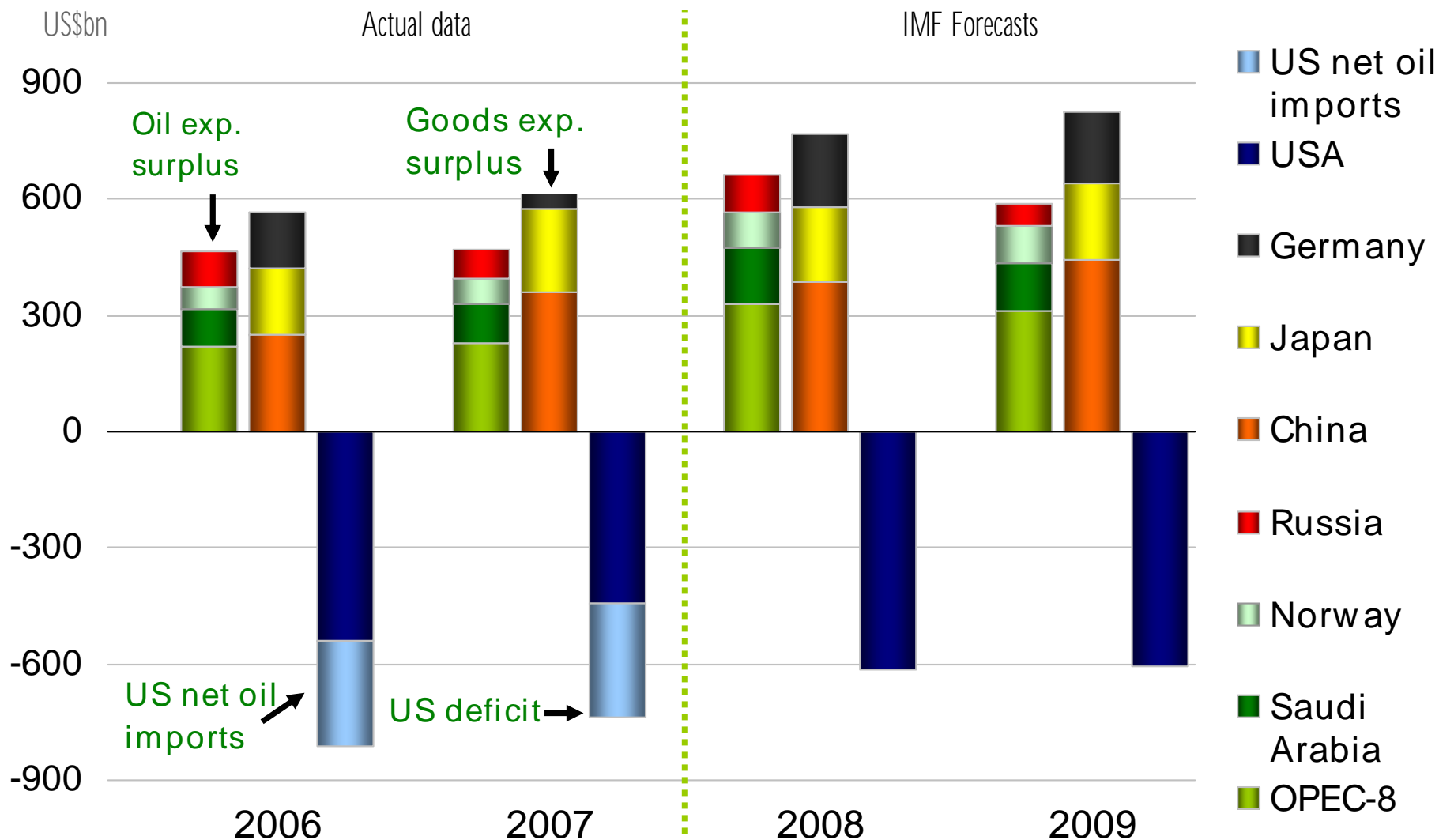
Total official reserves and SWF assets



Producers' Financial Reserves



International Current Account Balances

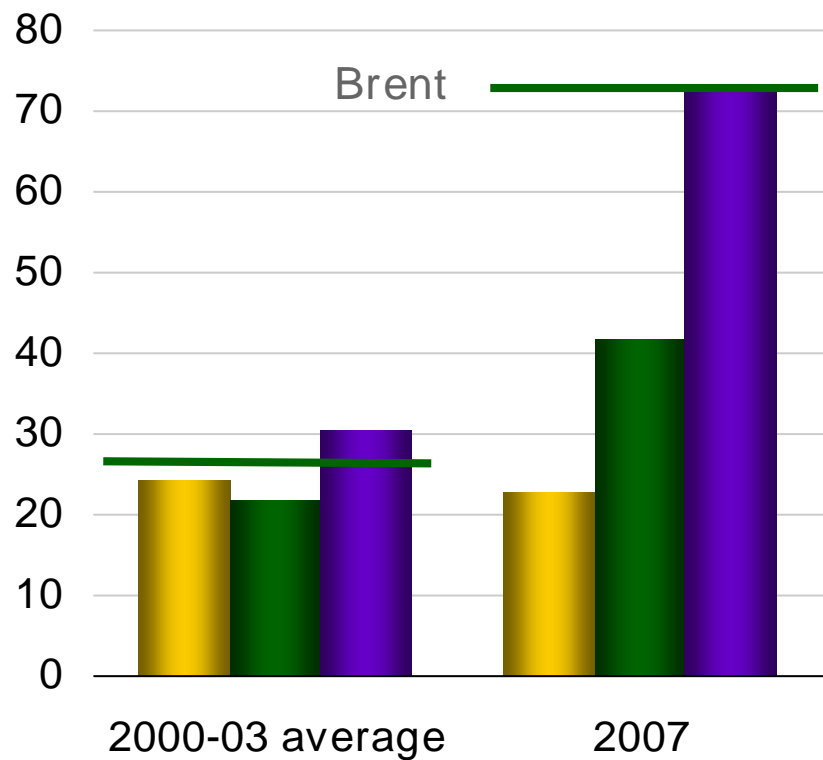


OPEC: Oil Price "Dependence"



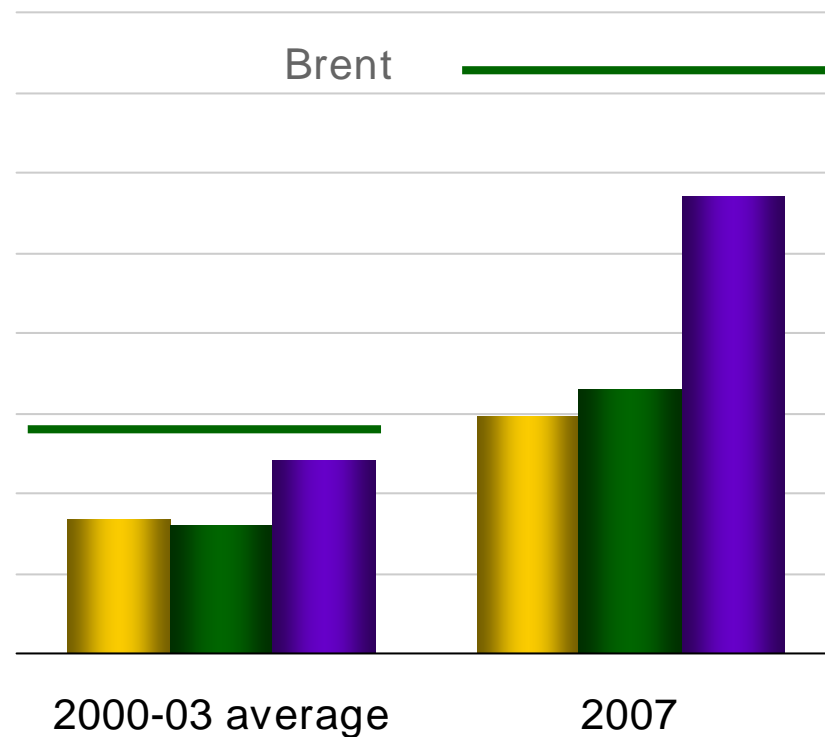
The government budget

Brent oil price at which the budget and current account balance (\$/bbl)



The external current account

■ UAE & Kuwait
■ Algeria, Libya, Saudi Arabia, Qatar
■ Angola & Nigeria, Iran & Venezuela



- The long term: Driven by the developing world
- In the short term: Volatility will increase
- But not (yet) a source of global instability