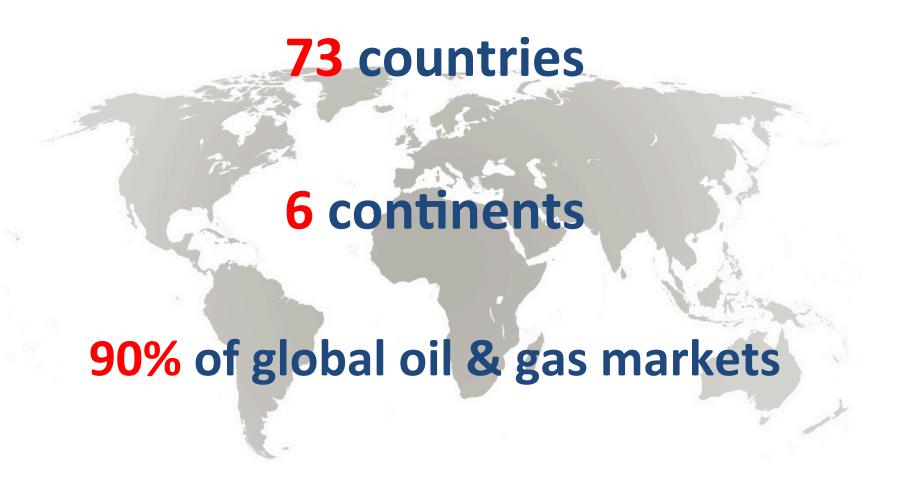


Oil market volatility and the producer-consumer dialogue:

Trends and questions



The IEF membership: neutrality means inclusion



An Industry Advisory Committee of global oil and gas companies participates in the IEF





























































































Flow

1. Trends

2. Questions



Flow

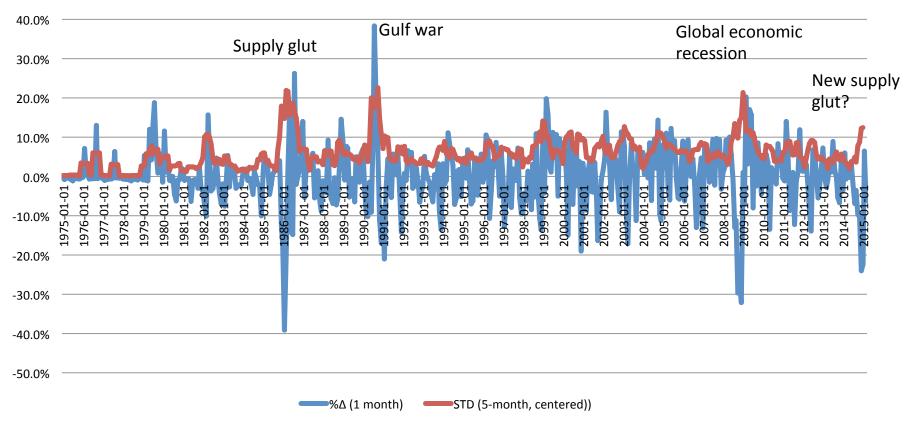
1. Trends

2. Questions



Three episodes of high volatility in 35 years: 1986, 1990, 2008......and maybe a fourth one: 2014-2015

Monthly oil price change and volatility, 1975-2015



Source: US prices are WTI from EIA (1986-2014) and WSJ (1975-1985); own calculation.



Flow

1. Trends

2. Questions



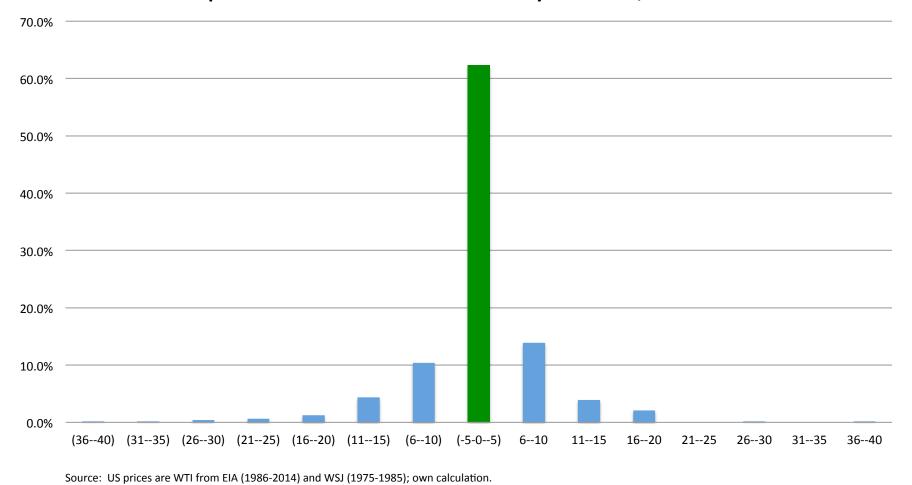
Question 1

Volatility: how much is too much?



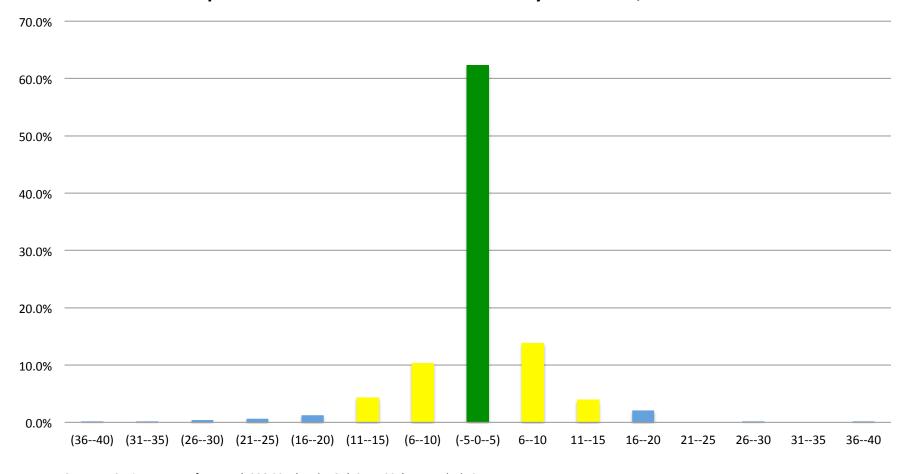
Over 60% of monthly price variations since 1975 have taken place within a small range: -5% to 5%

Oil price. Relative distribution of monthly variations, 1975-2015



A wider range of variation has appeared tolerable -to a point: -15% to 15%

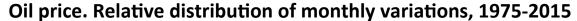
Oil price. Relative distribution of monthly variations, 1975-2015

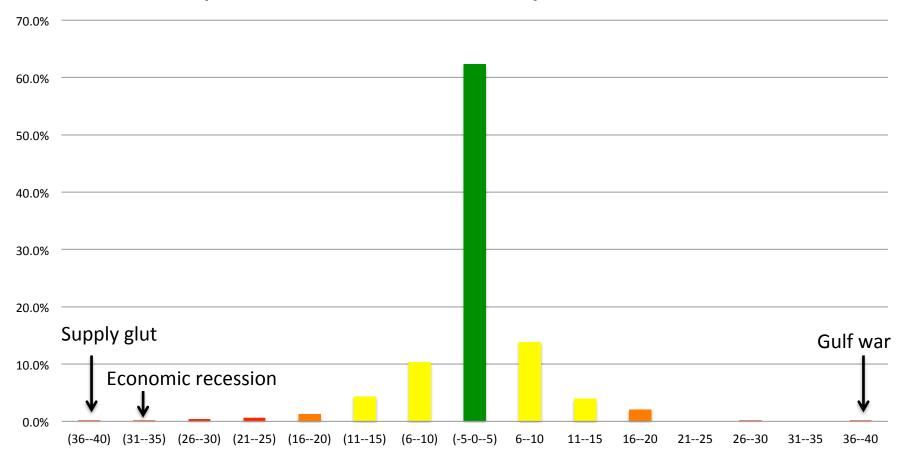


Source: US prices are WTI from EIA (1986-2014) and WSJ (1975-1985); own calculation.



But higher ones have generated much discomfort:





Source: US prices are WTI from EIA (1986-2014) and WSJ (1975-1985); own calculation.



It is difficult to reach a common view of an acceptable level of volatility due to the broad range of stakeholder interests in the oil market



Different stakeholders have different perspectives on volatility

Governments

- Distributive effects
- Macroeconomic effects

Companies operating in physical markets

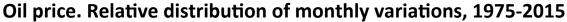
- Long-term investment
- Affordable supplies

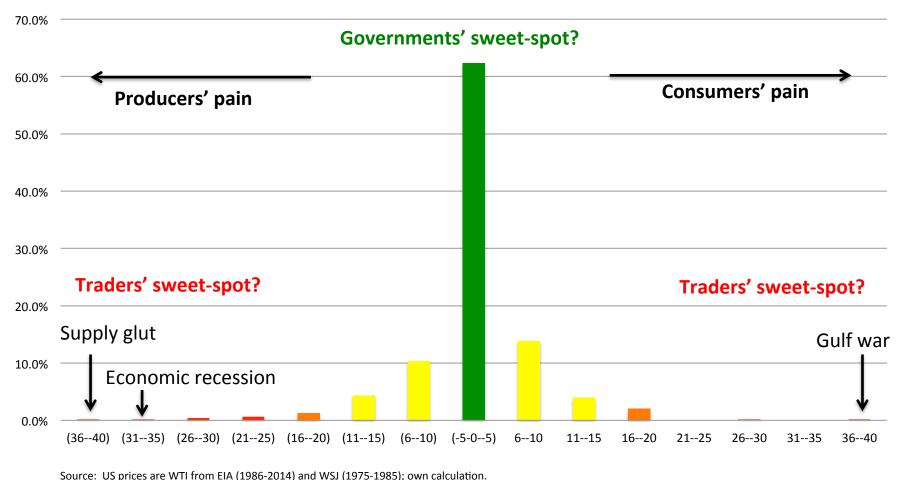
Investors, creditors, and debtors in financial markets

- Hedging and risk allocation
- Credit and risk valuation



Stakeholders have different tolerance thresholds for volatility





Question 2

International energy cooperation: when and how?



It depends on:

Objectives

Instruments

Information



What is the target?

An oil price level?

A range for the percentage change in the oil price?

A range of variation around an average percentage change?

• A revenue **stream**?

Supply/demand certainty?

What are the instruments?

Physical market	Supply	Production quotas Strategic reserves	
		Spare capacity	Dialogue
	Demand	Policy transparency?	and
			Data
Financial market	Policy and regulation	Price reporting	
		Position limits	



The IEF works to improve the quality of information available to decision-makers

Dialogue

- IEF Ministerial meetings
- Analysis of the interaction between physical and financial energy markets and its implications for policy (with IEA and OPEC)
- Comparative analysis of energy outlooks (with IEA and OPEC)

Data

Promotion of market transparency through the Join Organisations
Data Initiative, or JODI (with APEC, Eurostat, IEA, GECF, OLADE,
OPEC, and UNSD)



Focus of the conversation on the interaction between physical and financial markets (IEA-IEF-OPEC Symposia)

Fundamentals and expectations about fundamentals

- Supply
- Demand

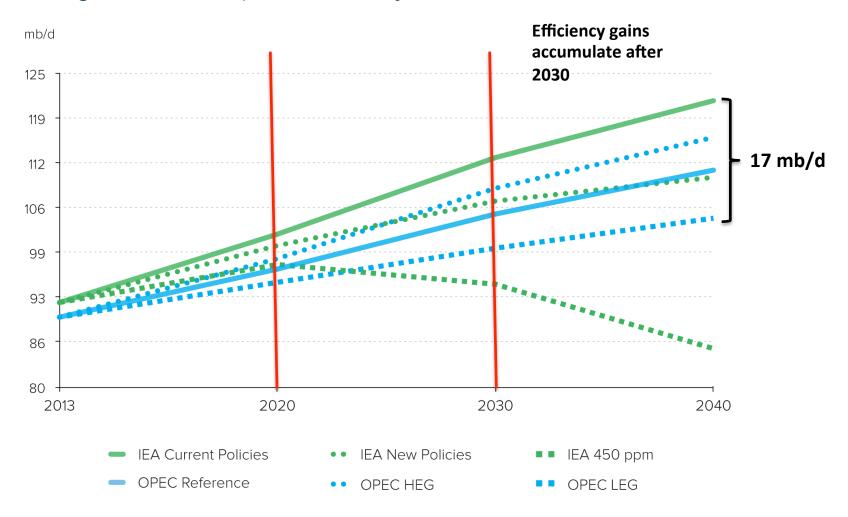
Role of regulation in promoting transparency and efficient price formation

- Price reporting
- Hedging
- Harmonization of standards
- Regulatory arbitrage



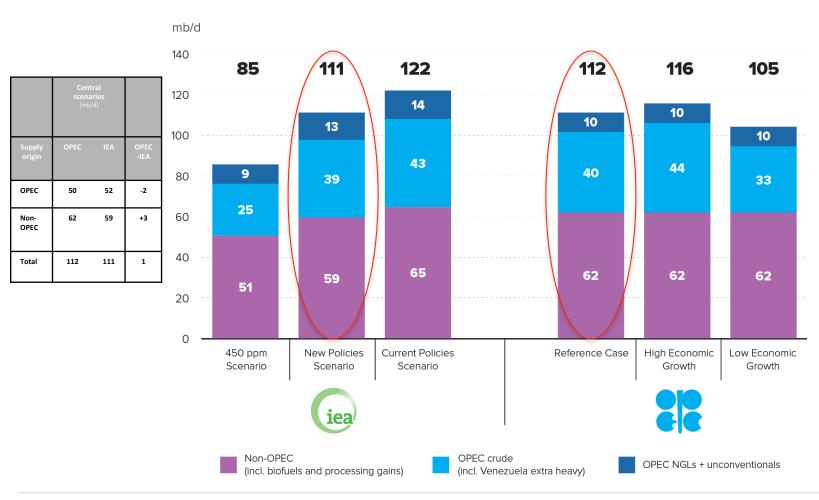
Oil consumption will depend to al large extent on economic and population growth...and on technological progress and the long-term investment framework

Figure 16. World Liquids Demand Projections in Various Scenarios



OPEC sees its crude making up for the demand not covered by Non-OPEC; the IEA sees more variation in both supply sources

Figure 20. Shares of Liquids Supply by Types in 2013 and Outlook for 2040











Transparency: JODI involves the coordination of many actors and processes

National statistics offices collect information From oil and gas companies

National statistics offices fill the JODI questionnaires and pass this information to the JODI partner organization



JODI partner reviews the data, checks for outliers, compares with secondary sources, and sends data to IEF



IEF rechecks, integrates, and publishes the information it receives from partner organisations



The **problem** and the **paradox**

Problem

You can have **fast data or accurate data, but not both** at the same time

Paradox

Everyone wants more and better data, but not everyone is willing to provide it









www.jodidata.org

More food for thought...



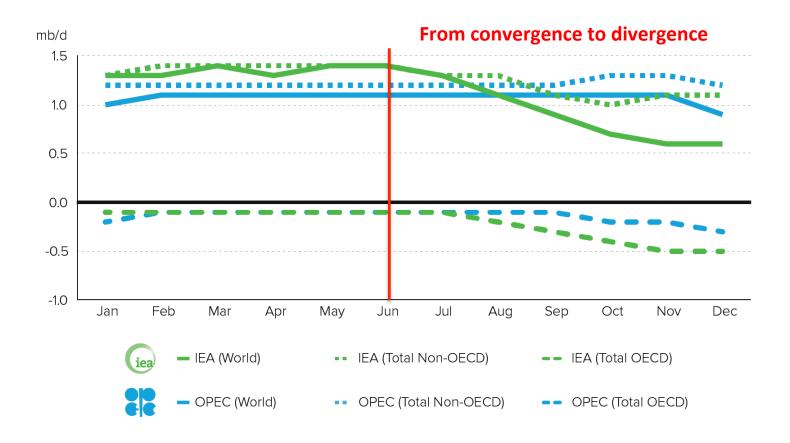
Factors behind the oil price fall

Microeconomic	Supply	Greater output from the USA, Canada, Brazil, Libya (temporarily), and Iraq OPEC decision not to cut production	
	Demand	Weak consumption with unexpectedly large downward revisions through the second half of 2014	
Macroeconomic	Exchange rate Interest rate	US dollar appreciation US interest rate expectations	



Demand estimates for both the IEA and OPEC were stable until June 2014, when expectations began to change

Figure 1. Revisions of 2014 World Liquids Demand Growth Estimates



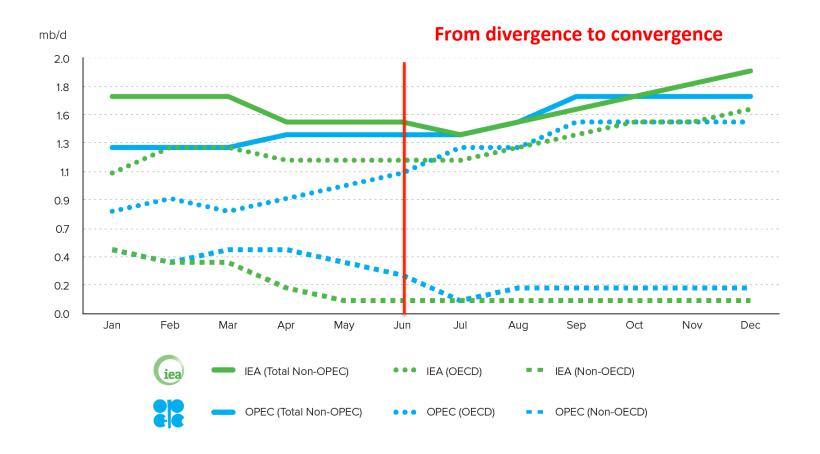






Supply growth estimates converged by the second half of the year

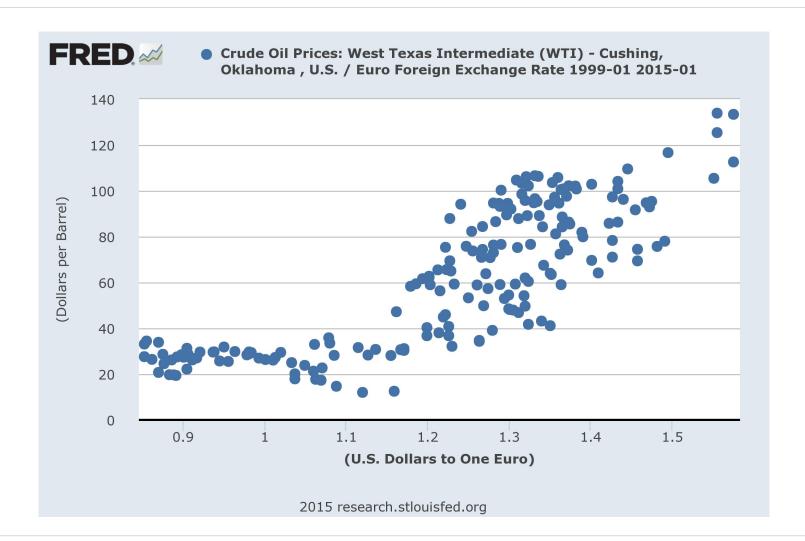
Figure 4. Forecast Revisions of 2014 Non-OPEC Liquids Supply Growth





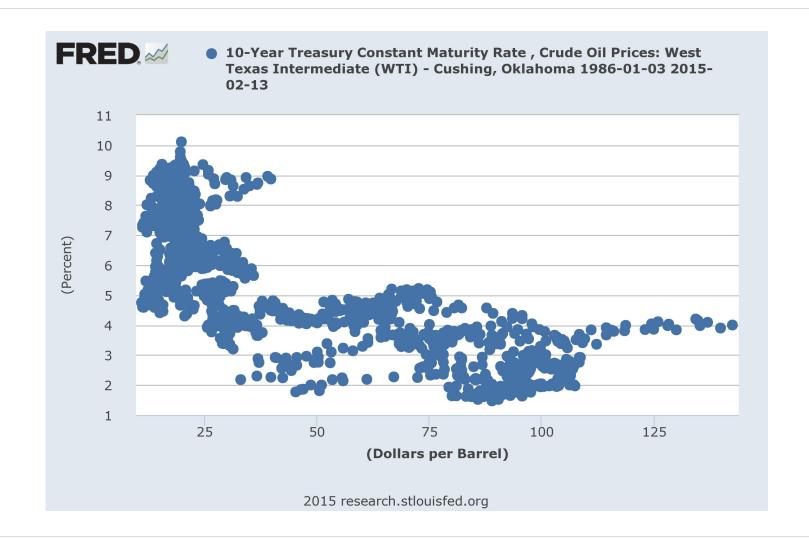


Oil prices are low when the dollar is strong





Oil prices are low when interest rates are high











www.jodidata.org