BOTTOMFEEDING

- Scavenging
- How a Wall Street Investment Banker Described the Current State of the U.S. Industry

A Consulting Project Example

NIGERIA FARM-IN

r = 28%

What are you doing ?

Where did this come from?

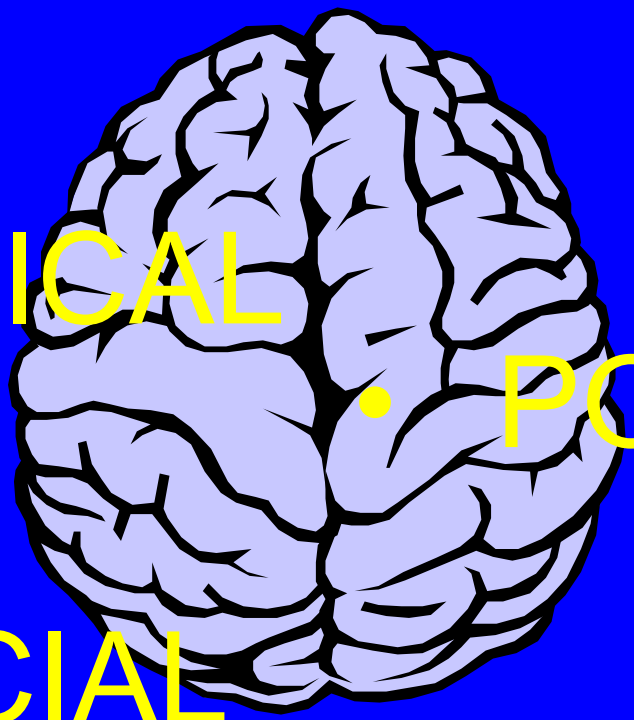
Political Uncertainty in Project Economics – A Case Study: ConocoPhillips in Venezuela

DeAnn Craig

Goal: A THOUGHT PROCESS

Left Brain

Right Brain



rate

- TECHNICAL
- FINANCIAL

S_w

$NB_{oi} = (N-N_p)B_o$

r

Oil and Gas Price

- POLITICAL

RIOTS

STRIKES

WAR

r

KIDNAPPING

GOAL – Convince the Project Evaluator

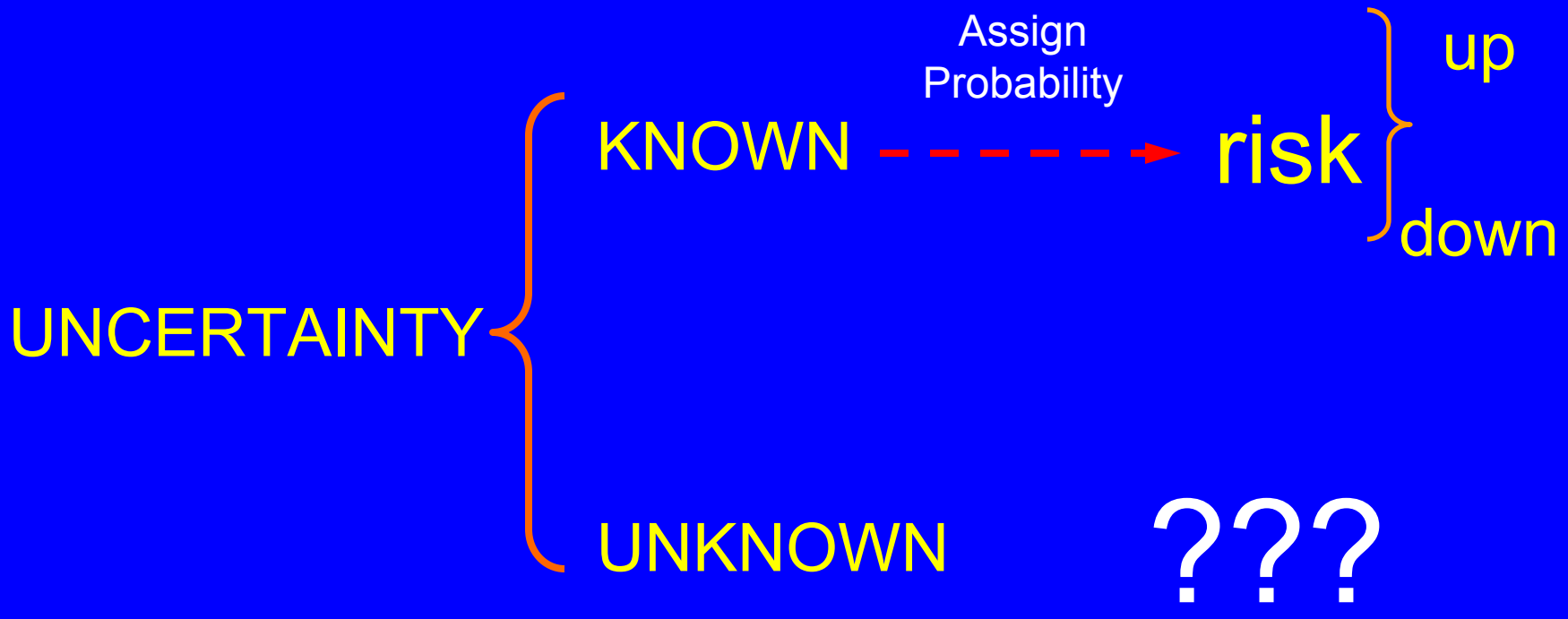
- Political events can be accounted for in Project Economic Evaluation just like Technical or Financial issues.
  - Changes in production volumes
  - Changes in net revenue
  - Increases in cost
- Accounting for political uncertainties in the discount factor will distort the analysis.

DEFINITIONS

- **POLITICAL** : relating to stakeholders

- This includes
  - populations of home and host countries directly or indirectly affected by the project
  - governments that represent them
  - shareholders of the corporation

DEFINITIONS



Political Uncertainty Matrix
Potential Outcomes

Macro *(nearly all firms)*

Unwanted Transfer risk (inconvertibility) Negative government actions (operations risk) Regulatory Changes Trade Sanctions Economic instability	Civil War/Revolution Damages Border conflicts (ownership in question) Riots Damage Expropriation/Nationalization (all foreign entities)
Regulatory changes (including environmental) Contract terms altered (creeping expropriation) Expropriation/Nationalization (selected industries)	Terrorism/Sabotage Contract repudiation Process deterioration (strikes, bribery, corruption, pipeline theft) Personnel safety (kidnapping)

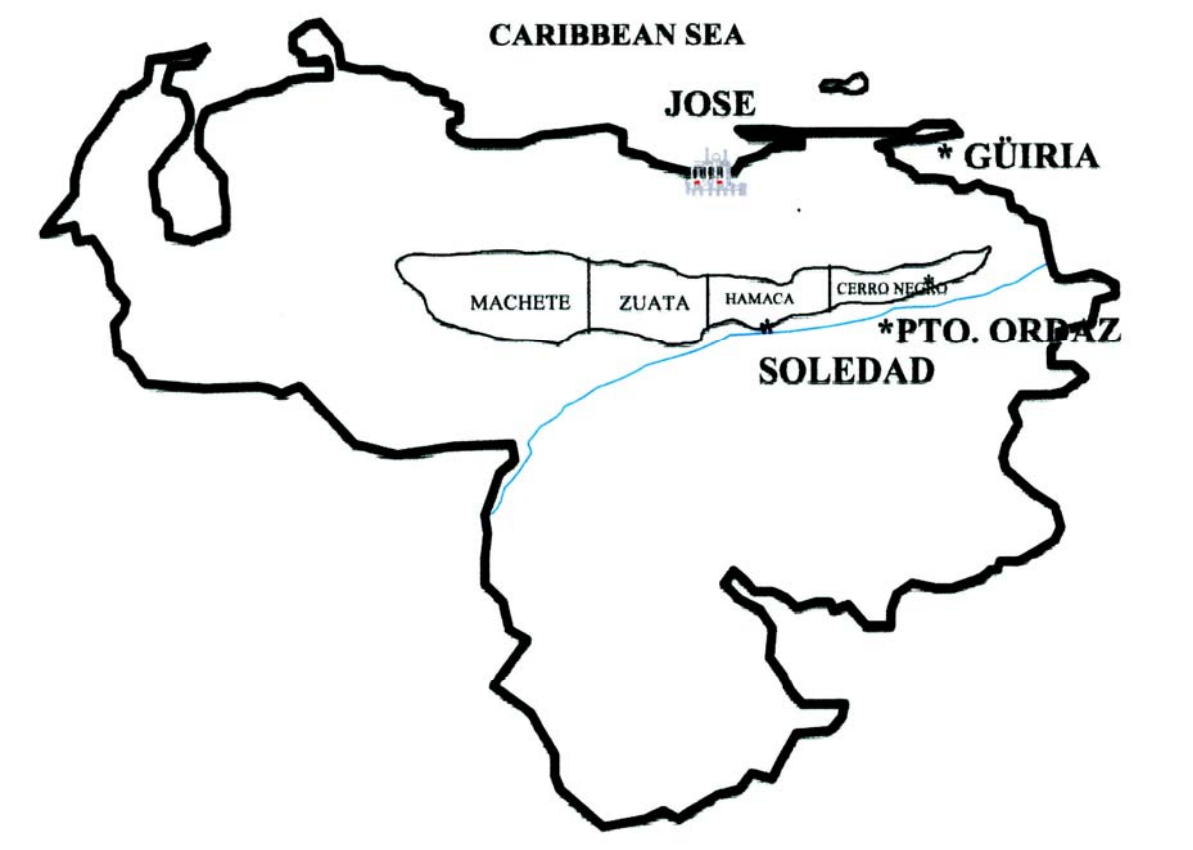
Legal **Extra-legal**

Micro *(selected industries or firms)*

CASE STUDY: ConocoPhillips-Venezuelan Strike

An Example of Process Deterioration

The Orinoco Oil Belt



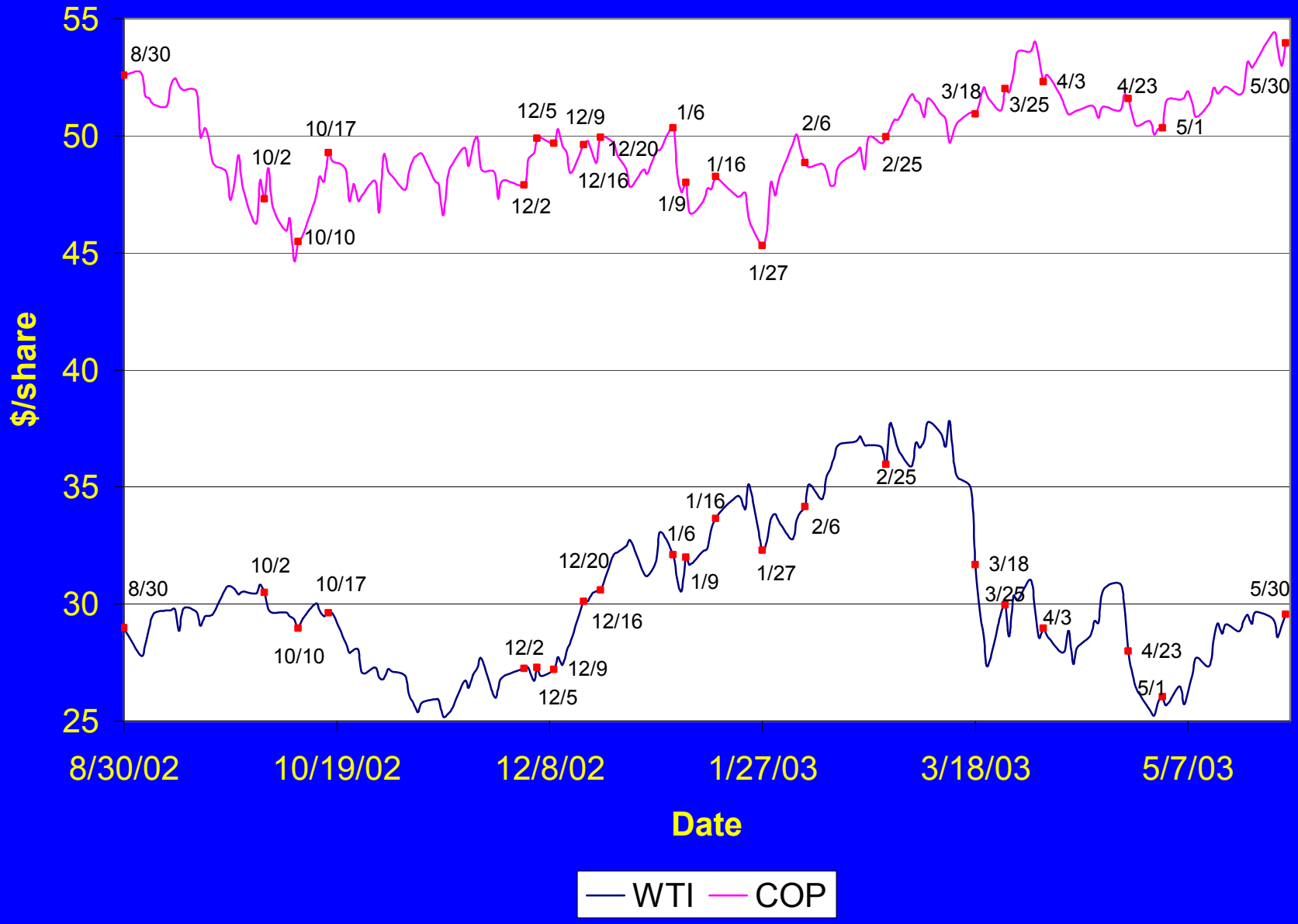
Source: Alvarez, C.E., C Marciano, C Pereira, K. Larrauri, F. Morros, P. Bauduhin. “The Orinoco Oil Belt Targets Light/Medium Crude Oil and Product Market Opportunities,” SPE 69734, 2001, p 10.

Orinoco Belt Strategic Associations

Project Name (New Name)	Petrozuata (Junin)	Cerro Negro (Carabobo)	Sincor (Boyaca)	Hamaca (Ayacucho)
Partners (percent)	PdVSA (49.9), ConocoPhillips (50.1)	PdVSA (41.67), ExxonMobil (41.67), BP	PdVSA (38), Total (47), Statoil (15)	PdVSA (30), ConocoPhillips (40), Chevron (30)
Startup Date	October 1998	November 1999	December 2000	October 2001
Extra-Heavy Crude Production (bpd; API)	120,000; 9.3°	120,000; 8.5°	200,000; 8-8.5°	190,000; 8.7°
Syncrude Production (bpd: API)	104,000; 19-25°	105,000; 16°	180,000; 32°	180,000; 26°

Source: http://www.eia.doe.gov/emeu/cabs/Venezuela/Full.html, (16 September 2005)/.

TIMELINE including VENEZUELAN NATIONAL STRIKE



Estimated, Actual Cost of Shut-in Production

Project	December 2002	January 2003	February 2003	March 2003
Petrozuata				
Syncrude Net, Daily Production, mbopd	58	58	58	58
Estimated Days Shut-in	25	31	28	15
Estimated monthly shut-in cost ($mm/month)	29.1	39.4	38.1	19.3
Estimated total cost of shut-in ($mm)	$126			
Estimated per share cost of shut-in ($/share)	$0.19	Assumes 676.8 mm shares		
Estimated average, daily cost of shut-in production ($000 per day)	$1,272			
Hamaca				
Net, Daily Production, mbopd	20	20	20	20
Estimated Days Shut-in	25	31	28	15
Estimated monthly shut-in cost ($m/month)	311	348	378	354
Estimated total cost of shut-in ($mm)	$35			
Estimated per share cost of shut-in ($/share)	$0.05	Assumes 676.8 mm shares		
Estimated average, daily cost of shut-in production ($000 per day)	$348			
TOTAL				
Estimated total cost of shut-in ($mm)	$161			
Estimated per share cost of shut-in ($/share)	$0.24	Assumes 676.8 mm shares		
Estimated average, daily cost of shut-in production ($000 per day)	$1,620			

Market Model

$$C(COP/WTI)_t = \{[(COP/WTI)_t - (COP/WTI)_{t-1}]/(COP/WTI)_{t-1}\}$$

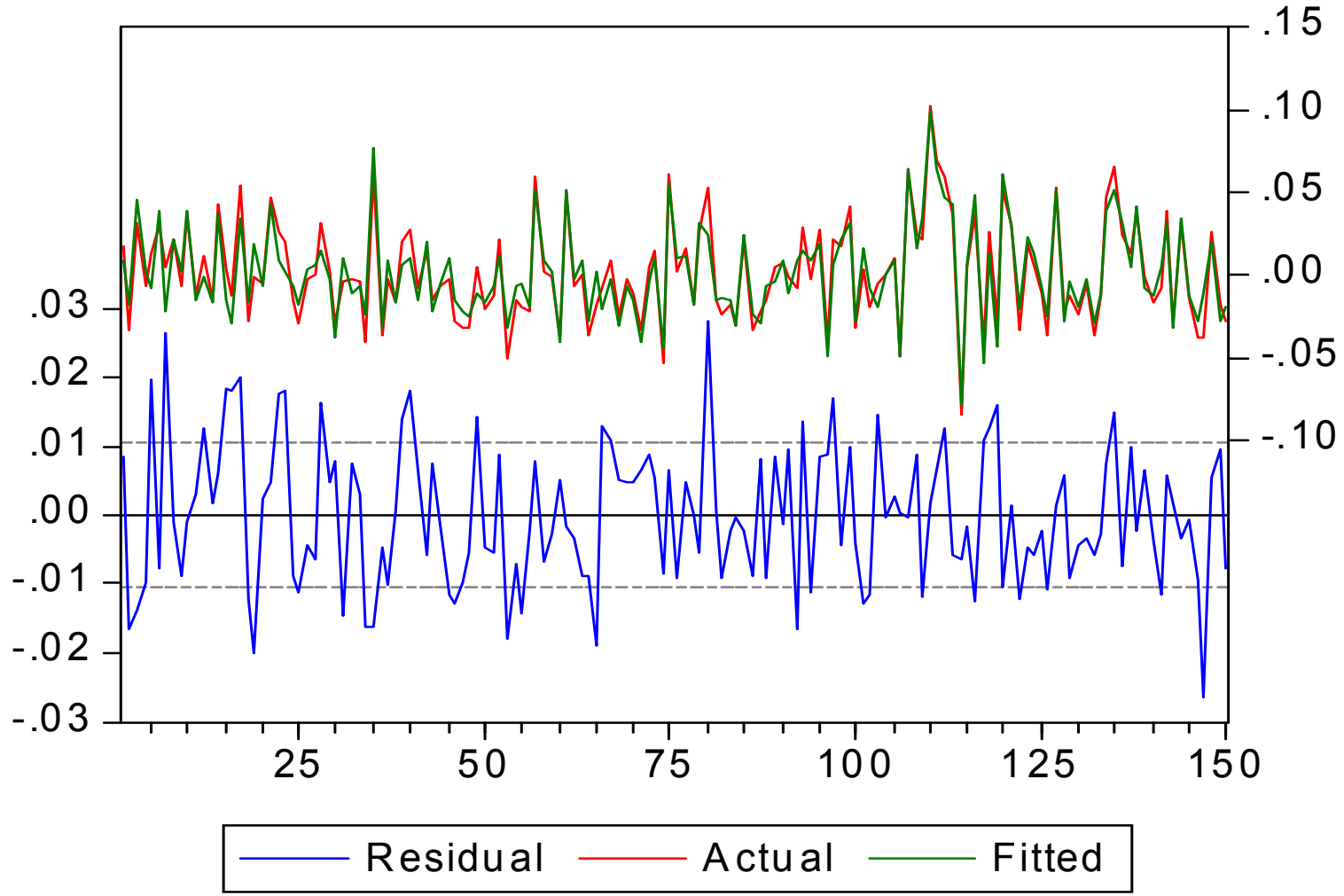
$$C(INDEX/WTI)_t = \{[(INDEX/WTI)_t - (INDEX/WTI)_{t-1}]/(INDEX/WTI)_{t-1}\}$$

$$C(COP/WTI)_t = b_0 + b_1 * C(INDEX/WTI)_t + \varepsilon_t$$

REGRESSION RESULTS

- b_o = .000457, b_1 = .910049
- adjusted-R^2 = .88
- No autocorrelation, heteroskedasticity, multicollinearity.
- Residuals stationary and normally distributed.

Figure 1: Actual vs. Fitted and Residuals



SUMMARY

- Actual Cost
  - Small in relation to parent corporation
  - About 1/4 – 1/3 of region (country's) profits
- Market Model
  - No distorting spike
  - Not 'fine' enough
  - Day-to-day share price changes > Actual per share cost

ConocoPhillips -Venezuela Political Uncertainty Matrix

Potential Outcomes

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Micro *(selected industries or firms)*

GOAL: A Thought Process

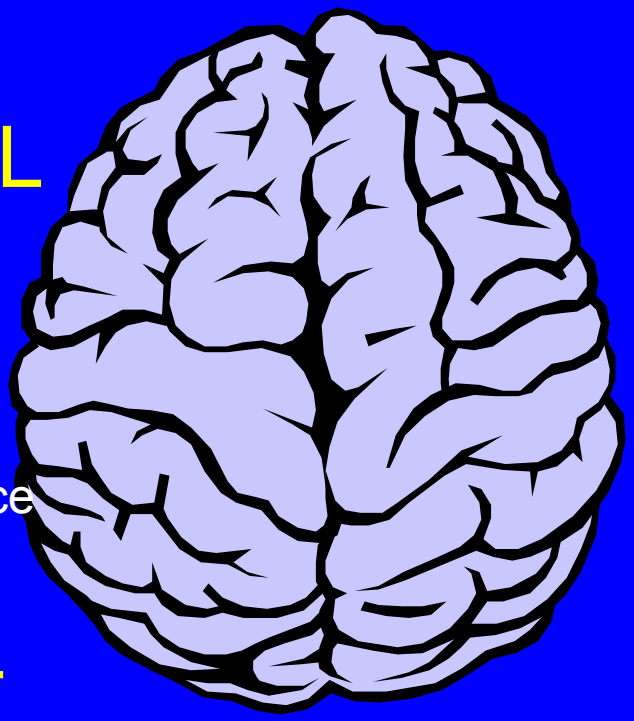
Left Brain

- TECHNICAL
- POLITICAL
- FINANCIAL
  - Internally financed
    - Corporate funds
    - Funds generated in-country
  - Externally financed

Development Scenarios

Production Interruption

Insurance



Right Brain

Micro-credit

Schools

Jobs

Health & Medical