Team Record Chart

Xs & Ys: A Cartel Simulation

Payoffs Per Round

4 Xs	each X loses 1 Buck
3 Xs & 1 Y	each X wins 1 Buck, Y loses 3 Bucks
2 Xs & 2 Ys	each X wins 2 Bucks, each Y loses 2 Bucks
1 X & 3 Ys	X wins 3 Bucks, each Y loses 1 Buck
4 Ys	each Y wins 1 Buck

Round #	Team Decision	Outcome	Team Total $
1		X Y	
2		X Y	
3*		X Y	
4		X Y	
5		X Y	
6*		X Y	
7		X Y	
8		X Y	
9*		X Y	
10		X Y	

Directions:

- The goal of the game is to win the most money. Each team starts with 10 Bucks.
- No Cheating.
- All you have to do is reach consensus as a team to play either an X or a Y in each round.
- There can be **<u>NO</u>** communication between teams unless specified by Mr. Caggia. Don't cheat.
- Each team deliberation will last 2 minutes. Each team must then place one of their cards in front of them on the desk FACE DOWN. Mr. Caggia will then direct all teams to turn up your cards together.
- Students must keep track of their results on the Team Record Chart.
- The team with the most money at the end of Round 10 wins, but only if you have earned a profit.
- NO CHEATING!!!! Have fun, but the game will not work if you cheat!

Cartel Simulation

Things to think about:

- In round 3, teams probably *initially* agreed to cooperate. But when did your team realize that cheating may work to your advantage? Did cooperation change in rounds 6 and 9 as teams got greedy? What happens when one team "cheats"? Did your team then trust anyone?

- Translate the Xs and Ys into a market simulation. The obvious analogy is that the teams represent the OPEC countries, and that X represents a decision to pump (that is, to increase the amount of oil on the market) and Y represents the decision to not pump (to restrict the amount of oil on the market).

    1. Assess the impact of an X decision on consumers, on producers, and on the total price and quantity of oil.
    2. Make a similar assessment for the Y decision.
    3. Consider the situation of the "cheater". How did you feel about the cheater? Was he morally virtuous? etc
    4. Now translate the "cheating" situation into the market. What was the impact on the market, on consumers, if someone "cheated"? What was the impact on the market, on consumers, if nobody cheated?
    5. Who caused the most hardship for the most people?
    6. Who's the good guy and who's the bad guy?
    7. Consider the fate of cartels in the free market. What is their likely fate? Why?

What is OPEC?? copied from www.opec.org

OPEC is an international Organization of eleven developing countries which are heavily reliant on oil revenues as their main source of income. Membership is open to any country which is a substantial net exporter of oil and which shares the ideals of the Organization. The current Members are Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates and Venezuela.

Since oil revenues are so vital for the economic development of these nations, they aim to bring stability and harmony to the oil market by adjusting their oil output to help ensure a balance between supply and demand. Twice a year, or more frequently if required, the Oil and Energy Ministers of the OPEC Members meet to decide on the Organization's output level, and consider whether any action to adjust output is necessary in the light of recent and anticipated oil market developments.

OPEC's eleven Members collectively supply about 40 per cent of the world's oil output, and possess more than three-quarters of the world's total proven crude oil reserves.

Production in t/b (effective 1 April 2004)			
Member Countries	**Old production**	**New Production**	**Decrease**
Algeria	782	**750**	32
Indonesia	1,270	**1,218**	52
Iran	3,597	**3,450**	147
Kuwait	1,966	**1,886**	80
Libya	1,312	**1,258**	54
Nigeria	2,018	**1,936**	82
Qatar	635	**609**	26
S. Arabia	7,963	**7,638**	325
UAE	2,138	**2,051**	87
Venezuela	2,819	**2,704**	115
Total	**24,500**	**23,500**	**1,000**

In view of the projected significant supply surplus in the seasonally low demand second quarter of 2004, the Conference decided that remedial supply responses are needed to maintain market balance and avert downward pressure on oil prices. To this end, the Conference decided to maintain the OPEC production ceiling (excluding Iraq) at 24.5 mb/d (mb/d = million barrels per day) until the end of March 2004, with a strong commitment from Member Countries to comply with the agreed production levels.

Furthermore, whilst reaffirming its pledge to guarantee adequate supplies to consumers, as consistently shown in the past, the Conference decided to reduce the 24.5 mb/d ceiling by 1 mb/d, to 23.5 mb/d, effective 1 April 2004, distributed pro rata.