Test Yourself: Oligopoly

I have to keep testing myself.
Eartha Kitt

What is imperfect competition?

Imperfect competition is a market structure between the extremes of perfect competition and monopoly.

What are the characteristics of an oligopolistic market?

The general characteristics of an oligopoly market are:

- few sellers
- product can be differentiated or standardized
- high entry barriers
- substantial market power (price control)

How few are a *few* sellers?

A *few* sellers refers to a situation in which the firms are so large relative to the total market that they can affect the market price.

What is a significant barrier to entry?

Significant barriers to entry might include economies of scale, patents, government regulation, lack of access to distribution outlets, etc.

Barrier to Entry	Notes
Investment cost	High cost will deter entry High capital requirements might mean that only large businesses can compete
Economies of scale available to existing firms	Lower unit costs make it difficult for smaller newcomers to break into the market and compete effectively
Regulatory and legal restrictions	Each restriction can act as a barrier to entry E.g. patents provide the patent holder with protection, at least in the short run
Product differentiation (including branding)	Existing products with strong USPs and/or brand increase customer loyalty and make it difficult for newcomers to gain market share
Access to suppliers and distribution channels	A lack of access will make it difficult for newcomers to enter the market
Retaliation by established products	E.g. the threat of price war will act to discourage new entrants But note that competition law outlaws actions like predatory pricing

What is the distinguishing feature of an oligopoly market?

Mutual Interdependence is a distinguishing feature of oligopoly markets.

a. Market power is substantial but interdependent.
b. Firms interact among themselves.
c. When one firm changes a price, it must take into account how other firms in the industry will respond.

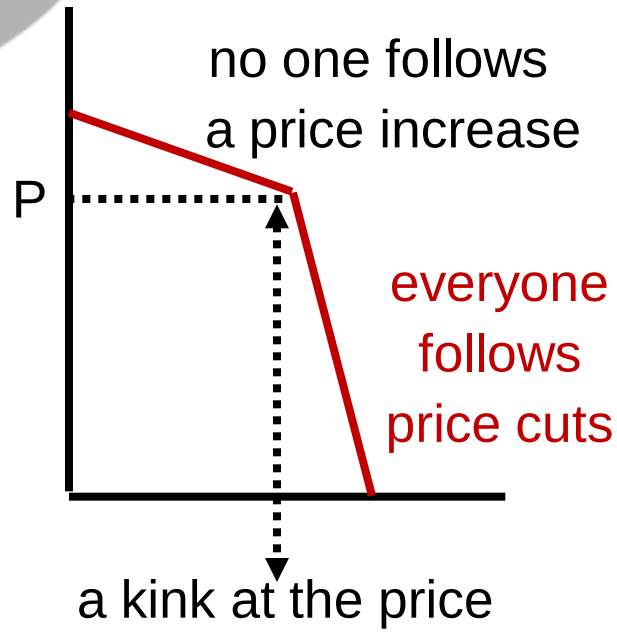
What is mutual interdependence?

Mutual interdependence is a situation in which an action by one firm may cause a reaction from other firms. Therefore firms must display strategic behavior.

It's not enough for a firm to say "what shall we do?" A firm must also take into account what its rivals will do in reaction.

What does mutual interdependence do to the demand curve?

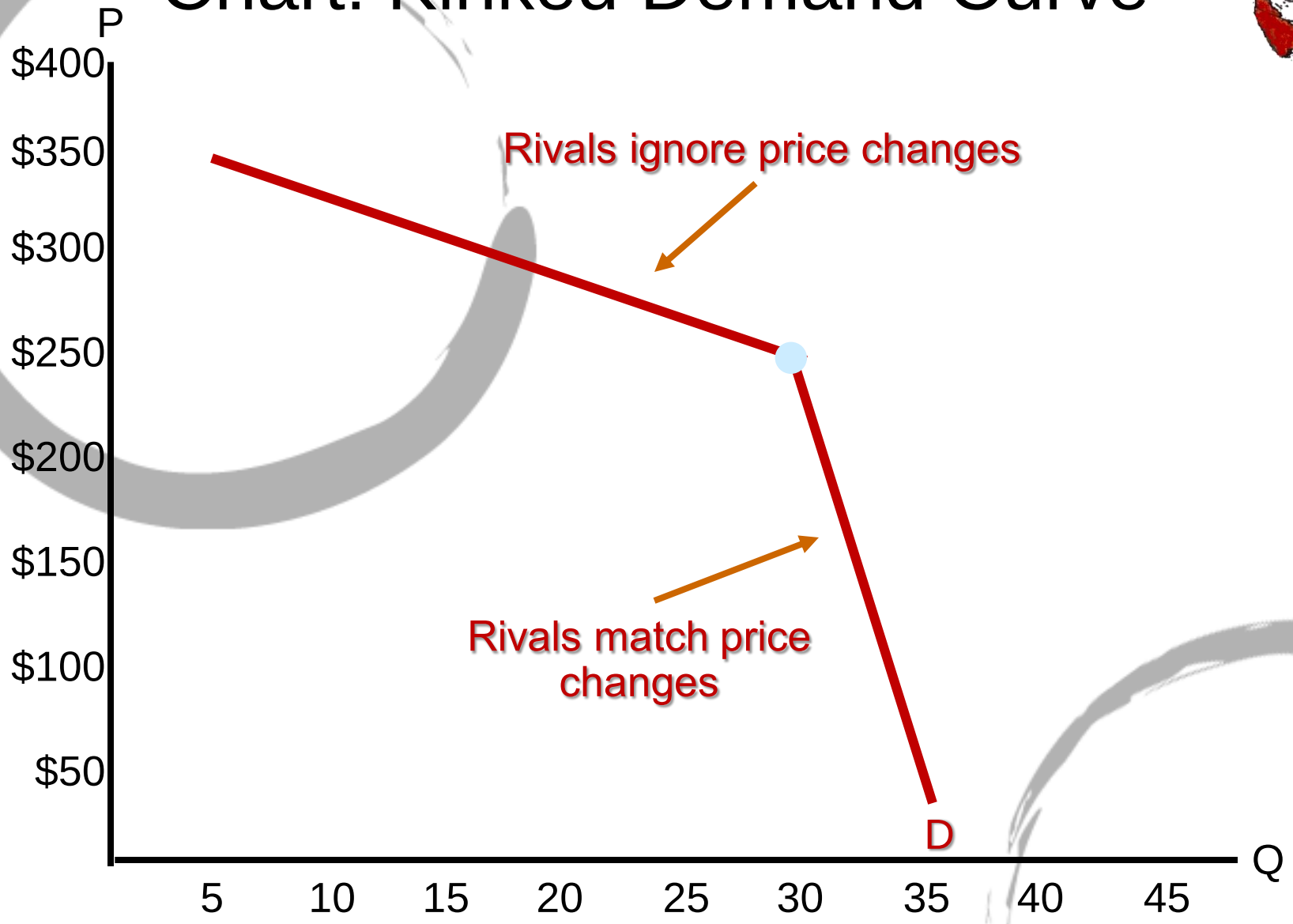
Mutual interdependence can cause the demand curve to be *kinked* based on the assumption that rivals will match price cuts but not price hikes.



What does a kinked demand curve show?

A *kinked demand curve* shows that rivals will match a firm's price decrease, but ignore a price increase.

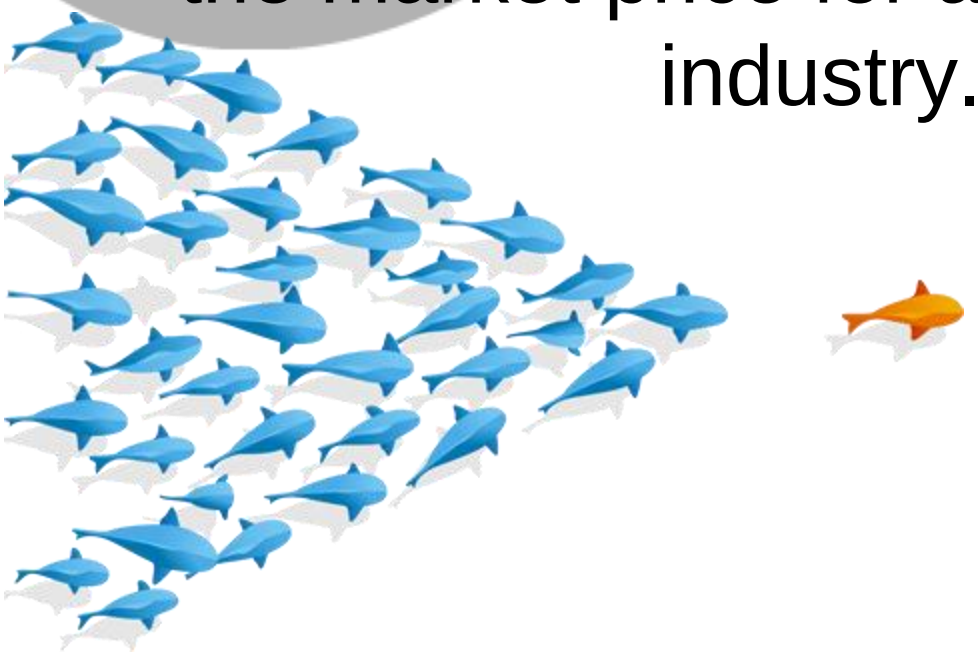
Chart: Kinked Demand Curve



How do oligopolists determine price?

They play the game *follow the leader*, or price leadership.

Price leadership is an oligopolistic pricing pattern that allows one firm to establish the market price for all firms in the industry.

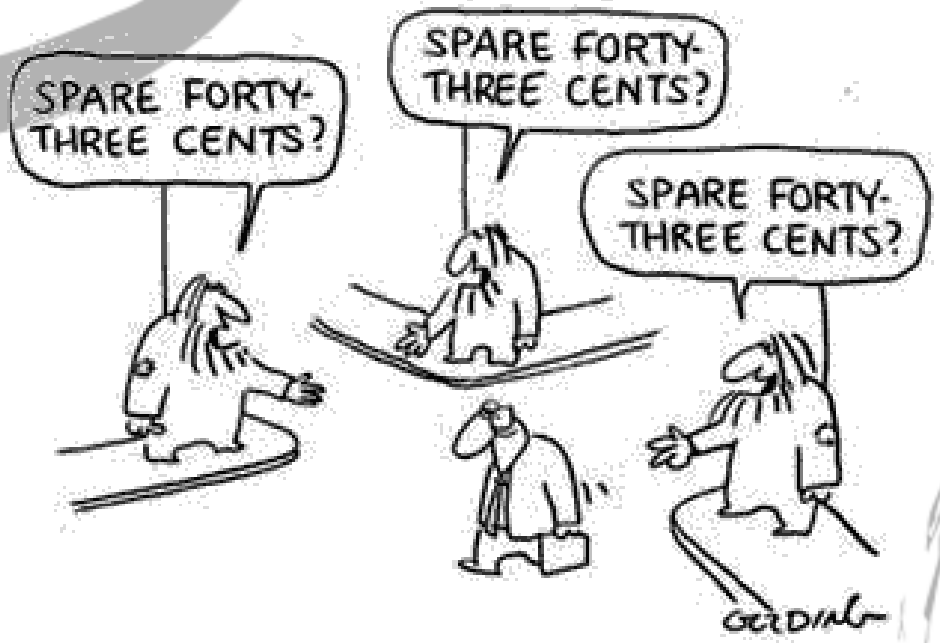


What is price leadership?

Price leadership is a pricing strategy in which a dominant firm sets the price for an industry and the other firms follow suit.

What is a cartel?

A *cartel* is a group of firms formally agreeing to control the price and output of a product.



What are examples of cartels?

Some current cartels include:

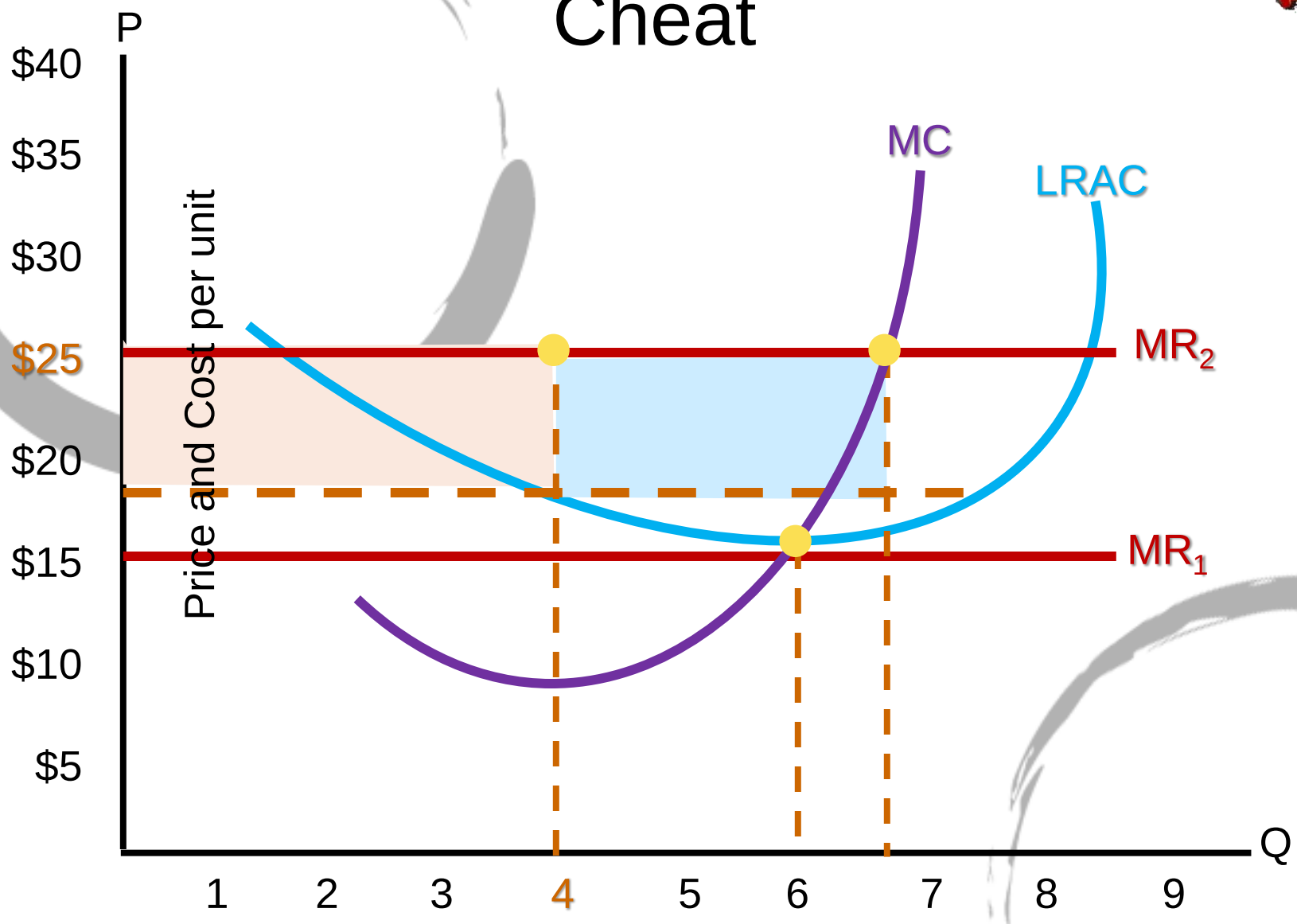
- International Telephone Cartel (CCITT)
- International Airline Cartel (IATA)
- ocean shipping
- De Beers -- diamonds
- OPEC -- oil cartel, with Saudi Arabia making up 33% of the group's exports
- Siemens and Thompson - CSF -- airport radar systems
- major league baseball

What is the major weakness of a cartel?

The major weakness of a cartel is *cheating by member firms*.

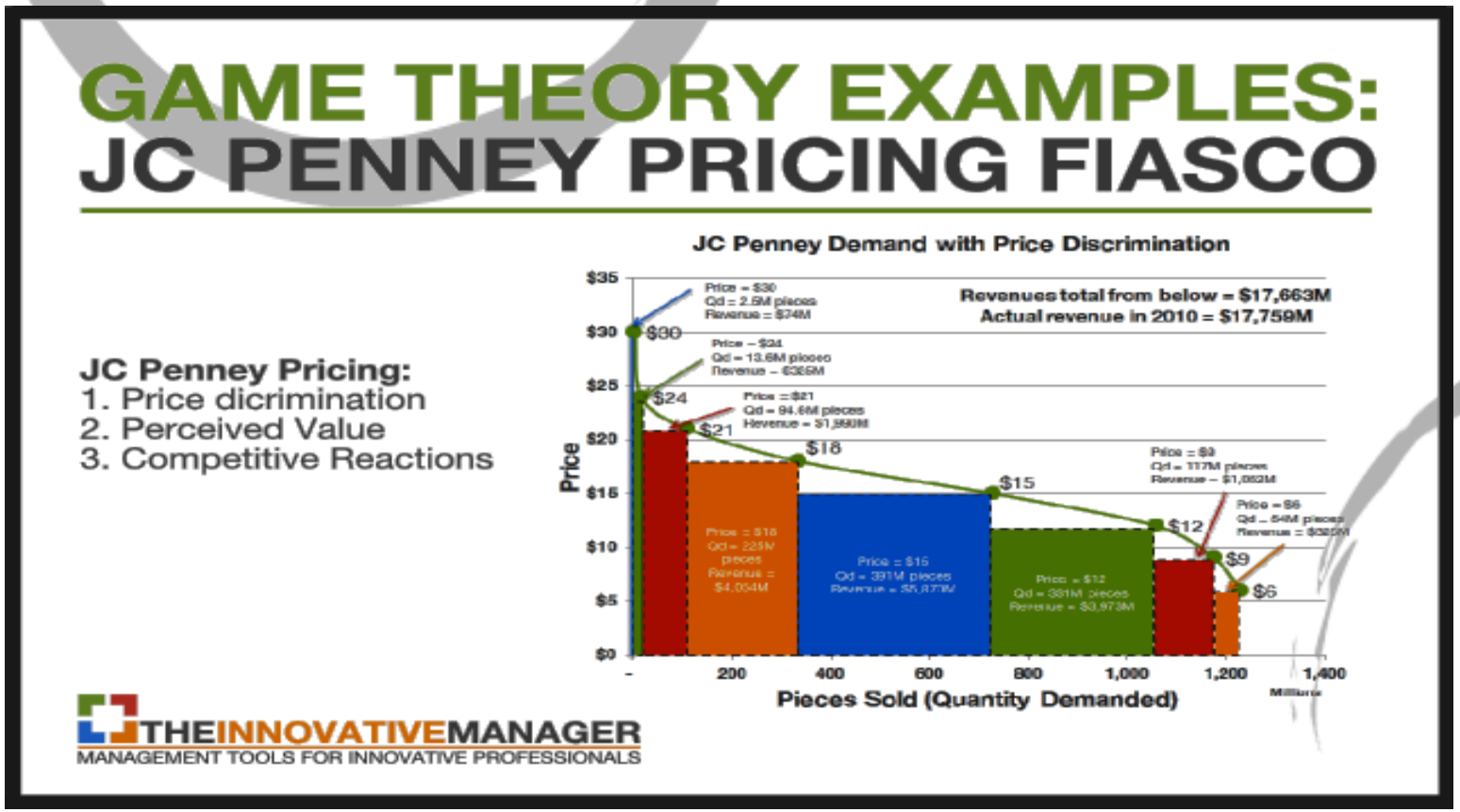
There are a number of ways cartel members can cheat and the temptation to do so is great. It’s not always easy to catch or stop cheaters and their behavior undermines the cartel’s agreements.

Chart: Why Cartel Members May Cheat



What is game theory?

Game theory is the study of decision making in situations where strategic interaction (moves and countermoves) between rivals occurs. It's a model of the strategic moves and countermoves of those rivals.



What are two pricing methods in game theory?

Two of the pricing methods in game theory are:

Tit-for-Tat

and

Price Leadership

What is tit-for-tat?

Tit-for-tat Strategy

- The mere possibility that you play tit-for-tat is sufficient for competitor to cooperate if the time horizon is long enough.
- Most managers don't know how long they will be competing with their rivals, serving to make cooperation a good strategy, except near the end *(called end game problem)*.
- Thus in a repeated game, prisoner's dilemma can have a cooperative outcome. Industries where only a few firms compete under stable demand and cost conditions may cooperate even though no contractual arrangements are made.
- Failure to cooperate is the result of rapidly shifting demand or cost conditions, e.g. airlines.

Using a *tit-for-tat strategy*, a firm will do whatever the rival firm did the last time.

Tit-for-tat strategies are based on the concepts of retaliation and altruism. For example, if provoked, a firm will subsequently respond with retaliation, but if not provoked, the firm will subsequently cooperate.

Tit-for-tat pricing is an extreme form of price following in which a firm matches its rival's price actions at every stage. If the rival lowers its price, the firm does as well. If the rival raises its price, so does the firm. Every price move the firm makes is in reaction to the rival's price actions.

This removes price as a strategic dimension of competition. Done repeatedly, a rival realizes that any price move will simply be matched so that lowering prices only hurts themselves.

What is price leadership?

Price leadership is an oligopolistic pricing pattern that allows one firm to establish the market price for all firms in the industry.

For example, in the airline industry a dominant carrier might announce a price increase on holiday tickets months in advance, giving other carriers time to also announce price increases.

What is formal collusion?

Formal collusion is a situation in which member firms formally meet to set price or output levels and act like a monopoly to maximize joint profits.

What is informal collusion?

Through *informal collusion*, firms find alternative ways to agree on a price without any tacit communication.

Is formal collusion legal?

Formal collusion is not legal in the US. It is against the law for firms to come together and agree among them what price to charge or what level of output to maintain.

What conclusion can be drawn from collusion?

In an oligopoly market, as long as the benefits exceed the costs, cheating can threaten firms' formal or informal agreements to maximize joint profits.

What conclusion can be drawn from oligopolies?

In an oligopoly market

- the price charged for the product will be higher than under perfect competition.
- more money is spent on forms of non-price competition.

How did you do?! If you didn't do as well as you'd like, review the margin notes and presentations and test yourself again.

THE END