Barick Chung

Employment:
2022-present Associate Professor (Teaching), Economics, CUSZSZ.
2014-2022 Senior Lecturer, School of Management and Economics, CUSZSZ.
2012-2014 Lecturer, School of Economics and Finance, University of Hong Kong.
2006-2012 Instructor, Department of Economics, CUHKHK.

Education:
2003-2007 Ph.D. (Business) Indiana University – Bloomington.
1987-1991 BS.Sc. (Economics) Chinese University of Hong Kong – Hong Kong.

Research paper:
Chung, Barick, "Two Level Price Discrimination and Vertical Relationship" (March 05, 2012). Available at SSRN: http://ssrn.com/abstract=1997070.

Homepage: Deleted
Facebook: Deleted
Wechat ID: barickchung

ECO 2011 (Sections L07-10)
Basic Microeconomics

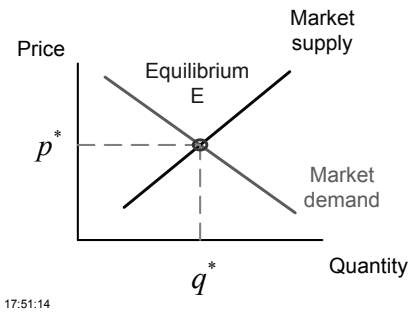
Barick Chung
Department of Economics
235-18822
Zhiren Building, 409
barickchung@cuhk.edu.cn

Player B

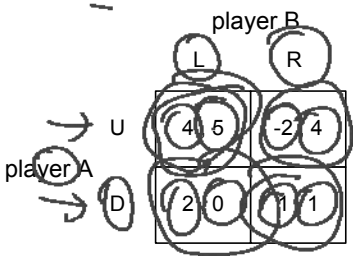
Player A	L	C	R
T	2, 0	1, 1	1, 2
M	3, 4	5, 2	0, 5
B	1, 1	0, 2	3, 3

		Player B		
		L	M	R
Player A	U	3, 10	8, 99	-1, 100
	C	5, 5	2, 2	-1, 20
	D	7, 3	3, 1	0, 2

Kreps, David M., 1990, *Game Theory and Economic Modelling*, p.28: “A Nash equilibrium is an array of strategies, one for each player, such that **no player has an incentive** (in terms of improving his own payoff) **to deviate** from his part of the strategy array.”



{U, L} is a Nash equilibrium

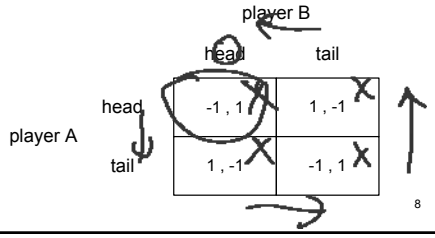


Matching pennies

Game Theory .net

http://www.gametheory.net/dictionary/Games/MatchingPennies.html
accessed 20110921

to determine who is required to do the nightly chores, two children first select who will be represented by "same" and who will be represented by "different." Then, each child conceals in her palm a penny either with its face up or face down. Both coins are revealed simultaneously. If they match (both are heads or both are tails), the child "same" wins. If they are different (one heads and one tails), "different" wins. The game is equivalent to "odds or evens" and quite similar to a three strategy version - rock, paper, scissors.

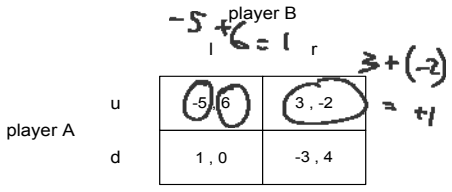


Constant sum game

Game Theory .net

http://www.gametheory.net/dictionary/ConstantSum.html
accessed 20110921

In a constant sum game, the sum of all players' payoffs is the same for any outcome. Hence, a gain for one participant is always at the expense of another, such as in most sporting events. Given the conflicting interests, the equilibrium of such games is often in mixed strategies. Since payoffs can always be normalized, constant sum games may be represented as (and are equivalent to) zero sum game in which the sum of all players' payoffs is always zero.



Coordination game

Game Theory .net

http://www.gametheory.net/dictionary/Games/PureCoordination.html
accessed 20110921

two firms must simultaneously elect a technology to use for their compatible products. If the firms adopt different standards, few sales result. A common standard leads to higher sales. One technology is significantly preferred by consumers over the other. Thus, if the companies can standardize on the preferred technology, each obtains maximal profits. This is also called a Pareto coordination game.

		player B: drive on the left	player B: drive on the right
player A	drive on the left	10 , 10	0 , 0
	drive on the right	0 , 0	10 , 10

Battle of the sexes

Game Theory .net

http://www.gametheory.net/dictionary/Games/BattleoftheSexes.html
accessed 20110921

A husband and wife have agreed to attend a rare entertainment event in the evening. Unfortunately, neither remembers which of the two special events in town they had agreed on - the boxing match or the opera. The husband prefers the boxing match while the wife prefers the opera; yet, both prefer being together to being apart. They must decide simultaneously and without communication which event to attend.

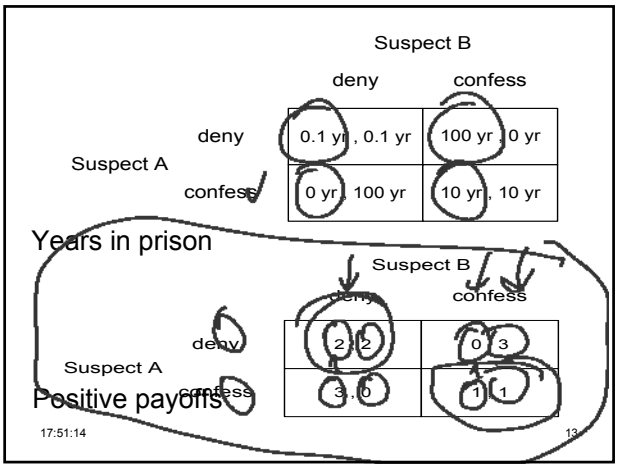
		wife: steak	wife: sushi
husband	steak	3 , 1	0 , 0
	sushi	0 , 0	1 , 3

The prisoner's dilemma

Game Theory .net

http://www.gametheory.net/dictionary/Games/PrisonersDilemma.html
accessed 20110921

Two conspirators are arrested and interrogated separately. If one implicates the other, he may go free while the other receives a life sentence. Yet, if both confess, bad fate befalls them. If both stay silent, insufficient evidence will lead them being charged with and convicted of a lesser crime.


Suspect B
deny
confess
Suspect A
deny
confess
0.1 yr , 0.1 yr
100 yr , 0 yr
0 yr , 100 yr
10 yr , 10 yr
Years in prison
Suspect B
deny
confess
deny
Suspect A
confess
2 , 2
0 , 3
3 , 0
1 , 1
Positive payoffs
17:51:14
13

The end