BEATING THE BOOKIES

Can you make money from gambling?

INTRODUCTION

- * I'm currently working in the gambling industry
- Which is great when you're introducing yourself to religious people



CAN YOU WIN?

- ₩ William Hill made £81 million in 2009
- In the same year,
 Ladbrokes made £74
 million
- Harrah's Entertainment had a revenue of \$10 billion in 2007



SPORTS BETTING

- You bet on an event to happen, or "back it"
- The price can be expressed as a fraction,
 5/1 means you get £6 back from a £1 bet
- Or decimally as a price of 6.00

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TOTAL BOOK

- Bookmakers work off a profit margin
- The size of this profit margin is known as the "total book"
- Punters would like a 100% book, but anything above this is bookmaker's profit

Leeds v Chelsea

Leeds	2.00	
	1/2.00	50%
Draw	3.25	
	1/3.25	31%
Chelsea	4.00	
	1/4.00	25%
Total boo	k	106%

PRICING THE MARKET

- So markets are priced to a percentage markup
- And the beauty of this is that if the bookmaker can balance their book, they make money whatever
- So they price markets to create this effect

Leeds v Chelsea

Leeds	1.50	
	1/1.50	67%
Draw	4.50	
	1/4.50	22%
Chelsea	5.88	
	1/5.88	17%
Total boo	k	106%

PRICING THE MARKET

- Only a very few
 bookmakers price up
 the markets
- Everyone else copies off them
- And there really isn't much thought put into it

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B	= C	D	E	F	G		
Frequency							
1	2	3	4	5	6		
\$10.00	\$11.00	\$12.00	\$13.00	\$14.00	\$15.00		
\$16.00	\$17.00	\$18.00	\$19.00	\$20.00	\$21.00		
\$22.00	\$23.00	\$24.00	\$25.00	\$26.00	\$27.00		
\$28.00	\$29.00	\$30.00	\$31.00	\$32.00	\$33.00		
\$34.00	\$35.00	\$36.00	\$37.00	\$38.00	\$39.00		
\$40.00	\$41.00	\$42.00	\$43.00	\$44.00	\$45.00		

BETTER MODELLING

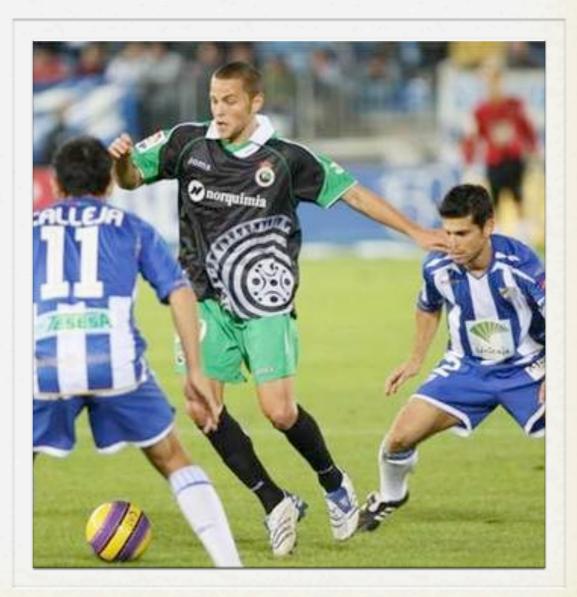
- One way to beat the bookies would be to build better models
- But you would need to have really good models
- And plenty of money to wager



FIX THE GAMES

* As the old saying goes, you don't make money out of thinking you know what is going to happen; you make money out of knowing what is going to happen

And it's still quite common



ARBITRAGE BETTING

If you can get preferential prices at a range of different bookmakers, you can bet on every outcome for a guaranteed return

Leeds v Chelsea

Normally:	2
Stake:	1
Winnings:	£

2.00, 3.50, 3.50 L3.50, L2.00, L2.00 L7.00, L7.00, L7.00

William Hill	1.50, 4.50, <mark>5.88</mark>
Ladbrokes	<u>3.50</u> , 2.00, 3.50
Bedfred	3.50, <mark>3.50</mark> , 2.00

Stake: Winnings: £2.75, £2.75, £2.00 £9.63, £9.63, £11.76

ARB ROBOTS

- Because you don't have time to look for arb bets
- Why not get your robotic slave to do it?



COUNTER TACTICS

- So there are a few ways to make money on sports betting
- Unfortunately you can't get away with it for long...



FOBT MACHINES

- Fixed odds betting terminals
- Run games such as roulette and virtual horse racing
- The life and soul of the bookmaking industry



CASINO GAMING

- The two most popular games are roulette and blackjack
- So I'm just going to focus on these two
- Though you may want to try your hand at Weight of Fruit Cake



SYSTEMS

- There are a lot of betting systems
- And they are basically all nonsense
- Mostly due to the Gambler's Fallacy



DOUBLING UP

- Doubling your stake every time has two affects.
- One it prevents you from winning any real money.
- * Two is increases your chance of going bust very quickly.

1st	£1	50%	1 min
Znd	12	25%	2 mins
3rd	£4	12.5%	4 mins
4th	18	6.25%	8 mins
5th	£16	3.13%	1/4 hour
6th	£32	1.57%	1/2 hour
7th	£64	0.79%	1 hour
8th	£128	0.40%	2 hours

BEATING ROULETTE

- Roulette is a no skill at all game, it's just random
- But the wheels aren't always perfectly random



BEATING ROULETTE

- The most famous case was Gonzalo Garcia-Pelayo
- He took the Casino de Madrid for over €1,000,000
- Subsequent legal action failed



BLACKJACK

- Offers the best odds of any casino game - when played well
- Indeed, if the house stands on "soft 17s" the house edge is only 0.2%



BASIC STRATEGY

Disuse hand	Dealer's face-up card									
Player hand	2	3	4	5	6	7	8	9	10	A
н	ard	tota	iis (e	excl	udin	ng p	airs)		
17-20	8	8	8	8	8	S	8	8	8	s
16						н	н	SU	SU	SU
15		8		8	8		н		SU	н
13-14		8	8	8	8	н		н	н	
12	н	н	8				н		н	
11	Dħ	Dħ	Dh	Dh	Dh	Dh	Dh	Dh	Dh	н
10	Dh	Dh	Dh	Dh	Dh	Dh	Dh	Dh	н	н
9	н	Dh	Dh	Dh	Dh	н	н	н	н	н
5-8	н	н	н	н	н	н	н	н	н	н
-			Sof	t tot	als					
	2	3	4	5	6	7	8	9	10	A
A,8 A,9	8	8	8	8	8	8	8	8	8	8
A,7		Ds	Ds	Ds	Ds	8		н	н	н
A,6	н	Dh	Dh	Dh	Dh	н	н	н	н	н
A,4 A,5	н	н	Dh	Dh	Dh	н	н		н	
A,2 A,3	н	н	н	Dh	Dh	н	н		н	
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8,8	SP	SP	SP	SP	SP	SP	SP	SP	SP	SP
7,7	SP	SP	SP	SP	SP	SP	H	н	H	н
6,6	SP	SP	SP	SP	SP	H	н	н	н	н
5,5	Dh	Dh	Dh	Dh	Dh	Dh	Dh	Dh	н	н
4,4	н	н	н	SP	SP	H	н	н	н	н
2,2 3,3	SP	sp	SP	SP	SP	SP	н	н	н	н

CARD COUNTING

Card counting is nothing new

In 1957 Roger Waldwin and Wilbert Cantey published Playing Blackjack to Win



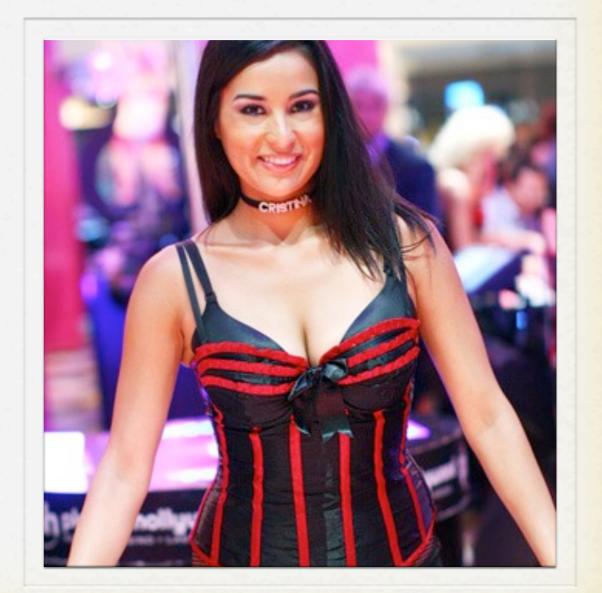
CARD COUNTING

- Card counting isn't illegal, as much as the casinos would love you to believe it is
- Though having computer devices to count cards is illegal

-1	10, jack, queen, king
0	8, 9
+1	2, 3, 4, 5, 6, 7

COUNTER TACTICS

- While it may not be illegal, it's very difficult to do
- And of course, the casinos will try their best to stop you



TEAM PLAY

Popularised in the 1970s

* "Spotters" would scout out the tables and the summon over "The Big Player"

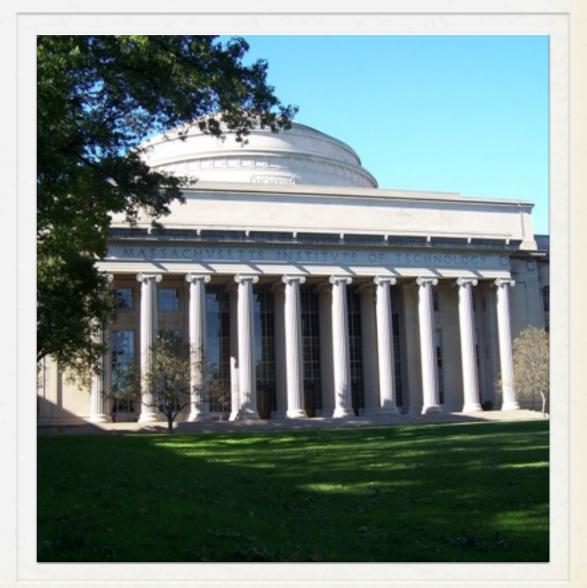
The most famous team was lead by Tommy Hyland



THE MIT YEARS

In 1979 MIT ran a course on "How to Gamble if You Must"

The following year the first "MIT Bank" was formed



THE MIT YEARS

- The operation
 expanded outwards
 during the 1990's
- At it's hight, up to 80
 students were working
 the casino floor



BEATING THE CASINO

- Throughout history people have beaten the house
- But it's rare because if you win too much, they just blacklist you



CONCLUSION

- It is possible to make a little bit of money but not for long
- Which is nonsense really
- But still, you could always get lucky...

