Increasing Handle or Increasing Hold?

Churn = 1/takeout

		Takeout		
		10%	20%	30%
Percentiles	5%	468	296	220
	25%	700	396	280
	Median	932	488	328
	Mean	1004.5	502.2	333.8
	75%	1240	596	388
	95%	1894	804	488
	Std Dev	449.2	156.1	83.0
	Skew	1.32	0.89	0.74
	Hold	100.5	100.4	100.1
	Bankroll	$100		
	Betsize	$2		
	Odds	Even		
	Prob	45.0%	40.0%	35.0%

		Odds					
		Even	2 to 1	4 to 1	8 to 1	20 to 1	50 to 1
Percentiles	5%	296	250	190	136	100	100
	25%	396	358	310	244	142	100
	Median	488	466	440	388	268	202
	Mean	501.6	501.2	500.9	498.1	504.5	498.2
	75%	596	616	630	640	562	406
	95%	804	922	1060	1288	1696	2038
	Std Dev	156.1	214.3	292.0	409.3	660.8	1015.9
	Skew	0.89	1.32	1.92	2.66	4.39	6.17
	Hold	100.3	100.2	100.2	99.6	100.9	99.6
	Bankroll	$100					
	Betsize	$2					
	Prob	40.0%	26.7%	16.0%	8.9%	3.8%	1.6%

Actual churn is less than 1/takeout

Bettors at the tails of the distribution drop

- Big losers get discouraged
- Big winners don’t recycle huge scores

Higher takeout → Lower Realized Churn

More extreme tails of distribution → Lower Realized Churn

Takeout

Higher prices reduce handle

The demand curve for racetrack wagers:

- Inelastic in the Short Run (less sensitive to price changes)
- Elastic in the Long Run (more sensitive to prices changes)

Increasing prices increase hold in the short run and reduce hold in the long run

Why are takeout rates rising?

		Takeout B		
		20%	25%	30%
Takeout A	20%	50,50	45,55	40,60
	25%	55,45	50,50	45,55
	30%	60,40	55,45	50,50

30%, 30% is a dominant strategy equilibrium

A's payouts are 50, 45, 40 with a 20% takeout and that is dominated by 60, 55, 50 for 30% takeout. The same is true for B.

Short Run result is higher takeouts, lower handle, higher hold

Long Run consequences are lower handle/hold

Racing no longer has a monopoly in regional gambling and has limited market power.

Potential new customers are priced out

What to do?

Experiment with takeout

Eliminate Breakage

Encourage Innovation

Competition

Market segmentation

Data

Transparency