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1 Introduction

This report analyzes how ticket prices change as the game date approaches, focusing on the relationship between the number of days between the transaction date and the game date and ticket prices. We also explore how this dynamic has shifted across different years. Overall, the mean price seemed to fluctuate a lot when it was further from the game. The relationship was not very clear from the figure though we can see that price tends to level off closer to the game, likely because the seller wants to sell all tickets.

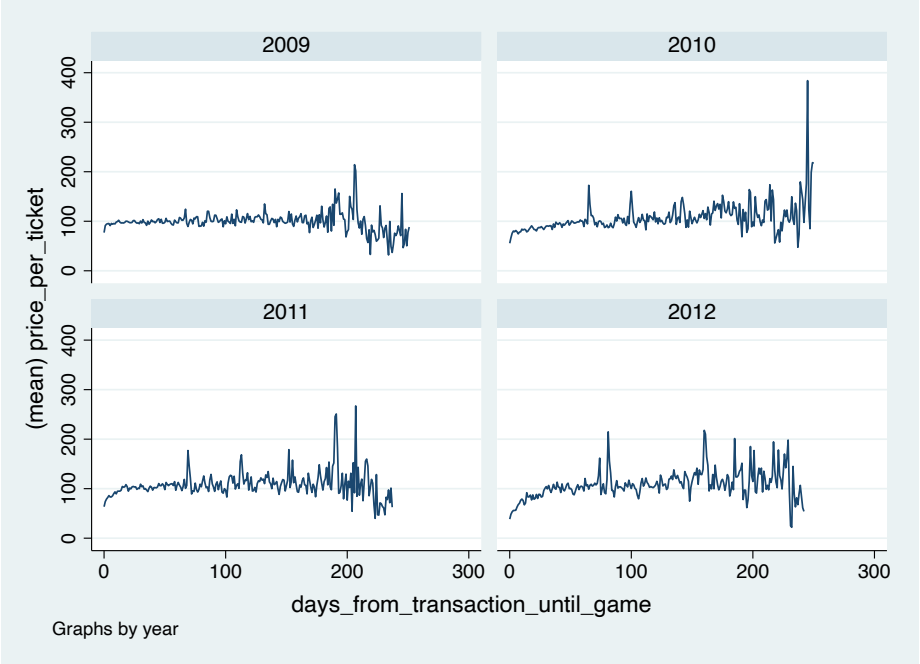

Figure 1: Ticket Price and Days til Game overtime

2 Findings

From the regression results, the overall relationship between days from transaction until game and ticket prices is positive. The coefficient for days from transaction until game is statistically significant and indicates that as the number of days between the transaction and game date decreases, ticket prices tend to increase. This trend holds across multiple model specifications, including controlling for the year, weekend games, and day games.

2.1 Base Model: Days and Year Interaction

- The base regression model reveals that for each additional day closer to the game, the price per ticket increases by approximately \$0.29 (coefficient = 0.2938, $p < 0.001$). This suggests that ticket prices increase as the game date approaches, potentially reflecting heightened demand or reduced supply.
- There is also significant variation across years. For example, in 2010, ticket prices were \$10.69 lower than in the reference year (likely 2009). However, by 2012, ticket prices were \$15.14 lower, suggesting an overall decline in ticket prices over time.

2.2 Interaction Between Days and Year

- The interaction model reveals that the effect of days from transaction until game differs across years. For instance, in 2012, the coefficient for the interaction between days from transaction until game and year is 0.4016, which is higher than the coefficients for 2010 (0.2113) and 2011 (0.2097). This suggests that the rate at which ticket prices increase as the game date approaches was more pronounced in 2012 compared to earlier years.
- Thus, while ticket prices generally increase as the game date nears, the magnitude of this effect has intensified over time.

2.3 Impact of Other Factors (Weekend and Day Games)

- Weekend games and day games also significantly impact ticket prices. Weekend games command an additional premium of about \$24.66 per ticket, while day games add around \$10.78.
- Controlling for these factors, the positive relationship between days from transaction until game and ticket prices remains significant, indicating that the upward pressure on prices as game dates approach persists even when accounting for these other variables.

2.4 Changes Over Time

The results indicate that the dynamic pattern of ticket price increases as the game date approaches has evolved over the years. In particular:

- The effect of proximity to the game date on prices became more pronounced in later years, especially in 2012. This may reflect changing market conditions or consumer behaviors over time, such as increased use of dynamic pricing or changes in fan demand.
- Ticket prices in 2012 were generally lower than in earlier years, but the rate at which prices increased as the game date approached was much steeper in 2012 compared to 2010 and 2011
- The effect of proximity to the game date on prices became more pronounced in later years, especially in 2012. This may reflect changing market conditions or consumer behaviors over time, such as increased use of dynamic pricing or changes in fan demand.
- Ticket prices in 2012 were generally lower than in earlier years, but the rate at which prices increased as the game date approached was much steeper in 2012 compared to 2010 and 2011.

3 Conclusion

In summary, ticket prices consistently increase as the game date approaches, with this effect becoming stronger over the years. Weekend and day games also play a significant role in driving ticket prices higher. However, the overall decline in base ticket prices across years suggests that while demand intensifies closer to the game, external factors may be pushing base prices down. These findings are essential for understanding consumer behavior in the ticket market and may inform pricing strategies for future games.

4 APPENDIX

	(1) price_per_ticket	(2) price_per_ticket
days_from_transaction_until_game	0.294***	0.095***
	(0.003)	(0.006)
year=2009	0.000	0.000
	(.)	(.)
year=2010	-10.699***	-18.259***
	(0.343)	(0.443)
year=2011	-2.843***	-10.305***
	(0.325)	(0.415)
year=2012	-15.143***	-30.148***
	(0.385)	(0.506)
year=2009 × days_from_transaction_until_game		0.000
		(.)
year=2010 × days_from_transaction_until_game		0.211***
		(0.008)
year=2011 × days_from_transaction_until_game		0.210***
		(0.008)
year=2012 × days_from_transaction_until_game		0.402***
		(0.009)
Constant	86.117***	93.270***
	(0.270)	(0.328)
Observations	453171	453171

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

	(1) price_per_ticket	(2) price_per_ticket
days_from_transaction_until_game	0.268***	0.077***
	(0.003)	(0.006)
weekend_game	24.663***	24.649***
	(0.240)	(0.239)
year=2009	0.000	0.000
	(.)	(.)
year=2010	-11.154***	-17.856***
	(0.339)	(0.437)
year=2011	-2.106***	-9.497***
	(0.321)	(0.410)
year=2012	-14.201***	-29.117***
	(0.381)	(0.500)
year=2009 × days_from_transaction_until_game		0.000
		(.)
year=2010 × days_from_transaction_until_game		0.186***
		(0.008)
year=2011 × days_from_transaction_until_game		0.209***
		(0.008)
year=2012 × days_from_transaction_until_game		0.399***
		(0.009)
Constant	73.348***	80.244***
	(0.294)	(0.347)
Observations	452936	452936

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

	(1) price_per_ticket	(2) price_per_ticket
days_from_transaction_until_game	0.268***	0.074***
	(0.003)	(0.006)
weekend_game	22.500***	22.346***
	(0.245)	(0.245)
day_game	10.777***	11.505***
	(0.267)	(0.267)
year=2009	0.000	0.000
	(.)	(.)
year=2010	-11.115***	-17.760***
	(0.338)	(0.437)
year=2011	-2.806***	-10.206***
	(0.321)	(0.410)
year=2012	-16.091***	-31.951***
	(0.383)	(0.503)
year=2009 × days_from_transaction_until_game		0.000
		(.)
year=2010 × days_from_transaction_until_game		0.183***
		(0.008)
year=2011 × days_from_transaction_until_game		0.207***
		(0.008)
year=2012 × days_from_transaction_until_game		0.420***
		(0.009)
Constant	71.794***	78.692***
	(0.296)	(0.349)
Observations	452936	452936

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

	(1) price_per_ticket	(2) price_per_ticket
days_from_transaction_until_game	0.275***	0.078***
	(0.003)	(0.006)
weekend_game	20.504***	20.327***
	(0.231)	(0.230)
day_game	9.686***	10.476***
	(0.251)	(0.251)
sectiontype==IFGS	-29.356***	-29.609***
	(0.326)	(0.325)
sectiontype==LowerBleachers	-63.089***	-63.275***
	(0.300)	(0.299)
sectiontype==RFFieldBox	-27.447***	-27.838***
	(0.397)	(0.396)
sectiontype==RFGS	-65.138***	-65.272***
	(0.352)	(0.350)
year=2009	0.000	0.000
	(.)	(.)
year=2010	-11.169***	-17.999***
	(0.318)	(0.410)
year=2011	-2.996***	-10.156***
	(0.302)	(0.385)
year=2012	-16.753***	-33.426***
	(0.360)	(0.473)
year=2009 × days_from_transaction_until_game		0.000
		(.)
year=2010 × days_from_transaction_until_game		0.189***
		(0.008)
year=2011 × days_from_transaction_until_game		0.198***
		(0.007)
year=2012 × days_from_transaction_until_game		0.441***
		(0.008)
Constant	104.699***	111.835***
	(0.318)	(0.362)
Observations	452936	452936

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$