Supplementary Appendix

Price Points and Price Rigidity

Last revised: November 26, 2010

A. Detailed Results on Price Endings

Similar to the aggregate results reported in the paper, the following figures show that 9¢ and 99¢ are the most popular price-endings for each of the four stores in the Dominick's dataset and most of the individual product categories in both the Dominick's and the Internet dataset.

- Figure R1a. Frequency Distribution of the Last Digit of Regular Prices – for the Dominick's Dataset, by Store
- Figures R1b–R1d. Frequency Distribution of the Last Digit of Regular Prices – for the Dominick's Dataset, by Product Category, Stores #8, #12, #122 and #133
- Figure R2a. Frequency Distribution of the Last Two Digits of Regular Prices – for the Dominick's Dataset, by Store
- Figures R2b–R2d. Frequency Distribution of the Last Two Digits of Regular Prices – for the Dominick's Dataset, by Product Category, Stores #8, #12, #122 and #133
- Figure R3. Frequency Distribution of the Last Digit – for the Internet Dataset, by Product Category
- Figure R4. Frequency Distribution of the Last Two Digits – for the Internet Dataset, by Product Category
- Figure R5. Frequency Distribution of the Last Dollar Digit – for the Internet Dataset, by Product Category
- Figure R6. Frequency Distribution of the Last Two Dollar Digits – for the Internet Dataset, by Product Category

B. Results on Price Endings by Sales Volume

The results in the following table show the popularity of 9-ending prices for both products that had a large sales volume and products that had a small sales volume.

- Table R1. Popularity of 9-Ending Prices - for the Dominick's Dataset, for the Low and High Quartile of Products in Terms of Sales Volume

C. Detailed Results from Markov-Chain Analyses

Similar to the aggregate results reported in the paper, the following tables show that for regular prices in each of the four stores for the Dominick's dataset, as well as for all stores combined and all prices, "9" to "9" was the most popular price change. While "99" to "99" is not the most popular price change for any of the four stores, similar to the aggregate results reported

in the paper, it is the most popular price change when all prices from all stores are analyzed together.

- Tables R2a–R2d. Transition Probabilities Conditional on a Price Change from a 10-State Markov Chain Analysis – for the Dominick's Dataset, by Store, Regular Prices Only, in Cents
- Table R2e. Transition Probabilities Conditional on a Price Change from a 10-State Markov Chain Analysis – for the Dominick's Dataset, in Cents
- Table R2f. Transition Probabilities Conditional on a Price Change from a 10-State Markov Chain Analysis – for the Dominick's Dataset, Stores #8, #12, #122 and #133, Regular Prices Only, in Cents, for the Low Quartile of Products in Terms of the Prevalence of 9-Ending Prices
- Table R2g–R2j. Transition Probabilities Conditional on a Price Change from a 10-State Markov Chain Analysis – for the Dominick's Dataset, by Store, Regular Prices Only, in Cents, for the Low Quartile of Products in Terms of the Prevalence of 9-Ending Prices
- Table R2k. Transition Probabilities Conditional on a Price Change from a 10-State Markov Chain Analysis – for the Internet Dataset, in Cents
- Table R2l. Transition Probabilities Conditional on a Price Change from a 10-State Markov Chain Analysis – for the Internet Dataset, in Dollars
- Table 2m. Transition Probabilities Conditional on a Price Change from a 10-State Markov Chain Analysis – for the Internet Dataset, Low Priced Product Categories, in Cents
- Table R2n. Transition Probabilities Conditional on a Price Change from a 10-State Markov Chain Analysis – for the Internet Dataset, High Priced Product Categories, in Cents
- Table R2o. Transition Probabilities Conditional on a Price Change from a 10-State Markov Chain Analysis – for the Internet Dataset, Low Priced Product Categories, in Dollars
- Table R2p. Transition Probabilities Conditional on a Price Change from a 10-State Markov Chain Analysis – for the Internet Dataset, Low Priced Product Categories, in Dollars
- Table R3a. Top 50 Transition Probabilities Conditional on a Price Change from a 100-State Markov Chain Analysis – for the Dominick's Dataset, by Store, Regular Prices Only, in Cents
- Table R3b. Top 50 Transition Probabilities Conditional on a Price Change from a 100-State Markov Chain Analysis – for the Dominick's Dataset, in Cents
- Table R3c. Top 50 Transition Probabilities Conditional on a Price Change from a 100-State Markov Chain Analysis – for the Dominick's Dataset, Stores #8, #12, #122 and #133, Regular Prices Only, in Cents, for the Low Quartile of Products in Terms of the Prevalence of 9-Ending Prices
- Table R3d. Top 50 Transition Probabilities Conditional on a Price Change from a 100-State Markov Chain Analysis – for the Dominick's Dataset, by Store, Regular Prices Only, in Cents, for the Low Quartile of Products in Terms of the Prevalence of 9-Ending Prices
- Table R3e. Top 50 Transition Probabilities Conditional on a Price Change from a 100-State Markov Chain Analysis – for the Internet Dataset
- Table R3f. Top 50 Transition Probabilities by Price Level Conditional on a Price Change from a 100-State Markov Chain Analysis – for the Internet Dataset

Taking stock of the results from the Markov-chain analyses, in the following figures we show that price changes in multiples of dimes are most common among all price changes in the Dominick's dataset. The following tables report in detail the proportion of 9-ending-preserving price changes, that is, price changes of 10¢, $1, $10, $100, etc. For the Dominick's dataset, in all but one category (Front-End Candies), there were considerably more price changes that were multiples of dimes and dollars for 9-ending prices. For the Internet dataset, in the low-priced product categories (Music CDs, Movie DVDs, Video Games), we found considerably more price changes that were multiples of dimes and dollars for 9-ending prices. For high-priced product categories (DVD Players, PC Monitors, Digital Cameras, Notebook PCs), we found more price changes that were multiples of $10 and $100 for 9-ending prices.

- Figures R7a–R7c. Frequency Distribution of the Price Changes by Category – for the Dominick's
- Table R4. Price Changes in Multiples of Dimes in the Dominick's Dataset: 9¢-Ending vs. Non-9¢-Ending Prices
- Table R5. Price Changes in Multiples of Dollars in the Dominick's Dataset: 99¢-Ending vs. Non-99¢-Ending Prices
- Table R6. Price Changes in Multiples of Dimes in the Internet Dataset: 9¢-Endings vs. Non-9¢-Endings
- Table R7. Price Changes in Multiples of Dollars in the Internet Dataset: 99¢-Endings vs. Non-99¢-Endings
- Table R8. Price Changes in Multiples of $10 in the Internet Dataset: $9-Endings vs. Non-$9-Endings
- Table R9. Price Changes in Multiples of $100 in the Internet Dataset: $9.99-Endings vs. Non-$9.99-Endings
- Table R10. Price Changes in Multiples of $10 in the Internet Dataset: $99-Endings vs. Non-$99-Endings
- Table R11. Price Changes in Multiples of $100 in the Internet Dataset: $99.99-Endings vs. Non-$99.99-Endings

D. Detailed Results on Price Rigidity

- Tables R12a–R12e. Results of the Logit Regression (Equation 1) Estimation with Product Fixed Effects – for the Dominick's Dataset, by Store.

E. Detailed Results on the Size of Price Change

Similar to the aggregate results reported in the paper, the following tables show that the average price change was larger for 9- and 99-ending prices for most of the product categories in each of the four stores in the Dominick's dataset. This is especially true for all stores combined, when we focused on the low quartile of the products in terms of 9-ending popularity, and for 9¢, $9, $9.99 and $99.99-ending prices for each of the product categories when we focuses on the low quartile of the products in terms of 9-ending popularity. It is also true when we included all of our Internet dataset.

- Table R13. Average Price Change for 9¢- and Non-9¢-Ending Prices – for the Dominick's Dataset, Stores #8, #12, #122 and #133, for the Low Quartile of the Products in Terms of 9-Ending Popularity
- Table R14. Average Price Change for 99¢- and Non-99¢-Ending Prices – for the Dominick's Dataset, Stores #8, #12, #122 and 3133, for the Low Quartile of the Products in Terms of 9-Ending Popularity
- Tables R15–R20. Average Price Change for 9- and Non-9-Ending Prices – for the Internet Dataset, for the Low Quartile of the Products In Terms of 9-Ending Popularity by Product Category
- Tables R21–R22. Average Price Change for 9- and Non-9-Ending Prices – for the Dominick's Dataset
- Tables R23–R28. Average Price Change for 9- and Non-9-Ending Prices by Product Category – for the Internet Dataset

F. Sample Price Series for the Internet Dataset

The following figures provide sample price series for ten randomly-selected products, one from each of the ten product categories in our Internet dataset. All data are for 743 days, from March 26, 2005 to April 15, 2005.

- Figure R8a. Price of a Music CD (Product #3, Store #194)
- Figure R8b. Price of a Movie DVD (Product #23, Store #194)
- Figure R8c. Price of a Notebook PC (Product #422, Store #258)
- Figure R8d. Price of a Hard Drive (Product #71, Store #324)
- Figure R8e. Price of a DVD Player (Product #262, Store #230)
- Figure R8f. Price of a Digital Camera (Product #273, Store #108)
- Figure R8g. Price of a PC Monitor (Product #189, Store #17)
- Figure R8h. Price of a PDA (Product #490, Store #207)
- Figure R8i. Price of a Software Product (Product #96, Store #292)
- Figure R8j. Price of a Video Game (Product #205, Store #68)

A. Detailed Results on Price Endings

Figure R1a. Frequency Distribution of the Last Digit of Regular Prices – for the Dominick's Dataset, by Store

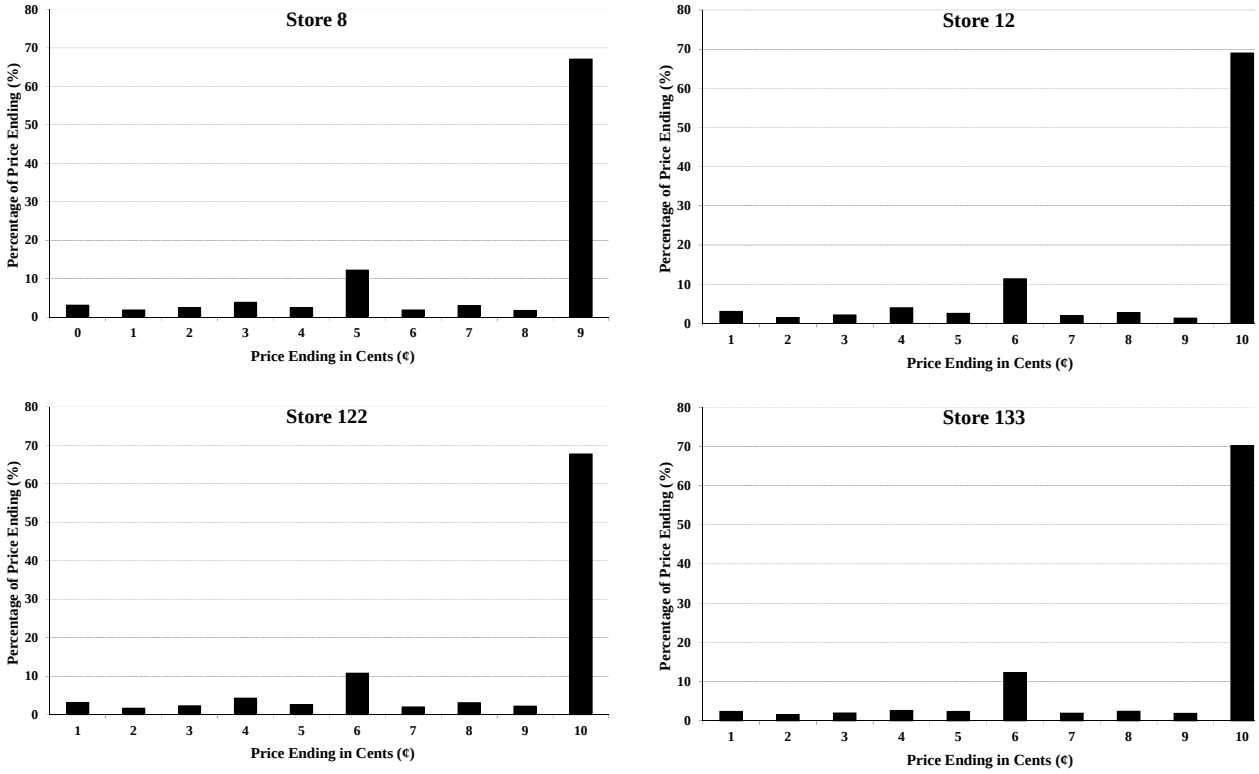


Figure R1b. Frequency Distribution of the Last Digit of Regular Prices – for the Dominick's Dataset, by Product Category, Stores #8, #12, #122 and #133

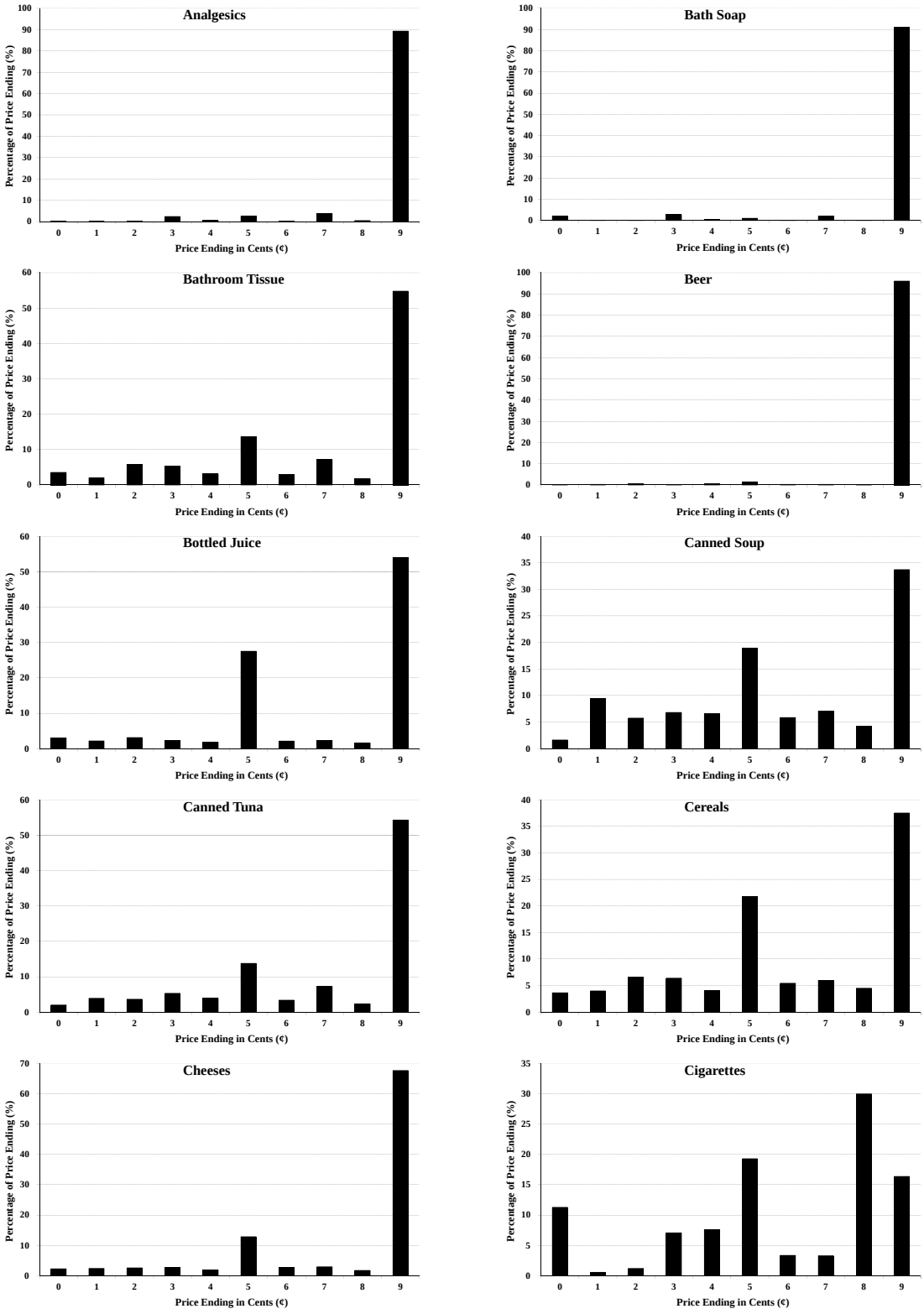


Figure R1c. Frequency Distribution of the Last Digit of Regular Prices – for the Dominick's Dataset, by Product Category, Stores #8, #12, #122 and #133

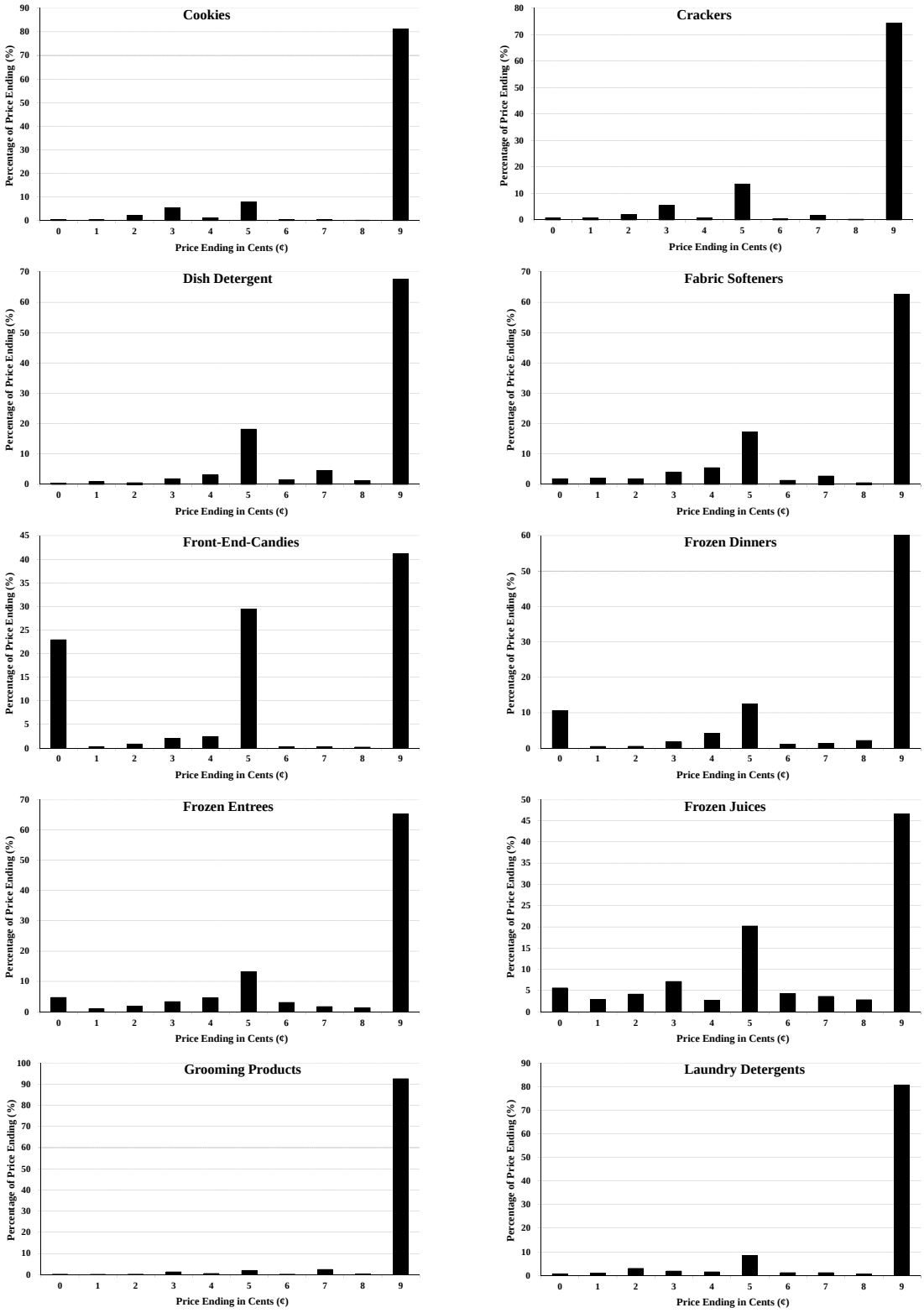


Figure R1d. Frequency Distribution of the Last Digit of Regular Prices – for the Dominick's Dataset, by Product Category, Stores #8, #12, #122 and #133

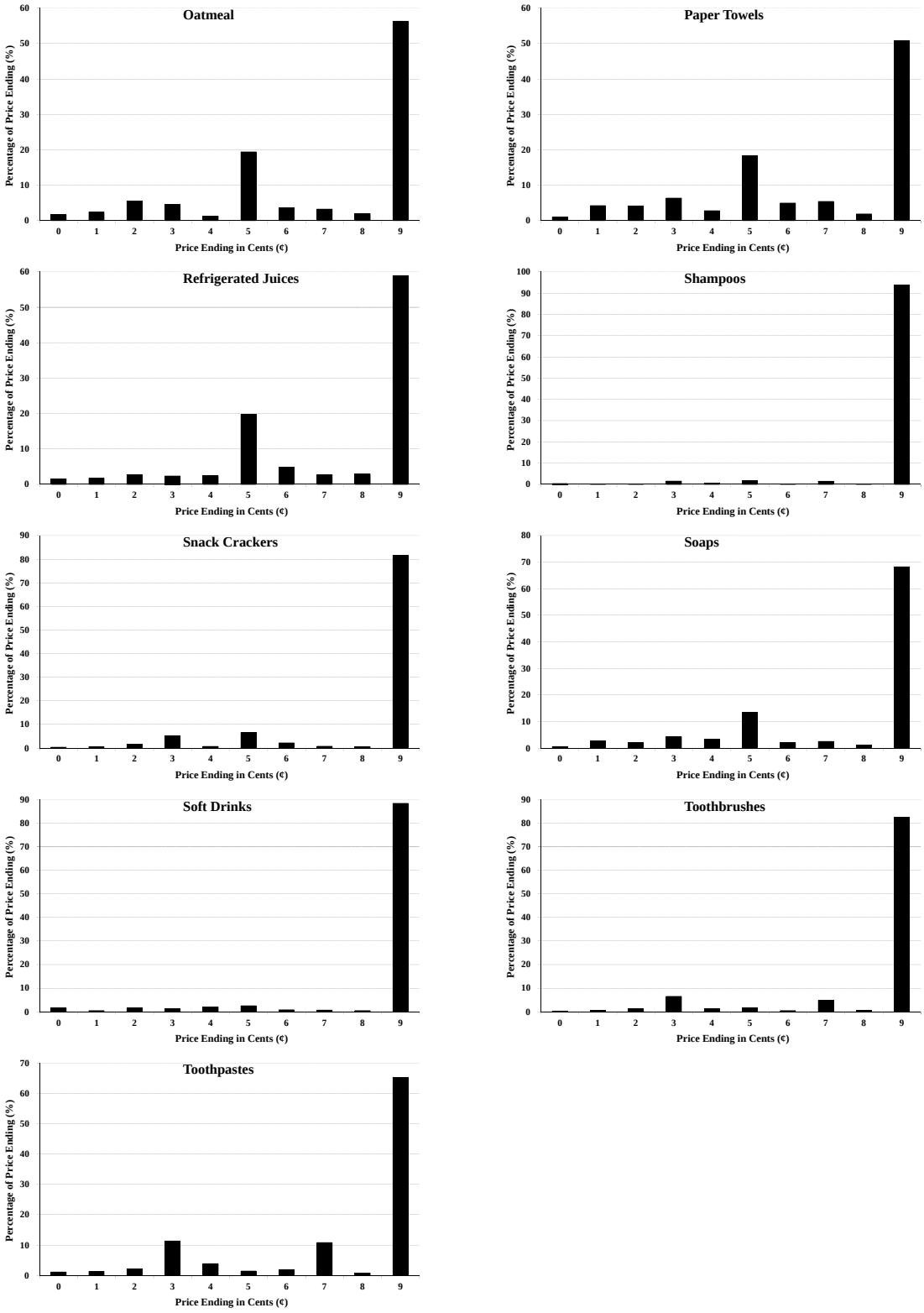


Figure R2a. Frequency Distribution of the Last Two Digits of Regular Prices – for the Dominick's Dataset, by Store

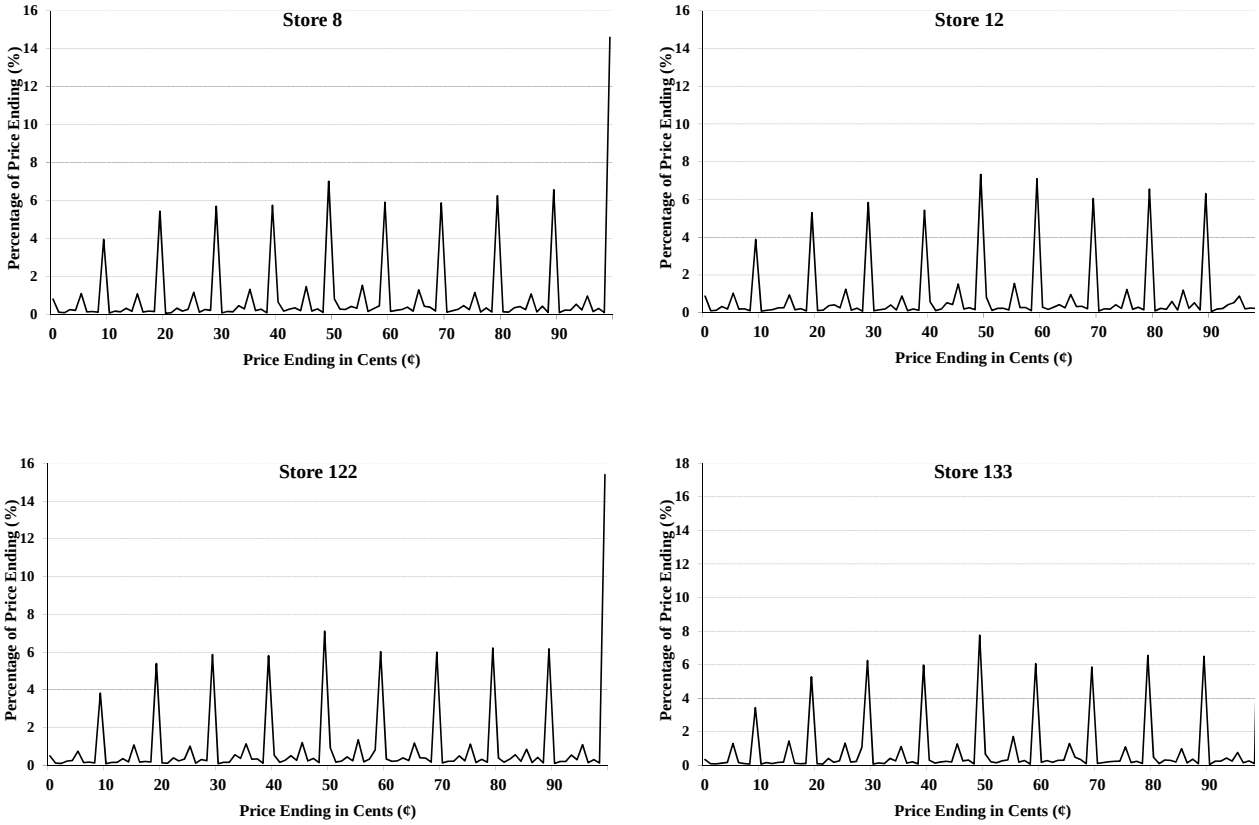


Figure R2b. Frequency Distribution of the Last Two Digits
- for the Dominick's Dataset, by Product Category, Stores #8, #12, #122 and #133

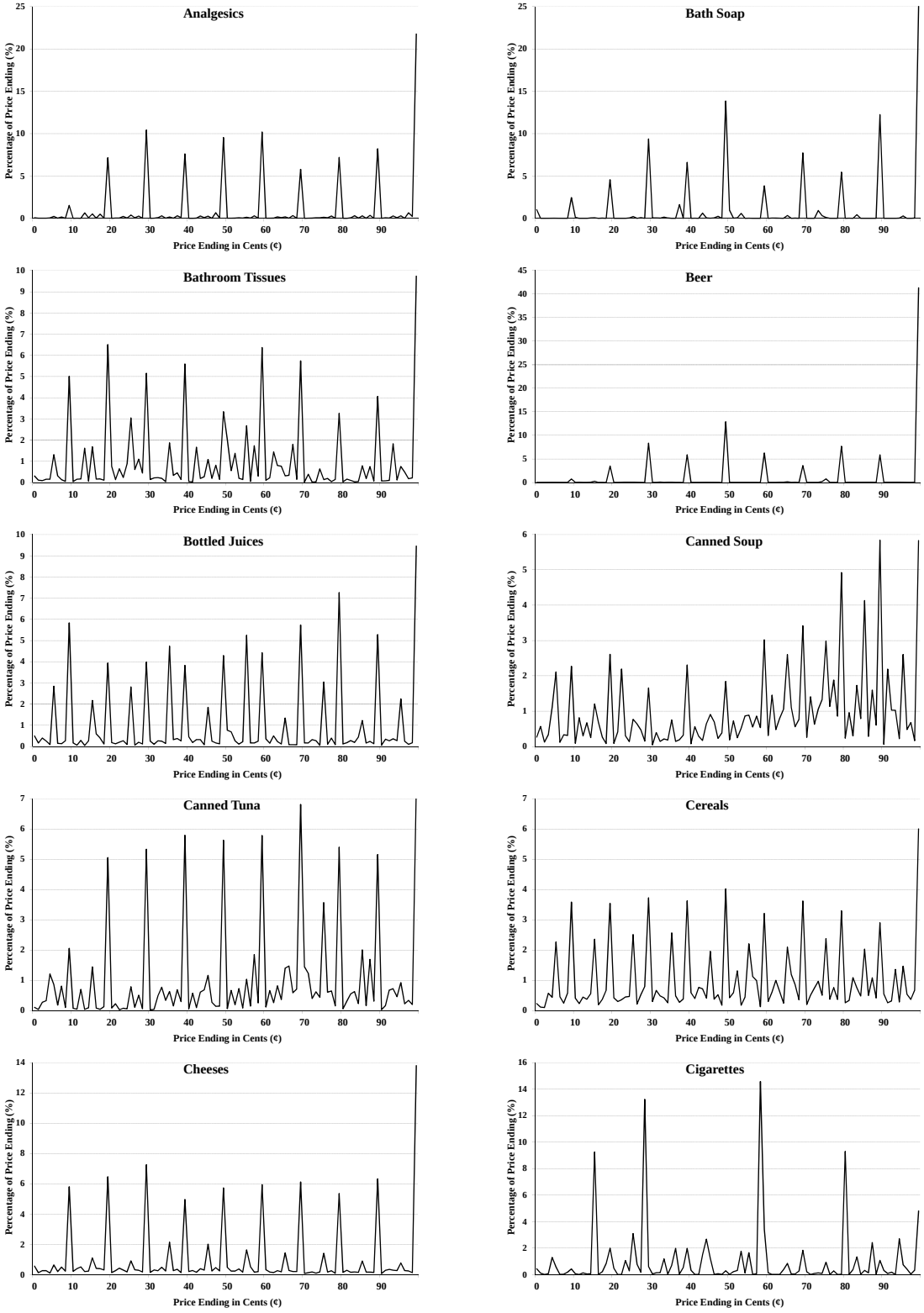


Figure R2c. Frequency Distribution of the Last Two Digits – for the Dominick's Dataset, by Product Category, Stores #8, #12, #122 and #133

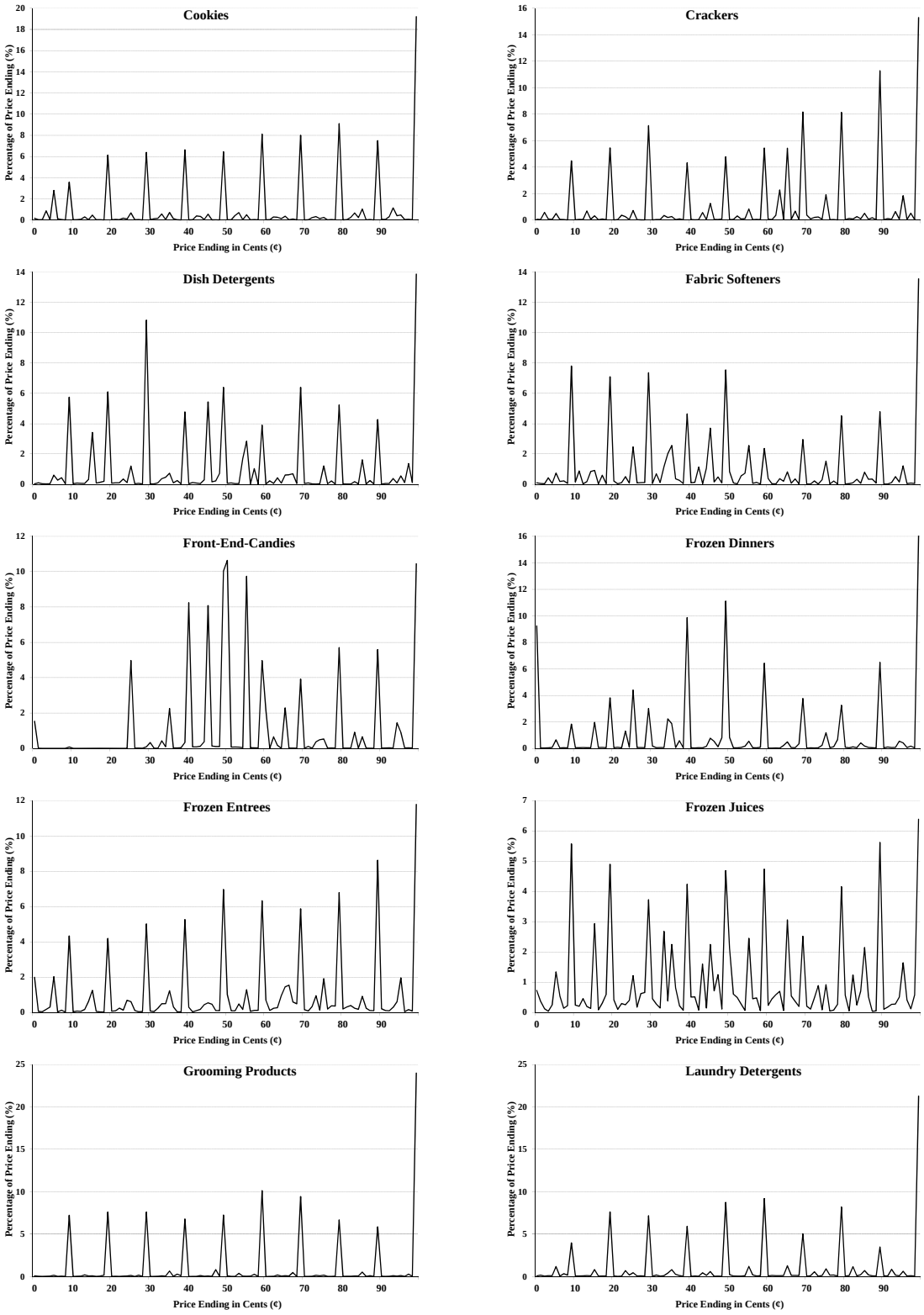


Figure R2d. Frequency Distribution of the Last Two Digits for the Dominick's Dataset, by Product Category, Stores #8, #12, #122 and #133

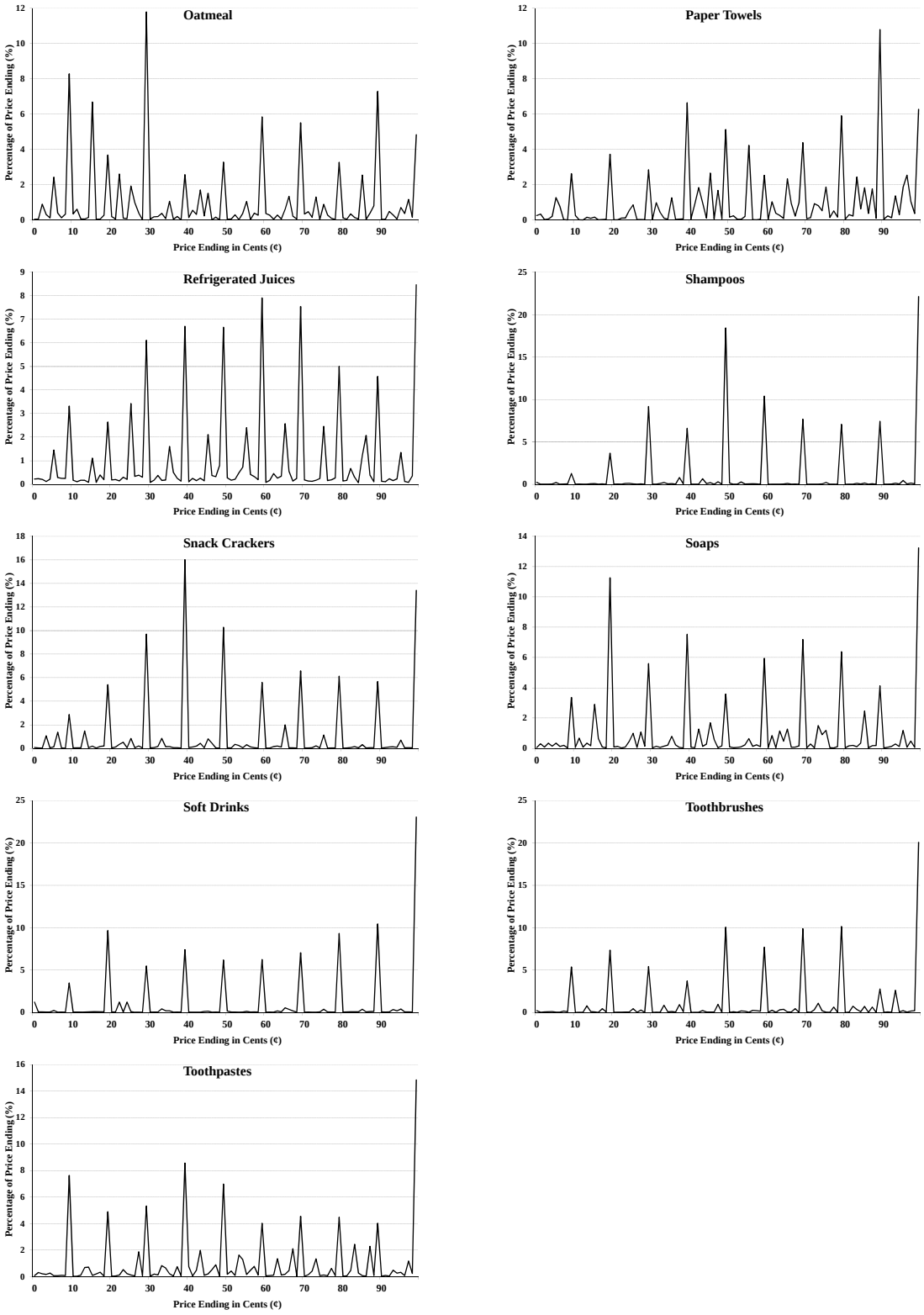


Figure R3. Frequency Distribution of the Last Digit - for the Internet Dataset, by Product Category

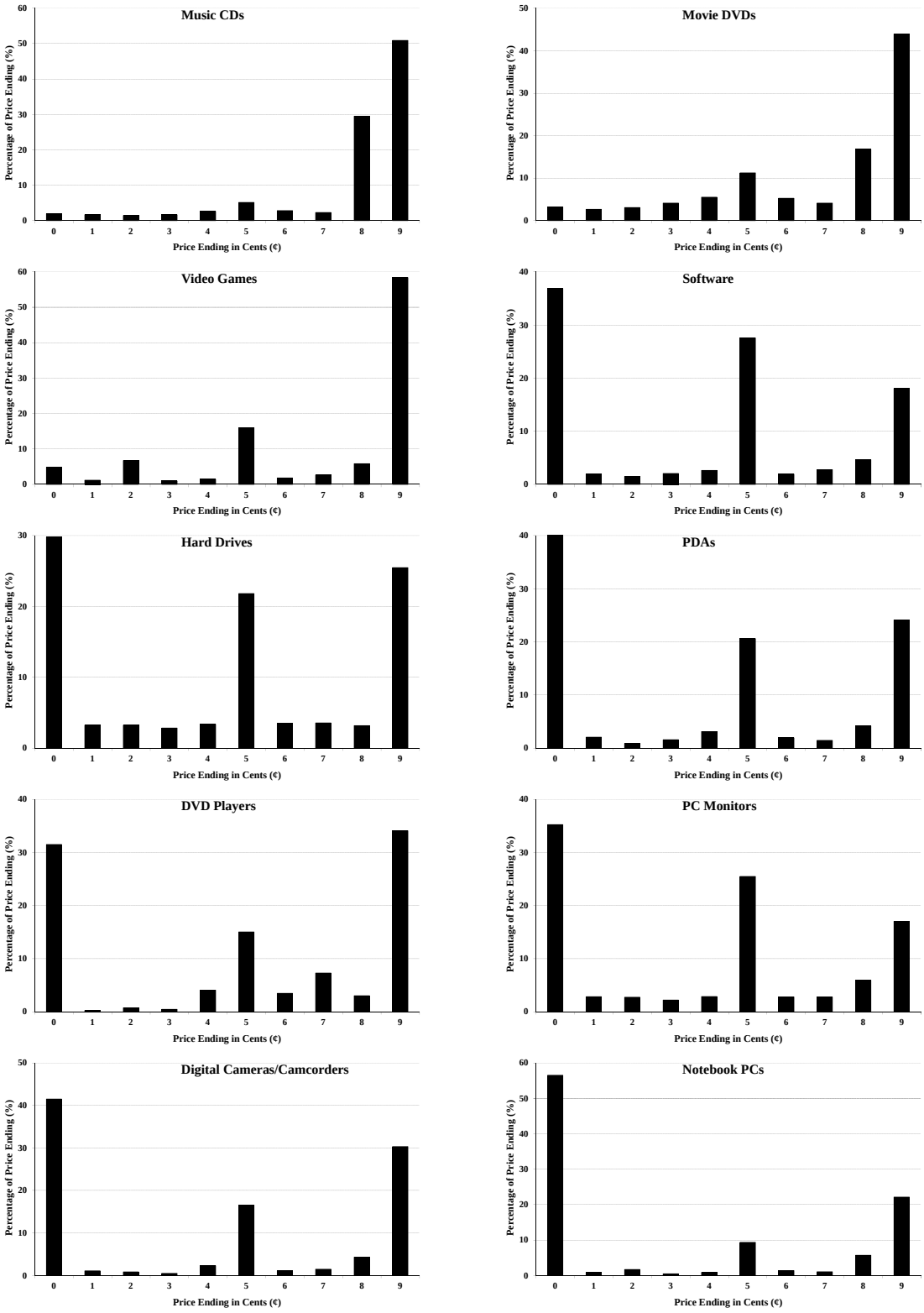


Figure R4. Frequency Distribution of the Last Two Digits – for the Internet Dataset, by Product Category

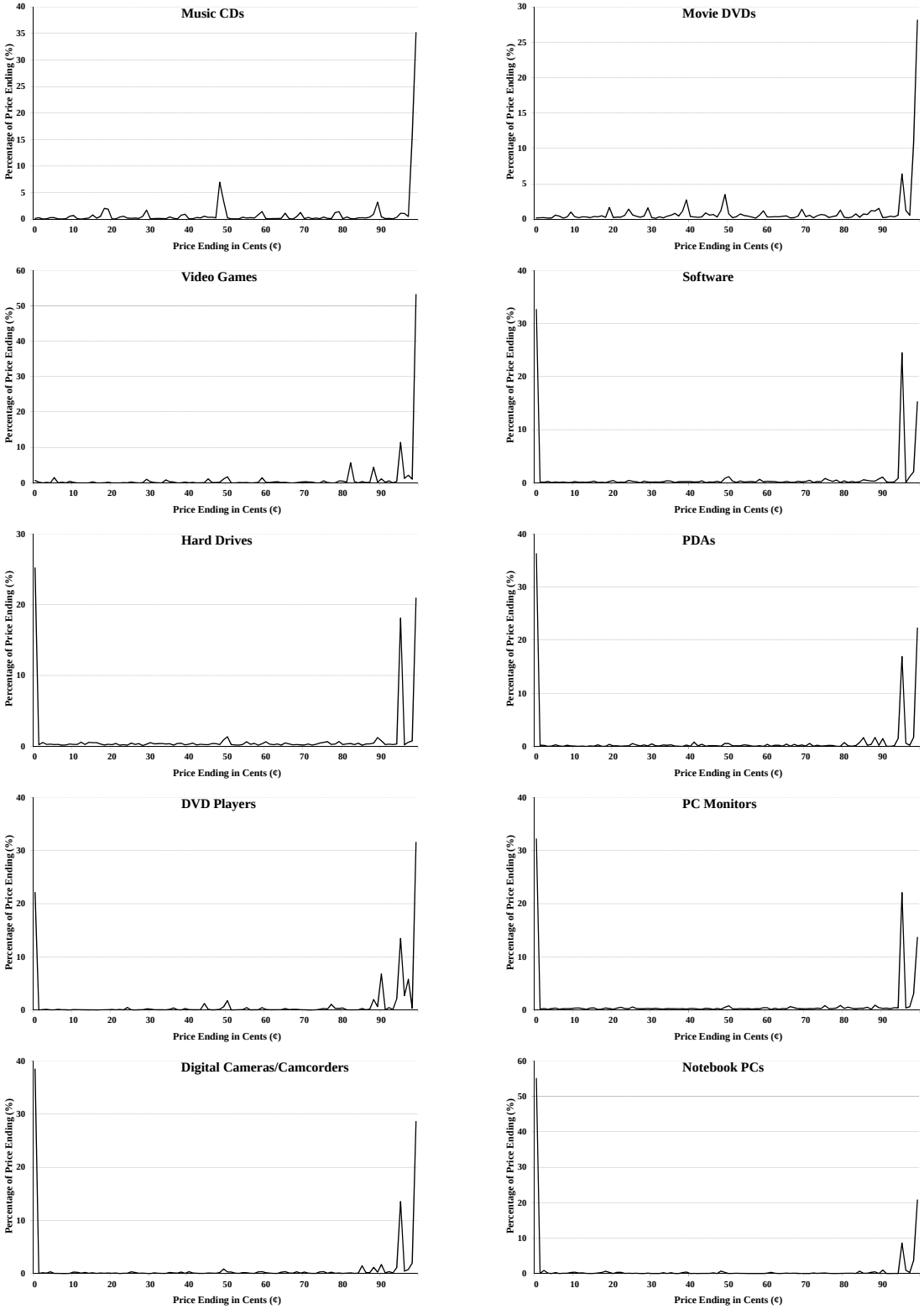


Figure R5. Frequency Distribution of the Last Dollar Digit – for the Internet Dataset, by Product Category

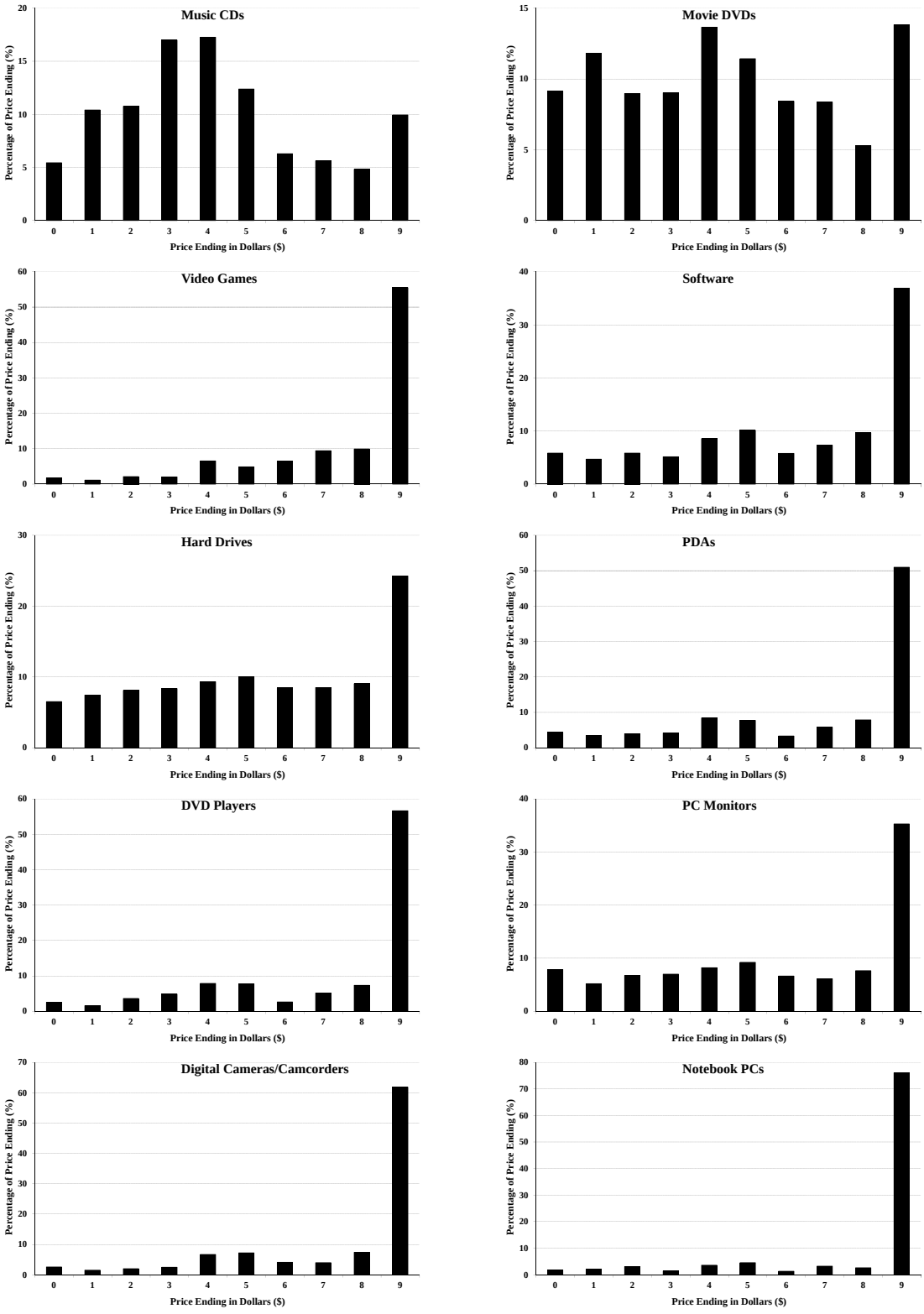
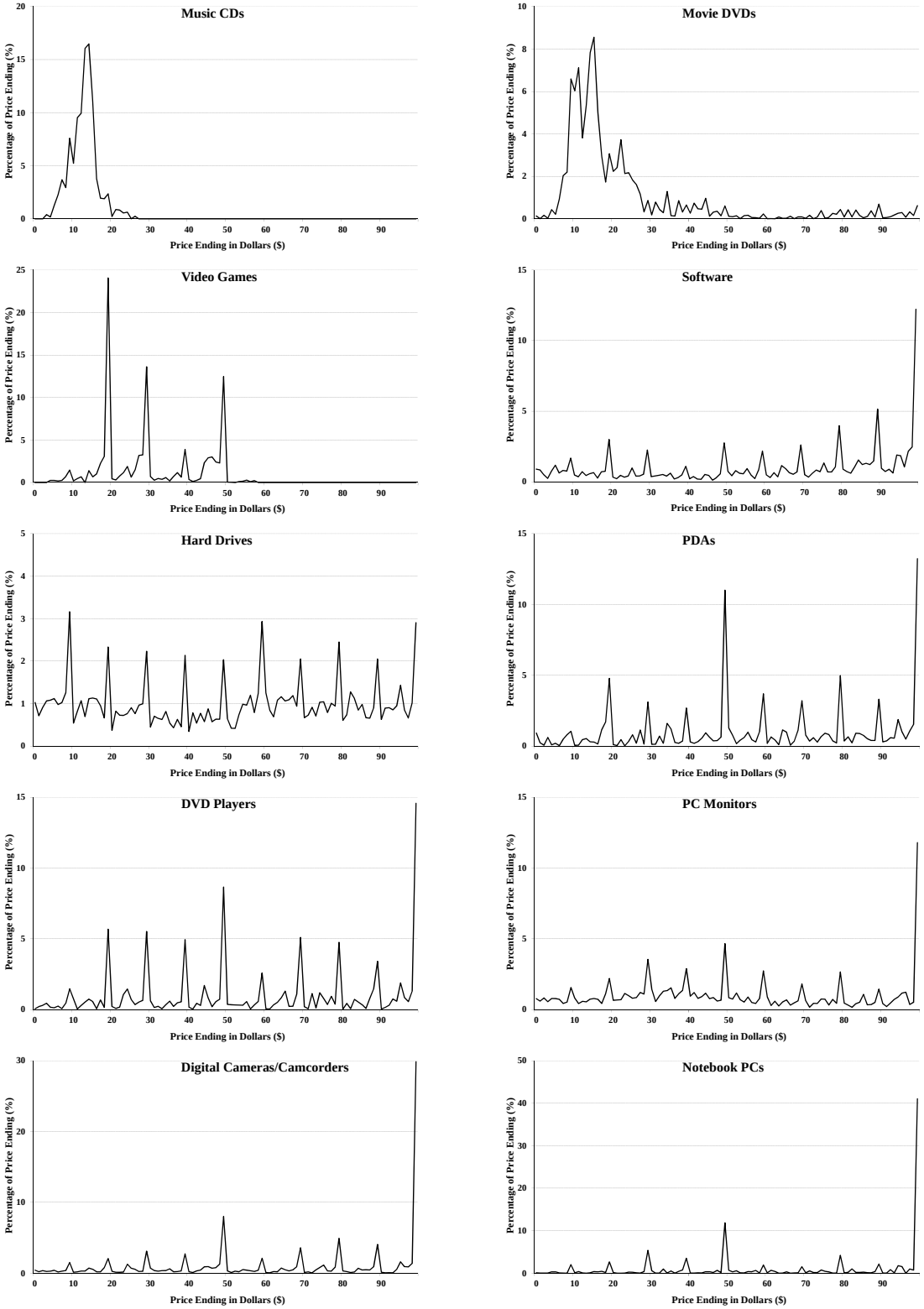


Figure R6. Frequency Distribution of the Last Two Dollar Digits – for the Internet Dataset, by Product Category



B. Results on Price Endings by Sales Volume

Table R1. Popularity of 9-Ending Prices – for the Dominick's Data Set, for Low and High Quartile of Products with Respect to Sales Volume

Category	Low Quartile				High Quartile			
	9¢-Ending		99¢-Ending		9¢-Ending		99¢-Ending	
	Rank	%	Rank	%	Rank	%	Rank	%
Analgesics	1	78.69	1	26.63	1	85.53	1	20.09
Bath Soap	1	66.35	1	23.79	1	88.83	1	23.34
Bathroom Tissue	1	78.53	1	35.87	1	43.06	1	8.07
Beer	1	99.20	1	52.04	1	94.83	1	41.12
Bottled Juice	1	65.94	1	11.67	1	48.09	1	8.75
Canned Soup	1	53.65	7	4.79	1	27.98	3	4.35
Canned Tuna	1	66.12	2	10.25	1	42.03	1	5.90
Cereals	2	29.55	6	5.49	1	34.58	5	4.38
Cheeses	1	72.34	2	11.17	1	60.06	1	12.33
Cigarettes	1	24.39	1	9.19	3	15.83	8	3.69
Cookies	1	76.27	1	13.28	1	73.60	1	15.22
Crackers	1	73.03	1	14.74	1	61.88	1	13.96
Dish Detergent	1	81.81	1	26.67	1	64.91	1	11.02
Fabric Softeners	1	75.80	1	20.58	1	55.27	1	14.01
Front-End Candies	1	59.49	7	6.10	1	43.04	3	9.12
Frozen Dinners	1	80.37	1	23.61	1	54.31	1	13.08
Frozen Entrees	1	86.70	1	34.13	1	55.35	1	9.61
Frozen Juices	1	59.25	4	7.91	1	46.92	1	8.23
Grooming Products	1	85.99	1	22.35	1	86.83	1	25.03
Laundry Detergents	1	82.01	1	29.15	1	75.53	1	19.10
Oatmeal	1	44.28	13	2.20	1	50.70	5	6.06
Paper Towels	1	99.25	3	4.36	1	41.41	4	5.08
Refrigerated Juices	1	67.37	4	9.25	1	54.68	1	11.96
Shampoos	1	91.10	1	36.30	1	90.83	2	18.29
Snack Crackers	1	71.53	1	18.60	1	70.66	2	13.54
Soaps	1	80.19	1	25.68	1	56.99	1	11.67
Soft Drinks	1	84.07	1	29.89	1	77.70	1	24.00
Toothbrushes	1	77.56	1	28.68	1	77.29	1	18.87
Toothpastes	1	77.81	1	30.18	1	68.28	1	15.07
Total	1	74.48	1	20.44	1	61.53	1	14.12

C. Detailed Results from Markov-Chain Analyses

Table R2a. Transition Probabilities Conditional on a Price Change for a 10-State Markov Chain Analysis – for the Dominick's Dataset, Store #8, Regular Prices Only, in Cents

		Next Period Ending Digit (¢)									
		0	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
Current Ending Digit (¢)	**0**	0.46	0.15	0.22	0.26	0.22	0.98	0.15	0.20	0.17	2.82
	1	0.16	0.08	0.17	0.31	0.16	0.63	0.17	0.17	0.11	1.97
	2	0.21	0.14	0.14	0.21	0.21	0.63	0.20	0.18	0.11	2.06
	3	0.25	0.29	0.20	0.32	0.23	0.78	0.18	0.30	0.15	2.38
	4	0.19	0.17	0.20	0.21	0.17	0.53	0.17	0.23	0.13	3.05
	5	0.89	0.55	0.55	0.67	0.48	1.17	0.52	0.65	0.43	4.66
	6	0.17	0.17	0.21	0.19	0.16	0.38	0.09	0.37	0.13	2.00
	7	0.21	0.19	0.18	0.28	0.23	0.57	0.31	0.21	0.16	2.80
	8	0.14	0.14	0.12	0.17	0.11	0.40	0.10	0.16	0.09	1.43
	9	2.94	2.03	2.10	2.31	3.05	4.60	1.97	2.55	1.34	30.92

Note: Each cell contains the percentage (%) of the price changes compared to the total number of price changes (113,615).

Table R2b. Transition Probabilities Conditional on a Price Change from a 10-State Markov Chain Analysis – for the Dominick's Dataset, Store #12, Regular Prices Only, in Cents

		Next Period Ending Digit (¢)									
		0	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
Current Ending Digit (¢)	**0**	0.53	0.15	0.25	0.25	0.25	0.90	0.17	0.18	0.15	3.19
	1	0.14	0.11	0.16	0.24	0.14	0.59	0.15	0.15	0.10	1.97
	2	0.23	0.11	0.11	0.19	0.19	0.62	0.19	0.21	0.12	2.18
	3	0.23	0.23	0.17	0.32	0.23	0.73	0.19	0.26	0.18	2.62
	4	0.21	0.12	0.17	0.19	0.17	0.45	0.17	0.23	0.12	3.22
	5	0.81	0.47	0.50	0.63	0.41	0.91	0.48	0.58	0.35	4.32
	6	0.17	0.14	0.18	0.22	0.16	0.37	0.15	0.43	0.14	2.40
	7	0.18	0.15	0.19	0.25	0.20	0.54	0.37	0.18	0.15	2.84
	8	0.16	0.10	0.12	0.17	0.10	0.38	0.14	0.12	0.11	1.34
	9	3.36	2.13	2.23	2.59	3.17	4.31	2.33	2.62	1.27	30.20

Note: Each cell contains the percentage (%) of the price changes compared to the total number of price changes (113,012).

Table R2c. Transition Probabilities Conditional on a Price Change from a 10-State Markov Chain Analysis – for the Dominick's Dataset, Store #122, Regular Prices Only, in Cents

		Next Period Ending Digit (¢)									
		0	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
Current Ending Digit (¢)	**0**	0.32	0.25	0.32	0.35	0.24	0.83	0.16	0.23	0.17	2.39
	1	0.24	0.09	0.26	0.38	0.21	0.70	0.17	0.20	0.14	2.43
	2	0.29	0.22	0.11	0.30	0.31	0.67	0.22	0.23	0.15	2.45
	3	0.32	0.31	0.26	0.39	0.32	0.88	0.27	0.41	0.20	2.69
	4	0.20	0.20	0.24	0.28	0.16	0.66	0.24	0.26	0.14	3.56
	5	0.73	0.53	0.60	0.75	0.59	0.67	0.60	0.63	0.42	4.25
	6	0.21	0.16	0.18	0.24	0.22	0.43	0.10	0.48	0.18	2.64
	7	0.24	0.22	0.24	0.35	0.27	0.54	0.41	0.23	0.26	3.30
	8	0.17	0.18	0.14	0.18	0.14	0.44	0.17	0.21	0.11	1.86
	9	2.54	2.64	2.58	2.66	3.51	4.12	2.47	3.00	1.78	23.47

Note: Each cell contains the percentage (%) of the price changes compared to the total number of price changes (122,877).

Table R2d. Transition Probabilities Conditional on a Price Change from a 10-State Markov Chain Analysis – for the Dominick's Dataset, Store #133, Regular Prices Only, in Cents

		Next Period Ending Digit (¢)									
		0	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
Current Ending Digit (¢)	**0**	0.11	0.23	0.27	0.20	0.24	0.79	0.19	0.19	0.12	2.14
	1	0.19	0.10	0.26	0.30	0.20	0.84	0.18	0.20	0.13	2.37
	2	0.25	0.22	0.11	0.24	0.25	0.92	0.23	0.18	0.13	2.64
	3	0.20	0.25	0.23	0.17	0.29	0.93	0.25	0.28	0.17	2.37
	4	0.18	0.18	0.26	0.25	0.16	0.80	0.28	0.22	0.15	3.93
	5	0.66	0.62	0.77	0.84	0.70	0.94	0.75	0.85	0.50	4.62
	6	0.20	0.18	0.23	0.21	0.24	0.54	0.12	0.58	0.15	2.73
	7	0.18	0.20	0.21	0.25	0.22	0.75	0.51	0.14	0.22	3.37
	8	0.13	0.15	0.13	0.16	0.14	0.51	0.15	0.19	0.07	1.75
	9	2.43	2.60	2.68	2.30	3.94	4.54	2.48	3.11	1.73	22.34

Note: Each cell contains the percentage (%) of the price changes compared to the total number of price changes (85,943).

Table R2e. Transition Probabilities Conditional on a Price Change from a 10-State Markov Chain Analysis – for the Dominick's Dataset, in Cents

		Next Period Ending Digit (¢)									
		0	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
Current Ending Digit (¢)	**0**	0.66	0.25	0.29	0.32	0.33	0.83	0.27	0.23	0.15	3.75
	1	0.28	0.12	0.17	0.22	0.14	0.47	0.14	0.14	0.10	2.76
	2	0.26	0.14	0.15	0.17	0.18	0.38	0.18	0.15	0.09	1.75
	3	0.30	0.22	0.16	0.31	0.22	0.49	0.19	0.24	0.14	2.42
	4	0.30	0.13	0.17	0.19	0.26	0.42	0.22	0.18	0.10	2.88
	5	0.77	0.33	0.35	0.45	0.35	0.90	0.43	0.50	0.26	3.88
	6	0.26	0.15	0.18	0.19	0.26	0.38	0.17	0.28	0.13	2.09
	7	0.24	0.14	0.16	0.25	0.23	0.45	0.25	0.23	0.12	2.11
	8	0.15	0.10	0.11	0.14	0.15	0.29	0.13	0.12	0.12	1.31
	9	3.47	1.56	1.45	1.91	2.38	3.32	1.84	1.79	0.82	37.74

Note: Each cell contains the percentage (%) of the price changes compared to the total number of price change (27,524,476).

Table R2f. Transition Probability Matrix 10-State Markov Chain Conditional on a Price Change – for the Dominick's Dataset, Regular Prices; Stores #8, #12, #122 and #133, in Cents, for the Low Quartile of Products in Terms of the Prevalence of 9-Ending Prices

		Next Period Ending Digit (¢)									
		0	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
Current Ending Digit (¢)	**0**	0.37	0.20	0.27	0.27	0.24	0.88	0.16	0.20	0.16	2.66
	1	0.18	0.09	0.21	0.31	0.17	0.68	0.17	0.18	0.12	2.18
	2	0.25	0.17	0.12	0.24	0.24	0.70	0.21	0.20	0.12	2.32
	3	0.25	0.28	0.22	0.31	0.27	0.83	0.22	0.32	0.18	2.53
	4	0.19	0.17	0.21	0.23	0.17	0.60	0.21	0.24	0.13	3.41
	5	0.78	0.54	0.60	0.72	0.54	0.92	0.58	0.66	0.42	4.45
	6	0.19	0.16	0.20	0.22	0.19	0.42	0.12	0.46	0.15	2.43
	7	0.21	0.19	0.20	0.29	0.23	0.59	0.39	0.19	0.20	3.07
	8	0.15	0.14	0.13	0.17	0.12	0.43	0.14	0.17	0.09	1.59
	9	2.83	2.34	2.38	2.48	3.39	4.37	2.30	2.81	1.52	26.93

Note: Each cell contains the percentage (%) of the price changes compared to the total number of price changes (434,997).

Table R2g. Transition Probabilities Conditional on a Price Change from a 10-State Markov Chain Analysis – for the Dominick's Dataset, Store #8, Regular Prices Only, in Cents, for the Low Quartile of Products in Terms of the Prevalence of 9-Ending Prices

		Next Period Ending Digit (¢)									
		0	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
Current Ending Digit (¢)	**0**	0.87	0.22	0.22	0.24	0.31	0.93	0.27	0.21	0.13	4.18
	1	0.29	0.06	0.10	0.20	0.09	0.34	0.09	0.12	0.04	2.04
	2	0.20	0.11	0.13	0.15	0.13	0.27	0.13	0.13	0.05	1.42
	3	0.22	0.19	0.13	0.31	0.20	0.40	0.13	0.20	0.10	1.99
	4	0.31	0.08	0.16	0.16	0.25	0.27	0.12	0.13	0.08	2.56
	5	0.87	0.26	0.25	0.31	0.20	0.72	0.27	0.38	0.21	3.48
	6	0.28	0.11	0.13	0.17	0.15	0.23	0.13	0.16	0.07	1.70
	7	0.21	0.09	0.11	0.22	0.13	0.33	0.14	0.14	0.07	1.84
	8	0.11	0.04	0.08	0.10	0.07	0.21	0.06	0.08	0.08	1.22
	9	3.95	1.30	1.15	1.67	2.28	3.00	1.57	1.53	0.67	45.81

Note: Each cell contains the percentage (%) of the price change compared to the total number of price changes (44,773).

Table R2h. Transition Probabilities Conditional on a Price Change from a 10-State Markov Chain Analysis – for the Dominick's Dataset, Store #12, Regular Prices Only, in Cents for the Low Quartile of Products in Terms of the Prevalence of 9-Ending Prices

		Next Period Ending Digit (¢)									
		0	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
Current Ending Digit (¢)	**0**	0.73	0.26	0.27	0.36	0.41	0.89	0.23	0.20	0.20	4.19
	1	0.21	0.09	0.14	0.18	0.13	0.36	0.10	0.12	0.05	1.67
	2	0.24	0.11	0.06	0.17	0.14	0.35	0.12	0.14	0.06	1.49
	3	0.30	0.22	0.14	0.26	0.22	0.42	0.15	0.24	0.14	2.05
	4	0.41	0.10	0.13	0.17	0.15	0.32	0.19	0.15	0.10	2.68
	5	0.88	0.26	0.31	0.34	0.26	0.72	0.29	0.41	0.19	3.36
	6	0.23	0.10	0.12	0.18	0.20	0.25	0.07	0.20	0.11	1.72
	7	0.18	0.12	0.12	0.22	0.15	0.41	0.15	0.11	0.09	1.72
	8	0.19	0.07	0.05	0.13	0.06	0.22	0.10	0.06	0.08	1.01
	9	4.27	1.60	1.48	2.06	2.62	3.22	1.75	1.63	0.88	42.86

Note: Each cell contains the percentage (%) of the price change compared to the total number of price changes (42,377).

Table R2i. Transition Probabilities Conditional on a Price Change from a 10-State Markov Chain Analysis – for the Dominick's Dataset, Store #122, Regular Prices Only, in Cents for the Low Quartile of Products in Terms of the Prevalence of 9-Ending Prices

		Next Period Ending Digit (¢)									
		0	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
Current Ending Digit (¢)	**0**	0.89	0.30	0.25	0.21	0.25	0.68	0.22	0.21	0.14	3.37
	1	0.42	0.18	0.18	0.18	0.13	0.50	0.10	0.12	0.07	3.41
	2	0.21	0.15	0.17	0.19	0.21	0.28	0.14	0.12	0.08	1.74
	3	0.25	0.17	0.18	0.42	0.21	0.43	0.18	0.23	0.12	2.34
	4	0.26	0.10	0.15	0.19	0.34	0.36	0.16	0.12	0.10	2.89
	5	0.61	0.26	0.24	0.36	0.25	0.86	0.31	0.41	0.20	3.13
	6	0.23	0.10	0.13	0.15	0.18	0.26	0.27	0.23	0.09	1.96
	7	0.21	0.10	0.12	0.22	0.19	0.32	0.22	0.27	0.13	2.04
	8	0.18	0.07	0.10	0.12	0.11	0.25	0.12	0.11	0.16	1.68
	9	2.57	1.30	1.19	1.52	1.83	2.62	1.28	1.48	0.69	44.27

Note: Each cell contains the percentage (%) of the price changes compared to the total number of price changes (57,668).

Table R2j. Transition Probabilities Conditional on a Price Change from a 10-State Markov Chain Analysis – for the Dominick's Dataset, Store #133, Regular Prices Only, in Cents for the Low Quartile of Products in Terms of the Prevalence of 9-Ending Prices

		Next Period Ending Digit (¢)									
		0	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
Current Ending Digit (¢)	**0**	0.80	0.30	0.26	0.20	0.31	0.69	0.21	0.22	0.10	3.59
	1	0.30	0.18	0.13	0.16	0.12	0.49	0.11	0.11	0.07	3.86
	2	0.20	0.13	0.23	0.17	0.19	0.32	0.15	0.08	0.07	1.94
	3	0.27	0.13	0.14	0.34	0.20	0.43	0.18	0.20	0.13	2.72
	4	0.25	0.13	0.19	0.18	0.40	0.39	0.22	0.16	0.08	3.03
	5	0.63	0.24	0.29	0.35	0.32	0.83	0.36	0.38	0.20	4.02
	6	0.22	0.13	0.15	0.17	0.25	0.28	0.25	0.21	0.11	2.10
	7	0.21	0.09	0.12	0.17	0.21	0.31	0.15	0.27	0.09	2.05
	8	0.17	0.06	0.13	0.12	0.15	0.23	0.14	0.10	0.13	1.70
	9	2.60	1.31	1.20	1.30	1.94	2.49	1.38	1.29	0.65	42.25

Note: Each cell contains the percentage (%) of the price change compared to the total number of price changes (47,097).

Table R2k. Transition Probability Matrix for a 10-State Markov Chain Conditional on a Price Change – for the Internet Dataset, in Cents

		Next Period Ending Digit (¢)									
		0	1	2	3	4	5	6	7	8	9
Current Ending Digit (¢)	0	20.35	0.35	0.35	0.34	0.33	1.40	0.39	0.38	0.52	1.69
	1	0.32	0.39	0.33	0.32	0.34	0.29	0.30	0.28	0.30	0.40
	2	0.40	0.33	0.47	0.34	0.34	0.27	0.24	0.31	0.34	0.32
	3	0.34	0.29	0.32	0.47	0.33	0.35	0.32	0.30	0.41	0.43
	4	0.37	0.34	0.37	0.31	0.66	0.52	0.40	0.38	0.37	0.87
	5	1.45	0.33	0.30	0.34	0.48	10.63	0.45	0.34	0.53	2.04
	6	0.34	0.29	0.31	0.34	0.43	0.48	0.86	0.41	0.30	0.66
	7	0.39	0.27	0.27	0.37	0.36	0.32	0.33	0.66	0.49	0.58
	8	0.54	0.33	0.30	0.37	0.44	0.58	0.41	0.48	2.95	1.21
	9	1.54	0.42	0.42	0.48	0.87	2.19	0.54	0.56	1.47	17.68

Note: Each cell contains the percentage (%) of the price changes compared to the total number of price changes (41,034).

Table R2l. Transition Probability Matrix for a 10-State Markov Chain Conditional on a Price Change – for the Internet Dataset, in Dollars

		Next Period Ending Digit ($)									
		0	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
Current Ending Digit ($)	**0**	1.58	0.85	0.45	0.40	0.42	0.43	0.35	0.41	0.68	1.38
	1	0.98	2.18	1.06	0.49	0.40	0.35	0.33	0.40	0.43	0.97
	2	0.58	1.19	1.72	1.01	0.76	0.56	0.34	0.32	0.48	1.12
	3	0.46	0.67	1.23	1.99	1.12	0.65	0.50	0.42	0.51	1.00
	4	0.55	0.49	0.87	1.30	2.73	1.32	0.69	0.65	0.62	1.98
	5	0.49	0.44	0.61	0.90	1.50	2.52	1.01	0.67	0.54	1.45
	6	0.36	0.37	0.42	0.52	0.88	1.15	1.47	0.86	0.64	1.04
	7	0.33	0.30	0.41	0.48	0.79	0.79	1.14	1.27	0.88	1.22
	8	0.49	0.39	0.38	0.57	0.56	0.72	0.71	1.11	1.73	1.79
	9	1.08	0.83	0.81	0.91	1.98	1.56	1.25	1.47	2.09	11.75

Note: Each cell contains the percentage (%) of the price changes compared to the total number of price changes (41,034).

Table R2m: Transition Frequency Matrix for a 10-State Markov Chain Conditional on a Price Change – for the Internet Dataset, Low Price Product Categories, in Cents

		Next Period Ending Digit (¢)									
		0	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
Current Ending Digit (¢)	**0**	0.73	0.44	0.39	0.38	0.42	0.42	0.50	0.40	0.48	1.14
	1	0.37	0.35	0.37	0.35	0.42	0.32	0.31	0.36	0.41	0.52
	2	0.50	0.38	0.68	0.44	0.55	0.33	0.29	0.33	0.39	0.44
	3	0.43	0.33	0.37	0.59	0.49	0.48	0.54	0.36	0.58	0.62
	4	0.44	0.42	0.58	0.47	0.75	0.54	0.63	0.53	0.50	1.31
	5	0.57	0.37	0.35	0.48	0.44	3.20	0.58	0.33	0.59	3.51
	6	0.32	0.32	0.49	0.49	0.67	0.72	1.83	0.61	0.46	1.19
	7	0.41	0.26	0.40	0.51	0.50	0.35	0.52	0.72	0.72	0.76
	8	0.63	0.38	0.39	0.55	0.54	0.67	0.65	0.73	5.40	2.10
	9	1.00	0.67	0.58	0.72	1.35	3.56	0.82	0.89	2.64	28.68

Note: Each cell contains the percentage (%) of the price changes compared to the total number of price changes (14,685). Low price categories include Music CDs, Movie DVDs, and Video Games.

Table R2n: Transition Frequency Matrix for a 10-State Markov Chain Conditional on a Price Change – for the Internet Dataset, High Price Product Categories, in Cents

		Next Period Ending Digit (¢)									
		0	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
Current Ending Digit (¢)	**0**	31.28	0.30	0.33	0.32	0.28	1.95	0.33	0.37	0.54	1.99
	1	0.30	0.41	0.30	0.30	0.30	0.27	0.30	0.23	0.24	0.33
	2	0.35	0.30	0.35	0.28	0.22	0.24	0.20	0.30	0.31	0.26
	3	0.29	0.26	0.29	0.41	0.24	0.27	0.20	0.26	0.32	0.32
	4	0.33	0.30	0.25	0.22	0.61	0.51	0.27	0.30	0.30	0.63
	5	1.94	0.31	0.28	0.25	0.50	14.77	0.37	0.35	0.50	1.22
	6	0.35	0.27	0.22	0.25	0.30	0.36	0.32	0.30	0.21	0.36
	7	0.38	0.28	0.20	0.29	0.28	0.30	0.22	0.62	0.37	0.49
	8	0.49	0.30	0.24	0.26	0.39	0.52	0.28	0.34	1.59	0.72
	9	1.84	0.29	0.33	0.35	0.61	1.43	0.38	0.38	0.81	11.55

Note: Each cell contains the percentage (%) of the price changes compared to the total number of price changes (26,349). High price categories include Computer Monitors, Digital Cameras, DVD Players, Hard Drives, Laptop Computers, PDAs, and Software.

Table R2o: Transition Frequency Matrix for a 10-State Markov Chain Conditional on a Price Change – for the Internet Dataset, Low Price Product Categories, in Dollars

		Next Period Ending Digit ($)									
		0	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
Current Ending Digit (¢)	**0**	2.96	1.38	0.39	0.40	0.35	0.16	0.21	0.25	0.37	1.06
	1	1.40	5.03	1.90	0.46	0.30	0.23	0.16	0.22	0.26	0.74
	2	0.36	1.89	3.62	1.72	0.93	0.40	0.22	0.15	0.22	0.52
	3	0.37	0.54	1.70	4.41	1.82	0.71	0.36	0.24	0.23	0.52
	4	0.41	0.43	0.89	1.71	5.17	2.25	0.90	0.59	0.29	1.11
	5	0.22	0.33	0.33	0.85	1.97	4.56	1.40	0.55	0.21	0.34
	6	0.16	0.22	0.20	0.32	0.92	1.23	2.64	1.21	0.52	0.85
	7	0.15	0.13	0.22	0.22	0.59	0.50	1.35	1.87	0.96	0.96
	8	0.31	0.27	0.12	0.27	0.26	0.19	0.37	0.88	2.40	1.55
	9	0.99	0.69	0.42	0.47	1.11	0.29	0.95	0.97	1.48	7.13

Note: Each cell contains the percentage (%) of the price changes compared to the total number of price changes (14,685). Low price categories include CDs, DVDs, and Video Games.

Table R2p: Transition Frequency Matrix for a 10-State Markov Chain Conditional on a Price Change – for the Internet Dataset, High Price Product Categories, in Dollars

		Next Period Ending Digit ($)									
		0	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
Current Ending Digit (¢)	**0**	0.82	0.55	0.48	0.40	0.46	0.58	0.43	0.50	0.86	1.56
	1	0.74	0.60	0.59	0.50	0.46	0.41	0.42	0.51	0.52	1.09
	2	0.71	0.80	0.66	0.62	0.67	0.64	0.41	0.42	0.62	1.45
	3	0.50	0.73	0.96	0.64	0.73	0.62	0.58	0.52	0.67	1.26
	4	0.62	0.53	0.85	1.07	1.38	0.80	0.58	0.69	0.81	2.47
	5	0.63	0.50	0.77	0.92	1.24	1.39	0.80	0.73	0.72	2.07
	6	0.47	0.45	0.54	0.63	0.87	1.11	0.82	0.66	0.71	1.14
	7	0.43	0.40	0.52	0.63	0.90	0.96	1.02	0.93	0.84	1.36
	8	0.59	0.46	0.53	0.73	0.73	1.01	0.90	1.24	1.35	1.92
	9	1.13	0.90	1.02	1.16	2.46	2.27	1.41	1.74	2.44	14.32

Note: Each cell contains the percentage (%) of the price changes compared to the total number of price changes (26,349). High price categories include Computer Monitors, Digital Cameras, DVD Players, Hard Drives, Laptop Computers, PDAs, and Software.

Table R3a. Top 50 Transition Probabilities Conditional on a Price Change for a 100-State Markov Chain Analysis – for the Dominick's Dataset, by Store, Regular Prices Only, in Cents

	Store 8			Store 12			Store 122			Store 133		
Rank	Current Ending	Next Ending	%	Current Ending	Next Ending	%	Current Ending	Next Ending	%	Current Ending	Next Ending	%
1	89	99	1.34	89	99	1.09	89	99	0.87	89	99	0.82
2	99	89	1.03	99	89	0.86	99	89	0.70	39	49	0.65
3	99	19	0.86	79	99	0.83	99	19	0.61	79	89	0.62
4	39	49	0.79	79	89	0.71	79	89	0.58	99	19	0.61
5	79	99	0.78	99	19	0.70	79	99	0.58	79	99	0.60
6	49	99	0.75	99	49	0.69	39	49	0.57	99	29	0.60
7	79	89	0.73	59	99	0.68	29	39	0.55	99	89	0.60
8	99	49	0.73	99	29	0.68	99	09	0.55	99	09	0.54
9	99	29	0.72	49	99	0.67	99	29	0.50	29	39	0.53
10	19	99	0.71	99	59	0.64	69	99	0.49	49	99	0.50
11	99	09	0.70	99	79	0.63	19	29	0.48	49	59	0.48
12	29	99	0.70	99	99	0.61	19	99	0.47	29	99	0.47
13	99	99	0.66	49	59	0.59	59	69	0.46	19	29	0.45
14	29	39	0.60	29	99	0.58	49	99	0.45	59	69	0.45
15	99	79	0.60	39	49	0.56	99	99	0.43	19	99	0.44
16	99	39	0.55	19	99	0.55	99	49	0.42	69	99	0.44
17	69	99	0.53	29	39	0.54	29	99	0.42	99	49	0.44
18	69	79	0.52	59	69	0.52	69	79	0.42	99	99	0.43
19	49	59	0.51	99	09	0.52	99	79	0.41	69	79	0.42
20	09	19	0.50	69	99	0.50	49	59	0.40	09	19	0.41
21	19	29	0.50	69	79	0.49	99	39	0.40	99	79	0.39
22	59	69	0.49	09	19	0.48	09	99	0.40	29	49	0.36
23	09	99	0.49	19	29	0.45	09	19	0.38	59	99	0.35
24	99	69	0.48	99	39	0.43	99	69	0.37	94	99	0.33
25	39	99	0.46	99	69	0.42	39	29	0.35	99	69	0.32
26	89	79	0.46	59	79	0.41	89	79	0.31	95	99	0.32
27	49	39	0.43	89	79	0.41	29	49	0.31	49	69	0.31
28	99	59	0.40	39	99	0.40	39	99	0.31	97	99	0.31
29	00	89	0.39	29	49	0.37	49	69	0.29	19	39	0.31
30	59	99	0.38	69	59	0.35	49	39	0.29	89	79	0.31
31	89	00	0.38	59	49	0.34	95	99	0.28	66	67	0.30
32	29	49	0.36	29	59	0.33	59	79	0.28	99	97	0.30
33	39	29	0.36	39	59	0.33	94	99	0.27	99	39	0.30
34	49	69	0.35	09	99	0.32	69	89	0.27	49	39	0.30
35	59	49	0.33	19	79	0.32	29	19	0.27	09	99	0.30
36	79	69	0.33	79	19	0.32	97	99	0.27	67	66	0.30
37	69	89	0.32	00	89	0.31	79	69	0.26	99	59	0.29
38	19	09	0.32	39	29	0.31	19	39	0.26	39	29	0.29
39	19	39	0.31	59	29	0.31	69	59	0.26	59	79	0.29
40	59	79	0.29	89	00	0.31	19	09	0.26	99	95	0.26
41	89	69	0.28	19	39	0.31	99	97	0.26	96	99	0.26
42	99	00	0.28	49	69	0.30	59	99	0.25	99	94	0.25
43	29	19	0.28	19	59	0.30	89	69	0.24	99	96	0.25
44	49	29	0.27	49	39	0.30	69	49	0.24	59	29	0.25
45	29	69	0.27	99	00	0.29	99	94	0.24	69	59	0.25
46	69	59	0.27	79	69	0.29	99	95	0.23	39	59	0.25
47	19	59	0.26	49	29	0.29	39	59	0.23	19	09	0.25
48	39	59	0.26	69	89	0.27	96	99	0.23	29	19	0.25
49	69	29	0.26	79	29	0.26	29	69	0.23	59	49	0.24
50	49	19	0.25	79	59	0.26	69	29	0.23	29	69	0.24

Table R3b. Top 50 Transition Probabilities Conditional on a Price Change from a 100-State Markov Chain Analysis – for the Dominick's Dataset, in Cents

Rank	Current Ending	Next Ending	%
1	99	99	1.91
2	49	99	1.50
3	99	49	1.35
4	89	99	1.10
5	59	99	0.97
6	29	99	0.97
7	79	99	0.95
8	99	89	0.92
9	19	99	0.88
10	99	29	0.83
11	99	59	0.83
12	39	99	0.83
13	69	99	0.82
14	99	79	0.78
15	99	19	0.71
16	99	69	0.64
17	99	39	0.63
18	09	99	0.61
19	79	89	0.53
20	39	49	0.46
21	99	09	0.45
22	89	79	0.43
23	29	49	0.41
24	69	79	0.39
25	49	29	0.37
26	49	39	0.37
27	29	39	0.37
28	19	59	0.36
29	50	99	0.36
30	59	29	0.35
31	49	59	0.34
32	79	39	0.34
33	99	50	0.34
34	79	69	0.34
35	69	29	0.33
36	09	19	0.33
37	19	29	0.33
38	59	79	0.32
39	59	69	0.31
40	39	29	0.31
41	79	49	0.31
42	29	69	0.30
43	39	79	0.30
44	79	49	0.29
45	29	59	0.29
46	49	79	0.29
47	19	79	0.29
48	59	49	0.29
49	19	49	0.29
50	59	19	0.28

Note: Total number of price changes = 27,524,476.

Table R3c. Top 50 Transition Probabilities for a 100-State Markov Chain Conditional on a Price Change – for the Dominick's Dataset, Regular Prices; Stores #8, #12, #122 and #133, in Cents

Rank	Current Ending	Next Ending	%
1	89	99	1.04
2	99	89	0.80
3	79	99	0.70
4	99	19	0.70
5	79	89	0.66
6	39	49	0.64
7	99	29	0.62
8	49	99	0.60
9	99	09	0.58
10	99	49	0.57
11	29	39	0.56
12	19	99	0.55
13	29	99	0.54
14	99	99	0.54
15	99	79	0.51
16	49	59	0.50
17	69	99	0.49
18	59	69	0.48
19	19	29	0.47
20	69	79	0.46
21	09	19	0.44
22	99	39	0.43
23	59	99	0.42
24	99	69	0.40
25	99	59	0.39
26	09	99	0.38
27	89	79	0.37
28	39	99	0.35
29	29	49	0.35
30	49	39	0.33
31	39	29	0.33
32	59	79	0.32
33	49	69	0.31
34	19	39	0.29
35	69	59	0.28
36	59	49	0.28
37	79	69	0.28
38	69	89	0.27
39	95	99	0.27
40	39	59	0.27
41	19	09	0.27
42	94	99	0.27
43	29	19	0.26
44	49	29	0.24
45	29	59	0.24
46	99	00	0.24
47	59	29	0.24
48	29	69	0.23
49	97	99	0.23
50	69	49	0.23

Note: Total number of price changes = 434,997.

Table R3d. Top 50 Transition Probabilities Conditional on a Price Change for a 100-State Markov Chain Analysis – for the Dominick's Dataset, by Store, Regular Prices Only, in Cents, for the Low Quartile of Products in Terms of the Prevalence of 9-Ending Prices

	Store #8			Store #12			Store #122			Store #133		
Rank	Current Ending	Next Ending	%	Current Ending	Next Ending	%	Current Ending	Next Ending	%	Current Ending	Next Ending	%
1	99	99	2.79	99	99	2.21	99	99	2.33	99	99	2.40
2	89	99	1.84	99	49	1.77	49	99	1.78	49	99	1.78
3	49	99	1.68	49	99	1.77	99	49	1.73	99	49	1.69
4	99	49	1.62	59	99	1.52	89	99	1.31	89	99	1.28
5	99	89	1.60	89	99	1.51	19	99	1.25	79	99	1.08
6	19	99	1.32	99	89	1.50	99	89	1.11	29	99	1.07
7	79	99	1.20	99	59	1.29	79	99	1.11	19	99	1.05
8	99	19	1.15	79	99	1.11	69	99	1.04	69	99	1.03
9	99	79	1.06	19	99	0.97	39	99	0.96	99	89	0.98
10	29	99	0.99	99	79	0.92	29	99	0.95	59	99	0.98
11	69	99	0.99	29	99	0.91	09	99	0.92	39	99	0.89
12	39	99	0.95	99	19	0.84	99	19	0.82	99	29	0.71
13	59	99	0.89	99	29	0.80	59	99	0.79	09	99	0.71
14	99	59	0.84	69	99	0.78	99	69	0.75	99	79	0.70
15	99	39	0.81	39	99	0.75	99	79	0.70	99	19	0.66
16	99	29	0.79	99	69	0.74	79	89	0.69	79	89	0.66
17	09	99	0.77	99	39	0.58	99	39	0.64	99	69	0.64
18	99	69	0.75	39	49	0.54	99	29	0.60	99	59	0.63
19	79	89	0.69	79	89	0.52	39	49	0.58	39	49	0.55
20	39	49	0.58	50	99	0.51	99	59	0.55	99	39	0.54
21	89	79	0.58	99	50	0.50	89	79	0.53	89	79	0.54
22	69	79	0.54	99	09	0.50	49	39	0.52	50	99	0.52
23	50	99	0.50	19	79	0.50	29	49	0.48	49	49	0.50
24	19	49	0.50	49	29	0.49	99	09	0.48	29	49	0.49
25	69	89	0.49	89	79	0.48	69	79	0.46	79	39	0.46
26	49	39	0.48	79	19	0.47	39	89	0.45	89	49	0.45
27	89	69	0.47	29	49	0.46	79	39	0.45	49	29	0.45
28	00	89	0.46	49	59	0.45	29	39	0.44	19	49	0.44
29	89	00	0.46	09	99	0.44	49	89	0.44	99	50	0.44
30	99	50	0.46	49	39	0.43	69	89	0.43	49	39	0.40
31	99	09	0.45	69	89	0.42	69	49	0.42	79	49	0.40
32	79	39	0.45	59	19	0.40	89	69	0.42	49	79	0.39
33	19	59	0.45	19	49	0.40	49	49	0.41	39	89	0.38
34	59	19	0.42	69	79	0.39	19	89	0.41	49	89	0.38
35	79	69	0.41	19	59	0.38	89	49	0.40	19	59	0.37
36	29	49	0.40	89	69	0.38	59	89	0.39	39	69	0.35
37	19	29	0.39	79	39	0.38	19	59	0.39	59	29	0.35
38	29	39	0.38	29	59	0.38	49	29	0.38	69	29	0.35
39	69	29	0.37	49	19	0.37	19	49	0.38	69	79	0.35
40	49	19	0.37	59	29	0.37	39	19	0.37	69	49	0.34
41	09	19	0.36	49	49	0.37	19	29	0.36	09	49	0.34
42	49	19	0.36	69	49	0.36	59	79	0.36	79	19	0.34
43	59	29	0.36	49	69	0.36	19	39	0.35	09	19	0.34
44	49	79	0.36	99	00	0.36	50	99	0.35	79	29	0.33
45	29	59	0.35	39	79	0.35	59	69	0.35	29	89	0.33
46	79	19	0.35	00	89	0.34	49	79	0.34	59	49	0.32
47	99	00	0.35	39	89	0.33	79	19	0.34	19	89	0.32
48	79	49	0.34	49	79	0.33	09	19	0.34	19	79	0.32
49	29	19	0.34	29	29	0.33	69	29	0.33	89	39	0.32
50	69	49	0.34	00	09	0.32	59	49	0.33	19	39	0.31

Table R3e. Top 50 Transition Probabilities for a 100-State Markov Chain Conditional on a Price Change – for the Internet Dataset

	Cents			Dollars		
Rank	Current Ending	Next Ending	%	Current Ending	Next Ending	%
1	00	00	18.36	14	14	1.47
2	99	99	11.89	11	11	1.36
3	95	95	8.83	15	15	1.28
4	98	98	1.13	09	09	1.23
5	00	99	0.89	13	13	1.16
6	99	00	0.85	99	99	1.01
7	99	95	0.72	12	12	0.80
8	00	95	0.66	10	10	0.67
9	99	98	0.64	08	08	0.63
10	99	49	0.62	14	15	0.59
11	49	99	0.62	16	16	0.58
12	95	00	0.62	15	14	0.54
13	95	99	0.57	14	13	0.49
14	98	99	0.54	12	11	0.48
15	49	49	0.28	13	14	0.48
16	00	50	0.25	11	12	0.44
17	88	88	0.24	22	22	0.43
18	50	00	0.23	12	13	0.42
19	85	85	0.20	13	12	0.42
20	96	96	0.19	99	49	0.42
21	89	99	0.19	19	19	0.41
22	00	90	0.18	11	10	0.39
23	96	99	0.18	21	21	0.39
24	24	99	0.17	49	99	0.38
25	97	97	0.16	10	11	0.35
26	99	24	0.15	29	19	0.35
27	94	99	0.14	99	79	0.35
28	99	19	0.14	23	23	0.32
29	99	89	0.14	17	16	0.31
30	90	00	0.13	16	17	0.30
31	99	88	0.13	10	09	0.29
32	99	94	0.13	49	29	0.29
33	50	50	0.12	09	08	0.29
34	19	99	0.11	49	39	0.29
35	90	90	0.11	07	07	0.28
36	82	82	0.10	16	14	0.28
37	88	99	0.10	17	17	0.27
38	95	75	0.10	15	16	0.27
39	99	39	0.10	99	89	0.26
40	97	99	0.10	79	99	0.26
41	99	29	0.10	08	09	0.25
42	99	97	0.10	15	13	0.24
43	89	89	0.10	24	24	0.24
44	49	59	0.09	25	25	0.24
45	75	95	0.09	49	49	0.24
46	75	75	0.09	09	10	0.24
47	99	79	0.09	16	15	0.23
48	75	00	0.08	39	29	0.23
49	59	69	0.08	14	16	0.22
50	59	99	0.08	14	12	0.21

Note: Total number of price changes = 41,034

Table R3f. Top 50 Transition Probabilities by Price Level for a 100-State Markov Chain Conditional on a Price Change – for the Internet Dataset

	Cents						Dollars					
	Low-Priced Categories			High-Priced Categories			Low-Priced Categories			High-Priced Categories		
Rank	Current Ending	Next Ending	%	Current Ending	Next Ending	%	Current Ending	Next Ending	%	Current Ending	Next Ending	%
1	99	99	16.32	00	00	28.59	14	14	4.03	99	99	1.51
2	98	98	1.80	95	95	12.77	11	11	3.72	99	49	0.65
3	95	95	1.75	99	99	9.42	15	15	3.53	49	99	0.60
4	99	98	1.19	00	99	1.34	09	09	3.31	99	79	0.54
5	49	99	1.04	99	00	1.29	13	13	3.21	79	99	0.40
6	98	99	0.97	00	95	1.02	12	12	2.18	99	89	0.39
7	99	49	0.95	95	00	0.96	10	10	1.84	49	39	0.33
8	96	96	0.50	99	95	0.94	08	08	1.62	49	49	0.28
9	24	99	0.45	98	98	0.76	14	15	1.59	89	79	0.28
10	99	24	0.42	95	99	0.75	16	16	1.55	79	69	0.28
11	96	99	0.40	99	49	0.44	15	14	1.40	39	29	0.27
12	89	99	0.37	00	50	0.39	13	14	1.26	49	29	0.25
13	88	88	0.37	49	99	0.39	14	13	1.25	29	99	0.25
14	99	95	0.34	50	00	0.35	12	11	1.17	99	69	0.25
15	99	19	0.33	99	98	0.33	11	12	1.16	99	94	0.24
16	82	82	0.28	49	49	0.32	22	22	1.15	59	49	0.23
17	99	89	0.27	98	99	0.30	12	13	1.12	99	98	0.23
18	19	99	0.26	85	85	0.29	13	12	1.06	79	49	0.22
19	95	99	0.26	00	90	0.27	19	19	1.06	19	99	0.22
20	99	39	0.25	97	97	0.22	21	21	1.01	69	59	0.21
21	99	29	0.25	90	00	0.20	11	10	0.94	89	99	0.21
22	49	59	0.24	94	99	0.18	10	11	0.90	99	29	0.20
23	49	49	0.22	90	90	0.17	23	23	0.84	29	19	0.20
24	09	95	0.21	99	94	0.17	16	17	0.78	09	99	0.20
25	59	69	0.21	88	88	0.17	17	16	0.74	19	09	0.18
26	99	05	0.21	50	50	0.16	17	17	0.74	89	89	0.18
27	29	39	0.20	75	00	0.13	10	09	0.71	69	89	0.18
28	79	59	0.20	75	75	0.13	07	07	0.70	69	99	0.18
29	79	89	0.20	95	75	0.13	16	14	0.69	79	79	0.18
30	19	89	0.20	75	95	0.12	09	08	0.68	79	78	0.17
31	99	79	0.20	00	75	0.11	24	24	0.65	99	19	0.17
32	29	49	0.19	89	89	0.11	09	10	0.63	99	97	0.17
33	39	49	0.19	99	88	0.10	15	13	0.63	69	79	0.17
34	99	88	0.19	94	94	0.09	15	16	0.63	99	59	0.16
35	29	99	0.18	00	98	0.09	25	25	0.62	39	99	0.16
36	36	16	0.18	95	50	0.09	08	09	0.61	89	69	0.15
37	95	89	0.18	97	99	0.09	29	19	0.61	29	49	0.15
38	16	36	0.18	25	25	0.08	14	16	0.59	88	88	0.15
39	49	79	0.18	89	99	0.08	20	20	0.57	94	94	0.15
40	58	98	0.18	75	50	0.08	16	15	0.54	97	97	0.15
41	98	48	0.18	50	95	0.07	21	22	0.54	89	88	0.14
42	39	99	0.17	90	99	0.07	13	15	0.52	94	99	0.14
43	46	99	0.17	95	94	0.07	14	12	0.51	69	49	0.14
44	48	98	0.17	99	90	0.07	22	21	0.50	49	79	0.14
45	65	53	0.17	99	97	0.07	26	26	0.46	90	89	0.14
46	88	99	0.17	90	50	0.07	13	11	0.45	95	94	0.14
47	05	99	0.16	80	00	0.06	19	17	0.42	98	99	0.13
48	69	79	0.16	88	00	0.06	06	06	0.42	39	49	0.13
49	69	99	0.16	88	99	0.06	25	26	0.40	96	95	0.13
50	95	09	0.16	94	95	0.06	19	16	0.39	00	99	0.13

Note: Low-priced categories include CDs, DVDs, and Video Games. High-priced categories include Computer Monitors, Digital Cameras, DVD Players, Hard Drives, Laptop Computers, PDAs, and Software.

Figure R7a. Frequency Distribution of the Price Changes – for the Dominick's Dataset, by Category

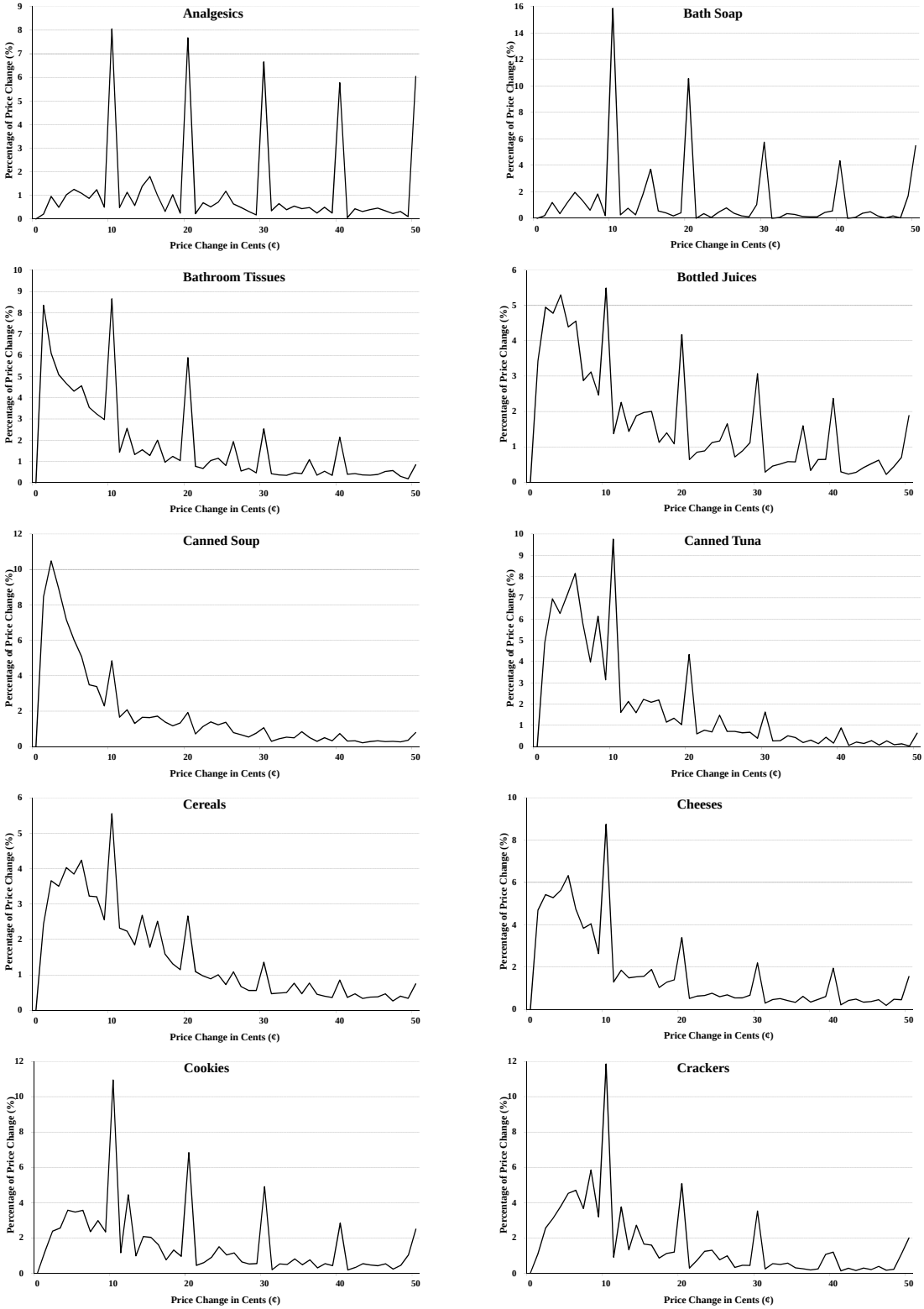


Figure R7b. Frequency Distribution of the Price Changes – for the Dominick's Dataset, by Category

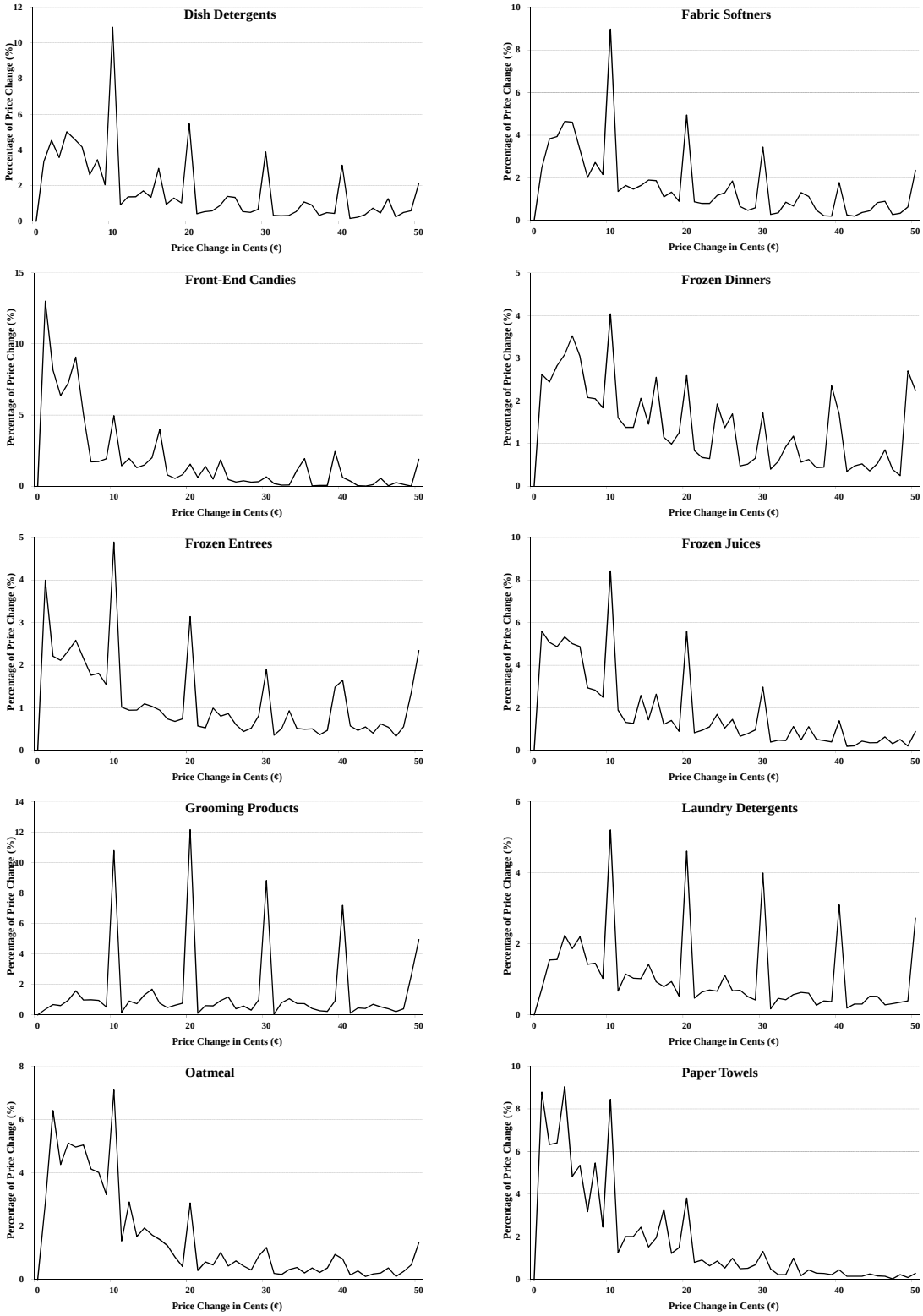


Figure R7c. Frequency Distribution of the Price Changes – for the Dominick's Dataset, by Category

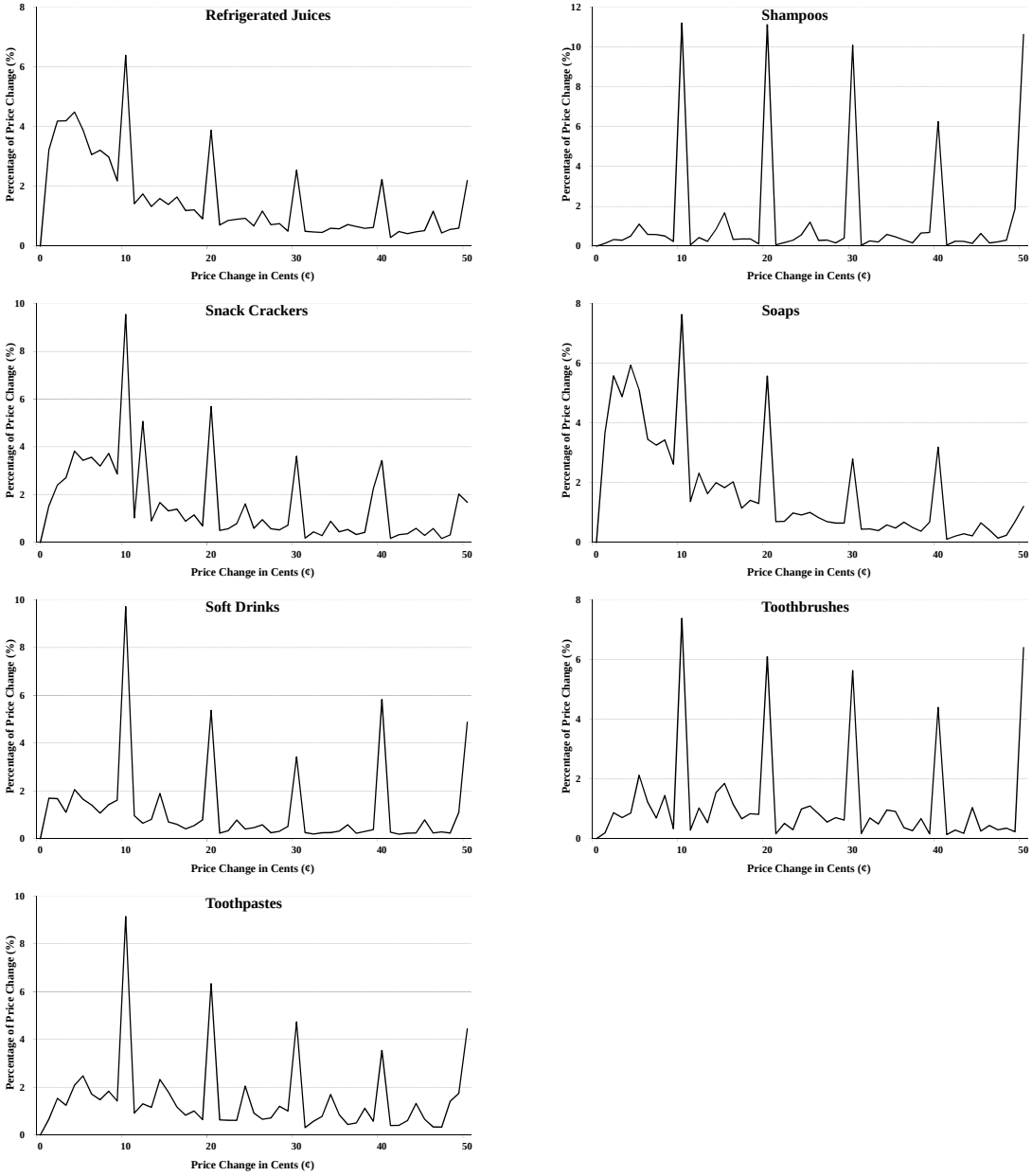


Table R4: Price Changes in Multiples of Dimes in the Dominick's Dataset: 9¢- vs. Non-9¢-Ending Prices

Category	9¢-Ending		Non-9¢-Ending		*p*-Value
	Multiples of Dimes	Sample Size	Multiples of Dimes	Sample Size	
Analgesics	78.25%	367,969	5.60%	102,550	.0000
Bath Soap	74.93%	58,735	12.65%	18,298	.0000
Bathroom Tissues	47.97%	156,863	4.09%	184,414	.0000
Bottled Juices	42.10%	457,490	5.33%	583,025	.0000
Canned Soup	26.14%	304,439	4.12%	741,357	.0000
Canned Tuna	36.10%	170,023	6.15%	281,703	.0000
Cereals	37.21%	271,757	8.32%	494,597	.0000
Cheeses	46.49%	872,489	4.57%	1,039,738	.0000
Cookies	58.73%	1,135,112	9.01%	709,697	.0000
Crackers	46.99%	283,278	7.31%	279,353	.0000
Dish Detergent	56.10%	240,532	4.75%	183,222	.0000
Fabric Softeners	51.41%	212,288	5.96%	191,319	.0000
Front-End Candies	18.47%	137,453	11.66%	385,234	.0000
Frozen Dinners	32.72%	230,423	5.70%	336,201	.0000
Frozen Entrees	42.49%	883,284	5.93%	1,183,557	.0000
Frozen Juices	46.75%	301,114	5.40%	395,344	.0000
Grooming Products	71.30%	1,017,513	10.22%	287,969	.0000
Laundry Detergents	68.07%	446,767	4.68%	210,342	.0000
Oatmeal	36.27%	72,753	7.17%	107,971	.0000
Paper Towels	37.01%	109,596	4.26%	152,846	.0000
Refrigerated Juices	46.25%	405,144	4.59%	418,402	.0000
Shampoos	80.84%	1,916,061	29.23%	238,976	.0000
Snack Crackers	48.53%	488,341	4.61%	405,005	.0000
Soaps	48.23%	180,935	4.79%	190,632	.0000
Soft Drinks	76.54%	4,614,455	15.36%	1,219,151	.0000
Tooth Brushes	74.22%	350,705	2.46%	123,840	.0000
Tooth Pastes	61.64%	468,688	6.18%	291,045	.0000
Total	62.81%	16,154,207	7.64%	10,755,788	.0000

Note: The column heading *p*-Value is an asymptotic significance level derived from the Pearson χ^2 test.

Table R5: Price Changes in Multiples of Dollars in the Dominick's Data: 99¢- vs. Non-99¢-Ending Prices

Category	99¢-Ending		Non-99¢-Ending		*p*-Value
	Multiples of Dollars	Sample Size	Multiples of Dollars	Sample Size	
Analgesics	17.09%	106,038	1.39%	364,481	.0000
Bath Soap	21.06%	15,608	3.11%	61,425	.0000
Bathroom Tissues	1.66%	36,944	0.04%	304,333	.0000
Bottled Juices	2.02%	104,451	0.27%	936,064	.0000
Canned Soup	0.19%	56,527	0.01%	989,269	.0000
Canned Tuna	2.96%	19,566	0.03%	432,160	.0000
Cereals	6.60%	56,437	0.99%	709,917	.0000
Cheeses	3.03%	160,237	0.16%	1,751,990	.0000
Cookies	5.41%	270,448	1.01%	1,574,361	.0000
Crackers	9.79%	62,297	0.06%	500,334	.0000
Dish Detergent	1.83%	52,117	0.22%	371,637	.0000
Fabric Softeners	10.67%	62,370	0.31%	341,237	.0000
Front-End Candies	*0.00%*	*11,923*	*0.01%*	*510,764*	*.1887*
Frozen Dinners	3.38%	56,617	0.65%	510,007	.0000
Frozen Entrees	8.47%	188,496	0.53%	1,878,345	.0000
Frozen Juices	0.21%	67,862	0.04%	628,596	.0000
Grooming Products	5.21%	247,298	1.63%	1,058,184	.0000
Laundry Detergents	20.15%	158,974	2.53%	498,135	.0000
Oatmeal	1.28%	12,921	0.82%	167,806	.0000
Paper Towels	8.38%	15,137	0.03%	247,305	.0000
Refrigerated Juices	4.76%	101,063	0.25%	722,522	.0000
Shampoos	12.99%	503,157	5.86%	1,651,880	.0000
Snack Crackers	3.23%	97,690	0.13%	795,656	.0000
Soaps	4.43%	43,874	0.20%	327,693	.0000
Soft Drinks	12.87%	1,385,935	2.86%	4,447,671	.0000
Tooth Brushes	19.06%	108,407	0.89%	366,138	.0000
Tooth Pastes	4.85%	117,086	0.57%	642,647	.0000
Total	9.86%	4,119,480	1.39%	22,790,515	.0000

Note: Categories with unsupportive results are indicated by italics. The column heading *p*-Value is an asymptotic significance level derived from the Pearson χ^2 test.

Table R6. Price Changes in Multiples of Dimes in the Internet Dataset: 9¢- vs. Non-9¢-Endings

Category	9¢-Endings		Non-9¢-Endings		*p*-Value
	Multiples of Dimes	Sample Size	Multiples of Dimes	Sample Size	
Music CDs	73.32%	2,268	21.17%	2,352	.0000
Movie DVDs	66.90%	2,813	23.08%	5,888	.0000
Video Games	80.05%	832	44.17%	532	.0000
Software	*57.32%*	*778*	*60.43%*	*4,751*	*.1015*
PDAs	66.76%	355	59.40%	1,436	.0110
Hard Drives	74.36%	1,435	57.39%	5,517	.0000
DVD Players	*57.18%*	*383*	*59.83%*	*1,210*	*.3569*
PC Monitors	*47.71%*	*809*	*56.08%*	*5,150*	*.0000*
Digital Cameras	*72.77%*	*852*	*77.07%*	*3,018*	*.0093*
Notebook PCs	*73.91%*	*92*	*78.51%*	*563*	*.3250*
Total	68.32%	10,617	50.50%	30,417	.0000

Note: Categories with unsupportive results are indicated by italics. The column heading *p*-Value is an asymptotic significance level derived from the Pearson χ^2 test.

Table R7. Price Changes in Multiples of Dollars in the Internet Data: 99¢- vs. Non-99¢-Endings

Category	99¢-Endings		Non-99¢-Endings		*p*-Value
	Multiples of Dollars	Sample Size	Multiples of Dollars	Sample Size	
Music CDs	62.43%	1,142	5.69%	3,478	.0000
Movie DVDs	72.19%	1,532	6.89%	7,169	.0000
Video Games	77.69%	744	33.71%	620	.0000
Software	56.42%	553	50.18%	4,976	.0054
PDAs	70.33%	300	52.45%	1,491	.0000
Hard Drives	84.95%	1,083	45.14%	5,869	.0000
DVD Players	59.27%	329	50.08%	1,264	.0030
PC Monitors	*47.98%*	*544*	*47.17%*	*5,415*	*.7174*
Digital Cameras	*65.02%*	*852*	*74.12%*	*3,018*	*.0000*
Notebook PCs	84.38%	64	72.76%	591	.0444
Total	69.13%	7,056	37.40%	33,978	.0000

Note: Categories with unsupportive results are indicated by italics. The column heading *p*-Value is an asymptotic significance level derived from the Pearson χ^2 test.

Table R8. Price Changes in Multiples of $10 in the Internet Dataset: $9- vs. Non-$9-Endings

Category	$9-Endings		Non-$9-Endings		*p*-Value
	Multiples of $10	Sample Size	Multiples of $10	Sample Size	
Music CDs	*0.00%*	*587*	*0.25%*	*4,033*	*.2271*
Movie DVDs	2.92%	926	0.35%	7,775	.0000
Video Games	32.78%	659	11.99%	705	.0000
Software	29.62%	1,347	3.25%	4,182	.0000
PDAs	43.38%	710	4.07%	1,081	.0000
Hard Drives	22.50%	1,169	2.11%	5,783	.0000
DVD Players	33.23%	641	7.35%	952	.0000
PC Monitors	33.43%	1,436	4.13%	4,523	.0000
Digital Cameras	48.98%	1,899	9.84%	1,971	.0000
Notebook PCs	74.13%	344	19.29%	311	.0000
Total	31.65%	9,718	2.76%	31,316	.0000

Note: Categories with unsupportive results are indicated by italics. The column heading *p*-Value is an asymptotic significance level derived from the Pearson χ^2 test.

Table R9. Price Changes in Multiples of $10 in the Internet Dataset: $9.99- vs. Non-$9.99-Endings

Category	$9.99-Endings		Non-$9.99-Endings		*p*-Value
	Multiples of $10	Sample Size	Multiples of $10	Sample Size	
Music CDs	*0.00%*	*76*	*0.22%*	*4,544*	*.6822*
Movie DVDs	11.70%	188	0.38%	8,513	.0000
Video Games	42.26%	433	5.05%	931	.0000
Software	44.62%	186	8.46%	5,343	.0000
PDAs	38.82%	170	17.64%	1,621	.0000
Hard Drives	50.45%	335	3.26%	6,617	.0000
DVD Players	42.47%	219	13.83%	1,374	.0000
PC Monitors	34.41%	247	10.19%	5,712	.0000
Digital Cameras	55.48%	566	24.06%	3,304	.0000
Notebook PCs	78.72%	47	9.63%	608	.0000
Total	42.64%	2,467	7.49%	38,567	.0000

Note: Categories with unsupportive results are indicated by italics. The column heading *p*-Value is an asymptotic significance level derived from the Pearson χ^2 test.

Table R10. Price Changes in Multiples of $100 in the Internet Dataset: $99- vs. Non-$99-Endings

Category	$99-Endings		Non-$99-Endings		*p*-Value
	Multiples of $100	Sample Size	Multiples of $100	Sample Size	
Music CDs	*N/A*				
Movie DVDs					
Video Games					
Software	1.59%	251	0.23%	5,278	.0000
PDAs	10.66%	122	0.30%	1,669	.0000
Hard Drives	*0.00%*	*197*	*0.06%*	*6815*	*.7993*
DVD Players	6.06%	132	0.41%	1,461	.0000
PC Monitors	15.36%	332	0.32%	5,627	.0000
Digital Cameras	19.12%	476	0.77%	3,394	.0000
Notebook PCs	38.51%	161	6.07%	494	.0000
Total	13.70%	1,671	0.26%	39,363	.0000

Note: Categories with unsupportive results are indicated by italics. The column heading *p*-Value is an asymptotic significance level derived from Pearson χ^2 test.

Table R11. Price Changes in Multiples of $100 for the Internet Data: $99.99- vs. Non-$99.99-Endings

Category	$99.99-Endings		Non-$99.99-Endings		*p*-Value
	Multiples of $100	Sample Size	Multiples of $100	Sample Size	
Music CDs	*N/A*				
Movie DVDs					
Video Games					
Software	*0.00%*	*37*	*0.29%*	*5,492*	*.7423*
PDAs	*2.94%*	*34*	*0.97%*	*1,757*	*.2531*
Hard Drives	*0.00%*	*36*	*0.06%*	*6,916*	*.8852*
DVD Players	8.93%	56	0.59%	1,537	.0000
PC Monitors	12.50%	64	1.03%	5,895	.0000
Digital Cameras	14.39%	139	2.60%	3,731	.0000
Notebook PCs	41.18%	17	13.32%	638	.0011
Total	10.07%	407	0.71%	40,627	.0000

Note: Categories with unsupportive results are indicated by italics. The column heading *p*-Value is an asymptotic significance level derived from the Pearson χ^2 test.

D. Detailed Results on Price Rigidity

Table R12a. Logit Regression Estimation with Product-Level Fixed Effects for Regular Prices – for the Dominick's Dataset, Store #8

Category	9¢-Ending (*9-Ending*$_9$ = 1)		99¢-Ending (*9-Ending*$_{99}$ = 1)	
	Coeff.	Odds Ratio	Coeff.	Odds Ratio
Analgesics	– 1.1677	0.31	– 0.2411	0.79
Bath Soap	– 2.2213	0.11	– 1.2291	0.29
Bathroom Tissues	– 0.3398	0.71	*0.2493*	1.28
Bottled Juices	– 0.4762	0.62	– 0.4973	0.61
Canned Soup	– 0.3535	0.70	– 0.4861	0.62
Canned Tuna	– 0.5950	0.55	– 0.4069	0.67
Cereals	– 0.3094	0.73	– 0.1644	0.85
Cheeses	– 1.6407	0.19	– 1.2511	0.29
Cookies	– 1.6438	0.19	– 0.9056	0.40
Crackers	– 1.5476	0.21	– 0.7460	0.47
Dish Detergent	– 0.8510	0.43	– 0.7509	0.47
Fabric Softeners	– 0.4802	0.62	*– 0.1294*	0.88
Front-End Candies	– 0.7422	0.48	– 1.1140	0.33
Frozen Dinners	– 1.4322	0.24	– 0.4512	0.64
Frozen Entrees	– 1.2126	0.30	– 0.5371	0.58
Frozen Juices	– 0.2585	0.77	*0.1160*	1.12
Grooming Products	– 1.8585	0.16	– 0.5076	0.60
Laundry Detergents	– 1.4641	0.23	– 0.4155	0.66
Oatmeal	– 0.9740	0.38	*0.6991*	2.01
Paper Towels	– 0.4516	0.64	– 0.7464	0.47
Refrigerated Juices	– 0.8390	0.43	– 0.3572	0.70
Shampoos	– 1.7033	0.18	*0.0484*	1.05
Snack Crackers	– 1.4559	0.23	– 0.4156	0.66
Soaps	– 1.6553	0.19	– 0.5254	0.59
Soft Drinks	– 2.3835	0.09	– 0.3610	0.70
Tooth Brushes	– 0.5696	0.57	*– 0.1025*	0.90
Tooth Pastes	– 0.4523	0.64	– 0.3599	0.70
Average		0.40		0.72

Note: *9-Ending*$_9$ *and 9-Ending*$_{99}$ are 9-ending dummy variables, which equal 1 if the price ends with "9" or "99," and 0 otherwise. All p-values < 0.0001, except for the italicized coefficients, for which $p > .10$. The average odds ratios reported in the last row of the table are the simple averages of the odds ratios for each product category.

Table R12b. Logit Regression Estimation with Product-Level Fixed Effects for Regular Prices – for the Dominick's Dataset, Store #12

Category	9¢-Ending (*9-Ending*$_9$ = 1)		99¢-Ending (*9-Ending*$_{99}$ = 1)	
	Coeff.	Odds Ratio	Coeff.	Odds Ratio
Analgesics	– 1.5589	0.21	– 0.3367	0.71
Bath Soap	– 1.8097	0.16	– 0.6650	0.51
Bathroom Tissues	– 0.2056	0.81	*– 0.0397*	0.96
Bottled Juices	– 0.6767	0.51	*0.1706*	1.19
Canned Soup	– 0.5149	0.60	– 0.6610	0.52
Canned Tuna	– 0.8264	0.44	– 0.8210	0.44
Cereals	– 0.2885	0.75	*0.0288*	1.03
Cheeses	– 1.6640	0.19	– 1.1023	0.33
Cookies	– 1.8859	0.15	– 1.0973	0.33
Crackers	– 1.5576	0.21	– 0.7035	0.49
Dish Detergent	– 0.7660	0.46	– 0.3160	0.73
Fabric Softeners	– 0.6354	0.53	– 0.5837	0.56
Front-End Candies	– 0.8269	0.44	– 1.2994	0.27
Frozen Dinners	– 1.3782	0.25	– 0.4012	0.67
Frozen Entrees	– 1.3498	0.26	– 0.7926	0.45
Frozen Juices	– 0.4710	0.62	*0.2026*	1.22
Grooming Products	– 2.4000	0.09	– 0.6572	0.52
Laundry Detergents	– 1.1451	0.32	*– 0.0734*	0.93
Oatmeal	– 0.5015	0.61	– 1.1298	0.32
Paper Towels	– 0.2459	0.78	– 1.1351	0.32
Refrigerated Juices	– 0.9773	0.38	– 0.5579	0.57
Shampoos	– 3.8464	0.02	– 0.3303	0.72
Snack Crackers	– 1.8120	0.16	– 0.7312	0.48
Soaps	– 1.2851	0.28	*– 0.1802*	0.84
Soft Drinks	– 3.2185	0.04	– 0.5519	0.58
Tooth Brushes	– 1.1053	0.33	– 0.5290	0.59
Tooth Pastes	– 0.8223	0.44	– 0.6423	0.53
Average		0.37		0.62

Note: *9-Ending*$_9$or *9-Ending*$_{99}$ are 9-ending dummy variables, which equal 1 if the price ends with "9" or "99," and 0 otherwise. All *p*-values are less than 0.0001, except for the italicized coefficients, for which $p > .10$. The average odds ratios reported in the last row of the table are the simple averages of the odds ratios for each product category.

Table R12c. Logit Regression Estimation with Product-Level Fixed Effects for Regular Prices – for the Dominick's Dataset, Store #122

Category	9¢-Ending (*9-Ending*$_9$ = 1)		99¢-Ending (*9-Ending*$_{99}$ = 1)	
	Coeff.	**Odds Ratio**	**Coeff.**	**Odds Ratio**
Analgesics	– 1.8527	0.16	– 0.4197	0.66
Bath Soap	– 1.6792	0.19	– 0.7045	0.49
Bathroom Tissues	– 0.5936	0.55	*– 0.1470*	0.86
Bottled Juices	– 1.0835	0.34	– 0.7830	0.46
Canned Soup	– 0.5211	0.59	– 0.6410	0.53
Canned Tuna	– 0.8724	0.42	– 0.6300	0.53
Cereals	– 0.7885	0.45	– 0.6695	0.51
Cheeses	– 1.8737	0.15	– 1.1211	0.33
Cookies	– 2.2580	0.10	– 1.1750	0.31
Crackers	– 2.2165	0.11	– 1.2748	0.28
Dish Detergent	– 1.3232	0.27	– 0.7658	0.46
Fabric Softeners	– 1.0728	0.34	– 0.6999	0.50
Front-End Candies	– 0.8878	0.41	– 1.5105	0.22
Frozen Dinners	– 2.0393	0.13	– 0.8201	0.44
Frozen Entrees	– 1.1912	0.30	– 0.7857	0.46
Frozen Juices	– 0.4213	0.66	– 0.4161	0.66
Grooming Products	– 2.9716	0.05	– 0.8471	0.43
Laundry Detergents	– 2.6676	0.07	– 1.0936	0.34
Oatmeal	– 1.1534	0.32	*0.1812*	1.20
Paper Towels	– 1.0415	0.35	– 0.7675	0.46
Refrigerated Juices	– 0.9071	0.40	*– 0.1166*	0.89
Shampoos	– 2.6157	0.07	– 0.7229	0.49
Snack Crackers	– 2.1846	0.11	– 0.9171	0.40
Soaps	– 2.3531	0.10	– 0.7919	0.45
Soft Drinks	– 3.4715	0.03	– 0.7920	0.45
Tooth Brushes	– 1.3230	0.27	– 0.8326	0.43
Tooth Pastes	– 0.7877	0.45	– 0.7520	0.47
Average		0.27		0.51

Note: *9-Ending*$_9$ or *9-Ending*$_{99}$ are 9-ending dummy variables, which equal 1 if the price ends with "9" or "99," and 0 otherwise. All *p*-values are less than 0.0001, except for italicized coefficients, for which $p > .10$. The average odds ratios reported in the last row of the table are the simple averages of the odds ratios for each product category.

Table R12d. Logit Regression Estimation with Product-Level Fixed Effects for Regular Prices – for the Dominick's Dataset, Store #133

Category	9¢-Ending (*9-Ending*$_9$ = 1)		99¢-Ending (*9-Ending*$_{99}$ = 1)	
	Coeff.	**Odds Ratio**	**Coeff.**	**Odds Ratio**
Analgesics	– 1.6394	0.19	– 0.4019	0.67
Bath Soap	– 1.6398	0.19	– 0.6139	0.54
Bathroom Tissues	– 1.2778	0.28	*– 0.1916*	0.83
Bottled Juices	– 1.2537	0.29	– 1.0469	0.35
Canned Soup	– 0.6521	0.52	– 0.8803	0.41
Canned Tuna	– 1.5447	0.21	– 0.6787	0.51
Cereals	– 0.8816	0.41	– 0.7887	0.45
Cheeses	– 2.5728	0.08	– 1.0503	0.35
Cookies	– 3.1094	0.04	– 1.3447	0.26
Crackers	– 2.1196	0.12	– 1.1906	0.30
Dish Detergent	– 1.8553	0.16	– 1.5776	0.21
Fabric Softeners	– 1.0582	0.35	– 0.9088	0.40
Front-End Candies	– 1.1614	0.31	– 3.0656	0.05
Frozen Dinners	– 1.9305	0.15	– 1.3401	0.26
Frozen Entrees	– 1.8965	0.15	– 1.0437	0.35
Frozen Juices	– 0.5149	0.60	*– 0.0027*	1.00
Grooming Products	– 2.2651	0.10	– 0.7322	0.48
Laundry Detergents	– 2.0479	0.13	– 0.9456	0.39
Oatmeal	– 1.2421	0.29	*0.5850*	1.79
Paper Towels	– 1.0388	0.35	– 0.8423	0.43
Refrigerated Juices	– 1.2913	0.27	– 1.3291	0.26
Shampoos	– 2.0740	0.13	– 0.5356	0.59
Snack Crackers	– 2.3402	0.10	– 1.2890	0.28
Soaps	– 1.9898	0.14	– 0.9234	0.40
Soft Drinks	– 4.7696	0.01	– 1.1849	0.31
Tooth Brushes	– 0.9789	0.38	– 0.7516	0.47
Tooth Pastes	– 0.8136	0.44	– 0.8738	0.42
Average		0.24		0.47

Note: 9-*Ending*$_9$ and *9-Ending*$_{99}$ are 9-ending dummy variables, which equal 1 if the price ends with "9" or "99," and 0 otherwise. All *p*-values are less than 0.0001, except for the italicized coefficients, for which $p > .10$. The average odds ratios reported in the last row of the table are the simple averages of the odds ratios for each product category.

Table 12e. Results of the Logit Regression (Equation 1) Estimation for the Entire Dominick's Data

	9¢-Ending		99¢-Ending	
	D_9 (9-Ending = 1)		D_{99} (9-Ending = 1)	
Category	**Coeff.**	**O/R**	**Coeff.**	**O/R**
Analgesics	– 0.6781	0.51	– 0.1847	0.83
Bath Soap	– 0.8155	0.44	– 0.2273	0.80
Bathroom Tissues	– 0.5036	0.60	– 0.3426	0.71
Bottled Juices	– 0.2891	0.75	– 0.2042	0.81
Canned Soup	– 0.1112	0.89	– 0.1629	0.85
Canned Tuna	– 0.5331	0.59	– 0.4714	0.62
Cereals	– 0.2558	0.77	– 0.1603	0.85
Cheeses	– 0.9142	0.40	– 0.6098	0.54
Cookies	– 0.8173	0.44	– 0.1876	0.83
Crackers	– 0.4412	0.64	– 0.0441	0.96
Dish Detergent	– 0.6283	0.53	– 0.6024	0.55
Fabric Softeners	– 0.3779	0.69	– 0.1980	0.82
Front-end-candies	– 0.4477	0.64	– 1.3781	0.25
Frozen Dinners	– 0.5808	0.56	– 0.4377	0.65
Frozen Entrees	– 0.5642	0.57	– 0.1291	0.88
Frozen Juices	– 0.2451	0.78	– 0.1008	0.90
Grooming Products	– 0.9030	0.41	– 0.2406	0.79
Laundry Detergents	– 0.5783	0.56	– 0.1446	0.87
Oatmeal	– 0.5805	0.56	– 0.2548	0.78
Paper Towels	– 0.5186	0.60	– 0.1546	0.86
Refrigerated Juices	– 0.5042	0.60	– 0.2908	0.75
Shampoos	– 0.7868	0.46	– 0.2957	0.74
Snack Crackers	– 0.8517	0.43	– 0.3930	0.68
Soaps	– 0.6709	0.51	– 0.3583	0.70
Soft Drinks	– 0.6709	0.51	– 0.3583	0.70
Tooth Brushes	– 0.3154	0.73	– 0.0709	0.93
Tooth Pastes	– 0.2343	0.79	– 0.2760	0.76
Average		0.59		0.76

E. Detailed Results on the Size of Price Change

Table R13. Average Price Change for 9¢- and Non-9¢-Ending Prices – in the Dominick's Dataset, Stores #8, #12, #122 and #133, for the Low Quartile of the Products in Terms of 9-Ending Popularity

Category	9¢-Ending		Non-9¢-Ending		*t*-Stat	*p*-Value
	Mean Price Change	Sample Size	Mean Price Change	Sample Size		
Analgesics	$0.4348	499	$0.3583	519	2.15	0.032
Bath Soap	*$0.5078*	*92*	*$0.6090*	*90*	*-0.79*	*0.431*
Bathroom Tissues	$0.2197	3,737	$0.2175	6,201	*0.28*	*0.783*
Bottled Juices	$0.3137	12,021	$0.2610	19,670	12.06	0.000
Canned Soup	$0.2244	13,251	$0.1870	32,121	11.36	0.000
Canned Tuna	$0.2017	4,616	$0.1399	9,602	11.70	0.000
Cereals	$0.5445	9,236	$0.4959	21,680	6.86	0.000
Cheeses	$0.2721	14,076	$0.1755	29,765	33.20	0.000
Cookies	*$0.3448*	*6,407*	*$0.3602*	*12,551*	*-2.25*	*0.025*
Crackers	$0.1946	2,423	$0.1630	4,877	5.066	0.000
Dish Detergent	$0.2774	3,639	$0.2231	4,704	10.60	0.000
Fabric Softeners	$0.3873	4,556	$0.2713	5,458	14.86	0.000
Front-End Candies	*$0.1343*	*4,583*	*$0.2073*	*15,491*	*-16.08*	*0.000*
Frozen Dinners	*$0.4821*	*5,596*	*$0.5615*	*11,228*	*-8.37*	*0.000*
Frozen Entrees	$0.6801	20,816	$0.6766	41,792	*0.49*	*0.622*
Frozen Juices	$0.2773	9,555	$0.2584	15,428	-3.44	0.000
Grooming Products	$0.5061	1,331	$0.4886	1,640	*1.60*	*0.110*
Laundry Detergents	$0.7462	1,850	$0.4203	1,921	14.46	0.000
Oatmeal	$0.4895	1,867	$0.4774	3,409	*0.93*	*0.355*
Paper Towels	*$0.1433*	*3,018*	*$0.1571*	*5,875*	*-2.07*	*0.038*
Refrigerated Juices	$0.3638	10,338	$0.3030	12,737	13.62	0.000
Shampoos	$0.3830	493	$0.3001	437	4.60	0.000
Snack Crackers	*$0.3136*	*4,078*	*$0.3294*	*5,534*	*-1.99*	*0.47*
Soaps	$0.1940	1,692	$0.1423	3,703	8.606	0.000
Soft Drinks	$0.3767	6,329	$0.2046	15,270	24.09	0.000
Tooth Brushes	$0.4364	1,706	$0.3577	1,207	6.75	0.000
Tooth Pastes	$0.3964	9,445	$0.3363	8,852	14.64	0.000
Total	$0.3754	157,250	$0.3314	291,762	27.61	0.000
Average	$0.3647		$0.3216			
Median	$0.3293		$0.2662			

Note: Categories with unsupportive results are indicated by italics. The *p*-value is a significance level derived from an independent samples *t*-test assuming equal variances. Cross-category paired t-tests showed that the price changes are of a larger magnitude when prices end with "9" ($t_{26} = 2.728$, $p = .011$).

Table R14. Average Price Change for 99¢- and Non-99¢-Ending Prices – for the Dominick's Dataset, Stores #8, #12, #122 and #133, for the Low Quartile of the Products in Terms of 9-Ending Popularity

Category	9¢-Ending		Non-9¢-Ending		*t*-Stat	*p*-Value
	Mean Price Change	Sample Size	Mean Price Change	Sample Size		
Analgesics	$0.5369	122	$0.3766	896	2.92	0.004
Bath Soap	$1.1410	20	$0.4859	162	3.28	0.000
Bathroom Tissues	$0.2733	901	$0.2129	9,037	4.50	0.000
Bottled Juices	$0.3754	2,909	$0.2715	28,782	14.16	0.000
Canned Soup	$0.2817	2,640	$0.1928	42,732	13.90	0.000
Canned Tuna	$0.3976	489	$0.1515	13,729	18.25	0.000
Cereals	$0.7164	1,948	$0.4966	28,968	16.54	0.000
Cheeses	$0.3901	2,346	$0.1961	41,495	32.09	0.000
Cookies	$0.4550	1,771	$0.3447	17,187	9.93	0.000
Crackers	$0.2330	511	$0.1690	6,789	5.56	0.000
Dish Detergent	$0.3678	798	$0.2340	7,545	15.59	0.000
Fabric Softeners	$0.5809	1,333	$0.2846	8,681	26.50	0.000
Front-End Candies	$0.4763	105	$0.1891	19,969	10.84	0.000
Frozen Dinners	*$0.4848*	*1,507*	*$0.5401*	*15,317*	*-3.53*	0.000
Frozen Entrees	$0.6936	4,537	$0.6765	58,071	*1.33*	*0.184*
Frozen Juices	$0.3169	2,077	$0.2610	22,906	5.79	0.000
Grooming Products	$0.5512	414	$0.4863	2,557	3.72	0.000
Laundry Detergents	$1.1455	666	$0.4590	3,105	24.33	0.000
Oatmeal	$0.6356	311	$0.4700	4,965	5.03	0.000
Paper Towels	$0.1877	241	$0.1515	8,652	1.87	0.062
Refrigerated Juices	$0.4717	2,631	$0.3121	20,444	23.01	0.000
Shampoos	$0.4576	108	$0.3292	822	4.58	0.000
Snack Crackers	*$0.2380*	*604*	*$0.3284*	*9,008*	*-5.60*	*0.000*
Soaps	$0.2651	317	$0.1518	5,078	9.57	0.000
Soft Drinks	$0.9923	765	$0.2280	20,834	44.83	0.000
Tooth Brushes	$0.4395	246	$0.4005	2,667	1.88	0.061
Tooth Pastes	$0.4943	2,763	$0.3447	15,534	26.49	0.000
Total	$0.4909	33,080	$0.3353	415,932	53.64	0.000
Average	$0.5037		$0.3239			
Median	$0.4473		$0.2781			

Note: Categories with unsupportive results are indicated by italics. The *p*-value is a significance level derived from an independent samples *t*-test assuming equal variances. Cross-category paired t-tests showed that the price changes are of a larger magnitude when prices end with "9" ($t_{26} = 4.468$, $p = .000$).

Table R15. Average Size of Price Change in Internet Data: 9¢- vs. Non-9¢-Ending Prices – for the Internet Dataset, for the Low Quartile of the Products in Terms of 9-Ending Popularity

Category	9¢-Ending		Non-9¢-Ending		*t*-Stat.	*p*-Value
	Mean Price Change	Sample Size	Mean Price Change	Sample Size		
Music CDs	*$1.13*	*476*	*$1.13*	*569*	*0.11*	*0.908*
Movie DVDs	$4.00	677	$2.57	1,579	7.34	0.000
Video Games	$8.47	90	$6.50	87	1.84	0.066
Software	$23.77	217	$18.49	1,488	2.59	0.009
PDAs	*$24.35*	*96*	*$29.48*	*646*	*-2.60*	*0.009*
Hard Drives	$16.99	836	$9.80	4,196	5.66	0.000
DVD Players	$27.97	97	$27.43	448	*0.12*	*0.907*
PC Monitors	$29.06	208	$22.39	1,802	2.75	0.006
Digital Cameras	$54.22	245	$43.50	1,204	3.37	0.001
Notebook PCs	*$76.30*	*70*	*$93.60*	*495*	*-0.75*	*0.454*
Total	$24.02	3,012	$21.03	12,514	2.75	0.006
Average	$26.63		$25.49			
Median	$24.06		$20.44			

Note: Categories with unsupportive results are indicated by italics. The *p*-value is a significance level derived from an independent samples *t*-test assuming equal variances. Cross-category paired t-tests showed that the price changes are of a larger magnitude when prices end with "9", but not significantly so ($t_9 = 0.457$, $p = .669$).

Table R16. Average Size of Price Change in Internet Data: 99¢- vs. Non-99¢-Ending Prices – for Internet Dataset, for the Low Quartile of the Products in Terms of 9-Ending Popularity

Category	9¢-Ending		Non-9¢-Ending		*t*-Stat.	*p*-Value
	Mean Price Change	Sample Size	Mean Price Change	Sample Size		
Music CDs	$1.86	205	$0.95	840	6.96	0.000
Movie DVDs	$5.41	307	$2.62	1,949	7.59	0.000
Video Games	$8.47	76	$6.77	101	2.58	0.010
Software	$28.51	137	$18.34	1,568	8.12	0.000
PDAs	$30.02	65	$28.70	677	*1.32*	*0.190*
Hard Drives	$19.39	585	$9.89	4,447	6.45	0.000
DVD Players	$31.98	84	$26.72	461	1.94	0.051
PC Monitors	$39.68	116	$22.06	1,894	5.37	0.000
Digital Cameras	$56.37	217	$43.36	1,232	2.60	0.009
Notebook PCs	$99.69	44	$90.76	521	*1.51*	*0.130*
Total	$27.78	1,836	$20.76	13,690	5.67	0.000
Average	$32.14		$25.02			
Median	$29.27		$20.20			

Note: Categories with unsupportive results are indicated by italics. The *p*-value is a significance level derived from an independent samples *t*-test assuming equal variances. Cross-category paired t-tests showed that the price changes are of a larger magnitude when prices end with "9" ($t_9 = 3.988$, $p = .003$).

Table R17. Average Size of Price Change in Internet Data: $9- vs. Non-$9-Endings – in the Internet Dataset, for the Low Quartile of the Products in Terms of 9-Ending Popularity

Category	$9-Ending		Non-$9-Ending		*t*-Stat.	*p*-Value
	Mean Price Change	Sample Size	Mean Price Change	Sample Size		
Music CDs	$4.04	13	$1.08	1,939	6.96	0.000
Movie DVDs	$2.68	57	$1.42	2,078	4.59	0.000
Video Games	$8.75	88	$5.78	143	2.58	0.010
Software	$21.22	278	$14.49	1,120	8.12	0.000
PDAs	$29.84	252	$21.34	456	2.53	0.012
Hard Drives	*$13.42*	*625*	*$15.30*	*3,426*	*-1.84*	*0.066*
DVD Players	$25.17	168	$16.70	340	4.94	0.000
PC Monitors	$22.93	532	$12.49	2,629	5.35	0.000
Digital Cameras	$30.52	751	$21.22	893	3.60	0.000
Notebook PCs	$178.41	97	$80.91	153	2.27	0.023
Total	$11.93	2,861	$7.21	13,177	4.56	0.000
Average	$33.70		$19.07			
Median	$29.27		$20.20			

Note: Categories with unsupportive results are indicated by italics. The *p*-value is a significance level derived from an independent samples *t*-test assuming equal variances. Cross-category paired t-tests showed that the price changes are of a larger magnitude when prices end with "9", but not significantly so ($t_9 = 1.574$, $p = .150$).

Table R18. Average Size of Price Change: $9.99- vs. Non-$9.99-Endings – in the Internet Dataset, for the Low Quartile of the Products in Terms of 9-Ending Popularity

Category	$9.99-Ending		Non-$9.99-Ending		*t*-Stat.	*p*-Value
	Mean Price Change	Sample Size	Mean Price Change	Sample Size		
Music CDs	$3.95	11	$1.09	1,941	6.96	0.000
Movie DVDs	$2.72	19	$1.44	2,116	4.59	0.000
Video Games	$9.83	51	$6.08	180	2.58	0.010
Software	$22.34	27	$15.70	5,343	8.12	0.000
PDAs	*$23.72*	*73*	*$24.44*	*635*	*-0.55*	*0.585*
Hard Drives	$18.38	174	$14.86	3,877	3.89	0.000
DVD Players	$24.19	59	$18.88	449	4.94	0.000
PC Monitors	$35.80	78	$13.70	3,083	5.35	0.000
Digital Cameras	$32.81	205	$24.42	1,439	3.60	0.000
Notebook PCs	$149.07	7	$117.86	243	1.96	0.050
Total	$22.47	704	$7.38	19,306	5.99	0.000
Average	$32.28		$23.85			
Median	$29.27		$20.20			

Note: Categories with unsupportive results are indicated by italics. The *p*-value is a significance level derived from an independent samples *t*-test assuming equal variances. Cross-category paired t-tests showed that the price changes are of a larger magnitude when prices end with "9" ($t_9 = 2.623$, $p = .028$).

Table R19. Average Size of Price Change in Internet Data: $99- vs. Non-$99-Endings – for the Internet Dataset, for the Low Quartile of the Products in Terms of 9-Ending Popularity

Category	$99-Ending		Non-$99-Ending		*t*-Stat.	*p*-Value
	Mean Price Change	Sample Size	Mean Price Change	Sample Size		
Music CDs	N/A	0	$1.10	1,952	N/A	N/A
Movie DVDs	N/A	0	$1.45	2,135	N/A	N/A
Video Games	N/A	0	$6.91	231	N/A	N/A
Software	$21.97	55	$15.57	1,343	5.32	0.000
PDAs	$37.65	34	$23.69	674	4.38	0.000
Hard Drives	*$13.76*	*45*	*$15.03*	*4,006*	*-0.88*	*0.388*
DVD Players	$41.20	22	$18.52	486	4.85	0.000
PC Monitors	$25.59	50	$14.07	3,111	5.37	0.000
Digital Cameras	$49.75	152	$22.99	1,492	4.60	0.000
Notebook PCs	$163.65	43	$109.41	207	1.78	0.076
Total	$49.61	401	$18.27	11,319	8.56	0.000
Average	$50.51		$31.33			
Median	$37.65		$19.36			

Note: Categories with unsupportive results are indicated by italics. The *p*-value is a significance level derived from an independent samples *t*-test assuming equal variances. Cross-category paired t-tests showed that the price changes are of a larger magnitude when prices end with "9" ($t_6 = 2.804$, $p = .031$).

Table R20. Average Size of Price Change: $99.99- vs. Non-$99.99-Endings – for the Internet Dataset, for the Low Quartile of Products in Terms of 9-Ending Popularity

Category	$99.99-Ending		Non-$9.999-Ending		*t*-Stat.	*p*-Value
	Mean Price Change	Sample Size	Mean Price Change	Sample Size		
Music CDs	N/A	0	$1.10	1,952	N/A	N/A
Movie DVDs	N/A	0	$1.45	2,135	N/A	N/A
Video Games	N/A	0	$6.91	231	N/A	N/A
Software	$26.25	4	$15.79	1,394	5.32	0.000
PDAs	*$23.42*	*12*	*$24.38*	*696*	*-0.58*	*0.562*
Hard Drives	$23.11	12	$14.99	4,039	1.78	0.076
DVD Players	$23.69	10	$19.42	498	3.85	0.000
PC Monitors	$63.60	4	$14.19	3,157	3.36	0.000
Digital Cameras	$36.80	41	$25.18	1,603	3.60	0.000
Notebook PCs	$549.01	1	$117.01	249	*1.31*	*0.191*
Total	$38.24	84	$19.21	11,636	4.78	0.000
Average	$106.55		$32.99			
Median	$26.25		$19.69			

Note: Categories with unsupportive results are indicated by italics. The *p*-value is a significance level derived from an independent samples *t*-test assuming equal variances. Cross-category paired t-tests showed that the price changes are of a larger magnitude when prices end with "9", but not significantly so. ($t_6 = 1.225$, $p = .267$).

Table R21. Average Size of Price Change for 9¢- vs. Non-9¢-Ending Prices – for the Dominick's Dataset

Category	9¢-Ending		Non-9¢-Ending		*t*-Stat	*p*-Value
	Mean Price Change	Sample Size	Mean Price Change	Sample Size		
Analgesics	$0.7625	367,969	$0.4672	102,550	120.54	0.000
Bath Soap	$0.5786	58,735	$0.5473	18,298	5.18	0.000
Bathroom Tissues	$0.2499	156,863	$0.2260	184,414	18.16	0.000
Bottled Juices	$0.3121	457,490	$0.2650	583,025	60.98	0.000
Canned Soup	$0.2196	304,439	$0.1948	741,357	33.77	0.000
Canned Tuna	$0.1946	170,023	$0.1421	281,703	61.43	0.000
Cereals	$0.5010	271,757	$0.4701	494,597	23.47	0.000
Cheeses	$0.2943	872,489	$0.2128	1,039,738	169.83	0.000
Cookies	$0.4947	1,135,112	$0.3656	709,697	176.67	0.000
Crackers	$0.2964	283,278	$0.2366	279,353	73.77	0.000
Dish Detergent	$0.2798	240,532	$0.2119	183,222	87.10	0.000
Fabric Softeners	$0.3955	212,288	$0.2597	191,319	108.29	0.000
Front-End Candies	*$0.1454*	*137,453*	*$0.2164*	*385,234*	*-82.14*	*0.000*
Frozen Dinners	*$0.5008*	*230,423*	*$0.5452*	*336,201*	*-25.10*	*0.000*
Frozen Entrees	*$0.7031*	*883,284*	*$0.7551*	*1,183,557*	*-42.37*	*0.000*
Frozen Juices	*$0.2567*	*301,114*	*$0.2816*	*395,344*	*-24.11*	*0.000*
Grooming Products	$0.6285	1,017,513	$0.4849	287,969	97.71	0.000
Laundry Detergents	$0.9036	446,767	$0.5548	210,342	160.26	0.000
Oatmeal	$0.4239	72,753	$0.4115	107,971	5.00	0.000
Paper Towels	$0.1913	109,596	$0.1702	152,846	15.41	0.000
Refrigerated Juices	$0.3780	405,144	$0.2987	418,402	104.89	0.000
Shampoos	$1.4476	1,916,061	$1.0888	238,976	96.30	0.000
Snack Crackers	$0.3251	488,341	$0.2903	405,005	44.70	0.000
Soaps	$0.3147	180,935	$0.1700	190,632	136.15	0.000
Soft Drinks	$1.0409	4,614,455	$0.6155	1,219,151	341.14	0.000
Tooth Brushes	$0.5063	350,705	$0.3653	123,840	134.28	0.000
Tooth Pastes	$0.4255	468,688	$0.3497	291,045	94.32	0.000
Total	$0.7452	16,154,207	$0.4033	10,755,788	934.87	0.000
Average	$0.4730		$0.3777			
Median	$0.3955		$0.2987			

Note: Categories with unsupportive results are indicated by italics. The *p*-value is a significance level derived from an independent samples *t*-test assuming equal variances. Cross-category paired t-tests showed that the price changes are of a larger magnitude when prices end with "9" ($t_{26} = 3.911$, $p = .001$).

Table R22. Average Size of Price Changes for 99¢- vs. Non-99¢-Ending Prices – for the Dominick's Dataset

Category	99¢-Ending		Non-99¢-Ending		*t*-Stat	*p*-Value
	Mean Price Change	Sample Size	Mean Price Change	Sample Size		
Analgesics	$0.8931	106,038	$0.6415	364,481	103.50	0.000
Bath Soap	$0.7149	15,608	$0.5346	61,425	28.32	0.000
Bathroom Tissues	$0.3302	36,944	$0.2257	304,333	49.74	0.000
Bottled Juices	$0.3760	104,451	$0.2756	936,064	78.78	0.000
Canned Soup	$0.2703	56,527	$0.1981	989,269	49.02	0.000
Canned Tuna	$0.3303	19,566	$0.1543	432,160	89.97	0.000
Cereals	$0.6374	56,437	$0.4686	709,917	70.05	0.000
Cheeses	$0.3563	160,237	$0.2403	1,751,990	134.10	0.000
Cookies	$0.5612	270,448	$0.4251	1,574,361	134.91	0.000
Crackers	$0.4902	62,297	$0.2489	500,334	125.25	0.000
Dish Detergent	$0.3273	52,117	$0.2397	371,637	74.31	0.000
Fabric Softeners	$0.5585	62,370	$0.2896	341,237	157.63	0.000
Front-End Candies	$0.2326	11,923	$0.1969	510,764	13.90	0.000
Frozen Dinners	$0.5585	56,617	$0.5237	510,007	12.03	0.000
Frozen Entrees	*$0.7229*	*188,496*	*$0.7339*	*1,878,345*	*-5.23*	*0.000*
Frozen Juices	$0.2794	67,862	$0.2699	628,596	5.50	0.000
Grooming Products	$0.6756	247,298	$0.5785	1,058,184	62.33	0.000
Laundry Detergents	$1.1475	158,974	$0.6785	498,135	199.81	0.000
Oatmeal	$0.5420	12,921	$0.4068	167,803	28.83	0.000
Paper Towels	$0.3555	15,137	$0.1682	247,305	65.28	0.000
Refrigerated Juices	$0.4874	101,063	$0.3168	722,483	149.05	0.000
Shampoos	$1.6000	503,157	$1.3492	1,651,880	90.65	0.000
Snack Crackers	$0.3673	97,690	$0.3022	795,656	52.33	0.000
Soaps	$0.3907	43,874	$0.2203	327,693	102.49	0.000
Soft Drinks	$1.2138	1,385,935	$0.8704	4,447,671	287.43	0.000
Tooth Brushes	$0.5972	108,407	$0.4317	366,138	151.36	0.000
Tooth Pastes	$0.5097	117,086	$0.3758	642,647	124.32	0.000
Total	$0.9144	4,119,480	$0.5532	22,790,515	721.24	0.000
Average	$0.5750		$0.4209			
Median	$0.5097		$0.3168			

Note: Categories with unsupportive results are indicated by italics. The *p*-value is a significance level derived from an independent samples *t*-test assuming equal variances. Cross-category paired *t*-tests showed that the price changes are of a larger magnitude when prices end with "9" ($t_{26} = 7.657$, $p = .000$).

Table R23. Average Size of Price Changes for 9¢- vs. Non-9¢-Ending Prices – for the Internet Dataset

Category	9¢-Ending		Non-9¢-Ending		*t*-Stat.	*p*-Value
	Mean Price Change	Sample Size	Mean Price Change	Sample Size		
Music CDs	$1.27	2,275	$1.04	2,345	5.37	0.000
Movie DVDs	$2.63	2,881	$1.71	5,820	10.34	0.000
Video Games	$7.96	851	$7.18	513	1.84	0.066
Software	$15.30	775	$13.45	4,754	*1.31*	*0.191*
PDAs	*$20.71*	*363*	*$26.28*	*1,428*	*-2.60*	*0.009*
Hard Drives	$26.19	1,438	$14.66	5,514	6.97	0.000
DVD Players	$37.71	385	$27.88	1,208	3.38	0.001
PC Monitors	$40.57	814	$28.56	5,145	5.20	0.000
Digital Cameras	$42.46	872	$37.87	2,998	*1.51*	*0.130*
Notebook PCs	*$89.34*	*91*	*$97.09*	*564*	*-0.55*	*0.585*
Total	*$15.54*	*10,745*	*18.07*	*30,289*	*-4.50*	*0.000*
Average	$28.41		$25.57			
Median	$23.45		$20.47			

Note: Categories with unsupportive results are indicated by italics. The *p*-value is a significance level derived from an independent samples *t*-test assuming equal variances. Cross-category paired *t*-tests showed that the price changes are of a larger magnitude when prices end with "9" ($t_9 = 1.603$, $p = .143$).

Table R24. Average Size of Price Changes for 99¢- vs. Non-99¢-Ending Prices – for the Internet Dataset

Category	99¢-Ending		Non-99¢-Ending		*t*-Stat.	*p*-Value
	Mean Price Change	Sample Size	Mean Price Change	Sample Size		
Music CDs	$1.89	1,114	$0.92	3,506	19.68	0.000
Movie DVDs	$3.27	1,564	$1.74	7,137	14.05	0.000
Video Games	$8.19	755	$7.01	609	2.87	0.001
Software	$17.43	551	$13.29	4,978	2.53	0.012
PDAs	*$21.88*	*308*	*$25.83*	*1,483*	*-1.73*	*0.084*
Hard Drives	$30.48	1,098	$14.53	5,854	8.71	0.000
DVD Players	$40.55	340	$27.47	1,253	4.32	0.000
PC Monitors	$47.63	554	$28.42	5,405	7.05	0.000
Digital Cameras	$44.60	782	$37.46	3,088	2.27	0.023
Notebook PCs	$110.40	65	$94.43	590	*0.98*	*0.330*
Total	$20.40	7,131	$16.78	33,903	5.55	0.000
Average	$32.63		$25.11			
Median	$26.18		$20.18			

Note: Categories with unsupportive results are indicated by italics. The *p*-value is a significance level derived from an independent samples *t*-test assuming equal variances. Cross-category paired *t*-tests showed that the price changes are of a larger magnitude when prices end with "9" ($t_9 = 2.983$, $p = .015$).

Table R25. Average Size of Price Changes for $9- vs. Non-$9-Ending Prices – for the Internet Dataset

Category	$9-Ending		Non-$9-Ending		*t*-Stat.	*p*-Value
	Mean Price Change	Sample Size	Mean Price Change	Sample Size		
Music CDs	*$1.05*	*588*	*$1.17*	*4,032*	*-1.83*	*0.067*
Movie DVDs	$3.08	890	$1.89	7,811	8.53	0.000
Video Games	$8.64	652	$6.77	712	4.58	0.000
Software	$19.07	1,368	$11.94	4,161	6.27	0.000
PDAs	$31.53	730	$20.77	1,061	6.19	0.000
Hard Drives	$19.43	1,192	$16.55	5,760	1.78	0.076
DVD Players	$41.72	649	$22.38	944	7.76	0.000
PC Monitors	$52.13	1,450	$23.15	4,509	15.97	0.000
Digital Cameras	$47.02	1,875	$31.28	1,995	6.25	0.000
Notebook PCs	$118.89	343	$70.86	312	4.99	0.000
Total	$32.13	9,737	$12.83	31,927	33.65	0.000
Average	$34.26		$20.68			
Median	$25.48		$18.66			

Note: Categories with unsupportive results are indicated by italics. The *p*-value is a significance level derived from an independent samples *t*-test assuming equal variances. Cross-category paired *t*-tests showed that the price changes are of a larger magnitude when prices end with "9" ($t_9 = 2.809$, $p = .020$).

Table R26. Average Size of Price Changes for $9.99- vs. Non-$9.99-Ending Prices – for the Internet Dataset

Category	$9.99-Ending		Non-$9.99-Ending		*t*-Stat.	*p*-Value
	Mean Price Change	Sample Size	Mean Price Change	Sample Size		
Music CDs	$2.42	76	$1.13	4,544	7.45	0.000
Movie DVDs	$5.41	190	$1.94	8,511	12.07	0.000
Video Games	$9.19	449	$6.92	915	5.27	0.000
Software	$23.08	198	$13.36	5,331	3.68	0.000
PDAs	*$23.05*	*181*	*$25.39*	*1,610*	*-0.82*	*0.414*
Hard Drives	$32.09	352	$16.24	6,600	5.18	0.000
DVD Players	$48.42	235	$27.12	1,358	6.12	0.000
PC Monitors	$66.52	254	$28.58	5,705	9.72	0.000
Digital Cameras	$49.28	580	$37.08	3,290	3.45	0.001
Notebook PCs	$105.33	45	$95.33	610	*0.52*	*0.606*
Total	$33.97	2,560	$16.30	38,474	17.34	0.000
Average	$36.48		$25.31			
Median	$27.59		$20.82			

Note: Categories with unsupportive results are indicated by italics. The *p*-value is a significance level derived from an independent samples *t*-test assuming equal variances. Cross-category paired *t*-tests showed that the price changes are of a larger magnitude when prices end with "9" ($t_9 = 2.980$, $p = .015$).

Table R27. Average Size of Price Changes for $99- vs. Non-$99-Ending Prices – for the Internet Dataset

Category	$99-Ending		Non-$99-Ending		*t*-Stat.	*p*-Value
	Mean Price Change	Sample Size	Mean Price Change	Sample Size		
Music CDs	N/A	0	$1.15	4,620	N/A	N/A
Movie DVDs	$6.04	62	$1.98	8,639	8.07	0.000
Video Games	N/A	0	$7.66	1,669	N/A	N/A
Software	$20.26	271	$13.37	5,258	3.03	0.002
PDAs	$42.90	155	$23.47	1,636	6.40	0.000
Hard Drives	$19.75	141	$16.99	6,811	*0.58*	*0.562*
DVD Players	$57.33	143	$27.59	1,450	6.91	0.000
PC Monitors	$96.28	337	$26.24	5,622	21.09	0.000
Digital Cameras	$80.54	519	$32.46	3,351	13.25	0.000
Notebook PCs	$131.13	153	$85.31	502	4.00	0.000
Total	$66.15	1,781	$15.20	39,253	42.89	0.000
Average	$56.78		$28.43			
Median	$50.12		$24.86			

Note: Categories with unsupportive results are indicated by italics. The *p*-value is a significance level derived from an independent samples *t*-test assuming equal variances. Cross-category paired *t*-tests showed that the price changes are of a larger magnitude when prices end with "9" ($t_7 = 3.266$, $p = .014$).

Table R28. Average Size of Price Changes for $99.99 vs. Non-$99.99-Ending Prices – for the Internet Dataset

Category	$99.99-Ending		Non-$99.99-Ending		*t*-Stat.	*p*-Value
	Mean Price Change	Sample Size	Mean Price Change	Sample Size		
Music CDs	N/A	0	$1.15	4,620	N/A	N/A
Movie DVDs	$11.15	25	$1.99	8,676	11.65	0.000
Video Games	N/A	0	$7.66	1,364	N/A	N/A
Software	$24.18	50	$13.61	5,479	3.03	0.002
PDAs	*$20.21*	*40*	*$25.27*	*1,751*	*-0.87*	*0.387*
Hard Drives	$34.45	40	$16.93	6,912	2.31	0.021
DVD Players	$69.68	71	$28.42	1,522	6.92	0.000
PC Monitors	$124.94	62	$29.21	5,897	12.37	0.000
Digital Cameras	$67.02	168	$37.63	3,702	4.75	0.000
Notebook PCs	$139.93	13	$95.13	642	*1.28*	*0.202*
Total	$63.04	469	$16.88	40,565	19.93	0.000
Average	$61.45		$31.02			
Median	$50.74		$26.85			

Note: Categories with unsupportive results are indicated by italics. The *p*-value is a significance level derived from an independent samples *t*-test assuming equal variances. Cross-category paired *t*-tests showed that the price changes are of a larger magnitude when prices end with "9" ($t_7 = 2.748$, $p = .029$).

Figure R8a. Price of a CD (Product #3, Store #194)
743 Days (March 26, 2003 –April 15, 2005)

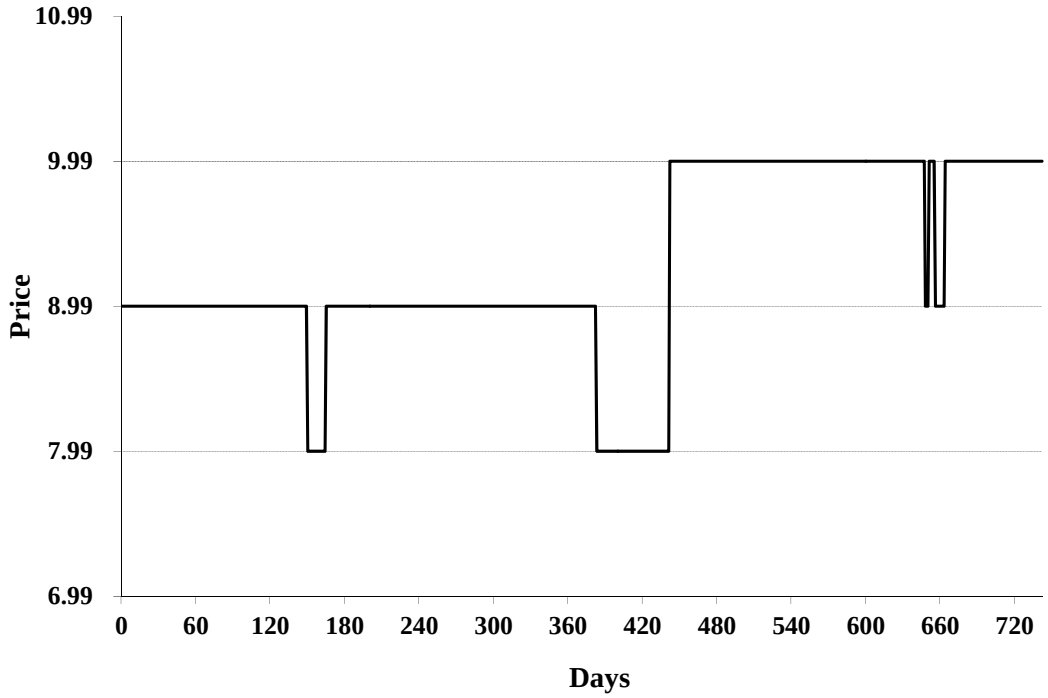


Figure R8b. Price of a DVD (Product #23, Store #194)
743 Days (March 26, 2003 – April 15, 2005)

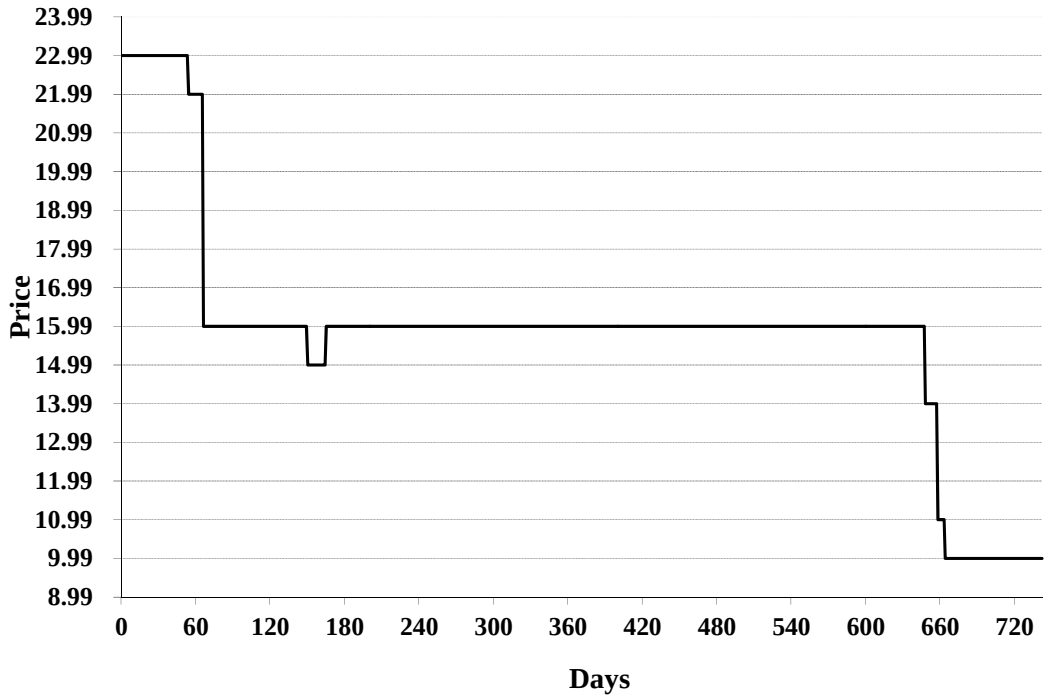


Figure R8c. Price of a Notebook PC (Product #422, Store #258)
743 Days (March 26, 2003 – April 15, 2005)

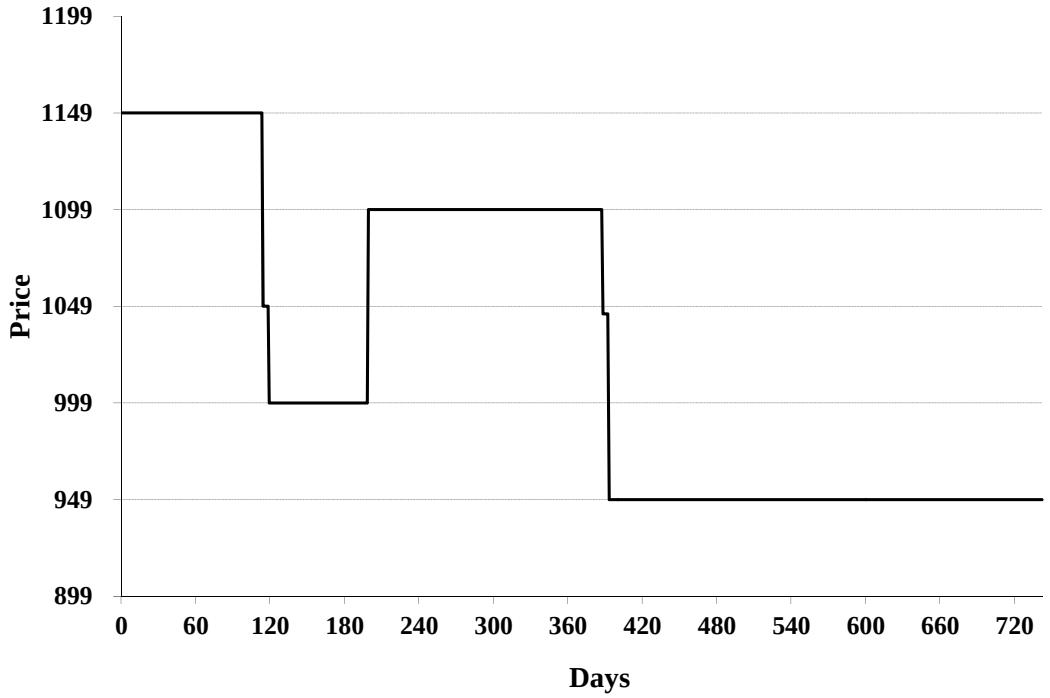


Figure R8d. Price of a Hard Drive (Product #71, Store #324)
743 Days (March 26, 2003 – April 15, 2005)

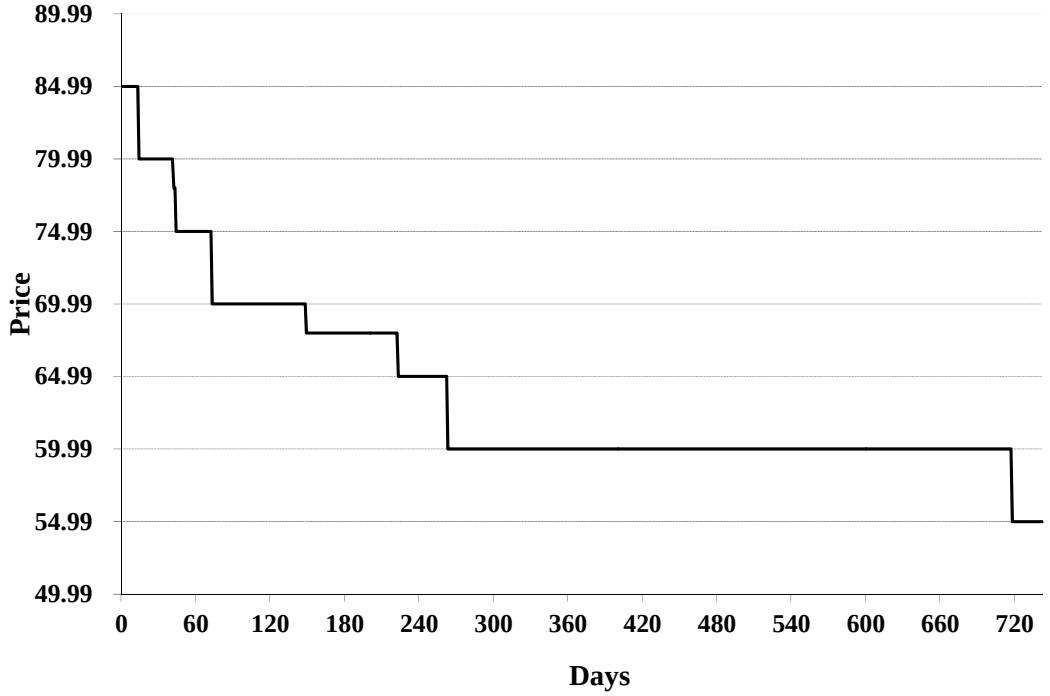


Figure R8e. Price of a DVD Player (Product #262, Store #230)
743 Days (March 26, 2003 – April 15, 2005)

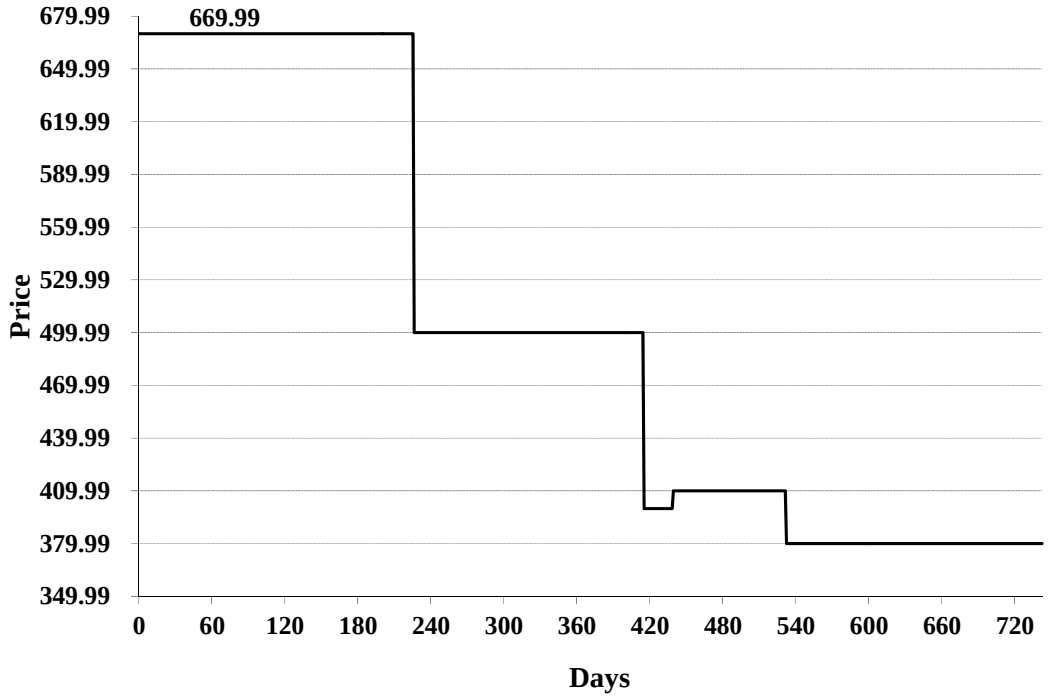


Figure R8f. Price of a Digital Camera (Product #273, Store #108)
743 Days (March 26, 2003 – April 15, 2005)

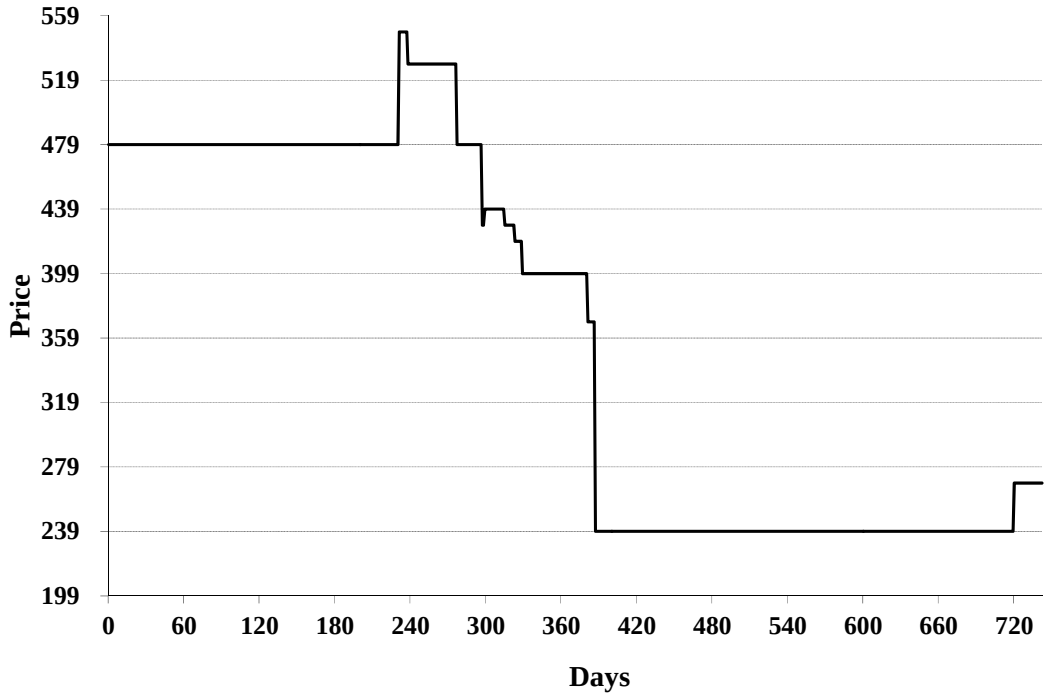


Figure R8g. Price of a PC Monitor (Product #189, Store #17)
743 Days (March 26, 2003 – April 15, 2005)

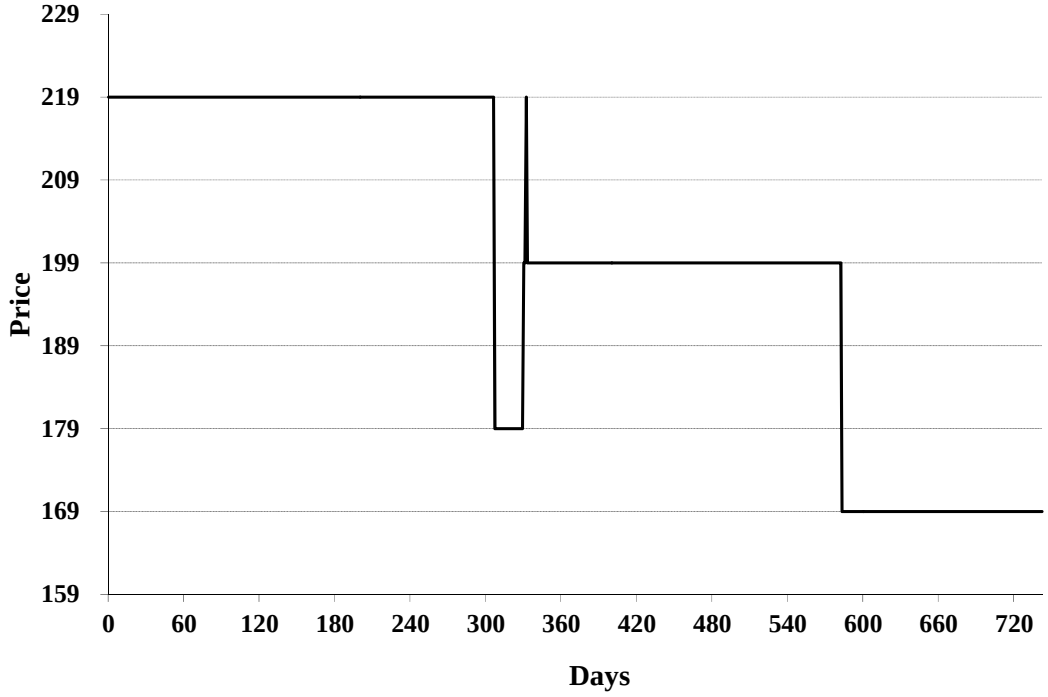


Figure R8h. Price of a PDA (Product #490, Store #207)
743 Days (March 26, 2003 – April 15, 2005)

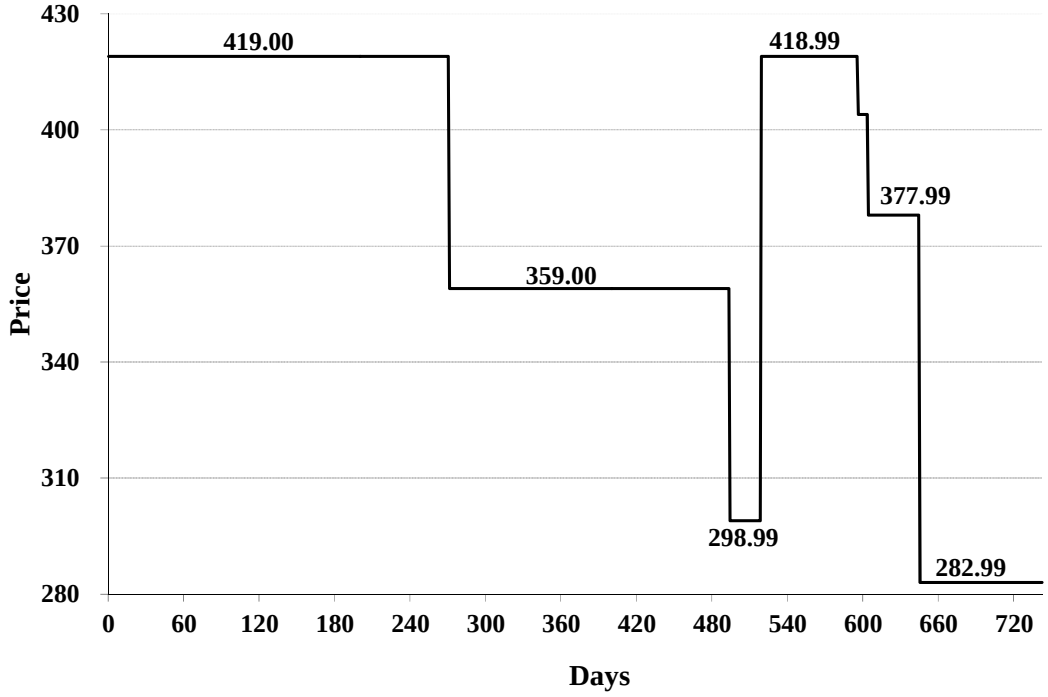


Figure R8i. Price of a Software Product (Product #96, Store #292)
743 Days (March 26, 2003 – April 15, 2005)

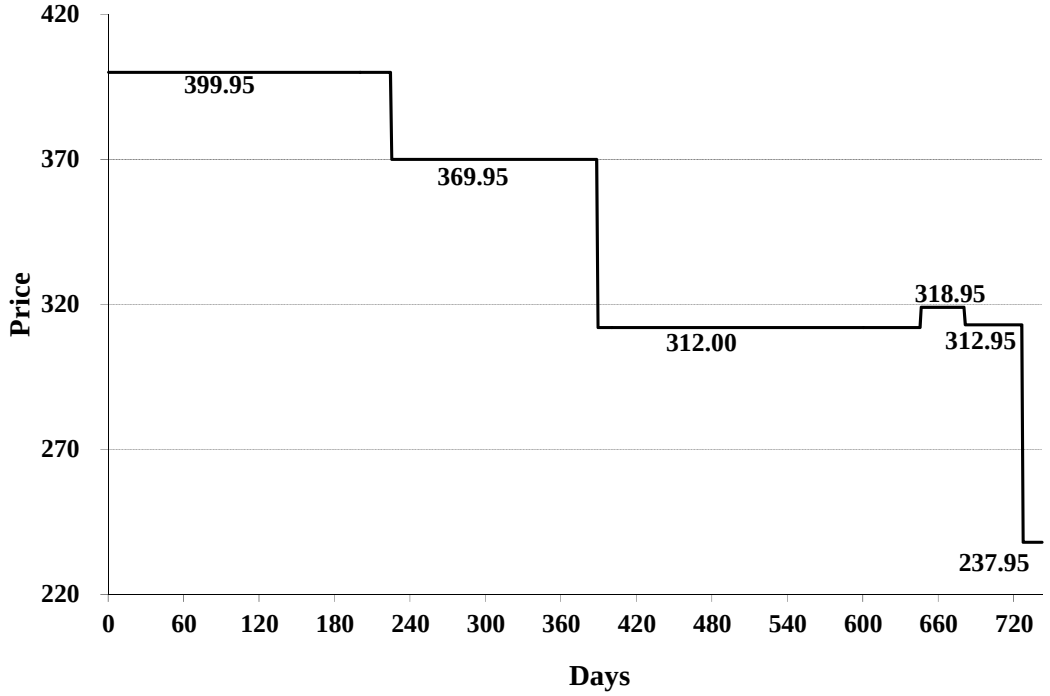


Figure R8j. Price of a Video Game (Product #205, Store #68)
743 Days (March 26, 2003 – April 15, 2005)