

Left-Digit Bias and Stock Sales

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Abstract

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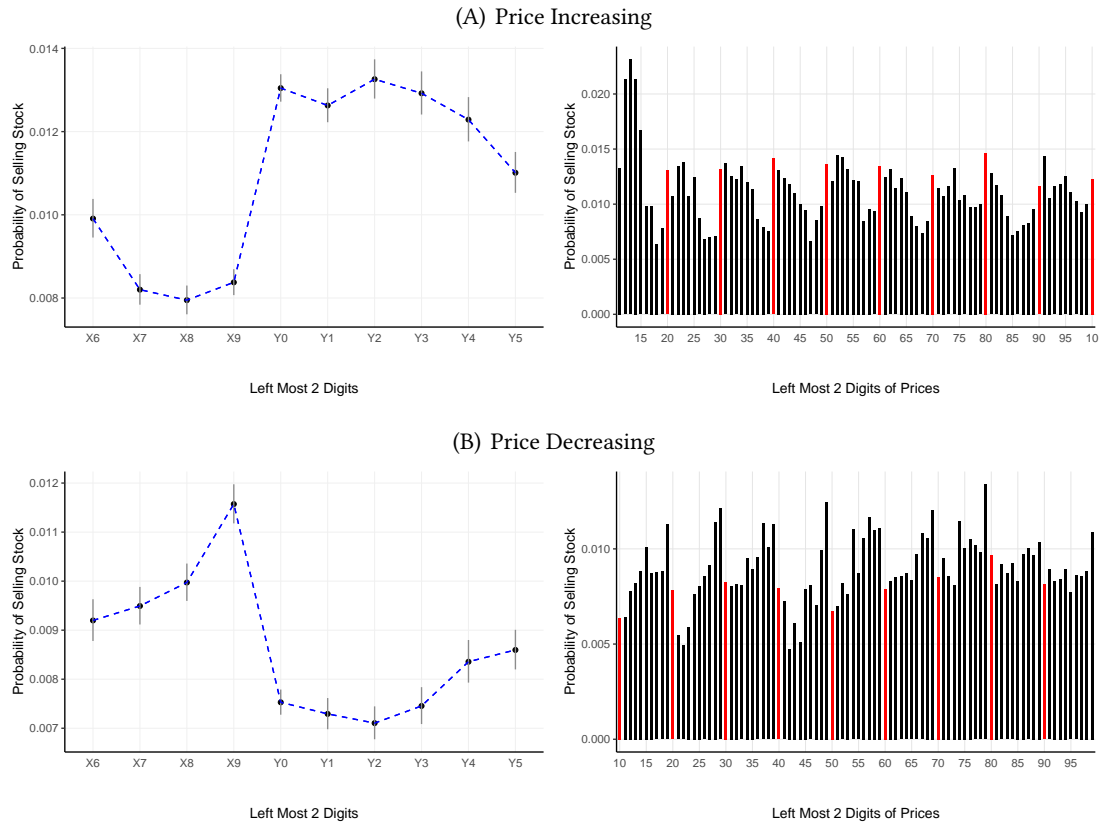
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EQ: Our main analysis here is using the quarterly sample and login days. We are using random 30% of the data, 27,021 accounts. In Appendix, we have the results for (1) replications using sub-samples of equal bin size (quarterly sample), (2) replications for monthly and annual samples (login days), (3) replication of the main analysis with sell days (quarterly sample), (4) random sells (using the quarterly sample). We also have analysis with (5) all data showing no patterns.

Figure 1: Leftmost Stock Price Digit and Probability of Sale, Quarterly Sample



Note: £Y in the X-axes is equivalent to £X + 1 (e.g., £X9 could include £0.19, £1.9, £19, etc., while £Y0 could include £0.20, £2.0, £20, etc.).

Table 1: Summary Stats, Quarterly Sample

| Panel (A): Baseline Sample | | | | | | | | | |
|----------------------------|------------|-------|----------|-------|----------|--------|----------|------------|--|
| | N | Mean | St. Dev. | Min | Pctl(25) | Median | Pctl(75) | Max | |
| Price on Login Days £ | 43,910,771 | 7.946 | 26.271 | 0.000 | 1.153 | 3.050 | 7.642 | 15,051.630 | |
| Price on Sell Days £ | 3,348,713 | 7.152 | 25.799 | 0.000 | 0.831 | 2.645 | 6.680 | 3,589.000 | |
| Price of Stocks Sold £ | 349,936 | 7.322 | 29.887 | 0.000 | 0.856 | 2.689 | 6.717 | 2,057.301 | |

| Panel (B): Price Increasing Sample | | | | | | | | | |
|---|-----------|--------|----------|--------|----------|--------|----------|-----------|--|
| | N | Mean | St. Dev. | Min | Pctl(25) | Median | Pctl(75) | Max | |
| All Stocks | 2,502,903 | 6.437 | 23.513 | 0.000 | 0.739 | 2.992 | 6.175 | 3,600.000 | |
| Stocks with Prices Between £0.11 to £1.01 | 616,769 | 0.599 | 0.256 | 0.110 | 0.382 | 0.628 | 0.811 | 1.010 | |
| Stocks with Prices Between £1.1 to £10.1 | 1,370,707 | 4.890 | 2.310 | 1.100 | 2.954 | 4.570 | 6.600 | 10.100 | |
| Stocks with Prices Between £11 to £101 | 192,406 | 35.681 | 22.229 | 11.000 | 19.720 | 29.780 | 48.040 | 100.995 | |

| Panel (C): Price Decreasing Sample | | | | | | | | | |
|--|-----------|--------|----------|--------|----------|--------|----------|-----------|--|
| | N | Mean | St. Dev. | Min | Pctl(25) | Median | Pctl(75) | Max | |
| All Stocks | 2,528,282 | 4.263 | 20.405 | 0.000 | 0.165 | 1.025 | 4.513 | 3,284.000 | |
| Stocks with Prices Between £0.10 to £1.0 | 688,845 | 0.511 | 0.270 | 0.100 | 0.275 | 0.485 | 0.750 | 1.000 | |
| Stocks with Prices Between £1 to £10 | 1,096,158 | 4.517 | 2.508 | 1.000 | 2.366 | 4.135 | 6.231 | 10.000 | |
| Stocks with Prices Between £10 to £100 | 180,327 | 25.818 | 18.967 | 10.000 | 10.940 | 20.900 | 30.370 | 99.990 | |

Table 2: Probability of Sale and Left Digit, Price Increasing Sample

| | <i>Probability of Sale_{ijt} = 1</i> | | | | |
|----------------------------------|--|------------------------|------------------------|------------------------|------------------------|
| | (1) | (2) | (3) | (4) | (5) |
| Above Y0 = 1 (in Range Y0 to Y5) | 0.0042*** (0.0002) | 0.0052*** (0.0002) | 0.0047*** (0.0002) | 0.0052*** (0.0002) | 0.0058*** (0.0002) |
| Stock Digits Y0 to Y5 | | -0.0003*** (0.0001) | -0.0004*** (0.0001) | -0.0005*** (0.0001) | -0.0007*** (0.0001) |
| Stock Digits X6 to X9 | | -0.0004*** (0.0001) | -0.0002** (0.0001) | -0.0002** (0.0001) | -0.0001 (0.0001) |
| Constant | 0.0085*** (0.0002) | 0.0080*** (0.0002) | 0.0081*** (0.0011) | | |
| Day FE | NO | NO | YES | YES | YES |
| Industry FE | NO | NO | YES | YES | YES |
| Account FE | NO | NO | NO | YES | YES |
| Stock FE | NO | NO | NO | NO | YES |
| Observations | 2,502,903 | 2,502,903 | 2,502,903 | 2,502,903 | 2,502,903 |
| R ² | 0.0004 | 0.0004 | 0.0017 | 0.0654 | 0.0715 |

Note: The unit of observation is an investor \times stock \times day. The samples is restricted to login days. We include only quarters in which the stocks increased in price (regarding the first observation of the quarter) and change the left most digit at least once during the quarter. Only those stocks that have changed the left most digit are included. Regressions fit an intercept for the change in the left most digit at X0 and two slopes for the left (with values in the range -3 to 0, corresponding to X6 to X9) and right (with values in the range 0 to 5, corresponding to Y0 to Y5) values. The constant shows the probability to sell the stock at when the second digit is 9 (X9). The second digit over threshold dummy shows the jump in probability when the first digit changes and so the second digit becomes 0 (X0). SE are clustered by account.

Table 3: Probability of Sale and Left Digit, Price Decreasing Sample

| | <i>Probability of Sale_{ijt} = 1</i> | | | | |
|----------------------------------|--|------------------------|------------------------|------------------------|------------------------|
| | (1) | (2) | (3) | (4) | (5) |
| Above Y0 = 1 (in Range Y0 to Y5) | -0.0025*** (0.0002) | -0.0040*** (0.0002) | -0.0043*** (0.0002) | -0.0039*** (0.0002) | -0.0039*** (0.0003) |
| Stock Digits Y0 to Y5 | | 0.0002*** (0.0000) | 0.0002*** (0.0000) | 0.0004*** (0.0000) | 0.0004*** (0.0001) |
| Stock Digits X6 to X9 | | 0.0008*** (0.0001) | 0.0008*** (0.0001) | 0.0005*** (0.0001) | 0.0006*** (0.0001) |
| Constant | 0.0102*** (0.0003) | 0.0112*** (0.0003) | 0.0154*** (0.0017) | | |
| Day FE | NO | NO | YES | YES | YES |
| Industry FE | NO | NO | YES | YES | YES |
| Account FE | NO | NO | NO | YES | YES |
| Stock FE | NO | NO | NO | NO | YES |
| Observations | 2,528,282 | 2,528,282 | 2,528,282 | 2,528,282 | 2,528,282 |
| R ² | 0.0002 | 0.0002 | 0.0004 | 0.0678 | 0.0737 |

Note: The unit of observation is an investor \times stock \times day. The samples is restricted to login days. We include only quarters in which the stocks have not increased in price (regarding the first observation of the quarter) and have not changed the left most digit at least once during the quarter. Regressions fit an intercept for the change in the left most digit at X0 and two slopes for the left (with values in the range -3 to 0, corresponding to X6 to X9) and right (with values in the range 0 to 5, corresponding to Y0 to Y5) values. The constant shows the probability to sell the stock at when the second digit is 9 (X9). The second digit over threshold dummy shows the jump in probability when the first digit changes and so the second digit becomes 0 (X0). SE are clustered by account.

Table 4: Probability of Sale and Left Digit, Splitting by Median Age

| | Prices Increasing Sample | | Prices Decreasing Sample | |
|----------------------------------|--------------------------|------------------------|--------------------------|------------------------|
| | Below Median | Above Median | Below Median | Above Median |
| Above Y0 = 1 (in Range Y0 to Y5) | 0.0071*** (0.0004) | 0.0045*** (0.0003) | -0.0037*** (0.0003) | -0.0042*** (0.0004) |
| Stock Digits Y0 to Y5 | -0.0009*** (0.0001) | -0.0006*** (0.0001) | 0.0004*** (0.0001) | 0.0005*** (0.0001) |
| Stock Digits X6 to X9 | -0.0003** (0.0001) | -0.0000 (0.0001) | 0.0007*** (0.0001) | 0.0004*** (0.0001) |
| Day FE | YES | YES | YES | YES |
| Industry FE | YES | YES | YES | YES |
| Account FE | YES | YES | YES | YES |
| Stock FE | YES | YES | YES | YES |
| Observations | 1,346,559 | 1,156,344 | 1,391,135 | 1,137,147 |
| R ² | 0.0850 | 0.0520 | 0.0890 | 0.0544 |

Note: The unit of observation is an investor \times stock \times day. The samples is restricted to login days. We include only quarters in which the stocks increased/decreased in price (regarding the first observation of the quarter) and change the left most digit at least once during the quarter. Only those stocks that have changed the left most digit are included. Regressions fit an intercept for the change in the left most digit at X0 and two slopes for the left (with values in the range -3 to 0, corresponding to X6 to X9) and right (with values in the range 0 to 5, corresponding to Y0 to Y5) values. The constant shows the probability to sell the stock at when the second digit is 9 (X9). The second digit over threshold dummy shows the jump in probability when the first digit changes and so the second digit becomes 0 (Y0). SE are clustered by account.

Table 5: Probability of Sale and Left Digit, Splitting by Gender

| | Prices Increasing Sample | | Prices Decreasing Sample | |
|----------------------------------|--------------------------|------------------------|--------------------------|------------------------|
| | Female | Male | Female | Male |
| Above Y0 = 1 (in Range Y0 to Y5) | 0.0056*** (0.0005) | 0.0059*** (0.0003) | -0.0040*** (0.0006) | -0.0039*** (0.0003) |
| Stock Digits Y0 to Y5 | -0.0006*** (0.0001) | -0.0008*** (0.0001) | 0.0004*** (0.0001) | 0.0004*** (0.0001) |
| Stock Digits X6 to X9 | -0.0003 (0.0002) | -0.0001 (0.0001) | 0.0007*** (0.0002) | 0.0005*** (0.0001) |
| Day FE | YES | YES | YES | YES |
| Industry FE | YES | YES | YES | YES |
| Account FE | YES | YES | YES | YES |
| Stock FE | YES | YES | YES | YES |
| Observations | 429,057 | 2,073,846 | 401,271 | 2,127,011 |
| R ² | 0.0731 | 0.0730 | 0.0774 | 0.0749 |

Note: The unit of observation is an investor \times stock \times day. The samples is restricted to login days. We include only quarters in which the stocks increased/decreased in price (regarding the first observation of the quarter) and change the left most digit at least once during the quarter. Only those stocks that have changed the left most digit are included. Regressions fit an intercept for the change in the left most digit at X0 and two slopes for the left (with values in the range -3 to 0, corresponding to X6 to X9) and right (with values in the range 0 to 5, corresponding to Y0 to Y5) values. The constant shows the probability to sell the stock at when the second digit is 9 (X9). The second digit over threshold dummy shows the jump in probability when the first digit changes and so the second digit becomes 0 (Y0). SE are clustered by account.

Table 6: Probability of Sale and Left Digit, Splitting by Portfolio Value

| | Prices Increasing Sample | | Prices Decreasing Sample | |
|----------------------------------|--------------------------|------------------------|--------------------------|------------------------|
| | Below Median | Above Median | Below Median | Above Median |
| Above Y0 = 1 (in Range Y0 to Y5) | 0.0083*** (0.0004) | 0.0032*** (0.0003) | -0.0046*** (0.0004) | -0.0031*** (0.0004) |
| Stock Digits Y0 to Y5 | -0.0010*** (0.0001) | -0.0004*** (0.0001) | 0.0004*** (0.0001) | 0.0004*** (0.0001) |
| Stock Digits X6 to X9 | -0.0002* (0.0001) | -0.0001 (0.0001) | 0.0008*** (0.0001) | 0.0002 (0.0001) |
| Day FE | YES | YES | YES | YES |
| Industry FE | YES | YES | YES | YES |
| Account FE | YES | YES | YES | YES |
| Stock FE | YES | YES | YES | YES |
| Observations | 1,355,866 | 1,147,037 | 1,408,129 | 1,120,153 |
| R ² | 0.0987 | 0.0465 | 0.1054 | 0.0457 |

Note: The unit of observation is an investor \times stock \times day. The samples is restricted to login days. We include only quarters in which the stocks increased/decreased in price (regarding the first observation of the quarter) and change the left most digit at least once during the quarter. Only those stocks that have changed the left most digit are included. Regressions fit an intercept for the change in the left most digit at X0 and two slopes for the left (with values in the range -3 to 0, corresponding to X6 to X9) and right (with values in the range 0 to 5, corresponding to Y0 to Y5) values. The constant shows the probability to sell the stock at when the second digit is 9 (X9). The second digit over threshold dummy shows the jump in probability when the first digit changes and so the second digit becomes 0 (Y0). SE are clustered by account.

Table 7: Probability of Sale and Left Digit, Splitting by Account Tenure

| | Prices Increasing Sample | | Prices Decreasing Sample | |
|----------------------------------|--------------------------|------------------------|--------------------------|------------------------|
| | Below Median | Above Median | Below Median | Above Median |
| Above Y0 = 1 (in Range Y0 to Y5) | 0.0069*** (0.0004) | 0.0048*** (0.0003) | -0.0045*** (0.0003) | -0.0034*** (0.0004) |
| Stock Digits Y0 to Y5 | -0.0009*** (0.0001) | -0.0006*** (0.0001) | 0.0005*** (0.0001) | 0.0003*** (0.0001) |
| Stock Digits X6 to X9 | -0.0002 (0.0001) | -0.0001 (0.0001) | 0.0006*** (0.0001) | 0.0005*** (0.0001) |
| Day FE | YES | YES | YES | YES |
| Industry FE | YES | YES | YES | YES |
| Account FE | YES | YES | YES | YES |
| Stock FE | YES | YES | YES | YES |
| Observations | 1,235,268 | 1,267,635 | 1,280,279 | 1,248,003 |
| R ² | 0.0823 | 0.0607 | 0.0822 | 0.0670 |

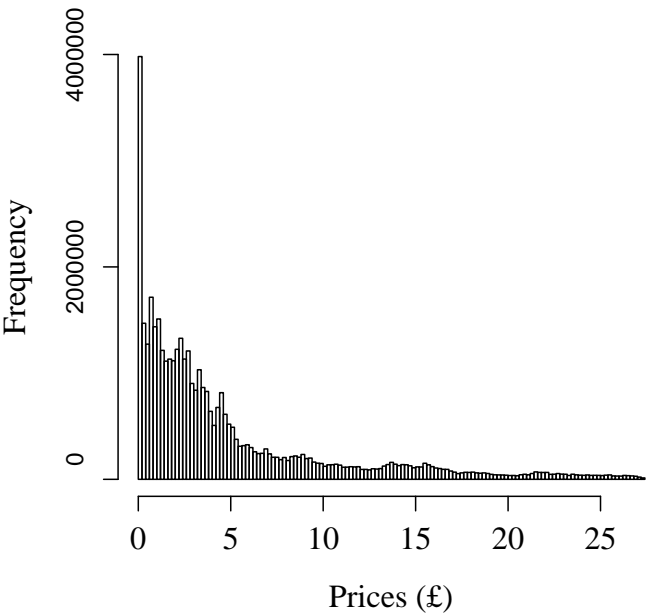
Note: The unit of observation is an investor \times stock \times day. The samples is restricted to login days. We include only quarters in which the stocks increased/decreased in price (regarding the first observation of the quarter) and change the left most digit at least once during the quarter. Only those stocks that have changed the left most digit are included. Regressions fit an intercept for the change in the left most digit at X0 and two slopes for the left (with values in the range -3 to 0, corresponding to X6 to X9) and right (with values in the range 0 to 5, corresponding to Y0 to Y5) values. The constant shows the probability to sell the stock at when the second digit is 9 (X9). The second digit over threshold dummy shows the jump in probability when the first digit changes and so the second digit becomes 0 (Y0). SE are clustered by account.

Table 8: Probability of Sale and Left Digit, Splitting by Number of Stocks

| | Prices Increasing Sample | | Prices Decreasing Sample | |
|----------------------------------|--------------------------|------------------------|--------------------------|------------------------|
| | Below Median | Above Median | Below Median | Above Median |
| Above Y0 = 1 (in Range Y0 to Y5) | 0.0084*** (0.0003) | 0.0028*** (0.0003) | -0.0044*** (0.0004) | -0.0034*** (0.0003) |
| Stock Digits Y0 to Y5 | -0.0011*** (0.0001) | -0.0003*** (0.0001) | 0.0004*** (0.0001) | 0.0004*** (0.0001) |
| Stock Digits X6 to X9 | -0.0002* (0.0001) | -0.0001 (0.0001) | 0.0008*** (0.0002) | 0.0002* (0.0001) |
| Day FE | YES | YES | YES | YES |
| Industry FE | YES | YES | YES | YES |
| Account FE | YES | YES | YES | YES |
| Stock FE | YES | YES | YES | YES |
| Observations | 1,420,565 | 1,082,338 | 1,343,898 | 1,184,384 |
| R ² | 0.0893 | 0.0336 | 0.0946 | 0.0372 |

Note: The unit of observation is an investor \times stock \times day. The samples is restricted to login days. We include only quarters in which the stocks increased/decreased in price (regarding the first observation of the quarter) and change the left most digit at least once during the quarter. Only those stocks that have changed the left most digit are included. Regressions fit an intercept for the change in the left most digit at X0 and two slopes for the left (with values in the range -3 to 0, corresponding to X6 to X9) and right (with values in the range 0 to 5, corresponding to Y0 to Y5) values. The constant shows the probability to sell the stock at when the second digit is 9 (X9). The second digit over threshold dummy shows the jump in probability when the first digit changes and so the second digit becomes 0 (Y0). SE are clustered by account.

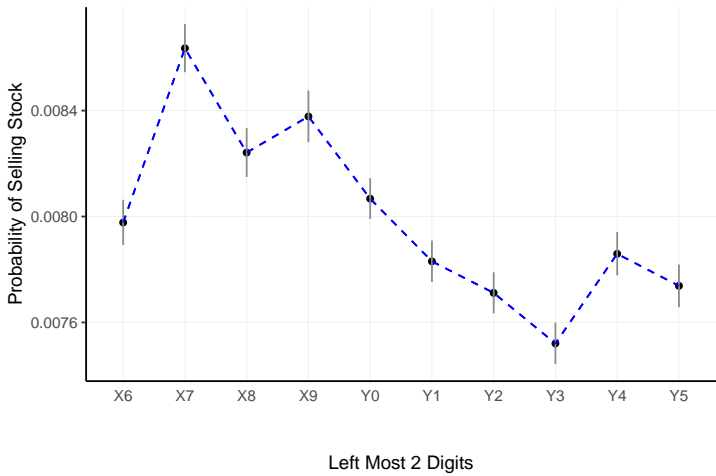
Figure A1: Histogram of Stock Prices



Note: Figure shows the histogram of prices on login days. Outliers above the 95 percentile are excluded.

EQ Comments: Patterns are unobservable if using all login days without any restriction

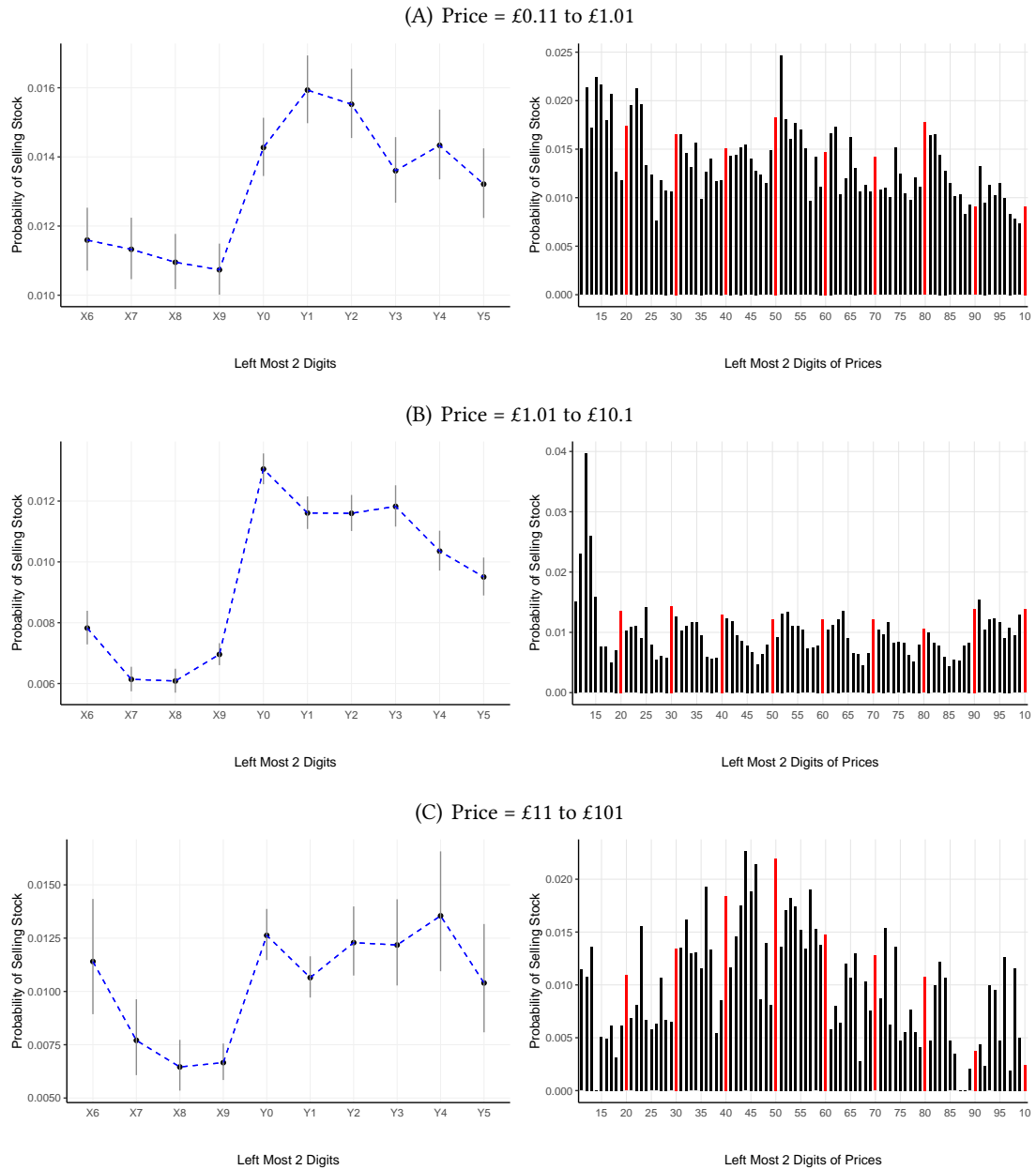
Figure A2: Leftmost Stock Price Digit and Probability of Sale
All Login Days



Note: £Y in the X-axes is equivalent to £X + 1 (e.g., £X9 could include £0.19, £1.9, £19, etc., while £Y0 could include £0.20, £2.0, £20, etc.).

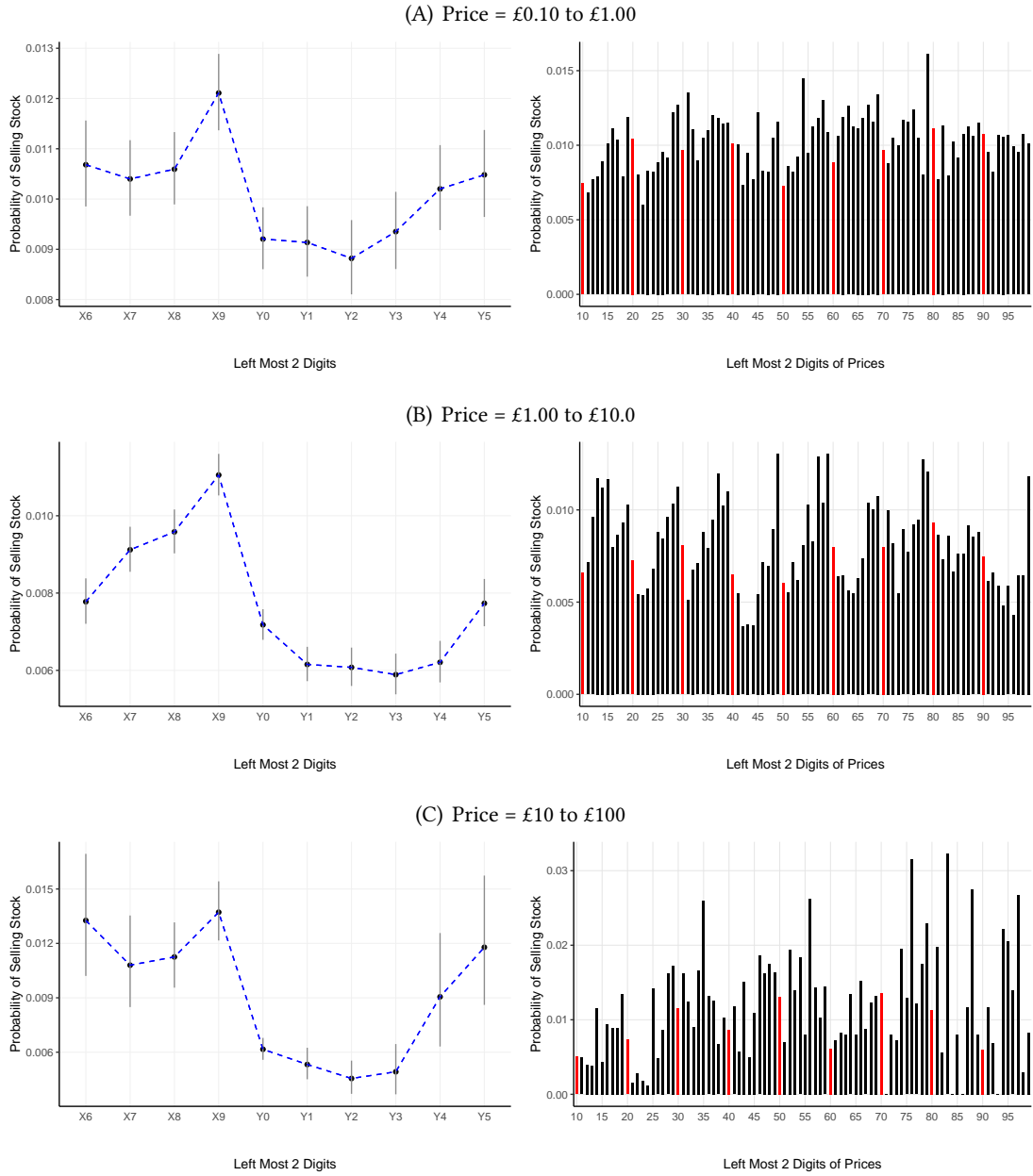
EQ: Robustness 1: Same patterns in sub-samples of equal bin size for our main sample (quarterly sample and login days)

Figure A3: Leftmost Stock Price Digit and Probability of Sale
Prices Increasing Sample by Price Range



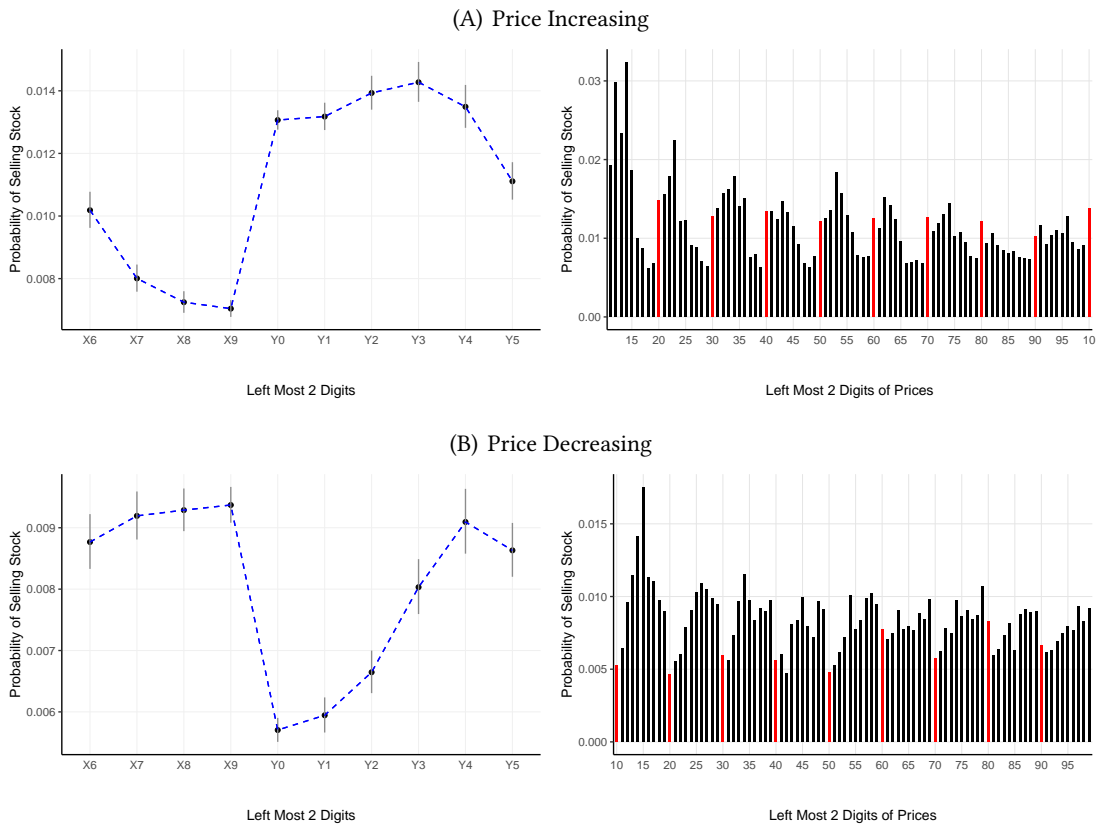
Note: £Y in the X-axes is equivalent to £X + 1 (e.g., £X9 could include £0.19, £1.9, £19, etc., while £Y0 could include £0.20, £2.0, £20, etc.). Panels A, B and C show equal size bins of 1p, 10p and £1, respectively. Panel A corresponds to 25% of the observations in the prices increasing sample; Panel B, to 55%; and Panel C, to 8%.

Figure A4: Leftmost Stock Price Digit and Probability of Sale
Prices Decreasing Sample by Price Range



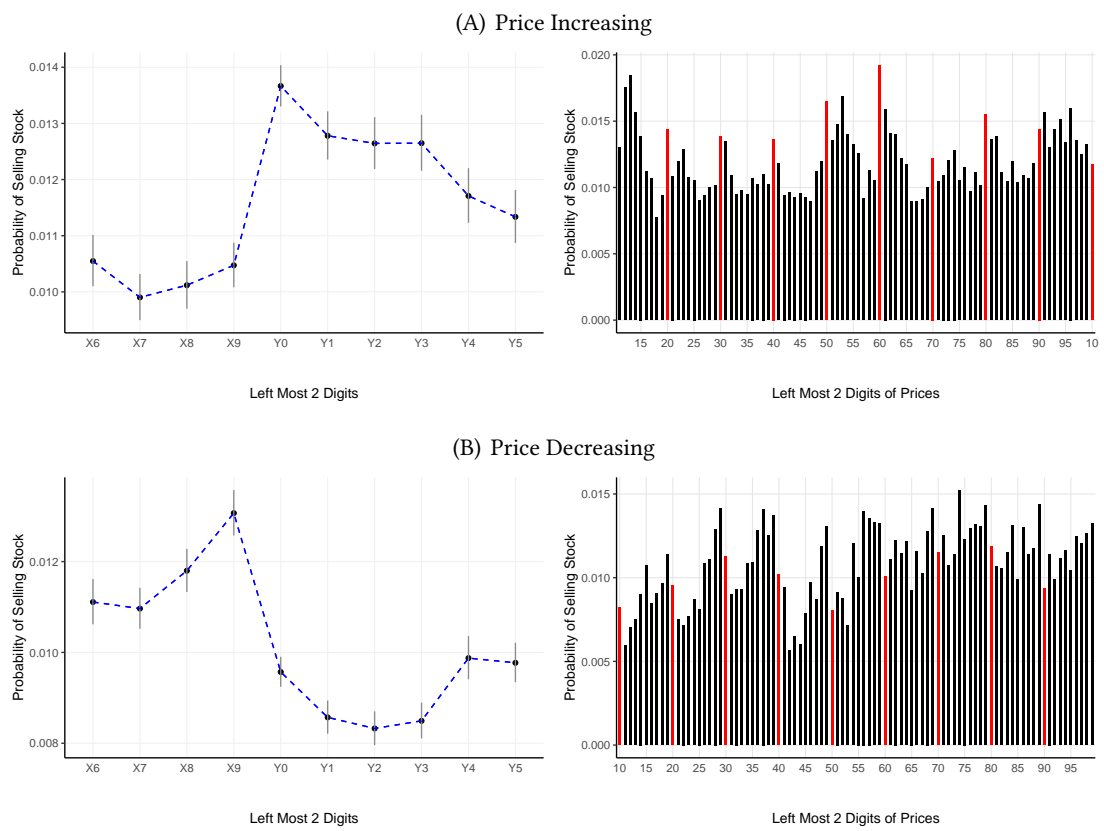
Note: £Y in the X-axes is equivalent to £X + 1 (e.g., £X9 could include £0.19, £1.9, £19, etc., while £Y0 could include £0.20, £2.0, £20, etc.). Panels A, B and C show equal size bins of 1p, 10p and £1, respectively. Panel A corresponds to 27% of the observations in the prices decreasing sample; Panel B, to 43%; and Panel C, to 7%.

Figure A5: Leftmost Stock Price Digit and Probability of Sale, Monthly Sample



Note: £Y in the X-axes is equivalent to £X + 1 (e.g., £X9 could include £0.19, £1.9, £19, etc., while £Y0 could include £0.20, £2.0, £20, etc.).

Figure A6: Leftmost Stock Price Digit and Probability of Sale, Annual Sample



EQ: Robustness 3: Random sells (using the same samples of our main analysis, quarterly sample and login days)

Figure A7: Sample Selection and Simulation Exercise

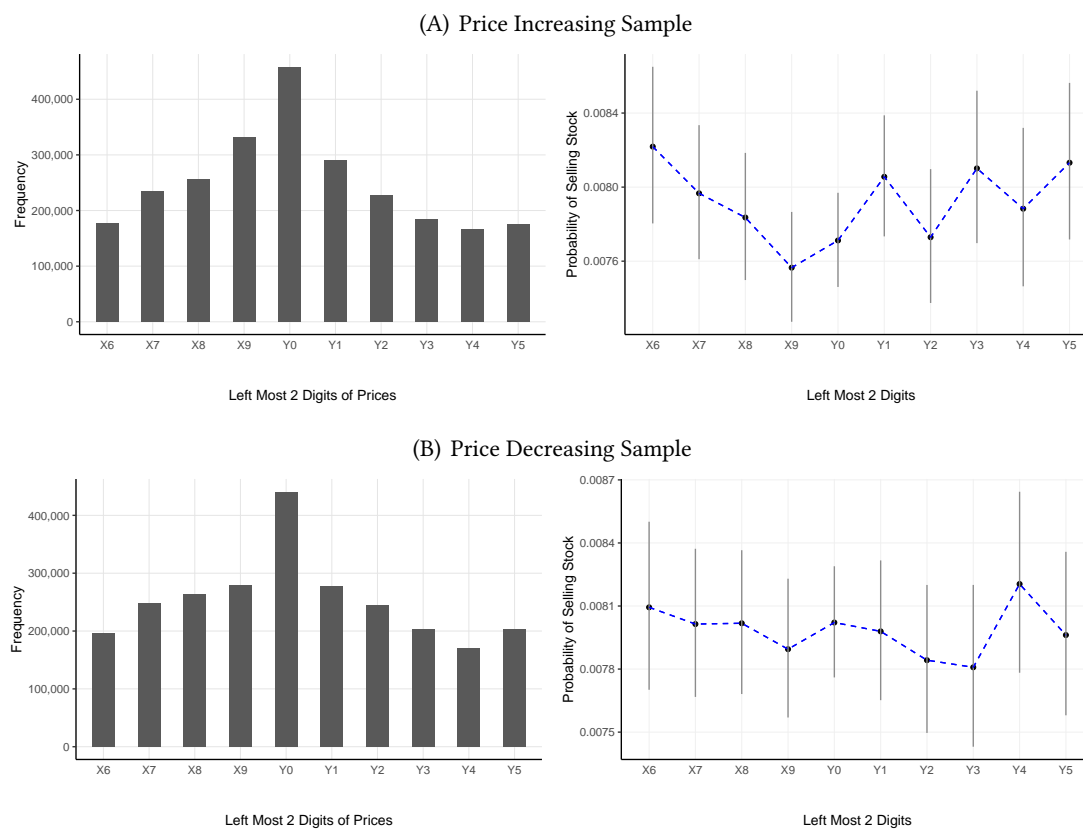
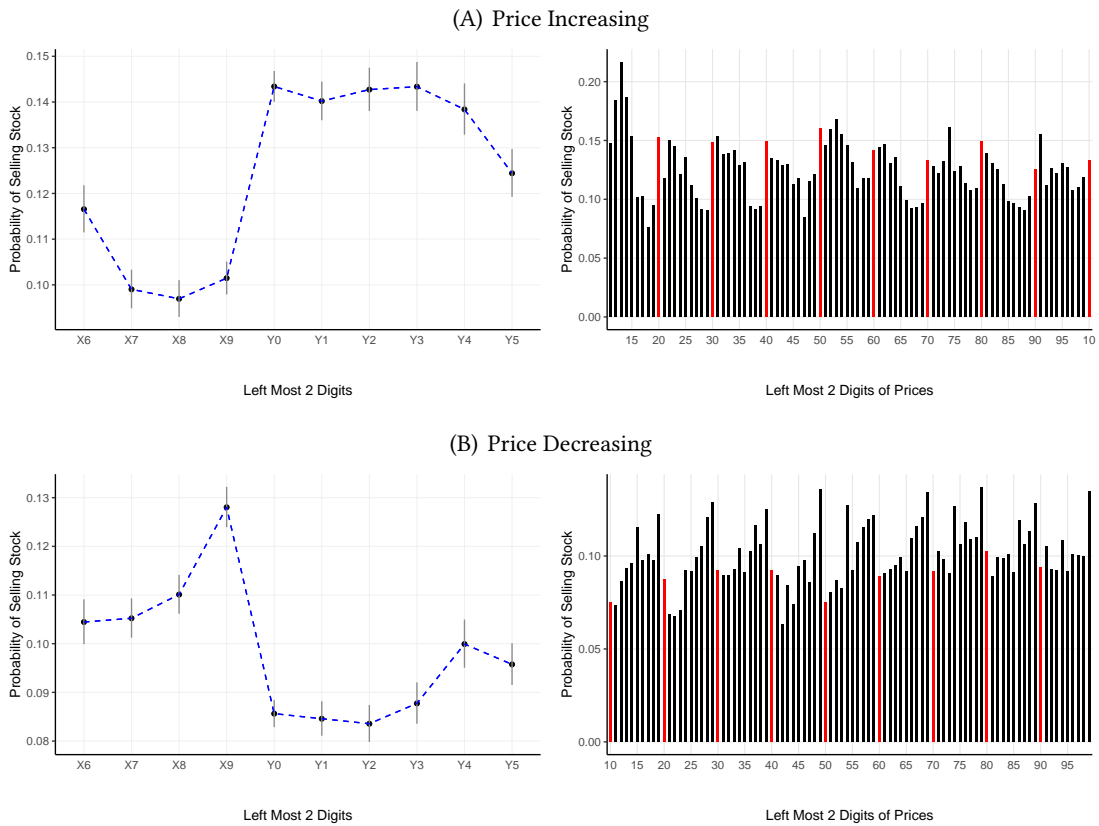


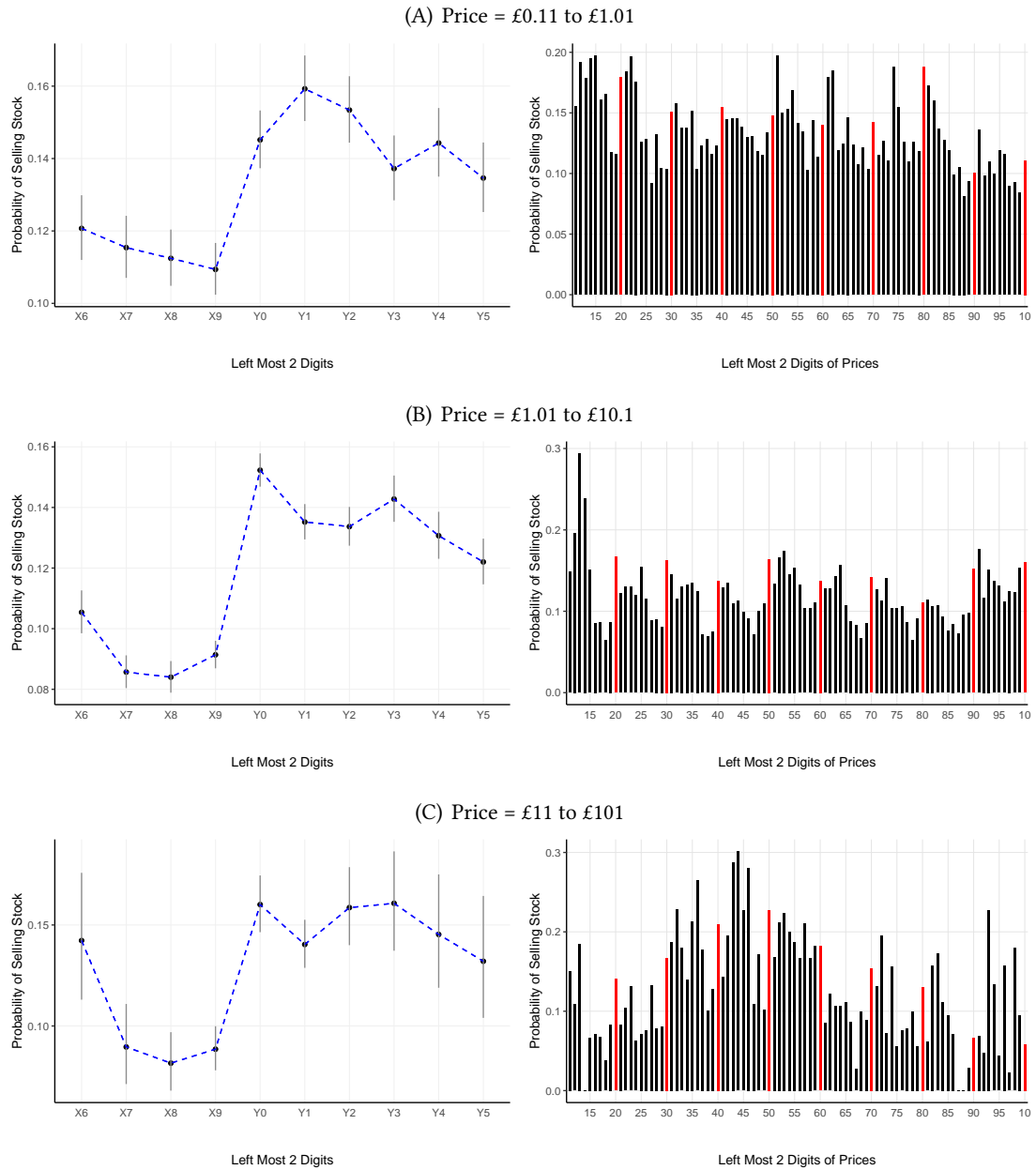
Figure A8: Leftmost Stock Price Digit and Probability of Sale, Sell Days



Note: £Y in the X-axes is equivalent to £X + 1 (e.g., £X9 could include £0.19, £1.9, £19, etc., while £Y0 could include £0.20, £2.0, £20, etc.).

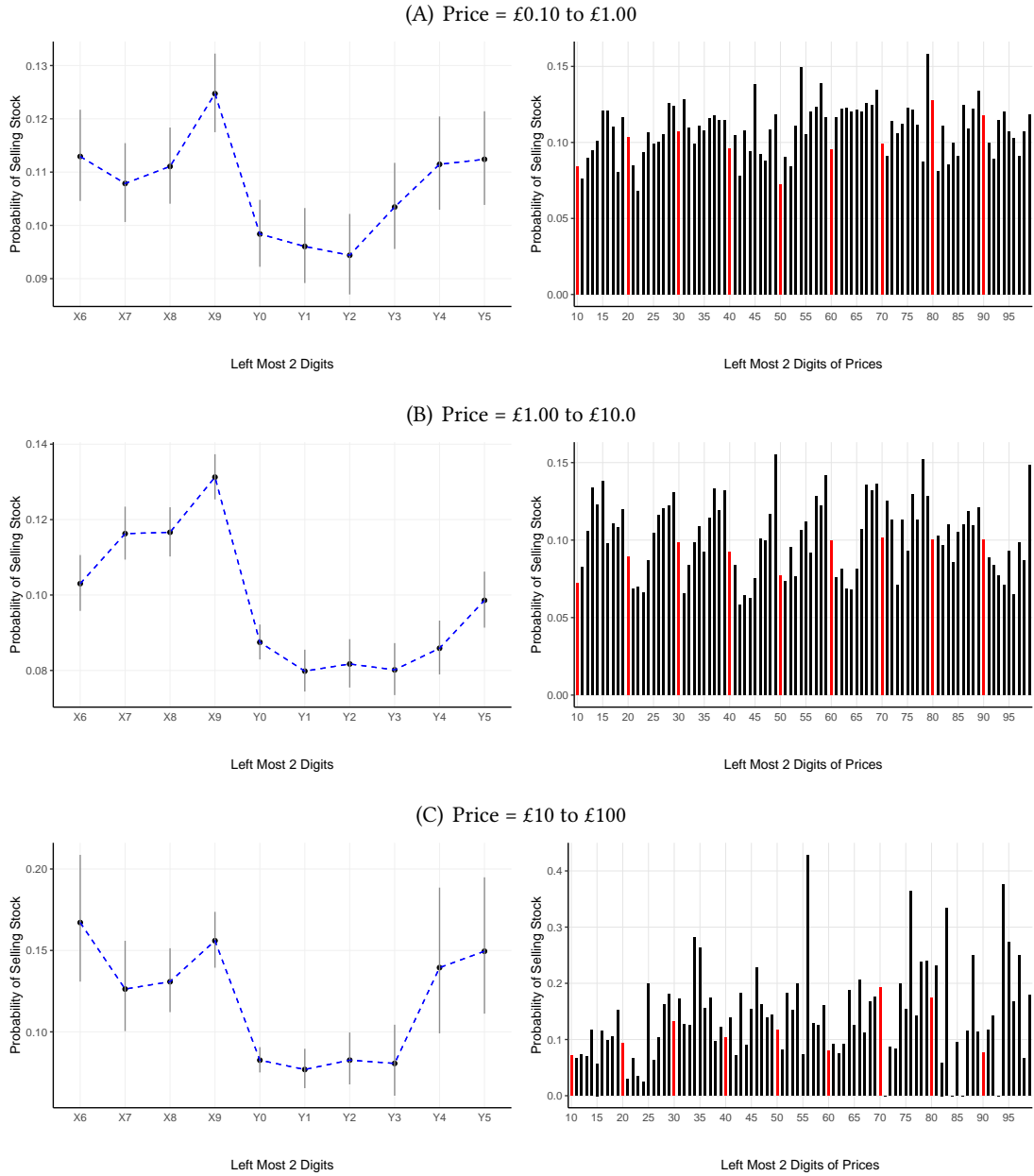
EQ: Robustness 4 [part 2]: Same patterns in sell days, sub-samples of equal bin size for our main sample (quarterly sample and sell days)

Figure A9: Leftmost Stock Price Digit and Probability of Sale, Sell Days
Prices Increasing Sample by Price Range



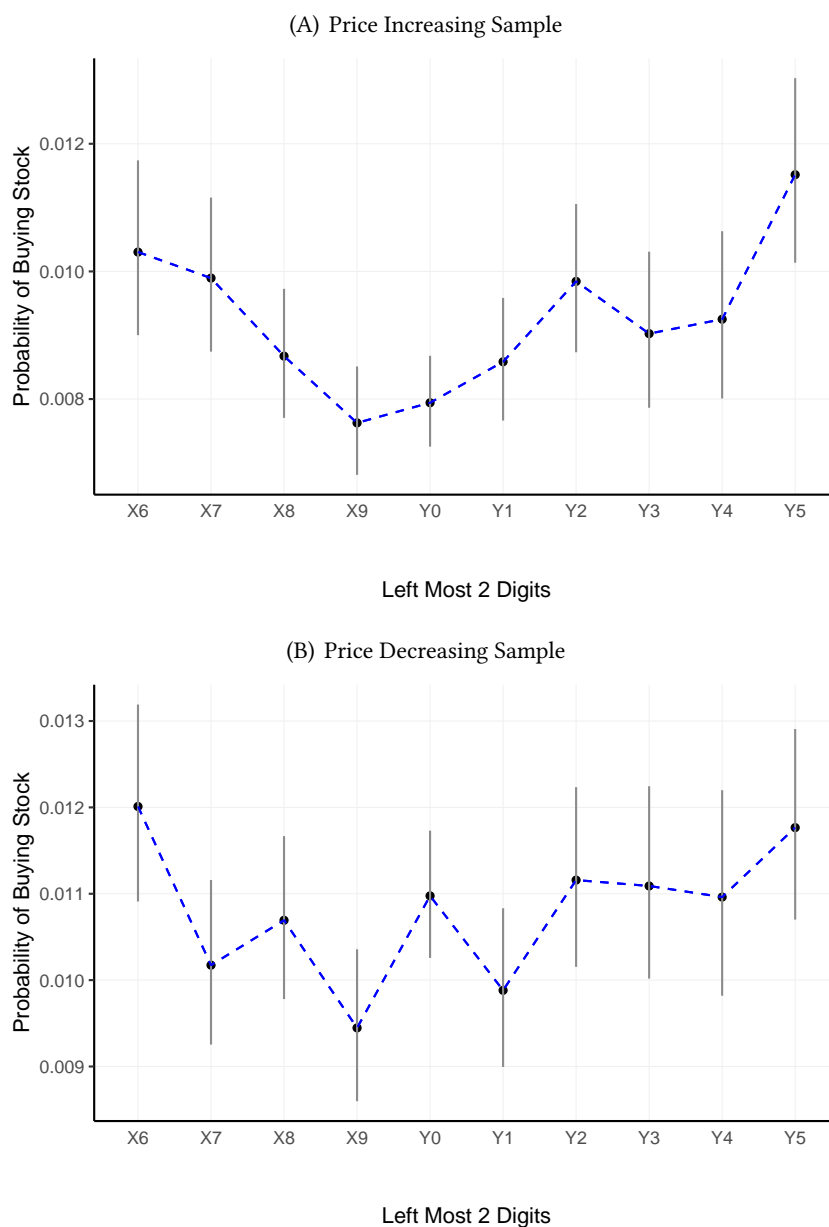
Note: £Y in the X-axes is equivalent to £X + 1 (e.g., £X9 could include £0.19, £1.9, £19, etc., while £Y0 could include £0.20, £2.0, £20, etc.). Panels A, B and C show equal size bins of 1p, 10p and £1, respectively.

Figure A10: Leftmost Stock Price Digit and Probability of Sale, Sell Days
Prices Decreasing Sample by Price Range



Note: £Y in the X-axes is equivalent to £X + 1 (e.g., £X9 could include £0.19, £1.9, £19, etc., while £Y0 could include £0.20, £2.0, £20, etc.). Panels A, B and C show equal size bins of 1p, 10p and £1, respectively.

Figure A11: Probability of Topping-up [EQ: I remember we talked with George about doing the topping up analysis. Perhaps we could just tell him that the analysis did not work and drop this plot? What do you think? Just in case, I am leaving the plots here for now. These plots were done using new accounts.]



Note: Figure shows the probability of topping up (increasing position in a stock) under the same sample selection. £Y in the X-axis is equivalent to £X + 1 (e.g., £X9 could include £0.19, £1.9, £19, etc., while £Y0 could include £0.20, £2.0, £20, etc.,).

EQ: We use 30% of accounts and login days

Table A1: Sample Selection

| | Accounts | Login-Days | Transaction-Days | Sell-Days |
|----------------------------------|----------|------------|------------------|-----------|
| Unrestricted Sample | 45919 | 67734059 | 1228755 | 493041 |
| <i>Drop due to:</i> | | | | |
| Inactive Accounts | 14370 | 7932474 | 46982 | 19562 |
| Unmatched Prices | 306 | 13009351 | 129314 | 49012 |
| At Least Two Stocks in Portfolio | 3062 | 720291 | 76539 | 32652 |
| Missing Demographic Data | 1137 | 1793831 | 37427 | 16400 |
| Starting Position Days | 23 | 367341 | 331557 | 25479 |
| Baseline sample | 27021 | 43910771 | 606936 | 349936 |

Note: The unrestricted sample contains 155,300 accounts. We use a 30% random sample of accounts. The table detail the steps in sample selection.

Table A2: Summary Stats for Annual and Monthly Samples

| | N | Mean | St. Dev. | Min | Pctl(25) | Median | Pctl(75) | Max |
|---------------------------|-----------|-------|----------|-------|----------|--------|----------|-----------|
| Monthly Increasing Sample | 2,224,458 | 5.646 | 26.950 | 0.000 | 0.561 | 2.735 | 6.060 | 3,600.000 |
| Monthly Decreasing Sample | 2,644,657 | 4.822 | 24.815 | 0.000 | 0.205 | 1.008 | 5.083 | 3,453.000 |
| Annual Increasing Sample | 2,351,131 | 8.338 | 24.526 | 0.000 | 1.073 | 3.672 | 7.350 | 3,600.000 |
| Annual Decreasing Sample | 2,172,299 | 4.084 | 21.423 | 0.000 | 0.155 | 1.077 | 4.256 | 2,062.035 |

EQ: Complementing Robustness 1: Sub-samples of equal bin size (quarterly sample and login days)

Table A3: Price Increasing Subsamples with Equal Prices Bins

| Panel (A): Price = £0.11 to £1.01 | | | | | |
|--|---------------------------------|------------------------|------------------------|------------------------|------------------------|
| | Probability of $Sale_{ijt} = 1$ | | | | |
| | (1) | (2) | (3) | (4) | (5) |
| Above $Y_0 = 1$ (in Range Y_0 to Y_5) | 0.0034*** (0.0003) | 0.0045*** (0.0005) | 0.0041*** (0.0005) | 0.0044*** (0.0005) | 0.0043*** (0.0005) |
| Stock Digits Y_0 to Y_5 | | -0.0003** (0.0001) | -0.0003*** (0.0001) | -0.0004*** (0.0001) | -0.0005*** (0.0001) |
| Stock Digits X_6 to X_9 | | -0.0003 (0.0002) | -0.0001 (0.0002) | -0.0003 (0.0002) | -0.0003 (0.0002) |
| Constant | 0.0111*** (0.0004) | 0.0107*** (0.0004) | 0.0216*** (0.0043) | | |
| Day FE | NO | NO | YES | YES | YES |
| Industry FE | NO | NO | YES | YES | YES |
| Account FE | NO | NO | NO | YES | YES |
| Stock FE | NO | NO | NO | NO | YES |
| Observations | 616,769 | 616,769 | 616,769 | 616,769 | 616,769 |
| R^2 | 0.0002 | 0.0002 | 0.0014 | 0.0988 | 0.1076 |
| Panel (B): Price = £1.01 to £10.1 | | | | | |
| | Probability of $Sale_{ijt} = 1$ | | | | |
| | (1) | (2) | (3) | (4) | (5) |
| Above $Y_0 = 1$ (in Range Y_0 to Y_5) | 0.0049*** (0.0002) | 0.0063*** (0.0003) | 0.0061*** (0.0003) | 0.0061*** (0.0003) | 0.0064*** (0.0003) |
| Stock Digits Y_0 to Y_5 | | -0.0006*** (0.0001) | -0.0007*** (0.0001) | -0.0006*** (0.0001) | -0.0007*** (0.0001) |
| Stock Digits X_6 to X_9 | | -0.0001 (0.0001) | -0.0001 (0.0001) | -0.0001 (0.0001) | -0.0001 (0.0001) |
| Constant | 0.0067*** (0.0002) | 0.0065*** (0.0002) | 0.0164*** (0.0041) | | |
| Day FE | NO | NO | YES | YES | YES |
| Industry FE | NO | NO | YES | YES | YES |
| Account FE | NO | NO | NO | YES | YES |
| Stock FE | NO | NO | NO | NO | YES |
| Observations | 1,370,707 | 1,370,707 | 1,370,707 | 1,370,707 | 1,370,707 |
| R^2 | 0.0006 | 0.0007 | 0.0020 | 0.0716 | 0.0751 |
| Panel (C): Price = £11 to £101 | | | | | |
| | Probability of $Sale_{ijt} = 1$ | | | | |
| | (1) | (2) | (3) | (4) | (5) |
| Above $Y_0 = 1$ (in Range Y_0 to Y_5) | 0.0046*** (0.0005) | 0.0055*** (0.0006) | 0.0057*** (0.0006) | 0.0073*** (0.0007) | 0.0080*** (0.0008) |
| Stock Digits Y_0 to Y_5 | | -0.0000 (0.0002) | -0.0001 (0.0002) | 0.0002 (0.0003) | 0.0002 (0.0003) |
| Stock Digits X_6 to X_9 | | -0.0011*** (0.0004) | -0.0014*** (0.0004) | -0.0012*** (0.0004) | -0.0012*** (0.0004) |
| Constant | 0.0072*** (0.0004) | 0.0063*** (0.0005) | -0.0017** (0.0008) | | |
| Day FE | NO | NO | YES | YES | YES |
| Industry FE | NO | NO | YES | YES | YES |
| Account FE | NO | NO | NO | YES | YES |
| Stock FE | NO | NO | NO | NO | YES |
| Observations | 192,406 | 192,406 | 192,406 | 192,406 | 192,406 |
| R^2 | 0.0005 | 0.0005 | 0.0028 | 0.1330 | 0.1391 |

Table A4: Price Decreasing Subsamples with Equal Prices Bins

| Panel (A): Price = £0.10 to £1.00 | | | | | |
|--|---------------------------------|------------------------|------------------------|------------------------|------------------------|
| | Probability of $Sale_{ijt} = 1$ | | | | |
| | (1) | (2) | (3) | (4) | (5) |
| Above $Y_0 = 1$ (in Range Y_0 to Y_5) | 0.0034*** (0.0003) | 0.0045*** (0.0005) | 0.0041*** (0.0005) | 0.0044*** (0.0005) | 0.0043*** (0.0005) |
| Stock Digits Y_0 to Y_5 | | -0.0003** (0.0001) | -0.0003*** (0.0001) | -0.0004*** (0.0001) | -0.0005*** (0.0001) |
| Stock Digits X_6 to X_9 | | -0.0003 (0.0002) | -0.0001 (0.0002) | -0.0003 (0.0002) | -0.0003 (0.0002) |
| Constant | 0.0111*** (0.0004) | 0.0107*** (0.0004) | 0.0216*** (0.0043) | | |
| Day FE | NO | NO | YES | YES | YES |
| Industry FE | NO | NO | YES | YES | YES |
| Account FE | NO | NO | NO | YES | YES |
| Stock FE | NO | NO | NO | NO | YES |
| Observations | 616,769 | 616,769 | 616,769 | 616,769 | 616,769 |
| R^2 | 0.0002 | 0.0002 | 0.0014 | 0.0988 | 0.1076 |
| Panel (B): Price = £1.00 to £10.0 | | | | | |
| | Probability of $Sale_{ijt} = 1$ | | | | |
| | (1) | (2) | (3) | (4) | (5) |
| Above $Y_0 = 1$ (in Range Y_0 to Y_5) | -0.0030*** (0.0002) | -0.0043*** (0.0003) | -0.0046*** (0.0003) | -0.0046*** (0.0003) | -0.0043*** (0.0004) |
| Stock Digits Y_0 to Y_5 | | -0.0000 (0.0001) | 0.0000 (0.0001) | 0.0004*** (0.0001) | 0.0003*** (0.0001) |
| Stock Digits X_6 to X_9 | | 0.0010*** (0.0001) | 0.0010*** (0.0001) | 0.0005*** (0.0001) | 0.0006*** (0.0001) |
| Constant | 0.0096*** (0.0003) | 0.0109*** (0.0004) | 0.0234* (0.0135) | | |
| Day FE | NO | NO | YES | YES | YES |
| Industry FE | NO | NO | YES | YES | YES |
| Account FE | NO | NO | NO | YES | YES |
| Stock FE | NO | NO | NO | NO | YES |
| Observations | 1,096,158 | 1,096,158 | 1,096,158 | 1,096,158 | 1,096,158 |
| R^2 | 0.0003 | 0.0004 | 0.0008 | 0.0843 | 0.0905 |
| Panel (C): Price = £10 to £100 | | | | | |
| | Probability of $Sale_{ijt} = 1$ | | | | |
| | (1) | (2) | (3) | (4) | (5) |
| Above $Y_0 = 1$ (in Range Y_0 to Y_5) | -0.0066*** (0.0007) | -0.0075*** (0.0009) | -0.0068*** (0.0009) | -0.0060*** (0.0009) | -0.0051*** (0.0011) |
| Stock Digits Y_0 to Y_5 | | 0.0003 (0.0002) | 0.0005** (0.0002) | 0.0006*** (0.0002) | 0.0003 (0.0002) |
| Stock Digits X_6 to X_9 | | 0.0006 (0.0005) | 0.0010* (0.0005) | 0.0001 (0.0005) | 0.0005 (0.0006) |
| Constant | 0.0125*** (0.0007) | 0.0131*** (0.0009) | 0.0062*** (0.0011) | | |
| Day FE | NO | NO | YES | YES | YES |
| Industry FE | NO | NO | YES | YES | YES |
| Account FE | NO | NO | NO | YES | YES |
| Stock FE | NO | NO | NO | NO | YES |
| Observations | 180,327 | 180,327 | 180,327 | 180,327 | 180,327 |
| R^2 | 0.0011 | 0.0011 | 0.0034 | 0.1437 | 0.1511 |

Table A5: Price Increasing Samples, Monthly and Annual Samples

| Panel (A): Monthly Sample | | | | | |
|----------------------------------|--|------------------------|------------------------|------------------------|------------------------|
| | <i>Probability of Sale_{ijt} = 1</i> | | | | |
| | (1) | (2) | (3) | (4) | (5) |
| Above Y0 = 1 (in Range Y0 to Y5) | 0.0055*** (0.0002) | 0.0066*** (0.0002) | 0.0061*** (0.0002) | 0.0064*** (0.0002) | 0.0070*** (0.0002) |
| Stock Digits Y0 to Y5 | | -0.0001 (0.0001) | -0.0002*** (0.0001) | -0.0005*** (0.0001) | -0.0008*** (0.0001) |
| Stock Digits X6 to X9 | | -0.0009*** (0.0001) | -0.0005*** (0.0001) | -0.0002* (0.0001) | -0.0001 (0.0001) |
| Constant | 0.0077*** (0.0002) | 0.0068*** (0.0002) | 0.0106*** (0.0019) | | |
| Day FE | NO | NO | YES | YES | YES |
| Industry FE | NO | NO | YES | YES | YES |
| Account FE | NO | NO | NO | YES | YES |
| Stock FE | NO | NO | NO | NO | YES |
| Observations | 2,224,458 | 2,224,458 | 2,224,458 | 2,224,458 | 2,224,458 |
| R ² | 0.0007 | 0.0007 | 0.0017 | 0.0625 | 0.0692 |

| Panel (B): Annual Sample | | | | | |
|----------------------------------|--|------------------------|------------------------|------------------------|------------------------|
| | <i>Probability of Sale_{ijt} = 1</i> | | | | |
| | (1) | (2) | (3) | (4) | (5) |
| Above Y0 = 1 (in Range Y0 to Y5) | 0.0024*** (0.0002) | 0.0033*** (0.0003) | 0.0030*** (0.0003) | 0.0038*** (0.0003) | 0.0044*** (0.0003) |
| Stock Digits Y0 to Y5 | | -0.0004*** (0.0001) | -0.0005*** (0.0001) | -0.0005*** (0.0001) | -0.0007*** (0.0001) |
| Stock Digits X6 to X9 | | 0.0000 (0.0001) | 0.0001 (0.0001) | -0.0001 (0.0001) | -0.0001 (0.0001) |
| Constant | 0.0103*** (0.0002) | 0.0103*** (0.0003) | 0.0079*** (0.0011) | | |
| Day FE | NO | NO | YES | YES | YES |
| Industry FE | NO | NO | YES | YES | YES |
| Account FE | NO | NO | NO | YES | YES |
| Stock FE | NO | NO | NO | NO | YES |
| Observations | 2,351,131 | 2,351,131 | 2,351,131 | 2,351,131 | 2,351,131 |
| R ² | 0.0001 | 0.0001 | 0.0026 | 0.0753 | 0.0819 |

Table A6: Price Decreasing Samples, Monthly and Annual Samples

| Panel (A): Monthly Sample | | | | | |
|--|---------------------------------|------------------------|------------------------|------------------------|------------------------|
| | Probability of $Sale_{ijt} = 1$ | | | | |
| | (1) | (2) | (3) | (4) | (5) |
| Above $Y_0 = 1$ (in Range Y_0 to Y_5) | -0.0025*** (0.0002) | -0.0038*** (0.0002) | -0.0041*** (0.0002) | -0.0041*** (0.0002) | -0.0043*** (0.0002) |
| Stock Digits Y_0 to Y_5 | | 0.0007*** (0.0001) | 0.0007*** (0.0001) | 0.0007*** (0.0001) | 0.0006*** (0.0001) |
| Stock Digits X_6 to X_9 | | 0.0002* (0.0001) | 0.0003*** (0.0001) | 0.0002** (0.0001) | 0.0004*** (0.0001) |
| Constant | 0.0092*** (0.0003) | 0.0094*** (0.0003) | 0.0149*** (0.0015) | | |
| Day FE | NO | NO | YES | YES | YES |
| Industry FE | NO | NO | YES | YES | YES |
| Account FE | NO | NO | NO | YES | YES |
| Stock FE | NO | NO | NO | NO | YES |
| Observations | 2,644,657 | 2,644,657 | 2,644,657 | 2,644,657 | 2,644,657 |
| R^2 | 0.0002 | 0.0003 | 0.0006 | 0.0577 | 0.0625 |
| Panel (B): Annual Sample | | | | | |
| | Probability of $Sale_{ijt} = 1$ | | | | |
| | (1) | (2) | (3) | (4) | (5) |
| Above $Y_0 = 1$ (in Range Y_0 to Y_5) | -0.0027*** (0.0002) | -0.0038*** (0.0003) | -0.0041*** (0.0003) | -0.0031*** (0.0003) | -0.0029*** (0.0003) |
| Stock Digits Y_0 to Y_5 | | 0.0001 (0.0001) | 0.0000 (0.0001) | 0.0003*** (0.0001) | 0.0003*** (0.0001) |
| Stock Digits X_6 to X_9 | | 0.0007*** (0.0001) | 0.0008*** (0.0001) | 0.0004*** (0.0001) | 0.0004*** (0.0001) |
| Constant | 0.0118*** (0.0003) | 0.0128*** (0.0004) | 0.0157*** (0.0016) | | |
| Day FE | NO | NO | YES | YES | YES |
| Industry FE | NO | NO | YES | YES | YES |
| Account FE | NO | NO | NO | YES | YES |
| Stock FE | NO | NO | NO | NO | YES |
| Observations | 2,172,299 | 2,172,299 | 2,172,299 | 2,172,299 | 2,172,299 |
| R^2 | 0.0002 | 0.0002 | 0.0005 | 0.0806 | 0.0870 |

EQ: Complementing Robustness 4 [part 1]: Same patterns in sell days (quarterly sample and sell days)

Table A7: Probability of Sale and Left Digit, Price Increasing Sample, Sell Days

| | <i>Probability of Sale_{ijt} = 1</i> | | | | |
|----------------------------------|--|------------------------|------------------------|------------------------|------------------------|
| | (1) | (2) | (3) | (4) | (5) |
| Above Y0 = 1 (in Range Y0 to Y5) | 0.0375*** (0.0023) | 0.0469*** (0.0029) | 0.0439*** (0.0030) | 0.0383*** (0.0028) | 0.0423*** (0.0030) |
| Stock Digits Y0 to Y5 | | -0.0025*** (0.0006) | -0.0031*** (0.0006) | -0.0031*** (0.0006) | -0.0049*** (0.0006) |
| Stock Digits X6 to X9 | | -0.0038*** (0.0010) | -0.0023** (0.0010) | -0.0018* (0.0010) | -0.0014 (0.0010) |
| Constant | 0.1025*** (0.0041) | 0.0977*** (0.0042) | 0.0965*** (0.0120) | | |
| Day FE | NO | NO | YES | YES | YES |
| Industry FE | NO | NO | YES | YES | YES |
| Account FE | NO | NO | NO | YES | YES |
| Stock FE | NO | NO | NO | NO | YES |
| Observations | 218,875 | 218,875 | 218,875 | 218,875 | 218,875 |
| R ² | 0.0030 | 0.0032 | 0.0109 | 0.2457 | 0.2764 |

Note: The unit of observation is an investor \times stock \times day. The samples is restricted to sell days. We include only quarters in which the stocks increased in price (regarding the first observation of the quarter) and change the left most digit at least once during the quarter. Only those stocks that have changed the left most digit are included. Regressions fit an intercept for the change in the left most digit at X0 and two slopes for the left (with values in the range -3 to 0, corresponding to X6 to X9) and right (with values in the range 0 to 5, corresponding to Y0 to Y5) values. The constant shows the probability to sell the stock at when the second digit is 9 (X9). The second digit over threshold dummy shows the jump in probability when the first digit changes and so the second digit becomes 0 (X0). SE are clustered by account.

Table A8: Probability of Sale and Left Digit, Price Decreasing Sample, Sell Days

| | <i>Probability of Sale_{ijt} = 1</i> | | | | |
|----------------------------------|--|------------------------|------------------------|------------------------|------------------------|
| | (1) | (2) | (3) | (4) | (5) |
| Above Y0 = 1 (in Range Y0 to Y5) | -0.0246*** (0.0017) | -0.0403*** (0.0026) | -0.0424*** (0.0026) | -0.0326*** (0.0026) | -0.0319*** (0.0027) |
| Stock Digits Y0 to Y5 | | 0.0025*** (0.0006) | 0.0025*** (0.0006) | 0.0033*** (0.0005) | 0.0037*** (0.0006) |
| Stock Digits X6 to X9 | | 0.0080*** (0.0011) | 0.0084*** (0.0011) | 0.0043*** (0.0010) | 0.0039*** (0.0010) |
| Constant | 0.1129*** (0.0034) | 0.1237*** (0.0039) | 0.1466*** (0.0123) | | |
| Day FE | NO | NO | YES | YES | YES |
| Industry FE | NO | NO | YES | YES | YES |
| Account FE | NO | NO | NO | YES | YES |
| Stock FE | NO | NO | NO | NO | YES |
| Observations | 222,138 | 222,138 | 222,138 | 222,138 | 222,138 |
| R ² | 0.0016 | 0.0021 | 0.0034 | 0.2228 | 0.2511 |

Note: The unit of observation is an investor \times stock \times day. The samples is restricted to sell days. We include only quarters in which the stocks have not increased in price (regarding the first observation of the quarter) and have not changed the left most digit at least once during the quarter. Regressions fit an intercept for the change in the left most digit at X0 and two slopes for the left (with values in the range -3 to 0, corresponding to X6 to X9) and right (with values in the range 0 to 5, corresponding to Y0 to Y5) values. The constant shows the probability to sell the stock at when the second digit is 9 (X9). The second digit over threshold dummy shows the jump in probability when the first digit changes and so the second digit becomes 0 (X0). SE are clustered by account.

EQ: Complementing Robustness 4 [part 2]: Same patterns in sell days, sub-samples of equal bin size for our main sample (quarterly sample and sell days)

Table A9: Price Increasing Subsamples with Equal Prices Bins, Sell Days

| Panel (A): Price = £0.11 to £1.01 | | | | | |
|--|---------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | Probability of $Sale_{ijt} = 1$ | | | | |
| | (1) | (2) | (3) | (4) | (5) |
| Above $Y_0 = 1$ (in Range Y_0 to Y_5) | 0.0323*** (0.0035) | 0.0438*** (0.0049) | 0.0402*** (0.0049) | 0.0237*** (0.0049) | 0.0204*** (0.0049) |
| Stock Digits Y_0 to Y_5 | | -0.0029** (0.0013) | -0.0028** (0.0013) | -0.0021* (0.0012) | -0.0023** (0.0012) |
| Stock Digits X_6 to X_9 | | -0.0036* (0.0019) | -0.0019 (0.0019) | -0.0015 (0.0020) | -0.0017 (0.0021) |
| Constant | 0.1139*** (0.0062) | 0.1090*** (0.0068) | 0.2047*** (0.0330) | | |
| Day FE | NO | NO | YES | YES | YES |
| Industry FE | NO | NO | YES | YES | YES |
| Account FE | NO | NO | NO | YES | YES |
| Stock FE | NO | NO | NO | NO | YES |
| Observations | 60,807 | 60,807 | 60,807 | 60,807 | 60,807 |
| R^2 | 0.0022 | 0.0024 | 0.0154 | 0.3453 | 0.3763 |

| Panel (B): Price = £1.01 to £10.1 | | | | | |
|--|---------------------------------|------------------------|------------------------|------------------------|------------------------|
| | Probability of $Sale_{ijt} = 1$ | | | | |
| | (1) | (2) | (3) | (4) | (5) |
| Above $Y_0 = 1$ (in Range Y_0 to Y_5) | 0.0478*** (0.0030) | 0.0605*** (0.0042) | 0.0587*** (0.0042) | 0.0459*** (0.0039) | 0.0478*** (0.0039) |
| Stock Digits Y_0 to Y_5 | | -0.0047*** (0.0009) | -0.0055*** (0.0010) | -0.0035*** (0.0009) | -0.0048*** (0.0009) |
| Stock Digits X_6 to X_9 | | -0.0029** (0.0014) | -0.0020 (0.0014) | -0.0015 (0.0013) | -0.0009 (0.0014) |
| Constant | 0.0905*** (0.0039) | 0.0870*** (0.0041) | 0.1290*** (0.0305) | | |
| Day FE | NO | NO | YES | YES | YES |
| Industry FE | NO | NO | YES | YES | YES |
| Account FE | NO | NO | NO | YES | YES |
| Stock FE | NO | NO | NO | NO | YES |
| Observations | 108,807 | 108,807 | 108,807 | 108,807 | 108,807 |
| R^2 | 0.0053 | 0.0057 | 0.0135 | 0.3002 | 0.3192 |

| Panel (C): Price = £11 to £101 | | | | | |
|--|---------------------------------|-----------------------|------------------------|-----------------------|-----------------------|
| | Probability of $Sale_{ijt} = 1$ | | | | |
| | (1) | (2) | (3) | (4) | (5) |
| Above $Y_0 = 1$ (in Range Y_0 to Y_5) | 0.0586*** (0.0064) | 0.0710*** (0.0080) | 0.0681*** (0.0080) | 0.0490*** (0.0092) | 0.0508*** (0.0100) |
| Stock Digits Y_0 to Y_5 | | -0.0022 (0.0029) | -0.0027 (0.0028) | 0.0042 (0.0032) | 0.0048 (0.0033) |
| Stock Digits X_6 to X_9 | | -0.0107** (0.0043) | -0.0123*** (0.0043) | -0.0077 (0.0049) | -0.0060 (0.0051) |
| Constant | 0.0918*** (0.0052) | 0.0828*** (0.0060) | -0.0072 (0.0126) | | |
| Day FE | NO | NO | YES | YES | YES |
| Industry FE | NO | NO | YES | YES | YES |
| Account FE | NO | NO | NO | YES | YES |
| Stock FE | NO | NO | NO | NO | YES |
| Observations | 15,031 | 15,031 | 15,031 | 15,031 | 15,031 |
| R^2 | 0.0071 | 0.0075 | 0.0277 | 0.4586 | 0.4800 |

Table A10: Price Decreasing Subsamples with Equal Prices Bins, Sell Days

| Panel (A): Price = £0.10 to £1.00 | | | | | |
|--|---------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | Probability of $Sale_{ijt} = 1$ | | | | |
| | (1) | (2) | (3) | (4) | (5) |
| Above $Y_0 = 1$ (in Range Y_0 to Y_5) | 0.0323*** (0.0035) | 0.0438*** (0.0049) | 0.0402*** (0.0049) | 0.0237*** (0.0049) | 0.0204*** (0.0049) |
| Stock Digits Y_0 to Y_5 | | -0.0029** (0.0013) | -0.0028** (0.0013) | -0.0021* (0.0012) | -0.0023** (0.0012) |
| Stock Digits X_6 to X_9 | | -0.0036* (0.0019) | -0.0019 (0.0019) | -0.0015 (0.0020) | -0.0017 (0.0021) |
| Constant | 0.1139*** (0.0062) | 0.1090*** (0.0068) | 0.2047*** (0.0330) | | |
| Day FE | NO | NO | YES | YES | YES |
| Industry FE | NO | NO | YES | YES | YES |
| Account FE | NO | NO | NO | YES | YES |
| Stock FE | NO | NO | NO | NO | YES |
| Observations | 60,807 | 60,807 | 60,807 | 60,807 | 60,807 |
| R^2 | 0.0022 | 0.0024 | 0.0154 | 0.3453 | 0.3763 |

| Panel (B): Price = £1.00 to £10.0 | | | | | |
|--|---------------------------------|------------------------|------------------------|------------------------|------------------------|
| | Probability of $Sale_{ijt} = 1$ | | | | |
| | (1) | (2) | (3) | (4) | (5) |
| Above $Y_0 = 1$ (in Range Y_0 to Y_5) | -0.0335*** (0.0026) | -0.0470*** (0.0039) | -0.0503*** (0.0039) | -0.0388*** (0.0039) | -0.0346*** (0.0042) |
| Stock Digits Y_0 to Y_5 | | 0.0014 (0.0009) | 0.0015 (0.0009) | 0.0032*** (0.0009) | 0.0022** (0.0010) |
| Stock Digits X_6 to X_9 | | 0.0086*** (0.0017) | 0.0088*** (0.0016) | 0.0027* (0.0016) | 0.0033** (0.0016) |
| Constant | 0.1190*** (0.0037) | 0.1298*** (0.0046) | 0.2497** (0.1241) | | |
| Day FE | NO | NO | YES | YES | YES |
| Industry FE | NO | NO | YES | YES | YES |
| Account FE | NO | NO | NO | YES | YES |
| Stock FE | NO | NO | NO | NO | YES |
| Observations | 86,156 | 86,156 | 86,156 | 86,156 | 86,156 |
| R^2 | 0.0031 | 0.0035 | 0.0066 | 0.2877 | 0.3117 |

| Panel (C): Price = £10 to £100 | | | | | |
|--|---------------------------------|------------------------|------------------------|------------------------|------------------------|
| | Probability of $Sale_{ijt} = 1$ | | | | |
| | (1) | (2) | (3) | (4) | (5) |
| Above $Y_0 = 1$ (in Range Y_0 to Y_5) | -0.0600*** (0.0076) | -0.0706*** (0.0092) | -0.0620*** (0.0092) | -0.0434*** (0.0107) | -0.0345*** (0.0129) |
| Stock Digits Y_0 to Y_5 | | 0.0077*** (0.0028) | 0.0085*** (0.0028) | 0.0057* (0.0032) | 0.0014 (0.0037) |
| Stock Digits X_6 to X_9 | | 0.0036 (0.0059) | 0.0053 (0.0060) | -0.0062 (0.0065) | -0.0033 (0.0068) |
| Constant | 0.1450*** (0.0077) | 0.1482*** (0.0090) | 0.0698*** (0.0167) | | |
| Day FE | NO | NO | YES | YES | YES |
| Industry FE | NO | NO | YES | YES | YES |
| Account FE | NO | NO | NO | YES | YES |
| Stock FE | NO | NO | NO | NO | YES |
| Observations | 13,233 | 13,233 | 13,233 | 13,233 | 13,233 |
| R^2 | 0.0082 | 0.0090 | 0.0254 | 0.4376 | 0.4672 |