Supporting Information

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SI Text

2D:4D Ratio in the Sample. Fig. S1 shows the distribution of the digits ratio in the sample. The variable 2D:4D ratio has a mean in the sample of 0.959 (SE = 0.004) and median of 0.957, with a range between a minimum of 0.904 and a maximum of 1.016.

Fig. S1*B* illustrates the asymmetry of the distribution around the median value of the 2D:4D ratio. The diagram is obtained by arranging the values in an increasing order and then computing the pair of values given by the difference, respectively, between the top value and the median, and that between the median and the lowest value. This pair is plot as a dot in the scatter plot. Then, the corresponding differences between the second highest value and the second to last are computed, and so on.

The Distribution of the Average P&L. The average monthly P&L of each trader has a mean of £24,749, with a standard error of £8,774. The range is between a minimum value of £-410 and a maximum value of £355,990. Few very large values dominate the mean. The histogram below (Fig. S2) illustrates the distribution of the average P&L and compares it with the normal distribution.

Clearly, the average P&L is strongly skewed to the right. Fig. S3 illustrates the asymmetry of the distribution around the median value and is constructed as Fig. 1*B*. Note the difference in scale between the horizontal and vertical axes, which is necessary to make the diagram readable.

Fig. S4 indicates the distribution of the average P&L against the uniform distribution on the range of the same variable. That is, for every value x on the horizontal axis, the curve reports the value y of corresponding quantile in the average P&L. For example, half of the data (at $x = 0.5$) are in a range of values very close to 0.

The Box–Cox Transformation of the Average P&L. The Box–Cox transformation (1) is obtained by first adding a constant to the average P&L to make all values positive, and then estimating by maximum likelihood the value of the power so that the skewness of the Box–Cox power transformation is zero.

This new variable has a mean value of 1.768 and a median of 1.679. Fig. S5, Fig. S6, and Fig. S7 below correspond to Fig. S2, and Fig. S3, and Fig. S4 for the average P&L. They show that this variable is symmetrically distributed.

Analysis of P&L. ***Average P&L and years of experience.*** Fig. S8 plots the Box–Cox transformation of the average P&L and the years of experience.

Average P&L and years of experience. Table S1 reports the regression of the 2 dependent variables that we used to measure performance of traders: rank and the Box–Cox transformation of the average P&L of the trader. The independent variables are experience, age, and the 2D:4D. Age and the 2D:4D have been normalized to take values in (zero, one), so their coefficients are comparable. The regression is computed for the entire sample of 44 traders.

Average P&L for a subset of traders. We consider the subset of 25 traders that have been active in the same interval of 20 months. The results are reported in Table S2, which is the exact correspondent of Table S1 for this subset.

Panel data analysis. Table S3 reports the panel data analysis (2) for the entire subset of 44 traders. The data were collected in the period from October 2004 to October 2007, for 37 months overall. The analysis extends over the same periods. Quarters 1 to 9 are the 4-month periods in that time interval (so quarter 1 is a variable equal to 1 in the period October 2004 to January 2005 included, and equal to 0 otherwise). Age and 2D:4D are normalized to take values in (zero, one).

Analysis of Experience. Experience is defined as the number of years the trader has been in business at the moment of the collection of the last P&L data (experience). Fig. S9 shows the lowess (3) analysis of experience as function of the 2D:4D ratio.

The scatter analysis of the relationship suggests an exponential relationship between the two variables. Table S4 displays the result of the regression analysis of the log of survival on 2D:4D ratio.

P&L and volatility. Fig. S10 displays the regression of the monthly P&L in the company against the SD of the 3-months Euribor. The number of observations is 20 months. The coefficient of the SD is 6.53 ($P < 0.0001$, $R^2 = 0.735$). The analysis was conducted with Stata (Stata Corp.), Release 10/SE.

1. Box GEP, Cox DR (1964) An analysis of transformations. *J R Stat Soc [Ser B]* 26:211–246.
2. Baltagi BH (2001) *Econometric Analysis of Panel Data* (Wiley, New York).
3. Cleveland WS (1979) Robust locally weighted regression and smoothing Scatterplots. *J Am Stat Soc* 74:829–836.

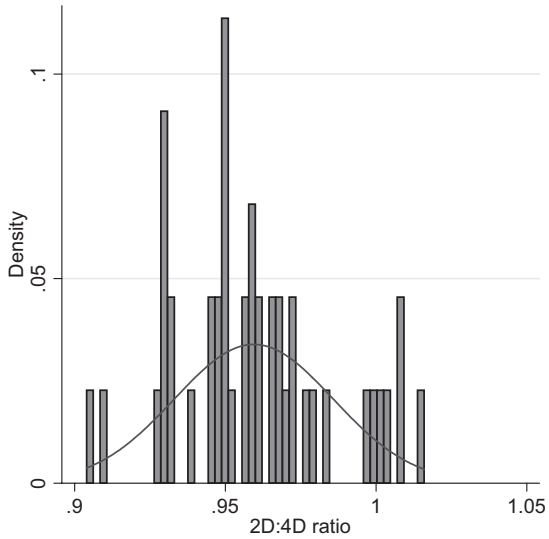

Fig. S1. Histogram of the 2D:4D ratio in the sample and normal distribution.

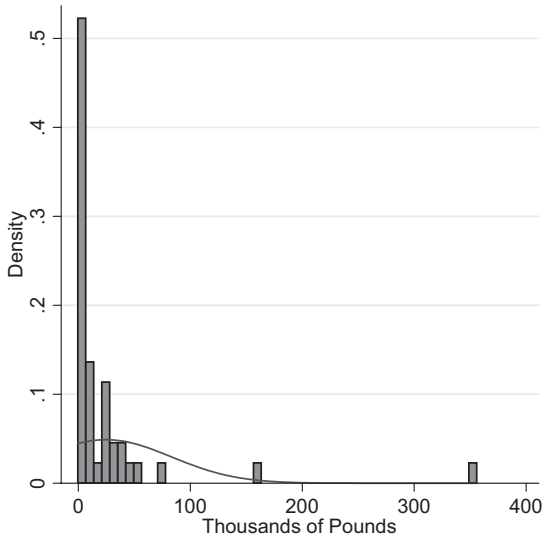

Fig. S2. Histogram of the average P&L. The continuous line describes the normal distribution approximating the real distribution.

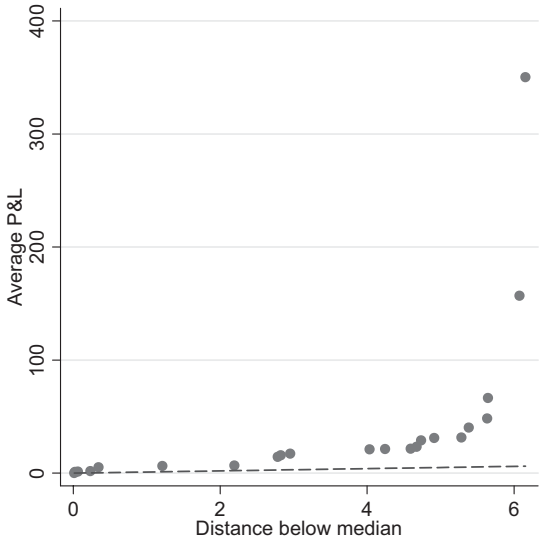

Fig. S3. Skewness of the average P&L.

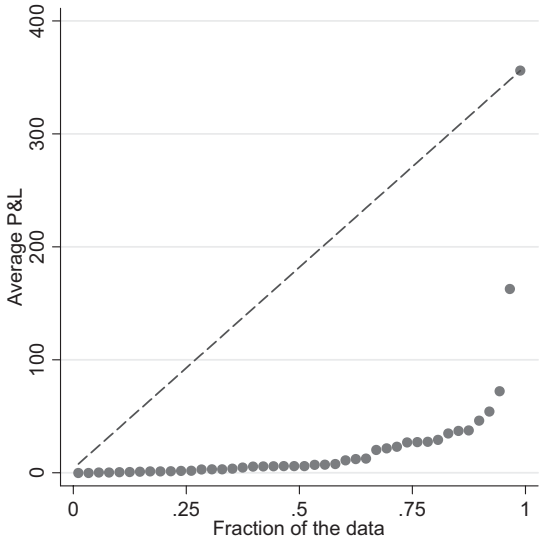

Fig. S4. Average P&L and the uniform distribution.

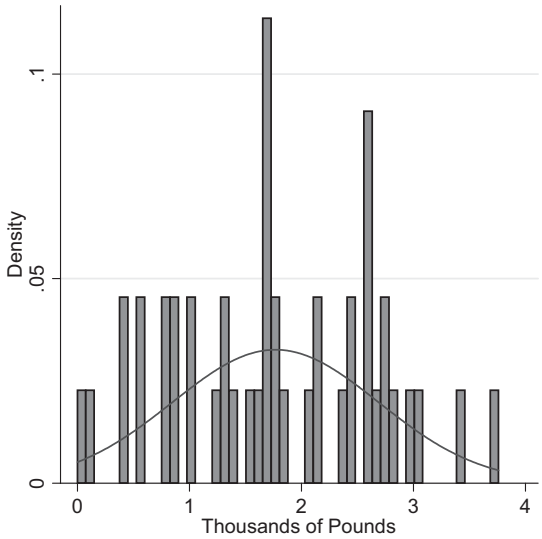

Fig. S5. Histogram of the Box–Cox transformation of the Average P&L. The continuous line describes the normal distribution approximating the real distribution.

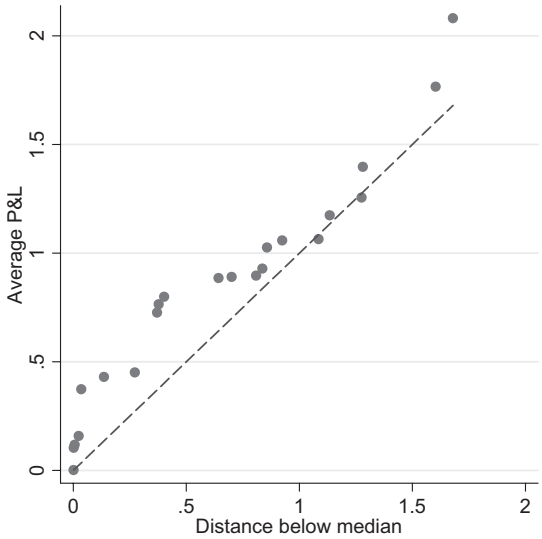

Fig. S6. Skewness of the Box–Cox transformation of the average P&L.

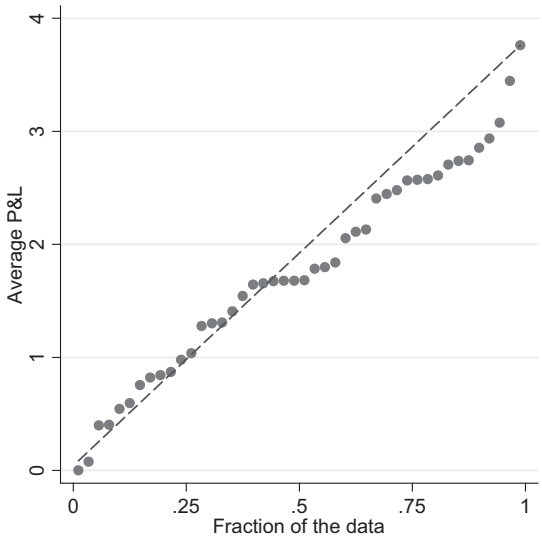

Fig. S7. Box–Cox transformation of the average P&L.

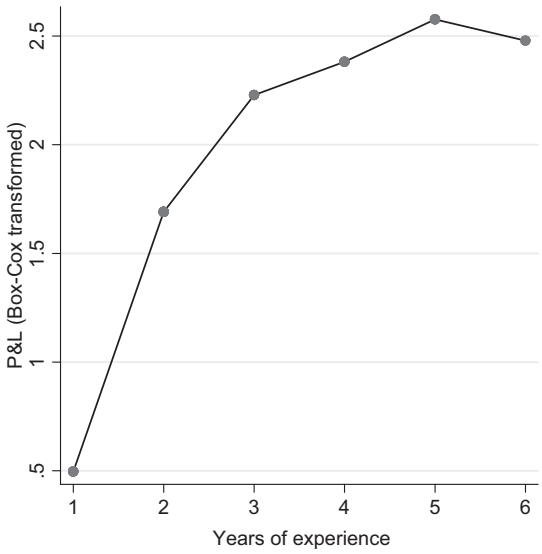

Fig. S8. P&L and years of experience.

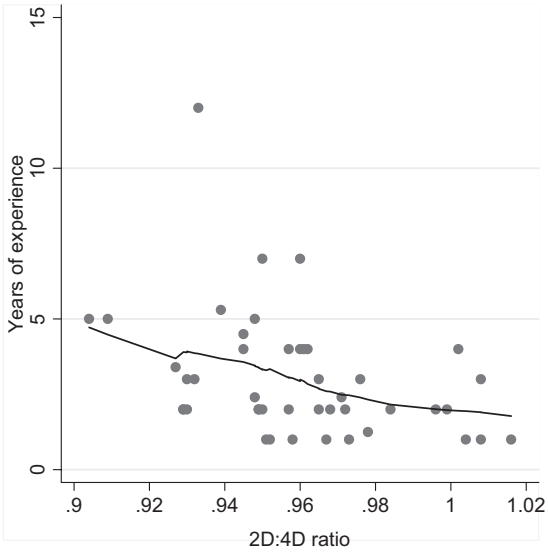

Fig. S9. Lowess analysis of the experience as function of 2D:4D. The bandwidth is 0.8 (that is, 80% of the data were used in each local regression).

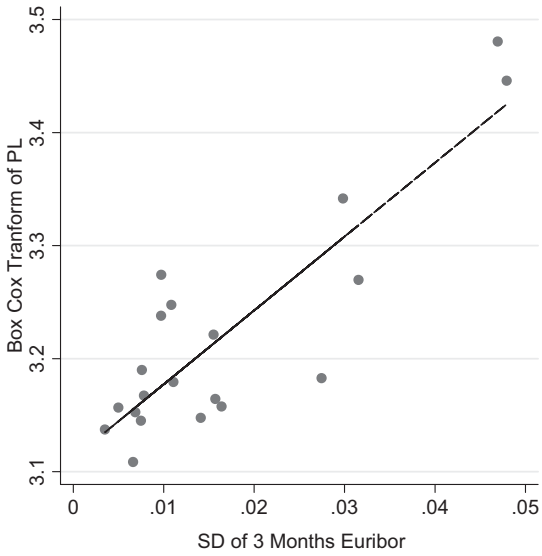
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Fig. S10.

Table S1. Ordinary least squares regression of the rank and BC transformation of the average P&L on 2D:4D, experience, and age

Method	Dependent variable	2D:4D ratio	Experience 2 yr	Age	R^2	$F_{3,40}$	*P*	*n*
Robust OLS	Rank: coefficient (*P* value)	17.51 (0.00085)***	−13.576 (0.00003)***	−7.465 (0.071)	0.569	23.06	0.000017	44
Robust OLS	Box–Cox P&L: coefficient (*P* value)	−1.211 (0.00086)***	0.983 (0.00003)***	0.458 (0.163)	0.553	20.26	0.00046	44

*, Significant at the 10% level; **, significant at the 5% level; ***, significant at the 1% level.

Table S2. Ordinary least squares regression of the rank and Box–Cox transformation of the average P&L on normalized 2D:4D, age, and experience

Method	Dependent variable	2D:4D ratio	Experience 2 yr	Age	R^2	$F_{3,21}$	*P*	*n*
Robust OLS	Rank b/*P* value	21.98 (0.002)***	−13.104 (0.00067)***	−4.045 (0.348)	0.568	10.96	0.0002	25
Robust OLS	Box–Cox P&L b/*P* value	−1.403 (0.002)***	0.949 (0.0007)***	0.116 (0.740)	0.534	9.35	0.0004	25

*, Significant at the 10% level; **, significant at the 5% level; ***, significant at the 1% level.

Table S3. Panel data analysis of the Box–Cox transformation of P&L, regressed on 2D:4D, experience, age, and time dummies

Method	Panel data	Panel data
Dependent variable	Box–Cox P&L b/P value	Box–Cox P&L b/P value
2D:4D ratio	−0.995 (0.013)**	−1.031 (0.004)***
Experience 2 years	0.917 (0.00025) ***	0.994 (0.00037)***
Age	0.407 (0.362)	0.368 (0.362)
Quarter 1		0.212 (0.480)
Quarter 2		0.392 (0.183)
Quarter 3		0.631 (0.034)**
Quarter 4		0.667 (0.026)**
Quarter 5		0.900 (0.003)***
Quarter 6		0.284 (0.430)
Quarter 7		0.612 (0.050)**
Quarter 8		0.350 (0.230)
Constant		9.039 (0.004)***
R^2	0.546	0.505
Wald χ^2 (11)	46.74	140.45
Probability $> \chi^2$	<0.00001	<0.00001
n of obs/groups	710/44	710/44

Table S4. OLS regression of the years of experience and log of years of experience on normalized 2D:4D and age

Method	Dependent variable	2D:4D ratio	Age	R^2	*P*	*n*
Ordinary least squares (OLS)	Years of experience b/*P* value	−3.11 (0.006)***	4.934 (0.000109)***	0.409	0.000023	44
OLS	Log of years of experience b/*P* value	−1.138 (0.003)***		0.188	0.0032	44
OLS	Log of years of experience b/*P* value	−1.057 (0.0013)***	1.454 (0.00006)***	0.451	0.0000059	44