Appendix To "Fight or Flight? Portfolio Rebalancing By Individual Investors"*

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1. Data and Estimation Methodology

1.1. Aggregate Flows

In Table A1, we report official statistics on aggregate flows from the household sector into major asset classes during the 2000-2002 period. Aggregate flows to stocks are modest, and do not exceed 2% in absolute value in any year. Households purchased mutual funds during the period, primarily money market and bond funds. They also slightly divested from equity funds; the aggregate outflow amounted to 3.1% of holdings in 2001 and 2.4% in 2002. The aggregate household response to the severe bear market was overall quite measured, and did not induce large outflows from stocks and mutual funds.

We then try to match official flow statistics using our micro dataset. Since we only observe asset holdings at the end of each year, flows cannot be computed exactly and must be approximated by imputing asset prices at transaction dates. Consider a household that owns N_t units of a non-dividend paying asset at the end of year t, trades on a unique date τ at the prevailing price V_τ, and as a result owns N_{t+1} units of the asset at the end of year $t+1$. The net flow of cash into the asset class is $(N_{t+1}-N_t)V_\tau$. Since the transaction date τ is unknown, we use the yearend price V_{t+1} as a proxy for V_τ. More generally when there are multiple transaction dates during the year $(\tau_0 = t < \tau_1 < ... < \tau_N < \tau_{N+1} = t+1)$, the aggregate inflow $\sum_{i=1}^{N+1}(N_{\tau_i} - N_{\tau_{i-1}})V_{\tau_i}$ is

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proxied by $(N_{t+1} - N_t)V_{t+1}$. We report the corresponding estimates of aggregate flows in Table A1.[1]

The imputation method provides relatively inaccurate estimates of equity flows, which are positively biased in 2000 and negatively biased in 2001 and 2002. Our procedure thus overemphasizes the outflow from the stockmarket in 2001 and 2002. For mutual funds, on the other hand, our estimates match quite well official statistics. A possible explanation is that fund prices are less volatile than stock prices, which reduces the role of price measurement errors. Overall, these results broadly confirm the reliability of our dataset.

1.2. Estimating the Mean and Variance of Returns

Since Sweden is a small and open economy, we assume that assets are priced on world markets in an international currency. Specifically, the CAPM holds in dollar-denominated excess returns relative to the US Treasury bill ("global CAPM"). The market return $r^e_{m,t}$ is measured as the US dollar return of the MSCI world index in excess of the US T-bill. Under covered interest rate parity, $r^e_{m,t}$ coincides with the excess return (in Swedish kronas) of the currency-hedged index relative to the Swedish T-bill.

As shown in Calvet Campbell and Sodini (2007, henceforth "CCS 2007"), excess returns in the domestic currency (the Swedish krona) with respect to the domestic interest rate satisfy:

$$r^e_{j,t} = \beta_j r^e_{m,t} + u_{j,t}. \tag{1.1}$$

From the perspective of a Swedish investor, the global pricing model induces a domestic version of the CAPM in which the currency-hedged world index is the efficient benchmark.

The global CAPM is implemented as follows. First, we estimate the sample mean $r^e_{m,t}$ and sample variance σ^2_m of the world index over the 1983-2004 period. Second for each asset $j \in \{1, .., N\}$, we estimate β_j by regressing the asset's domestic excess return on the currency-hedged world index, and then compute the $N \times N$ variance-covariance matrix R of the regression residuals. Third, we infer the mean vector $\mu = r^e_{m,t}\ \beta$ and variance-covariance matrix $\Sigma = \sigma^2_m \beta\beta' + R$ of domestic excess returns. The beta coefficient of each asset/mutual fund is computed using 1994-2004 monthly data (or the available subset for shorter-lived assets).

For each household, the dataset contains holdings at the security level and the balances of bank accounts. The risk-free rate in Sweden is proxied by the yield on the one-month Swedish T-bill. Since the spread between the risk-free rate and the yield on

[1] When an asset is created during year $t+1$, its value at the end of year t is proxied by the issue price. When instead an asset disappears during the year, the yearend price is proxied by the last available price.

bank deposits can be considered as a compensation for bank services, bank balances are assumed to earn the risk-free rate. The same assumption is extended to money market funds and verified empirically. We use the estimated moments of individual asset returns to calculate the means, variances and Sharpe ratios of household portfolio returns. Wermers (2000) has used a similar method to evaluate the properties of stock portfolios held by mutual funds.

2. Dynamics of the Risky Portfolio

2.1. Standard Deviation of the Risky Portfolio

How does the standard deviation $\sigma_{h,t}$ of the risky portfolio return vary with the initial risky share $w_{h,t}$? In Figure A1, we classify households into initial risky share bins, and report the equal-weighted average of $\sigma_{h,t}$ in each bin. We observe that $\sigma_{h,t}$ is approximately constant around 22% on a wide set of intermediate bins, and this value is also approximately constant across years. The standard deviation $\sigma_{h,t}$ is higher at the edges. This effect is more pronounced for low values of $w_{h,t}$, presumably because households with low risky shares hold less diversified portfolios, as documented in CCS (2007). For very high risky shares, on the other hand, the standard deviation $\sigma_{h,t}$ declines over time and is approximately equal to 22% in 2002.

In Figure A2, panel A, we report the cross-sectional distribution of the standard deviation of complete portfolios, $w_{h,t}\sigma_{h,t}$. We observe that households migrated to lower values of $w_{h,t}\sigma_{h,t}$ between 1999 and 2002. This finding is consistent with the evidence in Figure 1 of the paper that households scaled down their risky share $w_{h,t}$ during the sample period. We verify in Figure A2, panel B, that the cross-sectional distribution of $\sigma_{h,t}$ remained approximately constant. Overall, these findings confirm that households primarily adjusted their complete portfolios by (passively or actively) scaling down their risky share during the bear market.

2.2. Transition Probability of the Risky Share

In Table A2, we classify households into risky share bins, and report transition matrices to show how households migrate from one bin to another. The chosen bins are: 0% risky share (nonparticipants), 0-5%, 5-25%, 25-50%, 50-75%, 75-95%, and 95-100% risky shares

Households exhibit a marked tendency to stay in the same bin from one year to the next and over the entire period. When households change bins, they most often move to an adjacent bin, so risk adjustment is gradual. Households with low initial exposure tend to increase their risky share when they migrate, while households with high initial shares tend to reduce their shares. Thus household risky asset shares display

both inertia and a tendency to revert towards the mean.

The transition matrices also provide the probability that a household exits the market altogether. Consistent with the entry and exit regressions in Table 5 of the paper, the exit probability decreases with the initial risky share. Further, a household with substantial exposure is more likely to exit the market altogether than to migrate to a low risky share. This observation is consistent with sharp changes in investor sentiment or fixed costs to risky asset participation, as in Vissing-Jorgensen (2002) or Calvet, Gonzalez-Eiras and Sodini (2004).

3. Rebalancing Regressions in Risky Share Bins

To check the robustness of our rebalancing regression, we partition the set of households according to their initial risky share $w_{h,t}$ and analyze the portfolio dynamics in each bin. This approach allows us to check if the main characteristics of the data are satisfactorily described by the parametric models developed in the text. In Table A3, we regress in each bin the active change on the passive change, including in the regression only households that participate both at the end of year t and at the end of year $t+1$. This allows us to disentangle inframarginal rebalancing from entry and exit decisions. The slopes and intercept are bin-specific and can be written as:

$$A_{h,t+1} = \gamma_0(w_{h,t}) + \gamma_1(w_{h,t})P_{h,t+1} + u_{h,t+1}, \tag{3.1}$$

where, in a slight abuse of notation, $w_{h,t}$ denotes the average risky share of households in the given bin.

The intercept γ_0 decreases with the initial share, which is consistent with a mean-reverting model of the risky share $w_{h,t}$. The slope coefficient γ_1 is strongly negative for all bins and years, with a coefficient typically between -0.75 and -0.4. Households display a strong tendency to resist passive changes, offsetting about half of these changes on average through active rebalancing. The slope γ_1 decreases with $w_{h,t}$ in the 2000 and 2001 cross-section, and seems less sensitive to the initial share in 2002. We also observe that γ_1 is closer to zero in 2002, which shows that households started to rebalance less as the bear market took hold.

The estimates of the slope coefficient γ_1 are substantially more negative for the lowest bin in all years. We attribute this phenomenon to boundary effects. During the bear market, most households with low initial exposure ($w_{h,t} \approx 0$) incur small passive losses in levels, which bring them closer to the short sales constraint $w_{h,t+1} \geq 0$. Such households may substantially increase their risky share, which will be associated with a strongly positive active change $w_{h,t+1} - w^p_{h,t+1}$; very negative active changes, on the other hand, are infeasible. The slope estimate is therefore driven by observations with small negative passive and large positive active changes, and is very negative as a result.

The boundary effect is much less pronounced in the highest bin. Most households with $w_{h,t} \in [0.8; 1)$ incur large passive losses during the bear market, which moves them away from the no-leverage constraint $w_{h,t} \leq 1$. As a result, the estimates of γ_1 for these households do not substantially differ from the values in other bins.

In Table A4, we report the results of the rebalancing regression in logs:

$$a_{h,t+1} = \gamma_0(w_{h,t}) + \gamma_1(w_{h,t})p_{h,t+1} + u_{h,t+1}. \tag{3.2}$$

With this specification, the lowest-bin estimate γ_1 is much closer to the values obtained for other bins, consistent with the fact that there are no boundary effects in logs. Furthermore, the values of γ_1 are generally quite similar in the log and level regressions, which confirms the robustness of our results.

4. Adjustment Model of the Risky Share

This section provides additional explanations on the adjustment model developed in Section 4 of the paper.

4.1. IV Estimation

The adjustment model is specified in the main text by:

$$\ln(w_{h,t+1}) = \phi_h \ln(w^d_{h,t+1}) + (1 - \phi_h) \ln(w^p_{h,t+1}) + \varepsilon_{h,t+1}, \tag{4.1}$$

where the error $\varepsilon_{h,t+1}$ is iid, and the adjustment speed ϕ_h and target change $\Delta \ln(w^d_{h,t+1})$ are linear functions of observable characteristics: $\phi_h = \varphi_0 + \varphi' x_{h,t}$, and $\Delta \ln(w^d_{h,t+1}) = \delta_{0,t+1} + \delta' x_{h,t}$. The adjustment model implies the reduced-form specification

$$\begin{aligned} \Delta \ln(w_{h,t+1}) &= a_{t+1} + b_0 \Delta \ln(w^p_{h,t+1}) + b' x_{h,t} \Delta \ln(w^p_{h,t+1}) \\ &\quad + c' x_{h,t} + x'_{h,t} D x_{h,t} + \varepsilon_{h,t+1} - \varepsilon_{h,t}. \end{aligned} \tag{4.2}$$

The regressor $\Delta \ln(w^p_{h,t+1})$ and the error $\varepsilon_{h,t+1} - \varepsilon_{h,t}$ are negatively correlated, because a high realization of $\varepsilon_{h,t}$ implies a high risky share $w_{h,t}$ and a high passive share $w^p_{h,t+1}$. The reduced-form equation (4.2) is therefore estimated by using instrumental variables (IV). We use as instruments the passive share $\ln(w^p_{h,t})$ and the zero-rebalancing passive change

$$\ln \omega^p(w^p_{h,t}; r_{h,t+1}) - \ln(w^p_{h,t}).$$

We assume that the return $r_{h,t+1}$ and the errors $\varepsilon_{h,t+1}$ and $\varepsilon_{h,t}$ are mutually independent. The zero-rebalancing passive change is then uncorrelated with the error $\varepsilon_{h,t}$. It is, however, correlated with the actual change in the passive share $\Delta \ln(w^p_{h,t+1})$ if rebalancing is partial. A timeline of the variables and instruments is provided in Figure A3.

A loglinearization provides additional intuition on the IV procedure. The instrumented variable $\Delta \ln(w^p_{h,t+1})$ satisfies

$$\Delta \ln(w^p_{h,t+1}) \approx \Delta \ln(w_{h,t}) + \Delta[(1 - w_{h,t})r^e_{h,t+1}],$$

where $r^e_{h,t+1} = r_{h,t+1} - r_f$ denotes the excess return of the risky portfolio. The instruments can similarly be loglinearized. The period-$t+1$ zero-rebalancing passive change is approximated by

$$(1 - w_{h,t-1})r^e_{h,t+1},$$

while the period-t log passive change satisfies $\ln(w^p_{h,t}) \approx \ln(w_{h,t-1}) + (1 - w_{h,t-1})r^e_{h,t}$. The log passive share contains an additional term, $\ln(w_{h,t-1})$, that is correlated with the instrumented variable $\Delta \ln(w^p_{h,t+1})$ but does not appear in the period-$t+1$ zero-rebalancing passive change. For this reason, we find it useful to use both instruments in our IV regressions.

4.2. Equilibrium

If the economy is closed and populated by a single agent, she has no one to trade with and her risky share w_{t+1} is equal to the passive share: $w_{t+1} = w^p_{t+1}$. The adjustment equation (4.1) implies $w^d_{t+1} = w^p_{t+1}$. The unique agent is always at her target risky share, and the intercept $\delta_{0,t+1}$ coincides with the aggregate change: $\delta_{0,t+1} = \Delta \ln(w_{t+1})$. More generally, the intercept $\delta_{0,t+1}$ should be relatively close to the aggregate change in the risky share when inflows and outflows from the household sector are relatively modest, as is the case in our dataset.

4.3. Impact of Financial Wealth on the Target Share

In a recent study, Brunnermeier and Nagel ("BN", 2007) assess the empirical relation between wealth and the risky share using US data from the Panel Study of Income Dynamics (PSID). They regress the change in the risky share (in levels) on the change in financial wealth (in logs) and control variables, and obtain a small and slightly negative wealth coefficient. Since trades are self-reported in the PSID, Brunnermeier and Nagel also analyze the potential effect of measurement error by using income growth and inheritance receipts as instruments. They again find a slightly negative impact of wealth changes on the risky share, and attribute their results to inertia. When a household saves in the form of cash during the year and only partially rebalances its financial portfolio, its risky share tends to fall mechanically in the short run.

In the first set of columns of Table A5, panel A, we estimate by OLS the pooled BN regression on the Swedish dataset:

$$\Delta w_{h,t+1} = \alpha_{0,t+1} + \beta \Delta \ln(F_{h,t+1}) + \varepsilon_{h,t+1}.$$

The estimate β is slightly but significantly negative, which is consistent with the findings of Brunnermeier and Nagel.

Even though our Swedish administrative dataset is of high quality, the OLS procedure does not control for the endogeneity problem resulting from high-frequency variation and measurement errors in cash balances. Assume for instance there are high-frequency shocks to cash holdings, either generated by transactions demands or measurement errors, which increase financial wealth but do not affect risky holdings. These shocks raise $F_{h,t+1}$ and lower $w_{h,t}$, generating a spurious negative β. To fix this problem, we need an instrument that is correlated with financial wealth but not with the high-frequency shocks.

In the second set of columns of panel A, we therefore instrument the financial wealth change by the passive log return on the complete portfolio, $\ln(1 + r^c_{h,t+1}) \equiv \ln[w^p_{h,t}(1 + r_{h,t+1}) + (1 - w^p_{h,t})(1 + r_f)]$. We then obtain a strongly positive estimate of β, which is consistent with the results of the adjustment model reported in the main text.

An alternative story is that there are high-frequency shocks to cash which do influence desired risky asset holdings, but do so with a lag because of portfolio inertia. In the third set of columns, we accordingly run the OLS regression of the risky share change on the *lagged* wealth change. The relation between $\Delta w_{h,t+1}$ and $\Delta \ln(F_{h,t+1})$ is weaker but significantly positive.

In the last two sets of columns, we regress the risky share change on both the contemporaneous and lagged wealth changes by both OLS and IV. The lagged coefficient is positive and comparable to the previous estimate with both methods. The coefficient of the contemporaneous wealth change, on the other hand, is negative by OLS but positive by IV.

In panel B, we verify that these results are not produced by a problem with the instrument. We now instrument the wealth change by the log return on the risky portfolio, $\ln(1 + r_{h,t+1})$, and find very similar coefficients to the ones obtained in panel A.

In Tables A6 and A7, we verify that we obtain similar results when we estimate the BN regression separately for the years 2001 and 2002. Overall, Tables A5-A7 suggest that controlling for endogeneity problems and household inertia allows us to uncover evidence for a positive link between wealth changes and risk-taking. This analysis therefore confirms the findings obtained with the adjustment model in the main text.

4.4. Alternative Definition and Estimation of the Adjustment Model

In Table A8, we estimate the adjustment model when the change in financial wealth can impact both the adjustment speed and the target change. Increases in financial wealth still have a strong positive impact on the target change, but have an insignificant impact on the adjustment speed. The table confirms that wealth changes have a strong positive

impact on the target risky share. Furthemore, we find limited empirical support for a relation between wealth changes and the adjustment speed. Since such a relation has little theoretical justification, we do not consider it in the adjustment model discussed in the main text.

In Tables A9 and A10, we estimate the adjustment model separately in years 2001 and 2002. The results broadly confirm our findings that more sophisticated households, as measured for instance by the Sharpe ratio and education, tend to rebalance more quickly, but there is some variability from year to year. For instance, financial wealth has a positive impact on speed in 2001 but a negative impact in 2002. Changes in financial wealth have a positive impact on the target change in both years, but the effect is significant only in 2002 (Table A10). Overall, Tables A9 and A10 are consistent with the results in the main text and also show additional variability in yearly regressions, as one would expect.

4.5. Cross-Sectional Distribution of Household Characteristics

In Table A11, we investigate the cross-sectional distribution of characteristics in the adjustment model estimated in Table 4 of the main text.[2] In the first set of columns of Table A11, we classify households into adjustment speed bins, and report the equal-weighted average of characteristics in each bin. Households with high adjustment speed have a higher initial risky share and a more diversified risky portfolio. Financial wealth, real estate wealth, disposable income and education also increase strongly with the speed of adjustment. These results confirm the importance of household characteristics in the adjustment model.

In the second set of columns of Table A11, we classify households into target change bins. Households with higher financial wealth are more prone to maintaining or revising upward the target. However, real estate wealth, disposable income and education have the opposite effect.

Table A11 also shows that changes in financial wealth have a strong effect on the target, which is consistent with financial theory. The impact of wealth changes on the adjustment speed, however, are very modest, which confirms the specification used in the main text (Table 4).

4.6. Connection with Rebalancing Regressions

The adjustment model allows us to investigate the relation between household characteristics and portfolio rebalancing. We can also analyze these issues and the robustness

[2] Table A11 is based on the specification reported in the second set of columns of Table 4, in which changes in financial wealth can impact the target share. The results are very similar when financial wealth changes are not allowed to impact the target change (first set of columns of Table 4).

of our results by including characteristics in the rebalancing regressions considered in section 3.2 of the main text. In Table A12, we add observable characteristics to the intercept of the rebalancing regression:

$$a_{h,t+1} = \gamma_{0,t+1} + \zeta' x_{h,t} + \gamma_1 p_{h,t+1} + \gamma_2(\ln w_{h,t} - \overline{\ln w_{h,t}}) + u_{h,t+1}. \tag{4.3}$$

Each characteristic is standardized to have zero cross-sectional mean. The regression coefficient of the passive change, γ_1, remains essentially unchanged at around -0.5. The reduction in the risky share is in all years less pronounced for households with higher financial wealth or debt. These households were more willing to maintain their proportional investments in risky assets than were other Swedish households.

In Table A13, we interact demographic variables with the passive change. Wealthier and more sophisticated households tend to have more negative regression coefficients of active changes on passive changes; that is, they rebalance more actively. These findings confirm the results of the adjustment model. They are limited, however, in that they do not allow us to disentangle household inertia from changes in the target risky share, as the adjustment model can do.

The rebalancing regressions with characteristics easily relate to the adjustment model when all agents have the same adjustment speed: $\phi_h \equiv \phi$ for all h. Substract the passive share from (4.1):

$$a_{h,t+1} = \phi[\ln(w^d_{h,t+1}) - \ln(w^p_{h,t+1})] + \varepsilon_{h,t+1}. \tag{4.4}$$

The difference $\ln(w^d_{h,t+1}) - \ln(w^p_{h,t+1})$ can be rewritten as $\ln(w^d_{h,t+1}/w^d_{h,t}) + \ln(w^d_{h,t}/w_{h,t}) + \ln(w_{h,t}/w^p_{h,t+1}) = \delta_{0,t+1} + \delta' x_{h,t} + \ln(w^d_{h,t}/w_{h,t}) - p_{h,t+1}$. We infer:

$$a_{h,t+1} = -\phi p_{h,t+1} + \phi\delta_{0,t+1} + \phi\delta' x_{h,t} - \phi[\ln(w_{h,t}) - \ln(w^d_{h,t})] + \varepsilon_{h,t+1}. \tag{4.5}$$

The term $\ln(w_{h,t}) - \ln(w^d_{h,t})$ is the only difference between the adjustment model and the rebalancing regression with characteristics reported in Table 3 of the main text. We therefore view the latter as a reduced-form specification in which all households have the same speed of adjustment and the distance to the target, $\ln w_{h,t} - \ln w^d_{h,t}$, is proxied by a rescaled distance to the cross-sectional mean, $\lambda(\ln w_{h,t} - \overline{\ln w_{h,t}})$.

If agents have heterogeneous speeds of adjustment: $\phi_h = \varphi_0 + \varphi' x_{h,t}$, we similarly infer:

$$\begin{aligned} a_{h,t+1} \;=\; & -(\varphi_0 + \varphi' x_{h,t}) p_{h,t+1} + (\varphi_0 + \varphi' x_{h,t})\delta_{0,t+1} + (\varphi_0 + \varphi' x_{h,t})\delta' x_{h,t} \\ & -(\varphi_0 + \varphi' x_{h,t}) \left[\ln(w_{h,t}) - \ln(w^d_{h,t})\right] + \varepsilon_{h,t+1}, \end{aligned} \tag{4.6}$$

which contains more terms than the regressions reported in Table A12. Note that the difference persists even when agents have homogeneous variations in their target share ($\delta = 0$), i.e. have homogeneous beliefs.

5. Robustness Checks

5.1. Churning

One might worry that households do not deliberately rebalance the risky share, but instead randomly churn their portfolios. Because the passive share is measured with error, random churning tends to bias the regression coefficient of the active change on the passive change towards -1. In this case our results tell us who trades actively, but are not informative about deliberate rebalancing. A simple robustness check consists of confining attention to households that do not purchase new risky assets. That is, we exclude any household holding at $t+1$ a risky security that it does not hold at t ($w^*_{h,j,t} = 0$ and $w^*_{h,j,t+1} > 0$ for some j). In Table A14, we report that the corresponding rebalancing propensity is about -0.3, which is weaker than the estimates in the main text but still substantial. In Tables A15 and A16, we also see that the average adjustment speed remains high around 0.7. These estimates are quite conservative, since we have excluded households that rebalance the risky share by buying new assets. Thus, churning alone cannot explain the strongly negative estimates of the passive change coefficient reported in our rebalancing regressions.

5.2. Automatic Investment Plans

Automatic investment plans might be another source of apparent rebalancing. Consider a household that invests a fixed monetary amount K_h in a risky asset every year, and makes no other trades. Let $F_{h,t}$ denote financial wealth at the end of date t. If the household makes no other trades during the year, the final risky share is

$$w_{h,t+1} = \frac{F_{h,t} w_{h,t}(1 + r_{h,t+1}) + K_h}{F_{h,t}\left[w_{h,t}(1 + r_{t+1}) + (1 - w_{h,t})(1 + r_f)\right]}.$$

The measured passive and active changes in logs are respectively:

$$\begin{aligned} a_{h,t+1} &= \ln\left[1 + \frac{K_h/F_{h,t}}{w_{h,t}(1 + r_{h,t+1})}\right], \\ p_{h,t+1} &= \ln\left[\frac{1 + r_{h,t+1}}{1 + r_f + w_{h,t}(r_{h,t+1} - r_f)}\right]. \end{aligned} \tag{5.1}$$

The active change is a decreasing function of the risky portfolio's performance, while the passive change increases with performance. Automatic investment schemes can therefore generate a negative correlation between active and passive changes in levels. A similar effect arises in levels.

Tables A14-A16 can help us assess the empirical relevance of this effect, since automatic investment plans typically imply the purchase of the same assets every year. A household that only trades automatically is therefore classified as a household buying no

new assets during the year. In Tables A14-A16, we find that the rebalancing propensity is *weaker* for those households. Thus, it is very unlikely that automatic investments are driving the strong rebalancing propensity reported in the main text.

Households that only invest automatically presumably own the same *set* of assets every year. In Table A17, we report the rebalancing regressions for the set of households owning the same set of assets at the end of year t and $t+1$. These households are not churning assets and are more likely to be only trading through automatic savings than the entire household population.[3] The coefficient of the passive change ranges between -0.3 and -0.5.

In order to assess whether this strong rebalancing coefficient is due to automatic savings or rebalancing, we complement this analysis with a regression on a simulated dataset of automatic savers. The automatic investment is assumed to be a fixed percentage s of initial financial wealth: $K_h = sF_{h,t}$. We set s equal to the average ratio of savings to financial wealth for those households in each year: $s = 2.2\%$ in 2000, $s = 3.4\%$ in 2001, and $s = 3\%$ in 2002. In Table A18, panel A, we regress the implied active change on the passive change, and find very modest regression coefficients. In the log regression (panel B), we eliminate households in the first percentile of $w_{h,t}(1+r_{h,t+1})$, because low values of $w_{h,t}(1+r_{h,t+1})$ generate very large positive outliers of the active change (5.1) that are not observed in the actual dataset. Thus, we apply this filter only to correct an undesirable feature of the simulation method, and we have checked that using it on the actual dataset has no impact on the rebalancing regressions reported in Table 2. The rebalancing coefficients reported in panel B are again quite modest. Very similar results are obtained both in logs and in levels when s is set equal to a constant value of 3% every year. We conclude that automatic savings alone cannot explain the rebalancing regressions in the main text.

5.3. Cash Balances

Another possible worry is that our results are driven by random fluctuations in cash balances. We investigate this issue by a bootstrap simulation. Specifically, we assume that households do not trade risky assets during the year, and that their cash balances $cb_{h,t}$ follow the process:

$$cb_{h,t+1} = R^{cb}_{h,t+1} cb_{h,t}.$$

The shocks $R^{cb}_{h,t+1}$ are i.i.d. across households. We assume that $R^{cb}_{h,t+1}$ is drawn from the empirical distribution at time $t+1$ of the cash growth rate observed in the data.

[3] Similar results are obtained if we consider households that hold the same set of *funds* at the end of years t and $t+1$.

The end of the year portfolio share in risky assets is given by

$$w_{h,t+1} = \frac{w_{h,t}(1 + r_{h,t+1})}{(1 - w_{h,t})R^{cb}_{h,t+1} + w_{h,t}(1 + r_{h,t+1})}.$$

In Table A19 we report the corresponding regression of the active change on the passive change. The rebalancing coefficients are modest, which shows that random fluctuations in cash balances cannot explain the rebalancing regressions reported in the main text.

6. Dynamics of Individual Asset Shares

6.1. Summary Statistics

In Table A20, we report the probability that an asset is fully sold, partially sold, partially purchased or simply held in an given year. We observe that partial sales are more frequent than full sales for all assets in every year in the sample. Partial purchases are also quite common, especially for funds, which is likely a consequence of additional savings.

It is also useful to consider measures of portfolio turnover. Let $P_{j,t}$ denote the price of asset j at the end of year t, and let $N_{h,j,t}$ denote the number of shares of asset j held by household h at the end of year t. We can define turnover as either

$$\frac{\sum_j |N_{h,j,t} - N_{h,j,t-1}| \, P_{j,t}}{\sum_j N_{h,j,t} P_{j,t}},$$

or

$$\frac{\sum_j |N_{h,j,t} - N_{h,j,t-1}| \, P_{j,t-1}}{\sum_j N_{h,j,t-1} P_{j,t-1}}.$$

The cross-sectional distribution of these two measures are reported in Table A21. We observe substantial turnover in household risky portfolios.

6.2. Cross-Sectional Distribution of Characteristics in Stock Sale Regression

It is useful to reconsider the role of characteristics in the full sale probit regression reported in Table 7 of the main text. For each household and asset, we use the regression coefficients in Table 7 to compute the "impact coefficient" of an asset's performance on the probability of full sale, which is defined as the coefficient of the asset's gain or loss in the probit regression. The cross-sectional distribution of the "impact coefficient" is reported in Table A22. It reveals strong variations of the household characteristics across bins.

6.3. Nonparametric Analysis of Asset-Level Rebalancing

We now provide a nonparametric analysis of asset-level rebalancing. Let $r_{h,-j,t+1}$ denote the return on the portfolio of risky assets other than j held by the household. We have

$$w^*_{h,j,t} r_{j,t+1} + (1 - w^*_{h,j,t}) r_{h,-j,t+1} = r_{h,t+1},$$

where $w^*_{h,j,t}$ denotes the share of asset j in the risky portfolio, $r_{j,t+1}$ the net return on asset j, and $r_{h,t+1}$ the net return on the risky portfolio. The passive change

$$P_{h,j,t+1} = \frac{w^*_{h,j,t}(1 + r_{j,t+1})}{1 + r_{h,-j,t+1} + w^*_{h,j,t}(r_{j,t+1} - r_{h,-j,t+1})} - w^*_{h,j,t}$$

can be rewritten as

$$P_{h,j,t+1} = \frac{w^*_{h,j,t}(1 - w^*_{h,j,t})(r_{j,t+1} - r_{h,-j,t+1})}{1 + r_{h,-j,t+1} + w^*_{h,j,t}(r_{j,t+1} - r_{h,-j,t+1})}.$$

The passive change is a U-shaped function of the initial share $w^*_{h,j,t}$ if asset j outperforms other risky assets in the portfolio ($r_{j,t+1} > r_{h,-j,t+1}$), and is hump-shaped otherwise.

In Table A23, we classify observations into bins corresponding to different levels the initial risky share $w^*_{h,j,t}$ and asset class c (stock or fund), and regress in each bin the active change on relative performance:

$$A^*_{h,j,t+1} = \rho_{c,t}(w^*_{h,j,t}) + \psi_c(w^*_{h,j,t})(r_{j,t+1} - r_{h,-j,t+1}) + \varepsilon_{h,t+1},$$

where in a slight abuse of notation $\rho_{c,t}(w^*_{h,j,t})$ and $\psi_c(w^*_{h,j,t})$ denote the regression coefficients in each bin. We exclude from the regressions full sales ($w^*_{h,j,t+1} = 0$) and households that initially own a single risky asset ($w^*_{h,j,t} = 1$). The intercept $\rho_c(w^*_{h,j,t})$ is decreasing and approximately linear in the initial share $w^*_{h,j,t}$, which is analogous to the results previously obtained for the share of risky assets in the complete portfolio. The coefficients $\psi_c(w^*_{h,j,t})$ are negative for stocks and funds, as one would expect if households rebalance at the asset level. Perhaps more surprisingly, $\psi_c(w^*_{h,j,t})$ is U-shaped in the initial share, which suggests that the active change is chosen to offset the passive change.

In Table A24, we consider the separate effects of own performance and other assets' performance:

$$A^*_{h,j,t+1} = \rho_{c,t}(w^*_{h,j,t}) + \psi_c(w^*_{h,j,t}) r_{j,t+1} - \xi_c(w^*_{h,j,t}) r_{h,-j,t+1} + \varepsilon_{h,t+1},$$

For stocks, the coefficients $\psi_c(w^*_{h,j,t})$ are again negative and U-shaped, while the coefficients $\xi_c(w^*_{h,j,t})$ are positive and hump-shaped. These findings are consistent with a rebalancing motive. For funds, the coefficient on other assets, $\xi_c(w^*_{h,j,t})$, is also positive and hump-shaped, but the own return coefficient $\psi_c(w^*_{h,j,t})$ tends to be also positive. The evidence of rebalancing is therefore less clear for mutual funds.

6.4. Asset-Level Rebalancing Regressions

These findings motivate the construction of a simpler parametric specification. In the first two columns of Table A25, we regress the log active change $a^*_{h,j,t}$ on the asset's performance and its initial share using separate coefficients for each asset class. Consistent with our earlier results, performance tends to strongly reduce the active change of stocks; households tend to sell winning stocks. The active change for funds is also negatively affected by performance, but the effect is substantially weaker for funds than for stocks. In addition, the active change tends to be negatively affected by the share of the asset in the risky portfolio.

In the next set of columns, we add the effect of the performance of other assets in the portfolio. The performance of other assets increases the active change, and the corresponding regression coefficient is almost identical for stocks and funds. A household tends to buy asset j if other risky securities in the portfolio have done well. The own return and the initial share coefficients remain negative and close to the previous estimates. Like the nonparametric results, these findings suggest that households do rebalance individual asset holdings. Rebalancing can explain why the active change is negatively affected by own performance, but positively affected by the performance of other assets in the portfolio. Furthermore, sluggishness in rebalancing is a possible explanation for the negative relation between the active change and the initial risky share, as discussed in Section 4.3.

These results lead us to estimate a rebalancing model for individual assets. In the last two columns of Table A25, we regress the log active change on the initial share and the log passive change:

$$a^*_{h,j,t+1} = \sum_c \left(\rho_{c,t} + \varphi_c w^*_{h,j,t} + \gamma_c p^*_{h,j,t+1}\right) 1_{h,j,t}(c) + \varepsilon_{h,j,t+1}. \tag{6.1}$$

The reported R^2, 6.21%, is slightly higher than the R^2 of the regression on own performance and other asset's performance. Since $p_{h,j,t+1} \approx (1 - w^*_{h,j,t})(r_{j,t} - r_{h,-j,t+1})$, the higher R^2 coefficient in (6.1) shows that the interaction between the initial share and returns helps to explain the log active change.[4]

In Table A26, we report the results of asset-level rebalancing regressions with characteristics. The results have limited significance.

[4] The analysis in levels yields very similar conclusions. Furthermore when full sales are included in the regression, the estimated R^2 is higher and the rebalancing coefficient γ_c more negative, which stems from the fact that full sales satisfy the exact relation $A^*_{h,j,t+1} = -w^*_{h,j,t} - P^*_{h,j,t+1}$

7. Trading Decisions and Risky Portfolio Rebalancing

In Tables A27 and A29, we report the asset-level rebalancing regressions in levels that are used to construct Table 9 in the main text. In Table A29, we report the results of asset-level rebalancing regressions with characteristics. We focus on the trading strategies that most contribute to rebalancing: stock sales and fund purchases by lucky households, and purchases of stocks and funds by unlucky households. Financial wealth and the Sharpe ratio of assets in the same class tend to be highly significant. Richer households with more diversified portfolios have a stronger tendency to rebalance by (partially) adjusting their fund purchases, as well as by adjusting their stock purchases when they are unlucky. More sophisticated households, however, rely less on stock sales when they are lucky, which suggests that they might be less prone to the disposition effect.

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TABLE A1. AGGREGATE FLOWS

Net Flows (Percentage and Billion Dollars)

	Year 2000		Year 2001		Year 2002	
	Official statistics	Micro data	Official statistics	Micro data	Official statistics	Micro data
Stocks	0.3%	2.9%	-1.7%	-5.2%	1.1%	-0.3%
	0.20	1.79	-0.91	-2.86	0.54	-0.14
Mutual funds:	1.0%	1.5%	2.0%	2.2%	4.4%	4.0%
	0.54	0.82	1.02	1.07	1.61	1.46
° *Money market funds*	10.7%	7.2%	36.1%	38.7%	28.3%	29.0%
	0.33	*0.21*	*1.90*	*1.90*	*2.12*	*2.07*
° *Bond funds*	-9.3%	-9.1%	8.9%	8.5%	2.3%	0.5%
	-0.36	*-0.34*	*0.40*	*0.36*	*0.10*	*0.02*
° *Equity funds*	1.2%	2.1%	-3.1%	-3.0%	-2.4%	-2.5%
	0.58	*0.95*	*-1.28*	*-1.19*	*-0.60*	*-0.64*

Notes: The table reports yearly net flows from the household sector expressed in both percentages and billion dollars. For each asset class, percentages are computed as a fraction of aggregate household investments in the asset class at the beginning of the year. We report: 1) the official estimate published by Statistics Sweden (stocks) or Fondbolagens Förening (funds); and 2) the estimate imputed from the micro dataset. Transaction prices, which are not provided by the micro dataset, are proxied by yearend prices, or the last available price when the asset disappears during the year. Furthermore, when an asset is created during year t+1, its value at the end of year t+1 is proxied by the issue price.

TABLE A2. TRANSITION MATRICES OF THE RISKY SHARE

A. End 1999 to End 2002

	Share	0	0-5	5-25	25-50	50-75	75-95	95-100
38%	**0**	80.2	4.0	7.5	4.4	2.5	1.2	0.2
4%	**0-5**	12.6	46.0	25.2	9.9	4.0	1.8	0.5
9%	**5-25**	11.3	13.4	44.7	19.0	7.7	3.2	0.8
12%	**25-50**	8.4	4.9	28.2	36.3	15.5	5.6	1.2
15%	**50-75**	5.9	2.6	13.4	31.4	32.2	12.7	1.8
17%	**75-95**	4.1	1.5	6.8	15.8	32.8	34.2	4.8
5%	**95-100**	3.1	1.3	4.0	7.9	17.0	42.4	24.3
		35%	*6%*	*15%*	*16%*	*15%*	*11%*	*3%*

B. End 1999 to End 2000

	Share	0	0-5	5-25	25-50	50-75	75-95	95-100
38%	**0**	84.2	2.7	5.5	3.7	2.4	1.3	0.3
4%	**0-5**	4.4	52.6	28.8	8.5	3.3	2.0	0.4
9%	**5-25**	4.2	4.8	54.6	25.8	7.5	2.5	0.6
12%	**25-50**	2.4	1.4	10.8	52.5	26.4	5.9	0.7
15%	**50-75**	1.5	0.5	3.3	13.4	56.6	23.0	1.7
17%	**75-95**	0.7	0.2	1.2	3.5	15.7	68.6	10.1
5%	**95-100**	0.7	0.2	0.8	1.7	4.9	29.0	62.8
		34%	*4%*	*10%*	*13%*	*16%*	*18%*	*5%*

C. End 2000 to End 2001

	Share	0	0-5	5-25	25-50	50-75	75-95	95-100
34%	**0**	94.3	1.2	2.1	1.2	0.7	0.4	0.1
4%	**0-5**	9.2	66.2	18.9	3.7	1.5	0.5	0.0
10%	**5-25**	6.3	8.5	63.8	16.8	3.6	0.9	0.2
13%	**25-50**	4.0	2.0	18.7	56.9	15.7	2.4	0.3
16%	**50-75**	2.6	0.9	5.7	22.5	56.1	11.4	0.8
18%	**75-95**	1.7	0.5	2.2	6.3	24.4	60.5	4.4
5%	**95-100**	0.9	0.4	1.3	3.0	8.1	37.7	48.6
		34%	*4%*	*12%*	*15%*	*17%*	*15%*	*4%*

D. End 2001 to End 2002

	Share	0	0-5	5-25	25-50	50-75	75-95	95-100
34%	**0**	95.6	1.1	1.8	0.8	0.5	0.2	0.1
4%	**0-5**	8.3	70.5	15.6	3.7	1.3	0.5	0.2
12%	**5-25**	6.6	14.5	61.3	11.9	3.6	1.7	0.4
15%	**25-50**	4.1	2.8	29.8	48.5	10.6	3.4	0.7
17%	**50-75**	2.9	1.2	8.0	32.8	43.6	9.9	1.6
15%	**75-95**	2.0	0.7	2.8	8.8	33.2	47.8	4.8
4%	**95-100**	1.8	0.6	1.8	4.5	9.8	42.4	39.0
		35%	*6%*	*15%*	*16%*	*15%*	*11%*	*3%*

Notes: The tables report the transition matrices of the risky share over the entire period (panel A) or each year in the sample (panels B to D). The analysis is based on the random subsample of 100,000 households considered throughout the main text.

TABLE A3. BIN REGRESSION OF ACTIVE CHANGE ON PASSIVE CHANGE IN LEVELS

A. Year 2000

Bin of initial share (%)	0–100	0–20	20–40	40–60	60–80	80–100
Passive change (in levels)	-0.488	-1.185	-0.666	-0.648	-0.572	-0.397
	20.05**	9.86**	10.97**	12.89**	13.78**	9.12**
Intercept	0.027	0.105	0.090	0.045	-0.004	-0.040
	34.29**	57.08**	41.71**	21.35**	2.39*	35.16**
Adjusted R^2	0.01	0.01	0.01	0.02	0.01	0.00
Number of observations	60,341	10,415	8,702	10,075	13,073	18,076

B. Year 2001

Bin of initial share (%)	0–100	0–20	20–40	40–60	60–80	80–100
Passive change (in levels)	-0.542	-1.266	-0.733	-0.671	-0.575	-0.588
	24.20**	13.67**	12.56**	14.45**	12.60**	12.81**
Intercept	-0.030	0.042	0.023	-0.022	-0.066	-0.087
	33.34**	26.69**	9.58**	8.93**	29.41**	59.01**
Adjusted R^2	0.01	0.02	0.02	0.02	0.01	0.01
Number of observations	64,119	10,728	9,270	11,084	14,004	19,033

C. Year 2002

Bin of initial share (%)	0–100	0–20	20–40	40–60	60–80	80–100
Passive change (in levels)	-0.274	-0.617	-0.251	-0.314	-0.397	-0.451
	20.89**	10.48**	5.98**	9.96**	14.52**	14.88**
Intercept	-0.012	0.046	0.044	0.001	-0.057	-0.098
	9.48**	21.75**	11.64**	0.13	17.88**	44.29**
Adjusted R^2	0.01	0.01	0.00	0.01	0.02	0.01
Number of observations	63,320	12,053	10,847	11,923	13,696	14,801

Notes: The table reports the regression of the active change in levels on the passive change in levels for groups of households sorted by their initial risky share. The Student *t*-statistics of the regression coefficients are provided in smaller fonts. Year *t* regressions are based on households that participate in risky asset markets both at the end of year *t*-1 and at the end of year *t*.

TABLE A4. BIN REGRESSION OF ACTIVE CHANGE ON PASSIVE CHANGE IN LOGS

A. Year 2000

Bin of initial share (%)	0–100	0–20	20–40	40–60	60–80	80–100
Passive change (in logs)	-1.139	-1.116	-0.597	-0.585	-0.391	-0.183
	50.36**	22.97**	12.41**	10.02**	7.03**	2.87**
Intercept	0.080	0.619	0.150	0.009	-0.047	-0.068
	28.29**	54.31**	21.34**	1.59	11.89**	29.05**
Adjusted R^2	0.04	0.05	0.02	0.01	0.00	0.00
Number of observations	60,341	10,415	8,702	10,075	13,073	18,076

B. Year 2001

Bin of initial share (%)	0–100	0–20	20–40	40–60	60–80	80–100
Passive change (in logs)	-0.961	-0.807	-0.612	-0.502	-0.351	-0.431
	44.48**	14.89**	12.04**	9.12**	5.04**	10.51**
Intercept	-0.102	0.200	-0.053	-0.131	-0.162	-0.144
	35.05**	17.45**	5.89**	17.95**	28.27**	47.80**
Adjusted R^2	0.03	0.02	0.02	0.01	0.00	0.01
Number of observations	64,119	10,728	9,270	11,084	14,004	19,033

C. Year 2002

Bin of initial share (%)	0–100	0–20	20–40	40–60	60–80	80–100
Passive change (in logs)	-0.778	-0.581	-0.489	-0.356	-0.296	-0.145
	61.01**	17.21**	15.34**	10.85**	7.83**	3.04**
Intercept	-0.157	0.169	-0.079	-0.126	-0.162	-0.162
	38.54**	10.35**	6.14**	12.35**	20.78**	32.66**
Adjusted R^2	0.06	0.02	0.02	0.01	0.00	0.00
Number of observations	63,320	12,053	10,847	11,923	13,696	14,801

Notes: The table reports the regression of the active change in logs on the passive change in logs for groups of households sorted by their initial risky share. The Student t-statistics of the regression coefficients are provided in smaller fonts. Year *t* regressions are based on households that participate in risky asset markets both at the end of year *t* -1 and at the end of year *t*.

TABLE A5. REGRESSION OF RISKY SHARE CHANGE ON FINANCIAL WEALTH CHANGE
Years 2001 and 2002

A. OLS and IV

	Risky Share Change (in levels)									
	OLS		IV		OLS		OLS		IV	
	Estimate	t-stat	Estimate	t-stat	Estimate	t-stat	Estimate	t-stat	Estimate	t-stat
Change in log financial wealth	-0.10	-111.0	0.32	40.9			-0.10	-106.0	0.28	41.2
Lagged change in log financial wealth					0.05	48.9	0.04	37.5	0.09	49.4
2001 dummy	-0.05	-65.7	-0.05	-38.3	-0.05	-62.2	-0.05	-65.5	-0.05	-40.9
2002 dummy	-0.08	-119.0	-0.02	-8.4	-0.07	-95.1	-0.08	-119.0	-0.02	-15.4
Adjusted R^2	0.18				0.11		0.19			

B. Alternative IV Estimation

	Risky Share Change (in levels)			
	IV		IV	
	Estimate	t-stat	Estimate	t-stat
Change in log financial wealth	0.42	24.10	0.38	24.70
Lagged change in log financial wealth			0.10	37.00
2001 dummy	-0.05	-33.00	-0.04	-34.80
2002 dummy	0.00	0.43	-0.01	-2.59

Notes: This table reports the pooled regression of the risky share change on the contemporaneous and lagged financial wealth changes. The financial wealth change is instrumented by the passive return on the complete portfolio (panel A) or by the return on the risky portfolio (panel B).

TABLE A6. REGRESSION OF RISKY SHARE CHANGE ON FINANCIAL WEALTH CHANGE
Year 2001

A. OLS and IV

	Risky Share Change (in levels)									
	OLS		IV		OLS		OLS		IV	
	Estimate	t-stat	Estimate	t-stat	Estimate	t-stat	Estimate	t-stat	Estimate	t-stat
Change in log financial wealth	-0.07	-51.1	0.24	24.6			-0.07	-48.4	0.21	24.4
Lagged change in log financial wealth					0.03	24.3	0.03	18.1	0.06	29.2
Intercept	-0.05	-68.0	-0.05	-48.8	-0.05	-66.2	-0.05	-67.8	-0.05	-50.9
Adjusted R^2	0.11				0.08		0.11			

B. Alternative IV Estimation

	Risky Share Change (in levels)			
	IV		IV	
	Estimate	t-stat	Estimate	t-stat
Change in log financial wealth	0.25	15.20	0.22	15.20
Lagged change in log financial wealth			0.06	23.80
Intercept	-0.05	-48.60	-0.05	-50.10

Notes: This table reports the regression of the risky share change on the contemporaneous and lagged financial wealth changes. The estimation is based on year 2001. The financial wealth change is instrumented by the passive return on the complete portfolio (panel A) or by the return on the risky portfolio (panel B).

TABLE A7. REGRESSION OF RISKY SHARE CHANGE ON FINANCIAL WEALTH CHANGE
Year 2002

A. OLS and IV

	Risky Share Change (in levels)									
	OLS		IV		OLS		OLS		IV	
	Estimate	t-stat	Estimate	t-stat	Estimate	t-stat	Estimate	t-stat	Estimate	t-stat
Change in log financial wealth	-0.12	-100.0	0.36	31.3			-0.12	-96.2	0.30	31.6
Lagged change in log financial wealth					0.06	43.6	0.05	34.9	0.11	39.1
Intercept	-0.09	-118.0	-0.01	-4.0	-0.07	-90.9	-0.09	-119.0	-0.02	-10.4
Adjusted R^2	0.24				0.14		0.25			

B. Alternative IV Estimation

	Risky Share Change (in levels)			
	IV		IV	
	Estimate	t-stat	Estimate	t-stat
Change in log financial wealth	0.53	17.30	0.47	17.90
Lagged change in log financial wealth			0.13	27.40
Intercept	0.02	3.46	0.01	1.46

Notes: This table reports the regression of the risky share change on the contemporaneous and lagged financial wealth changes. The estimation is based on year 2002. The financial wealth change is instrumented by the passive return on the complete portfolio (panel A) or by the return on the risky portfolio (panel B).

TABLE A8. ALTERNATIVE SPECIFICATIONS OF THE ADJUSTMENT MODEL

Adjustment speed defined as function of financial wealth changes

	Speed		Target change	
	Estimate	**t-stat**	**Estimate**	**t-stat**
Intercepts				
Adjustment speed φ_0	0.752	56.90		
Target change $\delta_{0,2001}$			-0.096	-4.34
Target change $\delta_{0,2002}$			-0.123	-5.31
Financial Characteristics				
Change in log financial wealth	-0.142	-1.87	0.302	4.58
Portfolio Characteristics				
Standard deviation of the risky portfolio	-0.001	-0.22	-0.037	-4.90
Sharpe ratio of risky portfolio	0.054	6.14	-0.019	-3.16
Financial Characteristics				
Disposable income	0.015	2.35	-0.059	-2.36
Private pension premia/Income	-0.004	-0.53	-0.008	-1.15
Financial wealth (in logs)	0.001	0.05	0.114	8.03
Real-estate wealth (in logs)	0.031	2.55	-0.149	-7.31
Total liability (in logs)	0.035	2.35	0.037	3.24
Retired dummy	-0.071	-1.58	0.045	0.91
Unemployment dummy	-0.108	-3.30	-0.009	-0.16
Entrepreneur dummy	-0.168	-3.64	-0.004	-0.15
Student dummy	-0.026	-0.37	0.054	0.38
Demographic Characteristics				
Age	0.002	2.35	-0.002	-3.19
Household size	-0.028	-3.70	-0.005	-0.74
High-school dummy	0.126	4.48	-0.010	-0.91
Post high-school dummy	0.066	2.86	-0.015	-1.51
Dummy for unavailable education data	0.158	2.80	0.114	1.70
Immigration dummy	-0.010	-0.32	-0.024	-2.15

Notes: This table reports the estimates of the adjustment model when the change in financial wealth is included in the definitions of both the target change and speed of adjustment. The estimation is based on households that participate in risky asset markets at the end of two consecutive years and for which the immigration dummy is available. All characteristics are demeaned year by year, and continuous financial characteristics other than the change in financial wealth are normalized to have unit standard deviation in each cross-section. Portfolio characteristics are in natural units.

TABLE A9. YEARLY ESTIMATES OF ADJUSTMENT MODEL

	2001				2002			
	Speed		Target change		Speed		Target change	
	Estimate	t-stat	Estimate	t-stat	Estimate	t-stat	Estimate	t-stat
Intercepts								
Adjustment speed φ_0	0.875	88.50			0.212	5.65		
Target change $\delta_{0.\tau+1}$			-0.109	-5.63			0.187	1.30
Portfolio Characteristics								
Standard deviation of risky portfolio	0.027	0.52	-0.373	-7.85	0.144	3.19	1.325	2.78
Sharpe ratio of risky portfolio	2.100	12.10	0.239	2.25	-0.964	-3.08	-0.062	-0.05
Financial Characteristics								
Disposable income	0.027	2.13	-0.016	-0.95	0.026	3.12	0.730	3.81
Private pension premia/Income	-0.028	-2.55	-0.015	-1.94	0.014	1.53	-0.013	-0.33
Financial wealth (in logs)	0.063	4.70	0.031	5.72	-0.145	-3.64	0.282	1.66
Real-estate wealth (in logs)	0.013	1.32	-0.060	-4.49	-0.006	-0.20	-0.155	-1.54
Total liability (in logs)	0.025	1.89	-0.001	-0.06	-0.013	-0.30	-0.011	-0.10
Retired dummy	0.046	1.10	0.017	0.37	-0.506	-3.64	1.649	2.01
Unemployment dummy	-0.014	-0.46	0.028	0.45	-0.131	-1.47	0.446	1.13
Entrepreneur dummy	-0.152	-3.67	-0.045	-2.07	0.220	1.73	-0.199	-0.53
Student dummy	-0.077	-1.38	0.156	1.14	-0.065	-0.42	-0.063	-0.08
Demographic Characteristics								
Age	0.003	3.03	-0.002	-3.47	-0.006	-2.34	0.008	0.97
Household size	-0.014	-2.18	0.000	0.05	0.050	2.65	-0.174	-2.31
High-school dummy	0.081	3.17	0.019	1.75	0.057	0.76	-0.252	-1.38
Post high-school dummy	-0.002	-0.10	0.013	1.34	0.269	4.78	-0.697	-2.16
Dummy for unavailable education data	0.051	0.87	0.138	1.98	0.254	1.51	-0.757	-1.39
Immigration dummy	0.027	1.10	0.009	0.78	-0.026	-0.33	-0.123	-0.72

Notes: This table reports the results of the separate estimation of the adjustment model in years 2001 (first set of four columns) and 2002 (second set of columns). The estimation is based on households that participate in risky asset markets at the end of two consecutive years and for which the immigration dummy is available. All characteristics are demeaned year by year, and continuous financial characteristics are normalized to have unit standard deviation in each cross-section. Portfolio characteristics are in natural units.

TABLE A10. YEARLY ESTIMATES OF ADJUSTMENT MODEL

Target change defined as a function of financial wealth changes

	2001				2002			
	Speed		Target change		Speed		Target change	
	Estimate	t-stat	Estimate	t-stat	Estimate	t-stat	Estimate	t-stat
Intercepts								
Adjustment speed φ_0	0.877	82.50			0.180	4.08		
Target change $\delta_{0.\tau+1}$			-0.107	-5.25			0.563	2.03
Portfolio Characteristics								
Standard deviation of risky portfolio	0.028	0.54	-0.362	-6.71	0.189	3.65	2.675	3.01
Sharpe ratio of risky portfolio	2.088	12.00	0.237	2.23	-0.981	-2.73	2.527	0.78
Financial Characteristics								
Disposable income	0.027	2.11	-0.018	-1.05	0.026	2.65	0.620	2.83
Private pension premia/Income	-0.028	-2.53	-0.015	-1.96	0.017	1.63	-0.101	-1.18
Financial wealth (in logs)	0.064	4.66	0.034	3.81	-0.182	-3.93	1.226	1.78
Change in Financial wealth (in logs)			0.024	0.42			2.552	3.17
Real-estate wealth (in logs)	0.013	1.32	-0.064	-3.93	0.001	0.02	-0.614	-2.43
Total liability (in logs)	0.025	1.88	0.001	0.07	-0.031	-0.63	0.269	1.03
Retired dummy	0.047	1.11	0.017	0.36	-0.629	-3.97	3.629	1.68
Unemployment dummy	-0.015	-0.49	0.030	0.47	-0.125	-1.22	0.756	1.03
Entrepreneur dummy	-0.154	-3.68	-0.045	-2.06	0.237	1.63	-0.772	-0.84
Student dummy	-0.078	-1.39	0.154	1.12	-0.042	-0.24	-0.079	-0.06
Demographic Characteristics								
Age	0.003	3.01	-0.002	-3.45	-0.006	-1.91	0.021	1.08
Household size	-0.015	-2.19	0.001	0.15	0.065	3.00	-0.383	-1.76
High-school dummy	0.080	3.12	0.018	1.67	0.074	0.86	-0.524	-1.14
Post high-school dummy	-0.001	-0.05	0.012	1.32	0.336	5.16	-1.749	-1.72
Dummy for unavailable education data	0.049	0.84	0.139	1.99	0.303	1.58	-1.694	-1.33
Immigration dummy	0.027	1.08	0.009	0.74	-0.007	-0.08	-0.210	-0.51

Notes: This table reports the results of the separate estimation of the adjustment model in years 2001 (first set of four columns) and 2002 (second set of columns). The estimation is based on households that participate in risky asset markets at the end of two consecutive years and for which the immigration dummy is available. All characteristics are demeaned year by year, and continuous financial characteristics other than the change in financial wealth are normalized to have unit standard deviation in each cross-section. Portfolio characteristics are in natural units.

TABLE A11. CROSS-SECTIONAL DISTRIBUTION OF CHARACTERISTICS IN ADJUSTMENT MODEL

Year 2001

	Adjustment Speed					Target Change				
	5th	**25th**	**50th**	**75th**	**95th**	**5th**	**25th**	**50th**	**75th**	**95th**
Portfolio Characteristics										
Initial risky share	0.47	0.54	0.58	0.65	0.70	0.50	0.60	0.64	0.58	0.60
Share of stocks in risky portfolio	0.15	0.16	0.14	0.16	0.19	0.19	0.15	0.16	0.15	0.14
Standard deviation of risky portfolio	0.25	0.23	0.21	0.22	0.21	0.28	0.23	0.21	0.21	0.20
Sharpe ratio of risky portfolio	0.22	0.28	0.29	0.30	0.31	0.28	0.29	0.29	0.28	0.27
Financial Characteristics										
Disposable income	$20,694	$24,934	$27,257	$33,116	$42,828	$34,537	$32,642	$31,616	$26,478	$20,474
Private pension premia/income	1.30%	1.26%	1.06%	1.43%	2.35%	1.47%	1.68%	1.63%	1.08%	0.77%
Financial wealth	$10,500	$13,063	$18,082	$27,030	$56,241	$9,310	$17,923	$35,375	$21,923	$25,346
Change in log financial wealth	3.5%	2.0%	0.6%	0.2%	-4.4%	-44.2%	-9.4%	1.8%	11.8%	31.1%
Real estate wealth	$94	$714	$2,428	$16,373	$97,074	$51,736	$54,332	$37,634	$502	$1
Total liability	$41	$380	$539	$3,439	$23,482	$6,143	$2,960	$827	$298	$30
Retired dummy	0.34	0.22	0.26	0.20	0.13	0.11	0.15	0.25	0.35	0.44
Unemployment dummy	0.22	0.14	0.04	0.01	0.00	0.08	0.07	0.06	0.09	0.06
Entrepreneur dummy	0.20	0.05	0.01	0.00	0.00	0.04	0.04	0.04	0.06	0.04
Student dummy	0.02	0.02	0.03	0.02	0.01	0.01	0.01	0.01	0.02	0.06
Demographic Characteristics										
Age	53.15	50.07	51.48	51.19	55.05	49.80	49.65	53.31	54.49	56.61
Household size	2.12	2.25	2.39	2.38	2.00	2.51	2.67	2.32	2.01	1.51
High school dummy	0.35	0.56	0.74	0.88	0.95	0.80	0.78	0.71	0.57	0.53
Post-high school dummy	0.06	0.12	0.24	0.50	0.71	0.35	0.32	0.31	0.24	0.29
Dummy for unavailable education data	0.13	0.08	0.18	0.11	0.05	0.02	0.03	0.07	0.25	0.36
Immigration dummy	0.13	0.11	0.09	0.09	0.10	0.15	0.11	0.07	0.10	0.08

Notes: This table complements Table 4 in the main text. We sort households by their adjustment speed (first set of of five columns) or their target change (second set of five columns) in centered bins containing 5 percentiles, and report the average value of household characteristics in each bin. All financial variables are converted into U.S. dollars using the exchange rate at the end of 2002 (1 SEK = $ 0.1127).

TABLE A12. REBALANCING REGRESSIONS WITH CONTROLS

Characteristics not interacted with passive change

	All years		2000		2001		2002	
	Estimate	**t-stat**	**Estimate**	**t-stat**	**Estimate**	**t-stat**	**Estimate**	**t-stat**
Portfolio Characteristics								
Passive change in logs	-0.453	-21.40	-0.742	-12.40	-0.542	-9.97	-0.465	-19.20
Log initial risky share (demeaned)	-0.218	-144.00	-0.299	-144.00	-0.167	-144.00	-0.178	-144.00
Financial Characteristics								
Disposable income	-0.005	-2.58	-0.002	-0.99	-0.006	-1.40	-0.008	-2.12
Private pension premia/income	0.001	0.49	0.003	1.18	0.003	0.69	-0.005	-1.74
Log financial wealth	0.087	40.00	0.086	22.20	0.068	19.10	0.115	29.80
Log real estate wealth	-0.014	-7.84	-0.004	-1.34	-0.020	-6.85	-0.020	-5.94
Log total liability	0.017	8.93	0.013	4.16	0.012	3.70	0.027	7.21
Retired dummy	0.016	2.83	-0.009	-0.97	0.039	3.90	0.014	1.27
Unemployment dummy	-0.007	-1.22	-0.010	-1.06	-0.005	-0.56	-0.012	-0.99
Entrepreneur dummy	-0.059	-6.69	-0.068	-4.72	-0.071	-4.69	-0.037	-2.28
Student dummy	-0.063	-5.29	-0.071	-3.86	-0.031	-1.55	-0.071	-2.95
Demographic Characteristics								
Age	-0.003	-16.80	-0.002	-7.00	-0.003	-10.70	-0.004	-10.80
Household size	-0.010	-6.73	-0.013	-5.20	0.005	2.00	-0.024	-9.24
High school dummy	0.010	2.23	0.024	3.19	0.015	2.06	-0.011	-1.34
Post-high school dummy	-0.001	-0.40	0.004	0.66	0.001	0.21	-0.016	-2.32
Dummy for unavailable education data	0.036	5.93	0.003	0.31	0.040	4.08	0.054	4.66
Immigration dummy	0.001	0.13	0.015	1.81	0.005	0.62	-0.019	-2.02
Intercept			0.098	28.90	-0.067	-13.70	-0.077	-12.10
1999 dummy	0.111	42.60						
2000 dummy	-0.060	-20.40						
2001 dummy	-0.074	-13.30						
Adjusted R^2	0.16		0.25		0.10		0.12	
Number of observations	187,424		60,243		63,995		63,186	

Notes: The table reports the regression of the active change in logs on the passive change in logs, the log risky share, and financial and demographic characteristics. The estimation is based on households that participate in risky asset markets at the end of two consecutive years and for which the immigration dummy is available. Disposable income is averaged over the previous three years. All characteristics are demeaned year by year, and continuous financial characteristics other than the change in financial wealth are normalized to have unit standard deviation in each cross-section. Portfolio characteristics are in natural units.

TABLE A13. REBALANCING REGRESSION WITH CONTROLS

Characteristics interacted with passive change

	Estimate	t-stat	Estimate	t-stat
Passive change	-0.355	-26.30		
	Characteristics interacted with passive change		**Non-interacted characteristics**	
Portfolio Characteristics				
Initial risky share (demeaned)	0.021	3.54	-0.221	-120.00
Standard deviation of risky portfolio	-0.050	-2.59	-0.165	-11.20
Sharpe ratio of risky portfolio	1.060	8.90	0.202	7.12
Financial Characteristics				
Disposable income	-0.006	-1.12	-0.002	-3.10
Private pension premia/income	0.026	3.40	0.046	1.34
Log financial wealth	-0.105	-11.60	0.048	33.90
Log real estate wealth	0.019	2.11	-0.002	-6.17
Log total liability	-0.157	-14.20	0.000	0.56
Retirement dummy	0.113	3.30	0.023	3.29
Unemployment dummy	-0.017	-0.59	-0.008	-1.23
Entrepreneur dummy	0.026	0.70	-0.053	-5.86
Student dummy	-0.092	-1.69	-0.073	-5.75
Demographic Characteristics				
Age	0.005	6.44	-0.002	-11.20
Household size	0.085	12.60	0.001	0.44
High school dummy	-0.073	-3.13	0.001	0.14
Post-high school dummy	0.055	2.86	0.009	1.93
Dummy for unavailable education data	-0.204	-4.97	0.013	1.67
Immigration dummy	0.032	1.39	0.010	1.67

Notes: The table reports the pooled regression of the active change in logs on: (a) the passive change in logs; (b) interacted and non-interacted characteristics; and (c) time-dependent intercepts. Disposable income is averaged over the previous three years. The estimation is based on households that participate in risky asset markets at the end of two consecutive years and for which the immigration dummy is available. All characteristics are demeaned year by year, and continuous financial characteristics are normalized to have unit standard deviation in each cross-section. Portfolio characteristics are in natural units.

TABLE A14. REGRESSION OF ACTIVE CHANGE ON PASSIVE CHANGE
Households purchasing no new risky assets during the year

A. In Levels

	All years		2000		2001		2002	
	Estimate	**t-stat**	**Estimate**	**t-stat**	**Estimate**	**t-stat**	**Estimate**	**t-stat**
Passive change	-0.323	-28.10	-0.387	-10.70	-0.401	-15.20	-0.313	-21.60
Initial risky share (demeaned)	-0.148	-97.80	-0.114	-41.30	-0.148	-61.90	-0.169	-64.10
Intercept			-0.007	-6.89	-0.037	-37.00	-0.026	-20.40
1999 dummy	-0.008	-8.34						
2000 dummy	-0.035	-43.60						
2001 dummy	-0.027	-24.40						
Adjusted R^2	0.08		0.06		0.08		0.08	

B. In Logs

	All years		2000		2001		2002	
	Estimate	**t-stat**	**Estimate**	**t-stat**	**Estimate**	**t-stat**	**Estimate**	**t-stat**
Passive change in logs	-0.300	-25.50	-0.337	-11.90	-0.334	-11.90	-0.268	-16.80
Log initial risky share (demeaned)	-0.112	-67.50	-0.114	-41.50	-0.100	-37.20	-0.123	-40.20
Intercept			-0.015	-4.31	-0.101	-28.80	-0.087	-18.20
1999 dummy	-0.013	-3.57						
2000 dummy	-0.100	-32.70						
2001 dummy	-0.094	-23.80						
Adjusted R^2	0.06		0.07		0.04		0.06	

Notes: The table reports the regression of the active change on the passive change for households purchasing no new risky assets during the year.

TABLE A15. ADJUSTMENT MODEL WITHOUT CHARACTERISTICS
Households purchasing no new risky assets during the year

	OLS		IV	
	Estimate	**t-stat**	**Estimate**	**t-stat**
Reduced-Form Parameters				
Change in log passive share	-0.076	-23.80	0.312	28.70
Intercept 2001	-0.148	-46.90	-0.172	-49.40
Intercept 2002	-0.275	-90.10	-0.174	-40.80
Structural Parameters				
Adjustment speed φ_0	1.076	339.00	0.688	63.30
Target change $\delta_{0,2001}$	-0.138	-46.10	-0.250	-35.80
Target change $\delta_{0,2002}$	-0.255	-93.70	-0.252	-54.70
Adjusted R^2	0.11			
Number of observations	86,208		86,208	

Notes: This table reports the IV and OLS estimates of the adjustment model for households that own risky assets at the end of two consecutive years *t* and *t*+1, but do not purchase new risky assets during year *t*+1.

TABLE A16. ADJUSTMENT MODEL WITH CHARACTERISTICS
Households purchasing no new assets during the year

A. Parameter Estimates

	Speed		Target change		Speed		Target change	
	Estimate	**t-stat**	**Estimate**	**t-stat**	**Estimate**	**t-stat**	**Estimate**	**t-stat**
Intercepts								
Adjustment speed φ_0	0.753	63.40			0.799	42.70		
Target change $\delta_{0,2001}$			-0.075	-2.70			-0.022	-0.55
Target change $\delta_{0,2002}$			-0.113	-3.96			-0.082	-1.91
Portfolio Characteristics								
Standard deviation of risky portfolio	0.076	1.83	-0.658	-14.00	-0.171	-2.37	-0.574	-7.21
Sharpe ratio of risky portfolio	0.872	5.74	-0.838	-9.17	0.396	1.85	-0.494	-4.16
Financial Characteristics								
Disposable income	0.080	7.04	-0.068	-6.94	0.073	4.26	-0.114	-7.70
Private pension premia/income	0.019	1.88	-0.010	-1.51	0.034	2.26	-0.013	-1.44
Log financial wealth	0.024	1.63	0.068	14.60	0.002	0.10	0.141	8.64
Change in log financial wealth							0.338	4.10
Log real estate wealth	0.030	2.77	-0.094	-7.24	0.056	3.65	-0.178	-7.44
Log total liability	0.028	1.99	0.027	2.85	0.046	2.28	0.042	2.98
Retired dummy	-0.017	-0.42	0.045	1.05	-0.057	-0.96	0.044	0.78
Unemployment dummy	-0.021	-0.70	0.092	1.65	-0.072	-1.67	0.021	0.28
Entrepreneur dummy	-0.128	-2.99	-0.018	-0.81	-0.273	-4.36	0.001	0.02
Student dummy	-0.023	-0.36	3.296	3.50	-0.029	-0.31	2.244	1.68
Demographic Characteristics								
Age	-0.001	-1.03	-0.002	-4.28	0.001	0.46	-0.003	-3.42
Household size	-0.024	-3.43	0.000	0.08	-0.042	-4.08	0.007	0.92
High school dummy	0.057	2.28	-0.011	-1.09	0.078	2.17	-0.026	-1.99
Post-high school dummy	0.054	2.67	-0.012	-1.23	0.040	1.36	-0.017	-1.26
Dummy for unavailable education data	-0.022	-0.46	0.630	4.20	0.086	1.25	0.471	2.29
Immigration dummy	-0.023	-0.89	-0.021	-1.99	-0.040	-1.02	-0.019	-1.35

B. Cross-Sectional Distribution (2001)

	Speed	Target Change	Speed	Target change
5th Percentile	0.524	-0.415	0.567	-0.492
25th Percentile	0.667	-0.316	0.707	-0.275
50th Percentile	0.764	-0.235	0.805	-0.130
75th Percentile	0.844	-0.069	0.895	0.139
95th Percentile	0.952	0.583	1.005	0.685

Notes: This table reports the estimates of the adjustment model (panel A) and the implied cross-sectional distribution of the speed parameter and target change (panel B) for households purchasing no new risky assets during the year. The estimation is based on households that participate in risky asset markets at the end of two consecutive years and for which the immigration dummy is available. All characteristics are demeaned year by year, and continuous financial characteristics other than the change in financial wealth are normalized to have unit standard deviation in each cross-section. Portfolio characteristics are in natural units.

TABLE A17. REBALANCING REGRESSIONS
Households owning the same set of assets in years t and t+1

A. In Levels

	All years		2000		2001		2002	
	Estimate	**t-stat**	**Estimate**	**t-stat**	**Estimate**	**t-stat**	**Estimate**	**t-stat**
Passive change	-0.344	-30.40	-0.446	-11.70	-0.463	-17.90	-0.326	-22.60
Initial risky share (demeaned)	-0.125	-84.00	-0.098	-36.30	-0.125	-54.40	-0.144	-53.70
Intercept			0.002	1.60	-0.023	-22.70	-0.013	-9.27
1999 dummy	0.001	1.22						
2000 dummy	-0.020	-24.70						
2001 dummy	-0.013	-11.70						
Adjusted R^2	0.08		0.05		0.08		0.07	
Number of observations	102,268		24,496		37,648		40,124	

B. In Logs

	All years		2000		2001		2002	
	Estimate	**t-stat**	**Estimate**	**t-stat**	**Estimate**	**t-stat**	**Estimate**	**t-stat**
Passive change in logs	-0.309	-28.50	-0.317	-11.70	-0.375	-14.70	-0.279	-18.90
Log initial risky share (demeaned)	-0.104	-69.50	-0.108	-42.00	-0.092	-38.70	-0.114	-40.80
Intercept			0.021	6.14	-0.044	-13.20	-0.023	-4.99
1999 dummy	0.022	6.52						
2000 dummy	-0.041	-14.00						
2001 dummy	-0.030	-7.75						
Adjusted R^2	0.08		0.08		0.06		0.08	
Number of observations	102,268		24,496		37,648		40,124	

Notes: The table reports the regression of the active change on the passive change for households owning the same set of assets at the end of years *t* and *t*+1.

TABLE A18. IMPACT OF AUTOMATIC SAVINGS
Simulation

A. In Levels

	All years		2000		2001		2002	
	Estimate	**t-stat**	**Estimate**	**t-stat**	**Estimate**	**t-stat**	**Estimate**	**t-stat**
Passive change	-0.057	-143.00	-0.045	-119.00	-0.061	-111.00	-0.050	-79.30
Initial risky share (demeaned)	0.009	176.00	0.002	84.30	0.007	138.00	0.016	140.00
Intercept			0.022	2064.00	0.035	1581.00	0.033	556.00
1999 dummy	0.022	673.00						
2000 dummy	0.035	1222.00						
2001 dummy	0.032	826.00						
Adjusted R^2	0.98		0.50		0.48		0.45	
Number of observations	102,268		24,496		37,648		40,124	

B. In Logs

	All years		2000		2001		2002	
	Estimate	**t-stat**	**Estimate**	**t-stat**	**Estimate**	**t-stat**	**Estimate**	**t-stat**
Passive change in logs	-0.121	-47.80	-0.105	-15.00	-0.023	-3.93	-0.072	-21.40
Log initial risky share (demeaned)	-0.210	-546.00	-0.169	-281.00	-0.214	-364.00	-0.244	-341.00
Intercept			0.088	122.00	0.136	187.00	0.161	152.00
1999 dummy	0.080	105.00						
2000 dummy	0.127	197.00						
2001 dummy	0.151	174.00						
Adjusted R^2	0.85		0.77		0.81		0.80	
Number of observations	100,805		24,116		37,095		39,594	

Notes: This table reports the regression of the active change on the passive change calculated on a simulated dataset. We consider the same households as in Table A13 but assume that their active change is a fixed percentage s of their initial financial wealth. We set s equal to the average ratio of savings to financial wealth for those households in each year: s = 2.2% in 2000, s = 3.4% in 2001, and s = 3% in 2002. In the log regression (panel B), we eliminate households in the first percentile of $w_{h,t}(1+r_{h,t+1})$, which generate very large positive outliers of the active change.

TABLE A19. IMPACT OF RANDOM CASH BALANCES
Simulation

A. In Levels

	All years		2000		2001		2002	
	Estimate	**t-stat**	**Estimate**	**t-stat**	**Estimate**	**t-stat**	**Estimate**	**t-stat**
Passive change	-0.090	-11.50	-0.126	-6.95	0.009	0.50	-0.116	-10.90
Initial risky share (demeaned)	-0.056	-52.80	-0.051	-29.30	-0.053	-30.00	-0.066	-32.50
Intercept			0.011	17.90	-0.021	-28.20	-0.006	-5.41
1999 dummy	0.012	20.10						
2000 dummy	-0.024	-40.10						
2001 dummy	-0.003	-4.22						
Adjusted R^2	0.03		0.01		0.01		0.02	
Number of observations	187,026		60,054		63,873		63,099	

B. In Logs

	All years		2000		2001		2002	
	Estimate	**t-stat**	**Estimate**	**t-stat**	**Estimate**	**t-stat**	**Estimate**	**t-stat**
Passive change in logs	0.008	0.96	0.006	0.36	0.049	2.41	-0.004	-0.31
Log initial risky share (demeaned)	-0.010	-7.65	-0.032	-17.30	0.017	7.77	-0.014	-5.38
Intercept			-0.005	-2.20	-0.116	-42.40	-0.070	-17.40
1999 dummy	-0.005	-1.99						
2000 dummy	-0.120	-51.70						
2001 dummy	-0.067	-21.60						
Adjusted R^2	0.02		0.01		0.00		0.00	
Number of observations	187,026		60,054		63,873		63,099	

Notes: This table reports the regressions of the active change on the passive change calculated on a simulated dataset of passive investors with noisy cash balances. We assume that the households actually observed at the end of year t do not trade risky assets during the year t+1, but are exposed to multiplicative shocks to their cash balances. The multiplicative shocks are assumed to be i.i.d. across households and are drawn from the empirical distribution at time t+1 of the cash growth rate observed in the data.

TABLE A20. PROBABILITY OF SELLING, PURCHASING OR HOLDING ON TO AN ASSET

A. All Assets

	2000	2001	2002
Full sales	14.7%	11.2%	8.9%
Partial sales	23.3%	18.3%	18.7%
Partial purchases	45.7%	48.2%	53.2%
Hold	16.3%	22.3%	19.2%

B. Stocks

	2000	2001	2002
Full sales	23.6%	15.8%	9.8%
Partial sales	35.4%	27.3%	31.3%
Partial purchases	30.0%	34.5%	38.8%
Hold	11.0%	22.3%	20.0%

C. Funds

	2000	2001	2002
Full sales	9.1%	8.1%	8.3%
Partial sales	15.8%	12.2%	9.9%
Partial purchases	55.5%	57.5%	63.2%
Hold	19.6%	22.3%	18.6%

Notes: This table reports the probability that an asset held at the end of year t is fully sold, partially sold, partially purchased or simply held at the end of year t+1. A position is classified as "hold" if the change in its value between t and t+1 is within 50 basis points of the asset's ex dividend return. In unreported robustness checks, we obtain very similar results when a tolerance level of 1 basis point is used.

TABLE A21. CROSS-SECTIONAL DISTRIBUTION OF PORTFOLIO TURNOVER

A. Valuation at Beginning of Year

	2000	2001	2002	All years
5th Percentile	0.0%	0.0%	0.0%	0.0%
25th Percentile	2.3%	2.1%	2.9%	2.6%
50th Percentile	11.6%	11.0%	11.5%	11.3%
75th Percentile	33.1%	32.4%	34.2%	33.3%
95th Percentile	100.0%	100.0%	108.9%	101.4%

B. Valuation at End of Year

	2000	2001	2002	All years
5th Percentile	0.0%	0.0%	0.0%	0.0%
25th Percentile	2.1%	2.1%	2.7%	2.4%
50th Percentile	9.9%	10.2%	9.2%	9.8%
75th Percentile	27.9%	28.5%	26.4%	27.6%
95th Percentile	93.3%	98.4%	84.2%	91.7%

Notes: The table reports the cross-sectional distribution of portfolio turnover, that is the sum of absolute value of changes in individual asset holdings between the beginning and the end of the year divided by the value of the complete portfolio. Because the Swedish dataset provides asset positions at a yearly frequency but does not report transaction prices, we compute turnover using asset prices and household complete portfolios at the beginning (panel A) or the end of the year (panel B).

TABLE A22. CROSS-SECTIONAL DISTRIBUTION OF CHARACTERISTICS IN STOCK SALE REGRESSION

Year 2001

	Winning Stocks					Losing Stocks				
	5th	**25th**	**50th**	**75th**	**95th**	**5th**	**25th**	**50th**	**75th**	**95th**
Portfolio Characteristics										
Initial risky share	0.83	0.77	0.73	0.69	0.61	0.72	0.73	0.75	0.72	0.68
Share of stocks in risky portfolio	0.94	0.83	0.61	0.34	0.18	0.12	0.32	0.64	0.85	0.94
Standard deviation of risky portfolio	0.42	0.30	0.25	0.21	0.17	0.17	0.20	0.24	0.30	0.45
Stock component of Sharpe ratio	0.22	0.22	0.17	0.11	0.07	0.05	0.10	0.18	0.23	0.22
Fund component of Sharpe ratio	0.01	0.04	0.10	0.19	0.24	0.26	0.20	0.09	0.03	0.01
Financial Characteristics										
Disposable income	$64,961	$51,811	$52,497	$38,224	$27,774	$31,479	$42,734	$43,237	$47,286	$51,411
Private pension premia/income	3.20%	2.59%	2.60%	2.34%	1.09%	1.25%	2.55%	2.51%	2.32%	3.30%
Financial wealth	$114,105	$99,660	$76,180	$57,508	$55,443	$58,035	$72,678	$85,104	$87,681	$59,041
Real estate wealth	$68,422	$47,129	$21,833	$12,550	$865	$2,076	$15,206	$18,561	$35,136	$39,081
Total liability	$26,641	$4,221	$1,140	$774	$10	$55	$844	$1,451	$2,104	$9,073
Retired dummy	0.04	0.18	0.24	0.24	0.53	0.37	0.25	0.27	0.25	0.12
Unemployment dummy	0.05	0.05	0.05	0.06	0.06	0.06	0.05	0.04	0.04	0.07
Entrepreneur dummy	0.04	0.05	0.05	0.05	0.08	0.03	0.04	0.05	0.05	0.10
Student dummy	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Demographic Characteristics										
Age	46.71	53.47	54.94	54.83	61.81	55.96	54.64	54.69	55.10	50.84
Household size	2.71	2.35	2.41	2.34	1.80	1.87	2.34	2.32	2.38	2.67
High school dummy	0.88	0.81	0.74	0.73	0.59	0.65	0.76	0.77	0.77	0.84
Post-high school dummy	0.58	0.52	0.47	0.42	0.30	0.19	0.45	0.47	0.54	0.65
Dummy for unavailable education data	0.02	0.09	0.12	0.09	0.19	0.14	0.10	0.10	0.11	0.05
Immigration dummy	0.10	0.11	0.08	0.09	0.08	0.07	0.07	0.08	0.11	0.15

Notes: This table complements Table 7 in the main text. For each household and asset, we use the regression coefficients in Table 7 to compute the "impact coefficient of an asset's performance on the probability of full sale", which is defined as the coefficient of the asset's gain or loss in the probit regression. We convert all financial variables into U.S. dollars using the exchange rate at the end of 2002 (1 SEK = $ 0.1127).

TABLE A23. BIN REGRESSION OF ACTIVE CHANGE ON RELATIVE PERFORMANCE

	Stocks		Funds	
	Estimate	t-stat	Estimate	t-stat
Relative performance of asset j, $r_{j,t+1} - r_{h,-j,t+1}$				
$0 < w^*_{h,j,t} \leq 0.2$	-0.010	-27.3	-0.005	-4.8
$0.2 < w^*_{h,j,t} \leq 0.4$	-0.089	-29.9	-0.053	-16.5
$0.4 < w^*_{h,j,t} \leq 0.6$	-0.145	-20.1	-0.073	-14.4
$0.6 < w^*_{h,j,t} \leq 0.8$	-0.129	-14.3	-0.065	-9.4
$0.8 < w^*_{h,j,t} < 1$	-0.053	-5.9	-0.032	-3.8
2000 dummy				
$0 < w^*_{h,j,t} \leq 0.2$	0.003	12.5	0.009	31.8
$0.2 < w^*_{h,j,t} \leq 0.4$	-0.016	-10.1	-0.013	-18.3
$0.4 < w^*_{h,j,t} \leq 0.6$	-0.055	-16.0	-0.041	-34.0
$0.6 < w^*_{h,j,t} \leq 0.8$	-0.094	-18.0	-0.076	-38.5
$0.8 < w^*_{h,j,t} < 1$	-0.133	-19.2	-0.116	-41.3
2001 dummy				
$0 < w^*_{h,j,t} \leq 0.2$	0.007	27.5	0.014	52.4
$0.2 < w^*_{h,j,t} \leq 0.4$	-0.001	-0.7	0.003	4.1
$0.4 < w^*_{h,j,t} \leq 0.6$	-0.028	-9.9	-0.015	-14.1
$0.6 < w^*_{h,j,t} \leq 0.8$	-0.054	-13.0	-0.040	-23.9
$0.8 < w^*_{h,j,t} < 1$	-0.069	-14.5	-0.063	-28.6
2002 dummy				
$0 < w^*_{h,j,t} \leq 0.2$	0.007	27.4	0.010	39.6
$0.2 < w^*_{h,j,t} \leq 0.4$	0.003	2.3	0.003	4.2
$0.4 < w^*_{h,j,t} \leq 0.6$	-0.010	-3.4	-0.012	-11.5
$0.6 < w^*_{h,j,t} \leq 0.8$	-0.026	-6.2	-0.028	-17.6
$0.8 < w^*_{h,j,t} < 1$	-0.056	-10.7	-0.049	-22.9
Adjusted R^2	5.80%			

Notes: This table reports the results of the bin regression of the asset's active change on the asset's relative performance and yearly dummies. Active and passive changes are expressed in levels. We exclude full sales and purchases of new assets, and households owning a single risky asset. Standard errors are robust and clustered by households.

TABLE A24. BIN REGRESSION OF ACTIVE CHANGE ON OWN PERFORMANCE AND PERFORMANCE OF OTHER ASSETS

	Stocks		Funds	
	Estimate	t-stat	Estimate	t-stat
Performance of asset j, $r_{j,t+1}$				
$0 < w^*_{h,j,t} \leq 0.2$	-0.009	-23.70	0.004	4.24
$0.2 < w^*_{h,j,t} \leq 0.4$	-0.079	-26.00	-0.006	-1.44
$0.4 < w^*_{h,j,t} \leq 0.6$	-0.125	-18.40	0.014	1.90
$0.6 < w^*_{h,j,t} \leq 0.8$	-0.126	-12.40	0.031	2.92
$0.8 < w^*_{h,j,t} < 1$	-0.020	-1.65	0.094	6.34
Performance of risky assets other than j, $r_{h,-j,t+1}$				
$0 < w^*_{h,j,t} \leq 0.2$	0.027	14.60	0.024	8.92
$0.2 < w^*_{h,j,t} \leq 0.4$	0.127	17.30	0.106	20.20
$0.4 < w^*_{h,j,t} \leq 0.6$	0.192	13.30	0.142	20.60
$0.6 < w^*_{h,j,t} \leq 0.8$	0.135	10.10	0.121	13.20
$0.8 < w^*_{h,j,t} < 1$	0.087	7.65	0.075	7.50
2000 dummy				
$0 < w^*_{h,j,t} \leq 0.2$	0.004	15.30	0.011	31.80
$0.2 < w^*_{h,j,t} \leq 0.4$	-0.014	-8.30	-0.006	-7.39
$0.4 < w^*_{h,j,t} \leq 0.6$	-0.052	-14.70	-0.031	-23.10
$0.6 < w^*_{h,j,t} \leq 0.8$	-0.094	-18.00	-0.067	-31.80
$0.8 < w^*_{h,j,t} < 1$	-0.134	-19.50	-0.106	-36.40
2001 dummy				
$0 < w^*_{h,j,t} \leq 0.2$	0.010	25.40	0.018	36.30
$0.2 < w^*_{h,j,t} \leq 0.4$	0.006	3.44	0.016	14.20
$0.4 < w^*_{h,j,t} \leq 0.6$	-0.018	-5.53	0.005	2.95
$0.6 < w^*_{h,j,t} \leq 0.8$	-0.053	-11.70	-0.022	-9.48
$0.8 < w^*_{h,j,t} < 1$	-0.061	-11.80	-0.043	-15.30
2002 dummy				
$0 < w^*_{h,j,t} \leq 0.2$	0.013	17.90	0.019	18.80
$0.2 < w^*_{h,j,t} \leq 0.4$	0.021	6.98	0.036	15.30
$0.4 < w^*_{h,j,t} \leq 0.6$	0.016	2.93	0.040	11.80
$0.6 < w^*_{h,j,t} \leq 0.8$	-0.022	-3.60	0.021	4.35
$0.8 < w^*_{h,j,t} < 1$	-0.032	-4.67	0.004	0.67
Adjusted R^2	6.19%			

Notes: This table reports the results of the bin regression of the asset's active change on own performance and other assets' performance. We exclude full sales and purchases of new assets, and households owning a single risky asset. Standard errors are robust and clustered by households.

TABLE A25. ASSET-LEVEL REBALANCING

Comparison of several linear specifications

	Estimate	t-stat	Estimate	t-stat	Estimate	t-stat
Stocks						
Passive change of asset j (in logs)					-0.180	-56.30
Return of asset j	-0.165	-39.40	-0.179	-42.80		
Return of other risky assets			0.344	23.90		
Share of asset j in risky portfolio	-0.039	-44.60	-0.043	-47.30	-0.039	-44.70
Funds						
Passive change of asset j (in logs)					-0.155	-20.50
Return of asset j	-0.015	-2.02	-0.022	-2.96		
Return of other risky assets			0.359	27.10		
Share of asset j in risky portfolio	-0.092	-93.60	-0.098	-93.60	-0.093	-94.30
Dummies						
2000 stock dummy	-0.204	-48.00	-0.196	-46.40	-0.205	-48.40
2001 stock dummy	-0.130	-36.90	-0.096	-25.60	-0.119	-34.40
2002 stock dummy	-0.150	-40.80	-0.049	-8.78	-0.112	-33.00
2000 fund dummy	-0.228	-92.20	-0.220	-89.70	-0.230	-94.30
2001 fund dummy	-0.153	-63.30	-0.122	-47.10	-0.153	-68.70
2002 fund dummy	-0.193	-58.10	-0.093	-19.30	-0.189	-82.80
Adjusted R^2	5.41%		6.00%		6.21%	
Adjusted R^2 of stock regression	2.97%		3.66%		4.69%	
Adjusted R^2 of fund regression	6.95%		7.48%		7.18%	

Notes: This table reports the results of the asset-level rebalancing regression with characteristics. In each set of columns, we regress the active change of asset j's share in the risky portfolio on a subset of the following variables: (a) the passive change of asset j in the risky portfolio; (b) the return of asset j during the year; (c) the return on the household's other risky assets during the year; and (d) the initial share of asset j in the risky portfolio. We exclude full sales and purchases of new assets. All household characteristics are demeaned. Standard errors are robust and clustered by household.

TABLE A26. ASSET-LEVEL REBALANCING WITH CHARACTERISTICS

	Stocks		Funds					
	Estimate	**t-stat**	**Estimate**	**t-stat**				
Passive change of asset j (in logs)	-0.179	-56.30	-0.122	-17.00				
Share of asset j in risky portfolio	-0.025	-23.90	-0.107	-90.80				
1999 dummy	-0.158	-36.50	-0.256	-0.26				
2000 dummy	-0.072	-19.50	-0.182	-0.18				
2001 dummy	-0.064	-18.10	-0.217	-0.22				
	Characteristics interacted with passive change				**Non-interacted characteristics (controls)**			
Portfolio Characteristics								
Initial risky share	0.006	1.44	0.027	2.82	0.054	26.40	0.008	5.89
Share of stocks in risky portfolio	-0.004	-1.19	-0.059	-6.13	-0.026	-14.60	-0.009	-4.36
Financial Characteristics								
Disposable income	0.002	0.44	0.017	1.28	-0.002	-0.54	-0.012	-3.50
Private pension premia/income	-0.004	-1.16	-0.002	-0.25	-0.002	-1.22	-0.004	-3.01
Log financial wealth	0.031	6.78	0.056	4.89	0.005	2.16	-0.043	-23.80
Log real estate wealth	-0.001	-0.15	0.010	1.24	-0.011	-5.72	-0.006	-4.45
Log total liability	-0.014	-3.70	-0.010	-1.06	-0.001	-0.39	-0.009	-6.15
Retirement dummy	0.010	0.85	0.045	1.60	0.010	1.80	0.002	0.42
Unemployment dummy	0.003	0.20	0.032	1.05	0.014	1.77	-0.004	-0.91
Entrepreneur dummy	-0.008	-0.58	-0.054	-1.63	-0.001	-0.09	-0.008	-1.41
Student dummy	0.062	2.09	0.056	0.97	0.061	4.22	-0.002	-0.21
Demographic Characteristics								
Age	0.000	0.67	0.001	1.35	0.002	9.67	0.002	11.80
Household size	0.000	0.03	-0.011	-1.45	0.000	0.01	0.003	2.88
High school dummy	-0.004	-0.36	0.018	0.86	-0.006	-1.31	-0.018	-5.80
Post-high school dummy	0.015	2.03	-0.013	-0.69	-0.025	-6.66	-0.015	-5.30
Dummy for unavailable education data	0.039	2.78	0.063	2.02	-0.028	-4.45	-0.008	-2.06
Immigration dummy	-0.022	-1.97	0.013	0.52	-0.005	-0.89	0.002	0.45

Notes: This table reports the results of the asset-level rebalancing regression with characteristics. We exclude full sales and purchases of new assets. The estimation is based on households that participate in risky asset markets at the end of two consecutive years and for which the immigration dummy is available. Disposable income is averaged over the previous three years. All characteristics are demeaned year by year, and continuous financial characteristics other than the change in financial wealth are normalized to have unit standard deviation in each cross-section. Portfolio characteristics are in natural units. Standard errors are robust and clustered by household.

TABLE A27. DECOMPOSITION OF REBALANCING COEFFICIENTS

Active changes for all assets

All households

	Estimate	t-stat
Passive change +	-0.581	-29.60
Passive change -	-0.504	-53.10
Initial share (demeaned)	-0.186	-144.00
1999 dummy	0.028	40.30
2000 dummy	-0.028	-38.30
2001 dummy	-0.028	-26.50
Adjusted R^2	0.12	
Number of observations	187,780	

	Purchases		Sales	
	Estimate	t-stat	Estimate	t-stat
Passive change +	-0.253	-13.00	-0.327	-20.10
Passive change -	-0.431	-45.80	-0.073	-9.32
Initial share (demeaned)	-0.028	-22.10	-0.158	-147.00
1999 dummy	0.114	164.00	-0.086	-148.00
2000 dummy	0.047	64.90	-0.075	-124.00
2001 dummy	0.031	29.10	-0.059	-66.90
Adjusted R^2	0.21		0.27	
Number of observations	187,780		187,780	

	Partial purchases		Full purchases		Partial sales		Full sales	
	Estimate	t-stat	Estimate	t-stat	Estimate	t-stat	Estimate	t-stat
Passive change +	-0.285	-19.40	0.032	2.17	-0.091	-8.84	-0.236	-17.10
Passive change -	-0.220	-30.90	-0.211	-29.80	-0.025	-4.93	-0.049	-7.26
Initial share (demeaned)	-0.047	-48.10	0.018	19.00	-0.068	-99.50	-0.090	-98.60
1999 dummy	0.028	53.80	0.086	164.00	-0.031	-84.90	-0.055	-111.00
2000 dummy	0.013	23.40	0.034	62.80	-0.028	-73.80	-0.047	-90.50
2001 dummy	0.014	16.90	0.017	21.70	-0.020	-36.30	-0.039	-51.50
Adjusted R^2	0.06		0.18		0.12		0.16	
Number of observations	187,780		187,780		187,780		187,780	

Notes: This table reports the asset-level rebalancing regressions in levels that are used to construct Table 9 in the main text. We distinguish between lucky ("Passive change +") and unlucky households ("Passive change –"), and include the demeaned risky share and yearly fixed effects as controls. A household is classified as lucky (unlucky) if the passive return on its risky portfolio during the year is higher (lower) than the cross-sectional average.

TABLE A28. DECOMPOSITION OF REBALANCING COEFFICIENTS

Separate treatment of stocks and funds

Active changes for Stocks

All participating households

	Estimate	t-stat
Passive change +	-0.349	-27.50
Passive change -	-0.334	-54.40
Initial share (demeaned)	-0.045	-53.60
1999 dummy	0.018	39.00
2000 dummy	-0.016	-33.10
2001 dummy	-0.016	-22.90
Adjusted R^2	0.05	
Number of observations	187,780	

	Purchases		Sales	
	Estimate	t-stat	Estimate	t-stat
Passive change +	0.001	0.07	-0.350	-32.20
Passive change -	-0.304	-49.20	-0.030	-5.77
Initial share (demeaned)	0.026	31.20	-0.071	-99.30
1999 dummy	0.054	117.00	-0.036	-92.30
2000 dummy	0.016	32.80	-0.031	-77.20
2001 dummy	0.008	11.30	-0.024	-40.00
Adjusted R^2	0.13		0.12	
Number of observations	187,780		187,780	

	Partial purchases		Full purchases		Partial sales		Full sales	
	Estimate	t-stat	Estimate	t-stat	Estimate	t-stat	Estimate	t-stat
Passive change +	-0.045	-6.93	0.046	4.19	-0.059	-10.20	-0.291	-31.30
Passive change -	-0.143	-45.30	-0.160	-30.00	0.009	3.18	-0.039	-8.71
Initial share (demeaned)	0.004	9.43	0.022	30.50	-0.023	-59.30	-0.049	-78.90
1999 dummy	0.004	16.00	0.050	126.00	-0.006	-27.40	-0.030	-90.50
2000 dummy	0.000	-0.48	0.016	38.20	-0.007	-31.10	-0.025	-70.60
2001 dummy	0.000	1.24	0.007	12.40	-0.004	-14.20	-0.019	-37.80
Adjusted R^2	0.03		0.12		0.03		0.10	
Number of observations	187,780		187,780		187,780		187,780	

Active changes for Funds

Households holding both stocks and funds

	Estimate	t-stat
Passive change +	-0.231	-13.10
Passive change -	-0.170	-19.90
Initial share (demeaned)	-0.141	-121.00
1999 dummy	0.011	16.70
2000 dummy	-0.012	-18.70
2001 dummy	-0.013	-13.00
Adjusted R^2	0.08	
Number of observations	187,780	

	Purchases		Sales	
	Estimate	t-stat	Estimate	t-stat
Passive change +	-0.254	-16.70	0.023	1.77
Passive change -	-0.127	-17.20	-0.043	-6.72
Initial share (demeaned)	-0.055	-54.40	-0.087	-99.40
1999 dummy	0.061	112.00	-0.050	-106.00
2000 dummy	0.032	55.40	-0.044	-89.00
2001 dummy	0.023	27.70	-0.035	-49.40
Adjusted R^2	0.13		0.16	
Number of observations	187,780		187,780	

	Partial purchases		Full purchases		Partial sales		Full sales	
	Estimate	t-stat	Estimate	t-stat	Estimate	t-stat	Estimate	t-stat
Passive change +	-0.240	-18.70	-0.014	-1.51	-0.032	-3.66	0.055	5.34
Passive change -	-0.076	-12.30	-0.051	-10.90	-0.034	-7.93	-0.009	-1.86
Initial share (demeaned)	-0.051	-60.00	-0.004	-6.20	-0.045	-78.00	-0.042	-60.80
1999 dummy	0.025	53.50	0.036	106.00	-0.026	-81.90	-0.025	-66.40
2000 dummy	0.013	27.00	0.019	52.10	-0.022	-66.40	-0.022	-57.30
2001 dummy	0.013	18.80	0.010	18.90	-0.016	-33.40	-0.020	-34.80
Adjusted R^2	0.06		0.09		0.10		0.08	
Number of observations	187,780		187,780		187,780		187,780	

Notes: This table reports the asset-level rebalancing regressions in levels that are used to construct Table 9 in the main text. We distinguish between stocks and funds, and between lucky ("Passive change +") and unlucky households ("Passive change –"). A household is classified as lucky (unlucky) if the passive return on its risky portfolio during the year is higher (lower) than the cross-sectional average. The demeaned risky share and yearly fixed effects are included as controls.

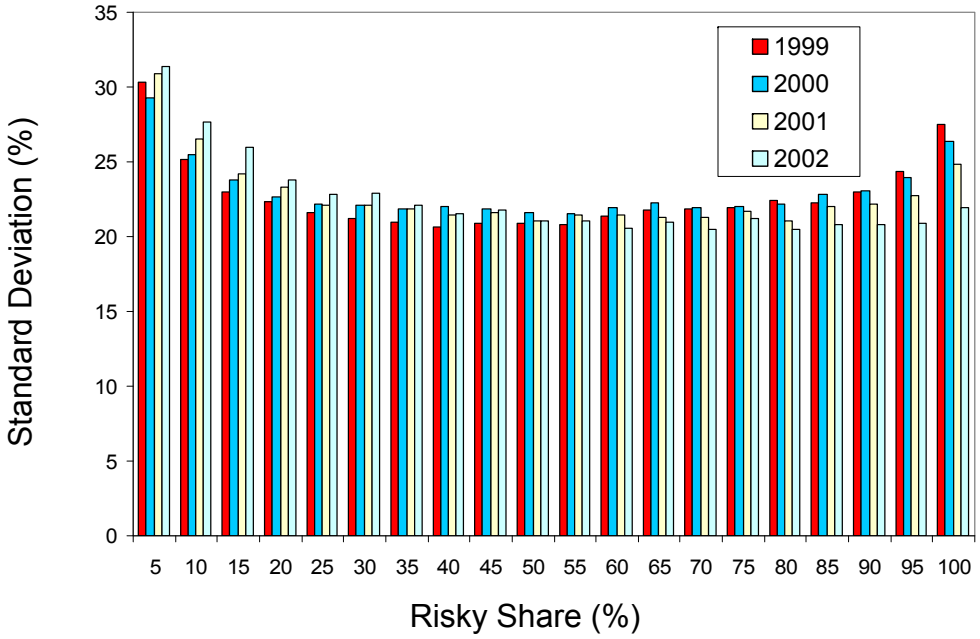
TABLE A29. ASSET-LEVEL REBALANCING WITH CHARACTERISTICS

Separate treatment of popular strategies

	Lucky								Unlucky			
	Stocks				Funds				Stocks		Funds	
	Sales		Full Sales		Purchases		Partial Purchases		Purchases		Purchases	
	Estimate	t-stat	Estimate	t-stat	Estimate	t-stat	Estimate	t-stat	Estimate	t-stat	Estimate	t-stat
Passive change	-0.574	-51.60	-0.452	-47.20	-0.356	-22.40	-0.326	-24.40	-0.016	-2.09	-0.251	-27.00
	Characteristics interacted with passive change											
Portfolio Characteristics												
Initial risky share	-0.361	-7.95	-0.507	-13.00	0.660	10.20	0.842	15.40	0.210	8.21	0.521	16.80
Standard deviation of risky portfolio	1.064	9.42	0.659	6.79	0.716	4.44	0.686	5.06	-0.071	-3.86	0.006	0.26
Stock component of Sharpe ratio	6.408	29.80	5.927	32.00	0.285	0.93	0.560	2.17	-0.198	-1.76	-0.242	-1.78
Fund component of Sharpe ratio	3.719	20.10	3.705	23.20	-0.567	-2.14	-0.256	-1.15	2.138	23.10	-1.047	-9.35
Financial Characteristics												
Disposable income	0.055	5.31	0.037	4.14	0.013	0.90	0.035	2.77	-0.012	-4.53	0.008	2.60
Private pension premia/income	-0.015	-1.66	-0.012	-1.54	0.015	1.20	0.013	1.22	0.018	3.27	0.010	1.49
Log financial wealth	-0.013	-1.27	0.051	5.60	-0.180	-11.90	-0.193	-15.20	-0.099	-18.10	-0.079	-11.90
Log real estate wealth	0.001	0.15	-0.012	-1.44	0.083	6.01	0.080	6.91	0.003	0.69	0.030	4.93
Log total liability	0.028	2.51	0.030	3.12	-0.069	-4.37	-0.050	-3.77	-0.063	-10.10	-0.051	-6.83
Retirement dummy	0.038	1.18	0.070	2.56	-0.101	-2.21	-0.137	-3.56	0.082	4.21	-0.038	-1.61
Unemployment dummy	0.002	0.06	0.002	0.06	-0.038	-0.81	-0.064	-1.61	-0.036	-2.27	-0.001	-0.06
Entrepreneur dummy	0.077	1.94	0.061	1.79	0.118	2.09	0.109	2.29	-0.085	-4.03	0.053	2.08
Student dummy	-0.139	-2.11	-0.121	-2.14	0.072	0.77	0.096	1.21	0.074	2.72	0.097	2.95
Demographic Characteristics												
Age	-0.002	-1.89	-0.003	-3.27	0.008	6.41	0.005	4.73	0.003	7.62	0.004	7.27
Household size	0.007	0.92	-0.001	-0.13	0.070	6.44	0.036	3.90	0.036	9.77	0.037	8.45
High school dummy	0.053	2.26	0.029	1.46	0.021	0.63	0.012	0.41	-0.025	-1.88	0.002	0.12
Post-high school dummy	-0.001	-0.03	-0.010	-0.58	0.025	0.90	0.080	3.36	0.006	0.61	-0.039	-3.31
Dummy for unavailable education data	0.033	0.94	0.043	1.41	-0.016	-0.32	0.031	0.74	-0.014	-0.59	-0.086	-2.98
Immigration dummy	0.013	0.48	-0.028	-1.22	0.014	0.36	-0.009	-0.29	-0.083	-6.51	0.015	1.00

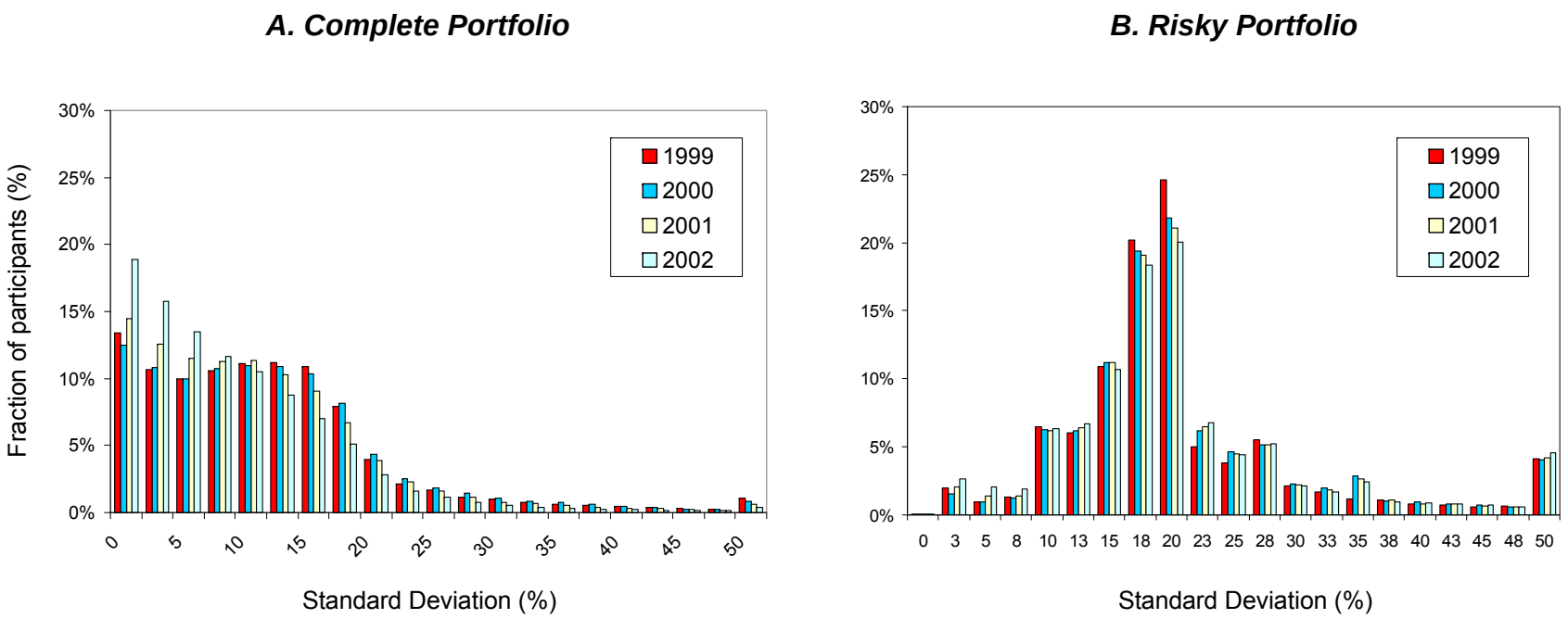
Notes: This table reports the results of asset-level rebalancing regressions with characteristics. We focus on the trading strategies that most contribute to rebalancing: stock sales and fund purchases by lucky households, and purchases of stocks and funds by unlucky households. The estimation is based on households that participate in risky asset markets at the end of two consecutive years and for which the immigration dummy is available. Disposable income is averaged over the previous three years. All characteristics are demeaned year by year, and continuous financial characteristics other than the change in financial wealth are normalized to have unit standard deviation in each cross-section. Portfolio characteristics are in natural units.

FIGURE A1. STANDARD DEVIATION OF RISKY PORTFOLIO



Notes: The figure illustrates the standard deviation of household risky portfolios vs. the initial risky share at the end of years 1999 to 2002. Specifically, we classify households into bins of the initial risky share $w_{h,t}$ at the end of year t, and report the equal-weighted average of the risky portfolio standard deviations $\sigma_{h,t}$ in each bin.

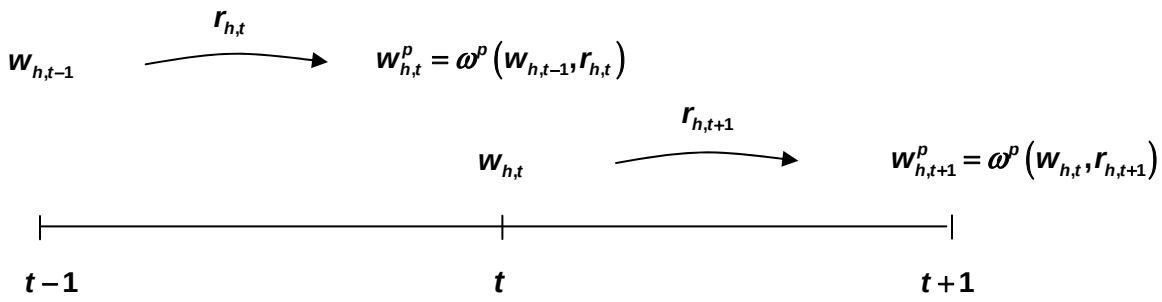
FIGURE A2. CROSS-SECTIONAL DISTRIBUTION OF PORTFOLIO STANDARD DEVIATIONS



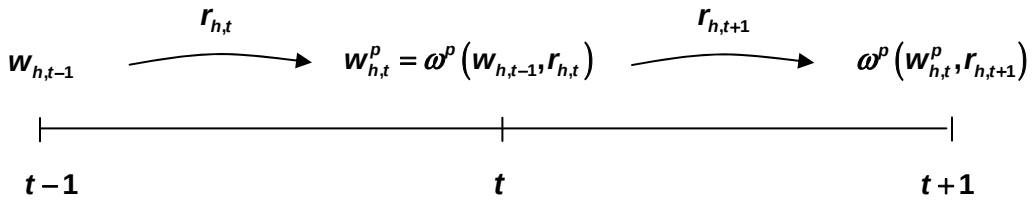
Notes: The figure reports the cross-sectional distribution of the standard deviation of household complete portfolios (Panel A) and risky portfolios (Panel B) at the end of years 1999 to 2002.

FIGURE A3. TIMELINE OF ADJUSTMENT MODEL

A. Ordinary Least Squares Estimation



B. Instrumental Variables Estimation



Notes: The figure reports the timeline of the variables used in the OLS estimation (panel A) and the IV estimation (panel B) of the adjustment model.