

Replication output for Cheaper is not better (Review of Asset Pricing Studies, 2023)

Ly Nguyen

FIGURE 1 – Characteristics of stock portfolios of funds charging different fees

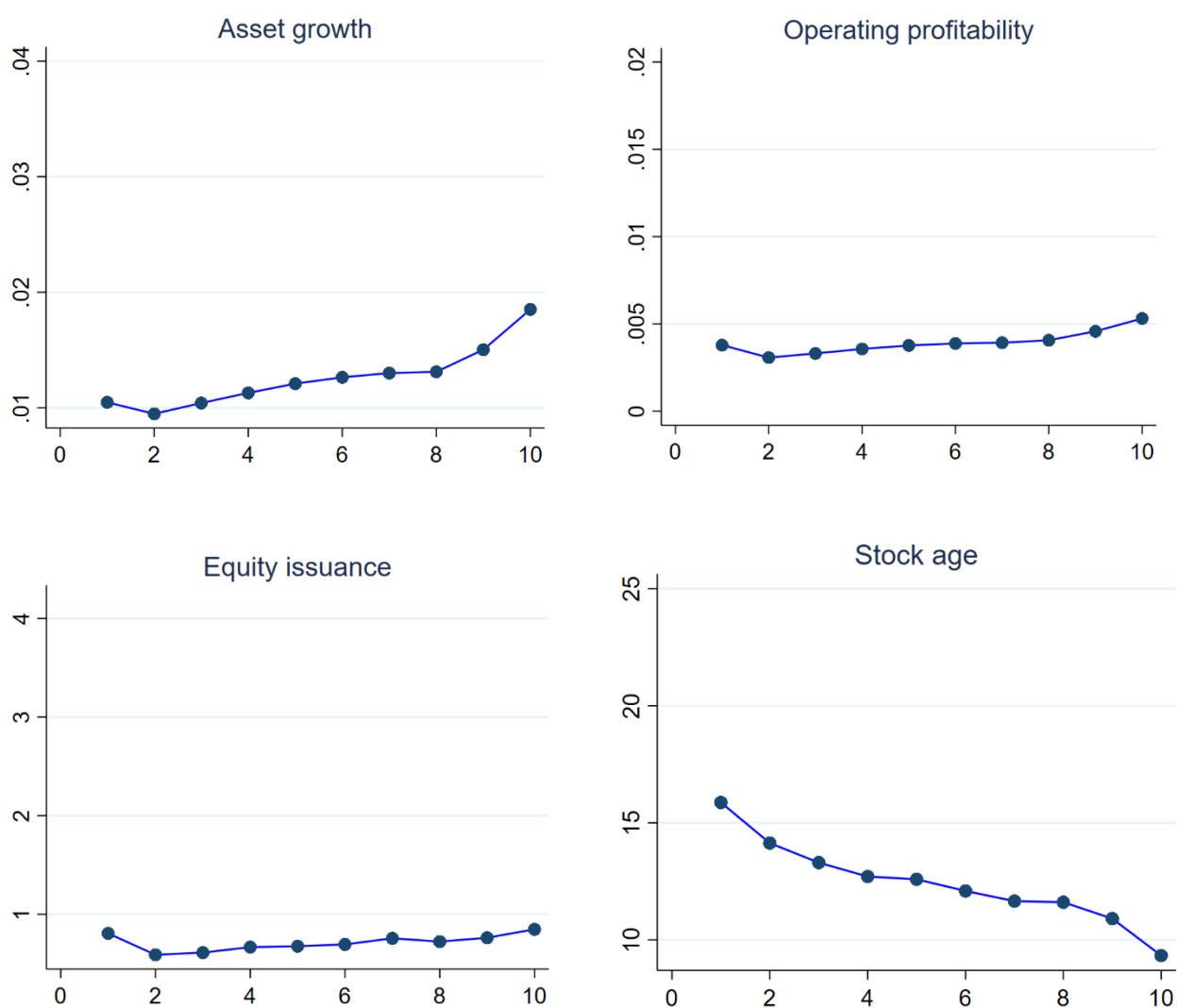


TABLE 2 – Fund fees and characteristics of stock holdings

	(1) Profit	(2) Stock Age	(3) B/M	(4) Size	(5) Asset Growth	(6) Equity Issuance
Expense ratio _{t-1}	.0477*** (.0158)	.0535*** (.0139)	.0365*** (.0113)	.0397*** (.0112)	.0756*** (.017)	.0126 (.0149)
Log (Fund size _{t-1})	.0845** (.0343)	.0741** (.0289)	.4419*** (.0291)	.4761*** (.0318)	.0187 (.0259)	.0451 (.0308)
Log (Fund family size _{t-1})	-.0705*** (.0056)	-.0856*** (.0074)	-.0444*** (.0049)	-.0473*** (.0053)	-.0778*** (.0051)	-.0513*** (.0059)
Log (Fund age _{t-1})	-.864*** (.1149)	-.8475*** (.1513)	-.6363*** (.0972)	-.6407*** (.0783)	-1.033*** (.1167)	-.8343*** (.1376)
Observations	40669	40418	40669	40669	40669	40669
Adjusted R ²	.434	.4335	.6044	.6116	.4773	.5065
Style x Year FEs	Yes	Yes	Yes	Yes	Yes	Yes

TABLE 2B – Extension

High-fee funds also tilt their portfolios towards innovation-driven firms (proxy by R&D expenses and CapEx)

	(1) R&D Expense	(6) Capital Expenditure
Expense ratio _{t-1}	.053*** (.0109)	.0467*** (.0114)
Log (Fund size _{t-1})	.5131*** (.04)	.3952*** (.027)
Log (Fund family size _{t-1})	-.0474*** (.0041)	-.0439*** (.0046)
Log (Fund age _{t-1})	-.561*** (.0896)	-.5582*** (.0724)
Observations	39921	40667
Adjusted R ²	.5901	.5969
Style x Year FEs	Yes	Yes

FIGURE 3 – Mutual fund fee-performance relation

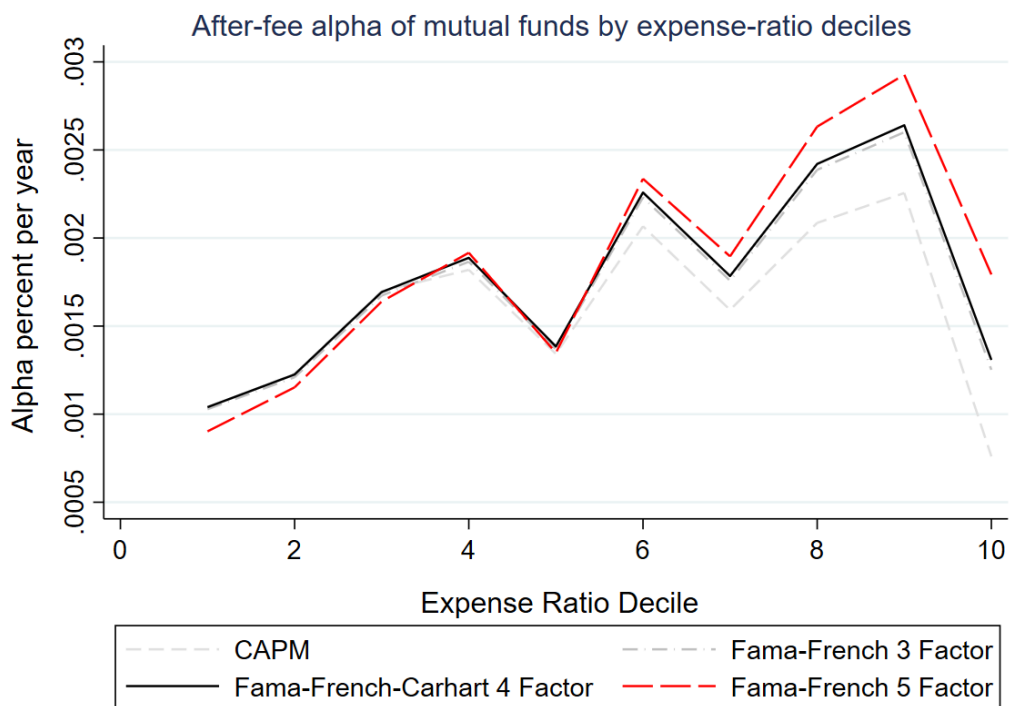
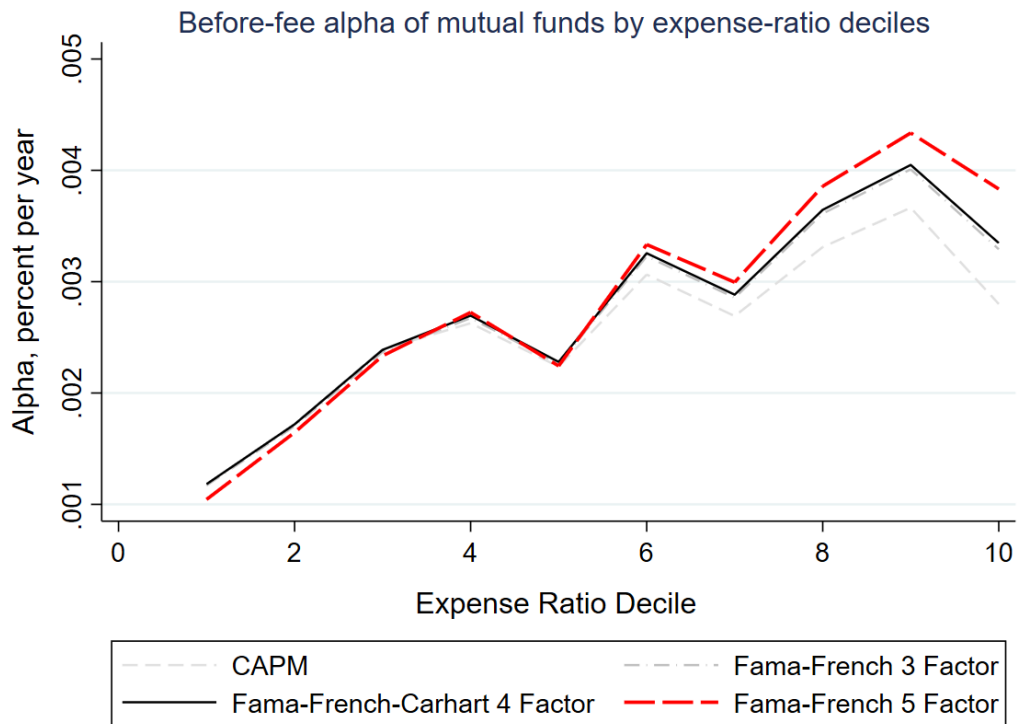


TABLE 3 – Mutual fund fee-performance relation

Panel A: Before-fee alpha				
	(1) FF5 α	(2) FF4 α	(3) FF3 α	(4) CAPM α
Expense ratio _{t-1}	0 (.0002)	.0001 (.0002)	.0001 (.0002)	.0001 (.0002)
Log (Fund size _{t-1})	-.0002 (.0002)	-.0002 (.0002)	-.0002 (.0002)	-.0002 (.0002)
Log (Fund family size _{t-1})	0 (.0001)	0 (.0001)	0 (.0001)	0 (.0001)
Log (Fund age _{t-1})	.0012* (.0006)	.0012* (.0006)	.0012* (.0006)	.0012* (.0006)
Observations	473808	473808	473808	473808
Adjusted R ²	.0374	.0323	.0322	.0317
Style x Year FEs	Yes	Yes	Yes	Yes

Panel B: After-fee alpha				
	(1) FF5 α	(2) FF4 α	(3) FF3 α	(4) CAPM α
Expense ratio _{t-1}	-.0005** (.0002)	-.0005** (.0002)	-.0005** (.0002)	-.0005** (.0002)
Log (Fund size _{t-1})	-.0001 (.0002)	-.0001 (.0002)	-.0001 (.0002)	-.0001 (.0002)
Log (Fund family size _{t-1})	0 (.0001)	0 (.0001)	0 (.0001)	0 (.0001)
Log (Fund age _{t-1})	.0013* (.0006)	.0013** (.0006)	.0013* (.0006)	.0013* (.0006)
Observations	473808	473808	473808	473808
Adjusted R ²	.0372	.0321	.032	.0316
Style x Year FEs	Yes	Yes	Yes	Yes

TABLE 4 – Fund fees and loadings on the investment and profitability factors

	(1)	(2)	(3)	(4)
	FF5 CMA factor loading	FF5 RMW factor loading	FF5 CMA factor loading	FF5 RMW factor loading
Expense ratio _{t-1}	-.0015 (.0017)	.0002 (.0019)	-.0008 (.0008)	.0009 (.0013)
Log (Fund size _{t-1})	-.0004 (.0007)	.0003 (.0009)	-.0005 (.0003)	.0005 (.0005)
Log (Fund family size _{t-1})	-.0001 (.0002)	.0001 (.0002)	-.0001 (.0001)	.0003 (.0002)
Log (Fund age _{t-1})	-.0004 (.0058)	.0023 (.0067)	.0017 (.0021)	-.0005 (.0036)
FF5 market factor loading _t			-.2619** (.1238)	.3804*** (.0873)
FF5 HMF factor loading _t			-.5565*** (.0904)	.409*** (.1233)
FF5 SML factor loading _t			-.1149 (.0732)	-.4065*** (.1351)
Observations	473808	473808	473808	473808
Adjusted R ²	.174	.096	.5127	.5828
Style x Year FEs	Yes	Yes	Yes	Yes