Half of the 15,000 mutual funds in the US are run by portfolio managers who do not invest a single dollar of their own money in their products, raising concerns about whether fund managers’ interests are properly aligned with those of their investors.

Many of the world’s largest asset managers, including Vanguard, State Street, Schroders, BlackRock and Aberdeen, are among the companies with the lowest levels of portfolio manager investment in their funds.

Three out of four funds at Vanguard, the world’s second-largest asset manager, and at Schroders, Europe’s second-largest listed fund house, are run by managers who do not invest anything in their funds.

Portfolio managers are not invested in two out of three funds at BlackRock, the world’s largest investment company, and at Aberdeen, the FTSE 250 fund company, according to figures compiled exclusively for FTfm by Morningstar, the data provider.

Only one of State Street’s 33 US-domiciled funds has a portfolio manager who is invested in their own product.

This raises concerns as large investors such as pension funds and institutional asset managers like to see fund managers invested in their own funds as it demonstrates they have skin in the game and will be personally affected by any downturn in a fund’s performance.

Steve Deschenes, head of client analytics at Capital Group, the Los Angeles-based investment company, said the findings are a worry. “Of course you should invest in [your own] fund,” he said. Nearly 90 per cent of Capital Group’s mutual funds are run by managers that invest at least $1m in their own products.

Amin Rajan, chief executive of Create Research, the asset management consultancy, said he expected manager investment levels to be higher. “Since the 2008 crisis, more asset managers have
been revamping their incentive systems to encourage co-investing,” he said. “The rhetoric of the reported changes has been running ahead of the reality.”

A number of smaller investment companies demonstrated much higher levels of skin in the game, including Dodge & Cox, Oakmark and Primecap Odyssey. One hundred per cent of these companies’ funds had portfolio managers invested in them.

The data also showed that asset managers running funds with lower fees were more likely to invest in their own products, suggesting manager investment could lead to lower costs and better performance, according to Russel Kinnel, head of research at Morningstar.

He said: “Fund managers are savvy investors, so they are less likely to invest in gimmicky, high-cost funds. I remember one firm telling us that they didn’t invest much [in their own funds] because they would rather invest in something cheaper.”

According to Capital Group research published in 2014 looking at the performance of US mutual funds over 20 years, manager ownership and cost are the two characteristics most strongly correlated with improved returns.

Fewer than one in seven funds have managers with more than $1m invested, the Morningstar figures showed, despite the fact that annual salaries for fund managers are frequently in the millions of dollars, according to Mr Kinnel.

He added that it was surprising how many funds had zero levels of investment from their portfolio managers.

“We would have guessed that at least more [fund managers would invest] in those middle ranges of $50,000.”

In Europe, rules that came into effect earlier this year require mutual fund managers to receive part of their bonuses as units of the funds they run. Mr Kinnel believes this change will have a spillover effect and pressure US fund managers to increase investments in their funds.

However, he said that similar rules were unlikely to be imposed in the US.

Fund companies argue that there are some situations where managers cannot invest in their own funds. UK-based Schroders said only a third of its 16 US-based mutual funds are managed by US-based portfolio managers who can invest directly in the products.

A spokesperson for BlackRock said: “Morningstar’s most recent stewardship report on BlackRock makes clear that approximately 67 per cent of our US mutual fund assets are in vehicles in which at least one of the managers has invested $1m or more, including unvested fund shares. Morningstar has stated that it does not expect portfolio managers to invest in every target date fund or every municipal bond fund that they manage.”

T Rowe Price, which has no manager investment in 45 per cent of its funds, said personal investments “might not be practical” if a manager is not a US citizen or manages retirement-related funds of funds.

A spokesperson for Vanguard, which has no managers invested in 77 per cent of its funds, added that cost was a more important metric for investors than skin in the game.