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ANALYSING THE MANAGER HOME BIAS

Investment in the EU's real economy could be boosted by attracting more fund managers to EU countries

According to analyses by former ECB president Mario Draghi and other experts, the EU economy suffers from substantial investment backlogs, notably in infrastructure and defence. Mobilising public and private capital will be a key priority in the next years. The fund management industry, which channels money from savers and investors to both governments and companies, is seen as a powerful tool to direct private capital into desired projects or economic sectors. After all, investment funds managed EUR 14.8 trillion on behalf of EU investors in June 2024, according to ECB data. However, it is crucial that fund managers maintain their fiduciary duties to clients as a top priority. Even well-intentioned EU regulation should not interfere with serving client needs. At the same time, there are regulatory and structural factors that act as unnecessary obstacles for investments in the EU economy. In this paper, we discuss such an obstacle: Fund managers over-invest in their country of residence, partly because they have better information on domestic companies. This phenomenon is known as the "manager home bias".

We show that even global equity UCITS exhibit a manager home bias. We estimate it to inflate the portfolio share of the manager's home country by 1-2 percentage points for a typical global equity fund. It is likely even higher for asset classes where information is harder to obtain, such as private equity, infrastructure and venture capital. Politically, the existence of a manager home bias is important, because 62 per cent of fund managers in our sample of 303 large global equity UCITS are based in non-EU countries, notably the UK and the United States. Companies from these countries benefit from higher investments and lower cost of capital. We also simulate the effects of a change in manager locations: If all funds available for sale to EU investors had at least one manager in any Member State, the funds considered alone can be expected to invest an additional EUR 2.0-2.9 bn in the EU's real economy. Attracting more fund managers to the EU's financial centres would therefore not only create highly qualified jobs but also improve the access to private capital for EU companies.

The fund industry: an untapped source of capital to finance the EU's political goals?

After decades of slow growth, aiming to digitalise and decarbonise the EU's economy and increase its defence capacity, the **Draghi report** concludes that "a minimum annual additional investment of EUR 750 to 800 billion is needed" in the next years. One of the key levers to increase investments will be "to better channel high household savings towards productive investments in the EU". One aspect is to improve capital market participation of EU households and companies. But policymakers moreover raise the question of how to make sure that funds and other intermediaries invest in EU assets. For instance, European Commission President Ursula von der Leyen noted in her 2025 World Economic Forum speech that "EUR 300 billion of European families' savings are

invested abroad every year. That is a key issue holding back the growth of our tech startups [...]." Indeed, funds diversify their investments geographically: Euro Area funds hold only 42 per cent of their security assets in debt and equity from the EU. The US makes up 33 per cent, the UK 7 per cent and other non-EU countries 19 per cent. In other words, more than half of total fund assets are invested in non-EU securities. This amounts to EUR 7.2 trillion. Of course, if funds were to channel a higher proportion of their portfolios to EU equity and bonds, rising valuations would decrease the cost of capital for Europe's real economy.

However, this may not be in the best interest of investors. For instance, global diversification of assets helps mitigating what is known as the "investor home bias": Investors are much more likely to hold assets connected to their home country, which leads to an inferior risk-return profile. Against this background, linking private investment decisions with funding challenges in the EU economy is questionable. Any restriction of the investment universe will reduce investors' return potential.

The EU fund industry is a very efficient eco-system for allocating capital

With increasing European integration, the fund industry in the EU has become a highly efficient eco-system for channelling savings toward investments in the real economy. It is characterised by a high degree of specialisation along the value chain. Fund administrators, managers, and distributors focus on their respective area of expertise. This division of labour has proven advantageous because it benefits investors through better choice and lower cost (see box).

The specialisation occurs also on a country level. This is illustrated by Morningstar Direct data for active UCITS (excluding funds of funds). For example, there are "fund hubs" (Luxembourg, Ireland) which focus on fund administration. Products domiciled in the two fund hubs stand for almost 60 per cent of the EUR 9.2 trn in total assets. Other EU countries account for 30 per cent, and domiciles outside the EU, primarily the UK, for 11 per cent. However, the fund domicile does not have to correspond to the location of the fund company. In addition to the common practice of setting up a subsidiary in Luxembourg or Ireland, many firms engage in cross-border fund administration to make use from the hubs' benefits, such as the eco-system of service providers. As a result, about 22 per cent of the funds domiciled in a fund hub are set up by a company from another country.

Origin of debt securities and equity held by Euro Area investment funds





Shares in UCITS' AuM (excluding funds of funds/passive funds). Data as of 30/6/2024 Sources: Morningstar Direct, BVI

The daily portfolio decisions may be taken in an altogether different location. The headquarter of the management company can serve as a proxy for this. According to our analysis, it is usually either located in the same country as the fund company, or fund management is delegated to a country with a special focus on fund management. The by far most important domiciles of external management companies are the United States and the UK, i.e. the most capital market-oriented countries. As a result, more than 50 per cent of the assets of active UCITS are managed by non-EU companies, while fund hubs account for only 8 per cent.

Does the manager location matter?

Academic research indeed suggests that characteristics of the manager influence portfolio decisions. Notably, managers may overweight assets from their home country – i.e., funds experience a "manager home bias"¹. This bias can be explained by lower costs associated with domestic investments, more relevant information on the home market, better ways to influence the executive management of investee companies and behavioural factors, such as over-optimism regarding the domestic economy. Given the high prevalence of fund managers from third countries, a manager home bias will cause these managers to invest more in their home countries and less in the EU – which may dampen the supply of capital to the EU economy.

Of course, this does not imply any negative effect from delegation of portfolio management to third parties within the EU. To the contrary: Outsourcing or offshoring business functions across member states contributes to a cost-efficient functioning of the fund industry.

A case study: Manager home bias in global equity UCITS

Delegation of fund management in practice

Daily portfolio decisions for about 48 per cent of the fund assets held by German investors are delegated to another company, either within or outside the corporate group. Main reasons include:

- A specialist fund manager may have superior expertise in certain markets or asset classes, such as high-yield corporate bonds or emerging-market equity.
- The delegate may have access to trading venues or systems that offer additional or more efficient investment options.
- The specialisation may help to optimise business functions and processes by achieving economies of scale and thus save cost.

A typical case is an integrated asset management group which has at some point delegated fund management to a dedicated in-house provider to increase the efficiency of the group. Another one is a "white label fund", where a specialised firm is responsible for administering the fund, while the portfolio management is carried out by an external manager (usually the fund sponsor).

In the EU, delegation is comprehensively regulated by the AIFMD and the UCITS Directive. Among other things, the National Competent Authority must be notified, the services provided must be effectively monitored and the delegating company must retain responsibility for the fund. Third parties must be subject to supervision themselves and fulfil the same regulatory requirements as the management company. The delegation models used in practice are in line with these rules and have proven their reliability over many years.

To assess the extent to which the high proportion of third-country managers influence the share of EU investments, we analyse the portfolio composition of a set of large UCITS where managers have discretion to buy individual stocks (i.e., excluding funds of funds and passive funds). We analyse global equity funds, because they are least likely to suffer from a manager home bias. After all, publicly traded companies are typically required to disclose all relevant information to ensure transparency for investors. In the EU, the reporting requirements are set out in the Transparency Directive, for instance. Broad categories (such as global equity) furthermore benefit from the availability of investment research for many of the companies in scope as well as extensive media coverage. If even in this "plain vanilla" market segment a bias is observable, it will likely be substantially higher when it comes to niche segments, such as thematic investments, or asset classes where publicly available information is scarce and personal contacts play a larger role, such as private equity, infrastructure and venture capital.

¹ See Cooper et al. (2012). The Equity Home Bias Puzzle: A Survey. Foundations and Trends in Finance, 7(4), 289–416.

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We limit our dataset to 303 funds with assets under management of at least EUR 750 million for which sufficient data is available. They collectively managed EUR 940 bn as of June 2024, which corresponds to almost two-thirds of the assets of actively managed global equity UCITS in Morningstar Direct. We have obtained data on the funds' portfolio holdings for 21 countries² and a wide range of other characteristics of the fund, the management company and the manager from Morningstar Direct (see annex for a detailed description of the data included).

A key contribution of our analysis is that we look at the actual location of the responsible fund managers rather than the corporate headquarter of the management company. We have collected the manager location from a variety of sources, such as company websites, press articles and social media accounts. Just 34 per cent of the 565 managers work from EU countries. There is no dominant hub for managing global equity UCITS in the EU, with the largest locations being Frankfurt, Copenhagen, Stockholm, and Paris. Non-EU countries account for 62 per cent, with a very strong focus on the UK (36 per cent) and the US (14 per cent). London alone is home to 164 managers in our sample. The next biggest management centres in third countries are Edinburgh, Zurich, and New York.

Distribution of manager locations for our sample of 303 actively managed global equity UCITS

	34%		62%		4%
	EU		Non-E	U	Not disclosed
Fr	ankfurt	37	London	164	
Сс	openhagen	29	Edinburgh	25	
	ockholm	22	Zurich	23	
Pa	aris	22	New York	20	
Br	ussels	11	Geneva	14	
Ot	ther	71	Other	104	

Data as of 2024

Sources: Morningstar Direct, company websites, press articles and social media accounts

Our analysis of individual managers is crucial as about one third of them are located away from their headquarter country. Moreover, it is common for multinational teams to manage a fund. In our sample, 75 per cent of the funds are managed by a team. While it is usually located in one or two cities only, there are cases where teams are truly international. For one fund, the management team is scattered over Hong Kong, London, Los Angeles, Luxembourg, and San Francisco, for instance. In cases like this, there could be a bias towards several countries.

Locally managed funds increase the portfolio weight of domestic equity by 1-2 percentage points

By simply comparing country portfolio shares between funds with and without a local manager in our dataset, we see that domestic managers on average invest an additional 1.3 per cent of fund assets in their home equity market. While this already hints at the existence of a manager home bias, we need to isolate the effect of a domestic manager from other influences on the manager, fund, company or country level. To this end, we use a regression analysis. We collect data on aspects that may theoretically influence the portfolio share of a country and may be correlated with the manager location (explanatory variables) and connect them to the observed country shares as

² Australia, Austria, Belgium, Brazil, Canada, Denmark, Finland, France, Germany, Hong Kong, Ireland, Italy, the Netherlands, Norway, Singapore, South Africa, Spain, Sweden, Switzerland, the United Kingdom, and the United States

of June 30, 2024 (dependent variable). Since we analyse more than 6,000 unique combinations of investment funds and countries and cover two-thirds of this market segment, we can infer with some confidence which of the following explanatory variables influence the country weight – and which do not (see the annex for detailed information on the variables and their expected effect on the portfolio shares):

- Control variables for the "natural level" of a country's portfolio share ("country-fixed effects") mostly mirroring the size of the respective market
- Manager-specific data: Whether there is a domestic manager (the "manager location dummy"³) or a multi-manager team, the average experience as equity managers, and interaction terms of the manager location dummy and the other two variables
- Fund specific data: Whether a fund is available for sale in the country analysed and whether it is a single market fund (or both), the funds' factor profile (Size, Momentum, Style, Yield), its assets under management, fund age, and whether it is domiciled in the respective country
- A control variable for the headquarter location of the management company

The effect of these variables on the portfolio shares is likely to be complex. Notably, we expect that the impact will rise with the portfolio share to some extent. After all, managers in large markets have more stocks to choose from that fit their investment approach without compromising on a diversified portfolio. We therefore have transformed our dependent variable in the model⁴.

The regression confirms that there indeed is a manager home bias for our sample of active global equity funds: The presence of a domestic manager increases the portfolio share of the respective country. The effect is statistically significant, even at very strict confidence levels⁵. That is, we can almost surely conclude that our result is not driven by chance. Moreover, the impact is also economically significant: the portfolio weight of a country increases substantially when a fund manager is domiciled there. Due to the complex relationship between the explanatory and dependent variables, the exact amount of the increase depends on the fund's characteristics and the country considered. We have therefore constructed a "typical" global equity UCITS⁶, which is domiciled in Luxembourg and manages EUR 1.6 bn for its investors, to showcase the range of the estimated effect.

Country	Portfolio weight (in per cent)		Effect of a domestic manager, i.e., additional allocation to local equities		
	(a) without a domestic manager	(b) with a domestic manager	(c) in percentage points	(d) in EUR mn	
France	3.6	5.4	+1.8	+30	
United Kingdom	3.6	5.4	+1.8	+30	
Switzerland	2.0	3.5	+1.4	+24	
Netherlands	2.1	3.5	+1.4	+24	
Germany	1.7	3.0	+1.3	+22	
United States	61.6	62.4	+0.9	+14	

³ We allow the manager location dummy to differ for US managers, as US equity accounted for more than 60 per cent of the global equity market capitalisation. It is likely that the effect of a domestic manager is different in such a dominant market. ⁴ Since often funds do not hold any assets domiciled in a certain country (the dependent variable is zero), we use the arcsine square root transformation for our regression model (see annex for details). We furthermore bootstrap the standard errors due to the non-standard distribution of our residuals.

⁵ The probability of the manager location – also considering its interaction terms – having no effect is below 0.1 per cent, as shown by a F test. It tests whether the estimated combined effect could also be caused by chance.

⁶ It is based on median (for quantitative variables) and mode (for qualitative variables) values of our controls. The annex contains a more detailed discussion of the typical global equity UCITS.

For the most common fund management locations, the effect of a domestic manager on the share of local equity amounts to about 1-2 percentage points. Above table shows the estimated equity allocation for our typical fund (a) without and (b) with a domestic manager. The two remaining columns express the additional investment due to a domestic manager in percentage points and millions of Euros, respectively. For instance, the typical global equity UCITS holds about 1.7 per cent of its assets in German equity without a domestic manager. The share increases by 1.3 percentage points to a total portfolio weight of 3.0 per cent if there is at least one manager located in Germany. This translates to an additional investment of EUR 22 mn in German equity for this fund alone. The size of the effect differs between countries, which underscores the non-linearity of the managers location's impact. We estimate the largest effect for managers in France and the UK, where it amounts to EUR 30 mn.

Another variable that has a statistically significant impact on the portfolio share of a country is whether the fund is available for sale in the respective country. Funds apparently cater to the preference of investors for local equity, i.e. the investor home bias, by increasing the portfolio weight of companies from their home countries. One explanation could be that the inclusion of familiar stocks increases the interest of potential investors in the fund. Therefore, the effect is particularly pronounced for single-market funds that are specifically designed for investors from one country only. Then, the size of the effect on the countries' portfolio share is almost comparable to that of a domestic manager. For funds marketed in several countries, the economic impact is negligible.

The effects of most of our remaining control variables are not statistically significantly different from zero at conventional confidence levels. This implies that we cannot conclude they help to explain the observable differences in the portfolio share across countries. Notably, this is true for the fund domicile as well as the headquarter location of the management company. In other words: The effect can confidently be attributed to the location of the actual fund manager – and highlights the importance of differentiating between the legal presence of a firm and the question of where decision-making takes place. To make use of the manager home bias for the European economy, it is necessary to attract fund managers to the EU's financial centres, not just letterboxes.

Potential additional investment of EUR 2.0-2.9 bn from attracting global equity fund managers to the EU

The size of the European asset management industry and the high share of fund managers from third countries suggest that measures to increase the relative attractiveness of the EU's financial centres for fund managers can redistribute substantial amounts of capital back into the EU. To quantify this potential, we use our regression results for a prediction: How would the portfolio share of the 11 member states in our sample change if more managers were working in the EU, e.g. because working in the EU becomes more attractive for fund managers?

As an illustrative example, we simulate an increase in the attractiveness of EU financial centres. We consider funds where all managers work in third countries that are available for sale in at least one of the considered Member States. This is the case for 142 funds in our sample, managing a total of EUR 380 bn for their clients. Specifically, our assumption is that there is an additional EU manager on every fund's management team. They are randomly assigned to one of the considered Member States where the fund is available for sale. Because the additional EU investment depends on fund-specific factors, every possible allocation of manager countries leads to a different effect on investments. To find the range and distribution of possible results, we repeat the random allocation 250,000 times (Monte Carlo simulation). Then, we obtain the likelihood of alternative capital allocations for the EU countries considered. While the results depend on our assumptions and may be different for other assumed changes in manager locations, it gives a good first impression of the potential for the EU's real economy.

According to our simulation, adding EU fund managers to the management teams of these 142 funds alone could yield additional investments of EUR 2.0-2.9 bn⁷ in listed companies from the 11 member states. Of course, countries with larger capital markets benefit more in absolute terms: Companies from Germany can hope for an additional EUR 510 mn, French ones for EUR 400 mn and Dutch listed firms for EUR 300 mn. But even for smaller Member States, such as Finland or Austria, the additional capital available to local businesses can be meaningful

⁷ The range covers 95 per cent of all simulation results (i.e., all values between the 2.5th and 97.5th percentile)

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(see chart). Although we cannot extrapolate our results to the entire EU fund market due to the wide variety of asset classes and strategies, the great potential for EU companies and governments is evident. After all, we cover only about eight per cent of the UCITS market according to Morningstar Direct.



Increase in EU investments due to an additional EU manager for all funds where managers are currently located in third countries only that are available for sale in at least one of the EU countries considered. Results of a Monte Carlo simulation with random allocation of additional managers to domiciles

While the potential from attracting managers of listed assets is already substantial, the implications of the manager home bias will even be larger for asset classes where less information is publicly available. This is true for private equity and venture capital, which play a particularly large role for infrastructure financing and the emergence of innovative business models. Their managers usually rely to a larger extent on personal networks and private information, which is more difficult to obtain for companies abroad. Compared to listed equity, there is also much higher explicit cost associated with investments in foreign markets, e.g., due to different legal and tax regimes and high transaction costs. Moreover, there are often additional obstacles to influence the management in a different country, e.g., due to different languages or simply because personal contact is less frequent.

The existence of a manager home bias underscores the need to view fund managers as strategically important for funding local companies and governments. It should therefore be a priority to remove any barriers that hinder fund companies to locate managers in the EU. This includes a strategic re-positioning of European governments and supervisors. They should consider the global competitiveness of European financial centres as equally important as market stability and consumer protection interests. Moreover, the tax, labour and social framework must be adapted to the requirements of portfolio managers, where necessary. Finally, European asset managers should invest strategically in the core area of portfolio management to maintain key competences and an independent profile compared to global competitors.

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Annex I – Data

Sample construction

We source data on actively managed global equity UCITS (excluding funds of funds) from Morningstar Direct. They collectively managed EUR 1,521 bn for their investors as of June 2024. For our analysis, we exclude all funds that manage less than EUR 750 mn (23 per cent of the combined assets), funds with insufficient meta or portfolio data (7 per cent) and without disclosed manager names (8 per cent). Our sample therefore covers 303 funds with a total of more than 4,400 share classes and assets under management of EUR 940 bn.

We complement the Morningstar Direct data with the location of individual fund managers according to a variety of sources, such as company websites, press articles, and social media accounts. We obtain location data for 542 of the 565 managers in our sample (see below). Where we have partial data, i.e., the location of some team member is missing only, we exclude the managers without known locations from the analysis (3 per cent). Where no manager on the team has disclosed his domicile, the entire fund is removed from our sample (1 per cent).



Sample composition

Our sample contains a broad set of funds, domiciles, asset managers and distribution markets. The by far largest individual product is the Swedish AP7 Equity Fund, which is part of the national pension system's "premium pension". It managed EUR 104 bn as of the end of June 2024. Luxembourg is the most important domicile in our sample. It is home to funds managing more than one third of the assets under management covered (EUR 343 bn). In terms of fund providers, the largest corporate groups stem from the Nordics and Germany. This may partially be due to the almost ubiquitous disclosure of manager names and locations by providers from Northern Europe. The differences in sales markets are less pronounced as many funds are – at least theoretically – available for sale in many European countries.



Data as of 30 June 2024. Sales markets based on availability for sale. Source: Morningstar Direct

Portfolio Allocation

Our data set includes the (equity) portfolio allocation across 21 countries where the managers from our sample are based (excluding Luxembourg, for which no data is available). The boxplot below illustrates the distribution of portfolio weight for each country.



The blue line indicates the median, the green box contains all values from the 25^{th} to the 75^{th} percentile (interquartile range). The whiskers cover additional observations within ± 1.5 times the interquartile range. Individual dots represent outliers.

The portfolio allocation of the funds in our sample as of June 2024 broadly resembles the relative size of the different equity markets – but is slightly tilted towards European countries. This is in line with what we expect due to the existence of a home bias. North American listed companies stand for 64 per cent of the total equity held by funds in our sample, whereas the share of the US and Canada in the widely used MSCI World index amounts to approximately 75 per cent. In contrast, European companies account for 25 per cent of total assets in our sample, while their share in the market capitalisation of developed countries is 17 per cent only. Asia-Pacific and other regions play a minor role only, both in our sample and in the MSCI World index. Finally, about 3 per cent of the analysed funds' net assets are cash or other instruments.

Manager locations

The 565 fund managers in our sample of 303 large active global equity UCITS worked in 22 distinct countries as of mid-2024. Below table shows the geographical distribution for all cities where at least 5 managers are based. The by far most important location is London with 164 managers, which is home to almost as much as managers as the entire EU. The next biggest manager locations are Frankfurt, Copenhagen and Edinburgh.

Location	n Managers in our sample		
City	Country	Number	Share
Frankfurt	Germany	37	6.5%
Copenhagen	Denmark	29	5.1%
Stockholm	Sweden	22	3.9%
Paris	France	22	3.9%
Brussels	Belgium	11	1.9%
Milan	Italy	9	1.6%
Amsterdam	Netherlands	9	1.6%
The Hague	Netherlands	6	1.1%
Madrid	Spain	6	1.1%
Other EU		41	7.3%
EU total		192	34.0%
London	United Kingdom	164	29.0%
Edinburgh	United Kingdom	25	4.4%
Zurich	Switzerland	23	4.1%
New York	United States	20	3.5%
Geneva	Switzerland	14	2.5%
Boston	United States	13	2.3%
San Francisco	United States	10	1.8%
Oslo	Norway	8	1.4%
Los Angeles	United States	8	1.4%
Chicago	United States	6	1.1%
Milwaukee	United States	5	0.9%
Other non-EU		54	9.6%
Non-EU total		350	61.9%
Unknown		23	4.1%

The segments "Other EU" / "Other non-EU" include a small number of cases where only the country or region (but not the city) is available.

Annex II – Model

Regression model

We perform a regression analysis using the ordinary least squares estimator (OLS) to test whether the location of a fund manager increases the portfolio share of his "home country" (holding other, possibly confounding factors constant). With f denoting the fund and c the country, the model can be written as:

 $g(Allocation_{f,c}) = \beta' \cdot Domestic_{f,c} + \gamma' \cdot Controls_{f,c} + FE_c + \varepsilon_{f,c}$

where
$$g(Allocation_{f,c}) = \arcsin\left(\sqrt{\frac{Allocation_{f,c}}{100}}\right)$$

 $Allocation_{f,c}$ is the share of equity securities from Country *c* in total equity held by Fund *f* as of 30 June 2024 in per cent. We use the arcsine square root transformation $g(\cdot)$ since the observed values are (1) highly skewed¹ and (2) about 43 per cent of our observed values are zero.

and
$$Domestic_{f,c} = \begin{pmatrix} Domestic Manager_{f,c} \\ Domestic Manager_{f,c} \cdot 1_{(C = USA)} \\ Domestic Manager_{f,c} \cdot Multi Manager Team_{f} \\ Domestic Manager_{f,c} \cdot Average Manager Experience_{f} \end{pmatrix}$$

 $Domestic_{f,c}$ contains a binary variable indicating whether there is any domestic manager on the team as well as interactions of this variable with other control variables on the management team level. Moreover, we include an interaction term that allows the effect of a domestic manager to differ between the United States and other countries. The reason behind that the portfolio share of US companies averages at 61 per cent in our sample (see above) and funds may want to limit the exposure towards stocks from a single country in a global equity fund.

$$\text{and} \quad Controls_{f,c} = \begin{pmatrix} Multi \ Mana \ ger \ Team_f \\ Average \ Manager \ Experience_f \\ Available \ For \ Sale_{f,c} \\ Single \ Market \ Fund_f \\ Available \ For \ Sale_{f,c} \cdot Single \ Market \ Fund_f \\ Available \ For \ Sale_{f,c} \cdot Single \ Market \ Fund_f \\ Same \ Domicile_{f,c} \\ Same \ Headquarter_{f,c} \\ Fund \ Net \ Assets_f \\ Fund \ Age_f \\ Factor \ Exposure \ Size_f \cdot FE_c \\ Factor \ Exposure \ Momentum_f \cdot FE_c \\ Factor \ Exposure \ Style_f \cdot FE_c \\ Factor \ Exposure \ Style_f \cdot FE_c \\ Factor \ Exposure \ Yield_f \cdot FE_c \end{pmatrix}$$

and FE_c is a dummy for each of the selected 21 countries (country-fixed effects).

For a discussion of the control variables, see the next section.

¹ The average of the observed allocations is at around 4.3 per cent, while the median lies at about 0.3 per cent



Control variables

We expect the explanatory variables to be related to the portfolio share of a country as follows:

- The existence of a domestic manager should, inter alia, *increase* the portfolio share of a county.
- A multi-manager team and young managers² (proxied through experience as equity managers) should increase investments in less familiar markets, i.e. reduce the effect of a domestic manager and may also generally decrease the weight of the countries in our sample.
- The investor home bias should lead to an *increased* portfolio share of countries where the fund is available for sale. The effect should be *stronger*, when the product is sold in just a single country.
- The portfolio share of the country where the fund is domiciled and/or the headquarter of the management company is located should be *larger* (due to higher familiarity).
- We do not expect an effect from the funds' net assets (of share classes listed in Morningstar Direct) or the fund age (the age of the oldest share class); they are used to control for fund-specific factors only.
- The funds' factor profile should be controlled for, as the equity markets differ in terms of available stocks with certain factor exposures (we consider Size, Momentum, Style, and Yield³).
- Country-fixed effect need to be included to control for the "natural level" of a country's portfolio share.

Variable	Mean	SD	Min	Median	Max
Domestic Manager 1 = yes; 0 = no	0.05	0.23	0	0	1
Multi Manager Team 1 = yes; 0 = no	0.75	0.43	0	1	1
Average Manager Experience in years	13.70	6.12	0.25	13.58	33.00
Available For Sale 1 = yes; 0 = no	0.36	0.48	0	0	1
Single Market Fund 1 = yes; 0 = no	0.23	0.42	0	0	1
Fund Net Assets in EUR mn	3,103	6,698	754	1,649	103,515
Fund Age in years	17.99	12.78	0	15.58	87.58
Factor Exposure Size 0 = small; 100 = large	65.96	18.99	18.29	68.29	98.14
Factor Exposure Momentum 0 = low; 100 high	50.80	24.75	3.89	51.09	97.97
Factor Exposure Style 0 = value; 100 = growth	40.64	25.30	1.00	33.57	98.74
Factor Exposure Yield 0 = low; 100 = high	58.80	24.86	5.71	67.35	99.57

The following table summarises some of the key variables:

 ² See Hiraki, Liu (2021). Do global equity mutual funds exhibit home bias? Journal of Behavioral and Experimental Finance, 31.
³ Following Carhart (1987). On Persistence in Mutual Fund Performance. The Journal of Finance, 52(1), 57-82.

Regression results

Results from the OLS regression show a significant, positive relationship between the existence of a domestic manager and the portfolio share of the respective country. This can be seen from the coefficient on "Domestic manager" and its very low p-value, even though we consider bootstrapped standard errors. However, this coefficient must be interpreted with caution, as the effect also depends on the interaction terms. For that reason, we illustratively test the joint significance using a restricted model excluding all terms containing "Domestic Manager" and a standard F-test. The F-test examines how likely differences between two models are caused by chance. The resulting test statistics implies a p-value below 0.1 per cent. It is therefore extremely unlikely that the combined effect of all terms including the variable "Domestic Manager" is zero.

As expected, the manager home bias differs markedly between the US and other countries in our sample. This can be explained by the already high share of US equity in almost all funds in our sample: A large additional bias would turn some of the "global equity funds" essentially into "US equity funds". The other variables tend to have the expected sign and magnitude as well. Most importantly, we find evidence for an investor home bias, as funds hold a higher portfolio share in markets where they are available for sale (independent of the fund manager location). This effect is particularly pronounced for single-market funds, i.e. products that are marketed in one individual country only. In terms of policy implications, it is furthermore important to note that the fund domicile as well as the headquarter location of the management company have no statistically significant effect on the portfolio composition according to our model (see main body of the text).

	Effect on Allocation (transformed)
Domestic Manager	0.053** (0.024)
Domestic Manager · Multi Manager Team	0.004 (0.017)
Domestic Manager · Average Manager Experience	-0.001 (0.001)
Domestic Manager $\cdot 1_{(C = USA)}$	-0.035* (0.020)
Multi Manager Team	-0.004** (0.002)
Average Manager Experience	-0.0002 (0.0001)
Same Domicile	0.010 (0.009)
Same Headquarter	-0.010 (0.009)
Available For Sale	0.005** (0.002)
Single Market Fund	0.002 (0.002)
Available For Sale · Single Market Fund	0.042* (0.023)
Number of observations	6,359
Adjusted R ²	0.904

The model contains additional controls (Fund Age, Fund Net Assets, Factor Exposure, Country Fixed Effects). Values represent the effect on the transformed dependent variable (arcsine square root transformation). Bootstrapped standard errors, ordinary least squares estimator. Significance: *p<0.1; **p<0.05; ***p<0.01

The "typical" global equity UCITS

The "typical" active global equity UCITS is designed to showcase the range of the estimated effect across countries. It is based on median and mode values of the control variables and has the following properties:

Variable	Value for "typical" fund	Reference
Domicile	Luxembourg	Mode
Fund Net Assets	EUR 1,649 mn	Median
Fund Age	15.6 years	Median
Factor Exposure Momentum	51.1 (neutral)	Median
Factor Exposure Style	33.6 (value tilt)	Median
Factor Exposure Size	68.3 (large cap tilt)	Median
Factor Exposure Yield	67.3 (high dividend tilt)	Median
Countries Available for Sale	Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, Netherlands, Norway, Spain, Sweden, Switzerland, UK	Mode
Multi Manager Team	Yes	Mode
Average Team Experience	13.6 years	Median

Monte Carlo simulation

We simulate an increase in the attractiveness of EU financial centres by means of a Monte Carlo simulation. We consider funds that are available for sale in at least one of the considered Member States but are managed outside the EU (142 funds with total assets of EUR 380 bn). The simulation estimates the distribution of additional investments in EU equity due to additional EU managers. As the effect differs across funds and countries, we assign an EU team member randomly to one of the Member States where the respective fund is available for sale, repeat this process and study the range of possible outcomes. As the share of the 142 funds that is available in a certain country varies between 61 per cent in Belgium and 86 per cent in Germany, i.e., most funds are available in a wide range of Member States, all countries are very likely to benefit from increased investments.

We perform a total of 250,000 iterations so that the obtained results are sufficiently stable to discuss the effect (convergence). The result of each iteration is independent and identically distributed. The additional level of investments is the predicted portfolio value less the value in our baseline model (i.e., without an EU manager). Aggregated across all funds, adding EU fund managers to the management teams of our sample of 142 funds could yield additional investments of EUR 2.0-2.9 bn in listed companies from the 11 member states.

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