Investment Platforms Market Study

Interim Report: Annex 7 – Fund Discounts and Promotions

July 2018

Annex 7: Fund Discounts and Promotions

Introduction

1. There are several ways in which investment platforms can influence consumers' investment choices and the outcomes they receive from investing via a platform. Platforms can influence which investments the consumer chooses through promoting certain funds, creating Best Buy lists and managing model portfolios of recommended funds. Since the introduction of the Retail Distribution Review (RDR), platforms no longer receive commissions from fund managers and receive revenues directly from consumers. Therefore, in principle platforms' incentives in terms of which funds they promote should align with investor interests.

2. Platform can also compete to influence the investment itself, mainly through negotiating discounts with fund managers relative to how the fund is priced on other platforms. In principle as consumers pay directly for their platforms and any fund discounts are passed on to consumers, platforms should face greater competitive pressure to lower fees and be more incentivised to negotiate with fund managers for lower fund charges.

3. This annex looks at both ways in which platforms can influence consumers' investment choices and the outcomes they receive. The first part of the annex examines the prevalence fund discounts on platforms and the factors that determine the level of discount offered by fund managers to platforms, including fund, fund manager and platform characteristics. The second section then looks at whether promotions drive flows into platforms and which funds platforms promote.

4. The discounting dynamic we explored in this annex is the discounted fund price on one platform relative to the price of the fund available on other platforms. We focused on this dynamic because we wanted to understand whether platforms compete by seeking to secure cheaper funds relative to their competitors and what factors explain platforms' ability to do so. This is how our analysis defined discounts (see paragraph 18). We did not explore whether fund managers reduce the price of their funds across the board to attract more price sensitive consumers.

5. Our analysis used data on open-ended funds[1] available on 46 platforms (20 D2C and 26 adviser platforms) from January 2014 to June 2017.[2] Our data request covered 60% to 100% of the AUA in open-ended funds for each platform at the end of each year during the relevant period. This dataset allowed us to have a comprehensive view of the majority of funds available on platforms while maintaining the reasonable scale of our request to firms. We supplemented this with data on charges, net

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[1] These are also called mutual funds. When an investor purchases units of one of these funds, more units are created and their price is based on the total value of the fund or the net asset value (NAV). This is different from closed-end funds and exchange-traded funds which only issue a set amount of units and are traded in the open market with actual price affected by supply and demand, in addition to the impact of NAV on their value.

[2] Data includes launch date, promotional activities, AUA and fund charges at the share class level for open-ended funds within scope of our data request (covering 60% to 100% of platform AUA in open-ended funds). Annual data is at the end of each year, except for 2017 which is at the end of June.

returns and fund size from Morningstar Direct for all share classes in open-ended funds included in firms' data submissions.

6. In order to examine the factors that determine the size of discounts, we introduced a conceptual framework that assesses discount decisions as separate stages and modelled each stage separately. First, the fund manager decides whether to offer any discount on platforms. If so, the manager then decides which funds to apply a discount on. Last, the manager needs to decide how much of a discount to give to different platforms, including not offering discounts on certain platforms, which is likely to be determined through negotiations between the 2 parties.

7. The analysis in this annex covers:
    - the prevalence of fund discounts on platforms
    - econometric analysis of fund discount decisions by fund managers
    - econometric analysis of factors that determine the size of discounts
    - econometric analysis of impacts of promotions on net sales into funds

8. Our analysis is one of several possible approaches, each of which has advantages and disadvantages. Here we started by examining a few of the key relationships, and will develop the work further between the interim and final report.

Data

9. As outlined in Figure 7.1, the 2 data sources we used were firm submissions as part of the Investment Platforms Market Study data request and Morningstar Direct. Data are at the share class level from January 2014 to June 2017.

10. Given that all assets under administration (AUA) figures from firm submission are in pound sterling, we used funds' net returns and fund size information from Morningstar Direct with pound sterling as the base currency.

Figure 7.1: Data description and sources

Data	Source
General information: fund name, ISIN, fund manager	Firm submissions
Annual standard OCF and OCF net of discounts	Firm submissions
AUA at the end of each year (and half year for 2017)	Firm submissions
Promotion information, including start date, end date, format of promotion	Firm submissions
Commercial relationship between platform and fund: belong in the same parent company, receiving seed money from platform	Firm submissions
Platform size measured by total AUA at the end of each year	Firm submissions
Size of model portfolio solutions measured by AUA in in-house model portfolios at the end of each year	Firm submissions

Data	Source
Average monthly fund size in a given year, annual net returns, standard OCF	Morningstar Direct

Note: Total expense ratio (TER) has been used in place of OCF when OCF is not available. In determining the total return of each fund, Morningstar assumes reinvestment of all cash and bonus unit distributions in order to account for variations in the size and timing of distributions. Morningstar does not adjust the total returns for broker commissions, but does account for management and administrative fees and other costs automatically taken out of fund assets (excluding initial charges and exit fees).

Source: FCA analysis

Data challenges

11. We observed inconsistencies in the standard OCF for the same fund submitted by different platforms and from Morningstar Direct. After correcting for errors, most of these inconsistencies were due to differences in the timing and frequency with which OCF data were recorded.[3]

12. To mitigate this issue, we used the most consistent standard OCF figures across multiple sources (firm submissions and Morningstar Direct) where available. To avoid the different timings, we calculated the gap between the OCF after discounts and standard OCF submitted by platforms.[4] This gap was then added back to the consistent standard OCF chosen to obtain the actual OCF paid for a share class on a given platform. This approach means that despite the variations in OCF due to different timing and frequency of updates on OCF data across platforms, we were able to obtain the discounted OCF based on the same standard OCF for each share class.

13. To illustrate this point, consider a hypothetical example of share class Alpha from fund Omega which should have the same standard OCF (before any discounts) reported from Morningstar Direct and all platforms where share class Alpha is available. However, share class Alpha is reported to have the standard OCF in 2016 of 0.8% in most sources, except on platform B where its standard OCF in 2016 is reported as 0.9% because platform B reported OCF figures at a different point in time of the same year from the rest. In addition, platform B reported the OCF after discount for share class Alpha at 0.85%, indicating a 0.05% discount. With the approach described above, we calculated that share class Alpha on platform B has the actual OCF after discount as follows: 0.8 – (0.9 – 0.85) = 0.75% which still reflects the 0.05% discount platform B receives for share class Alpha when the standard OCF chosen is 0.8% since it is the most consistent figure across all sources.[5]

14. Each fund in our dataset had between 1 to 15 share classes available on a given platform, with a median of 2 share classes. We aggregated our dataset from the share class level to fund level. We did so because different share classes of the same fund have the same underlying investments, strategies and gross performance, and thus can be considered the same product.

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[3] This is the explanation several platforms have given us when we asked about these inconsistencies.

[4] In cases where firms did not submit standard OCF, the chosen standard OCF is used in combination with OCF after discounts from firm submission to calculate this gap.

[5] Here, we assume that discounts stay the same in bps (or as a percentage of total investments) when there are changes in the OCF level in a given year.

15. When funds have 2 share classes on a platform, they are typically accumulation and income share classes with the same OCF and different net returns over time (but still the same annual net returns). Returns from the accumulation share class get reinvested while returns from the income share class are paid out to the investor as income. In that case, the 2 share classes are the same exact product with the same underlying investments, strategies and charges.

16. Funds may also have more than 2 share classes, some of which may be closed to new investment. Including those older share classes would capture the price of the funds for existing investors rather than the relevant price at a given point in time (ie the price to new investors at that point in time). Since we do not know which share classes were open to new investments in a given year, using data at the fund level with the focus on the cheapest share class available on platform in that year allowed us to take a more conservative approach in estimating the relevant OCF for a fund on a given platform.[6]

17. This approach also avoids over- or under-representation of a particular fund in cases where some firms submitted all share classes while others did not.

Variables used

18. We used the set of variables described in Figure 7.2 below to assess the prevalence of fund discounts on platforms, the factors that determine the level of discount offered by fund managers to platforms and fund managers' decision to offer discounts. The conceptual frameworks and econometric models are presented in the later sections of the annex.[7]

19. We defined the fund discount variable as the difference between the lowest OCF available across all share classes of a given fund on a given platform and the lowest OCF most commonly occurring across platforms.[8] To illustrate this definition, consider a hypothetical example of fund Omega with multiple share classes on 6 platforms: A, B, C, D, E and F. The lowest OCF across all share classes on platform A is 0.5%, on platform B and C is 0.8% and on platforms D, E and F is 0.7%. In this case, we consider 0.7% as the benchmark OCF for fund Omega and any OCF lower than that level is defined as discount on fund Omega. That means among these 6 platforms, only platform A receives a discount – of 0.2% – on fund Omega while platform B and C do not have any discount on this fund.[9]

20. An alternative approach would be to compare the lowest OCF across all share classes on a platform to the most commonly occurring lowest standard OCF, instead of the actual OCF that may have already been discounted. This alternative definition would cover both discounts that fund managers may provide to cover the administrative tasks that platforms undertake and any additional discounts that fund managers offer for a selected number of platforms. With our definition, the focus is on the latter type of discounts.[10]

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[6] OCF of funds which have been considered obsolete by Morningstar Direct or delisted from platforms have been removed from the data set for the year(s) after the obsolete or delisting year. However, we do not know whether all or which of the remaining share classes are open to new investments.

[7] Sections 'Conceptual framework of discount decisions by fund managers' and 'Factors that determine which funds are discounted'

[8] This approach is conservative and as such may underestimate the prevalence and amount of discounts.

[9] If there are more than 1 lowest OCF most commonly occurring across platforms, we used the average.

[10] Within our dataset, the number of platforms a fund is available on ranges from 1 to 29, with an average of around 13 platforms and median of 14 platforms.

Figure 7.2: Variable names and definitions

Variable	Definition
Fund discount	The difference between the lowest OCF available across all share classes of a given fund on a given platform and the most commonly occurring lowest OCF across platforms (as % of total investment, and as a proportion of OCF)
Dummy variable for promotion	Whether the cheapest share class was promoted on a platform in a given year. If there are more than 1 share class with the lowest OCF, then this variable indicates whether at least one of them was promoted.
Fund size	Average fund size across all months in a given year
Fund manager size	Sum of all funds available in the dataset for a fund manager in a given year
Net returns	Net returns of the cheapest share class on a platform. If there are more than 1 share class with the lowest OCF, then we take average net returns of those share classes.
Platform size	Total AUA on platform at the end of each year
Platform having model portfolio solutions	Whether platform has their own ready-made model portfolios
Fund by fund manager from the same parent company as platform	0 for no, 1 for yes
Fund receiving seed money from platform	0 for no, 1 for yes
Age of the discount	Launch year of the cheapest share class. 0 for before 2014, 1 for since 2014. If there are more than 1 share class with the lowest OCF, then we use the latest launch year.
Change in net sales into a fund	The difference in net sales for a given fund on a given platform during a year and the year before[11]
Type of platform	0 for adviser platform, 1 for D2C platform

Source: FCA analysis

Prevalence of fund discounts

21.   In this section, we assess the prevalence of fund discounts in the following respects:
  - the absolute and proportion of AUA in discounted share classes on platforms
 - when discounting has taken place on platforms

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[11] See section 'Promotions and their impact on net sales into funds' for more information.

- the size of discounts relative to the OCF

- the proportion of fund managers offering a discount

The absolute and proportion of AUA in discounted share classes

22. As illustrated in Figure 7.3, the AUA in share classes subject to a discount has been increasing in absolute terms since 2014, from £24bn in December 2014 to £48bn in June 2017.[12]

Figure 7.3: AUA invested in discounted share classes of open-ended funds across platforms (£bn)
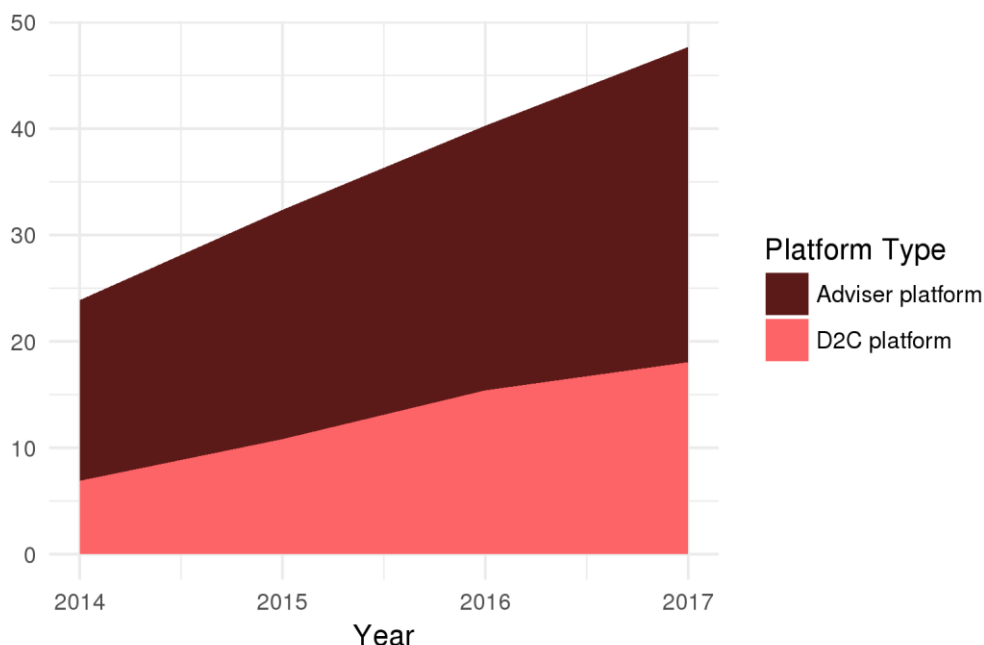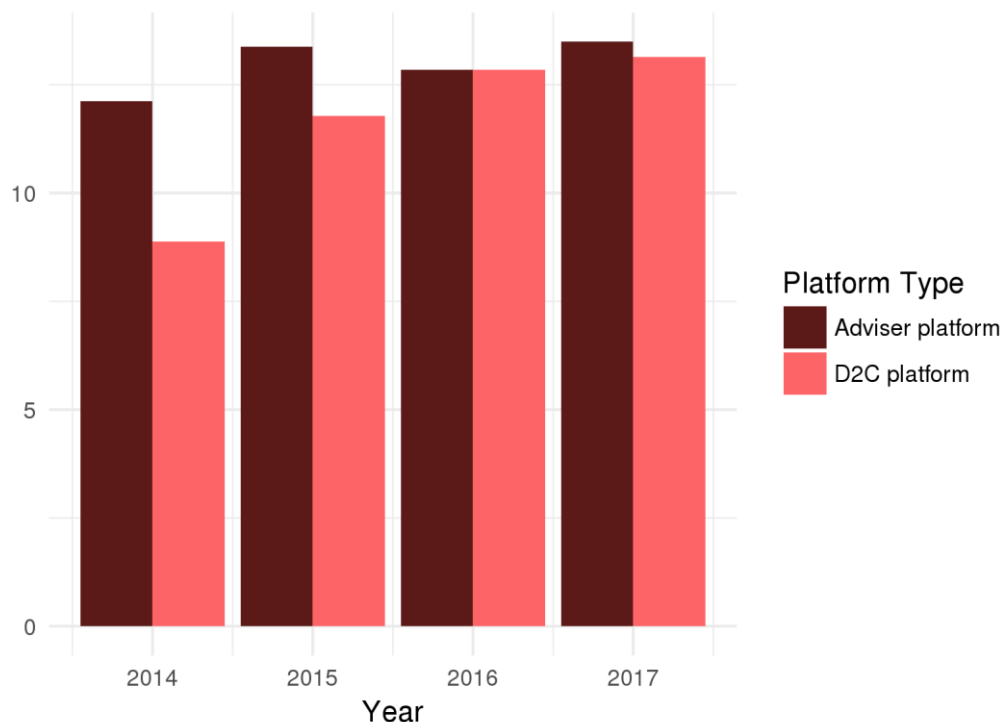

Source: FCA analysis

23. As illustrated in Figure 7.4 below, the proportion of total AUA in open-ended funds across all platforms in discounted funds has increased slightly over the 2014 – 2017 period, from 12% to 13% on adviser platforms and from 9% to 13% on D2C platforms. This suggests that growth in the absolute amount invested in discounted funds may have been driven more by the general growth of investments on platforms rather than an increase in the prevalence of discounting.

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[12] Using the alternative definition of fund discount described above, the AUA figures only slightly increase to £25bn and £49bn respectively. When considering against the total AUA in open-ended funds, Figure 7.4 below does not change with this definition of fund discounts.

Figure 7.4: Percentage of AUA invested in discounted share classes of open-ended funds across platforms (%)


Note: The actual percentages may be slightly different from the ones presented here because our sample only covers 60 – 90% AUA in open-ended funds for smaller platforms.

Source: FCA analysis

When discounting has taken place on platforms

24. D2C platforms appear to have received more recent discounts than adviser platforms. 70% of the discounted AUA on adviser platforms in 2017 was in share classes that were launched on these platforms before 2014. The discounts on share classes launched on platforms before 2014 are likely to have been agreed between platforms and fund managers during the RDR. To comply with RDR, fund managers had to convert share classes from 'bundled' (including commission or rebate payments to the platform) to 'clean' (excluding commission or rebate payments). Typically platforms negotiated a discount for their 'clean' share class based on the pre-RDR commission or rebate that their platforms received from the fund manager. The small number of more recently launched funds with discounts on adviser platforms indicates limited further negotiations done by adviser platforms to secure discounts from fund managers after RDR.

25. In contrast to this, 65% of the discounted AUA on D2C platforms in 2017 was in share classes that were launched since 2014. This suggests a larger amount of more recent discounts secured by D2C platforms.

Figure 7.5: Percentage of AUA invested in discounted share classes of open-ended funds across platforms by share class launch year (%)
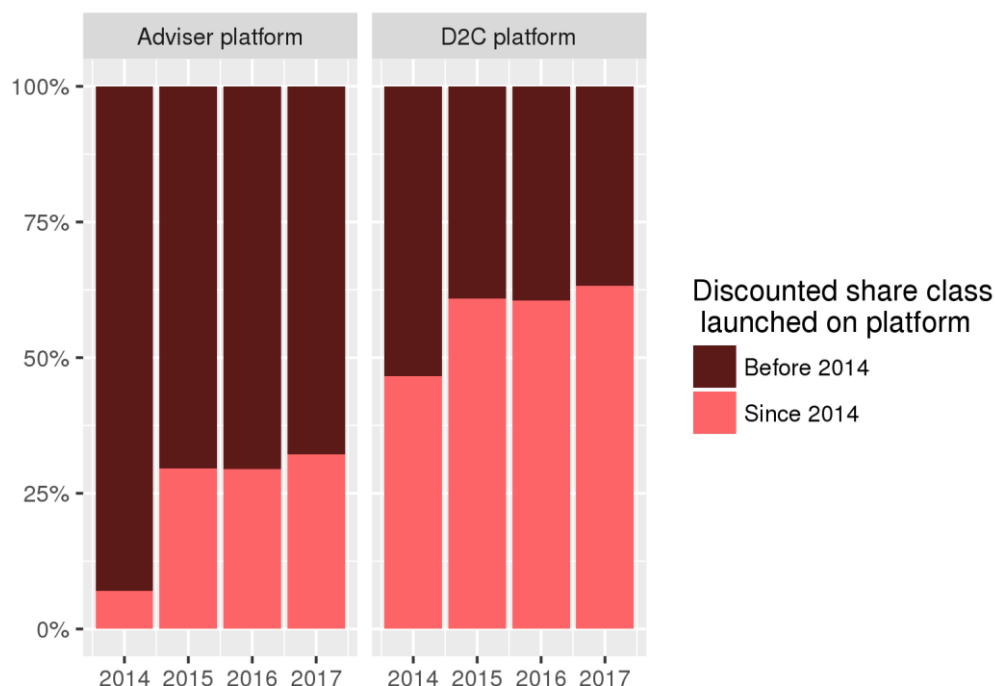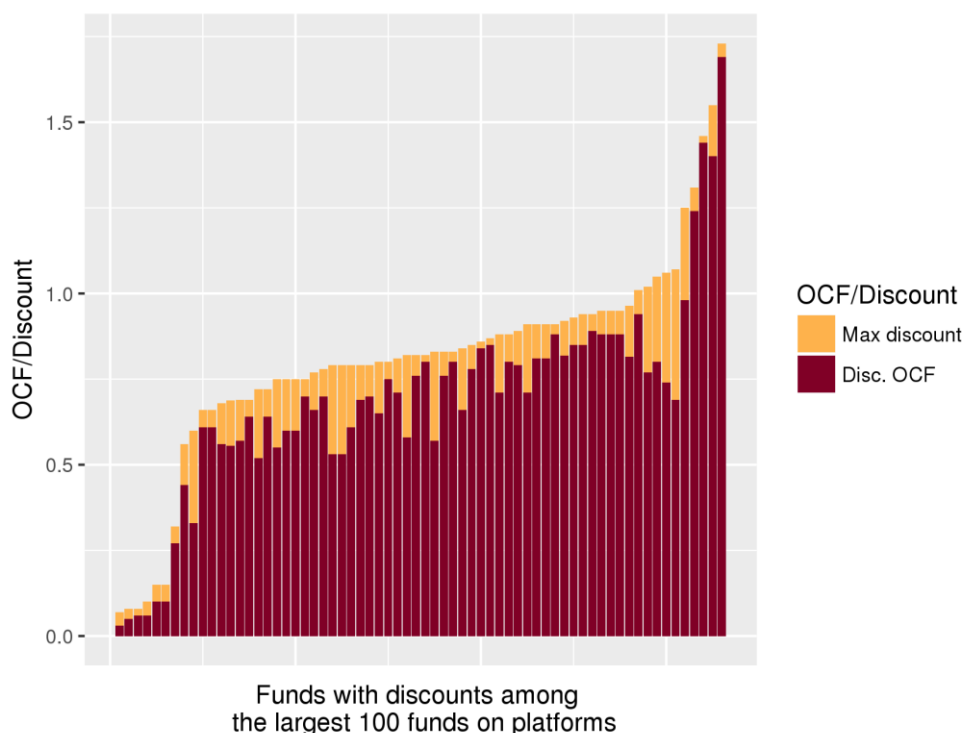

Source: FCA analysis

The size of discounts relative to the OCF

26.   Looking across all funds available on platforms (rather than the 100 largest funds we focus on later), almost all discounts range from 1 to 50bps.[13] Of the largest 100 funds in 2017, 33% have no discounts on any platforms, while the average discount is around 8bps and a maximum of 38bps. These discounts among the largest 100 funds account for, on average, 11% of their OCF.[14]

27.   The figure below shows the size of discounts available compared to the OCF for the funds with discounts among the largest 100 funds on platforms. The size of the discounts varies across the whole spectrum of OCFs (from low to high as shown in Figure 7.6), indicating variation in discounts as a proportion of OCF. To take into account these different ways of measuring discounts, we used both discounts as a percentage of total investments and discounts relative to OCF when analysing the drivers of the size of discounts.

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[13] This observation also holds for the alternative definition of fund discounts.

[14] This is a simple average, not weighted by AUA.

Figure 7.6: Maximum discount for a given fund across platforms and discounted OCF for funds with discounts among the largest 100 funds on platforms in 2017 (%)

Source: FCA analysis

The proportion of fund managers offering a discount

28. The majority of fund managers with funds available on platforms do not offer any discounts. Out of 575 fund managers in our sample, 39% offered a discount on at least 1 of their funds during the 2014 – 2017 period. Across all fund management firms in our sample, around 43% of the total number of funds were discounted at some point during this period.

29. A fund manager may only offer a discount on a selected number of their funds. Of the 4,144 funds from fund management firms who have offered discounts, around 51% have been discounted at some point during this period. [15]

30. Where funds do have discounts, these discounts are only available to some of their share classes. Among the funds with discounts, each fund has from 1 to 14 share classes on a platform, with a median of 2 share classes per fund on each platform. Some funds have 2 or more on the same platform. This happens when a platform has more than 1 share class with an OCF lower than the most commonly occurring lowest OCF across all platforms. Among the 8,326 share classes in funds with discounts, 54% were discounted.

31. In terms of AUA, around 60% of AUA in funds with discounts[16] is invested in the discounted share classes. This means that even when platforms are successful at

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[15] If we look at funds available in 2017 only, the proportions described in paragraphs 27 and 28 are 45%, 48% and 55%.

[16] On platforms that have those discounts.

obtaining discounts from fund managers, a significant portion of their customers' money (around 40%) in those funds do not receive any discounts.[17]

Conceptual framework of discount decisions by fund managers

32. As described above, not all fund managers in our sample offered a discount. For those fund managers offering discounts, some were only available on a selected number of funds. Fund discounts, by our definition, were also only available on some platforms and, as we show below, the size of the discount varies between platforms. This implies that fund managers face a number of decisions: which funds to discount, which platforms to offer discounts to and how much to discount.

33. Figure 7.7 below describes a stylised chain of decisions made by fund managers. First, the fund manager decides whether to offer any discount on platforms, that is, whether to price differentially on platforms. If so, the manager then decides which funds to apply a discount on. Last, the manager needs to decide how much of a discount to give to different platforms, including not offering discounts on certain platforms,[18] which is likely to be determined through negotiations between the 2 parties. This can range from 0, where platforms do not receive any discount, to any positive amount below the standard OCF for a selected number of platforms. These 3 stages are modelled separately with the methodology explained below.

34. In reality these decisions may be made simultaneously or as a combination of multiple decisions. The stylised version used in this analysis, however, provided us with a conceptual framework to estimate the impact of the variables of interest on each decision separately.

Figure 7.7: Fund managers' discount decisions
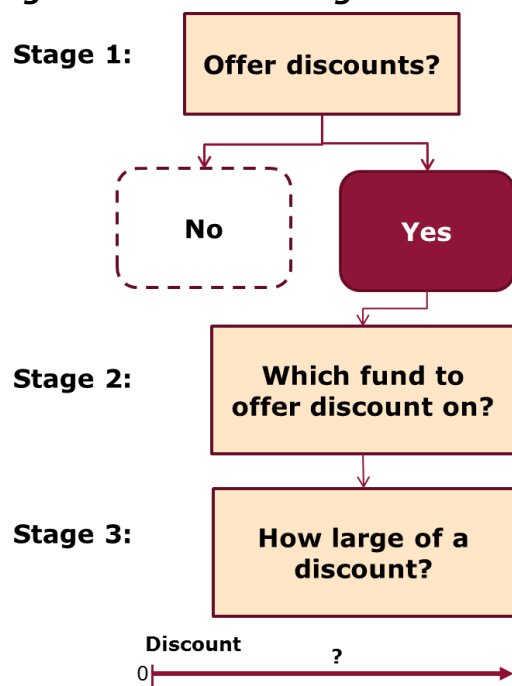
Source: FCA analysis

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[17] In reality the discounted AUA may be higher given our conservative approach of measuring discounts.

[18] This is due to the fact that discounts were defined based on relative fund price across platforms.

Variables included at each stage

35.   The variables we considered at each stage of the analysis are set out in Figure 7.8. In the first 2 stages, the variables we considered are fund manager and fund characteristics such as firm and fund size, performance and any commercial relationships with platforms. At this stage we did not include platform characteristics. This is because the decision of whether to offer a discount is likely to depend on fund and firm characteristics (such as how the fund has performed or the fund's popularity), rather than differing characteristics between platforms.

36.   At the third stage, we then introduced platform characteristics, as they are likely to affect the fund manager's decision about how much of a discount to offer a particular platform, including the decision not to offer one at all. We also included the same fund management firm and fund variables we included in the first and second stage in the third stage to test whether these factors also affect the fund manager's decision about how much of a discount to offer.

Figure 7.8: Variables included in each stage of the analysis

Stage 1 and 2	Reason for inclusion
Fund manager size	Larger fund managers could be more able to offer a discount
Fund size	More popular funds could be less likely to offer a discount. Or larger funds could be more able to offer a discount.
Fund net returns	Poorly performing funds could be more likely to be discounted to attract or retain flows
Belong in the same parent company as one of the platforms	Fund managers with a commercial relationship with platforms may have more incentive to offer fund discounts to platforms
Receive seed money from a platform	Fund managers with a commercial relationship with platforms may have more incentive to offer fund discounts to platforms
Additional variables introduced at Stage 3	
Platform size	Larger platforms may be able to get greater discounts as they gave greater 'footfall' and hence a greater potential to attract more investment flows into the funds
Platform has a model portfolio	Platforms could use potential to put a fund in a model portfolio as leverage with fund managers to secure discounts
Type of platform	D2C platforms may be more able to secure discounts than advised platforms as they have greater ability to influence flows

Source: FCA analysis

37. It is important to note the relationship between fund discounts and fund promotions. One aspect of the relationship is that platforms may have an incentive to secure fund discounts if they give platforms an opportunity to promote those funds, which in turn drives flows into the platform. The second aspect is that fund managers may want to offer fund discounts in return for promotional activities done by platforms, which can drive flows into their funds.

38. These discount and promotion decisions made by platforms and fund managers may therefore be determined simultaneously. There may be a high correlation between discounts and promotions (funds that are discounted are also those that are promoted by the platform). This implies there could be an endogeneity issue if we included the promotion decision as a possible explanatory factor when modelling the discount decision (meaning that promotions may cause the discounts and/or that discounts may cause the promotion). To untangle this relationship, we would need an instrumental variable appropriate for promotion in the fund discount model or a natural experiment with sufficient scale that affects promotion in ways unrelated to expected discounts.

39. In the absence of such an instrumental variable or a natural experiment, we considered only the impacts of fund/ fund manager and platform characteristics, along with commercial relationships between the 2 parties, on the size of fund discounts. This annex presents our preliminary findings following this approach. Further analysis will be conducted between the interim and final reports to better understand the dynamics between fund promotions and discounts.

40. For the 352 fund managers with funds available on platforms in 2017, the breakdowns in terms of discounts offered and their relationship with platforms are as follows.

Figure 7.9: Breakdown of fund managers by discounts offered and whether a fund manager belongs in the same parent company as one of the platforms

	Does not have a platform within the parent company	Have a platform within the parent company
No discount	265	7
With discount	178	18

Source: FCA analysis

Figure 7.10: Breakdown of fund managers by discounts offered and a commercial relationship with platforms

	No commercial relationship with platforms	Have a commercial relationship with a platform
No discount	264	8
With discount	168	28

Note: Commercial relatioships here include fund manager belonging to the same parent company as one of the platforms and receiving seed money from a platform.

Source: FCA analysis

Factors that determine which funds are discounted

41. To assess the first decision (whether a fund manager offers any discounts), we used a logit regression model with the binary variable of whether a fund manager offers any discount on any funds across platforms in a given year as the dependent variable. It was regressed on fund manager's size (measured by sum of fund size across all their funds available on platforms), dummy variables for whether the fund manager belongs to the same parent company as one of the platforms and whether it has received any seed money from platforms, along with year fixed effects.

42. The results in Figure 7.11 show larger fund managers and those belonging to the same parent company as one of the platforms are more likely to offer discounts. In particular, a 1% increase in fund manager size is associated with the odds[19] of the fund manager offering a discount increasing by 83%, all else equal. The odds of the fund manager offering a discount for fund managers belonging in the same parent company as one of the platforms is 1.1 times higher than that for other fund managers, all else equal.

Figure 7.11: Correlation between fund manager characteristics and their decision to offer discounts

	Estimated coefficient	Change in the odds of fund managers offering discounts
Log of fund manager size	0.60161***	exp(0.60161) − 1 ≈ 1.82506 − 1 ≈ 0.83
	(0.04019)	
Belong in the same parent company as one of the platforms	0.75517**	exp(0.75517) − 1 ≈ 2.12797 − 1 ≈ 1.1
	(0.34341)	
Receive seed money from a platform	0.86219	exp(0.86219) − 1 ≈ 2.368342 − 1 ≈ 1.4
	(0.56158)	
Number of observations	1,215	

Note: Robust standard errors are in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Source: FCA analysis

43. To assess the second decision (which funds to offer a discount on), we considered fund managers who have offered fund discounts. We used a logit regression model with the binary variable of whether the fund has any discount across platforms in a given year as the dependent variable. It was regressed on fund size and net returns, along with the 2 variables for commercial relationships with platforms described above, year and fund manager fixed effects. The dataset for this regression was at the fund level, covering all funds from fund managers that offered fund discounts.

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[19] The odds of an event is the ratio of the probability that the event will happen to the probability that the event will not happen.

44. The results for the second decision, outlined in Figure 7.12, are consistent with those presented above. The magnitudes of the impacts estimated are different. This is because in stage 1 we looked at whether a fund manager would offer any fund discounts, whereas in stage 2 the dependent variable was whether a fund from a fund manager who offered discount would get discounted. In the second stage, a 1% increase in fund size is associated with an increase of 20% in the odds of a fund having a discount, all else equal. The odds of a fund being discounted if its fund manager belongs in the same parent company as one of the platforms is 3.8 times higher than that when its fund manager does not, all else equal.

Figure 7.12: Correlation between fund characteristics and fund managers' decision of which fund(s) to offer discounts on

	Estimated coefficient	Change in the odds of a fund being discounted
Log of fund size	0.19812***	exp(0.19812) – 1 ≈ 1.219109 – 1 ≈ 0.2
	(0.02879)	
Net returns	0.00767**	exp(0.00767) – 1 ≈ 1.007699 – 1 ≈ 0.01
	(0.00386)	
Belong in the same parent company as one of the platforms	1.57208***	exp(1.57208) – 1 ≈ 4.816656 – 1 ≈ 3.8
	(0.28903)	
Receive seed money from a platform	-2.19483	exp(-2.19483) – 1 ≈ 0.1113775 – 1 ≈ -0.9
	(1.41909)	
Number of observations	3,758	

Note: Robust standard errors are in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Source: FCA analysis

45. By assessing the first 2 decisions made by fund managers on whether to offer fund discounts and which funds to discount, we can conclude that the size of fund managers (and funds) and being in the same parent company as one of the platforms are attributes associated with higher likelihood of offering fund discounts. Other factors, fund performance and fund receiving seed money from a platform, do not seem to have an impact on whether the fund is being discounted.[20]

Factors that determine the size of fund discount

46. The previous section looked at the fund and fund manager characteristics that determine whether a fund manager would offer fund discounts on platforms and which funds are chosen to be offered a discount. In this section, the focus is on funds

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[20] The estimated coefficient for fund performance while statistically significant is very small.

which had a discount on at least 1 or more platforms. Our aim was to understand which factors are most important in determining the size of fund discount.

47. Given that a fund manager has decided to offer a discount on a given fund, they now face the decision of how large the discount should be on each platform the fund is listed on, including the option to offer no discount. We wanted to explore whether the decision is determined by the negotiating power of platforms and benefits a platform can bring to the fund manager, as well as the fund management firm and fund characteristics we explored at stage 1 and 2.

48. As outlined in Figure 7.8, in addition to the variables we considered in stage 1 and 2, we considered the following variables to test whether they may have an impact on the size of fund discount:

   • Platform size. Platforms may be able to use their size and greater 'footfall' on the platform when negotiating with fund managers

   • Use of model portfolios. Platforms with model portfolio solutions may be able to influence flows into funds which may help secure larger discounts from fund managers in return

   • Type of platform. D2C platforms may be more able to secure discounts because of their ability to influence fund flows

49. The size of platform and fund were considered in log forms to account for the impact in percentage change. In addition, we used lag of platform size, fund size and fund performance to reflect the fact that when fund managers and platforms agree on a discount, these pieces of information may only be available for the previous year and not for the current year.

50. We used a Tobit model with the size of discount for a given fund on a platform as the dependent variable. It was regressed on variables for platform characteristics as described above, fund characteristics such as fund size and net returns, dummy variables for the 2 types of commercial relationships between platform and fund manager, along with year and fund manager fixed effects. A Tobit model was used because it combines 2 stages, whether a fund is discounted on any platform as the first stage and how much of a discount on each platform as the second stage.[21] Because we expected correlations between observations from the same fund manager, cluster-robust standard errors on fund manager have been used.

51. The 3 specifications presented below follow this same model, with slightly different groups of explanatory variables included. Model 1 and 2 use log of platform size while model 3 uses the lag of platform size instead to check whether the current or past platform size may be more appropriate in determining size of fund discounts. Model 2 and 3 also include a control for the type of platforms, with the base case being adviser platforms.

52. While our data covered the 2014 – 2017 period which is post RDR, as explained in paragraph 23 it is reasonable to infer that some of the discounts in our dataset were negotiated as part of the RDR share class conversion and may reflect a different negotiation mechanism between platforms and fund managers than the one we have described so far. While we do not have data on how each discount was negotiated, we considered discounts on share classes with launch date before 2014 to be a good

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[21] Tobit model is used to model selection bias and is a combination of a probit modelling the first stage decision and a truncated regression model for the second stage decision. This is similar to the approach used in modelling female labour participation and wages (see Killingsworth, M. R. and James J. Heckman (1986), 'Female labor supply: A survey', Handbook of labor economics).

proxy for the RDR-driven discounts. Therefore, we removed these from the main analyses of size of fund discounts in Figure 7.13 and 7.14.

53. The dataset covers around 2,000 funds from 205 fund managers during the 2014 – 2017 period. We observed a discount across platforms in 20% of the cases on 23 out of 26 platforms in total. Where we have sufficient information to determine the size of discount, it has a mean of 11bps and a median of 5bps. Within this dataset, there are 315 funds from fund managers belonging in the same parent company as one of the platforms and 19 funds with fund managers receiving seed money from platforms.

Discounts as a percentage of total investment

54. In Figure 7.13, the dependent variable is fund discounts in bps or as a percentage of total investment. This is how fund discounts tend to be communicated, especially in marketing materials to consumers. Therefore, we considered it a relevant metric to measure size of discount.

Figure 7.13: Factors that determine size of fund discount (as a percentage of total investment)

	Model 1	Model 2	Model 3
Log of platform size	0.04557***	0.05459***	
	(0.00686)	(0.00748)	
Lag of log platform size			0.04899***
			(0.0063)
Lag of log fund size	0.00051	0.00092	0.00111
	(0.00327)	(0.00328)	(0.00328)
Lag of net returns	-0.00043*	-0.00036	-0.00036
	(0.00023)	(0.00023)	(0.00023)
Platform having model portfolio solutions	0.00491	0.00425	0.00453
	(0.01277)	(0.0122)	(0.01211)
Belong in the same parent company as one of the platforms	0.02693	0.02611	0.02636
	(0.03442)	(0.03506)	(0.03526)
Receive seed money from a platform	0.03878	0.04285	0.0418
	(0.04296)	(0.04261)	(0.04267)
Type of platform		-0.05183***	-0.05304***
		(0.01177)	(0.01172)
Number of observations	15,701	15,701	15,701

Note: Cluster robust standard errors on platform are in parentheses. *** p < 0.01, ** p < 0.05, * p < 0.1. Model 1 to 3 show how the estimated coefficients change with slightly different set of explanatory variables.

Source: FCA analysis

55. Figure 7.13 above shows that platform size has a positive impact on the size of discounts available on that platform. An increase in platform size by 1% is associated with around 4 to 5bps increase in fund discounts, all else equal. In addition, adviser platforms on average receive around 5bps higher in discounts compared to D2C platforms.

Discount as a proportion of OCF

56. We also considered fund discounts as a proportion of OCF the dependent variable, instead of a percentage of total investment. It is a relevant metric to measure, since funds with higher OCF may have more room to offer higher discounts in absolute terms. For example, a 5bps discount on a fund with a 0.8% (80 bps) OCF would be more significant than the same discount on a fund with a 1.6% (160 bps) OCF. Fund managers and platforms, as a result, may take the OCF level into consideration in their discount negotiations.

Figure 7.14: Factors that determine size of fund discount as a proportion of OCF

	Model 1	Model 2	Model 3
Log of platform size	0.40325**	0.47934**	
	(0.2054)	(0.23729)	
Lag of log platform size			0.42664**
			(0.20936)
Lag of log fund size	0.01302	0.01643	0.01797
	(0.02638)	(0.02673)	(0.0269)
Lag of net returns	-0.00387	-0.0033	-0.00331
	(0.0025)	(0.00238)	(0.00238)
Platform having model portfolio solutions	0.0558	0.04695	0.05182
	(0.11523)	(0.1098)	(0.10924)
Belong in the same parent company as one of the platforms	0.03055	0.01978	0.02254
	(0.29013)	(0.29514)	(0.29708)
Receive seed money from a platform	0.42303	0.4567	0.44628
	(0.36355)	(0.36931)	(0.36672)
Type of platform		-0.42904**	-0.43768**
		(0.20475)	(0.20719)
Number of observations	15,701	15,701	15,701

Note: Cluster robust standard errors on platform are in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Model 1 to 3 show how the estimated coefficients change with slightly different set of explanatory variables.

Source: FCA analysis

57.   We found that an increase of 1% in platform size is associated with an increase of 40% to 50% in the size of discount measured as a proportion of OCF. This is consistent with the finding in Figure 7.13 which shows a similar correlation between platform size and discount measured as a percentage of total investment. The statistical significance, while reduced here compared to the regressions using discounts as the percentage of total investments, is still at 95% confidence level. In addition, D2C platforms are more likely to have lower discount as a proportion of OCF than adviser platforms.

58.   By assessing the factors that may impact size of fund discounts, either as a percentage of total investments or as a proportion of OCF, we can conclude that larger platforms are associated with larger fund discounts. Additionally, advisor platforms are more likely to have larger discounts.

Sensitivity checks

Including both pre and post RDR discounts

59.   The analysis above excludes discounts that may have been negotiated during the RDR-driven share class conversions. We would like to test whether our findings would hold for both types of discounts, those achieved before and since 2014. To control for these 2 types of discounts, we included a binary variable for the age of the discount, with before 2014 being the base case.

60.   In this set of specifications, platform size is the main factor determining the size of fund discounts, with 1% increase in platform size associated with around 3bps increase in fund discount. In addition, adviser platforms on average receive around 1 to 2bps higher in discounts compared to D2C platforms. Platforms with model portfolio solutions are also associated with fund discounts that are around 3bps higher.

Figure 7.15: Factors that determine size of fund discount: Including discounts on share classes launched before and since 2014 with a dummy variable for age of the discounts

	Model 1	Model 2	Model 3
Log of platform size	0.03474***	0.03517***	
	(0.00388)	(0.00391)	
Lag of log platform size			0.03070***
			(0.00364)
Lag of log fund size	0.00285	0.00285	0.00287
	(0.00231)	(0.00231)	(0.0023)
Lag of net returns	0.00032**	0.00031**	0.00031**
	(0.00013)	(0.00013)	(0.00013)
Platform having model portfolio solutions	0.03119***	0.03242***	0.03475***
	(0.00877)	(0.00868)	(0.00871)

	Model 1	Model 2	Model 3
Belong in the same parent company as one of the platforms	0.01235	0.01173	0.01135
	(0.01362)	(0.01372)	(0.0139)
Receive seed money from a platform	0.05313**	0.05358**	0.05366**
	(0.02659)	(0.02649)	(0.02659)
Age of the discount	-0.0161	-0.01283	-0.01166
	(0.0134)	(0.01377)	(0.01377)
Type of platform		-0.01411**	-0.01558**
		(0.00711)	(0.00708)
Number of observations	42,027	42,027	42,027

Note: Cluster robust standard errors on platform are in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Model 1 to 3 show how the estimated coefficients change with slightly different set of explanatory variables.

Source: FCA analysis

Actual OCF as the dependent variable

61. One way to sense-check our findings so far from the Tobit model of fund discounts is to model the OCF level of funds available on platforms. If we observe that larger platforms tend to have lower OCF for the same fund, then that would be consistent with our finding that larger platforms tend to have larger fund discounts.

62. However, these regressions model variations in the lowest OCFs available on platforms, which include more than just the variations in fund discounts as defined in this annex. For example, the lowest OCF for a fund on a platform may be higher than the most commonly occurring lowest OCF across all platforms, which means there is no discount for that fund available on that platform in the discount regressions. The OCF regressions presented here attempt to explain the difference between this higher OCF level and the average OCF for that fund across platforms.

63. The explanatory variables are the same as before. The dependent variable here, however, is the actual OCF for a given fund on a platform, instead of the discount. In addition, we included all funds in our sample and used an OLS regression to explain variations in the actual OCFs after discounts if available. The Tobit model used in the discount regressions is not appropriate in this case because all funds in the sample have been included. Cluster-robust standard errors on funds and fund fixed effects have also been used here.

64. The results here are broadly in line with our findings in the previous sections. Larger platforms tend to have lower OCFs available on their platforms. In addition, we found that commercial relationships between platforms and fund managers, either belonging in the same parent company or providing/receiving seed money, are associated with lower OCFs on platforms. Platforms with model portfolio solutions are also associated with having lower OCFs for a given fund.

*Figure 7.16: Factors that determine the OCF after discounts on platforms –
With fund fixed effects and cluster-robust standard errors*

	Model 1	**Model 2**	**Model 3**	**Model 4**
Log of platform size	-0.00613***	-0.00570***		
	(0.00039)	(0.00039)		
Lag of log platform size			-0.00534***	-0.00512***
			(0.00038)	(0.00038)
Platform having model portfolio solutions	-0.00165	-0.00319***	-0.00273**	-0.00417***
	(0.00108)	(0.00103)	(0.00114)	(0.00109)
Belong in the same parent company as one of the platforms	-0.06286***	-0.06189***	-0.06522***	-0.06417***
	(0.00576)	(0.00574)	(0.00612)	(0.00611)
Receive seed money from a platform	-0.06347***	-0.06912***	-0.06597***	-0.07096***
	(0.02174)	(0.02199)	(0.02183)	(0.02211)
Age of the cheapest share class	-0.01221***	-0.01525***	-0.01584***	-0.01853***
	(0.00162)	(0.00175)	(0.00166)	(0.00178)
Type of platform		0.01046***		0.00969***
		(0.00133)		(0.00136)
Number of observations	90,507	90,507	79,594	79,594
R squared	0.91053	0.91067	0.91583	0.91596

Note: Cluster robust standard errors on platform have been used. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Model 1 to 4 show how the estimated coefficients change with slightly different set of explanatory variables.

Source: FCA analysis

Promotions and their impact on net sales into funds

65. Platforms are no longer remunerated by commission from asset managers. The main financial incentive to promote investment products is the expectation that promotions will drive flows onto the platform which will, in turn, increase platform fee revenue. We wanted to understand whether platforms' incentives to promote funds to increase platform fee revenue align with investors' interests.

66. The first part of our analysis explored whether fund promotions are successful in driving money into the platform. Having found that promotions are one way in which platforms can influence investor choice and attract flows to the platform, we then explored which types of funds platforms typically promote.

67. We wanted to test the following:
   - Are platforms more likely to promote funds that they have a commercial relationship with (the so-called 'in-house' funds)? This supported our analysis of how platforms promoted in-house funds and whether it was clear to the consumer that funds were in-house.

- Do fund characteristics, such as fund size and performance, have an impact on platforms' promotion decisions?

68. Here, we considered promotions including print advertising, marketing campaigns, publication of research on a fund or fund manager, interviews with fund managers, speaking engagements, inclusion or highlighting of particular funds in shortlists or best-buy lists.

Impact of promotions on flows into the platform

69. Promotional activities are designed to attract consumers' attention and can be expected to influence consumers' decision of which funds to choose. To test this hypothesis, we looked into the impact that promotions may have on net sales into a fund, ie 'fund flow'.[22] We used an OLS regression with log of the change in net sales as the dependent variable. Change in net sales is defined as the difference in net sales for a given fund on a given platform during a year and the year before.[23] It was regressed on fund characteristics, including fund size, net returns, and a binary variable of whether the fund is promoted on that platform, along with year and platform fixed effects.

70. The results below confirm our hypothesis that promotional activities done by platforms are associated with a significantly higher amount of sales into those funds. In addition, larger funds, funds with higher net returns, lower charges and those having commercial relationships with the platform tend to receive greater net sales.

71. In particular, promoted funds, on average, receive around 2 times higher an increase in net sales than funds not being promoted, all else equal. Moreover, an increase of 1% in fund size is associated with an increase of 0.5% in the change in net sales. Net sales into funds with a commercial relationship with platform also increase by around 1.7 to 1.9 times more in funds without a commercial relationship with that platform while a 10bps increase in the lowest OCF across all share classes for that fund is associated with a 10% reduction in change in net sales.

Figure 7.17: Correlation between promotion and change in net sales into funds

	Model 1	Model 2
Log of fund size	0.47780***	0.49169***
	(0.01655)	(0.0164)
Net returns	0.02048***	0.02045***
	(0.00214)	(0.00214)
Fund being promoted by the platform	2.19241***	1.78245***
	(0.09265)	(0.10227)
Lowest OCF on the platform	-1.01570***	-1.03064***
	(0.06472)	(0.06289)

[22] Net sales into a fund is calculated as the difference in AUA invested in that fund between 2 consecutive years, after accounting for any capital gain from the fund's net returns in the previous year.

[23] An increase in net sales into a fund on a given platform here can be from other platforms or from other funds on the same platform.

	Model 1	Model 2
Belong in the same parent company as one of the platforms		1.74915***
		(0.11557)
Receive seed money from the platform		1.94581***
		(0.48287)
Number of observations	11,098	11,098
R squared	0.40076	0.41715

Note: Robust standard errors are in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Model 1 and 2 show how the estimated coefficients change with slightly different set of explanatory variables.

Source: FCA analysis

The types of funds platforms promote

72. To better understand platforms' decision of which funds to promote, we used a logit regression model with the binary variable of whether a fund is promoted on a given platform. It was regressed on fund characteristics such as fund size, performance, and commercial relationships with the platform, along with year and platform fixed effects. The dataset here is at the fund level for all funds in our sample on platforms that have promotional activities and excludes platforms who do not do any promotions.[24]

73. We found that funds with commercial relationships with platforms, either belonging in the same parent company or receiving seed money from platforms, are more likely to be promoted. In addition, platforms are more likely to promote larger funds.

74. An increase of 1% in fund size is associated with an increase of 35% in the odds of the fund being promoted. The odds of a fund being promoted by a given platform increases by 16 times if its fund manager and the platform belong to the same parent company while the odds increases by 8 times if its fund manager receives seed money from the platform.

75. While fund discounts may be one of the drivers of fund promotions, including discounts in the estimation of promotions would introduce an endogeneity issue to the model due to the two-way relationship between these 2 variables. Therefore, we did not use discounts as an explanatory variable in the below regression.

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[24] This exclusion follows from the model specification because platforms who do not do any promotions would not have any variations in the dependent variable.

Figure 7.18: Correlations between fund characteristics and platforms' decision of which fund(s) to promote

	Estimated coefficient	Change in the odds of a fund being promoted
Log of fund size	0.30318***	$\exp(0.30318) - 1 \approx$ $1.354158 - 1 \approx 0.35$
	(0.02733)	
Net returns	0.00104	$\exp(0.00104) - 1 \approx$ $1.001041 - 1 \approx 0.001$
	(0.00425)	
Belong in the same parent company as one of the platforms	2.78906***	$\exp(2.78906) - 1 \approx$ $16.26572 - 1 \approx 16$
	(0.11414)	
Receive seed money from the platform	2.21231***	$\exp(2.21231) - 1 \approx$ $9.136798 - 1 \approx 8$
	(0.33205)	
Number of observations	25,430	

Note: Robust standard errors are in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Source: FCA analysis

Conclusion

76. In this analysis, we have explored fund managers' and platforms' discount and promotion decisions. We found that larger funds and funds with a commercial relationship with platforms are more likely to offer fund discounts. The size of discount is, in turn, positively associated with platform size.

77. In addition, platforms' promotional activities are associated with significantly more sales into these promoted funds. Platforms' promotional activities focus on funds with which they have commercial relationships.

78. This annex presented our initial findings on fund discounts and promotions. The analysis followed a stylised chain of decisions to model fund managers' discount decisions, as well as the impacts of fund/fund manager and platform characteristics on the size of discount. In reality these decisions may be made simultaneously or as a combination of multiple decisions. The stylised version used in this analysis, however, allowed us to break down this complex decision-making process into multiple stages and estimate the impact of each variable of interest separately.

79. Throughout this annex, we considered various model specifications and discussed their pros and cons. We are planning for further analysis and testing of the specifications used here and exploring others to better understand other factors that may impact size of fund discounts, in addition to platform size, between the interim and final reports.