Financial Product Design and Catering: Evidence from the Global Mutual Fund Industry

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"The key first principle of modern finance, going back to Markowitz, is that preferences attach to money – to the payoffs of portfolios – not to the securities that make up portfolios."

John Cochrane, in his commentary blog (October 9, 2016)

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- Literature: how mutual funds invest to deliver performance.
 - Investor preference is defined over portfolio *performance*.
- What if investors also have non-performance-related preference for portfolio *composition*?
- How does this affect asset managers' portfolio decisions?

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Fund A

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Investors





















• Preference candidate.





- Preference candidate.
 - Solution: Preference for local stocks.





- Preference candidate.
- Preference measure.



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 - Solution: Link local preference with funds' distribution channels not rely on proxies



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Empirical Challenges (III/IV) Sold Fund A Investors **Country** A **Country A** Sec2 Sec2 Sec1 Sec5 Sec1 Sec4 Sec3 Sec6 Sec3 Sec4

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Investment Country



Home Country



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Do Funds Overweight Client Country Stocks?

Do Funds Overweight Client Country Stocks? Raw Data (I/II)

Excess Weight% in Client Country of Funds Located in Top 20 Home Countries



Excess Weight% in Client Country

Do Funds Overweight Client Country Stocks? Raw Data (II/II)

Excess Weight% in Client Country of Funds Sold in Top 20 Client Countries



Excess Weight% in Client Country

 $Excess Weight_{fct} = \alpha + \beta_1 Client Country_{fc} + \beta_2 Home Country_{fct} + \gamma' x_{ft} + \varepsilon_{ft}$

$$Excess Weight_{fct} = \frac{w_{fct} - \overline{w}_{ct}}{\overline{w}_{ct}}$$

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	(1)	(2)	(3)	(4)
Client Country	1.1965***	1.1459***	1.1557***	0.5447***
	(12.24)	(12.01)	(11.83)	(6.26)
Control variables	Ν	Y	Y	Y
Investment country × date f.e.	Ν	Ν	Y	Ν
Home ct. \times investment ct. \times date f.e.	Ν	Ν	Ν	Y
R ²	0.051	0.054	0.063	0.167
Ν	2,396,897	2,396,897	2,396,897	2,396,897

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What Drives Client-Country Overweighting? A. Do Funds Cater to Investors' Local Preference? (I/II)
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Excess $Weight_{fct} = \alpha + \beta_1 Client Country_{fc} + \beta_2 Home Country_{fct}$

 $+\beta_3$ Investor Home Bias_{ct} + δ Investor Home Bias_{ct} × Client Country_{fc} + $\gamma' x_{fct}$ + ε_{fct}

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	Client Country Funds' Home Bias			
	(1)	(2)		
Invsetor Home Bias × Client Country	1.4223***	0.7722***		
	(3.76)	(2.88)		
[Control variables omitted from the table]				
Home ct. \times investment ct. \times date f.e.	Y	Y		
R ²	0.178	0.178		
Ν	2,055,542	2,055,542		

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	Client Country Funds' Home Bias		High National Pride	High Identity Importance
	(1)	(2)	(3)	(4)
Invsetor Home Bias × Client Country	1.4223***	0.7722***	0.5293**	1.1523***
	(3.76)	(2.88)	(2.53)	(2.75)
[Control variables omitted from the table]				
Home ct. \times investment ct. \times date f.e.	Y	Y	Y	Y
R ²	0.178	0.178	0.184	0.161
Ν	2,055,542	2,055,542	1,886,045	1,991,533

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 $+\beta_3 High Visibility_{sct} + \delta High Visbility_{sct} \times Client Country_{fc} + \gamma' x_{fsct} + \varepsilon_{fsct}$

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	Analyst cov.	ROE	Sales	Media cov.
	(1)	(2)	(3)	(4)
High Visibility × Client Country	2.3134***	1.1787**	0.7144***	0.9124*
	(3.71)	(2.37)	(4.46)	(1.92)
[Control variables omitted from the table]	I			
Home ct. × investment ct. × date f.e.	Y	Y	Y	Y
R ²	0.180	0.174	0.158	0.193
Ν	5,660,797	5,660,797	5,660,797	5,660,797

Henderson Fund A













• Driven by familiarity at the home country level?



• Driven by familiarity at the home country level? No



- Driven by familiarity at the home country level? No
 - home country × investment country × date fixed effects



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- Driven by familiarity at the asset manager level? No
 - management firm × investment country × date fixed effects



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 $+\beta_3$ Managerial Rotation_{ft} + δ Managerial Rotation_{ft} × Client Country_{fc} + $\gamma' x_{fct}$ + ε_{fct}

Excess $Weight_{fct} = \alpha + \beta_1 Client Country_{fc} + \beta_2 Home Country_{fct}$

 $+\beta_3 Managerial Rotation_{ft} + \delta Managerial Rotation_{ft} \times Client Country_{fc} + \gamma' x_{fct} + \varepsilon_{fct}$

	Entire	Single-	Team-	
	Sample	Managed	Managed	
	(1)	(2)	(3)	
Managerial Rotation $ imes$ Client Country	-0.0512	-0.0311	-0.0337	
	(-0.65)	(-0.22)	(-0.39)	
[Control variables omitted from the table]				
Home ct. × investment ct. × date f.e.	Y	Y	Y	
R ²	0.172	0.201	0.167	
Ν	1,888,277	1,111,823	776,454	





Client Country (U.S.) Holdings



Client Country (U.S.) Holdings

Non Client-Country Holdings



Client Country (U.S.) Holdings



Non Client-Country Holdings

	Raw Returns	Industry- adj. returns	Market- adj. returns	DGTW- adj. returns
	(1)	(2)	(3)	(4)
Client Country	0.0428	0.0089	0.0094	0.0135
	(1.27)	(0.66)	(0.65)	(1.09)
Non Client Country	0.0511	0.0142	0.0153	0.0194
	(1.52)	(1.05)	(1.06)	(1.57)
Diff (Client Country – Non Client Contry)	-0.0083	-0.0053	-0.0059	-0.0059
T-stat (Client Country – Non Client Contry)	(0.17)	(0.28)	(0.29)	(0.34)

Results so far

- Client-country overweighting: funds overweight stocks from their client countries
- Catering-driven investment: ... not driven by funds' familiarity or by an information advantage

Potential Consequences of Client-Country Overweighting

- Benefits for Funds: flows.
- Costs to Investors: fund performance.
Consequences (I/II): Higher Flows?

 $Flow_{ft} = \alpha + \beta Client Country Overweight_{ft-1} + \gamma' x_{ft} + \varepsilon_{ft}$

	Investment Flows					
	(1)	(2)				
Client Country Overweight	0.0192***	0.0180***				
	(3.05)	(2.77)				
[Control variables omitted from the table]						
Style and date f.e.	Y	Ν				
Style × date f.e.	Ν	Y				
R ²	0.061	0.098				
Ν	59,795	59,795				

Consequences (II/II): Worse Performance?

	Investment Flows		DGTW-adj. Returns	
	(1)	(2)	(3)	(4)
Client Country Overweight	0.0192***	0.0180***	-0.0059***	-0.0050***
	(3.05)	(2.77)	(-3.94)	(-3.36)
[Control variables omitted from	the table]			
Style and date f.e.	Y	Ν	Y	N
Style × date f.e.	Ν	Y	Ν	Y
R ²	0.061	0.098	0.176	0.427
Ν	59,795	59 <i>,</i> 795	93,882	93,882

 $R_{ft} = \alpha + \beta Client Country Overweight_{ft} + \gamma' x_{ft} + \varepsilon_{ft}$

Conclusion

- Novel empirical finding: client-country overweighting.
- Suggests that investors do care about other fund attributes, e.g. fund portfolio composition, and mutual funds respond.
- More broadly, it has implications for understanding how financial institutions design products to cater to investors' preferences.