

[Download This Paper \(Delivery.cfm/SSRN\\_ID1506705\\_code110766.pdf?abstractid=1108728&mirid=1\)](https://papers.ssrn.com/sol3/Delivery.cfm/SSRN_ID1506705_code110766.pdf?abstractid=1108728&mirid=1)[Open PDF in Browser \(Delivery.cfm/SSRN\\_ID1506705\\_code110766.pdf?abstractid=1108728&mirid=1&type=2\)](https://papers.ssrn.com/sol3/Delivery.cfm/SSRN_ID1506705_code110766.pdf?abstractid=1108728&mirid=1&type=2)[Add Paper to My Library](#)Share: [!\[\]\(3342c215b2a8b663596a81468d5dc314\_img.jpg\)](#) [!\[\]\(5e22d44aef1f9548ca8274cbfb388e9d\_img.jpg\)](#) [!\[\]\(b011182daf5a0527ed818f91dc4cf8f7\_img.jpg\)](#) [!\[\]\(e021942709a217cfed2f781c62feb09c\_img.jpg\)](#)

## Are ETFs Replacing Index Mutual Funds?

*AFA 2009 San Francisco Meetings Paper*

41 Pages

Posted: 24 Mar 2008

Last revised: 17 Nov 2009

Jennifer C. Huang ([https://papers.ssrn.com/sol3/cf\\_dev/AbsByAuth.cfm?per\\_id=110766](https://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?per_id=110766))

University of Texas at Austin - Department of Finance

Ilan Guedj ([https://papers.ssrn.com/sol3/cf\\_dev/AbsByAuth.cfm?per\\_id=354562](https://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?per_id=354562))

Bates White, LLC

Date Written: March 15, 2009

### Abstract

We develop an equilibrium model to investigate whether an Exchange-Traded Fund (ETF) is a more efficient indexing vehicle than an Open-Ended Mutual Fund (OEF). We find that while flow-induced trading is costly to OEF investors, it is also beneficial to those investors who cause the flow -- it is simply a zero-sum game. Indeed, the OEF structure can be viewed as providing insurance for investors with liquidity shocks, and hence is beneficial for risk averse investors. However, this liquidity insurance is not without cost -- it can cause moral hazard %that induce excessive trading and reduce the OEF performance. Moreover, we find that investors with higher individual liquidity needs prefer to invest via the OEF since they benefit more from the liquidity insurance. Surprisingly, the OEF structure is still viable despite the concentration of higher-liquidity-need investors in the OEF. The reason is that flow-induced trading costs depend only on the aggregate liquidity need, not on individual liquidity needs, which cancel out at the fund level. As a result, OEFs and ETFs coexist in equilibrium with different liquidity clienteles. Finally, we derive empirical predictions that ETFs are better suited for narrower and less liquid underlying indexes, and for investors with longer investment horizons.

**Keywords:** ETF, Index Mutual Fund, Transaction Costs**JEL Classification:** G23[Suggested Citation](#) >[Show Contact Information](#) >[Download This Paper \(Delivery.cfm/SSRN\\_ID1506705\\_code110766.pdf?abstractid=1108728&mirid=1\)](https://papers.ssrn.com/sol3/Delivery.cfm/SSRN_ID1506705_code110766.pdf?abstractid=1108728&mirid=1)[Open PDF in Browser \(Delivery.cfm/SSRN\\_ID1506705\\_code110766.pdf?abstractid=1108728&mirid=1&type=2\)](https://papers.ssrn.com/sol3/Delivery.cfm/SSRN_ID1506705_code110766.pdf?abstractid=1108728&mirid=1&type=2)

## 0 References

[Fetch References](#)

## 0 Citations

[Fetch Citations](#)~~Do you have negative results from your research you'd like to share?~~

We use cookies that are necessary to make our site work. We may also use additional cookies to analyze, improve, and personalize our content and your digital experience. For more information, see our [Submit Negative Results \(https://www.ssrn.com/index.cfm/en/Negative-Results/\)](https://www.ssrn.com/index.cfm/en/Negative-Results/) [Cookie Policy](#)

[Policy \(https://www.elsevier.com/legal/cookienotice\)](https://www.elsevier.com/legal/cookienotice)[Cookie Settings](#)[Accept all cookies](#)

12 Citations

38 References

PlumX Metrics



([https://plu.mx/ssrn/a/?ssrn\\_id=1108728](https://plu.mx/ssrn/a/?ssrn_id=1108728))

## Related eJournals

American Finance Association Meetings (AFA) ([https://papers.ssrn.com/sol3/JELJOUR\\_Results.cfm?form\\_name=journalBrowse&journal\\_id=239868](https://papers.ssrn.com/sol3/JELJOUR_Results.cfm?form_name=journalBrowse&journal_id=239868))

Follow



Mutual Funds, Hedge Funds & Investment Industry eJournal ([https://papers.ssrn.com/sol3/JELJOUR\\_Results.cfm?form\\_name=journalBrowse&journal\\_id=1504392](https://papers.ssrn.com/sol3/JELJOUR_Results.cfm?form_name=journalBrowse&journal_id=1504392))

Follow



## Recommended Papers

Risk Taking by Mutual Funds as a Response to Incentives ([https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=225298&rec=1&srcabs=1108728&pos=1](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=225298&rec=1&srcabs=1108728&pos=1))

By Judith A. Chevalier ([https://papers.ssrn.com/sol3/cf\\_dev/AbsByAuth.cfm?per\\_id=16290](https://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?per_id=16290)) and Glenn Ellison ([https://papers.ssrn.com/sol3/cf\\_dev/AbsByAuth.cfm?per\\_id=21500](https://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?per_id=21500))

Mutual Fund Flows and Performance in Rational Markets ([https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=338881&rec=1&srcabs=1108728&pos=2](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=338881&rec=1&srcabs=1108728&pos=2))

By Richard C. Green ([https://papers.ssrn.com/sol3/cf\\_dev/AbsByAuth.cfm?per\\_id=41160](https://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?per_id=41160)) and Jonathan Berk ([https://papers.ssrn.com/sol3/cf\\_dev/AbsByAuth.cfm?per\\_id=38880](https://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?per_id=38880))

Mutual Fund Flows and Performance in Rational Markets ([https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=383061&rec=1&srcabs=1108728&pos=3](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=383061&rec=1&srcabs=1108728&pos=3))

By Richard C. Green ([https://papers.ssrn.com/sol3/cf\\_dev/AbsByAuth.cfm?per\\_id=41160](https://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?per_id=41160)) and Jonathan Berk ([https://papers.ssrn.com/sol3/cf\\_dev/AbsByAuth.cfm?per\\_id=38880](https://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?per_id=38880))

View more >

Feedback

Submit a Paper > (<https://hq.ssrn.com/submissions/CreateNewAbstract.cfm>)

SSRN Quick Links



SSRN Rankings



About SSRN



We use cookies that are necessary to make our site work. We may also use additional cookies to analyze, improve, and personalize our content and your digital experience. For more information, see our [Cookie Policy](#).

(<https://www.facebook.com/SSRNcommunity/>)  
([https://www.linkedin.com/company/493409?](https://www.linkedin.com/company/493409?trk=tyah&trkInfo=clickedVertical%3Acompany%2CclickedEntityId%3Acompany_493409%2Cidx%3A0))  
(<https://twitter.com/SSRN>)

Cookie Settings

Accept all cookies

(<http://www.elsevier.com/>)

[Copyright](https://www.ssrn.com/index.cfm/en/dmca-notice-policy/) (<https://www.ssrn.com/index.cfm/en/dmca-notice-policy/>)      [Terms and Conditions](https://www.ssrn.com/index.cfm/en/terms-of-use/) (<https://www.ssrn.com/index.cfm/en/terms-of-use/>)  
[Privacy Policy](https://www.elsevier.com/legal/privacy-policy) (<https://www.elsevier.com/legal/privacy-policy>)

All content on this site: Copyright © 2023 Elsevier Inc., its licensors, and contributors. All rights are reserved, including those for text and data mining, AI training, and similar technologies. For all open access content, the Creative Commons licensing terms apply.

We use cookies to help provide and enhance our service and tailor content.  
To learn more, visit [Cookie Settings](#).



(<http://www.relx.com/>)

(<https://papers.ssrn.com/sol3/updateInformationLog.cfm?process=true>)

We use cookies that are necessary to make our site work. We may also use additional cookies to analyze, improve, and personalize our content and your digital experience. For more information, see our [Cookie Policy](https://www.elsevier.com/legal/cookiepolicy) (<https://www.elsevier.com/legal/cookiepolicy>)

[Cookie Settings](#)

Accept all cookies