NEPC, LLC

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2012 Survey Results

Hedge Fund Operational Due Diligence

November 2012

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Background

- **NEPC's hedge fund research team includes investment specialists and a separate team focused on Operational Due Diligence ("ODD")**

- **Ongoing oversight includes an annual ODD survey, sent to all hedge funds utilized by NEPC clients and to additional funds rated "Preferred"**
  - Identifies key operational issues
    - Changes to the firm's ownership structure
    - Senior staff departures
    - Litigation or regulatory action
    - Dramatic decline in assets
    - Service provider changes
  - Allows NEPC to aggregate service providers used across all funds
    - Verify external service providers directly
    - Helps to flag any inaccurate responses
  - Highlights funds with ODD "red flags" worthy of further investigation

- **Survey is sent annually during May-June**

Survey Results

Survey Results

- **The 2012 survey went to 273 managers and 215 responded (Response rate: 79%)**

- **Information on 450 funds was provided**
  - Highlights and trends are summarized herein
  - Major Administrators and all Auditors were contacted independently by NEPC to verify the relationships reported by managers

- **Of the 58 non-responders …**
  - Most are in some form of liquidation or were terminated by the investor after the survey was sent
  - None are on NEPC's "Preferred" list
  - Per NEPC policy, non-responders cannot be included in future searches for clients

- **Firm level data**
  - 95% are registered with the SEC. This figure has risen dramatically (see p. 9 and 17) as regulatory requirements have changed.
  - 20% have had a change in ownership in the past year
  - 23% are involved in some form of litigation
  - 22% have an affiliated broker/dealer
  - 40% use a third-party marketing firm

- **Product level data**
  - 15 different audit firms are used, with the top two being PWC (30%) and Ernst & Young (27%). We are seeing increased concentration here (see p. 11).
  - 44 different administrators are used, with the most-used being Citco (19%)
  - 5% of the funds are self-administered
  - 14% have changed a service provider in the last year
  - 4% put up gates or restricted liquidity in the past year. As expected, this figure is down significantly since 2010 (see p. 12).

- **Auditors**
  - Just 15 audit firms utilized by 418* funds
  - Highly concentrated: 84% in the Big Four firms

	Provider	
1	PwC	30%
2	Ernst & Young	27%
3	Deloitte	15%
4	KPMG	12%
	All other providers (11)	16%

84%

  - 98% of the funds utilize one of the Big Four or five other well-known firms (BDO Seidman, Eisner, Grant Thornton, McGladrey & Pullen, Rothstein Kass)

* Differs from total number of responses because some products are no longer being reported or the provider is selected by the investor

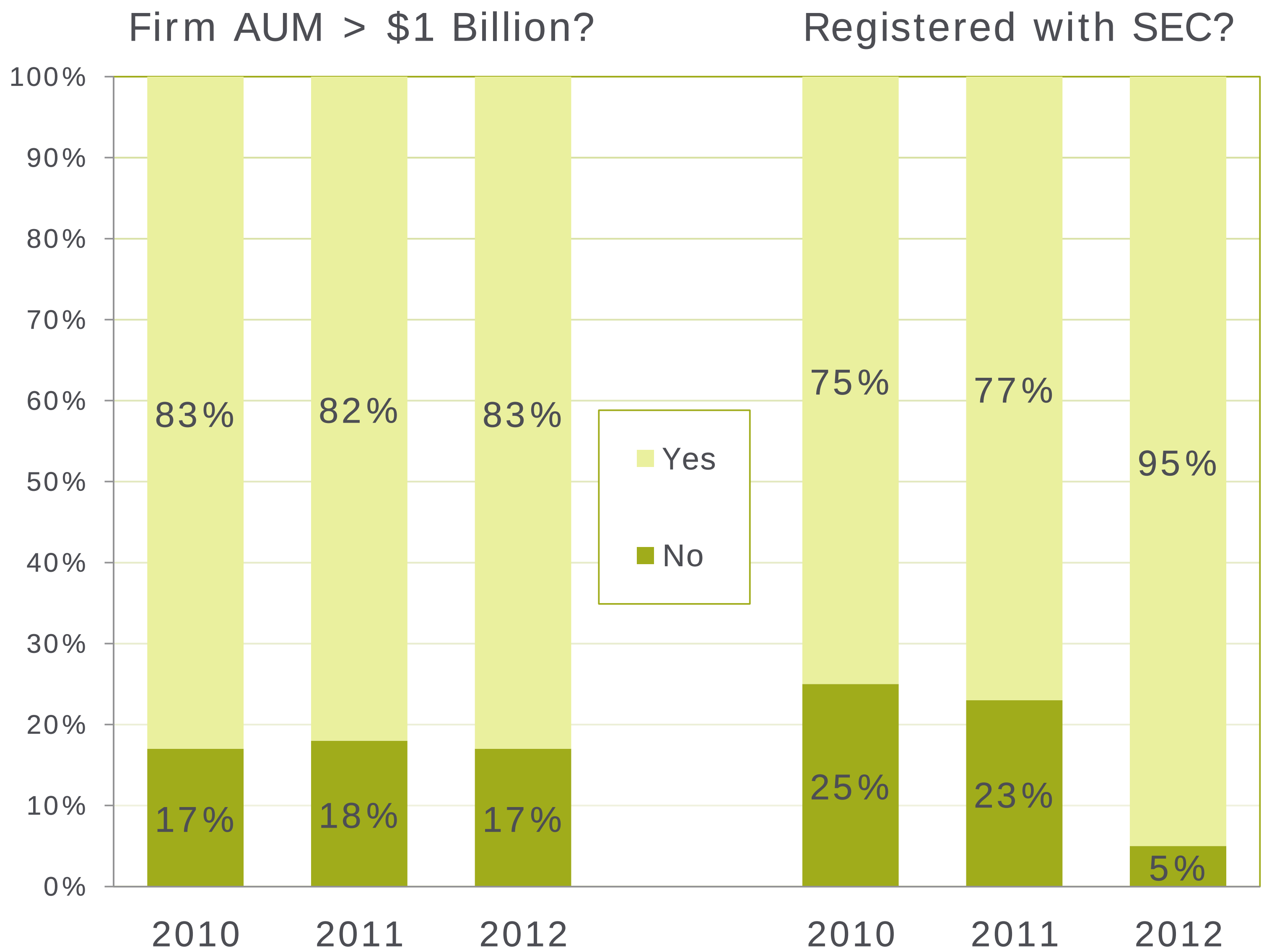
- **Administrators**
  - A diverse group of providers: 44 firms across 411* funds
  - Large concentration in the top 10 (66%)
  - 15 of the bottom 34 service just one or two funds used by NEPC clients

	Provider	
1	Citco Fund Services	19%
2	IFS (International Fund Services)	9%
3	BNY Mellon	8%
4	Goldman Sachs Administration Services	7%
5	Citi Fund Administration	6%
6	SEI Fund Administration	6%
7	HedgeServ	4%
8	State Street AIS	3%
9	Morgan Stanley Fund Services	2%
10	UBS Fund Services	2%
	Self-Administered	5%
	All other providers (34)	29%

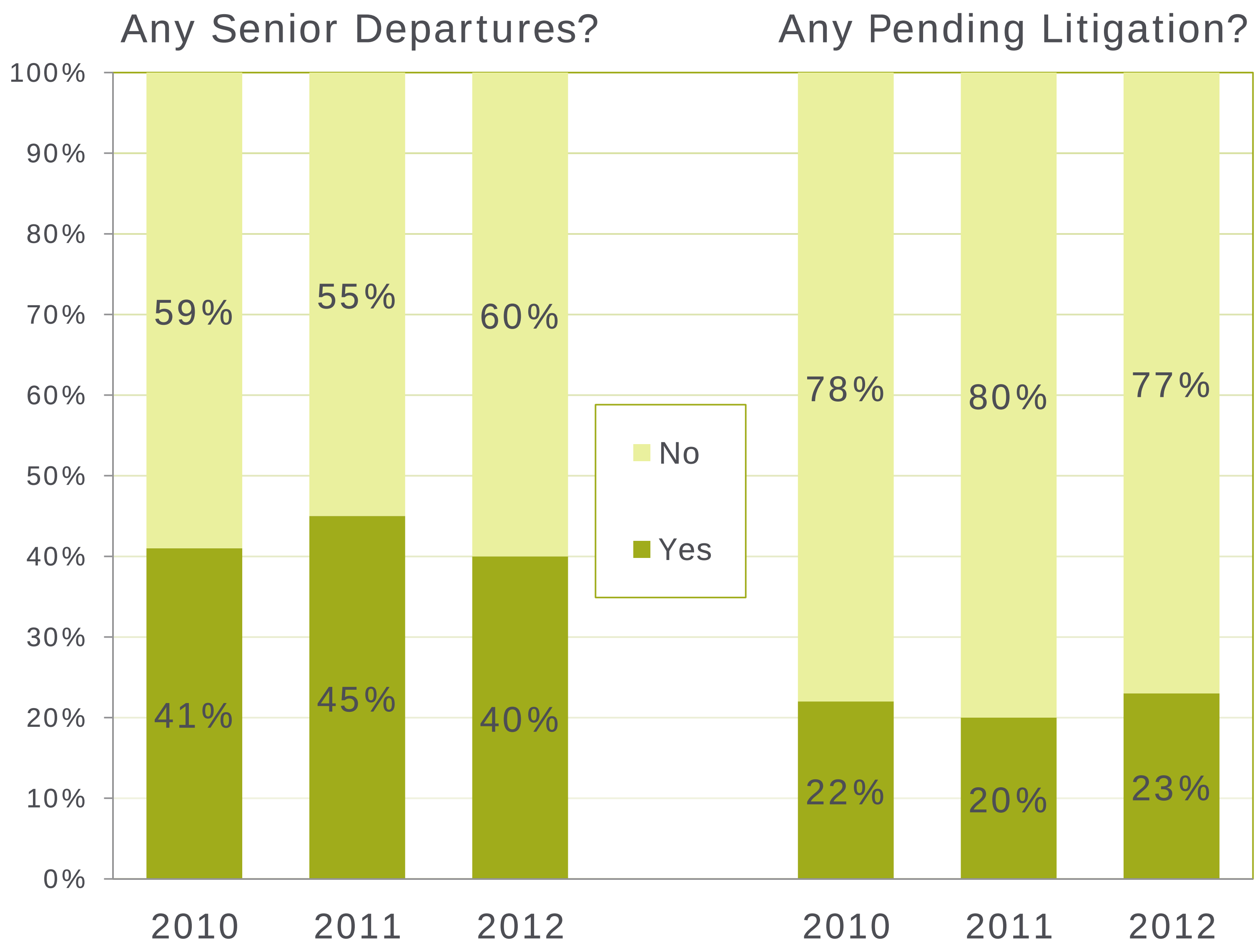
66%

* Differs from total number of responses because some products are no longer being reported, have no administrator or use various providers depending on the investor

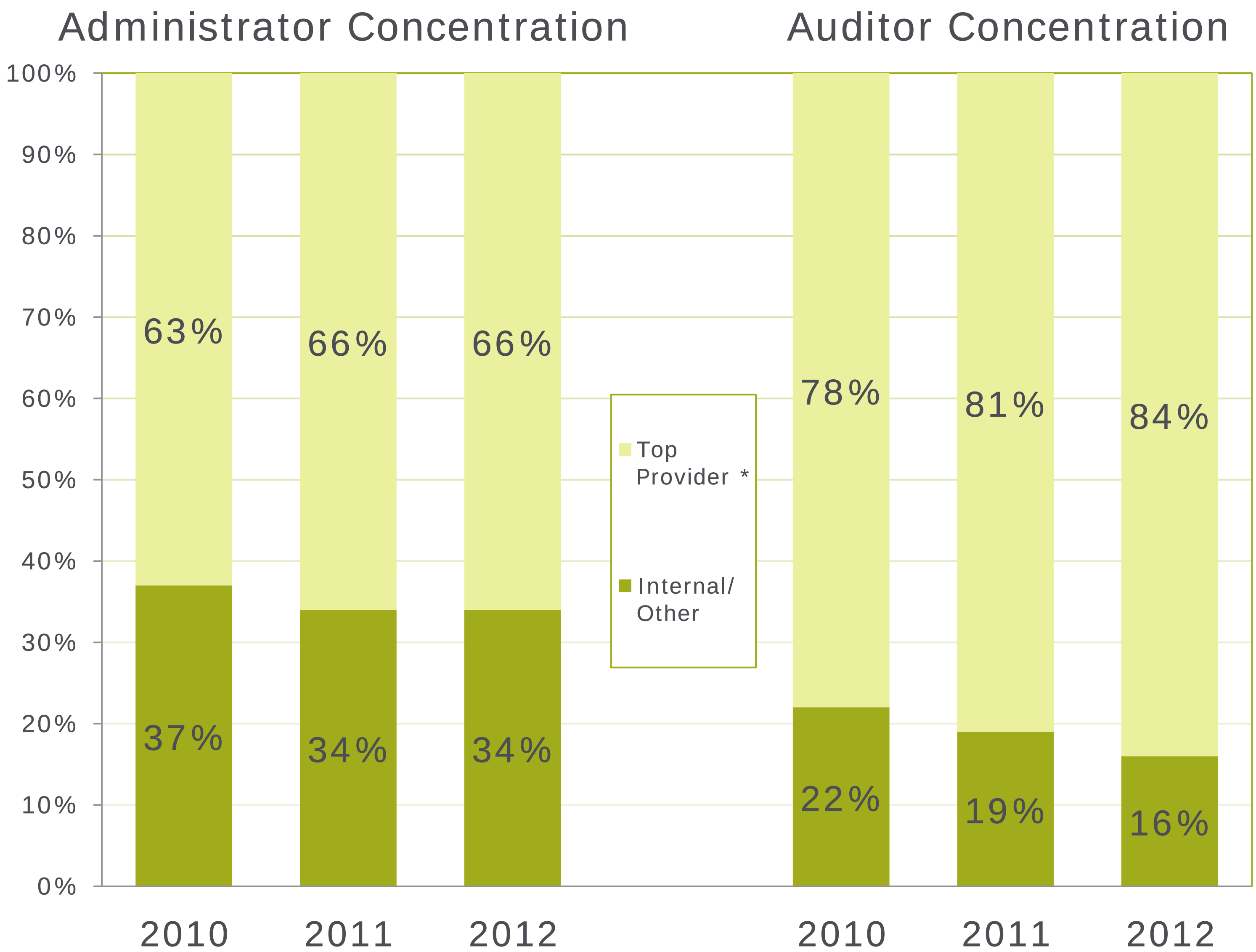
Survey Results



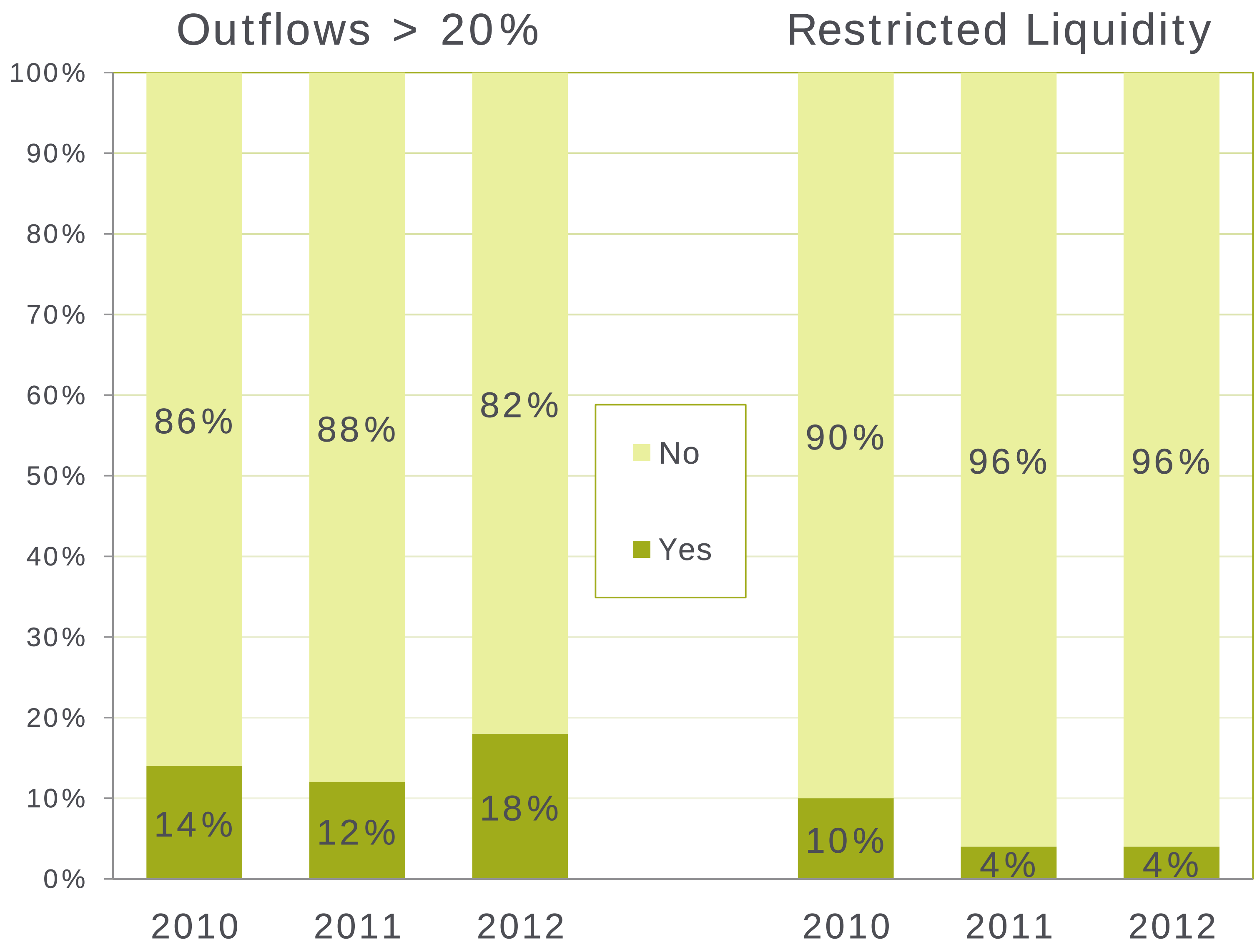
Survey Results



Survey Results



* Top 10 Administrators, Big Four Auditors


Outflows > 20%
Restricted Liquidity
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
86%
88%
82%
90%
96%
96%
14%
12%
18%
10%
4%
4%
No
Yes
2010
2011
2012
2010
2011
2012

Appendix

Survey Questions

- **Firm Questions**
  - Firm AUM
  - Is the firm registered with the SEC?
  - Has the firm been subject to a regulatory exam in the past year?
  - Has the firm's legal structure changed in the past year?
  - Has the firm's ownership changed in the past year?
  - Did any senior personnel leave the firm in the past year?
  - Is there any pending litigation related to the firm or management company?
  - Do you operate or are you affiliated with a Broker/Dealer?
  - Do you utilize the services of any third party marketing firm or Placement Agent?
- **Investment Product Questions**
  - Prime Broker(s)
  - Risk Aggregation System(s)
  - Fund Auditor
  - Fund Administrator and Service Location(s)
  - Custodian
  - How much of the fund is held in a side pocket, how often are the assets priced, and who prices them?
  - Have you changed any of the service providers listed above in the past year?
  - Have net outflows in the past year exceeded 20% of the fund's NAV?
  - Did you put up any gates or restrict liquidity in the past year?

The industry is becoming “institutionalized” *

- A study by Preqin estimates that 61% of hedge fund assets in 2011 come from the institutional sector, a 36% rise from 2008 when the figure stood at 44%.
- This ‘institutionalization’ of the industry is significant because it means that the industry is increasingly responsible for allocations from socially valuable investors such as pension funds, university endowments, charities and annuities.

* Source: 2011 Preqin Global Investor Report

Most Hedge Funds have added Compliance Staff Since 2008 *

- There aren't many hedge funds that aren't spending more on compliance today than four years ago, according to a new survey.
- Just two in 100 hedge funds have not hired additional staff to deal with regulatory compliance since 2008, said KPMG and the Alternative Investment Management Association, while a whopping 98% have done so. And with regulators and institutional investors demanding more of the industry, it's not the only area that hedge funds have worked to improve.
- Some 84% of hedge funds say they've improved transparency for investors. Nine in 10 have seen an increased demand for due diligence.
- "Institutionalization has been described as the continuing inflow of new institutional capital into the industry," AIMA CEO Andrew Baker said. "But as this report demonstrates, it is also about the increasing sophistication of operational infrastructure with respect to transparency, compliance and due diligence."

* Source: FIN Alternatives, 5/24/2012

SEC reports that more than 4,000 are registered *

- Some 4,061 private fund advisers, which include hedge funds and private equity funds, are now registered with the SEC.
- Hedge funds with more than $100 million in assets are now required to be registered by the Dodd-Frank financial regulation law, but most of the 4,061 didn't wait to be forced: Some 2,557 had voluntarily registered before they had to.
- But 1,504 only registered after Dodd-Frank passed last year, including Cerberus Capital Management, Citadel Investment Group, Elliott Management, SAC Capital Advisors and Tudor Investment Corp.
- The SEC also said that some 2,300 advisers with less than $100 million in assets have moved from federal to state regulation.

* Source: FIN Alternatives, 10/22/2012

SEC announces Presence Exams *

- A letter from the SEC was sent to newly registered investment advisers.
- According to the letter, “The Presence Exams initiative will take place over the next two years and it has three primary phases: engagement; examination; and reporting.” Firms will be contacted again if they have been selected for an examination.
- The Engagement Phase is an effort to inform registered firms about their obligations and to alert them to the outreach.
- The Examination Phase will encompass one or more “higher-risk areas”.
- Once the examination phase is over, the Reporting Phase kicks in and observations will be sent to the SEC and made public.

* Source: SEC letter, 10/9/2012

Form PF Introduced **

- One major source of anxiety for fund managers this summer was Form PF, the “unprecedentedly invasive questionnaire” that came due for the first time on August 29.

** Source: BloombergBusinessweek, 10/15/2012

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In addition, it is important that investors understand the following characteristics of non-traditional investment strategies including hedge funds and private equity:

1. Performance can be volatile and investors could lose all or a substantial portion of their investment
2. Leverage and other speculative practices may increase the risk of loss
3. Past performance may be revised due to the revaluation of investments
4. These investments can be illiquid, and investors may be subject to lock-ups or lengthy redemption terms
5. A secondary market may not be available for all funds, and any sales that occur may take place at a discount to value
6. These funds are not subject to the same regulatory requirements as registered investment vehicles
7. Managers may not be required to provide periodic pricing or valuation information to investors
8. These funds may have complex tax structures and delays in distributing important tax information
9. These funds often charge high fees
10. Investment agreements often give the manager authority to trade in securities, markets or currencies that are not within the manager's realm of expertise or contemplated investment strategy