
Investor Return – Mind the Gap



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Agenda

- ▶ Background
- ▶ The Real Test is Whether Investors Succeed
 - ▶ Total Return vs Investor Return
- ▶ Introduce the Investor Return
 - ▶ How much investors lose chasing returns
 - ▶ Investors often suffer from poor timing (buy high, sell low)
- ▶ Key Take-Away

Background

- ▶ **Market timing is one of the most popular investment technique Investors around the world have been employing**
 - ▷ Unfortunately, average Investors often suffer from poor timing and end up buying and selling at the wrong times.
 - ▷ Timing the market is too difficult. “It is a losing strategy”

- ▶ **Chasing (short term) past performance has been a basic investment strategy for average investors**
 - ▷ Unfortunately, again, average Investors usually came in too late.
 - ▷ Chasing hot product or hot trendy funds have never been a good investment idea.

The Real Test is Whether Investors Succeed

▶ Total Return

- ▶ Time-weighted calculation
- ▶ Assumes investor buys and holds for entire period with no additional investments (simply a buy-and-hold strategy)

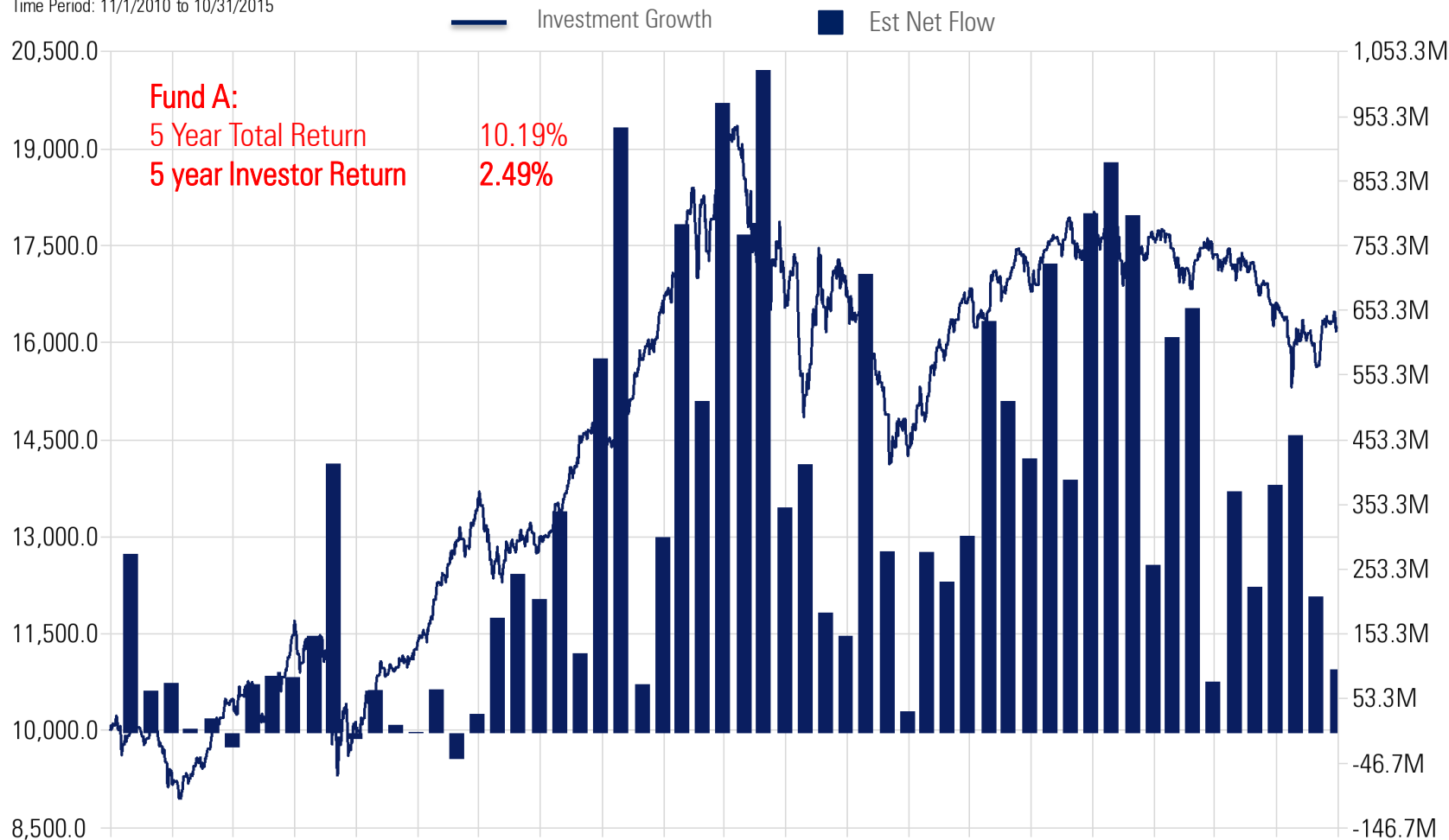
▶ Investor Return

- ▶ Money (Asset)-weighted calculation
- ▶ Accounts for aggregate monthly purchases and sales by all of a fund's investors (takes inflows and outflows into account)

How does the Investor Return work

Investment Growth VS Est Net Flow

Time Period: 11/1/2010 to 10/31/2015



Source: Mominostar Direct

- In contrast to total return, a fund's investor return takes into account the fact not all of a fund's investors bought it at the beginning of a period and held it until the end.

Investor Return - Methodology

► Estimated Net Flow

- We first calculate the monthly cash inflows and outflows for each fund. The cash flow estimate for a month (C) is simply the difference in beginning and ending total net assets (TNA) that cannot be explained by the monthly total return (r).

$$C_t = TNA_t - TNA_{t-1} (1 + r_t)$$

- Then, as with an internal rate of return calculation, investor return is the constant monthly rate of return that makes the beginning assets equal to the ending assets with all monthly cash flows accounted for.

What Investor Returns are trying to Tell You?

- ▶ Measures the experience of the average investor in a fund, it is not one specific investor's experience.
- ▶ Return Gap between investor return and total return indicates how well investors timed their fund purchases and sales.
- ▶ Investor returns are not a substitute for total returns but can be used in combination with total returns.

Mind the Gap

► **Investor Return Gap = Asset Weighted Investor Return – Average Total Return**

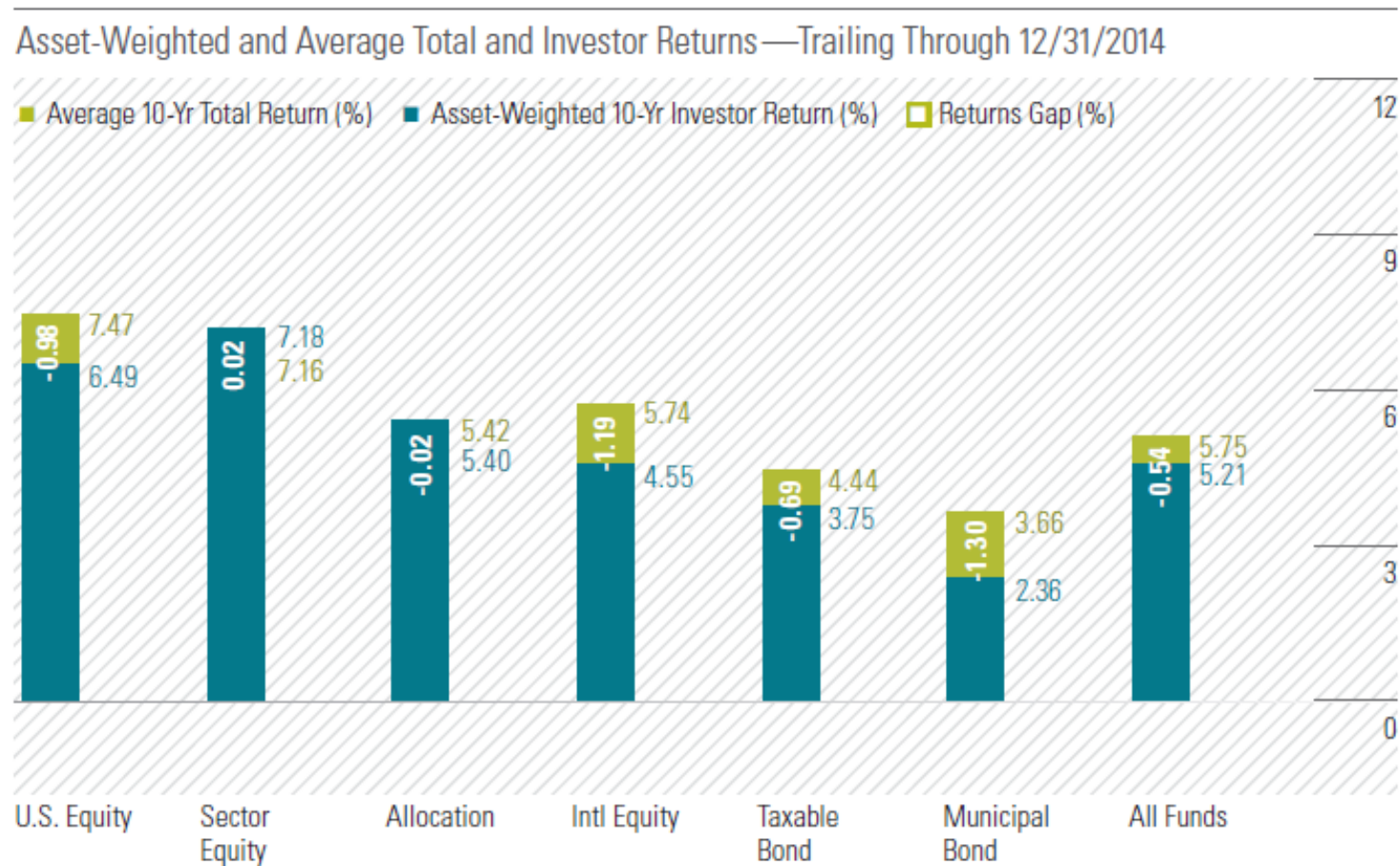
► Study on U.S. domiciled funds

Investor Returns			
Group	Asset-Weighted 10-Year Investor Return, %	Average 10-Year Total Return, %	10-Year Return Gap, %
2012			
U.S. Equity	6.88	7.89	-1.01
Sector Equity	9.07	9.44	-0.37
Allocation	5.53	6.37	-0.84
International Equity	6.84	9.95	-3.11
Taxable Bond	4.76	5.63	-0.87
Municipal Bond	2.71	4.06	-1.35
All Funds	6.10	7.05	-0.95
2013			
U.S. Equity	6.52	8.18	-1.66
Sector Equity	6.32	9.46	-3.14
Allocation	4.81	6.93	-2.12
International Equity	5.76	8.77	-3.01
Taxable Bond	3.15	5.39	-2.24
Municipal Bond	1.65	3.53	-1.88
All Funds	4.81	7.30	-2.49

Mind the Gap

► Recent study in 2014

► Surprise! The Investor Return Gap Shrinks



Risk and Investor Returns

Group	Risk Quartile	Ast-Wgt 10-yr Investor Return %	Average 10-yr Total Return %	10-yr Return Gap %	Average Overall Morningstar Risk
U.S. Diversified Funds	1	8.76	7.60	1.15	1.68
	2	6.68	7.78	-1.11	2.25
	3	7.27	7.40	-0.13	2.58
	4	5.25	7.38	-2.13	3.13
Balanced	1	4.32	4.53	-0.22	0.41
	2	6.65	5.38	1.26	0.78
	3	4.96	5.52	-0.57	0.93
	4	5.44	5.52	-0.08	1.34
Intl Equity Funds	1	7.24	6.45	0.79	1.71
	2	3.83	5.49	-1.66	2.48
	3	4.91	5.55	-0.64	2.95
	4	4.10	5.85	-1.75	3.90
Taxable Bond	1	2.53	4.01	-1.48	0.10
	2	3.02	4.03	-1.02	0.21
	3	4.26	4.84	-0.58	0.34
	4	3.78	4.46	-0.68	0.35
Municipal Bond	1	2.09	3.58	-1.49	0.14
	2	2.65	3.84	-1.18	0.20
	3	2.72	3.67	-0.95	0.19
	4	1.76	3.53	-1.77	0.38
All Funds	1	6.56	5.30	1.26	0.84
	2	5.88	5.91	-0.04	1.53
	3	5.63	5.95	-0.32	1.90
	4	4.53	5.84	-1.32	2.36

- ▶ The lowest-risk quartile has a 6.56% 10-year annualized versus a 5.3% average return, making for a positive gap of 126 basis points.
- ▶ On the other hand, the highest-risk quartile of funds had an average investor return of 4.53% (more than 200 basis points worse than the lowest-risk quartile) and it had a gap of 132 basis points.

Mind the Gap – Watch Out, Thai Fund Investors!!!

Mind the Gap – 5 year annualized

- Investor Return Gap = Asset Weighted Investor Return – Average Total Return

Morningstar Thailand Category	Ast-Wgt 5yr Investor Return %	Average 5yr Total Return %	5yr Return Gap %
Money Market	2.04	2.13	-0.09
Short Term Bond	2.50	2.65	-0.15
Mid/Long Term Bond	3.01	2.82	0.19
Global Bond	3.26	3.65	-0.39
Emerging Market Bond	4.86	3.94	0.92
Conservative Allocation	4.38	4.09	0.29
Moderate Allocation	3.38	4.57	-1.19
Aggressive Allocation	8.07	8.00	0.06
Global Allocation	2.45	2.81	-0.36
Equity Small/Mid-Cap	5.96	12.27	-6.30
Equity Large-Cap	6.78	8.69	-1.91
Global Equity	7.73	5.69	2.04
Europe Equity	0.46	4.63	-4.17
Asia Pacific ex-Japan Equity	2.02	0.37	1.65
Emerging Market Equity	-1.44	-4.32	2.88
US Equity	11.61	12.59	-0.98
Japan Equity	10.10	10.01	0.09
China Equity	3.99	1.23	2.76
Global Health Care	15.35	20.75	-5.40
Property Indirect	8.82	11.25	-2.43
Commodities Energy	-12.96	-13.50	0.54
Commodities Precious Metals	-5.70	-2.01	-3.69

Mind the Gap – 3 year annualized

Morningstar Thailand Category	Ast-Wgt 3yr Investor Return %	Average 3yr Total Return %	3yr Return Gap %
Money Market	1.93	1.99	-0.06
Short Term Bond	2.53	2.69	-0.16
Mid/Long Term Bond	3.09	2.97	0.11
Global Bond	3.11	1.56	1.54
Emerging Market Bond	2.43	0.98	1.45
Conservative Allocation	2.18	2.74	-0.56
Moderate Allocation	2.16	2.62	-0.45
Aggressive Allocation	4.07	4.49	-0.43
Global Allocation	3.01	2.92	0.09
Equity Small/Mid-Cap	2.25	7.39	-5.13
Equity Large-Cap	2.69	4.53	-1.85
Global Equity	8.55	8.06	0.48
Europe Equity	1.77	9.79	-8.02
Asia Pacific ex-Japan Equity	3.21	4.15	-0.94
Emerging Market Equity	-1.26	-2.73	1.46
US Equity	16.99	14.08	2.90
Japan Equity	19.40	19.84	-0.44
China Equity	7.48	7.53	-0.06
Global Health Care	15.27	26.35	-11.08
Property Indirect	3.89	5.89	-2.00
Commodities Energy	-23.11	-20.41	-2.71
Commodities Precious Metals	-11.28	-11.02	-0.26

Mind the Gap – 1 year

Morningstar Thailand Category	Ast-Wgt 1yr Investor Return %	Average 1yr Total Return %	1yr Return Gap %
Money Market	1.64	1.61	0.03
Short Term Bond	2.16	2.47	-0.32
Mid/Long Term Bond	2.95	2.52	0.43
Global Bond	0.16	-1.33	1.49
Emerging Market Bond	-2.27	-6.71	4.44
Conservative Allocation	0.65	0.65	0.01
Moderate Allocation	-4.46	-3.35	-1.11
Aggressive Allocation	-6.91	-6.23	-0.67
Global Allocation	3.22	-0.65	3.87
Equity Small/Mid-Cap	-7.64	-4.71	-2.94
Equity Large-Cap	-8.90	-9.24	0.33
Global Equity	4.06	3.41	0.65
Europe Equity	13.39	11.41	1.98
Asia Pacific ex-Japan Equity	-3.98	-3.00	-0.98
Emerging Market Equity	-9.64	-13.91	4.27
US Equity	15.59	7.90	7.70
Japan Equity	13.38	17.05	-3.68
China Equity	-0.53	4.70	-5.22
Global Health Care	7.46	13.60	-6.14
Property Indirect	7.23	9.62	-2.39
Commodities Energy	-36.61	-49.50	12.89
Commodities Precious Metals	-0.53	0.16	-0.70

Money usually flowing into a hot market

World Index - Heat Map						
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Take a closer look at some hot and trendy funds

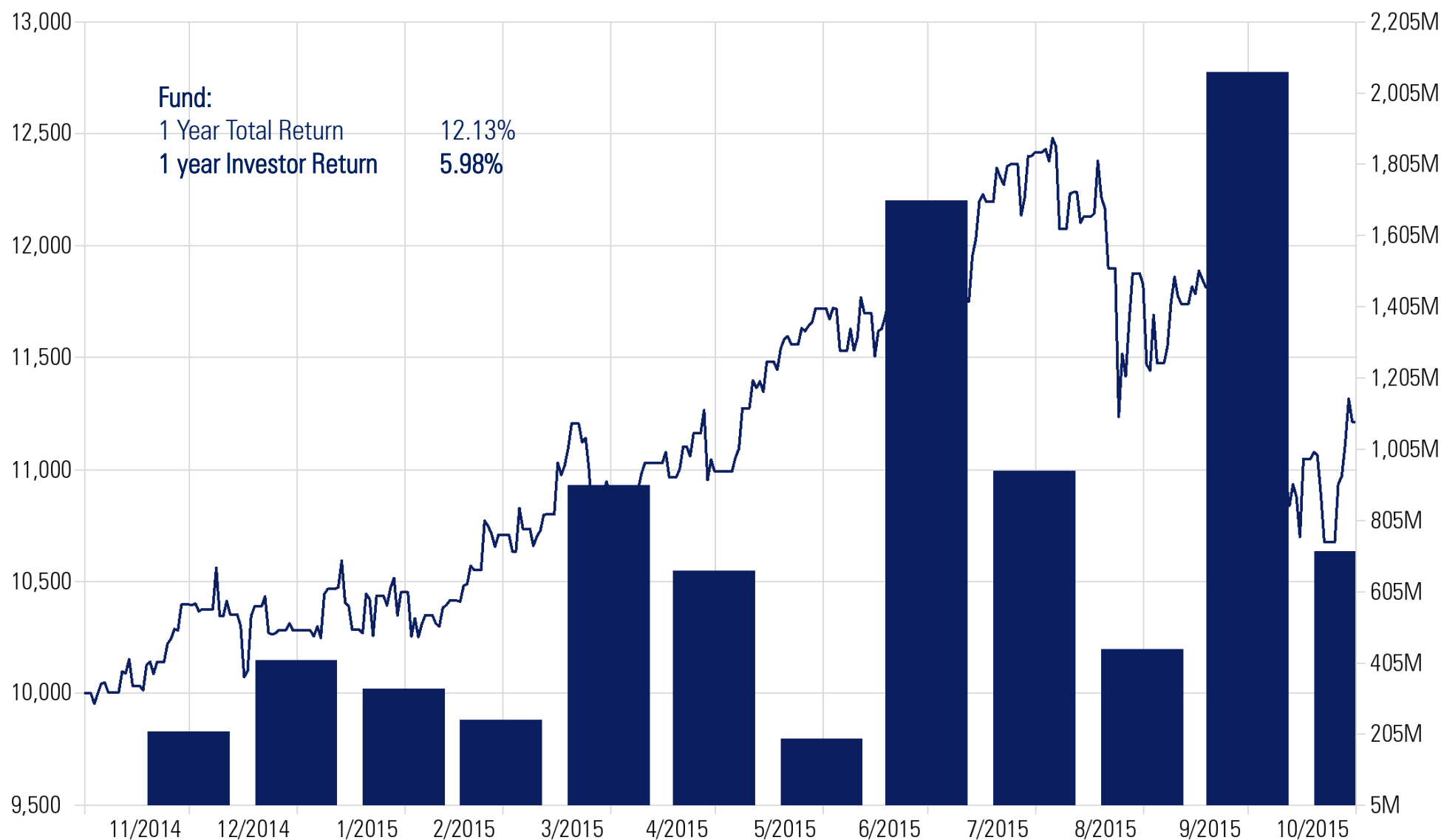
- ▶ Top 5 net inflow Morningstar Thailand categories YTD (excluding fixed income and money market)

			Estimated Net Flow (฿Mil)			
	Name		1-Mo	QTD	YTD	1-Yr
1	Money Market		11,124	11,124	180,587	172,129
2	Global High Yield Bond Fix Term		81,571	81,571	134,591	113,684
3	Short Term Bond		3,836	3,836	129,803	148,737
4	Mid/Long Term Bond		10,279	10,279	114,759	140,176
5	Global Health Care		2,578	2,578	46,669	54,767
6	Japan Equity		(129)	(129)	23,582	21,446
7	China Equity		(58)	(58)	17,258	17,219
8	Europe Equity		687	687	13,497	11,756
9	Property Indirect		732	732	9,893	9,809
10	Equity Large-Cap		854	854	7,939	52,551

Investment Growth VS Est Net Flow - Global Health Care

Time Period: 11/1/2014 to 10/31/2015

— Investment Growth ■ Est Net Flow

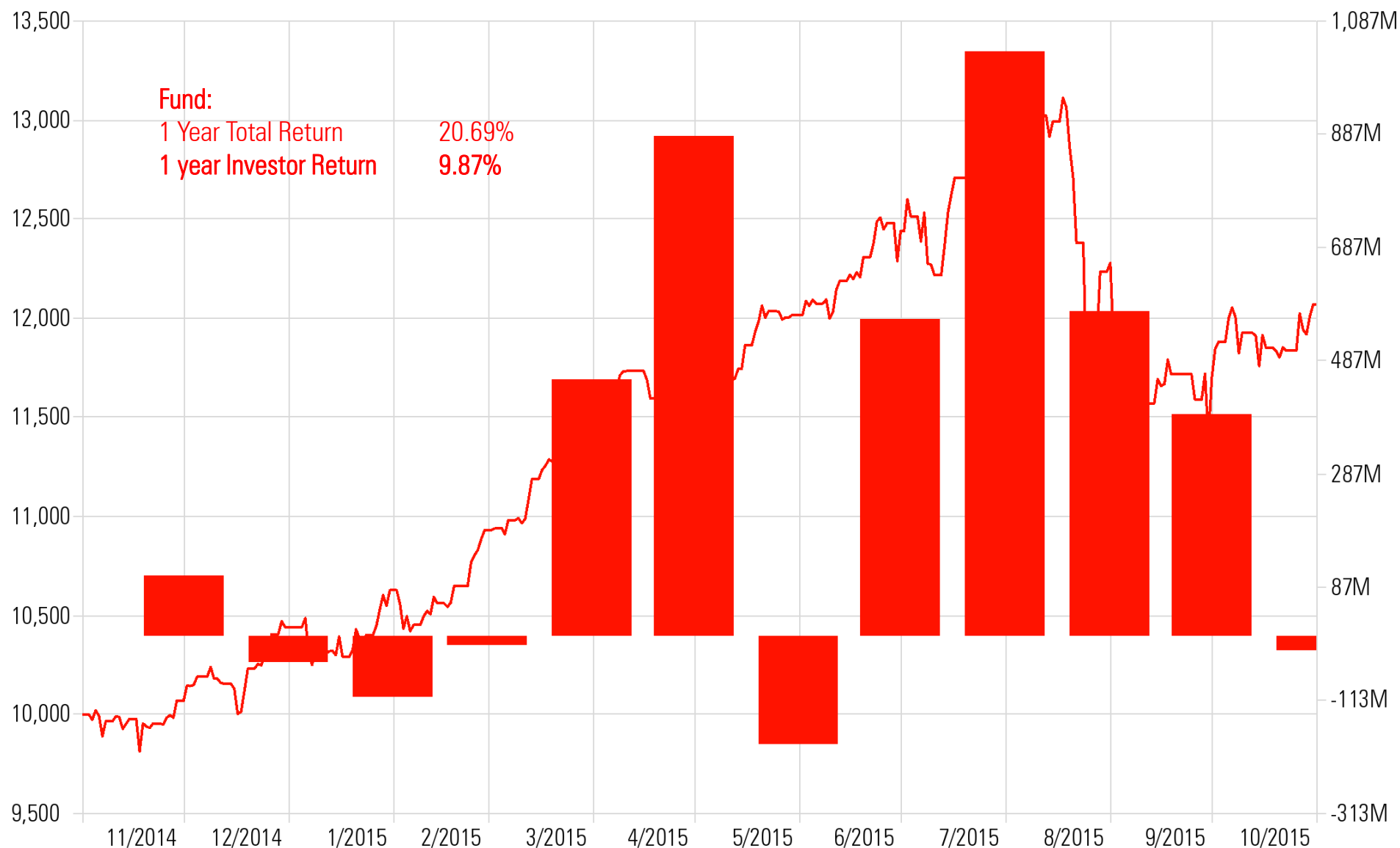


Source: Morningstar Direct

Investment Growth VS Est Net Flow - Japan Equity

Time Period: 11/1/2014 to 10/31/2015

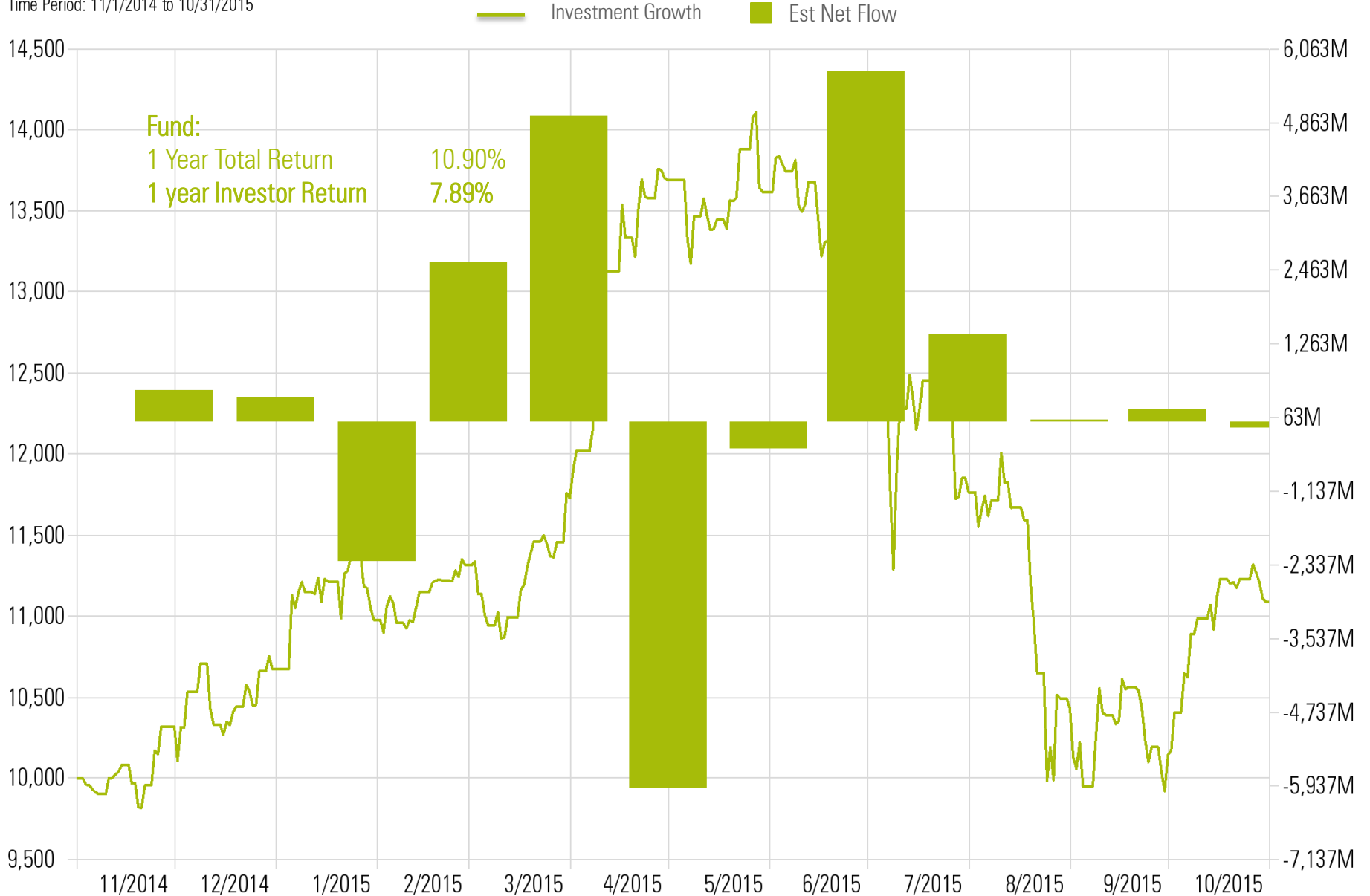
— Investment Growth ■ Est Net Flow



Source: Morningstar Direct

Investment Growth VS Est Net Flow - China Equity

Time Period: 11/1/2014 to 10/31/2015

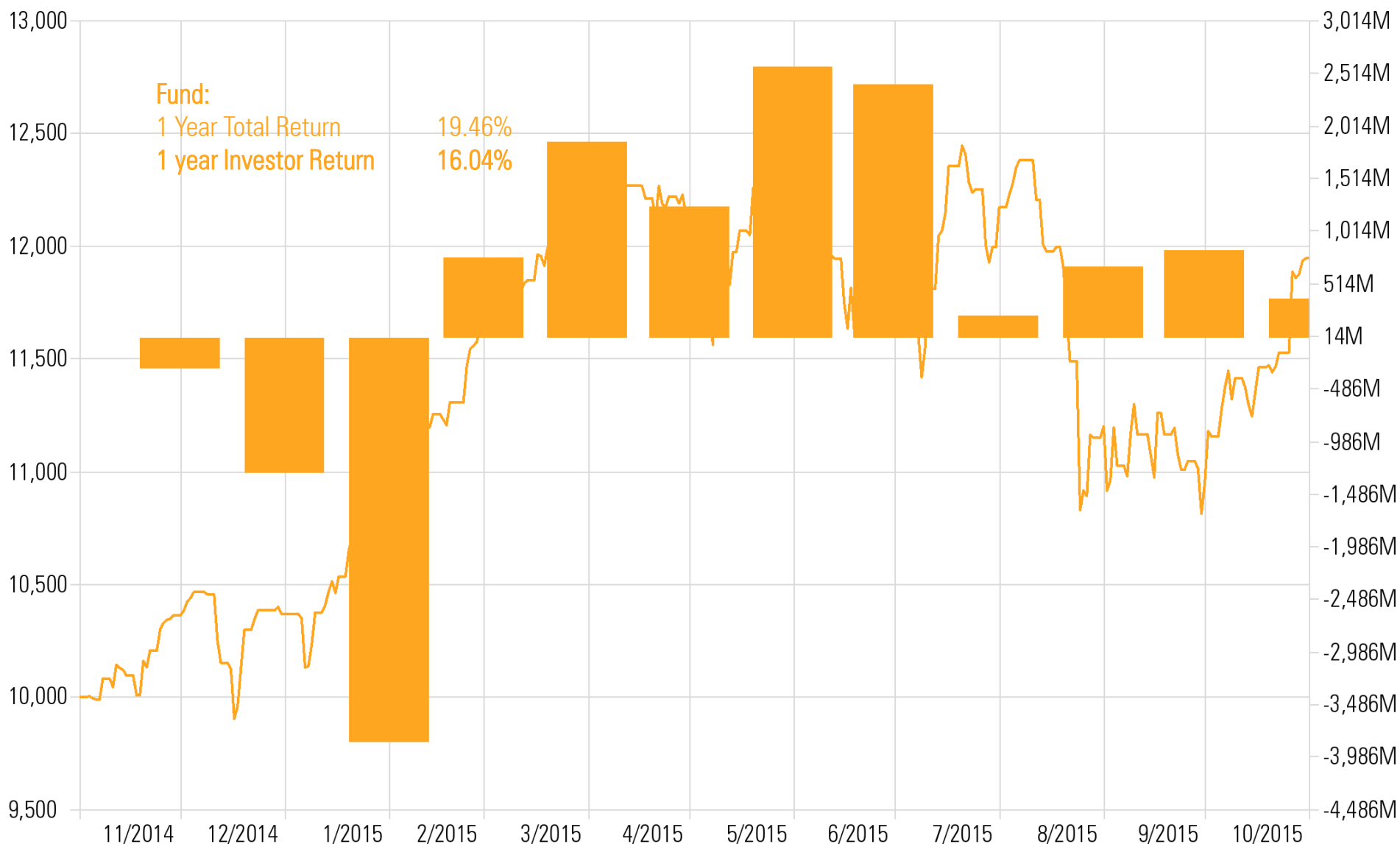


Source: Mominastar Direct

Investment Growth VS Est Net Flow - Europe Equity

Time Period: 11/1/2014 to 10/31/2015

Investment Growth Est Net Flow

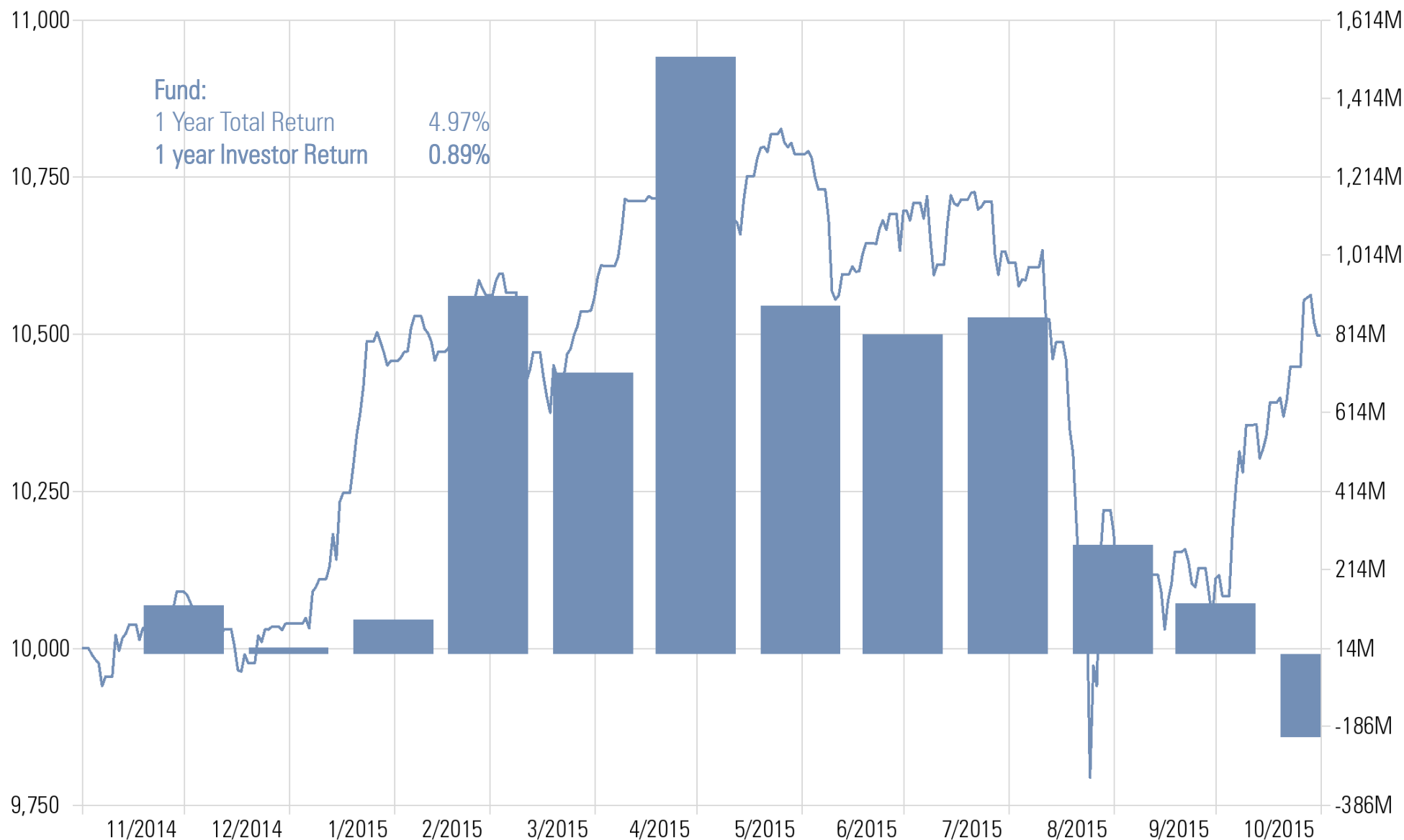


Source: Morningstar Direct

Investment Growth VS Est Net Flow - Property Indirect

Time Period: 11/1/2014 to 10/31/2015

— Investment Growth ■ Est Net Flow



Source: Mominstar Direct

Key Take-Away

- ▶ **Stick to Your Plan**

- ▶ Develop a robust investment plan and stick to it, avoid letting fear or greed drive your decisions.

- ▶ **Tune Out Noise**

- ▶ Don't spend too much time watching TV news or checking your accounts, it only leads to bad behavior. Focus on your needs and goals.

- ▶ **Rebalancing is the Key**

- ▶ When you rebalance, you are buying low and selling high because you are culling winning investments and adding cheaper investments.
- ▶ Alternatively, a balanced fund with fixed allocation or a target-date fund.

Key Take-Away

- ▶ **Looking for lower-risk funds**

- ▶ Low-volatility funds tend not to attract greedy short-term investors with explosive gains and also do a better job of protecting shareholders' capital during downturns.

- ▶ **Last but not least, fund companies also have a responsibility to produce effective funds and to promote sound investment strategies.**

- ▶ If these companies encourage short-term trading and trendy funds, they may not be looking out for the investors' long-term interests.
- ▶ Or if they advertise short-term returns and promote high-risk funds, it will likely have funds with low investor returns.

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