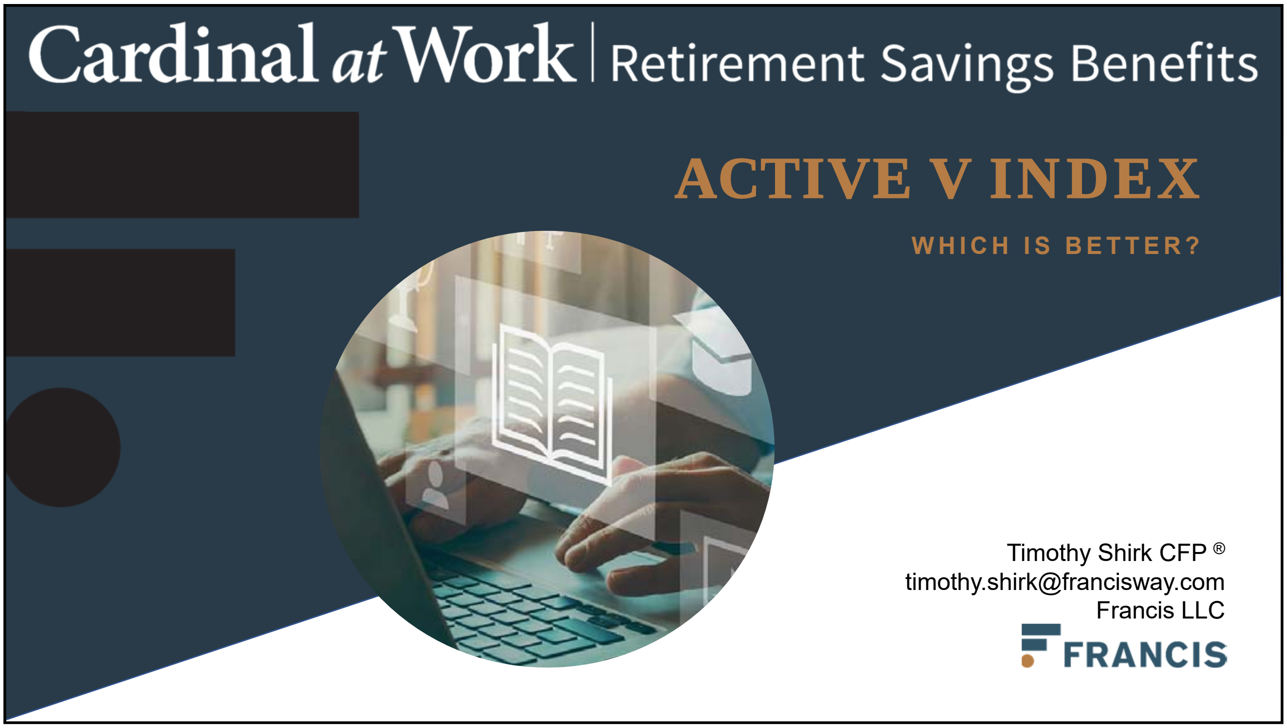
Cardinal at Work | Retirement Savings Benefits
ACTIVE V INDEX
WHICH IS BETTER?
Timothy Shirk CFP ®
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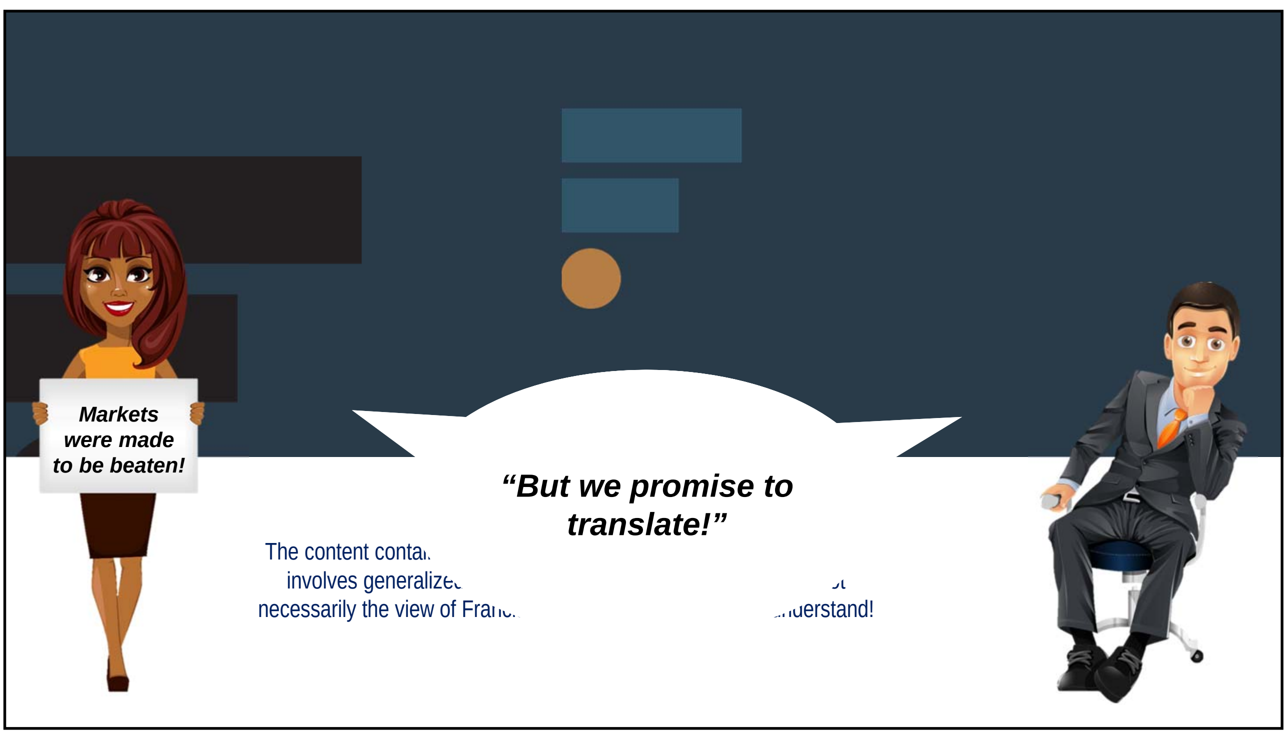
Francis LLC
FRANCIS
1


Markets were made to be beaten!
“But we promise to translate!”
The content
involves
necessarily the view of
2

What we’ll cover today

- The difference
- The debate
- The decision

3

What we’ll cover today

- The difference

4

Review – Stock Investments

- **Stock investments represent ownership of individual companies**
- **These companies can be divided by**
  - **Size of company**
  - **Type of company**
  - **Location of company**

- **These are purchased with the hope of future sales for a profit**

5

Review – Mutual Funds

- Mutual – many investors
- Fund – pool their money
- Investments – to purchase investments
- But how do they decide what to buy?

Mutual Fund Manager

6

How does the mutual fund manager pick?

Passive (Index) Manager
Goal: BE the Market!

Active Manager
Goal: BEAT the Market

7

What is an index?

S&P 500 | *Russel 2000* | *MSCI Ex USA*

Sample of S&P 500, Russel 2000, and MSCI Ex USA Companies

8

Large US Companies

S&P 500 Index

Sample of S&P 500 Companies

9

Option 1 – Pay an active manager to pick the best!

Large Cap Active Portfolio

"While this will cost you a little more, the hope is you will obtain a better return."

For illustration purposes only – Not a recommendation.

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Option 2 – Pay much less to buy the whole market!

Large-Cap Index Portfolio

"In return for paying much less, you will receive the performance of the market index."

Sample of S&P 500 Companies – Not a recommendation

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What we'll cover today

- **The difference**
- **The debate**

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The Case for Index (Passive)

- **Zero-Sum Game Theory**
- **The Impact of Fees**
- **Scarcity of Persistent Outperformance**

The case for low-cost index-fund investing – Vanguard April 2019

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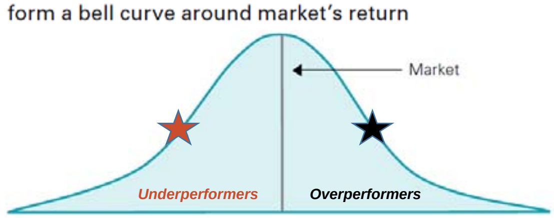
The Case for Index (Passive)

- **Zero-Sum Game Theory**
  - **The aggregate market return is equal to the asset-weighted return of all market participants.**
  - **For each position that outperforms the market, there must be a position that underperforms the market by the same amount.**

Figure 1. Market participants' asset-weighted returns form a bell curve around market's return



Source: Vanguard.

The case for low-cost index-fund investing – Vanguard April 2019

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The Case for Index (Passive)

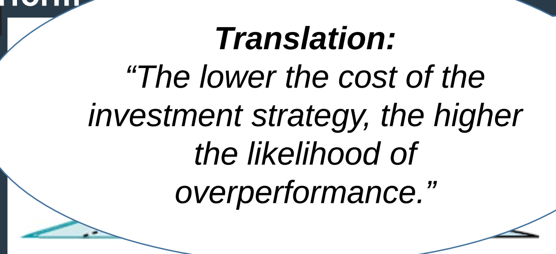
- **Zero-Sum Game Theory**
  - **The aggregate market return is equal to the asset-weighted return of all market participants.**
  - **For each position th... there must be a pos... by the sa...**
  - **As a res... of all i...**

Translation:
"Taken as a whole, active managers will not outperform the average market return!"

Theoretical summation for the purpose of illustrating the Zero-Sum Game theory. Assumes a theoretical, efficient, cost free market
The case for low-cost index-fund investing – Vanguard April 2019

The Case for Index (Passive)

- **The impact of fees**
  - **Investors are subject to costs which shift the return distribution to the left.**
  - **This reduces the number of investments that out-perform th...**



Source: Vanguard.

Translation:
"The lower the cost of the investment strategy, the higher the likelihood of overperformance."

"Considerable evidence supports the view that the odds of outperforming a majority of similar investments increase if investors simply seek the lowest possible cost for a given strategy" – The Case for Low-Cost Index-Fund Investing, Vanguard April 2019
Theoretical summation for the purpose of illustrating the impact of fees.

The Case for Index (Passive)

- **Scarcity of Persistent Outperformance**
  - **Studies including Sharpe (1966) and Jensen (1968), Carhart (1997), and Fama and French (2010) indicate how difficult it is to consistently outperf**
  - **A Vanguard Stu   active funds avail market o**

The Case for Low Cost Index-Fund Investing, Vanguard, April 2019
Keys to improving the odds of active management success, Vanguard April 2016
Past performance is not a guarantee of future results.

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The Case for Index (Passive)

	YTD	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005
Average -Large Cap Core Fund	17.1%	-5.1%	20.9%	12.3%	-0.7%	11.3%	31.8%	15.3%	0.1%	12.8%	28.2%	-37.1%	6.6%	13.4%	5.7%
S&P 500	18.5%	-4.4%	21.8%	12.0%	1.4%	13.7%	32.4%	16.0%	2.1%	15.1%	26.5%	-37.0%	5.5%	15.8%	4.9%
% Active Outperformance	37.6%	30.9%	37.8%	26.5%	32.9%	17.8%	41.7%	42.3%	25.5%	26.2%	53.0%	53.4%	60.3%	34.1%	64.8%

Source: Lipper , 2019 YTD as of 6/30/19
Francis LLC News You Can Use
Past performance does not guarantee future results.

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The Case for Active Investing

- The long-term perspective
- Good times and bad times
- Not all indexes are created equal

The Case for Active Investing

- The long-term perspective

Remember this chart?

	YTD	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	Batting Average
Average -Large Cap Core Fund	17.1%	-5.1%	20.9%	12.3%	-0.7%	11.3%	31.8%	15.3%	0.1%	12.8%	28.2%	-37.1%	6.6%	13.4%	5.7%	
S&P 500	18.5%	-4.4%	21.8%	12.0%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-37.0%	5.5%	15.8%	4.9%	
% Active Outpe[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	34.1%	64.8%	4 of 15

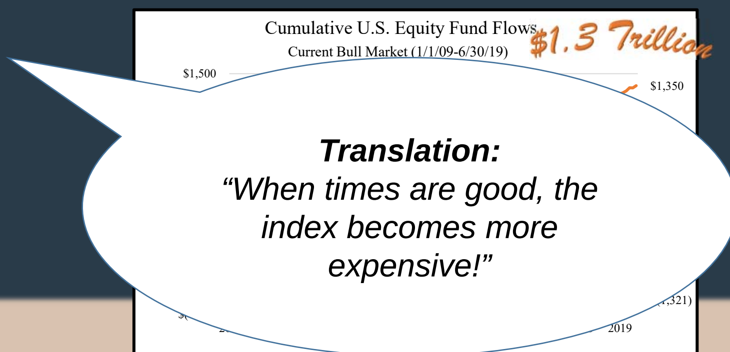
Translation:
"Even a successful ride is a bumpy one!
Take the long view."

- A 1 …
  fr …
- C …
  o …
  - 59 …
  - 98% u …
  - All of them under… least 3 years! †

Source: Lipper, Francis LLC News You Can Use
† Keys to improving the odds of active management success, Vanguard April 2016
Past performance is not a guarantee of future results.

The Case for Active Investing

- **Good Times And Bad Times**
  - **"Momentum Effect" – cash flow into the index during good times can make the index overvalued**



Source: Morningstar Asset Flows 2009-01-01 to 2019-06-30

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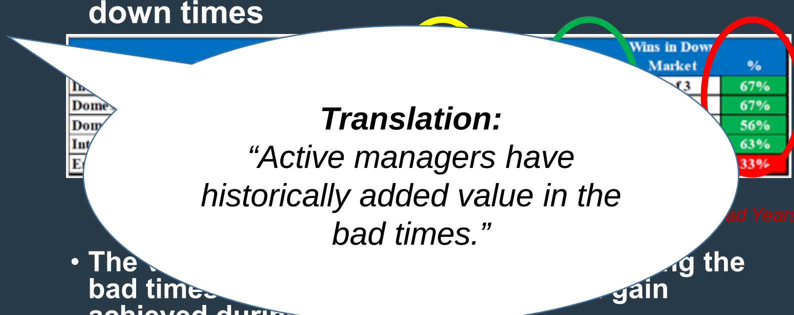
The Case for Active Investing

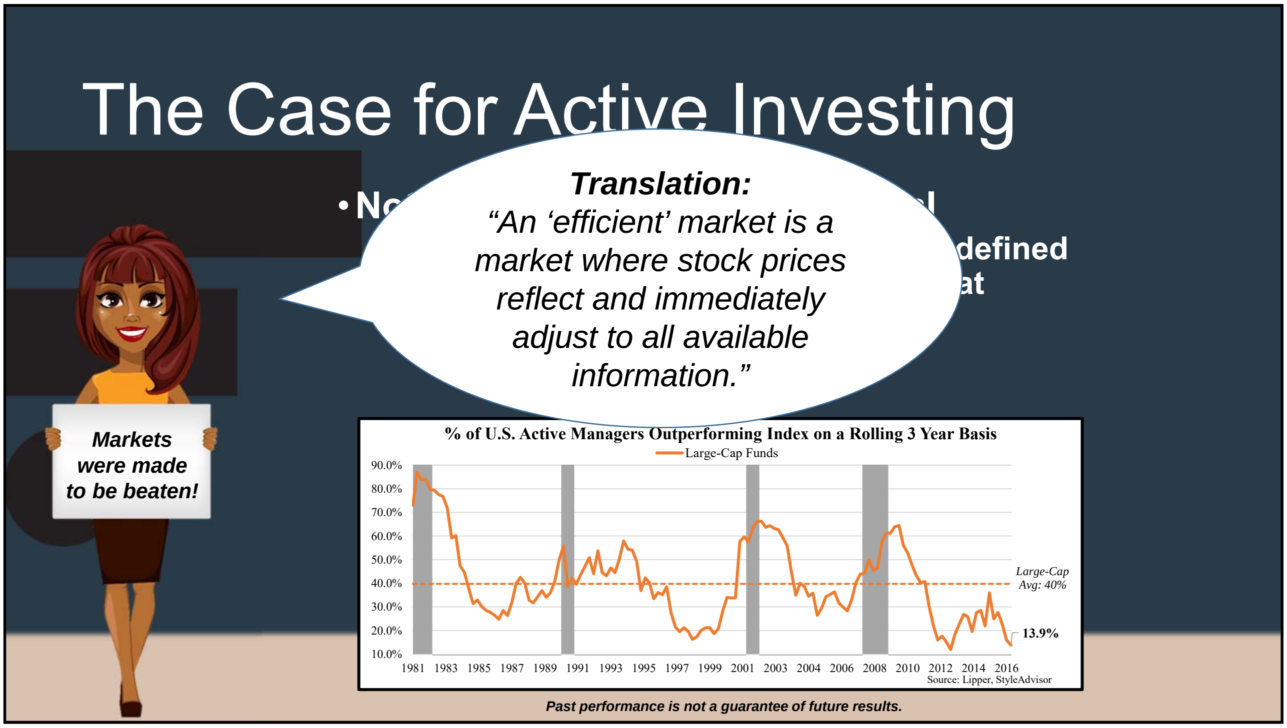
- **Good Times And Bad Times**
  - **Active managers can add value during the down times**



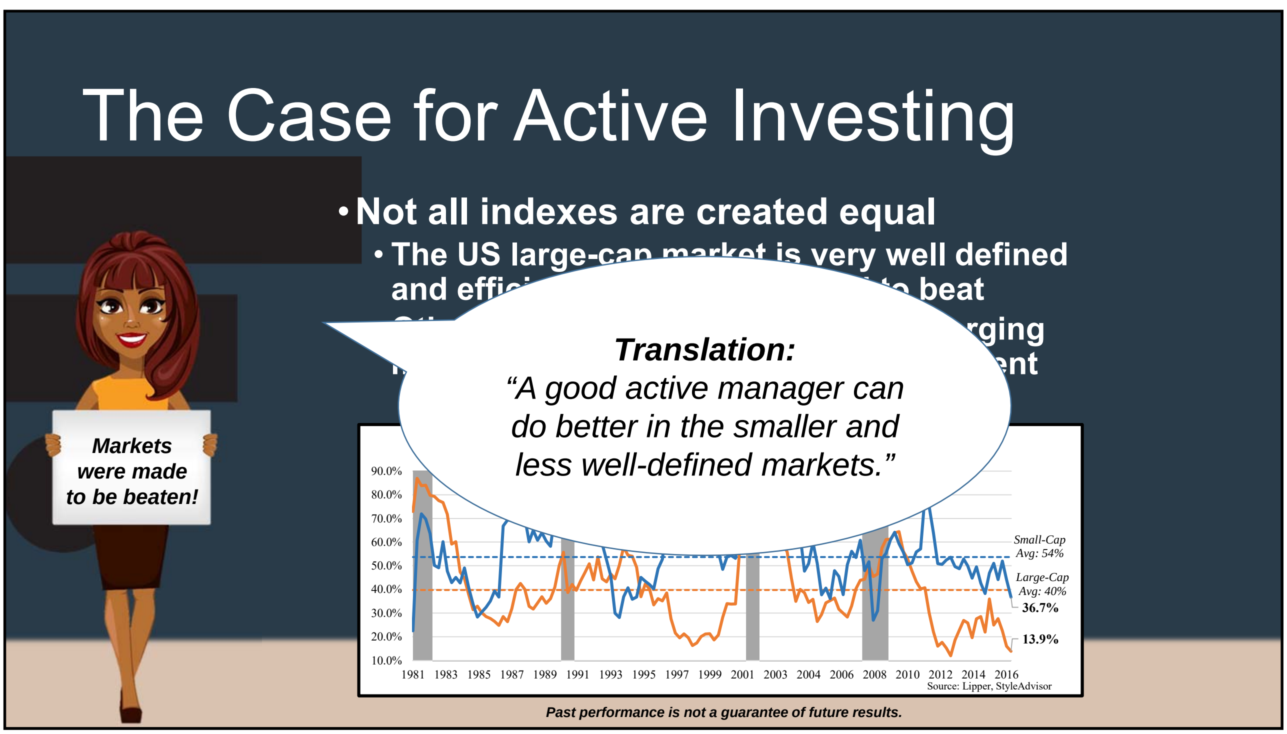
- **The ... ng the bad time ... gain achieved during ...**

Past performance is not a guarantee of future results.

22


The Case for Active Investing
Translation:
“An ‘efficient’ market is a market where stock prices reflect and immediately adjust to all available information.”
Markets were made to be beaten!
% of U.S. Active Managers Outperforming Index on a Rolling 3 Year Basis
Large-Cap Funds
90.0% 80.0% 70.0% 60.0% 50.0% 40.0% 30.0% 20.0% 10.0%
1981 1983 1985 1987 1989 1991 1993 1995 1997 1999 2001 2003 2004 2006 2008 2010 2012 2014 2016
Large-Cap Avg: 40%
13.9%
Source: Lipper, StyleAdvisor
Past performance is not a guarantee of future results.

23


The Case for Active Investing
• Not all indexes are created equal
• The US large-cap market is very well defined
Translation:
“A good active manager can do better in the smaller and less well-defined markets.”
Markets were made to be beaten!
90.0% 80.0% 70.0% 60.0% 50.0% 40.0% 30.0% 20.0% 10.0%
1981 1983 1985 1987 1989 1991 1993 1995 1997 1999 2001 2003 2004 2006 2008 2010 2012 2014 2016
Small-Cap Avg: 54%
Large-Cap Avg: 40%
36.7%
13.9%
Source: Lipper, StyleAdvisor
Past performance is not a guarantee of future results.

24

What we'll cover today

- **The difference**
- **The debate**
- **The decision**

25

So which should you use?

Passive (Index) Manager
Goal: <u>BE</u> the Market!

Active Manager
Goal: <u>BEAT</u> the Market

Sample of S&P 500 companies – for illustration purposes only.

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So which should you use?

- Both are appropriate investment strategies.
- Resist the temptation to chase returns by moving from one to the other.
- Consider diversifying your investment approach by using both!

Sample of S&P 500 companies – for illustration purposes only.

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Active Manager

- Do you have access to low-cost active funds?
- Will you be investing in a well defined, efficient market?
- Do you have time and risk tolerance to wait out the underperforming years?
- Will you be able to pick and exercise due diligence on the active managers?

Sample of S&P 500 companies – for illustration purposes only.

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Index (Passive) Manager

- Is your first and primary concern cost?
- Do you lack access to low-cost active funds?
- Does your risk tolerance suggest a lower long-term rate of return?
- Are you unable to pick and exercise due diligence on the active managers?

Sample of S&P 500 companies – for illustration purposes only.

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ACTIVE V INDEX

WHICH IS BETTER?

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