

Managed Funds

Chapter 4

Managed Funds

- Size of the Managed Fund Industry
- Main Categories of Institutional Investors
- Fees and their association with performance
- Taxes and their impact on performance

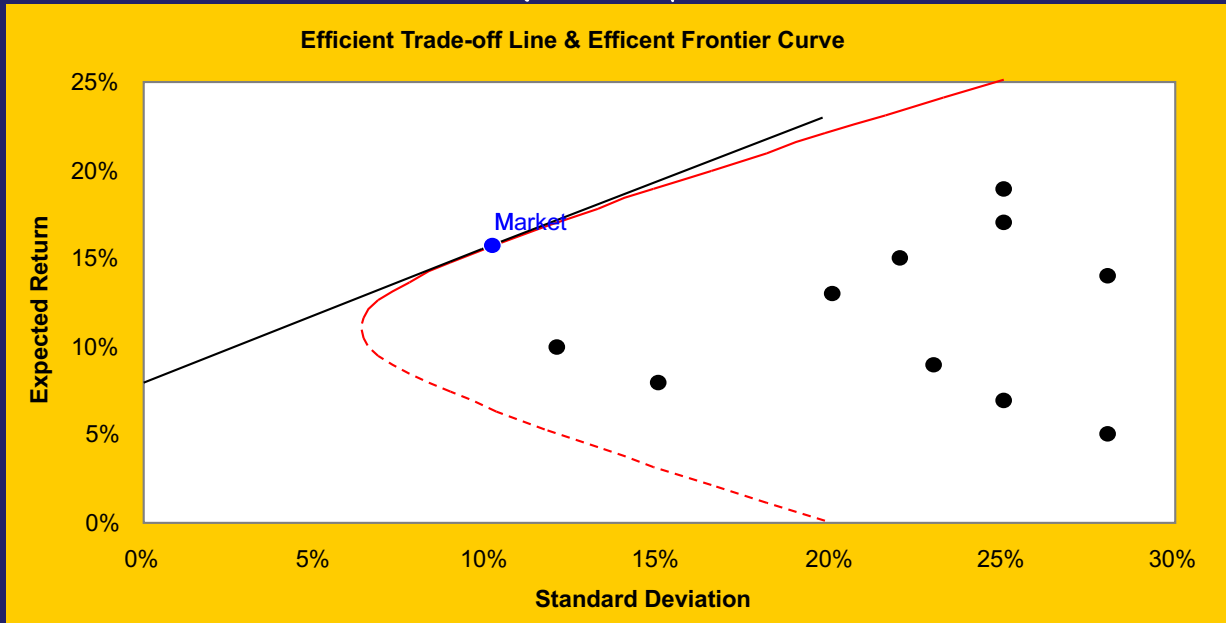
with sufficiently low transaction cost, investors want to diversify.

- ① managed funds provide large portfolio in one transaction
- ② separation property

The Theoretical Foundation of the managed fund industry

- The Separation Property

STEP 1 } identify the optimal portfolio
STEP 2 } adjust investment with r_f for risk aversion.

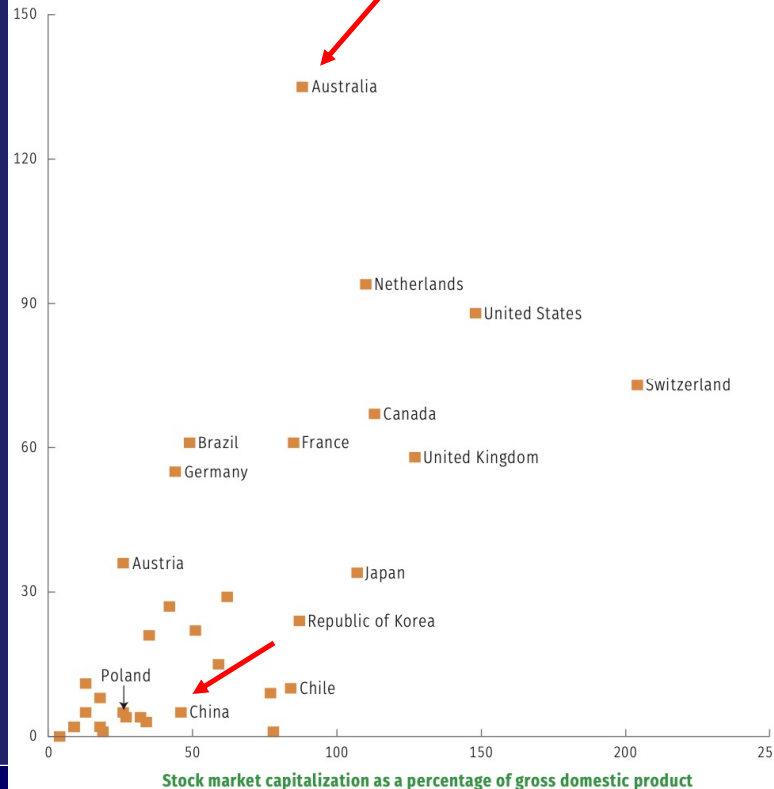


Managed Funds

- Financial intermediaries which collect money from individual investors and invest in a wide range of securities and other assets.
- In 2019, worldwide, there were
 - AUD\$78 trillion (USD \$54.9 trillion) in total net asset under management in regulated managed funds (both unlisted and listed funds including ETFs and institutional funds)
 - AUD\$3.7 trillion (USD \$2.6 trillion) in Australia in March 2020
 - AUD\$2.7 trillion (USD \$1.9 trillion) in China
 - 122,528 open-ended managed funds around the world
 - 5,683 in China
 - AUD\$3.1 trillion (USD \$2.2 trillion) in net sales world wide
 - AUD\$0.2 Trillion in net sales in China
 - Sources:
 - International: <https://www.ici.org/> and <https://www.icifactbook.org>
 - Australia: <https://www.abs.gov.au/ausstats/abs@.nsf/mf/5655.0>

Australia is an outlier: high fund assets

Regulated open-end long-term fund total net assets*
as a percentage of gross domestic product



measure the importance
of equity market in
the economic of
the country

Overview of Main Institutional Investors

	1. ETFs and REITs <i>exchange trade fund</i>	2. Managed Funds & Listed Inv. Companies (also called Mutual Funds)	3. Hedge Funds
Strategy	Typically FULL replication of benchmark <i>REIT: real estate investment trust → (invest property)</i>	Predominantly long only positions, anything from ETF-like benchmark tracking to active strategies to out-perform benchmarks.	Traditionally, non-directional bets (alpha transport). In practice, whatever they want.
Regulation	Very high: daily disclosure of holdings, every 15 minutes for an “indicative” NAV, cannot deviate a lot from benchmark	Medium: Quarterly disclosure, limits on shorting and derivatives use, can deviate from stated goals/benchmarks	Low: Annual Disclosure for some information. NAV on a monthly basis
Fees	Low: 0.2% to 0.5% for ETFs	Medium: 1% to 2.5%	High (2% and 20% common)
Liquidity	Buy/sell in real time	End of day	Low: Lock-in periods
Initial Investment	Price of 1 share	\$1000 - \$5000	>\$25,000
Evaluation	Tracking-error/ β <i>you have to pay bid-ask spread + commission for market orders</i>	Tracking-error/ β / Sharpe Ratio/ α	α (Usually using hedge fund specific “factors”)

<https://asic.gov.au/regulatory-resources/markets/supervision/exchange-traded-products-admission-guidelines/>

<https://www.moneysmart.gov.au/investing/managed-funds/choosing-a-managed-fund>

<https://asic.gov.au/regulatory-resources/find-a-document/regulatory-guides/rg-240-hedge-funds-improving-disclosure/>

Overview of Main Institutional Investors: two more

- Superannuation funds and Pension Funds
 - Similar to managed funds, but conforms to laws for retirement savings
- Sovereign Wealth Funds: State-owned investment funds
 - Revenue from commodity exports or from foreign exchange reserves held by the central bank
 - Created to diversify revenue streams
 - Four of the top ten are Chinese → large exchange reserve ⇒ exchange to $\$$ ⇒ π ↑
less competition
↓
Invest in foreign country instead of exchange
reg. invest. (euro) company
 - <https://www.cnbc.com/2015/07/17/the-worlds-biggest-sovereign-wealth-funds.html>
- Note: these are not the only types of managed funds, they are just the most important right now.

<https://www.smh.com.au/money/super-and-retirement/managed-funds-often-not-worth-the-high-fees-paid-by-small-investors-20160707-gq0j0e.html>
<https://www.canstar.com.au/managed-funds/managed-funds-how-do-fees-compare/>

Types of Managed Funds

Focus, Structure, and Purpose

Investment Policies

- Policy is set in the Fund Charter
 - Can have either Active or Passive Management → follow a specific rule

Single Asset Class	Absolute Return	Equity - Infrastructure	Mutli Asset Class (Diversified)
	Alternative	Equity - Specialist	
	Cash - Australian Dollar	Fixed Int - Australia / Global Bond	
	Cash Enhanced - Australian Dollar	Fixed Int - Australian Bond	
	Commodity & Energy	Fixed Int - Diversified Credit	
	Equity - Asia Pacific ex Japan	Fixed Int - Global Bond	
	Equity - Asia Pacific Single Country	Fixed Int - Global Strategic Bond	
	Equity - Australia	Mixed Asset - Aggressive	
	Equity - Australia Equity Income	Mixed Asset - Balanced	
	Equity - Australia Geared	Mixed Asset - Cautious	
	Equity - Australia Small/Mid Cap	Mixed Asset - Flexible	
	Equity - Emerging Markets	Mixed Asset - Growth	
	Equity - Global	Mixed Asset - Moderate	
	Equity - Global Hedged	Property - Australia Listed	
	Equity - Global Small/Mid Cap	Property - Global	

<https://www.asx.com.au/mfund/fund-information.htm/>

Managed Funds

accept new money

- Open-end: all purchases and sales occur through the fund itself. New shares are created when they are purchased and old shares are "destroyed" when they are sold back to the fund.
 - Unlisted: Open-ended funds are not listed on an exchange
 - Buy through a broker or financial advisor or directly from the fund

don't accept new money

- Closed-end: the fund does not redeem or issue shares. All transactions must be with other investors.

*why?
maybe
decrease
return to
scale
to keep
the profit then be closed-end*

- Listed
 - Primary example: Exchange traded funds, such as ETFs and A-REITs
- Unlisted
 - Managed funds can also be closed-end.
 - Typically you buy or sell them through a broker (if at all)



Net Asset Value (NAV)

- The value of the fund's assets minus liabilities on a per share basis.

eg: ① invest sold today,
send money tomorrow
↑ ② salary to manager

$$\text{NAV} = \frac{\text{Market Value of Assets} - \text{Liabilities}}{\text{Shares Outstanding}}$$

Managed Fund Pricing

- Open-end: Shares can be sold at NAV. Purchase price may be higher than NAV due to the **buy-sell spread** and *if* fund has a “contribution fee” → % of value investment  .
- Closed-end: Shares can sell at premium or discount to NAV
 - Exchange Traded Funds will usually trade very close to their NAV
 - Non-Exchange Traded Funds can deviate a lot from their NAV

What managed funds (open/closed, listed/unlisted) do:

1. Record keeping and administration
 2. Diversification and divisibility
 3. Professional management (?) (active vs. passive)
 4. Reduced transactions costs
- Of course, not for free...

Managed Funds

Fees, Taxes, and their relation to performance

Types of fees paid for managed funds

- ① *"sale commission"*
 - **Entry fee**: paid on first investing in a fund – as high as 5%
 - **Contribution fee**: for additional investments after the first
 - **Switching fee**: for changing funds
 - ② • **Exit (withdrawal) fee**: paid when disinvesting. Up to 5%. *costly for fund to pay out to people selling shares*
 - ③ • **Trailing (advisor service) fee**: ~0.5% paid to your financial advisor
 - ④ • **Management Expense Ratio (MER)**
 - Typically range of 0.7% to 2% *can't avoid*
 - ⑤ • **Performance fees**: ~20% if performance beats benchmark
- **Sources:**
 - <https://www.investors.asn.au/education/other-investments/managed-funds/>
 - <https://www.2020directinvest.com.au/investor-education/investment-fees.aspx>
 - <https://www.canstar.com.au/managed-funds/managed-funds-how-do-fees-compare/>

Management Fees in Australia (2018)

- ① bond fund usually charges less than stock fund
- ② less complicated fund charges less than more complicated
- ③ passive < active
- ④ domestic < international

% Management Fees on Managed Funds			
Profile	Minimum	Average	Maximum
Australian Cash & Fixed Interest	0.19	0.46	1.00
Australian Shares – Large Cap	0.35	1.01	2.05
Australian Shares – Mid/Small Cap	0.77	1.27	2.50
Equity Australia Real Estate	0.35	0.85	1.58
Global Fixed Income & Bonds	0.35	0.59	0.78
Global Shares – Large Cap	0.35	1.09	2.02
Global Shares – Mid/Small Cap	1.12	1.32	1.50
Multisector Aggressive	0.35	1.20	2.20
Multisector Balanced	0.35	0.84	2.42
Multisector Growth	0.35	1.00	1.95
Multisector Moderate	0.26	0.74	1.58

<https://www.canstar.com.au/managed-funds/managed-funds-how-do-fees-compare/>

Hidden/Implicit Fees

- Soft Dollars
 - Kick back to Managed Fund Managers
 - Not Cash but services *eg. data.*
- Trading costs
 - ① – Buy-sell spread from unlisted funds
 - Bid-ask (bid-offer) spread for ETFs.
- Fund Turnover

Fund Fees & Performance

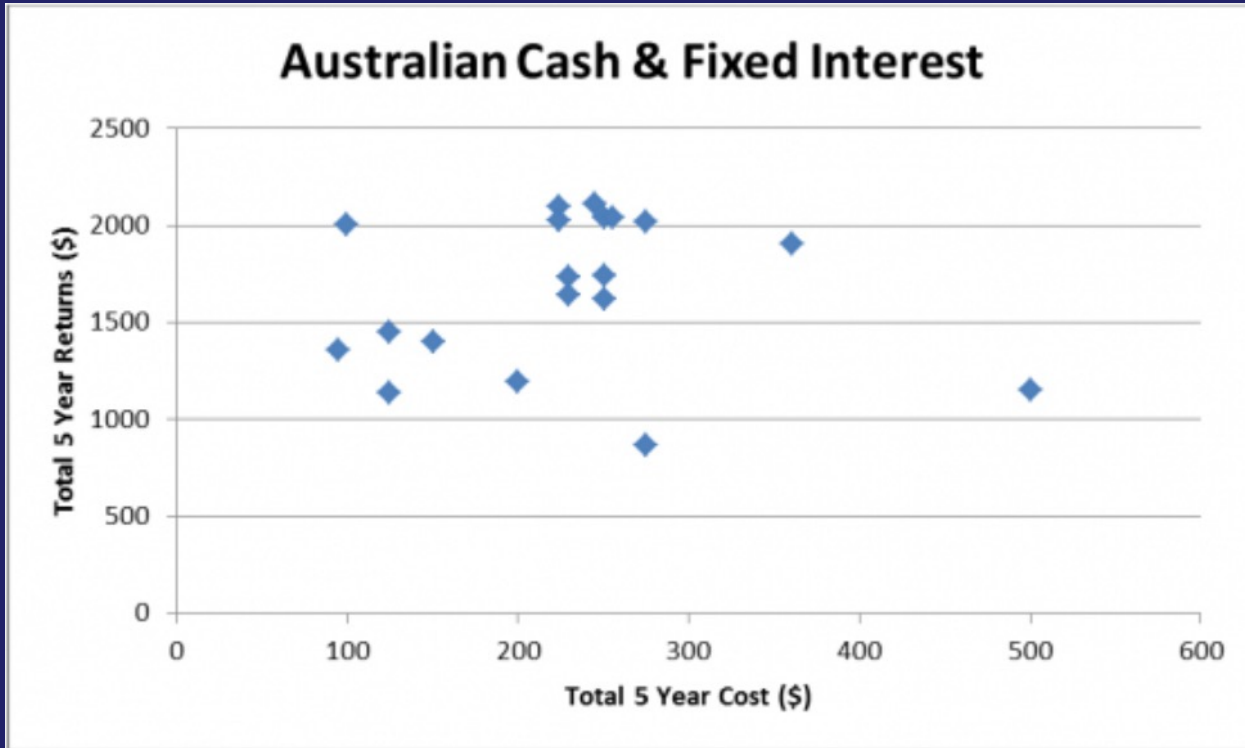
- Fees are set by contract...
 - The Board and the Manager agree on a fee maximum
 - Usually a percentage of fund's size
- ...but fees are not usually taken out up front
 - They're accrued and charged as the year progresses
- Fees can affect net performance a lot.
 - If you beat the market by 1%, but charge a 1.5% fee, the shareholders aren't beating the market.

Relation between fees and performance

- "Many of the cheaper funds advertise around being lower in fees and we believe this can be misleading. While you do need to consider the amount of fees you pay, the main thing that will determine your total gain is net performance."
– Australian Ethical

How do fees relate to performance (from Canstar)

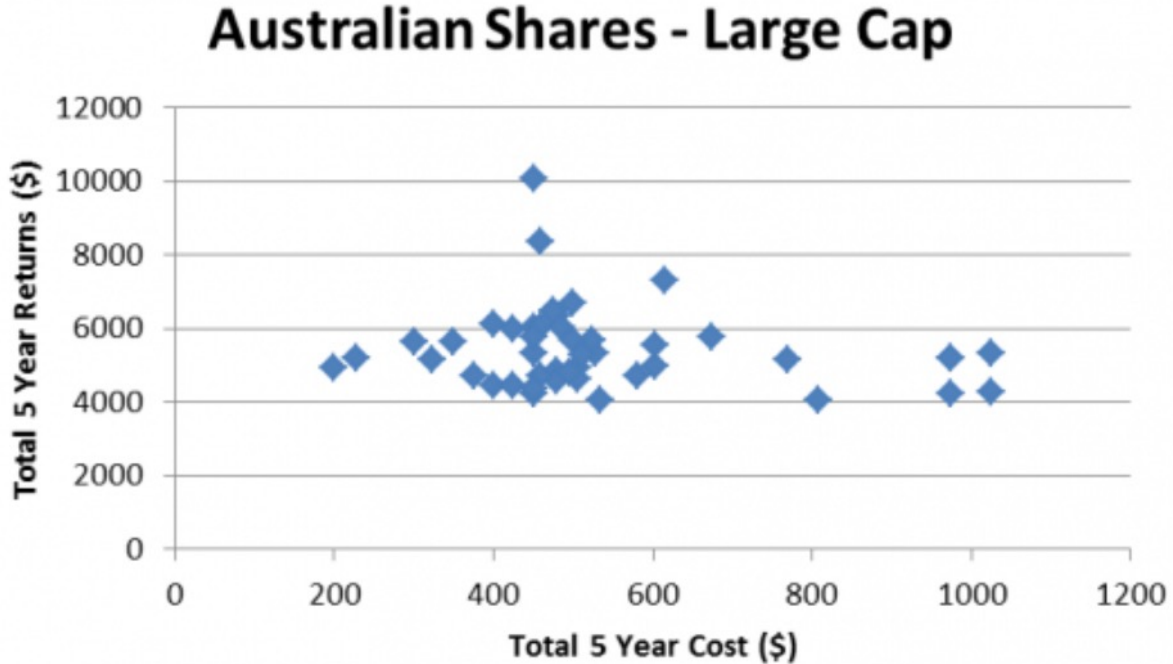
bond



<https://www.canstar.com.au/managed-funds/managed-funds-how-do-fees-compare/>

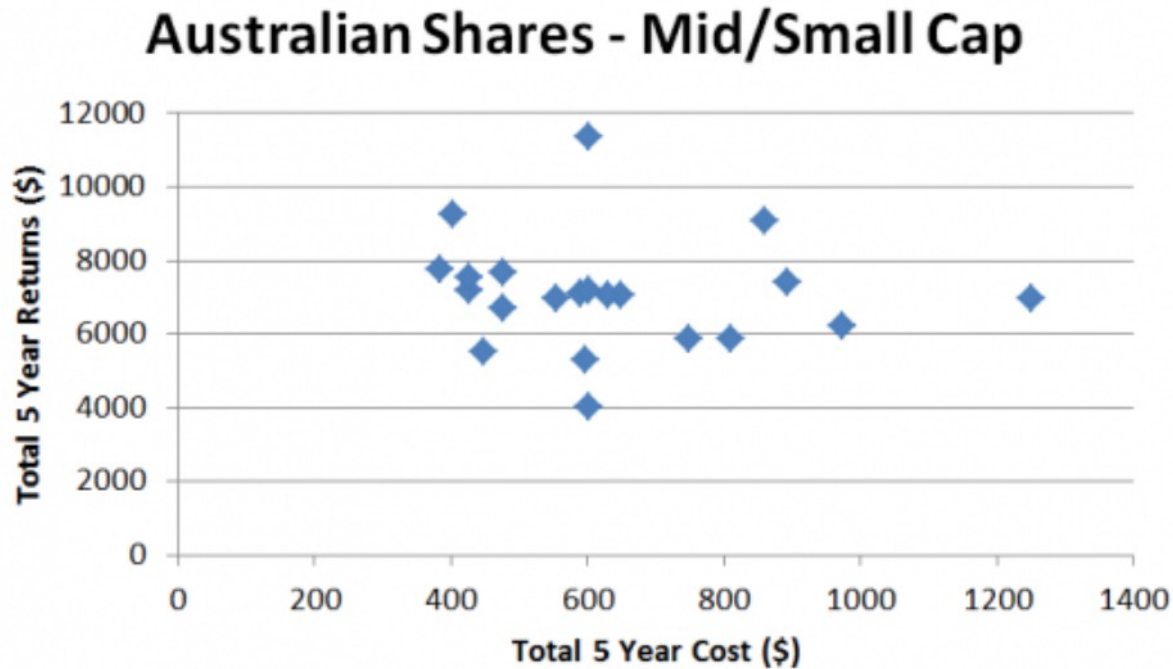
How do fees relate to performance (from Canstar)

equity



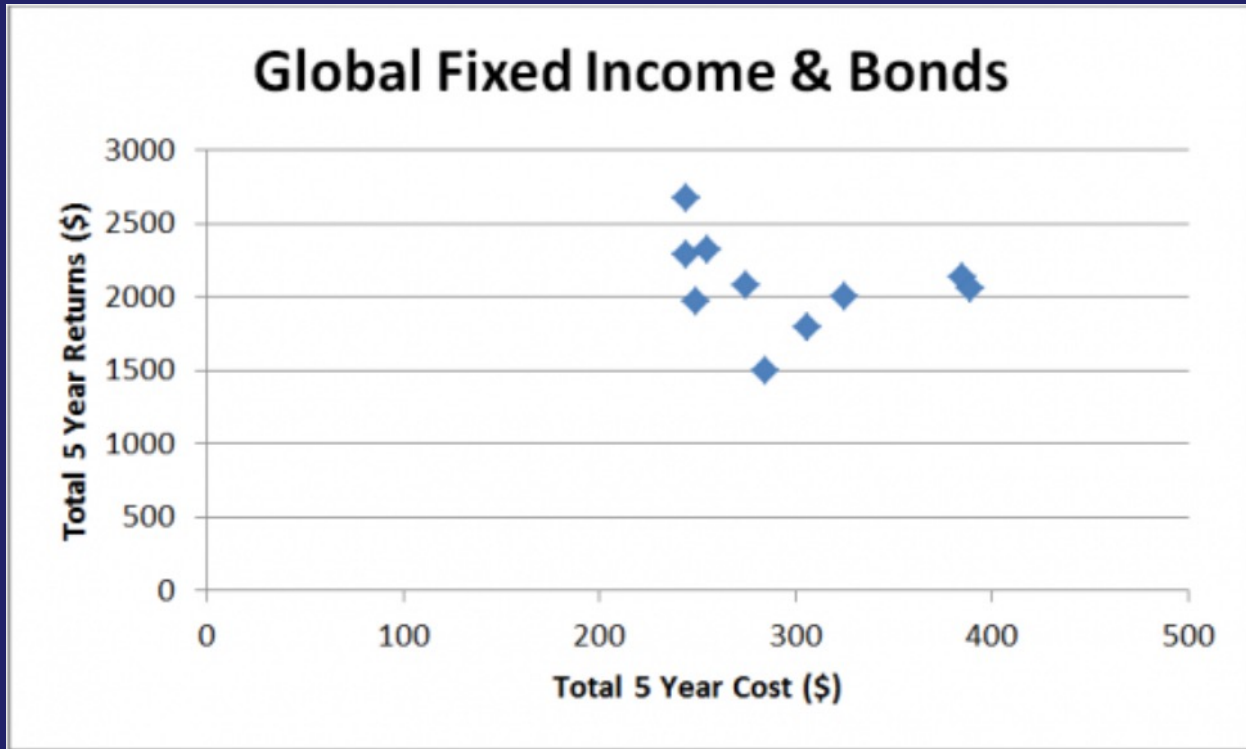
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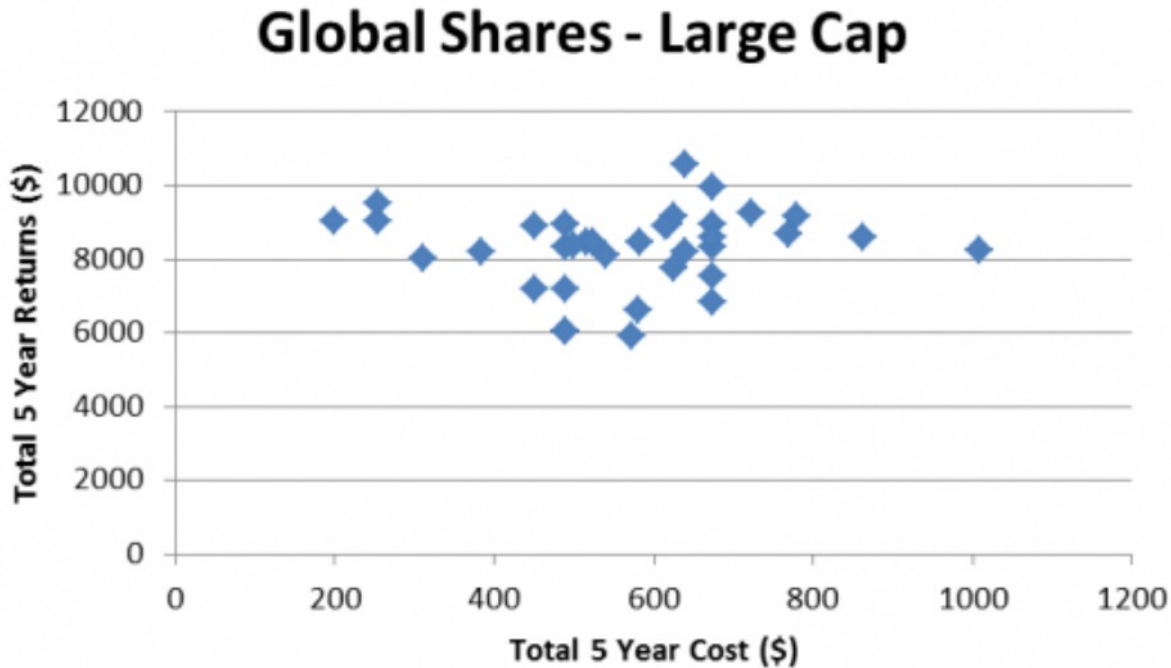
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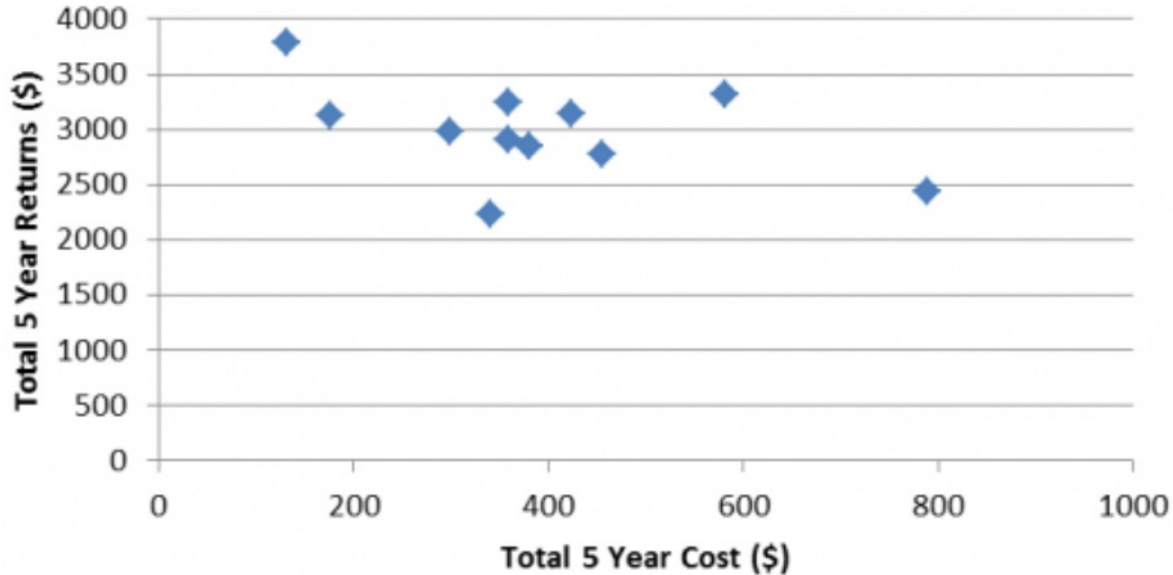
How do fees relate to performance (from Canstar)



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How do fees relate to performance (from Canstar)

Multisector Moderate



<https://www.canstar.com.au/managed-funds/managed-funds-how-do-fees-compare/>

Taxes and Tax Efficiency

- Managed funds usually have pass through status
rather: the investors pay taxes
- Taxes impact performance if not in a tax-exempt investment
 - Superannuation funds

Taxes and Tax Efficiency

- Capital Gains on all sales
 - High turnover is deadly (typical in equity funds is 60-70%)
tax owe to investors
- Capital Gains and Dividends
 - Typically paid once or twice a year
 - Be wary of buying into a fund right before these payouts because you will be taxed on gains that occurred before you purchased the fund! *4.*

Impact of Taxes

	1 year	5 years	10 years	Lifetime ¹
Class A — first sold 2/21/50				
Before taxes	4.37%	5.65%	11.27%	12.43%
After taxes on distributions	4.06	4.39	8.85	N/A
After taxes on distributions and sale of fund shares	3.20	4.20	8.63	N/A

Exchange Traded Funds (ETFs)

- Closed-end funds that typically invest in a passive strategy
 - buys and sales can occur at any time markets are open as these are exchange traded *actively managed*
 - A variant is the Exchange Traded Managed Fund (ETMF)
 - Usually actively managed: often provide leveraged or inverse exposure

Exposure	ASX Code	Type	Benchmark	MER%	Outperf fee	Admission Date
Equity - Australia						
BetaShares Australia 200 ETF	A200	ETF	Track Solactive Australia 200 Index	0.07	No	8-May-18
iShares S&P/ASX 20 ETF	ILC	ETF	Track S&P/ASX 20 Accumulation Index	0.24	No	9-Dec-10
iShares Core S&P/ASX 200 ETF	IOZ	ETF	Track S&P/ASX 200 Accumulation Index	0.09	No	9-Dec-10
VanEck Vectors Australian Equal Weight ETF	MVW	ETF	Track MVIS Australia Equal Weight Index	0.35	No	6-Mar-14
BetaShares FTSE RAFI Australia 200 ETF	QOZ	ETF	Track FTSE RAFI Australia 200	0.4	No	11-Jul-13
SPDR S&P/ASX 200 Fund	STW	ETF	Track S&P/ASX 200 Index	0.19	No	27-Aug-01
SPDR S&P/ASX 50 Fund	SFY	ETF	Track S&P/ASX 50 Index	0.286	No	27-Aug-01
Vanguard Australian Shares Index ETF	VAS	ETF	S&P/ASX 300	0.1	No	8-May-09
Vanguard MSCI Australian Large Companies Index ETF	VLC	ETF	MSCI Australian Shares Large Cap Index	0.2	No	26-May-11
Equity - Australia Small/Mid Cap						
BetaShares Australian Ex-20 Portfolio Diversifier ETF	EX20	ETF	Tracks NASDAQ Australia Completion Cap Index	0.25	No	7-Oct-16
eInvest Future Impact Small Caps Fund (Managed Fund)	IMPO	MF	Outperform S&P/ASX Small Ordinaries Accumulation Index	0.89	Yes	23-May-19

- A US S&P500 tracking ETF (The first in the world 22 Jan 1993)
- Australia SPDR S&P/ASX200 EFT (24 Aug 2001)
 - Product Disclosure Statement: <https://www.ssga.com/library-content/products/fund-docs/etfs/apac/au/pds/product-disclosure-statement-au-en-stw.pdf>

ETF

- Extremely low fees, currently 0.13% per year
 - For all ETFs in Australia 0.03% to 1.29%
 - Fees are low - but if you use market buys and sales you will pay the bid-ask spread
- Low tax consequences (low turnover) low since ETF is actively traded
 - Dividends paid quarterly, franking credits available.
 - Lower capital gains
 not many cash build up
- Index arbitrage
 - For a fee of \$4000 a *stockbroker* can trade 25,000 SPDRs for the underlying stock
 - This is how stockbrokers can help keep the price of SPDRs in line with the fundamental value
 - If you are curious about the details check the link above and check page 33, “Applications and Redemptions”.