



Index constituents

What do you mean:

“The ‘Top 200’ index is not the top 200 stocks?”!

Robert Brain
August 2022

About this presentation

This presentation expands on an information graphic I have had for a long time that depicts how the stocks in each market index correspond to the other indexes.

Diagrammatic indication of the composition of the key indices.
For most indices, low liquidity stocks are excluded from the index (except All Ords).

	All stocks sorted by market cap	Stock Code	Market Cap (\$mill)	Market Cap Rank (on XAO)	Stock name
ASX 100 – XTO *	1	BHP	195,811	1	BHP Billiton Limited
	2	CBA	171,464	2	Commonwealth Bank
	3	CSL	139,618	3	CSL Limited
S&P/ASX 50 – XFL *	19	S32	17,634	19	South32 Limited
	20	NCM	17,237	20	Newcrest Mining Limited
	21	QBE	17,102	21	QBE Insurance Group Ltd
S&P/ASX 20 XTL *	23	REA	16,523	23	REA Group
	38	TPG	11,788	38	TPG Telecom Limited (not in XFL, XMD)
MidCap 50 XMD *	47	REH	9,838	44	Reece Limited (in XMD not in XFL)
	



Index constituents

Does it surprise you to hear that the 200 stocks in our XJO* “Top 200” index are NOT literally the top 200 stocks **securities** in our market by market cap?
(they are selected from the top 349)

Stay tuned – We will reveal all...

* XJO index – aka S&P/ASX 200, or “Top 200” index



Today's agenda

- What are the top 5 securities on ASX market?
- What is today's *market capitalisation* of these securities?
- Brief look at “*the list of stocks by market cap*”
- In the Top 20 index (XTL) – are these securities literally the top 20 in the market?
- What about the XJO Top 200 index?
- If not, why not??
- Does this matter to you?





About... Robert Brain

Nimble Short term Investor

consultant, educator and part-time* share trader
web-based sharemarket-support business

- Many years experience as trainer, presenter, conference facilitator (*Scouts*)
- Share Market – active 15++ years* (slowly at first)
- Chartist ie. technical analyst (ATAA member and ex-national director)
- Provide support and tuition to traders and investors
[Brainy's Share Market Toolbox](#)
- Member Mensa
- Engineering Degree (structured thinking with an eye for charts and diagrams)
- 30+ years – professional experience (IT and management)
- **No AFS license! (Can't give advice)**
- **BullCharts software (convenor Australian BullCharts User Group and authorised reseller with special pricing)**



Conflict of interest?

* - Not yet enough capital to live off the proceeds of trading (after trading as a hobby until a career change in 2008).

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What are the top 5 securities on our ASX? (by market cap) and what are they actually worth?



Our top 5 stocks (by market cap)

Stock Code	Shares on issue* (millions)	Share Price** (at 31 July)	-
BHP	5,062	\$38.68	-
CBA	1,702	\$100.77	-
CSL	482	\$289.84	-
NAB	3,175	\$30.60	-
WBC	3,501	\$21.51	-

Notes:

* – Shares on issue in millions, rounded to the nearest million.

** – Share Price and other data here as at 31 July 2022.





Top stocks and market cap

Our top 5 stocks and market cap

Stock Code	Shares on issue* (millions)	Share Price** (at 31 July)	Market Cap*** \$ billion
BHP	5,062	\$38.68	\$196
CBA	1,702	\$100.77	\$171
CSL	482	\$289.84	\$140
NAB	3,175	\$30.60	\$97
WBC	3,501	\$21.51	\$75

Notes:

- * – Shares on issue in millions, rounded to the nearest million.
- ** – Share Price and other data here as at 31 July 2022.
- *** – Market Cap in billions, rounded to the nearest \$ billion, as at 31 July 2022.



Top stocks and market cap

Market capitalisation can change

Remember that the *market capitalisation* of any listed company can change daily.

Formula:

(number of shares) * (today's share price)

“Mister Market” has control over this!!

“Number of shares”:

refers to “common shares”, or “outstanding shares”.





About market cap

Exactly what is “*market cap*”?

1. A measure of what a company is worth on the open market, as if you were to buy the entire company;
2. It reflects the market’s perception of its worth today, plus its “future prospects”.



What about smaller stocks/securities?

Stock Code	Shares on issue* (millions)	Share Price**	Market Cap*** \$ million
BAS	240	3.7 cents	\$8.903
OEQ	15	23 cents	\$3.599
HXL	160	1.2 cents	\$1.917
IBUY	0.115	\$8.54	\$0.982
UUV	121	0.2 cents	\$0.242

Notes:

- * – Shares on issue in millions, rounded to the nearest million.
- ** – Share Price and other data here as at 31 July 2022.
- *** – Market Cap in millions, rounded to the nearest \$ million.





Top stocks and market cap

Reflect for a moment

Stock Code	Shares on issue* (millions)	Share Price** (at 31 July)	Market Cap*** \$ million
BHP	5,062	\$38.68	\$195,811
CBA	1,702	\$100.77	\$171,464
BAS	240	\$0.037	\$9
HXL	160	\$0.012	\$2

Consider and compare above:

- Shares on issue;
- Share price;
- Market cap – could you afford to buy all, or part, of the company?



Top stocks and market cap

All ASX securities sorted by market cap

Ref	Symbol	Name	Market Cap/ 1000000	Ref	Symbol	Name	Market Cap/ 1000000
1	BHP	BHP Group Limited	195810.7	2367	EN1	Engage:BDR Limited	1.2
2	CBA	Commonwealth Bank Of Australia.	171464.0	2368	EN1DA	Engage:BDR Limited Deferred Sett	1.2
3	CSL	CSL Limited	139617.7	2369	YTMSG3	Equity Trustees XTB SG3 3.30% M	1.2
4	NAB	National Australia Bank Limited	97242.2	2370	QUE	Queste Communications Limited	1.2
5	WBC	Westpac Banking Corporation	75309.3	2371	YTMSG2	Equity Trustees XTB SG2 4.50% N	1.2
6	MQG	Macquarie Group Limited	70002.5	2372	GLOB	BH Global Share TMF Units	1.1
7	ANZ	ANZ Banking Grp Ltd	66243.1	2373	YTMAP1	Equity Trustees XTB Ap1 3.75% O	1.0
8	WDS	Woodside Energy Group Ltd	60722.0	2374	IBUY	Beta Online Retail E Etf Units	1.0
9	FMG	Fortescue Metals Group Ltd	56468.2	2375	CTV	Colortv Limited	0.9
10	WES	Wesfarmers Limited	52871.0	2376	LAM	Laramide Resources Ltd	0.6
11	WOW	Woolworths Group Limited	45545.6	2377	AIB	Aurora GLB Trust Ordinary Units	0.6
12	TLS	Telstra Corporation Limited.	44946.7	2378	FUTR	Jhi GLB Sust Atv Etf TMF Units	0.6
13	TCL	Transurban Group Fpo/Units Staple	44556.1	2379	TNP	Triple Energy Limited	0.5
14	GMG	Goodman Group Fpo/Units Stapled	38672.2	2380	YTMTL1	Equity Trustees XTB TL1 4.00% Se	0.4
15	RIO	RIO Tinto Limited	36316.1	2381	YTMVCX	Equity Trustees XTB VCX 3.50% A	0.4
16	WPL	Woodside Petroleum Ltd	28525.6	2382	JZRO	Jhi Net Zero Atv Etf TMF Units	0.4
17	COL	Coles Group Limited.	25055.4	2383	UUV	UUV Aquabotix Ltd	0.2
18	STO	Santos Limited	24494.8	2384	MCGG	Munro Con GLBL GRWTH TMF Un	0.1
19	ALL	Aristocrat Leisure Limited	23529.5	2385	YTMSCPE	Equity Trustees XTB SCP 3.90% Ji	0.1
20	S32	South32 Limited	17634.3	2386	EMUCA	EMU NL 3C PD 3C Unpd	0.0
21	NCM	Newcrest Mining Limited	17237.3				
22	QBE	QBE Insurance Group Limited	17102.0				
23	ASX	ASX Limited	17086.7				
24	REA	REA Group Ltd	16522.6				
25	SHL	Sonic Healthcare Limited	16452.8				
26	WTC	Wisetech Global Limited	16352.0				





Top stocks and market cap

XTL index = “Top 20”?

For the XTL* index
are these 20 stocks
literally the largest 20 stocks
in the ASX?

=> Yes, no problem.

* – XTL = S&P/ASX20 aka “Top 20”



Top stocks and market cap

XJO index = “Top 200”?


- The 40 largest stocks are in the XJO ✓
- From then on, many are missing from the index!!
- How many? ...





Top stocks and market cap

XJO index = “Top 200”?? – NO!

- The 40 largest stocks are in the XJO; 
- From then on, many are missing;
- The last few stocks in the XJO:-

XJO seq	No.	Stock Code	Stock	Market Cap (millions)
195	299	RMS	Ramelius Resources Limited	\$936.8
196	301	CUV	Clinuvel Pharmaceuticals Limited	\$927.4
197	303	SBM	St Barbara Limited	\$917.7
198	314	360	Life360 Inc.	\$840.0
199	321	ZIP	ZIP Co Limited.	\$780.9
200	349	JHG	Janus Henderson Group PLC	\$670.5

That is, 149 large-cap stocks missing!

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Top stocks and market cap

The “Top 200” index is NOT the top 200

- You can see that the current list of XJO index constituents are NOT the “top 200” stocks;
- The XJO index constituents are selected from the top 349* stocks by market cap;
- That is, 149* stocks (or *securities*?) have been overlooked for inclusion in the XJO.

* This might change at the next index rebalance.

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Why is it so?

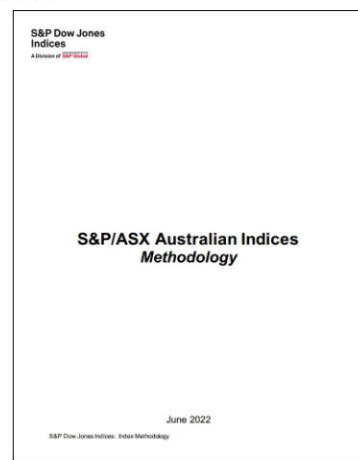
Why are the 200 stocks in the S&P/ASX 200 XJO index not the same 200 stocks as the top 200 in our market by market cap?



About the Indexes

Index Methodology

- Everything to do with the ASX indexes is governed and controlled by a committee of the Standard & Poor's company and the ASX;
- Refer to the 29 page document: *"S&P/ASX Australian Indices Methodology – June 2022"*
<https://www.spglobal.com/spdji/en/documents/methodologies/methodology-sp-asx-australian-indices.pdf>
- Just Google search for: *S&P ASX index methodology*





The index family – p1

- **All Ordinaries (XAO)** – “The index measures the performance of the ... 500 largest **securities**... no liquidity screen or minimum IWF* requirement... not weighted by FAMC* ”
- **S&P/ASX 20 (XTL)** – “... 20 actively-traded, highly liquid... by FAMC* ”
- **S&P/ASX 50 (XFL)** – “... 50 of the largest and most liquid index-eligible **stocks**... by FAMC* ”
- **S&P/ASX 100 (XTO)** – ...the 100 largest **stocks**... by FAMC* ... represents both the LargeCap and MidCap components...”
- **S&P/ASX 200 (XJO)** – “... the 200 largest and most liquid **stocks**... by FAMC.”

* *FAMC = Float-adjusted market cap* – Refers to shares that are available for public trading. It excludes: privately held shares, shares that are not available for public trading.

* IWF = Investable Weight Factor.



The index family – p2

- **S&P/ASX 300 (XKO)** – “... the 300 largest, highly liquid **securities**... by FAMC*... includes LargeCap, MidCap and SmallCap...”
- **S&P/ASX Small Ordinaries (XSO)** – “... companies included in the S&P/ASX 300 but not in the S&P/ASX 100”
- **S&P/ASX Mid-Small (???)** – “... companies included in the S&P/ASX 300, but not in the S&P/ASX 50... A combination of MidCap 50 and Small Ords.”
- **S&P/ASX All Australian 50 (XAF)** – “... 50 of the largest by float-adjusted market cap, highly-liquid... defined as ‘domestic’ or ‘Australian’...”
- **S&P/ASX All Australian 200 (XAT)** – “... 200 of the largest by float-adjusted market cap, highly-liquid... defined as ‘domestic’ or ‘Australian’...”

Source: “S&P/ASX Australian Indices Methodology”, June 2022, pp4-5





Index eligibility

“All common and equity preferred stocks (which are not of a fixed income nature) are eligible for inclusion in the indices.”

Not eligible:

- (1) Hybrid stocks such as convertible stock, bonds, warrants, and preferred stock that provide a guaranteed fixed return.
- (2) Listed Investment Companies (LICs) that invest in a portfolio of securities.
- (3) Companies that are currently the target of an acquisition.



Market cap eligibility

“The S&P/ASX indices only include securities that are considered to be institutionally investable, and market capitalisation is a key criterion for stock selection, based upon the daily average market capitalisation of a security over the last six months.”

Relevant variables for the calculation include:

- ASX stock price history
(last six months, adjusted for price-adjusting corporate actions),
- Latest available shares on issue, and
- The Investable Weight Factor (IWF).

Source: “S&P/ASX Australian Indices Methodology”, June 2022, p8





Liquidity eligibility

“Only *securities* that are regularly traded are eligible for inclusion in any S&P/ASX index. A stock’s liquidity is measured relative to its peers (using only ASX value traded data).” (ie. it excludes Cboe/Chi-X data).

*Relative Liquidity** thresholds are as follows, for example:

S&P/ASX 200 – *Stocks* require a minimum Relative Liquidity of 50% for inclusion in the S&P/ASX 200 and higher hierarchical indices. Any stock’s Relative Liquidity that drops below half of the 50% threshold becomes ineligible and is removed at the next rebalancing.

* – Calculation formula is in the reference document.

Source: “S&P/ASX Australian Indices Methodology”, June 2022, p8.



IWF eligibility

Companies in the S&P/ASX indices are assigned an *Investable Weight Factor* (IWF). Except for the All Ordinaries index, a company must have a minimum IWF of 0.3 to be eligible for index inclusion.

More information about IWF is in other S&P Dow Jones Indices documents.





Index eligibility – Summary

The index methodology rules mean that some companies do not qualify to be included in a particular index.

So, when we talk about the “top 200” stocks, we are not actually referring to the 200 largest “stocks” in our ASX market.



Subtle difference

Throughout the S&P/ASX rules there is a distinction between:
stocks and securities.

Stocks ~ companies with shares

Securities ~ stocks, bonds, ETFs, currencies, etc.





Is this important?

But does this matter to you?



Is this important?

Which *securities* are omitted?

Here are some of them:

REF	CODE	NAME	Mkt Cap	REF	CODE	NAME	Mkt Cap
41	VAS	VNGD Aus Shares Etf Units	10,380	268	VUL	Vulcan Energy Resources Limited	1,118
46	AFI	Australian Foundat.	9,839	270	COF	Centuria Office Reit Ordinary Units	1,114
55	CWN	Crown Resorts Limited	8,864	274	PNV	Polynovo Limited	1,085
59	SPK	Spark New Zealand Limited	8,497	280	GMA	Genworth Mortgage	1,061
76	ARG	Argo Investments Limited	7,021	281	TGR	Tassal Group Limited	1,057
80	YAL	Yancoal Australia Limited	6,602	286	KAR	Karoon Energy Ltd	1,038
96	IVV	Ishares S&P 500 Etf Etf Units	5,048	291	MND	Monadelphous Group Limited	987
153	PXA	Pexa Group Limited	2,582	294	ASB	Austal Limited	970
178	A200	Betaaustralia200Etf Etf Units	2,171	305	GEM	G8 Education Limited	903
184	WAM	WAM Capital Limited	2,007	310	ABB	Aussie Broadband Limited	863
193	DDR	Dicker Data Limited	1,948	312	VGI	VGI Partners Limited	846
203	AIZ	Air New Zealand Limited	1,836	321	NCK	Nick Scali Limited	781
213	MXT	Metrics Master Ordinary Units	1,742	324	SWM	Seven West Media Limited	755
217	LFS	Latitude Group Holdings Limited	1,693	325	OML	Ooh!Media Limited	748
229	RBD	Restaurant Brands New Zealand Li	1,547	331	PPM	Pepper Money Limited	719
236	JDO	Judo Capital Holdings Limited	1,459	337	URW	Unibail-Rodamco-Westfield	704
238	MAQ	Macquarie Telecom Group Limited	1,455	341	NEA	Nearmap Ltd	695
263	VSL	Vulcan Steel Limited	1,156	345	IFRA	Vaneck Infrastruct Etf Units	684

WHY are these *securities* omitted?





Is this important?

Omitted *securities*

The S&P/ASX rules for inclusion:

- Excludes ETFs
- Excludes hybrids
- Excludes listed investment companies.

Remember that the S&P/ASX reference document defines the XJO index as:

*“... the 200 largest and most liquid **stocks**...”*



Is this important?

Should this affect your trading?

**For many traders,
is there a reason to
exclude these missing “securities”
(ie. ETFs, etc)
from your Stock Universe??**

If your stock universe is the XJO index,
then you might be missing out on some
fabulous opportunities!





Stocks in our indexes

We've looked at:

- Top 5 stocks on the ASX and their market cap;
- List of “stocks by market cap”;
- Top 200 index (XJO) – is not the “top 200”!
- “S&P/ASX Indices Methodology” document so we can understand why it is so.
- Does this matter to you as a trader/investor?



That Index Compositions graphic...

Australian Market Indices INDEX COMPOSITIONS

Market rankings, stocks and stock values as at 31 July 2022.

NOTE: When determining which stock might be included in an index, various criteria can make it ineligible (eg. liquidity), based on the index participation rules. For example, the S&P/ASX 100 (code:XTO) might not include the “top 100 stocks”. In fact, as at 31 July 2022, it included selected stocks from the top 186 stocks. The first and last stock in each index are highlighted below, and their market cap, rank and their place in the XAO (All Ordinaries) index, if they are included.

Diagrammatic indication of the composition of the key indices.
For most indices, low liquidity stocks are excluded from the index (except All Ords).

All stocks sorted by market cap	Stock Code	Market Cap (\$mill)	Market Cap Rank (on XAO)	Stock name
1	BHP	195,811	1	BHP Billiton Limited
2	CBA	171,464	2	Commonwealth Bank
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21	QBE	17,102	21	QBE Insurance Group Ltd
23	REA	16,523	23	REA Group
50	VCX	9,423	46	Vicinity Centres Fpo/Units (not in XFL)
51	MPL	9,391	47	Medibank Private Limited (not in XMD)
175	TAH	2,204	154	Tabcorp Holdings Limited (not in XMD)

Download it from here:

<https://www.robertbrain.com/files/ASX-index-composition.pdf>

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Summary & Wrap up

THE END — Thank you



These slides prepared by: Robert Brain

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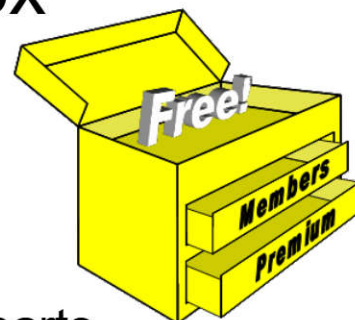
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Summary & Wrap up

Don't forget my Toolbox

- Brainy's ***Share Market Toolbox***
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 - Info: share market, charting, BullCharts
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