



# LOOKING FOR SURVIVORS AMONGST THE QUANT RUBBLE

# Agenda

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- Quant Recap
- What is working
- Low vol
- Momentum
- Growth
- Quality
- Value
- Outlook

# Quant Recap

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- Mathematical models to help generate performance
- They don't always work, but they usually do
- This is an implicit assumption about non-reversion

## No. 1 Question

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Are you selling insurance to the rest of the market?

# Quant Recap

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- **Momentum:** no mean reversion
- **Low Vol:** no mean reversion
- **Growth:** no mean reversion
- **Quality:** no mean reversion
- **Value:** mean reversion

# Factors: This year has been volatile

## S&P 500 Cap weighted return spreads

Style	Factor	MTD▼	Jun 22	May 22	Apr 22	Mar 22	Feb 22	Jan 22
Vol	Volatility	2.71	(10.84)	1.29	(14.50)	0.05	(1.40)	(5.92)
EQ	Earnings Quality	0.77	2.65	(4.19)	(2.66)	4.57	(4.25)	(4.70)
CE	Capital Efficiency	0.64	(0.50)	(1.65)	0.45	1.74	(3.73)	(2.07)
Sz	Size	0.52	(0.86)	0.00	1.57	(0.87)	4.90	(2.17)
HG	Historical Growth	(0.61)	(1.36)	0.02	(0.80)	0.17	(1.42)	(1.75)
AE	Analyst Expectations	(2.02)	(2.15)	(3.99)	(4.94)	3.04	(2.37)	(2.23)
PM	Price Momentum	(2.19)	6.21	(2.07)	(1.86)	0.65	(1.34)	(5.03)
Val	Valuation	(2.53)	(0.80)	6.26	11.69	(4.25)	0.33	8.41

Source: Capital IQ

# Quant Recap

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- Return disaggregation
- Overfitting
- Self serving bias
- Beware reversals
- Danger sectors: Resources, Utilities, Financials
- Manufacturing vs Services

# Factors: Longer term look at returns

## S&P 500 Cap weighted return spreads

Style	Factor	YTD ▼	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Val	Valuation	19.49	3.34	(26.50)	2.49	(8.01)	(2.98)	11.11	(17.42)	4.00	(0.19)	(0.08)
Sz	Size	2.98	0.30	(5.73)	0.35	(3.80)	(5.45)	3.25	(4.69)	1.45	1.79	1.83
CE	Capital Efficiency	(5.11)	12.64	7.10	(2.83)	4.74	9.01	(2.48)	0.28	0.82	(5.74)	(4.40)
HG	Historical Growth	(5.62)	13.53	8.92	(0.61)	(1.84)	3.53	(8.02)	(0.79)	(4.89)	(5.33)	(3.64)
PM	Price Momentum	(5.85)	(0.07)	(0.88)	(0.47)	9.77	13.83	0.94	23.02	(1.10)	6.71	(0.74)
EQ	Earnings Quality	(7.95)	9.39	11.62	4.71	13.12	0.81	(2.49)	1.08	1.45	(6.67)	9.03
AE	Analyst Expectations	(13.94)	9.42	11.21	1.69	7.72	13.49	(8.09)	16.98	4.94	1.53	1.38
Vol	Volatility	(26.40)	18.10	7.43	12.98	(5.59)	(2.68)	10.37	(9.09)	(10.51)	1.15	6.65

Source: Capital IQ



# Min Volatility

## CUMULATIVE INDEX PERFORMANCE – GROSS RETURNS (USD) (JUN 2007 – JUN 2022)



## ANNUAL PERFORMANCE (%)

Year	MSCI World Minimum Vol (USD)	MSCI World
2021	14.84	22.35
2020	3.26	16.50
2019	23.97	28.40
2018	-1.42	-8.20
2017	18.04	23.07
2016	8.18	8.15
2015	5.82	-0.32
2014	12.06	5.50
2013	19.41	27.37
2012	8.87	16.54
2011	8.04	-5.02
2010	12.76	12.34
2009	17.18	30.79
2008	-29.23	-40.33

## INDEX PERFORMANCE – GROSS RETURNS (%) (JUN 30, 2022)

	1 Mo	3 Mo	1 Yr	YTD	ANNUALIZED			
					3 Yr	5 Yr	10 Yr	Since May 31, 1988
<b>MSCI World Minimum Vol (USD)</b>	-4.32	-9.54	-6.01	-12.08	3.58	6.55	9.04	8.43
<b>MSCI World</b>	-8.63	-16.05	-13.94	-20.29	7.52	8.22	10.10	7.64

## FUNDAMENTALS (JUN 30, 2022)

Div Yld (%)	P/E	P/E Fwd	P/BV
2.40	18.87	17.13	3.15
2.20	16.97	14.53	2.70

# Min Volatility: Is the tail wagging the dog?

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- Interest Rates
- Share price vs underlying earnings
- Size
- Diversification
- Trading

# Momentum

## CUMULATIVE INDEX PERFORMANCE – GROSS RETURNS (USD) (JUN 2007 – JUN 2022)



## ANNUAL PERFORMANCE (%)

Year	MSCI World Momentum	MSCI World
2021	14.95	22.35
2020	28.70	16.50
2019	28.26	28.40
2018	-2.38	-8.20
2017	32.59	23.07
2016	4.75	8.15
2015	4.54	-0.32
2014	7.03	5.50
2013	30.28	27.37
2012	14.79	16.54
2011	4.79	-5.02
2010	16.54	12.34
2009	14.76	30.79
2008	-39.92	-40.33

## INDEX PERFORMANCE – GROSS RETURNS (%) (JUN 30, 2022)

	1 Mo	3 Mo	1 Yr	YTD	ANNUALIZED			Since Jun 30, 1994
					3 Yr	5 Yr	10 Yr	
<b>MSCI World Momentum</b>	-7.45	-17.98	-17.21	-22.60	6.97	10.48	11.72	10.57
<b>MSCI World</b>	-8.63	-16.05	-13.94	-20.29	7.52	8.22	10.10	7.59

## FUNDAMENTALS (JUN 30, 2022)

Div Yld (%)	P/E	P/E Fwd	P/BV
2.85	14.90	12.12	2.66
2.20	16.97	14.53	2.70

# Momentum: Traders delight

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- High turnover strategy
- Lots of little wins, some big losses
- What is it telling you
- Tax situation

# Value

## CUMULATIVE INDEX PERFORMANCE – GROSS RETURNS (USD) (JUN 2007 – JUN 2022)



## ANNUAL PERFORMANCE (%)

Year	MSCI World Value	MSCI World
2021	22.79	22.35
2020	-0.38	16.50
2019	22.74	28.40
2018	-10.09	-8.20
2017	17.95	23.07
2016	13.23	8.15
2015	-4.11	-0.32
2014	4.42	5.50
2013	27.52	27.37
2012	16.42	16.54
2011	-4.92	-5.02
2010	9.77	12.34
2009	27.70	30.79
2008	-39.85	-40.33

## INDEX PERFORMANCE – GROSS RETURNS (%) (JUN 30, 2022)

	1 Mo	3 Mo	1 Yr	YTD	ANNUALIZED			
					3 Yr	5 Yr	10 Yr	Since Dec 31, 1974
MSCI World Value	-8.79	-11.38	-5.95	-11.81	5.30	5.46	8.42	11.22
MSCI World	-8.63	-16.05	-13.94	-20.29	7.52	8.22	10.10	10.62

## FUNDAMENTALS (JUN 30, 2022)

Div Yld (%)	P/E	P/E Fwd	P/BV
3.31	12.85	11.28	1.84
2.20	16.97	14.53	2.70

# Value: MSCI value may be different to what you think value is

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- Reliance on Book Value
- No cashflow measures
- Different accounting standards
- Forward Earnings

# Value: MSCI value may be different to what you think value is

## S&P 500 Cap weighted return spreads

Style	Factor	YTD ▼	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Val	Div / Price	37.50	9.08	(33.65)	(3.64)	(12.27)	(17.63)	23.39	(14.11)	2.49	(13.51)	(11.41)
Val	Sales / EV	24.82	4.79	(19.42)	(10.60)	(6.46)	1.00	3.91	(10.53)	(0.78)	7.43	(4.69)
Val	Valuation	19.49	3.34	(26.50)	2.49	(8.01)	(2.98)	11.11	(17.42)	4.00	(0.19)	(0.08)
Val	EBITDA / EV	19.31	8.38	(37.88)	(0.81)	(16.15)	0.92	15.01	(15.68)	(0.11)	(0.16)	(5.44)
Val	FCF / Price	16.64	10.09	(2.45)	4.92	(0.74)	17.31	(5.48)	4.46	11.37	1.05	18.42
Val	Book to Price	14.05	4.74	(32.22)	(6.86)	(17.34)	(9.42)	17.72	(18.80)	(0.44)	3.41	8.72
Val	E / P	12.49	7.70	(34.14)	7.98	(7.47)	3.60	11.04	(14.58)	(3.02)	(4.48)	(1.41)

Source: Capital IQ

# Value: Superficial Value is not Value

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- It is a tool – not a religion
- Needs to change with accounting standards
- Value is always a trade-off
- Value is a bet on mean reversion



# Growth

## CUMULATIVE INDEX PERFORMANCE – GROSS RETURNS (USD) (JUN 2007 – JUN 2022)



## ANNUAL PERFORMANCE (%)

Year	MSCI World Growth	MSCI World
2021	21.40	22.35
2020	34.18	16.50
2019	34.14	28.40
2018	-6.42	-8.20
2017	28.49	23.07
2016	3.21	8.15
2015	3.50	-0.32
2014	6.55	5.50
2013	27.20	27.37
2012	16.63	16.54
2011	-5.14	-5.02
2010	14.89	12.34
2009	33.85	30.79
2008	-40.90	-40.33

## INDEX PERFORMANCE – GROSS RETURNS (%) (JUN 30, 2022)

	1 Mo	3 Mo	1 Yr	YTD	ANNUALIZED			
					3 Yr	5 Yr	10 Yr	Since Dec 31, 1974
MSCI World Growth	-8.46	-21.14	-22.22	-28.71	8.67	10.32	11.42	9.83
MSCI World	-8.63	-16.05	-13.94	-20.29	7.52	8.22	10.10	10.62

## FUNDAMENTALS (JUN 30, 2022)

Div Yld (%)	P/E	P/E Fwd	P/BV
1.02	25.81	20.98	5.34
2.20	16.97	14.53	2.70

## Value: MSCI growth may be different to what you think it is

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- Reliance on Analyst Long Term Growth (70%)
- No cashflow measures

## CUMULATIVE INDEX PERFORMANCE – GROSS RETURNS (USD) (JUN 2007 – JUN 2022)



## ANNUAL PERFORMANCE (%)

Year	MSCI World Quality	MSCI World
2021	26.10	22.35
2020	22.73	16.50
2019	36.70	28.40
2018	-5.06	-8.20
2017	26.64	23.07
2016	5.12	8.15
2015	4.25	-0.32
2014	9.01	5.50
2013	27.74	27.37
2012	13.66	16.54
2011	4.43	-5.02
2010	11.36	12.34
2009	33.49	30.79
2008	-33.47	-40.33

## INDEX PERFORMANCE – GROSS RETURNS (%) (JUN 30, 2022)

	1 Mo	3 Mo	1 Yr	YTD	ANNUALIZED			
					3 Yr	5 Yr	10 Yr	Since Jun 30, 1994
<b>MSCI World Quality</b>	-7.81	-16.80	-15.83	-23.79	10.16	11.43	12.01	10.99
<b>MSCI World</b>	-8.63	-16.05	-13.94	-20.29	7.52	8.22	10.10	7.59

## FUNDAMENTALS (JUN 30, 2022)

Div Yld (%)	P/E	P/E Fwd	P/BV
1.89	18.13	17.05	5.97
2.20	16.97	14.53	2.70

# Value: MSCI quality may be different to what you think it is

## IBM ROE 2006 - 2016



## IBM ROE 2016 - 2018



The Quality score for each security is calculated by combining Z-Scores of three winsorized fundamental variables, namely Return on Equity, Debt to Equity and Earnings Variability

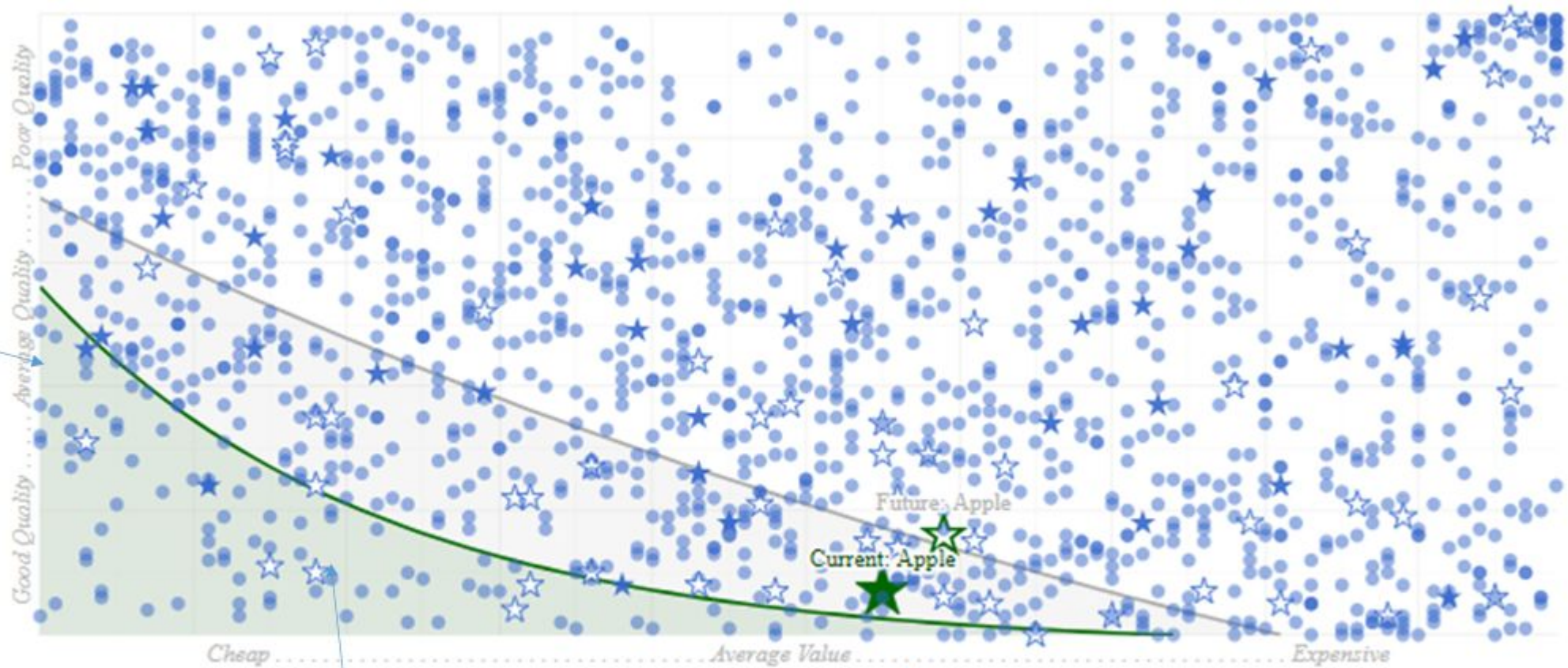
# Quality: Superficial Quality is not Quality

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- Definition of earnings really (really) important
- Definition of equity really important
- Needs more than 3 factors

# Quality vs Value

Some exposure to average quality stocks that are very cheap



Most exposure to stocks with both quality and value

Some exposure to more expensive stocks that are very high quality

# Stocks

## Value

	Float Adj Mkt Cap ( USD Billions)	Index Wt. (%)	Sector
UNITEDHEALTH GROUP	483.27	1.91	Health Care
JOHNSON & JOHNSON	466.72	1.84	Health Care
EXXON MOBIL CORP	362.56	1.43	Energy
BERKSHIRE HATHAWAY B	352.53	1.39	Financials
PROCTER & GAMBLE CO	344.67	1.36	Cons Staples
JPMORGAN CHASE & CO	332.52	1.31	Financials
PFIZER	294.83	1.16	Health Care
CHEVRON CORP	281.97	1.11	Energy
ABBVIE	270.90	1.07	Health Care
COCA COLA (THE)	259.11	1.02	Cons Staples

## Growth

APPLE	US	2,231.19	9.39	Info Tech
MICROSOFT CORP	US	1,829.15	7.70	Info Tech
AMAZON.COM	US	972.80	4.09	Cons Discr
ALPHABET A	US	655.42	2.76	Comm Srvcs
ALPHABET C	US	621.40	2.62	Comm Srvcs
TESLA	US	591.59	2.49	Cons Discr
NVIDIA	US	378.98	1.59	Info Tech
META PLATFORMS A	US	372.34	1.57	Comm Srvcs
NESTLE	CH	327.68	1.38	Cons Staples
VISA A	US	326.53	1.37	Info Tech

# Stocks

## Quality

	Country	Index Wt. (%)
MICROSOFT CORP	US	5.21
APPLE	US	5.11
JOHNSON & JOHNSON	US	3.15
UNITEDHEALTH GROUP	US	2.82
NVIDIA	US	2.68
META PLATFORMS A	US	2.66
ALPHABET A	US	2.60
ALPHABET C	US	2.47
VISA A	US	2.38
NESTLE	CH	2.16

## Min. Vol.

VERIZON COMMUNICATIONS	US	1.57
JOHNSON & JOHNSON	US	1.55
WASTE MANAGEMENT	US	1.53
VERTEX PHARMACEUTICALS	US	1.50
ROCHE HOLDING GENUSS	CH	1.42
PEPSICO	US	1.42
NESTLE	CH	1.42
MERCK & CO	US	1.30
NEWMONT CORP	US	1.25
CONSOLIDATED EDISON	US	1.22

## ESG

	Index Wt. (%)
MICROSOFT CORP	7.39
ALPHABET A	2.65
ALPHABET C	2.51
TESLA	2.39
JOHNSON & JOHNSON	1.89
NVIDIA	1.53
PROCTER & GAMBLE CO	1.39
VISA A	1.32
HOME DEPOT	1.16
MASTERCARD A	1.11

## Momentum

	Country	Index Wt. (%)
APPLE	US	5.16
EXXON MOBIL CORP	US	3.00
UNITEDHEALTH GROUP	US	2.76
JOHNSON & JOHNSON	US	2.64
CHEVRON CORP	US	2.46
PROCTER & GAMBLE CO	US	2.39
ABBVIE	US	2.27
LILLY (ELI) & COMPANY	US	2.19
BERKSHIRE HATHAWAY B	US	2.19
NOVO NORDISK B	DK	2.12



# Outlook

Style	Factor	MTD▼	Jun 22	May 22	Apr 22	Mar 22	Feb 22	Jan 22	Dec 21
Vol	Volatility	2.71	(10.84)	1.29	(14.50)	0.05	(1.40)	(5.92)	(10.81)
EQ	Earnings Quality	0.77	2.65	(4.19)	(2.66)	4.57	(4.25)	(4.70)	(0.04)
CE	Capital Efficiency	0.64	(0.50)	(1.65)	0.45	1.74	(3.73)	(2.07)	0.29
Sz	Size	0.52	(0.86)	0.00	1.57	(0.87)	4.90	(2.17)	2.45
HG	Historical Growth	(0.61)	(1.36)	0.02	(0.80)	0.17	(1.42)	(1.75)	(3.98)
AE	Analyst Expectations	(2.02)	(2.15)	(3.99)	(4.94)	3.04	(2.37)	(2.23)	0.39
PM	Price Momentum	(2.19)	6.21	(2.07)	(1.86)	0.65	(1.34)	(5.03)	(1.74)
Val	Valuation	(2.53)	(0.80)	6.26	11.69	(4.25)	0.33	8.41	8.71

Style	Factor	MTD▼	Jun 22	May 22	Apr 22	Mar 22	Feb 22	Jan 22	Dec 21
EQ	Earnings Quality	1.26	5.54	(5.39)	1.89	1.58	3.08	(3.28)	(0.80)
AE	Analyst Expectations	0.77	0.63	(1.12)	(1.77)	(2.08)	(3.78)	(0.42)	0.27
Sz	Size	0.56	(3.79)	0.39	(5.28)	1.97	(2.46)	(3.84)	(2.39)
CE	Capital Efficiency	0.34	3.88	(1.68)	(1.92)	2.12	0.22	(7.67)	1.03
Vol	Volatility	0.03	(2.73)	5.32	(9.48)	(3.11)	0.55	(2.76)	(5.45)
HG	Historical Growth	(0.83)	(0.76)	(0.34)	(2.76)	1.61	0.02	(8.78)	(0.79)
Val	Valuation	(2.74)	(5.10)	9.03	2.81	0.32	0.60	11.54	3.75
PM	Price Momentum	(4.12)	4.08	(2.05)	2.10	(0.19)	3.28	(7.57)	3.04

Style	Factor	MTD▼	Jun 22	May 22	Apr 22	Mar 22	Feb 22	Jan 22	Dec 21
EQ	Earnings Quality	1.00	(0.59)	(0.88)	0.46	1.49	(1.19)	(0.81)	0.49
CE	<a href="#">Capital Efficiency</a>	0.86	2.14	1.34	(0.50)	(0.50)	(1.68)	(3.75)	1.94
Vol	Volatility	0.47	(11.75)	0.08	(7.70)	4.90	0.85	(14.83)	(0.36)
HG	Historical Growth	0.39	(2.01)	(0.35)	(0.53)	2.17	(2.84)	(4.09)	0.79
Val	Valuation	0.24	(0.48)	2.18	7.25	(0.63)	2.59	13.35	4.60
Sz	Size	0.24	(5.84)	(1.82)	(2.50)	2.84	0.94	(8.66)	3.44
AE	Analyst Expectations	(0.29)	(6.00)	0.80	(0.21)	2.74	(1.31)	(1.13)	1.18
PM	Price Momentum	(0.59)	1.06	1.01	1.48	1.03	(1.17)	(4.17)	0.54

US

Europe  
(developed)

Asia  
(developed)

**Viewer question of the week:**

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**Which investment strategy is your preferred for 2nd half 2022?**

**Drop your answers in the comments**

# Coming up: Australian Housing Report

[YouTube.com/NucleusWealth](https://www.youtube.com/NucleusWealth)

next

Thursday, 14th of July, 12:30 AEST



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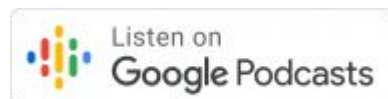
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