



Monthly Index Analysis - October 2022

US Equity

Firm Information

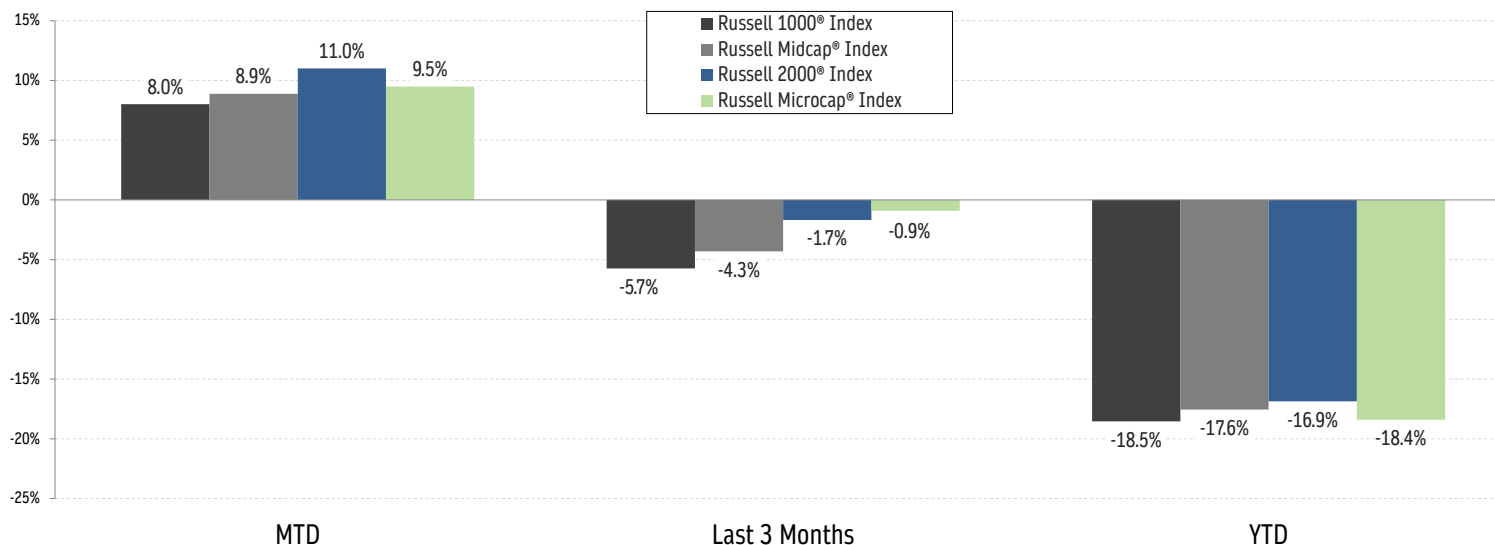
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Performance of Russell US Equity Indices by Size

As of October 31, 2022

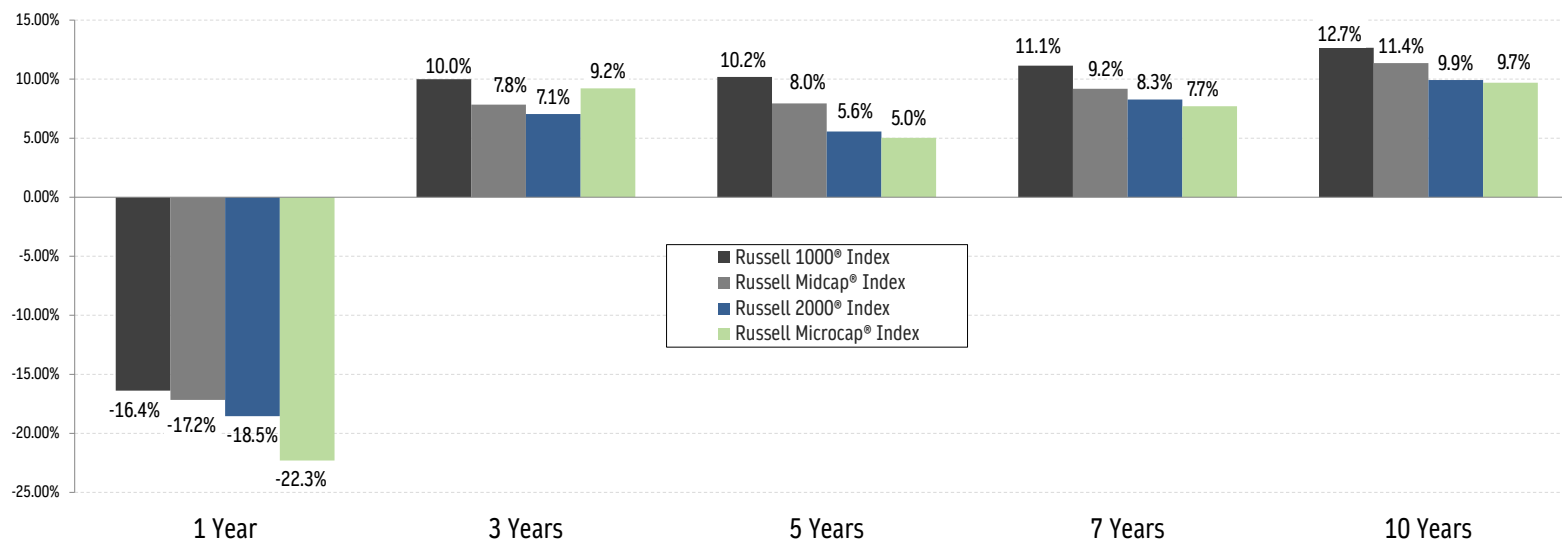


Performance of Russell Indices



US equity markets bounced back from a rough September with strong gains across the board in October with small cap leading the charge with a gain of +11.0%. Large cap lagged with a return of +8.0%. Over the last 3 months, micro cap is leading all size ranges with a decline of 0.9%, while large cap is the laggard by far with a decline of 5.7%. With its strong October, small cap actually leads all size ranges year to date with a decline of 16.9%, while large and micro cap have led on the downside with declines of 18.5% and 18.4%, respectively.

Longer-Term Performance of Russell Indices



Over the last year, larger market caps have held in better in linear fashion. However, over the last 3-years, micro cap and large cap are battling for the top spot with gains of +9.2% and +10.0%, respectively. Still, large cap leads all size ranges over the last 5, 7, and 10-years.

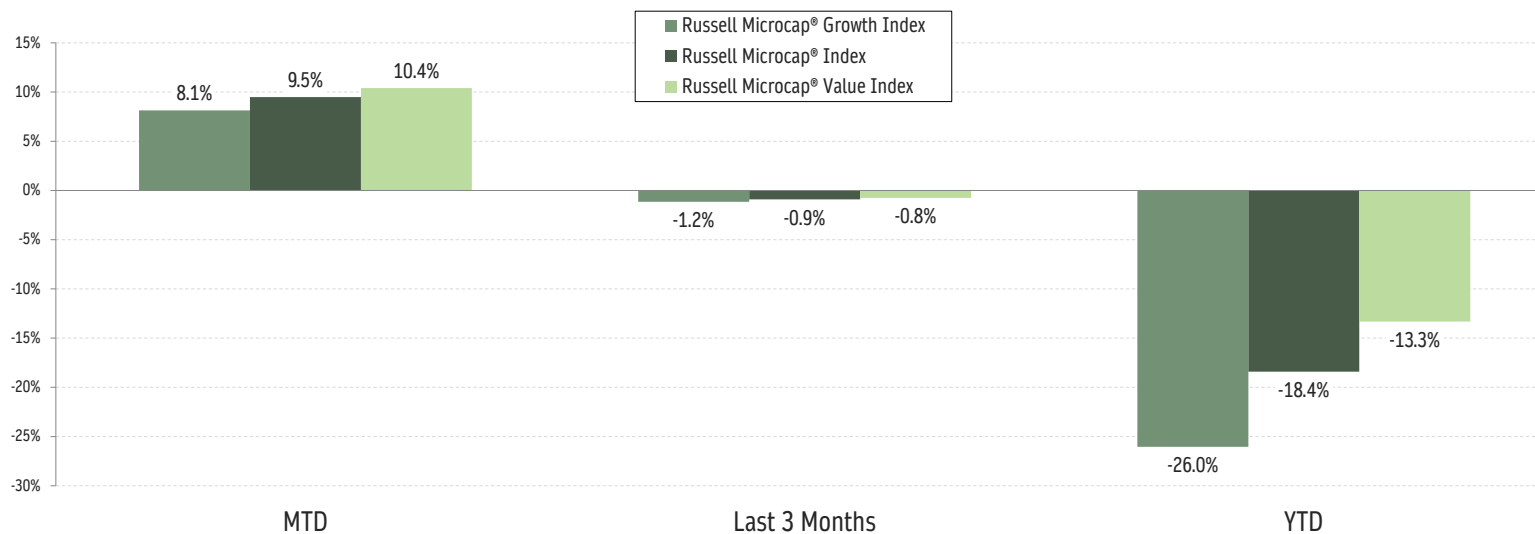
Source: FTSE Russell
Please see additional disclosures at the end of document.

Performance of Russell Microcap Indices by Style

As of October 31, 2022

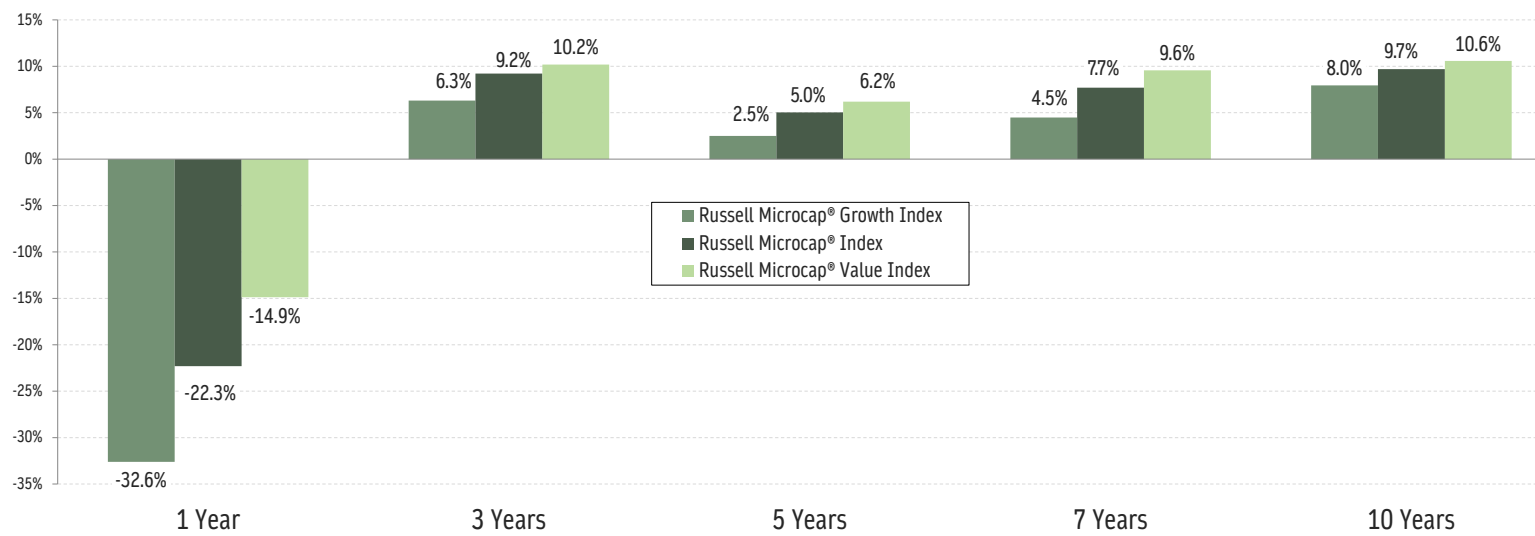


Performance of Russell Microcap Indices



In US microcap markets, value led in October with a gain of +10.4%, 230bps ahead of growth. Similarly, year to date, value has held in much better with a decline of 13.3%, nearly 13pts better than growth.

Longer-Term Performance of Russell Microcap Indices



With its horrendous performance over the last year, growth now trails value over the last 3, 5, 7, and 10-year timeframes.

Source: FTSE Russell
Please see additional disclosures at the end of document.

	MTD			T3M			YTD		
	Return	Contribution	Weight	Return	Contribution	Weight	Return	Contribution	Weight
GICS Sectors									
Communication Services	10.51	0.27	2.65	-3.29	-0.10	2.65	-34.28	-1.20	2.85
Consumer Discretionary	13.10	1.24	9.52	-6.44	-0.63	9.82	-33.44	-3.91	10.30
Consumer Staples	12.17	0.28	2.31	-5.06	-0.14	2.41	-22.95	-0.50	2.24
Energy	27.44	1.47	5.84	17.22	0.95	5.36	52.67	1.70	6.98
Financials	9.78	2.07	20.93	-0.92	-0.22	20.67	-10.15	-2.31	21.87
Health Care	3.03	0.83	29.69	4.84	1.19	29.27	-25.83	-5.23	25.43
Industrials	12.13	1.24	10.24	-7.28	-0.79	10.54	-21.54	-2.70	11.21
Information Technology	9.78	1.10	11.28	-5.84	-0.64	11.45	-28.03	-2.64	10.28
Materials	16.61	0.54	3.26	-2.55	-0.07	3.25	-10.48	-0.61	3.96
Real Estate	10.90	0.39	3.49	-10.38	-0.46	3.79	-21.05	-1.04	4.20
Utilities	7.57	0.06	0.77	0.86	-0.01	0.78	5.22	0.04	0.69
Total	9.49			-0.91			-18.41		
Axioma US Model Factor Returns									
Dividend Yield	0.36			-0.12			-0.08		
Earnings Yield	1.39			0.26			5.64		
Exchange Rate Sensitivity	-0.23			0.62			1.12		
Growth	-0.99			-0.80			-1.63		
Leverage	0.53			-0.67			-0.17		
Liquidity	-0.88			-0.79			1.02		
Market Sensitivity	1.05			0.29			-10.03		
Medium-Term Momentum	0.91			3.81			2.36		
MidCap	-1.11			-1.20			0.43		
Profitability	2.47			-0.39			2.63		
Size	-0.80			-1.87			-6.68		
Value	2.07			0.22			2.47		
Volatility	-0.66			-2.81			-13.59		
Market Cap Size Quintile									
Q1 (Largest)	9.97	5.90	58.99	0.54	0.34	53.67	-15.92	-8.80	55.20
Q2	11.02	2.58	23.49	-0.88	-0.18	24.49	-17.78	-4.00	25.73
Q3	7.73	0.78	10.15	-2.45	-0.31	12.64	-25.17	-3.10	11.38
Q4	4.36	0.22	5.24	-6.98	-0.52	6.56	-28.19	-1.79	5.31
Q5 (Smallest)	0.30	-0.00	2.13	-8.65	-0.26	2.63	-31.38	-0.86	2.04
NA				8.46	0.00	0.01	-17.25	0.13	0.35
Market Cap Bucket									
> 1 B	11.91	1.08	9.34	10.32	1.01	9.64	-18.61	-4.38	19.08
> 500 M, < = 1 B	9.18	3.21	34.85	-2.17	-0.81	36.31	-14.35	-4.72	37.74
> 250 M, < = 500 M	10.31	2.78	26.90	-0.14	-0.00	27.74	-17.98	-3.49	22.41
> 100 M, < = 250 M	10.61	2.08	19.67	-2.08	-0.37	17.90	-24.33	-3.82	14.51
< = 100 M	3.62	0.32	9.24	-7.86	-0.76	8.40	-29.27	-2.13	5.91
NA				8.46	0.00	0.01	-17.25	0.13	0.35
P/E Quintile									
Q1 (Highest)	9.39	1.17	12.32	-3.00	-0.41	12.57	-20.19	-2.60	13.06
Q2	13.23	1.50	11.33	-0.02	0.07	12.26	-11.39	-1.45	12.05
Q3	11.04	1.28	11.53	-1.56	-0.12	10.84	-6.82	-0.72	13.08
Q4	14.58	1.76	12.19	0.24	0.06	11.10	-15.16	-1.92	11.55
Q5 (Lowest)	13.26	1.23	9.43	-6.02	-0.64	10.21	-3.34	-0.85	11.92
Non-earners	6.04	2.52	43.19	0.79	0.11	43.01	-29.40	-10.87	38.34
ROE Quintile									
Q1 (Highest)	12.21	3.15	25.80	-1.64	-0.34	25.62	-10.95	-3.16	27.43
Q2	9.49	2.19	22.79	-0.30	-0.04	22.29	-8.30	-2.10	23.72
Q3	11.24	2.04	18.05	-3.23	-0.56	19.30	-18.83	-3.70	20.75
Q4	7.51	1.06	15.32	0.77	-0.02	15.60	-34.78	-4.83	14.38
Q5 (Lowest)	1.52	0.15	12.01	-2.22	-0.43	12.13	-36.55	-3.33	8.87
NA	14.95	0.88	6.02	9.64	0.46	5.07	-24.10	-1.29	4.85
BETA Quintile									
Q1 (Highest)	8.11	1.49	19.37	-9.76	-1.97	19.03	-21.14	-3.35	14.96
Q2	11.80	2.44	20.66	3.56	0.73	21.45	-24.42	-5.30	20.00
Q3	9.59	2.20	22.85	2.33	0.55	21.63	-18.43	-4.34	24.73
Q4	9.94	2.25	22.36	-2.19	-0.52	23.08	-12.20	-2.83	22.66
Q5 (Lowest)	7.29	1.09	14.71	1.77	0.25	14.70	-17.54	-2.64	16.08
NA	11.87	0.01	0.05	34.07	0.04	0.11	-19.90	0.05	1.57
Stock Price									
> 20	11.05	4.39	39.65	2.43	1.13	41.66	-14.37	-7.73	51.38
> 10, < = 20	6.94	1.81	25.72	-0.50	-0.11	25.24	-15.54	-3.52	24.47
> 5, < = 10	11.19	1.77	16.06	-3.17	-0.54	15.77	-25.48	-2.95	13.20
< = 5	8.21	1.49	18.58	-7.36	-1.42	17.33	-33.94	-4.34	10.59
NA				8.46	0.00	0.01	-17.25	0.13	0.35
Long Term Earnings Growth									
> 20%	11.68	0.63	5.46	-2.67	-0.12	5.83	-28.07	-1.75	6.37
> 10%, < = 20%	6.79	0.66	9.72	-9.32	-0.97	9.97	-23.12	-3.11	12.34
> 0%, < = 10%	9.40	0.54	5.68	-5.80	-0.38	6.16	-15.75	-0.92	5.81
< = 0%	7.67	0.20	2.59	-2.77	-0.06	2.55	-12.04	-0.15	3.12
NA	9.73	7.43	76.56	0.86	0.60	75.49	-17.17	-12.49	72.36
Yield									
Yield	11.23	3.72	32.72	-1.98	-0.61	32.21	-7.80	-3.01	33.83
No Yield	8.66	5.76	67.26	-0.33	-0.32	67.77	-23.71	-15.52	65.81
NA	16.30	0.00	0.03	-14.46	0.00	0.02	2.87	0.12	0.36

Energy (+27.4%) and materials (+16.6%) led in October, while healthcare (+3.0%) was a notable laggard. Year to date, energy (+52.7%) and utilities (+5.2%) are the only sectors with a positive return, while communication services (-34.3%), consumer discretionary (-33.4%), and information technology (-28.0%) have led declines.

Profitability, value, and earnings yield led in October, while midcap, growth, liquidity, and size lagged. Year to date, earnings yield is the leader by far, followed by profitability, value, and momentum. On the other side, volatility, liquidity, and size have been the standouts to the downside.

The smallest quintile by market caps severely lagged in October with a gain of +0.3%.

Stocks above \$1B in market cap were the best performers with a gain of +11.9%, while stocks below \$100m lagged.

Nonearners and the highest P/Es lagged in October.

The highest ROEs beat the lowest by over 10ppts in October.

The highest BETA stocks have lagged meaningfully over the last 3 months.

Stocks over \$20/share outperformed in October and over the last 3 months.

Stocks with long term earnings growth greater than 20% were the winners in October.

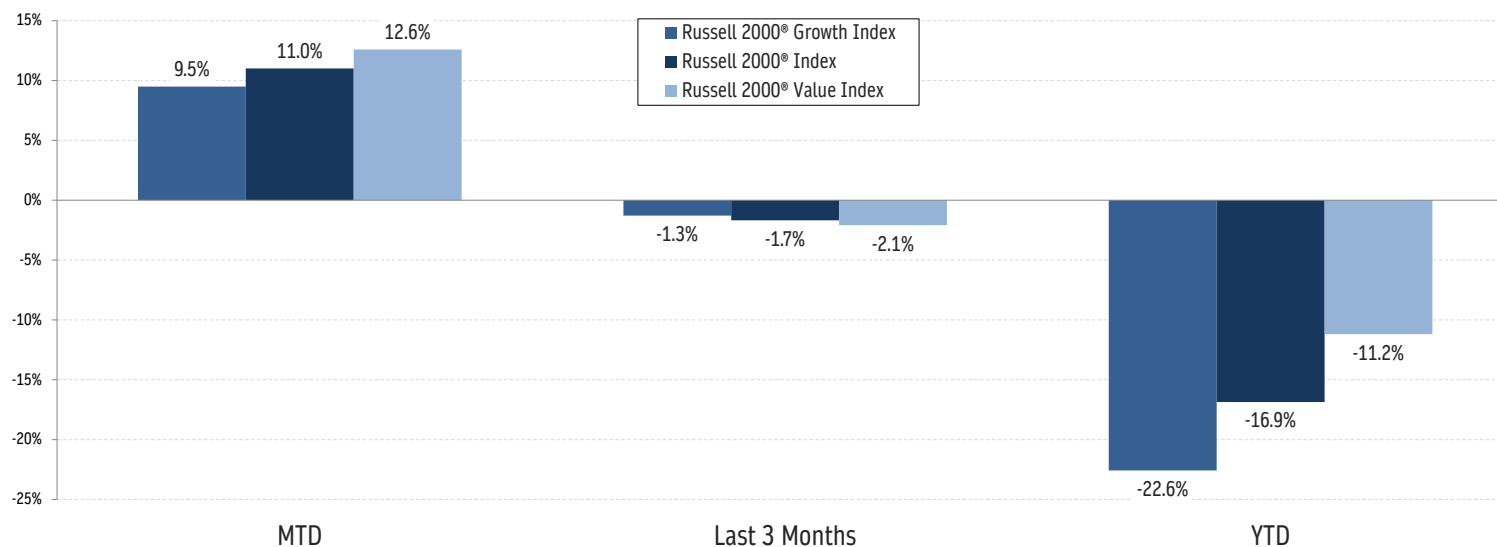
Yield beat no yield in October.

Performance of Russell 2000 Indices by Style

As of October 31, 2022

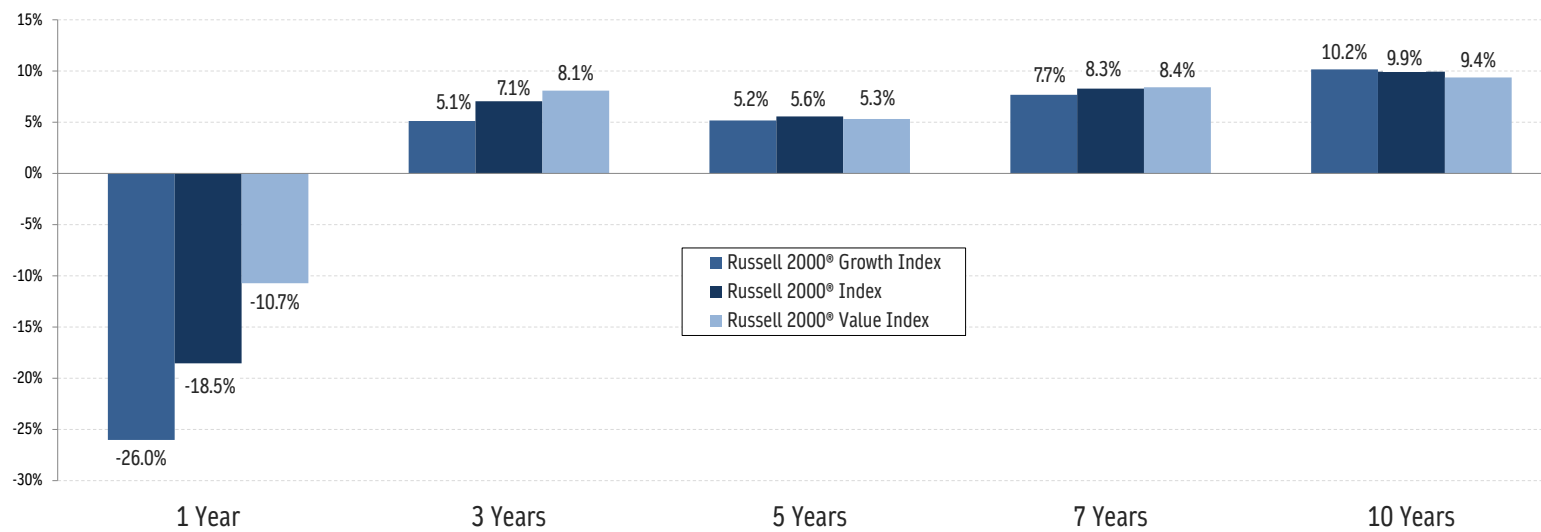


Performance of Russell Small Cap Indices



In US small cap markets, value led in October with a gain of +12.6%, 310bps better than growth. Similarly, year to date, value led with a decline of 11.2%, over 11ppts better than growth.

Longer-Term Performance of Russell Small Cap Indices



Over the last year, value has held in much better with a decline of 10.7%, over 15ppts better than growth. Value now leads growth over the last 1, 3, 5, and 7-year timeframes. However, growth still leads value based on 10-year annualized returns.

Source: FTSE Russell
Please see additional disclosures at the end of document.

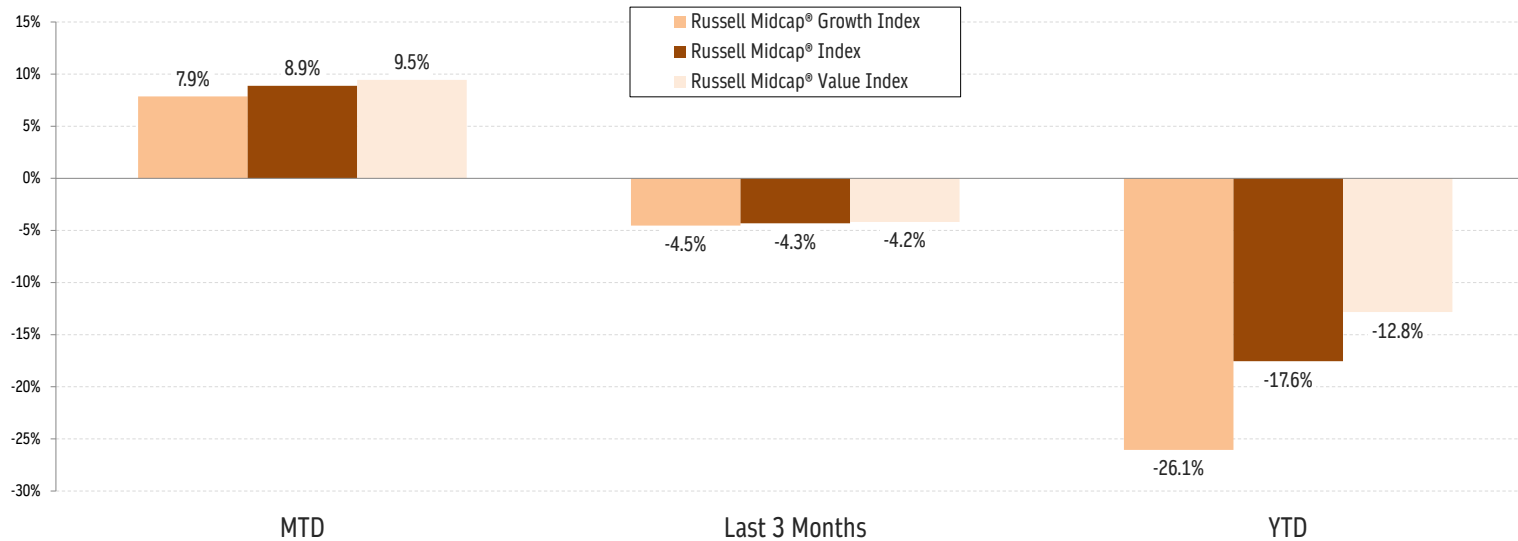
Russell 2000® Index				MTD			T3M			YTD			
As of October 31, 2022				Return	Contribution	Weight	Return	Contribution	Weight	Return	Contribution	Weight	
GICS Sectors													
Communication Services	10.54	0.29	2.73	-7.82	-0.23	2.77	-35.17	-1.24	2.95	Energy (+24.8%) was the leader by far in October, while healthcare (+2.9%) lagged. Year to date, energy (+62.7%) is the only sector with a positive return, while communication services (-35.2%) and information technology (-29.8%) have been the laggards.			
Consumer Discretionary	12.71	1.31	10.39	-2.19	-0.23	10.41	-27.68	-3.17	10.43				
Consumer Staples	11.57	0.41	3.48	-0.70	-0.03	3.47	-7.49	-0.21	3.61				
Energy	24.75	1.54	6.78	16.47	1.01	6.21	62.65	2.12	6.31				
Financials	12.44	2.16	17.53	0.80	0.11	17.25	-10.38	-1.57	16.79				
Health Care	2.93	0.52	17.49	-0.42	-0.07	17.75	-23.78	-3.54	16.78				
Industrials	13.61	2.01	15.06	-2.96	-0.43	15.14	-13.72	-2.15	15.39				
Information Technology	9.67	1.22	12.76	-6.11	-0.74	12.88	-29.78	-4.21	13.19				
Materials	14.24	0.59	4.14	-0.48	-0.03	4.14	-12.31	-0.58	4.09				
Real Estate	11.12	0.72	6.30	-10.78	-0.79	6.57	-25.82	-2.20	7.27				
Utilities	7.10	0.25	3.35	-5.70	-0.25	3.42	-2.11	-0.09	3.19				
Total	11.01			-1.68			-16.86						
Axioma US Model Factor Returns													
Dividend Yield	0.36			-0.12			-0.08			Profitability, value, and earnings yield led in October, while midcap, growth, liquidity, and size lagged. Year to date, earnings yield is the leader by far, followed by profitability, value, and momentum. On the other side, volatility, liquidity, and size have been the standouts to the downside.			
Earnings Yield	1.39			0.26			5.64						
Exchange Rate Sensitivity	-0.23			0.62			1.12						
Growth	-0.99			-0.80			-1.63						
Leverage	0.53			-0.67			-0.17						
Liquidity	-0.88			-0.79			1.02						
Market Sensitivity	1.05			0.29			-10.03						
Medium-Term Momentum	0.91			3.81			2.36						
MidCap	-1.11			-1.20			0.43						
Profitability	2.47			-0.39			2.63						
Size	-0.80			-1.87			-6.68						
Value	2.07			0.22			2.47						
Volatility	-0.66			-2.81			-13.59						
Market Cap Size Quintile													
Q1 (Largest)	11.14	9.67	86.73	-1.68	-0.87	52.59	-16.84	-9.51	52.94	The smallest stocks by market cap quintile lagged in October.			
Q2	10.84	0.70	6.52	-1.82	-0.46	23.51	-16.42	-3.85	24.66				
Q3	8.19	0.30	3.62	-1.15	-0.14	13.30	-14.70	-1.62	12.93				
Q4	12.53	0.26	2.12	-1.88	-0.14	7.29	-18.44	-1.10	6.85				
Q5 (Smallest)	8.07	0.08	1.01	-1.65	-0.06	3.29	-29.11	-0.82	2.50				
NA				-23.78	-0.01	0.01	2.20	0.04	0.13				
Market Cap Bucket													
> 3 B	10.18	2.82	27.43	-1.01	-0.34	34.47	-16.84	-7.80	43.06	Market cap buckets mattered little to returns in October.			
> 2 B, <= 3 B	10.92	2.37	21.85	-2.54	-0.52	20.53	-17.27	-3.23	19.07				
> 1 B, <= 2 B	12.11	3.07	25.47	-1.87	-0.44	22.84	-14.92	-2.76	20.07				
<= 1 B	10.91	2.75	25.25	-1.60	-0.36	22.15	-18.97	-3.10	17.67				
NA				-23.78	-0.01	0.01	2.20	0.04	0.13				
P/E Quintile													
Q1 (Highest)	9.76	1.76	17.96	-3.12	-0.61	18.20	-23.49	-4.68	18.72	Non-earners and the highest P/Es lagged in October.			
Q2	11.29	2.38	21.05	-2.16	-0.41	20.52	-13.80	-2.60	20.08				
Q3	14.31	2.11	14.96	-1.99	-0.28	15.79	-6.97	-0.98	15.92				
Q4	13.65	1.78	13.20	0.42	0.07	12.41	-14.20	-2.04	13.37				
Q5 (Lowest)	16.64	2.11	13.14	-0.51	-0.07	12.80	-2.06	-0.88	13.82				
Non-earners	4.43	0.87	19.70	-1.75	-0.38	20.28	-31.73	-5.67	18.09				
ROE Quintile													
Q1 (Highest)	12.66	3.12	24.90	-1.75	-0.38	25.23	-14.74	-3.94	25.55	The highest ROEs beat the lowest ROEs by over 900bps in October.			
Q2	12.36	2.47	20.03	-0.34	-0.06	21.10	-11.99	-2.78	23.73				
Q3	11.65	2.77	23.74	-1.48	-0.36	23.77	-12.06	-2.67	22.03				
Q4	11.22	1.55	13.97	-4.30	-0.61	14.25	-19.96	-2.97	15.35				
Q5 (Lowest)	3.23	0.35	11.71	-1.92	-0.30	12.04	-33.47	-3.20	9.44				
NA	12.97	0.75	5.65	1.46	0.02	3.61	-27.66	-1.28	3.90				
BETA Quintile													
Q1 (Highest)	6.97	1.10	16.17	-4.36	-0.76	16.55	-24.69	-4.03	15.68	The highest BETA stocks lagged in October.			
Q2	13.34	2.60	19.65	0.65	0.17	19.45	-15.91	-3.54	21.88				
Q3	12.27	2.79	22.98	-1.50	-0.34	23.47	-13.92	-3.04	21.97				
Q4	11.49	2.58	22.50	-1.72	-0.39	23.17	-13.67	-2.67	20.36				
Q5 (Lowest)	10.26	1.96	18.65	-1.79	-0.36	17.33	-17.70	-3.54	19.51				
NA	-23.78	-0.01	0.05	1.36	-0.00	0.04	-29.75	-0.04	0.60				
Stock Price													
> 100	13.46	1.27	9.36	0.77	0.10	12.05	-22.02	-4.01	17.06	Stocks greater than \$100/share outperformed in October and over the last 3 months.			
> 50, <= 100	7.59	1.76	22.86	-3.01	-0.71	23.99	-17.61	-4.49	24.83				
> 25, <= 50	12.47	3.55	28.71	-0.42	-0.07	28.63	-12.46	-3.48	29.31				
<= 25	11.40	4.43	39.07	-2.54	-0.98	35.32	-17.23	-4.92	28.67				
NA				-23.78	-0.01	0.01	2.20	0.04	0.13				
Long Term Earnings Growth													
> 20%	9.66	0.94	9.83	-0.11	0.02	12.20	-22.71	-3.35	13.82	Stocks with greater than 20% long term earnings growth have lagged year to date			
> 10%, <= 20%	10.87	1.82	16.88	-4.53	-0.80	17.60	-16.02	-3.12	18.31				
> 0%, <= 10%	10.59	1.76	16.52	-3.45	-0.59	15.73	-10.56	-1.74	14.81				
<= 0%	7.83	0.34	4.31	-4.36	-0.18	4.19	-15.48	-0.55	4.18				
NA	11.65	6.11	52.46	-0.32	-0.17	50.28	-17.58	-8.11	48.89				
Yield													
Yield	13.94	6.58	47.67	-0.94	-0.45	46.36	-8.97	-4.44	46.50	Yield beat no yield in October.			
No Yield	8.41	4.42	52.30	-2.37	-1.25	53.62	-23.11	-12.47	53.37				
NA	-44.09	-0.02	0.03	-23.78	-0.01	0.01	6.87	0.03	0.13				

Performance of Russell Midcap Indices by Style

As of October 31, 2022

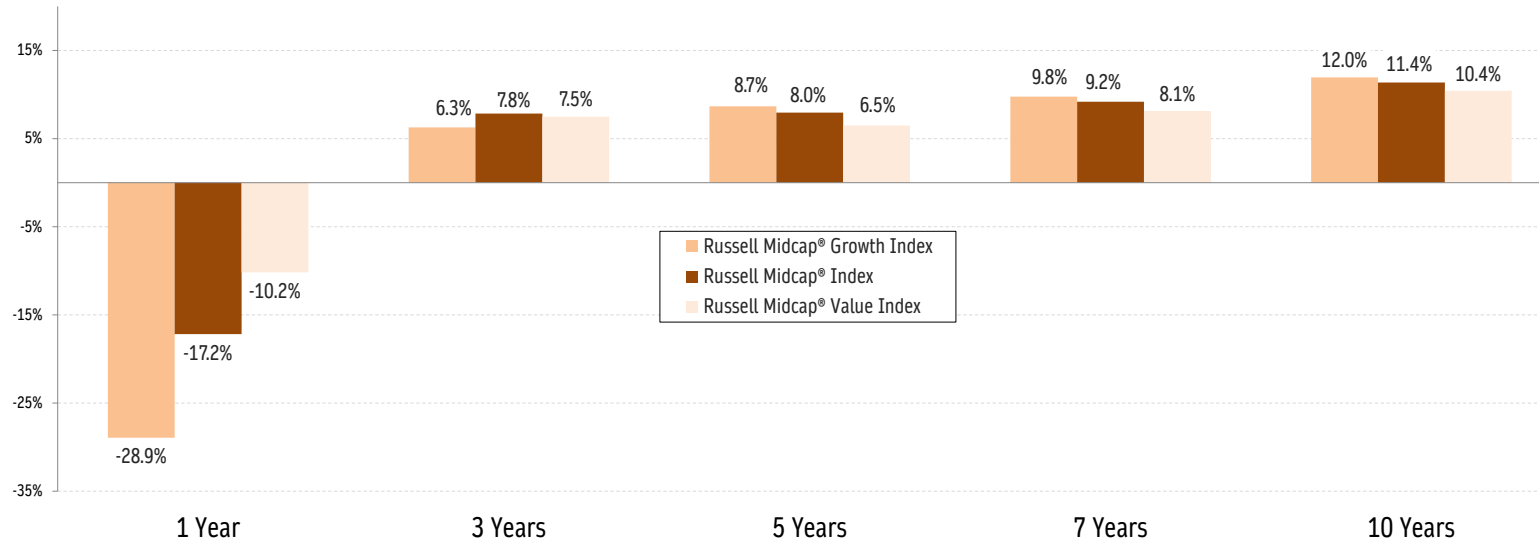


Performance of Russell Midcap Cap Indices



In US midcap markets, value led in October with a gain of +9.5%, 160bps better than growth. Similarly, year to date, value has held in better with a decline of 12.8%, over 13ppts better than growth.

Longer-Term Performance of Russell Midcap Indices



Over the last year, growth has struggled mightily with a decline of 28.9%, nearly 19ppts behind value. Still, growth leads value over the last 5, 7, and 10-year timeframes.

Source: FTSE Russell
Please see additional disclosures at the end of document.

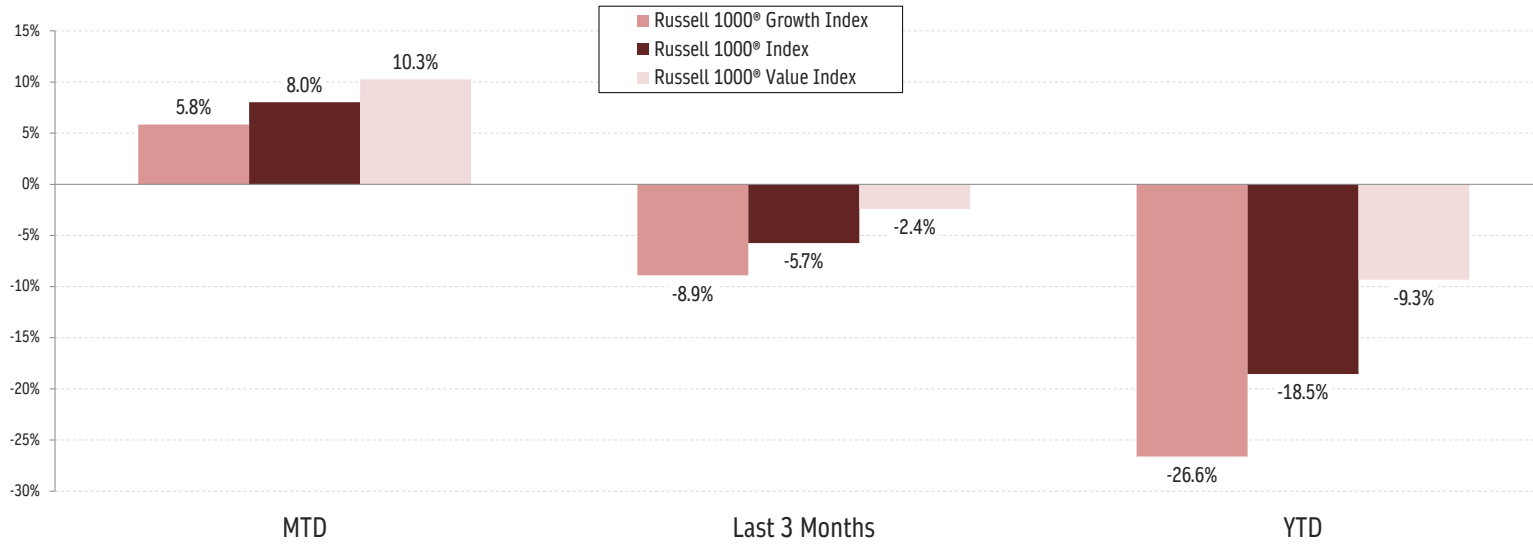
Russell Midcap® Index				MTD			T3M			YTD			
As of October 31, 2022				Return	Contribution	Weight	Return	Contribution	Weight	Return	Contribution	Weight	
GICS Sectors													
Communication Services	6.51	0.28	4.15	-6.48	-0.27	4.19	-35.27	-1.52	3.95	Energy (+22.4%) led by far in October, while real estate was the worst performer with a gain of +3.4%. Year to date, energy (+63.0%) is the only sector with a positive return, while communication services (-35.3%) and information technology (-29.2%) have been the worst.			
Consumer Discretionary	10.88	1.23	11.50	-3.10	-0.34	11.44	-26.27	-3.14	11.47				
Consumer Staples	9.58	0.35	3.68	-1.04	-0.03	3.62	-0.45	-0.09	3.79				
Energy	22.39	1.12	5.47	12.75	0.63	5.06	63.02	1.80	5.40				
Financials	10.89	1.49	13.93	1.79	0.23	13.65	-11.53	-1.40	13.20				
Health Care	7.41	0.78	10.48	-7.52	-0.72	10.41	-23.27	-2.33	10.66				
Industrials	11.03	1.67	15.31	-1.99	-0.23	15.13	-16.13	-2.23	14.80				
Information Technology	5.07	0.82	15.99	-8.64	-1.48	16.42	-29.20	-5.29	16.77				
Materials	9.15	0.58	6.21	-6.59	-0.39	6.20	-11.47	-0.77	6.11				
Real Estate	3.42	0.28	7.57	-14.03	-1.23	8.03	-25.08	-2.26	8.36				
Utilities	4.64	0.28	5.69	-6.32	-0.48	5.85	-3.19	-0.32	5.49				
Total	8.88			-4.31			-17.55						
Axioma US Model Factor Returns													
Dividend Yield	0.36			-0.12			-0.08			Profitability, value, and earnings yield led in October, while midcap, growth, liquidity, and size lagged. Year to date, earnings yield is the leader by far, followed by profitability, value, and momentum. On the other side, volatility, liquidity, and size have been the standouts to the downside.			
Earnings Yield	1.39			0.26			5.64						
Exchange Rate Sensitivity	-0.23			0.62			1.12						
Growth	-0.99			-0.80			-1.63						
Leverage	0.53			-0.67			-0.17						
Liquidity	-0.88			-0.79			1.02						
Market Sensitivity	1.05			0.29			-10.03						
Medium-Term Momentum	0.91			3.81			2.36						
MidCap	-1.11			-1.20			0.43						
Profitability	2.47			-0.39			2.63						
Size	-0.80			-1.87			-6.68						
Value	2.07			0.22			2.47						
Volatility	-0.66			-2.81			-13.59						
Market Cap Size Quintile													
Q1 (Largest)	9.82	4.73	48.29	-3.52	-1.63	47.69	-17.89	-8.29	46.33	Market cap quintiles mattered little to returns in October.			
Q2	6.79	1.62	23.61	-5.24	-1.25	23.59	-17.50	-4.35	24.54				
Q3	8.00	1.13	14.05	-4.52	-0.70	14.35	-18.82	-2.68	14.28				
Q4	10.09	0.93	9.30	-4.31	-0.40	9.38	-11.03	-1.08	9.73				
Q5 (Smallest)	9.89	0.47	4.75	-6.90	-0.34	4.98	-23.65	-1.24	4.98				
NA				17.00	0.00	0.00	-20.97	0.10	0.13				
Market Cap Bucket													
> 27.5 B	11.00	2.59	23.79	-1.52	-0.37	31.29	-18.38	-6.55	36.32	Stocks above \$27.5B in market cap outperformed in October with a gain of +11.0%.			
> 20 B, <= 27.5 B	8.69	1.52	17.30	-8.02	-1.19	14.11	-16.63	-2.90	16.84				
> 10 B, <= 20 B	7.38	2.23	30.04	-5.34	-1.65	29.41	-17.61	-4.64	25.80				
<= 10 B	8.80	2.54	28.88	-4.44	-1.11	25.18	-17.12	-3.55	20.90				
NA				17.00	0.00	0.00	-20.97	0.10	0.13				
P/E Quintile													
Q1 (Highest)	4.87	1.04	21.23	-7.64	-1.73	21.81	-29.96	-6.87	21.35	Non-earners and the highest P/Es lagged in October.			
Q2	8.36	1.95	23.14	-6.21	-1.39	21.96	-21.56	-4.53	20.97				
Q3	9.56	1.86	19.46	-3.17	-0.60	19.41	-11.54	-2.32	20.30				
Q4	10.04	1.68	16.92	-1.99	-0.31	16.94	-5.19	-0.98	16.90				
Q5 (Lowest)	15.08	2.24	15.38	0.43	0.12	15.33	-1.53	-0.60	15.83				
Non-earners	2.71	0.10	3.88	-8.10	-0.40	4.55	-41.75	-2.23	4.65				
ROE Quintile													
Q1 (Highest)	10.77	2.21	20.68	-0.94	-0.12	20.83	-14.39	-2.72	21.19	The highest ROEs beat the lowest by over 400bps in October.			
Q2	9.71	1.89	19.70	-4.89	-1.01	21.94	-16.52	-3.50	21.86				
Q3	7.81	1.53	19.47	-6.15	-1.15	17.68	-15.25	-3.13	20.06				
Q4	8.05	1.42	17.47	-4.01	-0.81	18.72	-13.90	-2.75	18.89				
Q5 (Lowest)	6.15	0.83	13.53	-7.62	-1.18	14.43	-33.24	-4.67	12.28				
NA	10.78	0.98	9.15	-1.31	-0.05	6.41	-13.73	-0.76	5.74				
BETA Quintile													
Q1 (Highest)	6.28	0.97	15.51	-6.85	-1.12	15.42	-18.39	-3.19	16.99	The highest BETAs lagged in October.			
Q2	9.48	1.89	20.10	-2.48	-0.43	19.98	-21.76	-4.55	19.61				
Q3	10.72	2.11	19.87	-3.40	-0.65	20.41	-16.94	-3.50	21.21				
Q4	9.91	2.26	22.92	-3.82	-0.78	21.97	-15.25	-3.15	21.89				
Q5 (Lowest)	7.45	1.64	21.60	-5.60	-1.34	22.15	-15.71	-3.21	20.02				
NA				17.93	0.01	0.07	-26.85	0.06	0.28				
Stock Price													
> 200	7.70	1.33	17.25	-4.92	-0.91	19.37	-24.43	-5.86	23.93	Stocks below \$50/share led in October.			
> 100, <= 200	7.16	1.65	22.82	-4.52	-1.13	25.08	-21.44	-5.88	27.37				
> 50, <= 100	9.14	2.78	30.40	-3.84	-1.19	30.50	-12.71	-3.54	26.87				
<= 50	10.65	3.12	29.52	-4.18	-1.08	25.05	-9.74	-2.37	21.66				
NA				17.00	0.00	0.00	-11.10	0.12	0.17				
Long Term Earnings Growth													
> 20%	9.78	1.41	14.74	-1.19	-0.22	16.51	-21.95	-4.90	21.53	Stocks with greater than 20% long term earnings growth have lagged year to date.			
> 10%, <= 20%	9.15	2.59	28.31	-3.66	-0.98	30.02	-17.33	-5.15	31.75				
> 0%, <= 10%	7.43	2.54	33.63	-6.89	-2.36	32.15	-13.35	-3.60	25.04				
<= 0%	9.03	0.68	7.39	-6.93	-0.42	6.45	-12.70	-0.73	5.69				
NA	10.56	1.66	15.92	-2.19	-0.33	14.87	-19.38	-3.16	15.99				
Yield													
Yield	9.85	6.70	68.03	-3.22	-2.19	67.64	-10.53	-7.24	66.85	Yield beat no yield in October.			
No Yield	6.82	2.17	31.97	-6.57	-2.12	32.36	-30.01	-10.40	33.02				
NA	NA	NA	NA	17.00	0.00	0.00	-20.97	0.10	0.13				

Performance of Russell 1000 Indices by Style

As of October 31, 2022

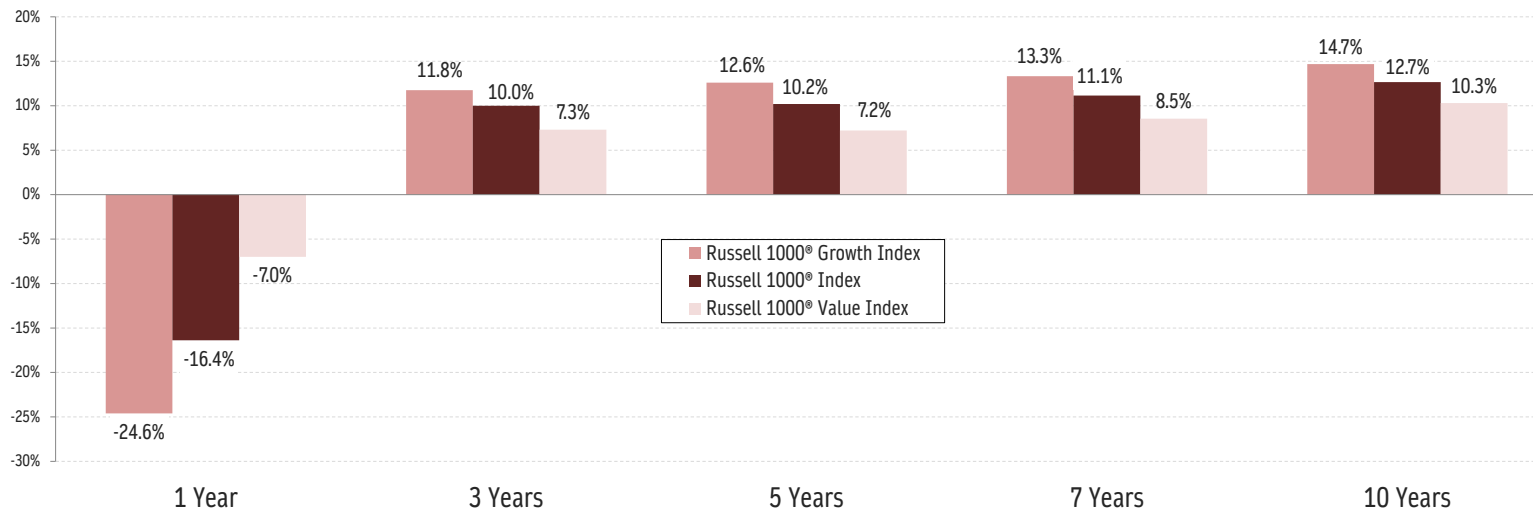


Performance of Russell Large Cap Indices



In US large cap markets, value led by far in October with a gain of +10.3%, 450bps better than growth. Over the last 3 months, value has beat growth by 650bps. Year to date, value is crushing it with a decline of 9.3%, over 17pts better than growth.

Longer-Term Performance of Russell Large Cap Indices



Over the last year, value has held in better with a decline of 7.0%, nearly 18pts better than growth. Still, despite its recent underperformance, growth still leads value over the last 3, 5, 7, and 10-year timeframes.

Source: FTSE Russell
Please see additional disclosures at the end of document.

Russell 1000® Index				MTD			T3M			YTD			
As of October 31, 2022				Return	Contribution	Weight	Return	Contribution	Weight	Return	Contribution	Weight	
GICS Sectors													
Communication Services	0.34	0.06	7.73	-15.10	-1.24	7.92	-38.85	-3.84	8.55	Energy (+24.0%) led by far in October, while communication services (+0.3%) was the laggard. Year to date, energy (+68.2%) is the only sector with a positive return, while communication services (-38.9%), consumer discretionary (-29.9%), and information technology (-27.6%) have lagged.			
Consumer Discretionary	1.19	0.14	11.26	-11.42	-1.43	11.51	-29.93	-3.86	11.48				
Consumer Staples	9.20	0.59	6.42	-1.30	-0.08	6.34	-3.97	-0.29	6.19				
Energy	24.01	1.11	5.13	15.98	0.75	4.68	68.23	1.66	4.15				
Financials	12.06	1.37	11.54	1.18	0.17	11.33	-11.69	-1.30	11.48				
Health Care	9.22	1.35	14.71	-0.15	0.11	14.19	-6.65	-0.48	13.86				
Industrials	13.04	1.11	8.75	-0.88	-0.04	8.66	-11.54	-0.93	8.51				
Information Technology	7.32	1.89	25.82	-10.73	-2.97	26.46	-27.55	-7.86	27.08				
Materials	9.15	0.25	2.76	-5.10	-0.13	2.74	-17.04	-0.48	2.59				
Real Estate	2.53	0.08	3.03	-15.79	-0.56	3.21	-26.87	-0.97	3.30				
Utilities	2.24	0.06	2.84	-8.85	-0.32	2.96	-4.63	-0.21	2.80				
Total	8.02			-5.74			-18.54						
Axioma US Model Factor Returns													
Dividend Yield	0.36			-0.12			-0.08			Profitability, value, and earnings yield led in October, while midcap, growth, liquidity, and size lagged. Year to date, earnings yield is the leader by far, followed by profitability, value, and momentum. On the other side, volatility, liquidity, and size have been the standouts to the downside.			
Earnings Yield	1.39			0.26			5.64						
Exchange Rate Sensitivity	-0.23			0.62			1.12						
Growth	-0.99			-0.80			-1.63						
Leverage	0.53			-0.67			-0.17						
Liquidity	-0.88			-0.79			1.02						
Market Sensitivity	1.05			0.29			-10.03						
Medium-Term Momentum	0.91			3.81			2.36						
MidCap	-1.11			-1.20			0.43						
Profitability	2.47			-0.39			2.63						
Size	-0.80			-1.87			-6.68						
Value	2.07			0.22			2.47						
Volatility	-0.66			-2.81			-13.59						
Market Cap Size Quintile													
Q1 (Largest)	7.82	5.96	75.68	-6.13	-4.60	75.49	-19.63	-14.76	75.15	The smallest quintile by market cap outperformed in October.			
Q2	9.08	1.16	13.05	-3.60	-0.48	13.09	-13.54	-1.76	13.19				
Q3	6.96	0.42	6.15	-6.01	-0.39	6.15	-17.62	-1.13	6.23				
Q4	9.38	0.32	3.44	-3.93	-0.14	3.52	-15.53	-0.56	3.64				
Q5 (Smallest)	10.00	0.17	1.68	-7.05	-0.12	1.75	-20.05	-0.36	1.73				
NA				17.00	0.00	0.00	70.77	0.04	0.06				
Market Cap Bucket													
> 450 B	0.96	0.26	20.79	-14.14	-3.53	23.48	-29.25	-8.09	25.71	Megacaps (greater than \$450B) severely lagged in October with a gain of only 1.0%.			
> 150 B, <= 450 B	9.82	2.24	22.92	-3.76	-0.79	23.55	-14.36	-3.14	23.80				
> 50 B, <= 150 B	10.89	2.58	24.00	-1.49	-0.29	23.09	-13.53	-2.87	21.97				
<= 50 B	9.28	2.94	32.30	-3.73	-1.12	29.88	-15.62	-4.47	28.46				
NA				17.00	0.00	0.00	70.77	0.04	0.06				
P/E Quintile													
Q1 (Highest)	1.17	0.20	17.59	-13.13	-2.68	18.97	-36.34	-7.72	18.54	Nonearners and the highest P/E's massively lagged in October. The lowest P/E's were the standouts the upside on October.			
Q2	8.22	2.83	34.32	-7.71	-2.86	36.43	-22.44	-8.04	35.51				
Q3	6.17	1.25	19.95	-3.43	-0.55	16.66	-11.96	-1.93	16.52				
Q4	12.46	1.75	14.29	-1.84	-0.20	13.29	-2.87	-0.49	16.10				
Q5 (Lowest)	16.20	1.97	12.70	4.21	0.65	13.31	4.11	0.36	11.92				
Non-earnings	2.40	0.02	1.16	-6.13	-0.09	1.34	-42.11	-0.71	1.41				
ROE Quintile													
Q1 (Highest)	9.40	3.17	33.85	-6.12	-2.05	34.07	-22.60	-9.15	40.13	ROEs haven't mattered too much to returns.			
Q2	5.30	1.20	22.29	-6.49	-1.53	23.47	-19.02	-4.53	23.53				
Q3	12.02	1.76	14.91	-1.13	-0.11	13.74	-6.59	-0.99	15.47				
Q4	4.21	0.67	15.36	-9.80	-1.59	15.28	-13.64	-1.75	12.68				
Q5 (Lowest)	7.36	0.56	7.81	-5.46	-0.47	8.34	-31.41	-1.80	5.15				
NA	11.55	0.65	5.78	0.09	0.02	5.09	-11.25	-0.31	3.04				
BETA Quintile													
Q1 (Highest)	1.17	0.15	13.52	-16.41	-2.50	13.93	-23.49	-1.84	7.24	The highest BETA stocks lagged severely in October.			
Q2	7.12	0.83	11.66	-3.27	-0.38	12.16	-19.06	-3.69	18.27				
Q3	7.26	1.87	25.51	-4.97	-1.17	24.11	-21.62	-4.38	19.74				
Q4	9.82	1.99	20.45	-6.57	-1.43	22.61	-12.93	-2.52	22.23				
Q5 (Lowest)	11.12	3.19	28.86	-1.17	-0.25	27.17	-19.00	-6.11	32.41				
NA				17.93	0.00	0.02	-20.28	0.00	0.11				
Stock Price													
> 350	10.27	0.71	7.05	-4.82	-0.43	9.31	-23.78	-3.61	14.80	Stocks greater than \$350/share were the winners in October.			
> 200, <= 350	5.29	1.14	21.36	-7.04	-1.54	21.80	-24.64	-5.67	22.79				
> 100, <= 200	7.77	2.62	33.38	-8.22	-3.15	37.57	-20.25	-7.07	34.39				
<= 100	9.39	3.55	38.22	-2.05	-0.62	31.31	-7.52	-2.23	27.95				
NA				17.00	0.00	0.00	67.52	0.04	0.07				
Long Term Earnings Growth													
> 20%	4.15	0.66	16.16	-8.79	-1.71	18.00	-29.76	-7.25	21.97	Stocks with greater than 20% long term earnings growth lagged in October with a gain of only 4.2%.			
> 10%, <= 20%	8.91	3.52	39.62	-6.37	-2.38	38.70	-17.65	-7.88	46.47				
> 0%, <= 10%	7.62	2.46	32.12	-4.52	-1.46	31.62	-8.93	-2.01	22.78				
<= 0%	12.40	0.74	6.00	-1.53	-0.04	5.85	-13.32	-0.27	2.23				
NA	10.62	0.63	6.10	-2.82	-0.16	5.82	-16.82	-1.13	6.56				
Yield													
Yield	10.13	7.60	75.67	-3.50	-2.48	74.96	-12.09	-8.55	74.07	Yield beat no yield.			
No Yield	1.63	0.42	24.33	-12.35	-3.26	25.04	-34.41	-10.02	25.87				
NA	NA	NA	NA	17.00	0.00	0.00	70.77	0.04	0.06				

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