

# **Russell US Indexes Spotlight**

QUARTERLY REPORT: OCTOBER 2023

FOR PROFESSIONAL INVESTORS ONLY

### Large-caps and Growth hold sway despite Q3 setback

The large-cap indexes fared better than their small-cap peers in the Q3 slump, with most of their edge coming from a bias for stocks viewed as more likely to withstand tighter credit conditions and an economic slowdown. The Q3 pullback barely dented large-cap Growth's massive lead for the year, while small-cap Value performed worst of all, ending with a loss.

### Highlights

#### Large-caps show resilience

Russell 1000 fell less than its small-cap counterpart in Q3, buoyed by a bias for larger players in most industries. (pages 2 & 4)

#### Growth prevails despite Q3 rate headwinds

The Q3 turmoil hurt both Growth and Value styles, but large-cap Growth retained its huge YTD lead despite pressures on Big Tech from surging rates. (page 2-5)

#### Growth enjoys biggest forecast upgrades

The EPS growth outlook has brightened across all Russell indexes this past year, with the Russell 1000 and both Growth indexes getting the biggest upgrades. (page 7-8)

#### Dividend yields edge higher

Amid a broad rebound, dividend yields have returned to pre-pandemic levels for the Value indexes, which are more tilted to high dividend-paying firms. (page 9)

#### Valuation re-ratings continue

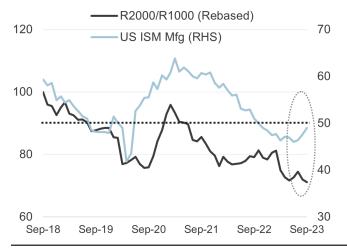
Forward P/Es are now roughly in line or modestly above pre-pandemic averages for most Russell indexes, except for the Russell 2000 and its Growth offshoot. (page 10)

#### **Russell IPO activity revives**

IPO activity perked up in Q3, with the Russell 2000 adding eight newcomers, mostly in Health Care. (page 11)

Russell Indexes - Your index matters | FTSE Russell

Large-caps held up better than small-caps in the Q3 rout as leading indicators continued to point to a slowing US economy.



Big Tech and other growth stocks were hit hard by last month's spike in bond yields but large-cap Growth remains well ahead YTD.



Source: FTSE Russell / Refinitiv. Data as of September 30, 2023. Past performance is no guarantee of future results. This report should not be considered 'research' for the purposes of MIFID II. Please see the end for important legal disclosures. For professional investors only.

### Russell US Index Performance — Third Quarter 2023

#### **Key Observations**

The rally in US stocks hit a speed bump in Q3, as slowing progress on inflation and continued hawkish Fed rhetoric reignited 'higher-for-longer' rate fears and eroded 'soft landing' optimism. The Russell 1000 fell 3.1%, far less than the more cyclically tilted Russell 2000's 5.1% drop, as investors continued to show a strong bias for larger, financially healthier companies deemed less sensitive to economic challenges. The Q3 pullback trimmed the large-cap index's respective YTD and 12-month advances to 13.0% and 21.2%, far outstripping the 2.5% and 8.9% gains for the small-cap index.

The Russell 1000 Growth also slid 3.1% in Q3, in line with the two Value indexes but far better than the small-cap Growth index. The Q3 stumble barely dented large-cap Growth's enormous lead (with respective YTD and 12-month gains of 25.0% and 27.2%). The large-cap Growth's recent winning streak owes much to the summertime rally in mega-cap Tech and other potential beneficiaries of the recent advances in artificial intelligence (AI). Those gains were only partially unwound in September when surging rates sparked a selloff in high-multiple growth stocks and soaring oil prices gave both large and small Value stocks back in the vanguard (Chart 2).

Small-cap Value ranks as the worst performer among the flagship Russell indexes, with a modest loss of 0.5% for the year so far, and a gain of 7.8% for the 12 months.

Chart 1: The large-cap size and style indexes fared the same or better than small-cap peers in the Q3 rout, putting the Russell 1000 and its Growth cohort firmly in the lead for the YTD and 12M. Small-cap Value has done worst of all this year.

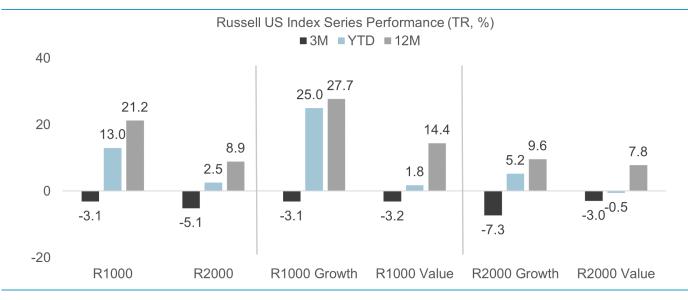
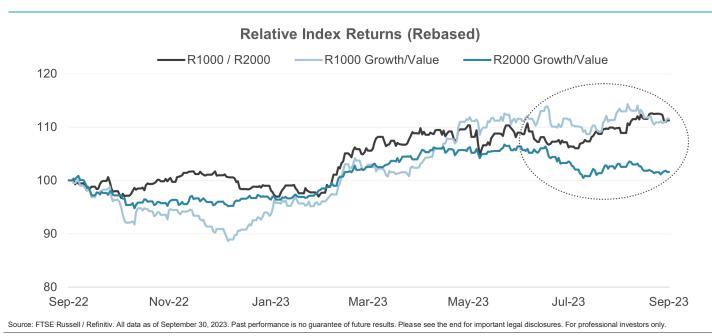


Chart 2: The Russell 1000 has retained its edge over the Russell 2000 this year, as Big Tech and other AI-propelled growth stocks held their summertime gains despite the late-quarter selloff. Small-cap Growth badly lagged its Value peer in Q3.



FTSE Russell | Russell US Indexes Spotlight Report

### Macro Drivers – Third Quarter 2023

Market anxieties ratcheted higher in Q3 as increasingly hawkish Fed rhetoric dashed hopes for interest-rate relief any time soon, sending long-term Treasury yields to new highs for the year and reigniting fears of a more significant US economic slowdown.

Vowing to bring inflation back to its 2% target, the Fed kept its benchmark borrowing rate steady at its meeting in September (following a 25bps hike in July and a pause in June), but signalled the possibility of one more hike this year. Treasury yields surged in response, though far more sharply at the long end than the short end (Chart 1). Though still inverted, the 10yr/2yr yield curve flattened significantly in Q3 from a record of negative 100bps in Q2.

Economists continue to see the US economy cooling in the coming year from the 2.1% growth in 2022. However, prompted by stronger-than-projected economic readings, many forecasters recently raised their GDP forecasts for 2023 and 2024 (Chart 2).

The ISM US Manufacturing Index improved modestly in September but remained in contractionary territory (below 50). Weak data and tightening financial conditions continued to favor larger-cap stocks over their more economically sensitive small-cap peers (Chart 3), as has been the case for most of the past year. However, the summertime AI-propelled rally in Big Tech and other growth stocks faltered in late-Q3 as the spike in long Treasury bonds put pressure on pricier segments of the market (Chart 4).

# Chart 1: The US yield curve flattened in Q3 as long yields reacted more than short yields to hawkish Fed signals.

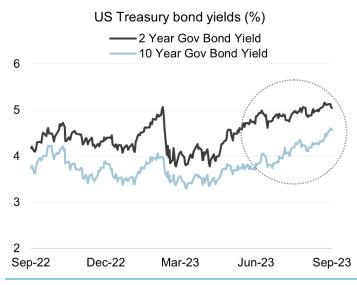


Chart 3: With leading indicators still signaling contraction, investors favored larger, less cyclically sensitive stocks.

US ISM Mfg (RHS)

120

100

80

60

Sep-18

R2000/R1000 (Rebased)

Chart 2: Prompted by recent data, economists lifted GDP growth estimates for 2023 but still see lower GDP in 2024.

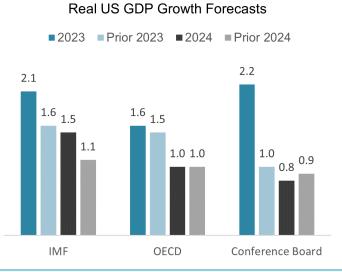


Chart 4: The late-Q3 surge in long bonds took a heavy toll on high-multiple stocks, upending the recent Growth rally.



Source: FTSE Russell / Refinitiv / International Monetary Fund World Economic Outlook Reports / Organization for Economic Cooperation and Development (OECD) and The Conference Board. Data as of September 30, 2023. Past performance is no guarantee of future results. Please see the end for important legal disclosures. For professional investors only.

Sep-20

Sep-21

Sep-22

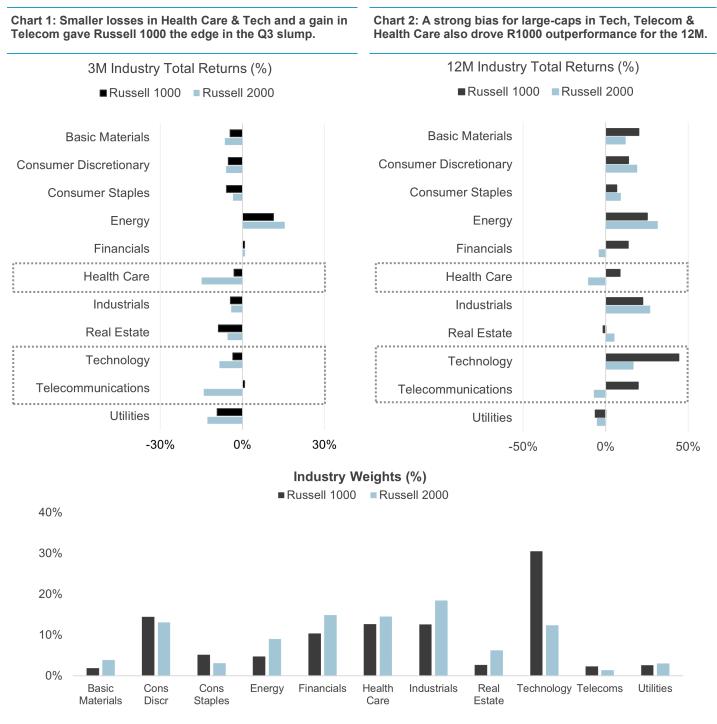
Sep-19

### Industry Returns and Exposures – Russell 1000 & Russell 2000

#### Key observations

Amid widespread losses, only Energy and (less so) Financial stocks ended Q3 in the plus column for both size indexes, while defensive stocks groups and Real Estate suffered the biggest declines.

- Smaller losses in Health Care and Technology (and a modest uptick in Telecom) provided most of the Russell 1000's edge versus the Russell 2000 in Q3.
- The same three industries (and Financials) drove the Russell 1000's outperformance for the 12 months.
- For Q3, Energy dominated gains for both size indexes, though more so for the Russell 2000; Real Estate & Utilities were the worst performers for the large-cap index; Health Care, Telecom & Utilities did worst for the small-cap index.
- For the 12 months, Tech, Energy and Industrials led large-cap gains, while Energy, Industrials and Discretionary topped the charts for the small-cap index.
- Utilities and Real Estate were the worst performers for the Russell 1000 for the 12 months. Health Care, Telecom and Utilities led small-cap losses for the longer-term period.



Source: FTSE Russell / Refinitiv. Based on Industry Classification Benchmark data as of September 30, 2023. Past performance is no guarantee of future results. Please see the end for important legal disclosures. For professional investors only.

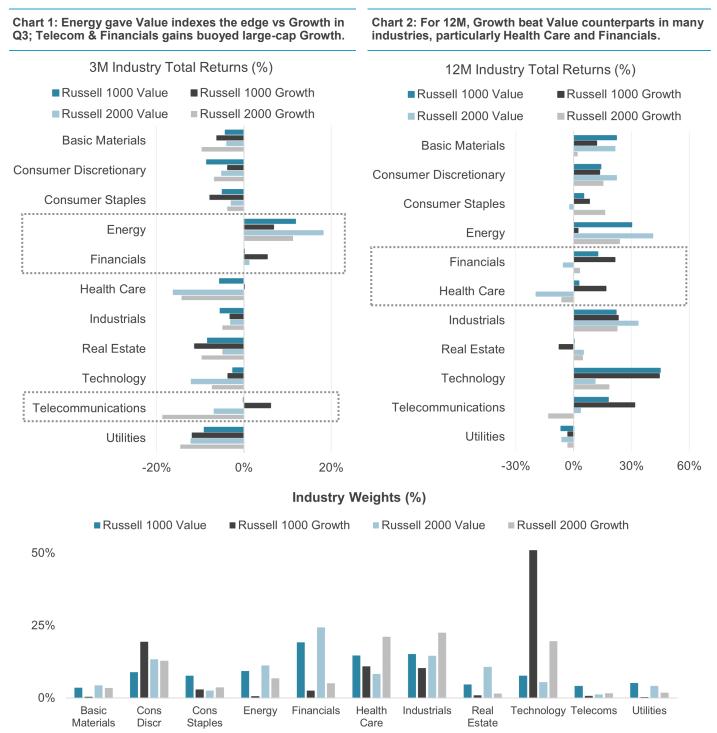
FTSE Russell | Russell US Indexes Spotlight Report

### Industry Returns & Exposures - Russell 1000 & 2000 Growth & Value

#### **Key observations**

Large-cap Growth and Value recorded similar losses in Q3, but small-cap Growth badly lagged its Value cohort. For the 12 months, however, large-cap Growth gains far outstripped those of its Value counterpart and both small-cap style indexes.

- Within large caps, Value fared better than Growth in 6 of 11 industries in Q3 (led by Energy) in Q3, but Growth evened the score with better performances Telecom, Health Care & Financials. Those same three industries also provided most of large-cap Growth's outperformance for the 12-month period.
- Within small-caps, Value held up better than Growth in 9 of 11 industries in Q3, led by Telecom, Energy and Materials. But Growth outpaced Value for the 12 months, with bigger gains in Staples, Health Care & Financials helping most.
- For Q3, Energy and (less so) Financials were among the few gainers across the style indexes; Utilities, Real Estate and Discretionary were among the biggest laggards, on average.
- Among widespread gains for the 12 month, growth-driven groups (e.g., Technology, Industrials and Discretionary) generally outpaced more defensive groups (Utilities and Staples) and Real Estate.



Source: FTSE Russell / Refinitiv. All data as of September 30, 2023. Past performance is no guarantee of future results. Please see the end for important legal disclosures. For professional investors only.

FTSE Russell | Russell US Indexes Spotlight Report

#### Key observations — Third Quarter 2023

Drilling deeper into the sector performances within the 11 Russell 1000 industries in Q3, we highlight the following key points:

- For the worst-performing industries in Q3 Utilities the Electricity sector was by far the biggest drag on returns, . though all components declined.
- Most of the losses for the second worst-performing industry Real Estate came from REITs.
- Up next among the decliners, Medical Equipment led Health Care declines, offset by small positive contributions from the Pharmaceuticals and Health Care Provider components. Tech Hardware stocks were also major detractors.
- Energy was by far the best-performing large-cap industry in Q3, with all of the gains coming from double-digit contributions from its oil, gas & coal component.
- Financials ranked a distant second among the top Q3 performers, led by positive contributions from Investment Banking and Life Insurance stocks, offset by small losses among the rest of that industry's sectors.

Table 1: Sectors within Real Estate, Utilities & Health Care were the biggest drags on large-cap performance in Q3.Oil & gas stocks dominated the large-cap index's sector gains for the period, followed by Investment Banks and Life Insurers.

	Avg.	Q3 2023		Avg.	Q3 2023
Sector	Weight	Contrib.	Sector	Weight	Contrib.
Basic Material			Health Care		
Chemicals	62.4%	-2.86%	Health Care Providers	18.4%	0.14%
Industrial Materials	4.9%	0.21%	Medical Equipment and Services	31.8%	-3.42%
Industrial Metals and Mining	27.2%	-1.04%	Pharmaceuticals and Biotechnology	49.8%	0.23%
Precious Metals and Mining	5.4%	-0.60%	Industrials		
Consumer Discretionary			Aerospace and Defense	12.0%	-1.26%
Automobiles and Parts	13.2%	-0.83%	Construction and Materials	6.7%	-0.16%
Consumer Services	4.2%	0.03%	Electronic and Electrical Equipment	8.4%	-0.81%
Household Goods & Home Construction	2.7%	-0.20%	General Industrials	16.1%	-0.47%
Leisure Goods	4.1%	-0.01%	Industrial Engineering	9.1%	-0.27%
Media	10.3%	-1.19%	Industrial Support Services	34.6%	-1.01%
Personal Goods	5.2%	-0.68%	Industrial Transportation	13.1%	-0.34%
Retailers	41.0%	-1.25%	Real Estate		
Travel and Leisure	19.3%	-1.40%	Real Estate Investment & Services Dev.	7.0%	-0.76%
Consumer Staples			Real Estate Investment Trusts	93.0%	<u>-8.10%</u>
Beverages	29.3%	-1.68%	Technology		
Food Producers	21.5%	-1.88%	Software and Computer Services	56.6%	-0.30%
Personal Care Drug & Grocery Stores	38.7%	-1.83%	Technology Hardware and Equipment	43.4%	-2.94%
Tobacco	10.6%	-0.45%	Telecomunications	<u> </u>	
Energy			Telecommunications Equipment	39.9%	-1.79%
Alternative Energy	2.6%	-0.69%	Telecommunications Service Providers	60.1%	-0.89%
Oil, Gas and Coal	97.4%	11.89%	Utilities		
Financials			Electricity	66.8%	-7.05%
Banks	29.2%	-0.39%	Gas, Water and Multi-utilities	23.3%	-1.41%
Finance and Credit Services		- <u>0.27%</u>	Waste and Disposal Services	9.9%	-0.91%
Investment Banking and Brokerage Svcs	40.2%	0.82%			
Life Insurance	4.4%	0.30%			
Mortgage Real Estate Investment Trusts	0.6%	-0.01%			
Non-life Insurance	18.4%	0.51%			

Source: FTSE Russell. \*Indexes data shown here are from the Russell Capped Index Series, except for the Real Estate Industry. Data as of September 30, 2023. Past performance is no guarantee of future results. Please see the end for important legal disclosures. For professional investors only.

### EPS Growth Outlook and Revision Cycle – Russell 1000 & Russell 2000

Consensus EPS growth forecasts continued their upward climb for both the Russell 1000 and Russell 2000 over the past few months, reflecting the surprising resilience of the US economy (underpinned by a strong job market) and easing input cost inflation.

Analysts are now anticipating Russell 1000 earnings growth of 15.6% over the next 24-month period, up dramatically from a low of 10% last December (Chart 1). Russell 2000 forecasts have also risen over the past year (Chart 2), with consensus now pegging EPS growth at 17.3%, up from a low of 14% last December.

These trends were driven largely by upgrades to Telecom, Discretionary and Utilities following recent stronger-than-expected quarterly earnings results, offset by downgrades for Basic Materials and Real Estate companies affected by the recent downturn in commodity prices and sharply rising interest rates.

Analysts' revisions for both indexes have also grown less pessimistic over the past year. Revision trends improved early in the quarter (with upgrades solidly outnumbering downgrades for the Russell 1000 and modestly so for the Russell 2000 in July and August) but have taken a turn lower more recently (Chart 3).

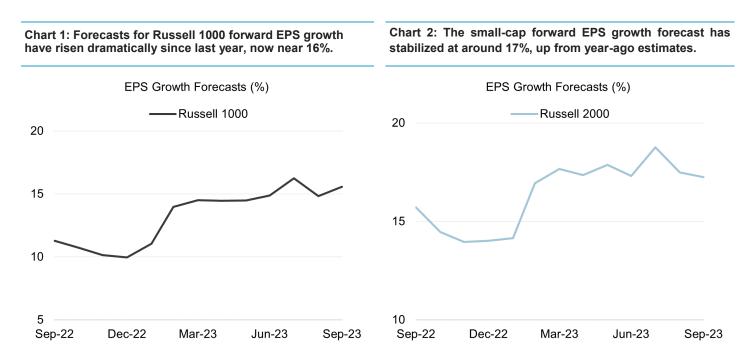
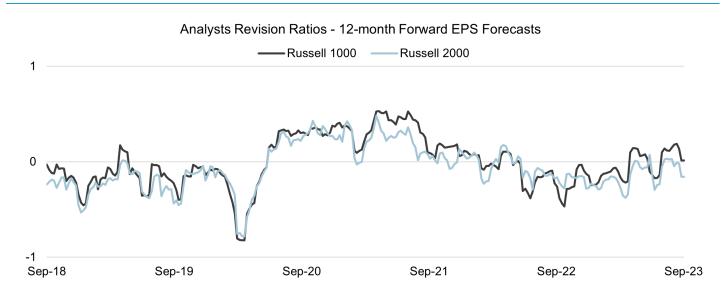


Chart 3: Revision cycles for the Russell 1000 and Russell 2000 have improved markedly since last September, particularly for the large-cap index, where upgrades have outpaced downgrades since July. But ratios deteriorated for both recently.



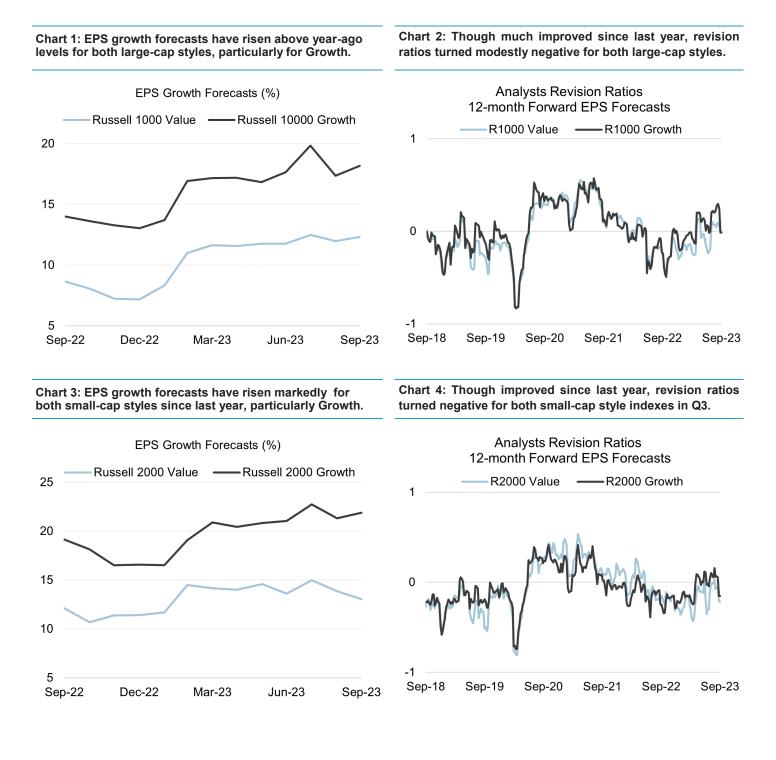
Source: FTSE Russell / Refinitiv. All data as of September 30, 2023. Past performance is no guarantee of future results. Please see the end for important legal disclosures. For professional investors only

### EPS Growth Outlook and Revision Cycle - R1000 & R2000 Growth & Value

As in the case of the two size benchmarks, the earnings growth outlook for the Russell US style indexes has also improved this year, though much more so for the large-cap style indexes than their small-cap counterparts.

Consensus now pegs EPS growth at around 18% for Russell 1000 Growth, up from estimates as low as 13% last December and well above those of a year ago. Analysts look for EPS growth of around 12% for Russell 1000 Value, well above year-ago projections and a low of 7% last December (Chart 1). These improvements have been driven largely by upgrades to Telecom, Tech, Discretionary, Industrials and Financials following stronger-than-anticipated quarterly results, offset by downgrades within Materials, Real Estate (industries that comprise a larger share of the Value index than its Growth peer). As Chart 2 illustrates, revision cycles have stabilized for both large-cap indexes from the steep downtrends of a year ago.

The profit outlook for the small-cap style indexes has also brightened. Consensus EPS growth forecasts for Russell 2000 Growth anticipate gains of nearly 22%, up considerably from a low of around 17% earlier this year and from Q2 estimates. Upgrades to small-cap Value forecasts have been less dramatic, with EPS now expected to grow 13% versus a low of 11% last December but down from Q2 estimates. As Chart 4 shows, revision cycles have recently deteriorated for both small-cap styles, particularly Value.



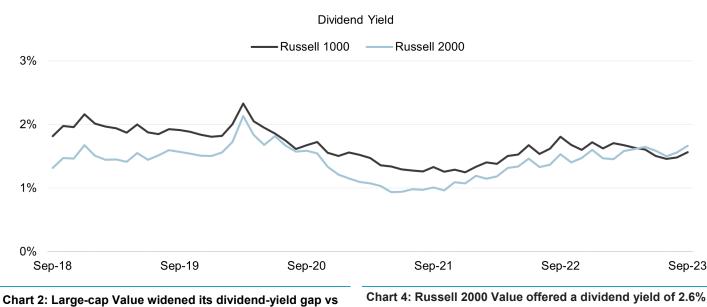
### Trailing 12-Month Dividend Yields – Third Quarter 2023

Dividend yields have steadily risen across the flagship Russell US Indexes over the past year as corporate profitability and cash flows have normalized from the depressed Covid-era levels. Even so, only the Russell 2000 and its Value offshoot have seen their dividend yields surpass their pre-pandemic averages.

Value indexes typically pay higher dividend yields than their Growth counterparts, an outgrowth of the former's bigger weights in traditionally steadier and more generous dividend payers among Telecom, Utilities and Financial companies and far smaller weights in Technology and other higher-growth companies that tend to pay little or no dividends. As Charts 2 and 3 illustrate, dividend yields for both Value indexes have risen far more significantly than for their Growth counterparts since 2021 (particularly among small-caps), despite the strong outperformance of Value stocks over most of that period. At September-end, the Russell 2000 Value offered a dividend yield of 2.6%, slightly above its pre-pandemic high. This was only slightly higher than the 2.4% of the large-cap Value index.

Dividend yields have also climbed for the Russell 1000 and Russell 2000 since their Q2 2021 troughs (Chart 1), though not as steeply as those of their Value offshoots. At September-end, both size benchmarks offered dividend yields of around 1.6%-1.7%.

## Chart 1: Both large and small-cap indexes have seen dividend yields climb over the past year, though they eased in Q3, more so for the former given its biggest tilt to outperforming Growth stocks, which pay no or lower dividends.



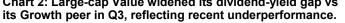
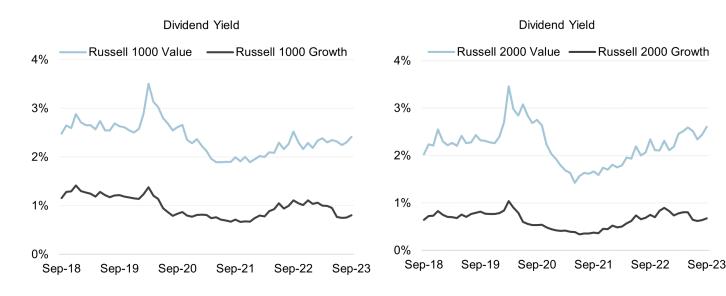


Chart 4: Russell 2000 Value offered a dividend yield of 2.6% at Q3-end, modestly above its pre-pandemic levels.



Source: FTSE Russell / Refinitiv. Data as of September 30, 2023. Past performance is no guarantee of future results. Please see the end for important legal disclosures. For professional investors only

### Valuation Comparisons – 12-Month Forward P/Es

The multi-year contraction in forward P/Es stabilized or reversed course with the broad rallies across the Russell US indexes this year, bringing valuations for most Russell indexes back roughly in line or modestly above pre-pandemic averages. The exceptions were the Russell 2000 and its Growth offshoot, which remained below their 10-year averages.

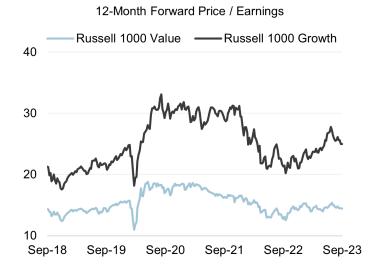
The Russell 2000 currently trades at 21.2 times 12-month EPS forecasts, down sharply from its pandemic peak but up considerably from its low of 16.5 times last June (Chart 1); it's also well below its 10-year average of 24.9 times. The Russell 1000 uptick was more modest, ending the quarter at 18.6. That's up from its low of 15.5 last October, but at a small premium to its 10-year average of 18.0. Though the valuation gap between the two indexes has narrowed recently, the small-cap premium is far below its historical average, even factoring out the huge small-cap rally during the reopening euphoria in early 2021.

Forward multiples have also climbed across the style indexes this year (Charts 2 and 3), more so for both large-and small-cap Growth indexes (now 25.0 and 31.4, respectively) than their Value counterparts (now 14.5 and 16.1). Reflecting its huge outperformance this year, large-cap Growth trades modestly above its historical norm, while its small-cap counterpart and both Value benchmarks trade at or below 10-year averages. Though Growth typically trades at a premium to Value, the gap between the large-cap style indexes has expanded significantly with the outperformance of Big-Tech-driven growth stocks this year.

Chart 1: Forward P/Es for both the Russell 1000 and Russell 2000 continued to normalize in Q3, with both indexes enjoying re-ratings since last September. Large-cap outperformance in Q3 narrowed the discount vs its small-cap counterpart.



Chart 2: R1000 Growth widened its already huge premium vs its Value cohort this year, reflecting large price gains.





Source: FTSE Russell / Refinitiv. Data as of September 30, 2023. Past performance is no guarantee of future results. Please see the end for important legal disclosures. For professional investors only

### IPO Additions to Russell US Indexes – Third Quarter 2023

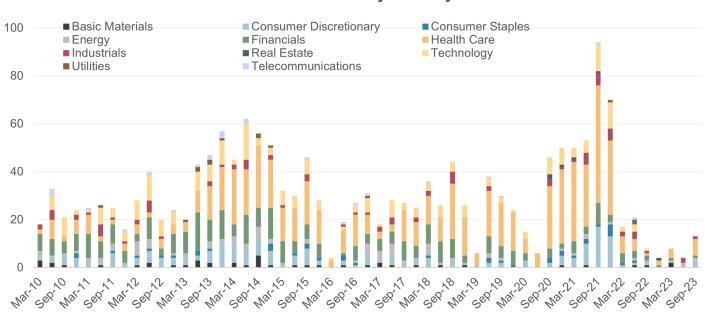
FTSE Russell adds eligible initial public offerings (IPOs) to its Russell US Indexes on a quarterly basis, ensuring that the indexes are always an accurate reflection of the markets they are designed to represent. Examining the history of such activity and its industry composition offers insights into market trends and investor sentiment.

While the number of IPOs each quarter tends to ebb and flow, the falloff over the past year and a half has been particularly dramatic, a likely effect of rising market volatility. IPO activity for the Russell 1000 perked up a bit in Q3, with one new addition, while the Russell 2000 added eight newcomers, up from three in the prior quarter and two in the same period a year ago. Returning to longstanding trends, there were seven new Health Care IPOs in Q3 (Chart 2), the greatest number of additions for the past five quarters. The indexes also added companies in Discretionary, Energy and Financials. For more information, see <u>Russell</u> <u>US Index IPO additions and reports | FTSE Russell</u>.

Chart 1: The Russell 2000 added eight newcomers in Q3 (up from three in Q2 and two in the year-ago period). The Russell 1000 added only one new company in Q3, extending its sluggish record for the past several quarters.



Chart 2: Returning to a long-running trend, there were seven Health Care IPOs, the biggest number of newcomers for the past five quarters. The US indexes also added new names in Discretionary, Energy and Financials.



#### IPO additions by industry

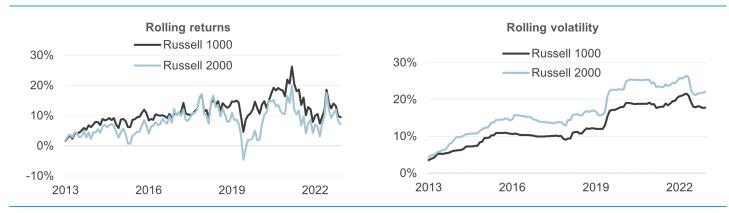
Source: FTSE Russell / Refinitiv. Based on Industry Classification Benchmark (ICB) data as of September 30, 2023. Past performance is no guarantee of future results. Please see the end for important legal disclosures For professional investors only.

### Return & Risk – Rolling Three-Year Patterns

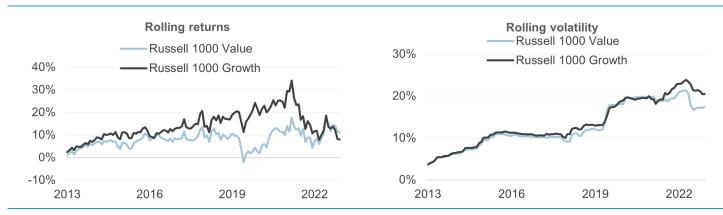
In the most recent 3-year period, Russell 1000 outpaced Russell 2000 with far less risk, as did large-cap Growth vs its smallcap peer. R2000 Value outpaced R1000 Value, but with far more risk. The charts below show rolling 3-yr patterns over time.



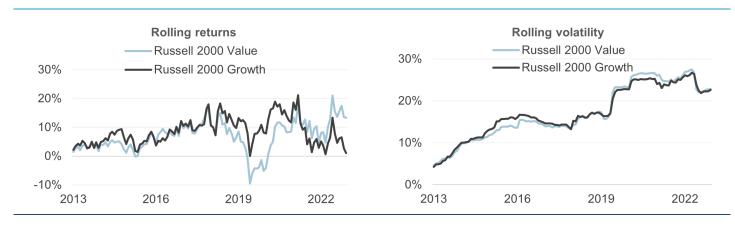
R1000 has slightly outperformed R2000 with far less risk recently, though volatility rose more for the latter in the Covid era.



R1000 Growth modestly lagged its Value cohort since the Covid outbreak, but has grown more volatile recently.



R2000 Value significantly outperformed R2000 Growth in the most 3-year period, finishing with comparable volatility.



Source: FTSE Russell / Refinitiv. All data through September 30, 2023. Past performance is no guarantee of future results. Please see the end for important legal disclosures. For professional investors only



### **Receive all research reports**

Global Investment Research reports offer investors timely capital-market analysis and insights across asset classes, regions, currencies, industries and styles for better investment decision-making. Subscribers are notified by email when each report is published.

Subscribe now: Market Maps Registration

To learn more, visit ftserussell.com; email info@ftserussell.com or call your regional Client Service Team office:

<b>EMEA</b> +44 (0) 20 7866 1810	Global Investment Research
North America +1 877 503 6437	GlobalInvestmentResearch@lseg.com
Asia Pacific	Author
Hong Kong +852 2164 3333	Mark Barnes
Tokyo +81 3 4563 6346	Head of Global Investment Research, Americas
Sydney +61 (0) 2 8823 3521	Mark.Barnes@lseg.com
@ 2022 Landan Stock Evaluate Crown als and its applicable	group undertakings (the "LOE Oroup"). The LOE Oroup includes (4) FTOE

© 2023 London Stock Exchange Group plc and its applicable group undertakings (the "LSE Group"). The LSE Group includes (1) FTSE International Limited ("FTSE"), (2) Frank Russell Company ("Russell"), (3) FTSE Global Debt Capital Markets Inc. and FTSE Global Debt Capital Markets Limited (together, "FTSE Canada"), (4) FTSE Fixed Income Europe Limited ("FTSE FI Europe"), (5) FTSE Fixed Income LLC ("FTSE FI"), (6) The Yield Book Inc ("YB") and (7) Beyond Ratings S.A.S. ("BR"). All rights reserved.

FTSE Russell® is a trading name of FTSE, Russell, FTSE Canada, FTSE FI, FTSE FI Europe, YB and BR. "FTSE®", "Russell®", "FTSE Russell®", "FTSE4Good®", "ICB®", "The Yield Book®", "Beyond Ratings®" and all other trademarks and service marks used herein (whether registered or unregistered) are trademarks and/or service marks owned or licensed by the applicable member of the LSE Group or their respective licensors and are owned, or used under licence, by FTSE, Russell, FTSE Canada, FTSE FI, FTSE FI Europe, YB or BR. FTSE International Limited is authorised and regulated by the Financial Conduct Authority as a benchmark administrator.

All information is provided for information purposes only. All information and data contained in this publication is obtained by the LSE Group, from sources believed by it to be accurate and reliable. Because of the possibility of human and mechanical error as well as other factors, however, such information and data is provided "as is" without warranty of any kind. No member of the LSE Group nor their respective directors, officers, employees, partners or licensors make any claim, prediction, warranty or representation whatsoever, expressly or impliedly, either as to the accuracy, timeliness, completeness, merchantability of any information or of results to be obtained from the use of FTSE Russell products, including but not limited to indexes, data and analytics, or the fitness or suitability of the FTSE Russell products for any particular purpose to which they might be put. Any representation of historical data accessible through FTSE Russell products is provided for information purposes only and is not a reliable indicator of future performance.

No responsibility or liability can be accepted by any member of the LSE Group nor their respective directors, officers, employees, partners or licensors for (a) any loss or damage in whole or in part caused by, resulting from, or relating to any error (negligent or otherwise) or other circumstance involved in procuring, collecting, compiling, interpreting, analysing, editing, transcribing, transmitting, communicating or delivering any such information or data or from use of this document or links to this document or (b) any direct, indirect, special, consequential or incidental damages whatsoever, even if any member of the LSE Group is advised in advance of the possibility of such damages, resulting from the use of, or inability to use, such information.

No member of the LSE Group nor their respective directors, officers, employees, partners or licensors provide investment advice and nothing in this document should be taken as constituting financial or investment advice. No member of the LSE Group nor their respective directors, officers, employees, partners or licensors make any representation regarding the advisability of investing in any asset or whether such investment creates any legal or compliance risks for the investor. A decision to invest in any such asset should not be made in reliance on any information herein. Indexes cannot be invested in directly. Inclusion of an asset in an index is not a recommendation to buy, sell or hold that asset nor confirmation that any particular investor may lawfully buy, sell or hold the asset or an index containing the asset. The general information contained in this publication should not be acted upon without obtaining specific legal, tax, and investment advice from a licensed professional.

The information contained in this report should not be considered "research" as defined in recital 28 of the Commission Delegated Directive (EU) 2017/593 of 7 April 2016 supplementing Directive 2014/65/EU of the European Parliament and of the Council ("MiFID II") and is provided for no fee.

Past performance is no guarantee of future results. Charts and graphs are provided for illustrative purposes only. Index returns shown may not represent the results of the actual trading of investable assets. Certain returns shown may reflect back-tested performance. All performance presented prior to the index inception date is back-tested performance. Back-tested performance is not actual performance, but is hypothetical. The back-test calculations are based on the same methodology that was in effect when the index was officially launched. However, back-tested data may reflect the application of the index methodology with the benefit of hindsight, and the historic calculations of an index may change from month to month based on revisions to the underlying economic data used in the calculation of the index.

This document may contain forward-looking assessments. These are based upon a number of assumptions concerning future conditions that ultimately may prove to be inaccurate. Such forward-looking assessments are subject to risks and uncertainties and may be affected by various factors that may cause actual results to differ materially. No member of the LSE Group nor their licensors assume any duty to and do not undertake to update forward-looking assessments.

No part of this information may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior written permission of the applicable member of the LSE Group. Use and distribution of the LSE Group data requires a licence from FTSE, Russell, FTSE Canada, FTSE FI, FTSE FI Europe, YB, BR and/or their respective licensors.

Refinitiv content is the intellectual property of Refinitiv. Any copying, republication or redistribution of Refinitiv content, including by caching, framing or similar means, is expressly prohibited without the prior written consent of Refinitiv. Refinitiv is not liable for any errors or delays in content, or for any actions taken in reliance on any content.

Source: Equity markets data is based on the following: FTSE All-World® (World), FTSE All-Share® (UK), FTSE 100(UK large caps) FTSE 250 (UK mid caps), Russell 2000® (US small caps), Russell 1000® (US large caps), FTSE World ex UK, FTSE Europe ex UK (Eurozone), FTSE World ex US, FTSE Japan, FTSE Asia Pacific ex Japan and FTSE Emerging (emerging markets) Indexes.