

The world according to Q-GARP

Monthly update I June 2022

UBS Asset Management's Private Client US Equity Team

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- US large-cap growth stocks continued to slump in the second quarter with the Russell 1000 Growth index falling 20.9%. The Q-GARP portfolio fell 18.2% (net, 18.0% gross). The portfolio's higher quality and select defensive characteristics helped drive its relative outperformance versus its large-cap growth benchmark.
- Rapidly rising interest rates have punished equity valuations, particularly stocks with the highest multiples. With the bulk of the move in long-term interest rates likely behind us, investor focus should shift to the outlook for sustained profitability.
- In June, we added cybersecurity leader Palo Alto Networks (PANW) to the portfolio. Additionally, we reduced our exposure to the consumer discretionary sector and raised our weight in healthcare. We also removed Meta Platforms (META) from the portfolio.



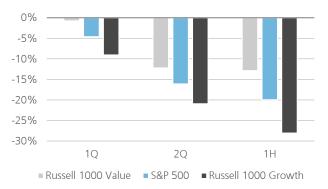
Fig. 1: Q-GARP portfolio holdings as of 30 June 2022

Name	Ticker	Name	Ticker	Name	Ticker
Communication Services		Financials		Information Technology	
Alphabet	GOOGL	Ameriprise Financial	AMP	Adobe	ADBE
		Intercontinental Exchange	ICE	Apple	AAPL
Consumer Discretionary		S&P Global	SPGI	Applied Materials	AMAT
Amazon	AMZN			Fidelity National Info. Serv.	FIS
Booking Holdings	BKNG	Health Care		Microsoft	MSFT
Dollar General	DG	Abbott Laboratories	ABT	Palo Alto Networks	PANW
Home Depot	HD	Boston Scientific	BSX	Salesforce	CRM
Lowe's	LOW	Danaher	DHR	Texas Instruments	TXN
NIKE	NKE	Intuitive Surgical	ISRG	Visa	V
O'Reilly Automotive	ORLY	Thermo Fisher Scientific	TMO		
TJX Companies	TJX	UnitedHealth Group	UNH	Materials	
				Sherwin-Williams	SHW
Consumer Staples		Industrials			
Costco Wholesale	COST	Honeywell	HON	Real Estate	
Estée Lauder	EL	Parker-Hannifin	PH	American Tower	AMT
		Rockwell Automation	ROK		
		Union Pacific	UNP		

Jump in rates hits growth stocks...again

Equity markets entered a bear market in the first half of 2022, with the S&P 500 falling by over 20% from its January 3rd peak. The losses have been even more pronounced for growth stocks.

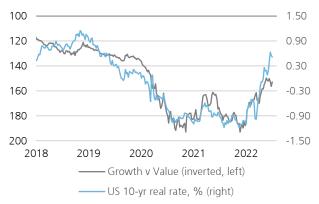
Fig. 2: Index total return so far in 2022



Source: FactSet, UBS Asset Management (Americas) Inc., as of 30 June 2022. Past performance is not indicative of future results.

Stubbornly elevated inflation has forced the Federal Reserve to rapidly speed up the pace of tightening monetary policy (i.e. raising short-term interest rates). This has in turn driven a faster normalization of long-term interest rates. Growth stocks are particularly sensitive to interest rates since a greater proportion of their value is derived from more distant cash flows. We find a strong correlation between real (inflation adjusted) interest rates and the relative performance between growth and value stocks (Fig. 3).

Fig. 3: Growth stocks have lagged as real (inflation-adjusted) interest rates have risen



Note: Chart shows the relative performance of the Russell 1000 Growth index vs the Russell 1000 Value index.

Source: Bloomberg, UBS Asset Management (Americas) Inc., as of 30 June 2022. Past performance is not indicative of future results.

Silver lining? Rates unlikely to move materially higher

While growth stock valuations remain somewhat above their long-term average and may be vulnerable to a further unexpected rise in interest rates, we believe that the bulk of the upward adjustment to interest rates in this cycle is over. The 10-year treasury yield has already increased from a pandemic low of 0.5% to as high as 3.5% in late June. The Chief Investment Office at UBS Global Wealth Management forecasts quarter-end bond yields between 2.75% and 3.25% over the next 12 months. As such, the focus for investors will likely shift from valuation vulnerabilities to earnings risks.

June Q-GARP portfolio changes: Added Palo Alto Networks (PANW)

Last month we added Palo Alto Networks to the Q-GARP portfolio. Palo Alto is a leading provider of cybersecurity solutions to enterprises, communications service providers, and governments. The increasing number and severity of high-profile cyberattacks have garnered significant public attention, and in some cases, has had both long-lasting damage to corporate brands and a material impact to sales. This trend has led more and more companies to prioritize cybersecurity in their IT spending budgets.

While the cybersecurity industry remains highly fragmented, Palo Alto has built, bought, and scaled up a unique security portfolio that spans from the edge to the data center to the cloud. Examples of offerings including advanced threat protection, endpoint security, URL filtering, SD-WAN, secure access service edge, and machine-learning powered firewall appliances. Its robust technology suite has displaced many of the legacy cybersecurity providers in recent years. As companies look to consolidate security needs into a single offering, Palo Alto stands to benefit.

Amidst increased economic uncertainty, the company's "razor-and-razor blade" business model—with its next-generation firewalls serving as the hardware foundation upon which customers add maintenance and security software subscriptions—is also particularly attractive. This model should help the company generate increased revenue visibility, a higher recurring revenue base, and improved profit margins over time.

Other portfolio changes

In June, we increased weights in UnitedHealth Group (UNH) and American Tower (AMT). We expect that defensive secular growth stocks should command above-average valuation premiums during periods of heightened economic uncertainty.

We also added to our positions in Applied Materials (AMAT) and Microsoft (MSFT) to boost our technology sector allocation, which remains below that of the Russell 1000 Growth index.

To fund these trades, we reduced weights in many of our retailers and industrial stocks. These areas would be more vulnerable to a pronounced economic downturn. Specifically, we trimmed weights in Home Depot (HD), Lowe's (LOW), TJX Companies (TJX), and Parker-Hannifin (PH). We also trimmed our position in Intercontinental Exchange (ICE).

Removed Meta Platforms (META)

We removed Meta Platforms (META) from the portfolio. At an industry level, rising geopolitical tensions, inflationary pressures, and weakening consumer demand present near-term risks to digital advertising budgets. But at the end of the day, our Q-GARP portfolio represents companies which we have the highest conviction will deliver above-average earnings growth over the next several years (and through business cycles). Given our concerns over Meta's ability to monetize its short-form video product (Reels) and implementing workarounds to Apple's privacy changes, and the uncertainty associated with the longer-term financial payoff on its planned large-scale expenditures on the metaverse, we elected to remove the stock from the portfolio.

Q-GARP 2Q performance review

In the second quarter, Q-GARP fell 18.2% (net, 18.0% gross) compared to the 20.9% decline in the Russell 1000 Growth index. The portfolio's higher quality and select defensive characteristics helped drive its relative outperformance versus its large-cap growth benchmark.

2Q portfolio leaders and laggards

Unsurprisingly, defensive stocks in the portfolio—Dollar General (+10.5%), American Tower (+2.9%), and UnitedHealth Group (+1.1%) were the strongest performers during the second quarter. Dollar General's focus on providing value to consumers is particularly valuable during periods of high inflation.

Amazon (-34.8%) was the largest portfolio laggard in the quarter. Higher-than-expected costs (shipping, labor, warehousing) weighed on the company's most recent quarterly results and forward-looking guidance. The ongoing consumer spending shift from goods to services, and fears of broader consumer weakness as inflation pinches consumer wallets, added further pressure on Amazon shares. While these issues may linger in the near-term, we remain positive on the company's long-term prospects. It remains the market leader in e-commerce and cloud computing – two significant secular growth markets.

Despite solid quarterly earnings, Intuitive Surgical shares (-33.5%) sagged following management's cautious tone on hospital capital spending and its potential impact on demand for the company's da Vinci surgical robots. We continue to see a bright future for Intuitive Surgical as the clear leader in the fast growth (and long-tailed) category of robot assisted surgeries.

Applied Materials fell 30.8% in 2Q. Demand for the company's manufacturing equipment has been strong supported by increased complexity, capital intensity, and content usage across the semiconductor industry and its end-markets. However, Applied Materials' ability to meet demand was hampered more recently by supply chain constraints and lockdowns in China.

Fig. 4: Total return as of 30 June 2022

	Q-GARP (Gross)	Q-GARP (Net)	Russell 1000 Growth	S&P 500
2019*	9.0%	8.7%	9.8%	9.4%
2020	27.6%	26.3%	38.5%	18.4%
2021	30.1%	28.9%	27.6%	28.7%
2022 YTD	-25.6%	-25.9%	-28.1%	-20.0%
Since inception (annualized)	10.8%	9.7%	12.1%	10.4%

^{*}Represents performance beginning August 2019, when UBS Asset Management began implementing the portfolios.

Source: UBS Asset Management (Americas) Inc, as of June 2022. Past performance is not indicative of future results.

Fig. 5: Supplemental Track Record

	Q-GARP (Gross)	Q-GARP (Net)	Russell 1000 Growth	S&P 500
2011*	2.6%	1.6%	-3.2%	-3.6%
2012	12.1%	10.5%	15.3%	16.0%
2013	40.2%	38.5%	33.5%	32.4%
2014	14.0%	12.6%	13.0%	13.7%
2015	6.9%	5.7%	5.7%	1.4%
2016	4.7%	3.4%	7.1%	12.0%
2017	26.5%	25.0%	30.2%	21.8%
2018	-0.2%	-1.2%	-1.5%	-4.4%
2019**	23.3%	22.7%	21.5%	18.5%
Since inception (annualized)	15.2%	13.8%	14.1%	12.5%

^{*}UBS Wealth Management USA IPS SMA inception: 1 April 2011. Concept for portfolio initially published as research in May 2007. Past performance is not indicative of future results.

Supplemental performance represents the WM USA IPS SMA track record since inception in 2011 through to June 2019. SMA portfolio implementation through UBS Asset Management began in July 2019.

Please see Description & Methodology for further details.

^{**}Represents performance through 28 June 2019.

Q-GARP in	vestment thesi Sector	s table –part 1 Investment Thesis
Alphabet	Communication Services	Dominant internet search market share drives above-average profitability. Continued shift of advertising from traditional to online media supports Alphabet's strong growth outlook. Valuation is reasonable for highteens EPS growth over the next 3-5 years. While heightened regulatory risk is likely to remain an overhang, we remain sanguine on potential outcomes and believe that the primary profit drivers are unlikely to significantly change.
Amazon	Consumer Discretionary	With e-commerce representing only a mid-teens percentage of total retail sales in the US, Amazon stands to grow wallet share as the shift to online buying continues. The company also has one of the leading cloud computing platforms (AWS), which should continue to grow given the secular migration from traditional onpremise data systems to cloud computing. The company's shift in focus from hyper-growth to a blend of growth and profitability makes the earnings trajectory, and thus valuations, more attractive.
Booking	Consumer Discretionary	High quality online travel agency (OTA) that should benefit from a normalization in consumer travel over the next couple of years. Longer-term, the company remains a digital transformation beneficiary given that online travel bookings still only account for roughly 50-60% of overall accommodation bookings. Initiatives to expand geographically, as well as into other travel functions (flights, experiences, rentals) present additional growth opportunities.
Dollar General	Consumer Discretionary	Dollar General is a leading discount retailer. Well positioned for near-term economic turbulence given its value and convenience proposition to customers. Store expansion and supply chain innovation should boost long-term profitability.
Home Depot	Consumer Discretionary	Largest home improvement retailer in the US. Growth should be well supported by a continued normalization in housing activity as the economy recovers and expands. Recent investments in inventory management, supply chain, and IT systems should enhance profit margin stability.
Lowe's	Consumer Discretionary	Healthy US consumer fundamentals, rising home prices, and low interest rates (relative to history) should benefit US housing-related industries. New home construction remains below normal and has scope for upside. As benefits from heavy investment spend begin to materialize, Lowe's should be able to deliver double-digit earnings growth over the next few years.
NIKE	Consumer Discretionary	Global leader in athletic footwear and sportwear. Strong brands and a reputation for innovation supports premium pricing, while investments in digital and direct-to-consumer are driving greater engagement with consumers and improved profitability. Greater China remains a significant growth market.
O'Reilly Automotive	Consumer Discretionary	One of the largest auto parts retailers in the US. Growth is underpinned by geographic expansion and acquisition opportunities in a fragmented market. A solid position in the wholesale business should protect growth as the macro recovery continues and consumers shift more to the "do it for me" model.
TJX Companies	Consumer Discretionary	The leading off-price apparel and home furnishing retailer in the US, Canada, and Europe. Rising consumer spending, store growth, international expansion, and brand diversification should drive top- and bottom-line growth for the company over the next several years. In-store "treasure hunt" experience provides protection from e-commerce threats.
Costco Wholesale	Consumer Staples	The leading membership warehouse retailer in North America with an expanding international presence. Low-cost advantages underpinned by massive scale, high private label penetration, and bare-bones store format. There is still scope for store growth in the US with additional opportunities in international markets. Online competitors can't match the company's low cost structure, mitigating online threats. Cash flows are usually quite resilient in downturns.
Estée Lauder	Consumer Staples	Estée is one of the leading global prestige cosmetic companies with a diversified portfolio of skin care, makeup, fragrance and hair care products. Continued market share gains, growth in emerging market demand, and its development of innovative new brands should drive solid revenue growth. The Lauder family's deep involvement in the business has been a positive providing greater visibility on management succession.
Ameriprise Financial	Financials	Legacy insurance segment is shrinking as a percent of total profits as the company grows its asset and wealth management segments organically and through acquisitions – a shift in favor of higher return and lower capital-intensive businesses. The shift also allows Ameriprise to focus on robust capital return to shareholders via dividend increases and share repurchases.

Source: UBS Asset Management, as of June 2022.

Q-GARP in	vestment thesis	s table –part 2 Investment Thesis
Inter- continental Exchange	Financials	An increasingly diverse product mix should augment Intercontinental Exchange's continued financial market innovations and client's hedging needs. Market share gains have boosted the company's futures volumes. Continued pushes into data offerings and acquisition of Ellie Mae should support durable growth and drive valuation expansion.
S&P Global	Financials	S&P Global is a leading financial services firm offering mission critical services spanning credit ratings, data and market intelligence, and indices. Dominant market position and exposure to secular trends such as rising debt, increasing data usage, and proliferation of ESG support attractive long-term growth.
Abbott Laboratories	Health Care	High quality diversified healthcare company with exposure to medical devices, diagnostics, and nutrition. As the economy normalizes post-pandemic, Abbott stands to profit from the resumption of elective procedures. Abbott's market-leading systems in several high growth areas such as cardiovascular and diabetes should support durable earnings growth.
Boston Scientific	Health Care	Boston Scientific has historically been among the faster growing medical devices company in the industry supported by high quality management team and their focus on rich organic pipelines and accretive bolt on acquisitions. Company looks poised to rebound from the eventual resumption of elective procedures.
Danaher	Health Care	Danaher is a global, diversified manufacturer of life science and diagnostic products. Organic growth in recent quarters has been strong and looks likely to be sustained given strong end markets. The company has excess capital on the balance sheet to pursue acquisitions to enhance the company's growth outlook, a strategy that management has proven that it can execute effectively.
Intuitive Surgical	Health Care	Intuitive is the leader within robotic-assisted surgery. Expansive installed based of its da Vinci robotics platform, improving hospital capacity as the pandemic turns endemic, aging demographics, and continued adoption of robotic-assisted surgery should drive strong double-digit sales and earnings growth.
Thermo Fisher Scientific	Health Care	One of the largest and most diversified providers of life sciences tools, Thermo Fisher has the breadth and depth to generate consistent revenue growth. Superior capital allocation, consistent double-digit earnings growth, and solid return on equity suggest a favorable outlook. Strong management team with a very good track record.
UnitedHealth Group	Health Care	UnitedHealth is the largest and most diversified managed care organizations, with significant exposure to the high-growth Medicare and Medicaid insurance markets. Aging US demographics should drive continued managed care adoption, and in turn, support earnings growth. The company's healthcare services segment (pharmacy benefits manager, healthcare IT, and consulting services) give the company further scale.
Honeywell	Industrials	Honeywell is among the highest quality diversified industrial companies, exposed to multiple secular trends (automation, environmental, energy solutions) that should support consistent sales and earnings growth. An underleveraged balance sheet provides a future catalyst for M&A and shareholder return.
Parker- Hannifin	Industrials	Parker-Hannifin is a global manufacturer of motion, flow, and process control technologies systems serving the diversified industrial and aerospace end markets. High quality is underpinned by superior service and strong brand loyalty. Earnings growth should benefit from efficiency gains, synergies from recent acquisitions, and a recovery in the global economy.
Rockwell Automation	Industrials	Rockwell Automation is a leading global provider of industrial automation, power, control, and information technology solutions serving diverse end-markets. Significant exposure to consumer industries should provide solid tailwinds and diversification from industrial end market exposure. Longer-term, solid, steady earnings growth should be driven by the company's focus on value-added technology solutions.
Union Pacific	Industrials	Railroads enjoy structural advantages due to limited competition from other railroads. Strategic focus on "precision scheduled railroading" should drive continued efficiency gains. Economic normalization and a tight freight market position the company well for healthy volume growth over the next few years.

Source: UBS Asset Management, as of June 2022.

Q-GARP inv	vestment thes Sector	is table -part 3 Investment Thesis
Adobe	Information Technology	Adobe has a dominant position in software for digital content creation and has expanded into digital marketing campaign management. These two businesses should continue to enjoy solid growth as content and advertising dollars continue to migrate to the web. Adobe was also an early adopter of the cloud and subscription-based business model which increases the lifetime value of a customer and generates a much less volatile cash flow stream.
Apple	Information Technology	While the smartphone category has matured, Apple has one of the most loyal and valuable user bases in the world, driving consistently high returns on capital. Apple is leveraging this consumer engagement to drive ancillary products (Watch, AirPods) and services (Music, TV+). Apple returns tens of billions to shareholders annually through dividend and stock repurchases.
Applied Materials	Information Technology	Among the leading diversified semiconductor capital equipment providers. Near-term semiconductor shortages and longer-term secular tailwinds (artificial intelligence, automation, cloud computing, electric vehicles, Internet of Things, etc.) should support more durable demand from semiconductor manufacturers.
Fidelity National Information Services	Information Technology	FIS is a technology software and services company offering mission-critical solutions to large financial institutions. Its recently completed merger with WorldPay also makes the company a leader in the faster growing global payment processing market. Recovering end-markets, along with cost savings and revenue synergies from the merger, should drive strong earnings growth over the next several years.
Microsoft	Information Technology	Microsoft has emerged as a leading provider of public and hybrid cloud solutions to enterprise, small/medium business, and government customers worldwide. Continued growth in cloud offerings should drive improving margins and strong earnings.
Palo Alto Networks	Information Technology	Palo Alto provides advanced network security to enterprises, communications service providers and governments. Palo Alto's unified threat management, combining industry-leading firewalls with additional security functions via subscriptions, offers users the ability to streamline IT complexity and consolidate expenditures with fewer vendors. Recent acquisitions strengthen its positioning in cloud security.
Salesforce	Information Technology	A pioneer in software-as-a-service (SaaS), salesforce.com should see rapid earnings growth over the next several years driven by high retention rates and upselling additional products into its existing customer base.
Texas Instruments	Information Technology	High quality analog semiconductor company with exposure to cyclical (industrial and auto end-markets) and secular (factory automation, electrification) tailwinds. The company has long track record of shareholder friendly policies, including returning around 100% of free cash flow annually to shareholders via dividends and buybacks over the last decade.
Visa	Information Technology	Favorable outlook is underpinned by 40% market share in credit and debit cards, which should see long-term attractive growth as transactions continue to migrate from physical cash payments to digital alternatives.
Sherwin- Williams	Materials	Sherwin-Williams is the leading premium paint and coatings provider. Long-term growth is driven by store expansion and strong pricing power. The home improvement category should be relatively resilient in the current economic downturn.
American Tower	Real Estate	One of the largest owner/operators of communications towers in the world. Strong and consistent growth is underpinned by secular wireless data demand growth, attractive tower locations, long-term contracts, and overseas expansion opportunities. In the near-term, growth should be well-supported as US wireless operators begin to deploy newly acquired spectrum.

Source: UBS Asset Management, as of June 2022.

Description & Methodology

Below, we outline the stock selection and portfolio construction process for the UBS Asset Management "Q-GARP" (Quality Growth at a Reasonable Price) equity portfolio.

We created a standardized quantitative scoring system, rewarding stocks with the following characteristics:

- Quality: As measured by: 1) profit margin stability, defined as the standard deviation of a company's operating profit margin over the past 10 years, and 2) high profitability, as measured by the expected return on equity (ROE) in the current fiscal year. Combined, a high ROE and low variability in historical profit margins indicates to us that a company has an economic moat and is managing that moat successfully through the economic cycle.
- **Growth:** Blend of the consensus three-to-five year EPS growth expectations and earnings growth forecasts over the current and next calendar year.
- Reasonable price: Price-to-earnings ratio (PE) relative to peers and relative to history.

This scoring system combines factors across quality, growth and valuation, the core tenets of our Q-GARP portfolio. We aggregate the standardized scores for each stock in the US large-cap universe to identify attractive candidates for the portfolio. We favor stocks that score highly across the three categories and generally avoid stocks that score very poorly in any specific category.

Stocks are then reviewed from a "bottom-up" or fundamental perspective, leveraging the intellectual capital of UBS Chief Investment Office (CIO) equity strategists, equity sector analysts, and other internal and external resources as deemed appropriate by the Private Client US Equity team. Our primary objective in our stock selection process is identifying candidates where we have high conviction in the company's ability to generate above-average earnings growth over the next few years. Quality and valuation measures help to mitigate the inherent risks of investing in growth stocks. Although the fund is actively managed, our intention is to hold stocks in the portfolio over a multi-year time horizon and incur relatively low levels of overall portfolio turnover. Holdings can change at any time depending on portfolio manager discretion.

In addition, we construct the portfolio taking into account several "top-down" views including, but not limited to: the UBS House View (a publication of macro and thematic views of WM CIO) on markets, regions, sectors and style factors. While our team receives input from multiple business units within UBS, we have final discretion in the portfolio's construction.

SMA performance calculation methodology

Performance Information: Composite Performance, Assumptions and Limitations. Past performance is not a guarantee of future returns. The performance shown should not be considered actual UBS Program account performance and should not be relied upon in making a decision to select this strategy or continue to have an account managed by this Manager.

Net Performance and Fee Information: The payment of actual fees and expenses will reduce a client's return. Please refer to the fees stated in the Manager's Form ADV Part 2, as well as the UBS Financial Services Inc. Form ADV Wrap Fee Program Disclosure Brochure. The net effect of the deduction of fees on annualized performance, including the compounded effect overtime, is determined by the relative size of the fee and the account's investment performance. For example, an account with a 2.8% annual fee deducted quarterly and annualized performance of 8% will have a net performance, after fees of about 5.0% per year, a reduction of 3.0% per year. Compounding will similarly affect the account's performance on a cumulative basis.

Net composite results are shown after deducting actual program fees up to a maximum annual ACCESS/SWP/AAP Program fee of 2.50%, plus a separate investment manager fee if applicable (0.10% manager fee for the Tax-Optimized strategies).

Actual client accounts in the UBS Programs may have paid a lower fee and the results, therefore, will vary. For fees charged in connection with the UBS Strategic Wealth Portfolio Program and other UBS Programs, please refer to the UBS Financial Services Inc. Form ADV Wrap Fee Program Disclosure Brochure and the Institutional Consulting Form ADV Disclosure Brochure. Individual investor results will vary.

Composite performance disclosure

UBS Asset Management (the Firm) claims compliance with Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. UBS Asset Management has been independently verified for the periods January 1, 2002 through December 31, 2020. The verification reports are available upon request. Verification assesses whether (1) the Firm has complied with all the composite construction requirements of the GIPS standards on a Firmwide basis, and (2) the Firm's policies and procedures are designed to calculate and present performance in compliance with the GIPS standards. Verification does not ensure the accuracy of any specific composite presentation. Past performance is not a guarantee of future results.

Performance represents all fee-paying unrestricted ACCESS and SWP/AAP accounts beginning the first day of the month following the account inception. Past performance is not a guarantee of future results. This document is aimed to help readers in understanding the investment process, and should not be construed as investment advice. An investor should consider the risks, investment objectives, charges and ongoing expenses before making an investment.

Results include all actual fee-paying, discretionary client portfolios including those clients no longer with the Firm. Portfolios are included in the composite beginning with the first full month of performance to the present or to the cessation of the client's relationship with the Firm. Terminated accounts are included through the last full month in which they were fully invested, and no alterations of composites have occurred due to changes in personnel. Composites consisting of more than one portfolio are asset weighted by beginning-of-period asset values. Investment results are time-weighted performance calculations representing total return.

Returns are calculated using geometric linking of monthly returns. Composites are valued at least monthly, taking into account cash flows. All realized and unrealized capital gains and losses, as well as all dividends and interest from investments and cash balances, are included. Interest income from fixed income securities is accrued, and equity dividends are accrued as of the ex-dividend date. Investment transactions are accounted for on a tradedate basis. Where applicable, returns are shown net of nonrecoverable withholding tax.

There are fees associated with investing in separately managed accounts. The rates of return are presented both net and gross of investment management fees. Net results presented typically reflect the deduction of the highest fee charged. Due to the graduated nature of fees, as account size increases, the annual percentage fee may decline. Net-of-fee returns are calculated by geometrically deducting the deannualized highest annual management fee from each monthly gross return and geometrically linking the monthly returns for each period. Net-of-fee performance for wrap accounts reflects the deduction of the actual or highest wrap fee charged. The highest wrap fee charged may be up to 2.60%. For fees charged and other information in connection with the ACCESS and SWP/AAP programs, please refer to the UBS Asset Management (Americas) Inc. Wrap Fee Program Brochure. Gross of fee returns are calculated net of transaction fees and other trading expenses, and are supplemental to net returns.

Composite dispersion represents the consistency of the Firm's composite performance results with respect to the individual portfolio returns within the composite. Presented is the asset-weighted dispersion (standard deviation) of the portfolios within the composite. Only portfolios in the composite for each full time period are included in the dispersion calculation and no dispersion is presented for composites consisting of only a single portfolio. The 3-year annualized ex-post standard deviations are based on monthly returns, shown starting with the first full 3-year calendar period.

A complete list of all Firm composite descriptions is available upon request. The Firm is defined as all actively and passively managed institutional and retail accounts of UBS Asset Management (the Firm) throughout the world. The Firm was incepted on January 1, 2002 following the reorganization of the asset management divisions of UBS Group AG under a single Asset Management brand. The performance record prior to 2002 is that of the local asset management division, which managed the composite, and has been prepared in compliance with GIPS from the inception date of this composite. Each of the entities comprising the Firm definition is an affiliate of UBS. Policies for valuing portfolios, calculating performance and preparing compliant presentations are available upon request.

Supplemental performance calculation methodology

The supplemental track record for the equity portfolio represents the UBS Investment Management track record within UBS Global Wealth Management USA's Managed Portfolio program from 2011 – June 2019. In July 2019, UBS Asset Management began implementing the portfolios.

Net composite results for the Global Wealth Management USA's Investment Management track record reflect actual program fees. Program fees were deducted quarterly in advance and are reflected in the monthly composite performance in which they are deducted. Composite performance presented for strategies with a short track record is for informational purposes only and should not be relied upon in making a decision to select, or continue to have an account managed, in those strategies.

Performance: This report presents a performance composite calculated on a time-weighted and asset-weighted basis. Accrued interest on fixed income investments is included in the performance calculations, as is equity dividend reinvestment when retained in the account by the client.

Accounts included: The composite includes all accounts managed by UBS Investment Management in the UBS Managed Portfolio program in accordance with the portfolio style. Accounts invested in the strategy for at least one full month are included in the composite, as are accounts that changed risk categories within the strategy during the month. This composite does not include any other account managed on a discretionary basis by UBS Financial Services Inc. or its affiliates. These other accounts may have had higher or lower returns. Data provided by UBS accounts held within the portfolio.

Statement of Risk

Q-GARP portfolio: As an equity style, growth stocks can fall out of favor with investors and go through periods of underperformance versus value stocks (and vice versa). Growth-oriented stocks with high valuations can experience periods of relative underperformance if expectations for future growth are not met.

Select UBS Asset Management (AM) strategies in the ACCESS and SWP Programs are available with no additional SMA management fee charged to Clients. UBS Financial Services has negotiated the SMA Management Fee with UBS AM based on an institutional fee schedule and will pay that fee out of its own resources.

UBS AM will charge additional fees for certain strategies or additional services determined to be premium solutions, such as personalized tax management and sustainable investing. The fees for those value-add services will be paid by Clients. All third-party asset managers will be invited to participate in this new pricing structure. Participation is optional and it does not impact the availability of a third party manager's strategy on the UBS Financial Services Inc. platform. The lower pricing structure for our affiliated UBS AM separately managed accounts creates a conflict of interest and provides an opportunity for Financial Advisors to charge a higher UBS Investment Advisory Fee for the affiliated strategies than they would for strategies that charge an additional SMA Management Fee. The difference in SMA Manager Fees can also result in the recommendation of the affiliated strategies versus other strategies available at higher fees.

The ACCESS, SWP, MAC and Institutional Consulting ("IC") programs offer some of the same Separately Managed Account ("SMA") Managers for different SMA Manager fees. The amount of the fee paid to each SMA Manager is a function of that SMA Manager's investment style and the fee negotiated with the SMA Manager either by UBS (in ACCESS, SWP) and by you in the MAC or IC Program. Depending on your asset level and ability to negotiate the investment management fee with the SMA Manager in the dual-contract structure of the MAC or IC program, you may find that the single-contract structure in ACCESS and SWP provides a more cost-effective option or vice versa. In addition, based on the combination of our fees and your SMA Manager's fees, the overall fee for your SMA account in ACCESS, SWP, MAC or IC may exceed 3% of the account value. **Please review your options and overall costs carefully with your Financial Advisor before investing.**

The Russell 1000 Value is an unmanaged, weighted index measuring the performance of the large-cap value segment of the US equity universe. It includes those Russell 1000 companies with lower price-to-book ratios and lower expected growth values. The index is completely reconstituted annually to ensure new and growing equities are included and the represented companies continue to reflect value characteristics. Investors should note that indices do not reflect the deduction of fees and expenses.

The Russell 1000 Growth is an unmanaged, weighted index measuring the performance of the large-cap growth segment of the US equity universe. It includes those Russell 1000 companies with higher price-to-book ratios and higher expected growth values. The index is completely reconstituted annually to ensure new and growing equities are included and the represented companies continue to reflect growth characteristics. Investors should note that indices do not reflect the deduction of fees and expenses.

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