

Global FinTech

Trends to watch in 2023

For professional investor use only – Equities

January 2023

Key points

- Despite the fact that equity outflows accelerated in 2022, we believe that when capital
 does return, it will concentrate in quality names. We took a more conservative approach
 last year but now aim to increase our exposure to upcoming FinTech companies.
 With worst-case scenarios priced-in across our universe, we believe 2023 will be a
 good year to build positions in FinTech.
- Within our FinTech universe, most of the excessive valuations have corrected, but the
 modern monetary theory bubble has not deflated everywhere. Payment company's
 valuations and fundamentals look solid and we expect this situation to carry into 2023.
 Overall, interest-rate rises and inflationary pressures weighed on multiples in 2022.
 While we expect more of the same in 2023, we do not anticipate a repeat effect.
- The impact of China's lagging economic performance throughout the year was significant. We expect that the Chinese economy will reopen during the first half of 2023. Before then, MSCI's Global Industry Classification Standard system will change in March. This will affect our sector exposure, which we believe it is a net-net positive for our portfolio.
- We envision there will be more engagement on cybersecurity by asset managers next year. We have already developed a proprietary methodology in order to assess cyber risks to our portfolio holdings.



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Lessons from 2022: a good year to differentiate FinTech strategies

'Be cautious in your predictions' could have been the title of this outlook, as we predicted last year that 2022 would be a volatile year. It certainly was, but the market behaved like one would expect it to in an inflationary environment characterised by rising interest rates. Those market dynamics bode well for quality stocks, but they are very negative for hyper-growth, loss-making, externally financed companies who now see their long-term profitability being discounted at much higher rates, thereby slashing their present value.

Quality stocks outperformed hyper-growth names in 2022 by a wide margin, from a relative perspective. But from an absolute perspective there was little reason to celebrate. Even though quality companies were more in focus for equity investors, 2022 saw a lot of outflows in the asset class and quality stocks suffered as well. It is unclear when, get rid of, or even if, that money will flow back to equities, but we are convinced that when flows do return to equity,



it will be in the quality names and not in the hyper-growth, loss-making names that led in 2020-2021. This is due to higher interest rates and the need to strike a better balance between growth and funding.

Figure 1 shows quality fell out of favour in 2022. But over the long term, this factor typically performed best — a topic we covered in a recent white paper, "Quality investing in FinTech."

FIG. 1 INVESTMENT STYLE RETURNS AS OF 30 DECEMBER 2022

Gross performance as of 30 December 2022 in USD

Index name MSCI ACWI Index		1D	1W	1M	3M	YTD	1Y	3Y	5Y	10Y
		-0.3%	0.0%	-3.9%	9.9%	-18.0%	-18.0%	4.5%	5.8%	8.5%
△ //	MSCI ACWI Minimum Volatility	-0.3%	0.1%	-1.9%	8.6%	-9.8%	-9.8%	2.2%	5.2%	8.4%
%	MCSI ACWI High Dividend Yield Index	-0.3%	0.0%	-1.4%	14.1%	-6.7%	-6.7%	3.3%	5.3%	7.1%
©	MSCI ACWI Quality Index	-0.4%	-0.2%	-4.6%	9.5%	-23.4%	-23.4%	5.6%	8.2%	10.8%
	MSCI ACWI Momemtum Index	0.0%	-0.2%	-2.5%	13.1%	-18.7%	-18.7%	5.3%	7.4%	10.8%
(\$)	MSCI ACWI Enhanced Value Index	-0.1%	-0.1%	-1.4%	15.9%	-12.4%	-12.4%	1.5%	1.5%	6.0%
SML	MSCI ACWI Equal Weighted Index	-0.1%	0.8%	-1.2%	12.2%	-16.9%	-16.9%	1.2%	1.7%	5.3%
	MSCI ACWI Growth Target Index	-0.2%	0.1%	-4.5%	8.4%	-17.6%	-17.6%	5.0%	6.1%	9.9%

Source: MSCI. Past performance is not a guarantee of future results.

The year 2022 was a good one for differentiating across FinTech strategies. FinTech is, after all, just a wrapper and portfolio managers have different investment styles. During these volatile markets, the variance in performance became very clear. Our investment approach targets conservatively funded, quality growth at a reasonable pace, which proved to be well suited for the 2022 market conditions.

Relative to the MSCI ACWI reference index, most underperformance can be explained by a lack of exposure to energy stocks and healthcare companies, while being 40% overweight IT. Our style enabled us to outperform both the universe and our peers for the second time in a row during 2022, securing performance differences of up to 35%.¹

We had no direct exposure to cryptocurrencies, meaning we avoided the crypto crash in the wake of the FTX debacle. Most companies in the crypto space did not adhere to our quality standards, so they did not make it into our portfolio. Competitors were exposed, and these companies are also in our investible universe, which explains part of our relative outperformance during 2022.

Most importantly for us, these returns went hand-in-hand with lower volatility. It is easy to make higher returns if one takes on higher risks. If that gamble pays off, the returns look superior. However, we strongly believe that good performance should result from a structured and repeatable process that consistently provides the best risk-adjusted return within the respective mandate.

¹ Performance of LO Funds Global FinTech USD NA net of fees. Past performance is not a reliable indicator of future results.



Modern monetary theory (MMT), which posits that governments are not constrained by revenues because they can spend, tax and borrow in a fiat currency that they control, has had a big influence on financial markets over the last decade.

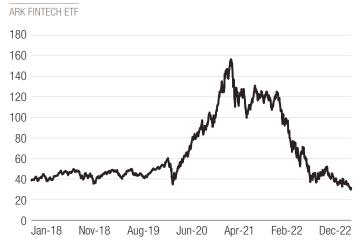
Cheap funding and interest-rate controls by central banks drove investors up the risk curve in the search for yield. This proliferated when MMT was combined with pandemic-relief packages from governments, globally, which caused bubbles across asset classes. We kept to our disciplined investment strategy during covid excesses, as we saw valuation risks increasing across the board.

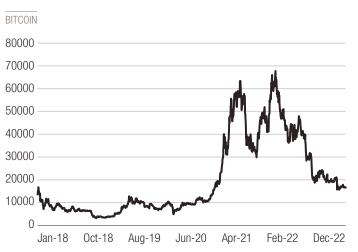
We have, and always will, seek quality-growth at a reasonable price. We think that within our FinTech universe most of the excessive valuations have gone, but the MMT bubble has not deflated in all areas (figure 2). The Nasdaq and Dow Jones indices, and FANG (Facebook, Apple, Netflix and Google) stocks, are still trading above 2019 levels, whereas the Ark FinTech ETF and the US payment company index are trading below their pre-pandemic levels.²

FIG. 2 MMT BUBBLES ARE STILL EVIDENT









Please read important information at the end of this document Lombard Odier Investment Managers · Trends to watch in 2023 · January 2023

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Source: Bloomberg as at 31 December 2022. For illustrative purposes only.

Valuations are only half of the story and some companies are cheap for a reason. That reason can be difficult end-markets, issues with the funding of growth as external sources become more expensive or, in extreme cases, a lack of business rationale that would imply there is little chance the company will survive after the money taps are turned off.

Other companies have very strong fundamentals but were nevertheless sold off in 2022 as investors fled to safer assets. We believe that our holdings in the payment-services space are a good example of this. Fundamentally, most payment companies are very resilient in inflationary environments because they take part of the total payment value besides a fee per transaction.

What typically happens during inflationary periods is that the number of transactions increase, since people buy more smaller ticket items, as opposed to spending on big ticket items. The value of the transactions increase as well, as inflation pushes up the final sales price and payment companies take a percentage of that value. So far, that has resulted in a strange situation where payment companies are trading at deeply discounted multiples, while at the same time their long-term outlook remains unchanged.

Of course, it might be possible that we will see a deep recession in 2023 (and beyond), in which case payment companies would still be hit by overall lower spending. When looking at valuations, though, that scenario is completely priced in already. In many cases these companies trade at or below 2008-2009 multiples. Most payment companies saw flat revenues and earnings during that time, so there was no collapse in growth or earnings at all. Every recession is different, but we think that the combination of valuations and fundamentals are a good basis for next year's stock picking.



FIG. 3 PAYMENT COMPANIES WITHIN OUR INVESTMENT UNIVERSE³

	PE FY2	5 YEAR AVG PE	5 YEAR Median Cfroi	EXP. EPS GROWTH'23	EXP. EPS GROWTH'24
FISERV	12.3x	21.8x	30%	12%	14%
GLOBAL PAYMENTS	8.9x	21.8x	26%	11%	14%
PAYPAL	13.7x	38.6x	14%	17%	17%
FLEETCOR	9.4x	19.8x	43%	8%	16%
VISA	22.7x	31.9x	52%	11%	16%
LAKALA	11.6x	22.6x	16%	32%	30%

Source: LOIM, Bloomberg as at 9 January 2023. For illustrative purposes only. Past performance is not an indicator of future results. Any reference to a specific company or security does not constitute a recommendation to buy, sell, hold or directly invest in the company or securities. It should not be assumed that the recommendations made in the future will be profitable or will equal the performance of the securities discussed in this document.

Key themes for 2023

We have identified several key themes that we believe will define market performance in 2023. This next section explores each theme in more detail:

- · Macro: focus on inflation and rising interest rates
- · China reopens after relaxing its zero-covid policy
- · Mergers and acquisitions (M&A) activity continues in 2023
- · MSCI re-classifies payment companies as financials
- · Cybersecurity risks are better monitored

Macro: inflation and rising interest rates

The impact of inflation and rising rates so far has been negative for our absolute performance. Not because fundamentals deteriorated, but because multiples contracted, and investors shunned the long duration segment. We think that a continuation of inflationary pressures, and subsequent interest rate rises, might continue in 2023, but we do not expect a similar impact on multiples.

In fact, our return expectation for the year is equal to the earnings growth for our portfolio, which historically trended between 12-15% per year. We believe multiples have contracted far enough to incorporate all the negatives, and may have even overshot. It is now up to the quality companies to show that they can keep their earnings growth intact and be rewarded for it.

Many of our portfolio holdings have cushioning clauses to cope with inflation. Our software providers can re-price their existing contracts via consumer price index (CPI) clauses and our payment company picks tend to benefit from increased payment values.

This argument has limits, of course. If there is a deep recession, volumes will come down, software companies will find it hard to keep their pipelines filled with orders and the general interest in equities will be subdued.

We think that risk is low in the US, but higher in Europe. We are invested globally, but heavily tilted to the US. In case of deteriorating end-markets, we can move our portfolio exposure to other parts of the world.

China reopens after easing its zero-covid policy

We think the base case for China is progressive re-opening. China's economic performance has been lagging and the impact has been significant. We expect that the Chinese economy will start to open back up again and be fully open in the second or third quarter of next year.

The Chinese government is likely to continue with the fiscal support and monetary stimulus that has been ongoing for a while. Our exposure to Chinese FinTech stocks is relatively high versus peers. We increased our weight to about 10% of the portfolio and spread that over several names to avoid single-stock risks. Most of our Chinese FinTech companies are exposed to payments or financial-industry software end-markets.

The market conditions as described in Figure 4 particularly bode well for this segment. Chinese policies can change quickly, and macro-economic risks persist, meaning we prefer a basket approach, in which we are diversified across names rather than concentrating on a few.

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⁴ Past performance is not a guarantee of future results.



FIG. 4 AN EXPECTED REOPENING SEQUENCE FOR CHINA

Q4 2022 - Q2 / Q3 2023

Change in the official narrative

- · Official rhetoric needs to change on the severity of threat from covid
- · National People's Congress (Mar 2023) likely to provide a decisive shift
- · Steady adjustments at local levels and social media campaigns

Vaccine and treatment approvals and administration

- · Possible emergency use approval for domestic & foreign vaccines/drugs
- Production launch/cold chain logistics preparations/stock building efforts
- Booster shot campaigns raising old population vaccination

Healthcare system preparations

- · New protocols for covid treatment, training of doctors and nurses
- Expansion of ICU beds, treatment facilities
- · Avoidance of northern hemisphere flu season (November ~ March)

Macroeconomic policy offsets before accelerated re-opening

- Fiscal support
- Monetary policy support
- · Macroprudential easing (esp. real estate sector)

Source: Lombard Odier, December 2022.

Q2 / Q3 2023 (before another flu season)

Accelerating reopening entailing (similar to neighbors)

- · End of mass-testing regime
- Minimally invasive testing/tracing/isolation protocols
- End of area-based lockdown measures
- · End of domestic mobility restrictions
- End of quarantine requirements for in-bound travelers
- Significant numbers of covid deaths (like other reopening cases)

M&A continues in 2023

Cheap valuations are not only attractive to mutual fund managers, but they also attract strategic deals and private equity buyers.

During 2022 we saw a couple of interesting M&A deals in our universe, including Avalara, EVO Payments, Ping Identity, Computer Service, and Coupa software, at an average premium of about 35%. We think that M&A activity will continue. It is not unthinkable that we see very large strategic deals in payments, where scale is extremely important. Several special purpose acquisition company (SPAC) deals have also completely de-rated, which could bring about opportunities for private equity managers to take those companies private again and restructure with a proper IPO sometime in 2025.

For us, M&A is an additional source of return. We are not going to add a company to the portfolio just for the sake of a deal being made. However, given our overweight positioning in mid and small market-cap companies, it is likely that we will see a positive contribution from M&A into the next year.

MSCI's reclassification of payment companies

On 20 March, 2023, MSCI will overhaul its Global Industry Classification Standard (GICS) system. The financials sector will see a reclassification in the Financials Services industry group. In this group, three new sub-industries will be added. Diversified Financial Services, multi-sector holdings, specialised finance, commercial and residential mortgage finance, and transaction and payment processing services will make up the Financial Services industry.

The impact on our FinTech universe will be considerable. The formation of the last group in particular will overhaul our sector exposure.

"Transaction and Payment Processing Services (40201060): Providers of transaction & payment processing services and related payment services, including digital/mobile payment processors, payment service providers & gateways, and digital wallet providers." 6

Payment companies comprise between 35%-40% of the portfolio. In the past, these companies were predominantly classified as technology companies. Our FinTech industry positioning has consisted of companies classified as 70% technology and 30% financials. After 20 March, 2023, this will potentially change to roughly 70% financials and 30% technology.⁷

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⁶ S&P Dow Jones Indices and MSCI. <u>Revisions to the Global Industry Classification Standard structure</u> Published in March 2022.

⁷ Holdings and/or allocations are subject to change.



We think this change in classification is a net-net positive for our portfolio. Within technology, the payment companies had to compete with FAANGs (FANG companies, plus Amazon⁸) for attention. Even though on a one- and two-year basis our payment companies were able to outperform FAANGs, the category was mostly ignored within technology portfolios. Within financials, however, they will clearly add an important diversification effect to traditional banks, insurers, and asset managers.

The financials sector represents about 15% of the MSCI ACWI index, whereas technology represents 21%. However, this was predominantly driven by FAANG-related flows. We think the outflow from technology portfolios will be more than compensated for by the inflows from financials portfolios. This does not affect our portfolio positioning because we have absolute weights and do not consider sector specification, but for several asset managers this is important. In passive strategies, the sector and country allocation often determine the composition of the instrument.

Monitoring cybersecurity risks

The global pandemic has increased vulnerabilities across the board, which raised the importance of cybersecurity. It is a source of weakness that markets do not really consider this factor in the pricing of assets. We believe the main reasons for this are that analysing the risks is a technically complex exercise, the information flow about breaches by companies is limited, and a regulatory framework is not yet enforced.

This may all very well change in 2023, since regulators are getting more involved. LOIM has developed a way to analyse cyber risks in

the investment process by looking at evidence-based data, which allows for a cybersecurity impact-analysis to be made.

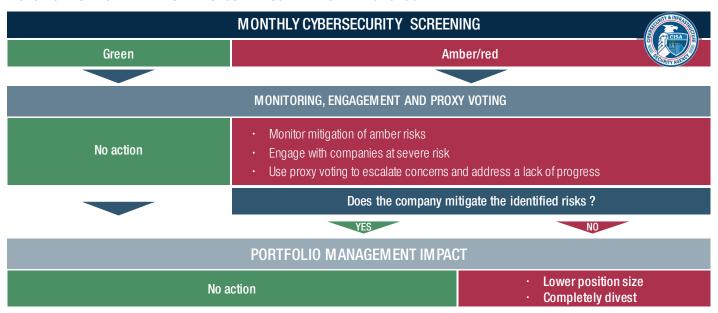
The market is paying more attention to this factor as it becomes more tangible and material. In addition, we expect to see a replacement of opaque risks assessments 'scores' in favour of multi-dimensional cyber-risk analysis. Behavioral analysis and time-based cyber-risk profiling will make it possible to develop amore nuanced view of the actual cyber-risk profile of organisations at scale.

Finally, there is pressure on budgets in general due to the macro environment, but we don't expect to see significant reductions in cybersecurity software spending or cyber risk screenings. We do envision more engagement on cybersecurity by asset managers next year, as some are rolling out their solutions to track cyber risks for their investment portfolios.

We have developed a screening methodology (see figure 5) based on disclosures from the Cybersecurity & Infrastructure Security Agency in order to assess cyber risks to our portfolio holdings. We screen our holdings every month and we receive red/amber/green results. A series of consecutive reds initiates official engagement and if the company is not responsive after several attempts, we would move to reduce our position as a result of an increase in the operational risk due to its neglect of cyber factors.

This is a unique approach. Our white paper, "Cybersecurity: a neglected investment risk in an increasingly digitalised world" provides its objectives and methodology in detail. The ultimate goal is to make our investments safer and protect our alpha-generation capabilities.

FIG. 5 LOIM'S PROPRIETARY CYBERSECURITY SCREENING METHODOLOGY



Source: LOIM. For illustrative purposes only.

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Positioning the portfolio for 2023

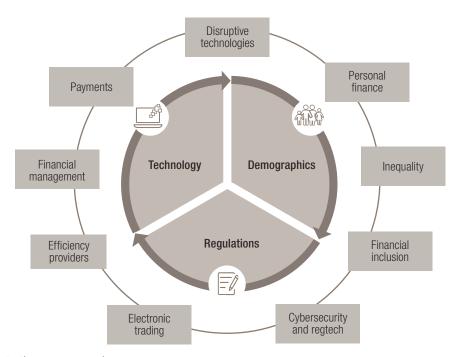
Trends investing boils down to monetising behavioral inefficiencies in the market and anticipating the impact and pace of change that is underestimated in the long-run. This change has three distinct drivers: technology, socio-demographics, and policies/regulations. All trends can eventually be traced back to these three drivers, or a combination thereof. From an investment perspective, however, not all these drivers of change can be equally monetised.

Socio-demographics, for example, are slow-moving and very transparent. Policy and regulation-driven change can be very impactful, but lacks predictability and therefore generates more reactive price movements, rather than predictive movements.

Finally, technological change provides the trained professional with ways to exploit behavioral biases resulting from a tendency by the market to overestimate technological change in the short term but underestimate its long-term impact.

This is often referred to as "Amara's law". Within FinTech, we view ageing, urbanisation, the rising middle class and financial inclusion as socio-demographically driven change. Inequality, regulatory equality between incumbents and startups, cybersecurity requirements and data protection are examples of policy-driven change. Finally, distributed-ledger technology, payment infrastructure, artificial intelligence and big data are examples of technology-driven change within FinTech that impact the landscape substantially.

FIG. 6 DRIVERS OF CHANGE AND THE RELATED FINTECH CATEGORIES



Source: LOIM. For illustrative purposes only.

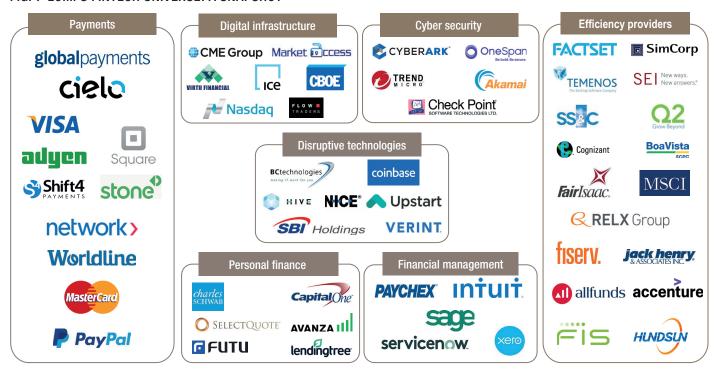
For our Global FinTech strategy, we have identified more than 350 companies that benefit from the digitalisation of the financial sector. A snapshot of this universe can be seen in figure 7. We perform a

quality overlay on top of this universe to select the best business models and financial track records. Without exception, all of members of our proprietary FinTech universe benefit from increased digitalisation.

⁹ Roy Charles Amara (7 April 1925 – 31 December 2007) was an American researcher, scientist, futurist and president of the Institute for the Future best known for coining Amara's law on the effect of technology. He held a BS in Management, an MS in the Arts and Sciences, and a PhD in Systems Engineering, and also worked at the Stanford Research Institute.

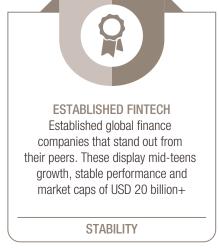


FIG. 7 LOIM'S FINTECH UNIVERSE: A SNAPSHOT



Source: Lombard Odier, December 2022. Any reference to a specific company or security does not constitute a recommendation to buy, sell, hold or directly invest in the company or securities. It should not be assumed that the recommendations made in the future will be profitable or will equal the performance of the securities discussed in this document.

Within the quality framework of our investment process, we have constructed a balanced high-conviction portfolio of 40-60 companies, which we divide into three subcategories:



ENANBLING TECHNOLOGY
Companies that help the financial industry to develop and implement technology. These companies have steady earnings growth, are of high quality and can be both large as well mid-sized companies

PREDICTABILITY



Source: LOIM. For illustrative purposes only.

Whereas we were conservative in our positioning during 2022, given we were heavily tilted towards stability and predictability, we are now adding to our position in upcoming FinTech names. We believe valuations have become attractive. Within the quality selection of this group, we have been able to add names and are looking to increase our exposure over the course of 2023, if market valuation allows.

We have a barbell investment approach, diversifying across sectors (financials and technology), countries and market capitalisation

(avoiding the mega-caps and overweight mid-caps). We do not invest in FAANGs, because they are not pure-play FinTech, but our portfolio has been able to beat FAANG performance on a one- and two-year basis, showing it is a great alternative, or a complementary approach for those who already hold FAANG exposure.

Finally, with the valuations as attractive as they are now given the aforementioned worst-case scenarios being priced in, we believe 2023 will be a good year to build a position in FinTech equities.

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