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Technology - Payments | Europe

What to own in payments?

We believe payments stocks offer protection vs. inflation. We update our forecasts for the impact of weaker growth/higher inflation, reducing revenues by 1-3% and EBITDA by 1-5%. Adyen and Network International are top picks. On the value side, we prefer Worldline vs. Nexi.

We want to own a payments stock into 2023 – Adyen and Network International are our top picks: Higher expected inflation makes it difficult to construct a scenario where we don't envisage growth. With the average payments stock down 23% YTD and now trading at, or close to, trough multiples, we see a cleaner set-up and believe the market may be missing the defensive nature of payments companies, particularly in an inflationary environment.

As always, there is a debate between owning Adyen, a structural winner but at an elevated valuation (42x CY24 P/E), or a more challenged incumbent such as Worldline or Nexi, where valuation is close to trough levels but there are concerns around competition/share losses. We favour owning the structural winner, with Adyen our top pick in the space – we expect growth to be shielded by share gains within existing merchants, while valuation on a growth-adjusted basis looks attractive (1.65x CY23 PEG). For investors seeking a more value-orientated play, we prefer Worldline, given a cleaner set-up post the sale of TSS/Ingenico integration broadly complete, as well as better 1H22 growth. In the case of Nexi, we are more cautious around the integration of Nets/SIA from a pure execution point of view and also a broader competitive positioning angle, given a more complex payments landscape post COVID. For both Nexi and Worldline, we believe tougher comps in 2H22 are a clear investor focus and will provide a read on the run-rate growth in a more normalised environment.

For investors comfortable with EM risk, we favour Network International, which we expect to be somewhat insulated from a wider macro slowdown thanks to tailwinds from cash-to-card, elevated oil prices and rebounding tourism. With the shares trading on just 15x CY23e P/E or 8% FCFF yield, we don't believe investors or consensus are pricing in >20% growth; and therefore, delivery of mid-teens growth with margin expansion should drive a re-rating.

Our economists expect an incrementally tougher macro backdrop from here, and they recently lowered their euro area GDP growth forecasts. They now see a technical recession across 4Q22 and 1Q23. For 2022, they project real GDP growth of 2.9%, before a material slowdown to -0.2% next year. Given their expectation that inflation will remain elevated throughout 2022/23, this results in higher nominal GDP and consumption (2.5%/2.6% nominal consumption/GDP for 2023 despite recession call). We think this is an important distinction, as higher inflation should support volumes for our payments coverage on a nominal basis.

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Technology - Payments

Europe
IndustryView **Attractive**

WHAT'S CHANGED?	FROM:	TO:
Adyen NV (ADYEN.AS)		
Price Target	€2,625.00	**€2,540.00**
Network International Holdings PLC (NETW.L)		
Price Target	440p	**460p**
Nexi SpA (NEXII.MI)		
Price Target	€13.00	**€10.00**
Worldline SA (WLN.PA)		
Price Target	€49.00	**€48.00**

However, we see a number of potential offsets for our payments coverage, suggesting a more defensive set-up vs. our software/services coverage: 1) Payments businesses offer a partial hedge vs. inflation, as higher inflation results in higher volumes, to which the take-rate is applied. 2) Cash-to-card remains a tailwind – we assume c. 2pts of increased card penetration per annum, providing a tailwind to growth, particularly for offline players. Combining this tailwind with our economists' nominal consumption forecasts would imply 8.3% growth in total card transaction value in 2022, falling to 4.3% in 2023. 3) Our global e-Commerce team are positive on longer-term penetration trends, forecasting a 10% CAGR in EMEA (and globally). 4) Digitalisation of payments remains a key focus for merchants, with such projects typically proving defensive in a milder downturn. We see Adyen as particularly well positioned here.

We make modest cuts to our FY22-23 forecasts: We assess a number of factors, including exposure to discretionary spending, online/offline split and transactional revenue exposure. Combined, our CY23 adj. revenue forecasts fall by 1-3% and our adj. EBITDA forecasts by 1-5% for the payments sector as a whole.

Key Changes

Exhibit 1: Ratings distribution in payments coverage

	Rating	Share price	Price target	Up / (Downside)	Comment
Overweight					
Adyen	OW	€ 1,487	€ 2,540	71%	Best-in-class payments provider, exposed to secular growth themes of e-Commerce and cash-to-card, as well as the digitalisation of omnichannel payments. We see a durable high growth runway and forecast 34% org. net revenue growth in FY22
Network	OW	291p	460p	58%	Leading payments provider in MEA and the only pan-regional scale player. Rebound continues to FY22, while low penetration of digital payments results in a long growth runway, with cash-to-card tailwinds providing an offset to any macro weakness
Equal-weight					
Worldline	EW	€ 47	€ 48	3%	Leading European payment services provider with wide coverage that spans the payments value chain. The company's revenue mix is currently skewed to the offline payments space. Recent growth supported by strong performance in Merchant Services (2Q22 +18% org.), focus remains on 2H22 growth
Nexi	EW	€ 8.5	€ 10.00	18%	Italian specialised payments technology player with continental European footprint. Investor focus largely around integration of recent Nets/SIA mergers (2Q22 margins +4pp y/y from delivered synergies) and growth in 2H22 vs. more normalised comps.

Source: Morgan Stanley Research

Exhibit 2: What's changed? Price targets

							Adjusted EBITDA forecast changes								
Company	Rating	Share price	Previous price target	New price target	% upside/ downside	What's changed?	2022 old	2022 new	% Chg	2023 old	2023 new	% Chg	2024 old	2024 new	% Chg
Adyen	OW	€1487.00	€2625.00	**€2540.00**	**71%**	Short-term and mid-term forecasts updated	€831.1m	**€831.1m**	0%	€1137.6m	**€1114.8m**	-2%	€1544.1m	**€1513.0m**	-2%
Network International	OW	GBp 291.4	GBp 440.0	**GBp 460.0**	**58%**	Short-term and mid-term forecasts updated. Updated FX assumptions in DCF	$ 180.8m	**$ 180.8m**	0%	$ 223.1m	**$ 219.0m**	-2%	$ 269.5m	**$ 266.4m**	-1%
Nexi	EW	€8.49	€13.00	**€10.00**	**18%**	Short-term and mid-term forecasts updated. Lowered terminal growth to 1.5%. Increase WACC to 8.5%	€1648.7m	**€1635.5m**	-1%	€1826.7m	**€1760.1m**	-4%	€2020.6m	**€1970.8m**	-2%
Worldline	EW	€46.80	€49.00	**€48.00**	**3%**	Short-term and mid-term forecasts updated	€1132.1m	**€1122.8m**	-1%	€1360.6m	**€1287.5m**	-5%	€1559.0m	**€1509.5m**	-3%

Source: Morgan Stanley Research estimates

Exhibit 3: MS adj. EPS (2022 and 2023) vs. consensus

	Adjusted EPS forecast changes vs. consensus					
Company	2022 MSe	2022 consensus	% delta	2023 MSe	2023 consensus	% delta
Adyen	**€20.30**	**€20.06**	1%	**€26.13**	**€26.89**	-3%
Network International	**17p**	**15p**	11%	**23p**	**22p**	5%
Nexi	**€0.52**	**€0.55**	-5%	**€0.60**	**€0.64**	-6%
Worldline	**€2.06**	**€2.08**	-1%	**€2.54**	**€2.53**	0%

Source: Visible Alpha consensus, Morgan Stanley Research estimates

Weak performance overall YTD – where are we now?

Our average covered European payments stock is down 23% YTD: This compares to the broader STOXX 600 index, which is down c. 11% on a total return basis, year-to-date. Pressures have been twofold. 1) Higher multiple/growth names such as Adyen have been particularly hard hit by the rotation, given their high starting multiples. 2) More traditional payments players such as Worldline and Nexi have sold off sharply on the back of concerns around rising competition, disruption and ultimately the growth outlook, although Worldline has since rebounded following better than expected growth in 1H22. Nexi has been the biggest underperformer, impacted by concerns around disruption, as well as higher Italian bond spreads (given elevated absolute debt level).

Exhibit 4: Annual share price performance, including 2022 YTD performance

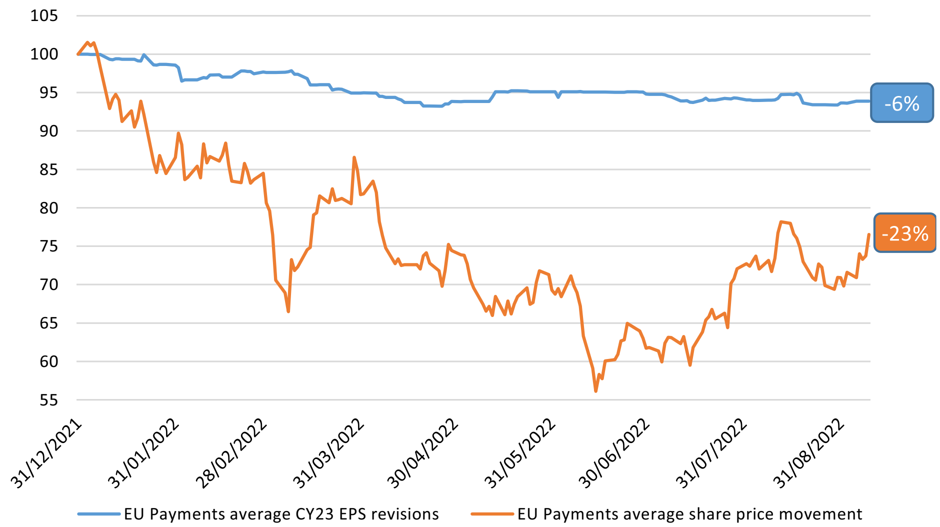
2017	2018	2019	2020	2021	2022 YTD
Worldline +51.9%	Adyen +97.9%	Adyen +53.9%	Adyen +160.6%	STOXX 600 +24.9%	Network -0.4%
STOXX 600 +10.6%	STOXX 600 -10.8%	Worldline +49.6%	Nexi +32.0%	Adyen +21.3%	Worldline -4.4%
	Worldline +3.8%	Network #VALUE!	Worldline +25.3%	Nexi -14.4%	STOXX 600 -11.9%
		Nexi +37.6%	STOXX 600 -2.0%	Worldline -38.0%	Adyen -35.6%
		STOXX 600 +26.8%	Network -49.0%	Network -10.5%	Nexi -39.3%

Source: Refinitiv data (as of COB 09/09/22), Morgan Stanley Research

Our payments coverage has seen limited earnings cuts (CY23) YTD, implying significant multiple compression: YTD, the four pure-play payments names in our coverage (Adyen, Nexi, Worldline, Network International) have seen an average consensus earnings cut of 6% for CY23 – relatively limited, in our view, considering recession concerns/impact from higher inflation. Given the -23% average share price move, this implies a significant de-rating (>15% YTD), with most names in our coverage now trading at, or slightly above, trough earnings multiples.

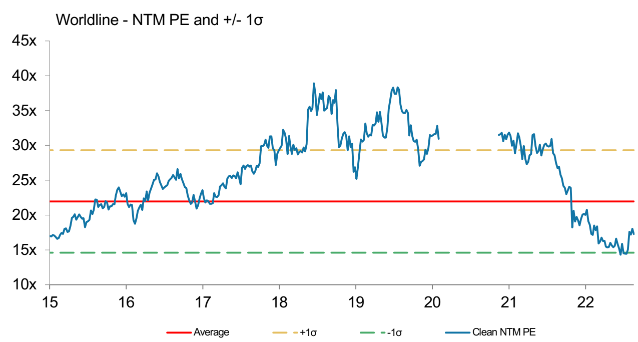
We think the limited earnings cuts largely reflect solid performance in 1H22. Worldline and Nexi delivered 2Q beats, with Worldline also slightly upgrading guidance as it now expects organic growth to be in the upper half of the 8-10% range, despite a 1% hit from Russia. Network International also delivered a small beat, confirming FY22 guidance. Adyen was more mixed, with strong volume growth (+60% y/y) offset by lower take-rates and higher investments. However, we think investors are focused on 2H22 for a read on how payments names can perform against much tougher comps/a weaker macro backdrop.

Exhibit 5: EU payments price vs. CY23 earnings YTD



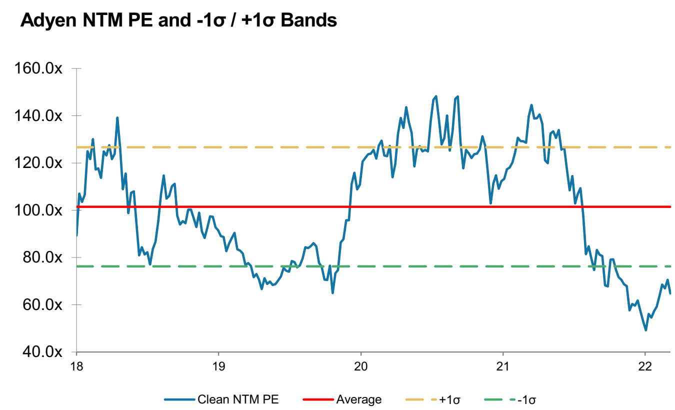
Source: Refinitiv consensus data (09/09/22), Morgan Stanley Research

Exhibit 6: Worldline P/NTM Earnings



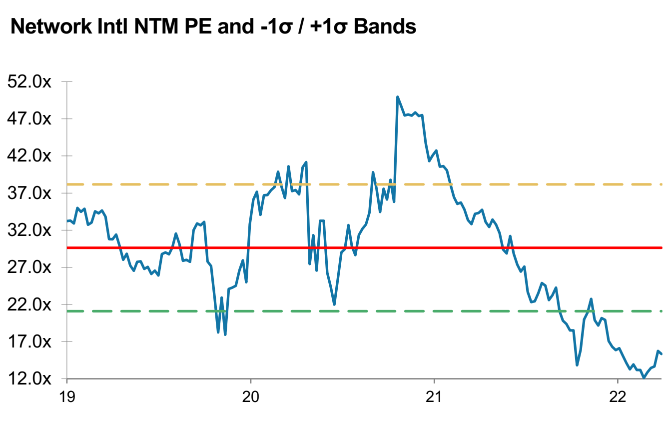
Data discontinuity (Feb-Nov 20) = period when consensus forecasts were ex-Ingenico Source: Refinitiv, Morgan Stanley Research

Exhibit 7: Adyen P/NTM Earnings



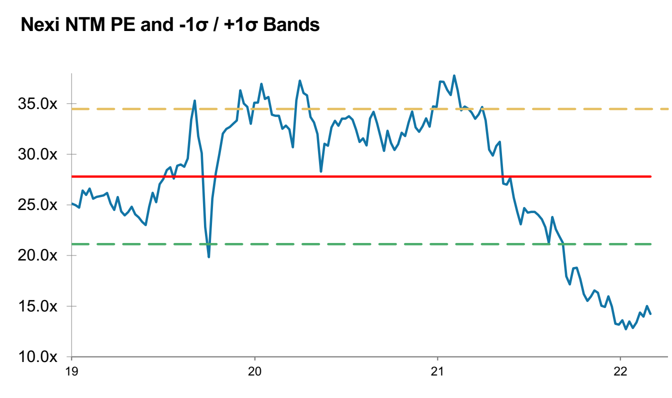
Source: Thomson Reuters TRSL, Morgan Stanley Research

Exhibit 8: Network International P/NTM Earnings



Source: Thomson Reuters TRSL, Morgan Stanley Research

Exhibit 9: Nexi P/NTM Earnings



Source: Thomson Reuters TRSL, Morgan Stanley Research

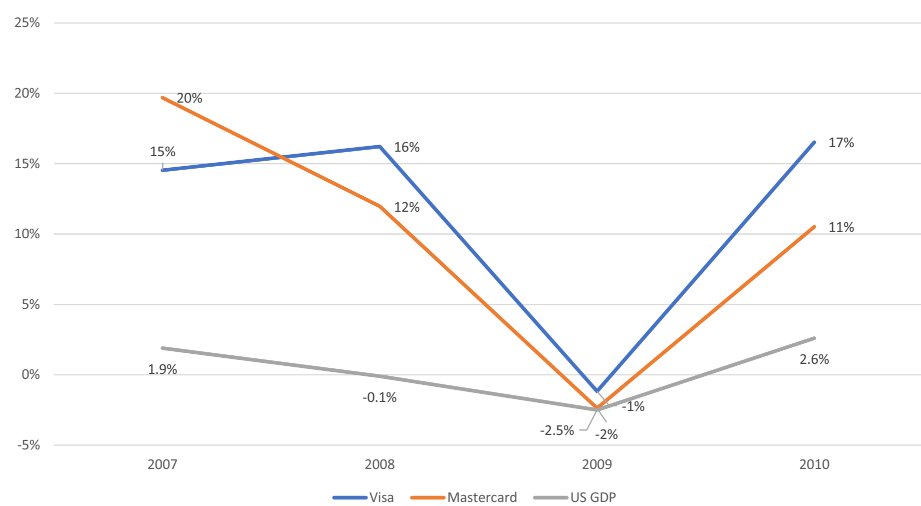
A framework for thinking about an economic downturn/recession

Examining previous downturns – what happened during the GFC?

We view the COVID-related economic contraction in 2020/21 as unique and less relevant for our analysis. Given the length of the economic cycle prior to COVID, we need to look back to 2008/09 and the Global Financial Crisis for an example of a protracted economic downturn and its impact on the payments industry. However, that was a particularly severe recession, something our economists (who expect a mild recession in Europe next year) are not calling for at present (more below). None of our payments companies was listed in 2008/09, so data are somewhat limited. Instead, we focus on Visa and Mastercard volumes, which we consider a proxy for the broader payments industry at the time. Exhibit 1 shows that both Visa and Mastercard saw volumes fall from mid-teens growth in 2007-08 to slightly negative in 2009, before recovering strongly in 2010.

Note that US CPI fell from 3.8% in 2008 to -0.4% in 2010 (EU CPI similar), which would have contributed to the slowdown. As we discuss in more detail below, the current downturn appears markedly different in that high inflation is expected to persist throughout 2022 and 2023, which should provide some support to volumes on a nominal basis. Applying our economists' forecast for inflation to remain at 5.4% in the Euro Area next year, would reduce the c. 15pt slowdown for V/MA to c. 9-10pts; if we then assume a recession that is half the GFC, this would imply a c. 4-5pt slowdown for transactional payments exposure. This is what we broadly apply to our forecasts, which results in a 2-3pt reduction to revenues for our payments coverage (outlined in more detail below).

Exhibit 10: Visa and Mastercard volumes 2007-10 (ex-FX) vs. US GDP growth



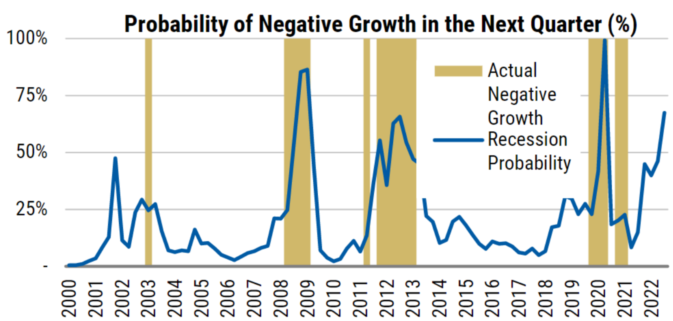
Source: St. Louis Fed data, Company data, Morgan Stanley Research

Our economists forecast a mild recession next year, but not a GFC style downturn...

As we described in more depth in our recent Software note, Debugging 2023 forecasts for a tougher macro, our economists envisage an incrementally tougher macro backdrop from here. As an example, our they recently lowered their euro area GDP growth expectations such that they are forecasting a technical recession across 4Q22 and 1Q23 (see here). The gas price surge has accelerated substantially in recent weeks (joined by wholesale electricity prices), with renewed concerns about a complete cut-off putting further pressure on households' disposable incomes. For 2022, our economists expect real GDP growth of 2.9%, before a material slowdown to -0.2% next year. Underpinning this forecast is the assumption of real consumption growth of 3.1% in 2022 and -0.1% in 2023.

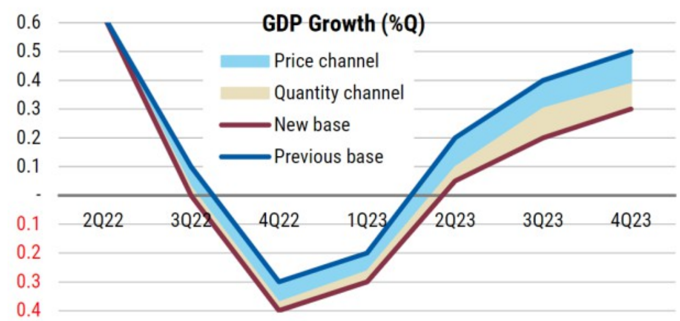
Considering our economists' expectation for the euro area to be in a technical recession by 4Q, we update our payment company forecasts for both 2H22 and 2023 in this note, although we expect the majority of the impact to be seen next year.

Exhibit 11: Recession probabilities have increased significantly



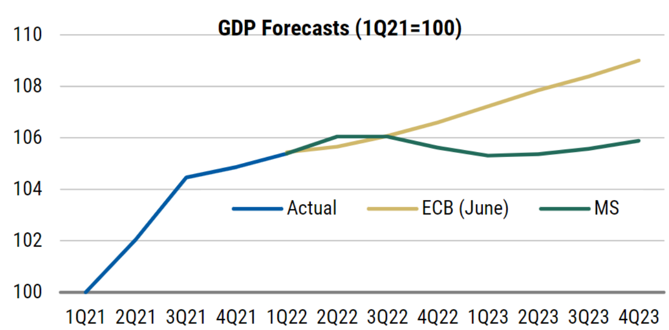
Source: Eurostat, Morgan Stanley Research forecasts for 2022

Exhibit 12: MS economists' recently lowered their growth forecasts on the back of higher gas prices/scarcer supply, expecting a technical recession from 4Q22



Source: ECB, Morgan Stanley Research forecasts

Exhibit 13: MS economists' more bearish on 2023 growth

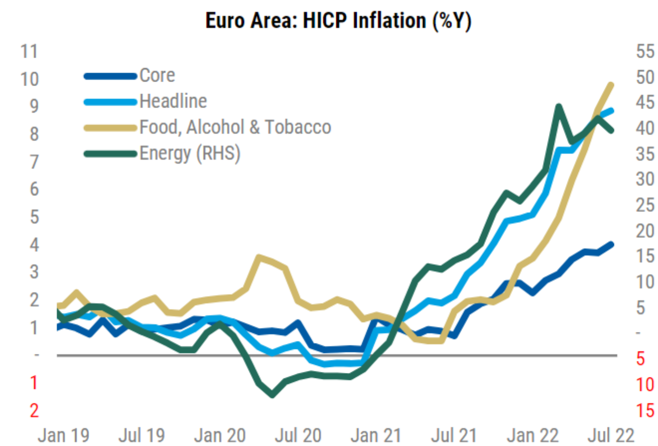


Source: ECB, Morgan Stanley Research forecasts

...with euro area inflation expected to peak at 9.4% in October, recent trends suggest upside risk

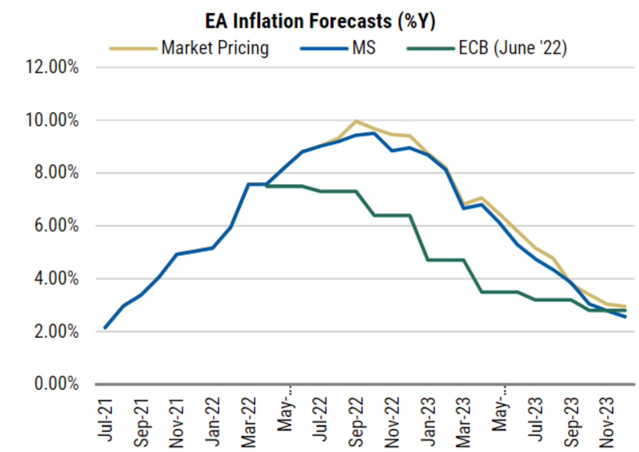
Euro area inflation reached yet another record high in July, with headline HICP printing at 8.9%Y. Our economists expect inflation to peak at 9.4% in October, resulting in an 8.1% inflation over the whole of 2022. In 2023, they expect inflation to stay elevated, reaching 5.4%. In light of the recent moves in gas prices across Europe, we believe it is fair to assume there is upside risk to these forecasts in the near term as we head into winter.

Exhibit 14: Euro area HICP reached a record high in July



Source: Eurostat, Morgan Stanley Research

Exhibit 15: Our economists' forecast path is broadly in line with market pricing, but substantially higher than the ECB's latest projections



Source: ECB, Bloomberg, Morgan Stanley Research forecasts

Exhibit 16: Euro area GDP/consumption – real and nominal forecasts

	2022	2023
Real GDP	2.9%	-0.2%
Nominal GDP	6.1%	2.5%
Real Consumption	3.1%	-0.1%
Nominal Consumption	6.3%	2.6%

Source: Morgan Stanley Research estimates

Elevated inflation supports higher levels of nominal GDP/consumption. Our economists' expectation for inflation to remain elevated throughout 2022/23 implies higher nominal GDP and consumption. For 2022, our economists look for nominal GDP growth of 6.1% and nominal consumption growth of 6.3%. In 2023, this falls to 2.5% and 2.6% for nominal GDP/consumption, but is still in positive territory. We think this is an important distinction, as higher inflation should support volumes for our payments coverage on a nominal basis.

In the US, the situation is similar, albeit recession is not the base case. For 2022, our economists see US GDP growth at just 0.9% 4Q/4Q, and for 2023 at 1.3%. Idiosyncratic factors, in particular inventories and net exports, weighed significantly on GDP in the first half of this year. In the second half, they expect a near-term bounce back in consumption after suffering from a confluence of negative shocks in 2Q. After a short recovery, domestic demand should slow again through 2023, they believe, as a euro area recession and tighter financial conditions slow aggregate demand more than anticipated. Recession is not our economists' base case, but they see rising risks that the soft landing could turn into a hard one. See Recession Risks – Hard or Soft Landing.

Incorporating the latest US data for 1H22, our economists now forecast more deceleration in real PCE (personal consumption expenditure), running at 1.2% 4Q/4Q growth in 2022 (2.2%Y) and 1.1% 4Q/4Q in 2023 (1.1%Y). Our economists expect consumer spending to rebound from 1.0% in 2Q22 to 1.4% in 3Q22 as spending surged on services this summer and gasoline prices come down from peaks. Real PCE, however, runs below its pre-COVID growth trend throughout their forecast horizon, reflecting the medium-term impact of higher rates, higher prices and a slowing labour market.

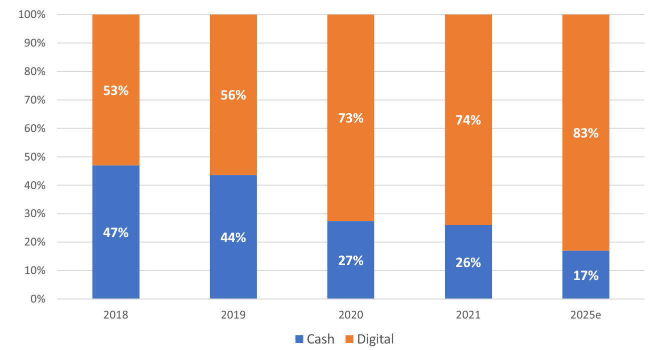
Despite the gloomy macro economic outlook, we note a number of potential offsets for our European payments coverage.

1. Payments businesses offer a partial hedge against inflation, given their take-rate model: Payments companies' revenue models tend to have a fee structure that is dependent on both number of transactions and value. In particular, the pure acquiring portion of payments businesses predominantly charge a take-rate vs. volumes (as well as a smaller fixed fee per transaction component). As a result, we see this acquiring portion as offering a hedge against higher inflation, given that higher inflation results in higher volumes, to which the take-rate is applied. Within our European coverage, we estimate Adyen has the highest exposure to acquiring and thus take-rate based revenues, where we estimate 90% of net revenues are take-rate based.

Worldline, Nexi and Network International offer lower exposure (40-55%), as merchant acquiring represents a smaller portion of their overall business. Each of these companies is exposed to issuer processing/outsourcing, where revenues are typically a function of the number of cards in issue and a fee per transaction. For simplicity, in calculating exposure to transactional revenues, we assume a 25% weight in the respective divisions towards the number of transactions. While in an inflationary environment, a fee per transaction revenue model may not provide a pure hedge, we note there can be a trend towards splitting larger transactions into smaller ones in the face of rising inflation, in order to better manage household budgets.

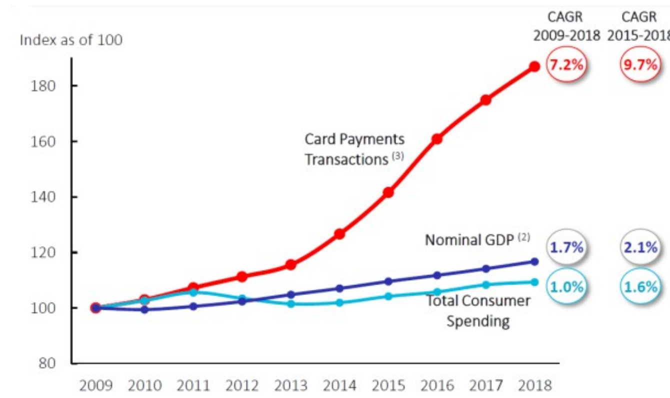
2. Cash-to-card migration remains a tailwind: Another key growth driver for payments names over the past decade has been the shift away from cash towards card-based or digital payment methods. Card penetration has been increasing at 2-3pts per annum over this period, increasing the TAM for payments names and supporting growth (considering only non-cash transactions are applicable for payments businesses). While the COVID pandemic resulted in a one-time step change away from cash usage in Europe (44% to 27% in 2020), the trend is still forecast by Worldpay to continue, with cash usage in Europe expected to drop to 17% by 2025, down from the estimated 26% in 2021. This implies c. 2pts of increased card penetration per annum, which, although slightly lower than the previous trend, should still act as a clear tailwind to growth for payments names. Indeed, Exhibit 9below (from Nexi) shows how the value of card payments far outstripped total consumer spending/nominal GDP over 2009-18, when Italian GDP remained depressed, supported by growth in card penetration within the Italian economy.

Exhibit 17: Cash-to-card shift is a tailwind for Europe, albeit with less runway post COVID



Source: Worldpay Global Payments report, Morgan Stanley Research

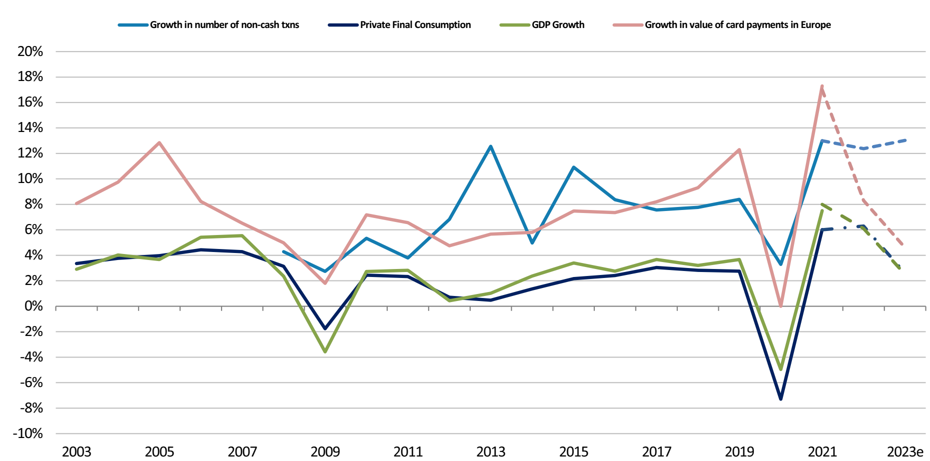
Exhibit 18: Growth of Italian card payments values outperformed Italian total consumer spending and nominal GDP



Source: Nexi

Linking European card transaction growth to consumption: Growth in the number of non-cash transactions in Europe, as well as the value, has consistently outperformed consumption growth since 2008, by 5 percentage points, on average. As noted, payments companies' revenue models tend to have a fee structure that is dependent on both number of transactions and value. Despite the expected slowdown, higher inflation underpins our economists' nominal consumption forecast for the euro area is +6.3% in FY22 and +2.6% in FY23. Applying the 2pt tailwind implied by Worldpay's cash vs. digital payments forecast (Exhibit 17) would still imply 8% growth in total card transaction value in 2022, falling to 5% in 2023. We believe this captures the way in which higher inflation can actually provide an offset to our payments coverage despite the weaker macro backdrop.

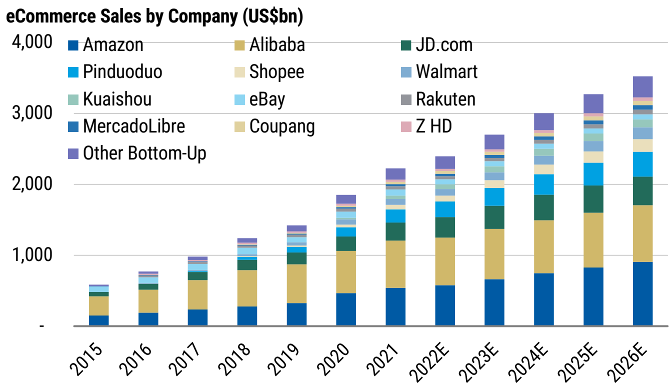
Exhibit 19: European non-cash transaction growth vs. consumption and GDP



Source: Capgemini World Payments Report, Eurostat, OECD, Morgan Stanley Research estimates (e)

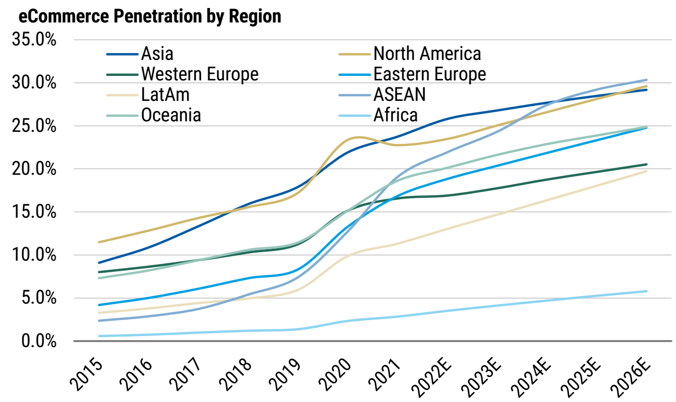
3. Rising e-Commerce growth/penetration: While e-Commerce penetration (and thus growth) saw a material one-time benefit during COVID, 2022 has seen growth moderate, with penetration appearing to revert to trend. Nonetheless, our global e-Commerce colleagues are positive on longer-term trends. While cyclical headwinds (weaker macro/re-opening) have been a greater drag than initially anticipated in 2022, they see the key drivers behind their multiyear e-Commerce growth outlook as still intact. The team's top-down model illuminates broad-based gains even for the highest-penetration countries and categories, supporting their long-term outlook. They expect e-Commerce to grow at a c. 10% CAGR in EMEA (and globally) out to 2026. In 2023, their model looks for growth to rebound to 10% vs. -6% in 2022 (in USD terms). We have always considered rising e-Commerce penetration as a tailwind for our payments coverage, particularly names with higher exposure to pure e-Commerce volumes. With 2023 expected to see a rebound following a weak 2022, we see this as providing a small offset vs. the weaker macro backdrop.

Exhibit 20: Morgan Stanley bottom-up, company-level forecasts cover nearly 70% of global GMV, with an aggregate 10% 2021-26E CAGR largely consistent with the top-down industry growth rates



Source: Company data, Morgan Stanley Research estimates (E)

Exhibit 21: e-Commerce gains are broad-based globally, with increases even in the most penetrated countries and merchandise categories

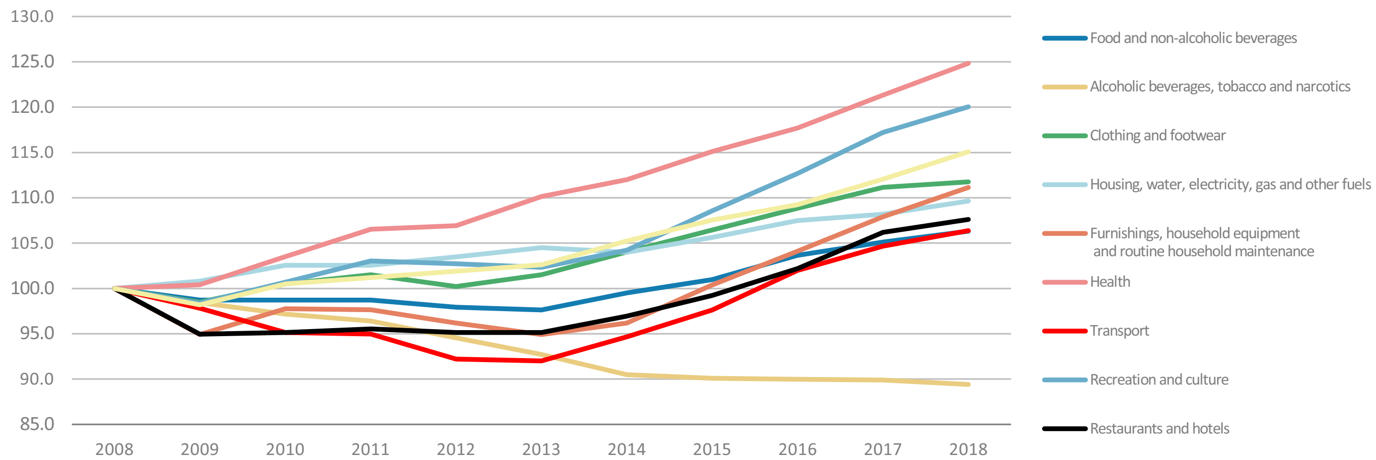


Source: Euromonitor, National Data Sources, Morgan Stanley Research estimates (E)

4. Digitalisation of payments remains a key focus for merchants: The pandemic acted to accelerate existing tailwinds for the payments industry around rising e-Commerce penetration, cash-to-card migration and omnichannel/unified commerce. As part of this, complexity continues to rise across the payments landscape, with payments viewed as more strategic post pandemic. This can be evidenced by the ever-increasing number of payment methods, curb-side pick-up and more complex customer authentication requirements. Combined, this is driving the digitalisation of payments, similar to what we have noted for our Software coverage, where digital transformation is a strong secular trend. In the face of a deteriorating cycle, we believe companies – or in this case merchants – typically will try to maintain projects related to digitalisation, since these efforts can be critical to improving productivity and reducing costs. As a result, these projects often prove more defensive or resilient, especially in the event of a mild recession. With the digitalisation journey within payments still relatively early, we believe players such as Adyen, which are able to solve for complexity and support the digitalisation of a merchant's payments stacks, should fare better than more legacy competitors.

Nonetheless, we expect the expected mild recession combined with elevated inflation to have a negative impact on consumer wallets: While the above forecasts clearly suggest pressure on consumer wallets over the coming months and into 2023, we view the consumer portion of GDP as relatively resilient. Highlighting this point, we note that prior to COVID, US nominal PCE growth only turned negative once in the last 60 years (during the GFC). Despite a slowdown and less disposable income, consumers still have to spend money on certain staples. With this in mind, we think it helpful to look at the exposure of our payments coverage to discretionary vs. non-discretionary or staples spending. In a downturn, we would expect to see a much more significant hit to spending on discretionary goods. As shown in Exhibit 22, in 2009 discretionary spending was hardest hit, with restaurants, hotels and household DIY standouts.

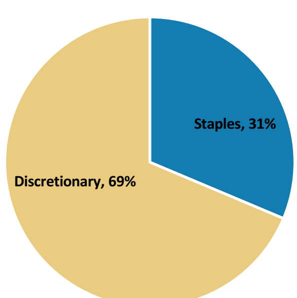
Exhibit 22: European household expenditure indexed to 2008 by vertical



Source: Eurostat, Morgan Stanley Research

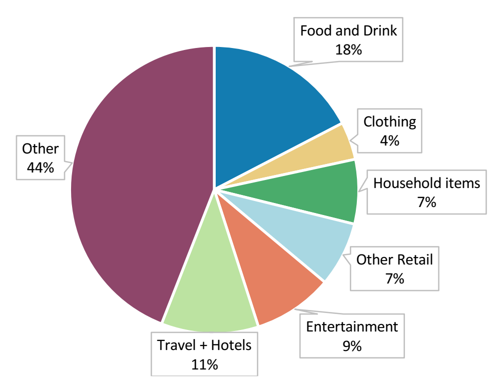
Aggregate card volume appears to be heavily linked to discretionary spending: Whilst we don't have data for every country, the UK Card Association has, in the past, provided a split of UK card payments by vertical. We have analysed each vertical, dividing card spend into discretionary/staples. This finds a strong bias towards discretionary spending at c.69% of total card expenditure vs. 31% for staples. For example, in 2017 (the latest period when data were published, but we believe still broadly applicable).

Exhibit 23: Discretionary vs. staples expenditure



Source: UK Card Association, Morgan Stanley Research

Exhibit 24: Card spend by category



Source: UK Card Association, Morgan Stanley Research

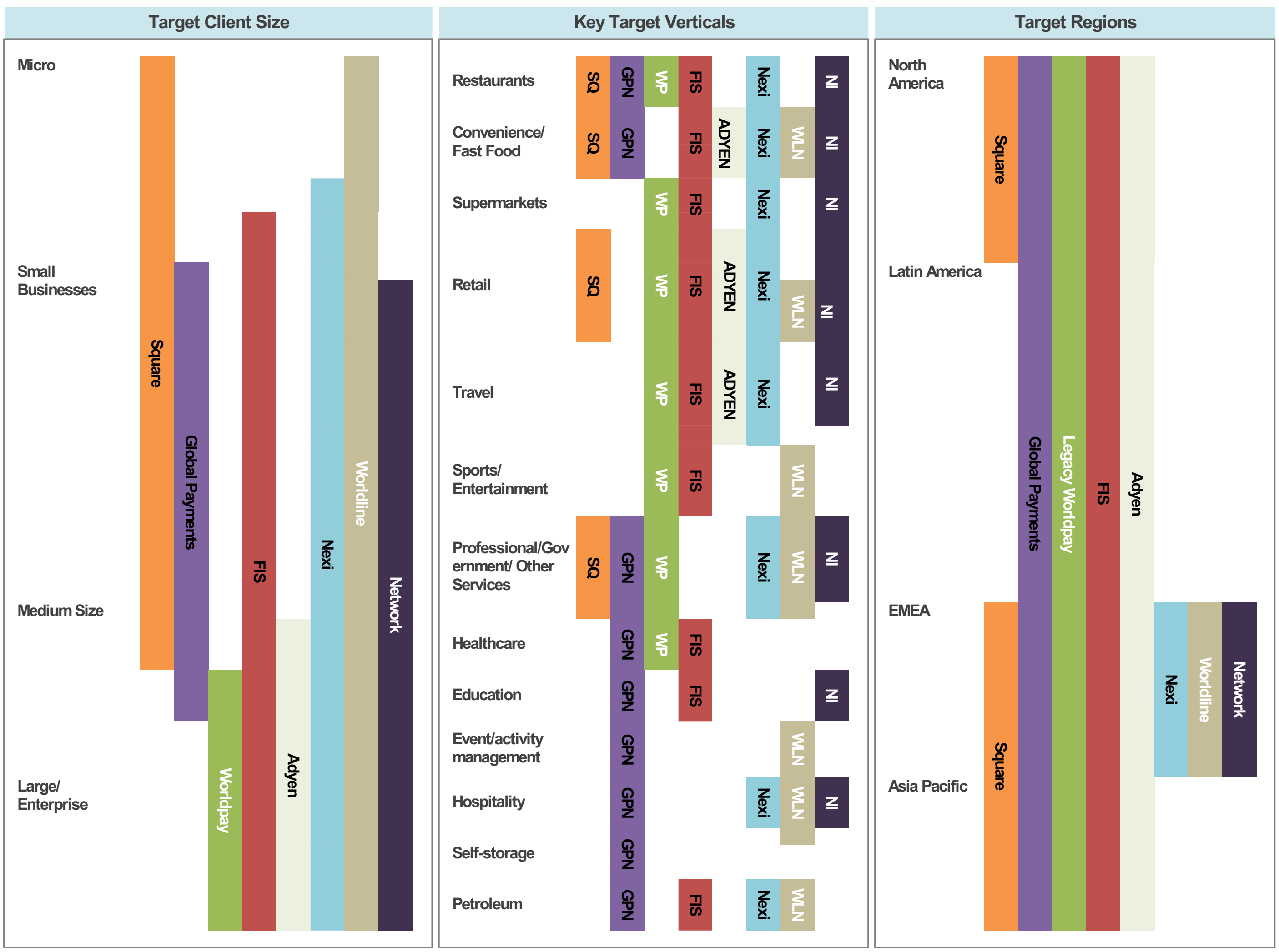
Where are players exposed? Taking the above considerations into account, we outline our view of exposure to online, transactional revenues and discretionary vs. non-discretionary spending. We view players with a higher exposure to pure take-rate business, enterprise customers and more staples-focused markets as most defensive, whereas a higher exposure to SMEs and discretionary spending would be a negative in this environment. In the following sections, we analyse each company under coverage in detail, acknowledging a varying degree of exposure across these factors. Combined, this results in EBITDA cuts of c. 1-2% in FY22 and 1-5% in FY23.

Exhibit 25: Payments coverage exposure to key segments – 2022e

% revenues	Merchant Acquring	Issuing	Exposure to online	Exposure to Discretionary*	Non-transactional revenue
Adyen	**c. 97%** o/w ~90% acquring o/w ~10% gateway	**<1%**	87%	c. 80-90%	c. 3%
Nexi	**c. 50%** o/w ~80% acquring o/w ~20% gateway/acceptance	**c. 32%** **o/w 80% issuer / 20% acquirer processing** o/w ~50% revenue per card o/w 50% fee per transaction	10%	c. 50-60%	c. 40%
Network International	**c. 50%** o/w ~90% direct acquring o/w ~10% acquirer processing	**c. 50%** o/w ~1/3 revenue per card o/w 1/3 fee per transaction o/w 1/3 value added services	c. 12%	c. 50%	c. 45%
Worldline	**c. 70%** o/w ~50% acquring o/w ~30% gateway o/w ~20% payment solutions	**c. 22%** o/w ~50% revenue per card o/w 50% fee per transaction	c. 22%	c. 50%	c. 50%

Source: Company data, Morgan Stanley Research estimates.
* Within Merchant Acquiring exposure

Exhibit 26: Payments exposure by merchant size/vertical/region



Source: Morgan Stanley Research

Adyen

What has the company said? On its earnings call on August 18th, and subsequent roadshow, Adyen noted that it had not seen any notable slowdown in activity due to the weaker macro environment or the deceleration in underlying e-Commerce growth, pointing to the 60% y/y volume growth delivered in 1H22. Adyen continues to see three main growth drivers: 1) natural growth alongside merchants, 2) increasing wallet share within existing merchants, and 3) growth from winning new merchants. Typically, 1) and 2) combined drive >80% of Adyen's growth. Importantly, from a wallet share perspective, management believes the company is a long way from reaching any sort of ceiling with existing customers, and we are still very early in the broader digitalisation of payments. Regarding inflation, the majority of Adyen net revenue is derived from a take-rate based on volume, ensuring a hedge against higher inflation.

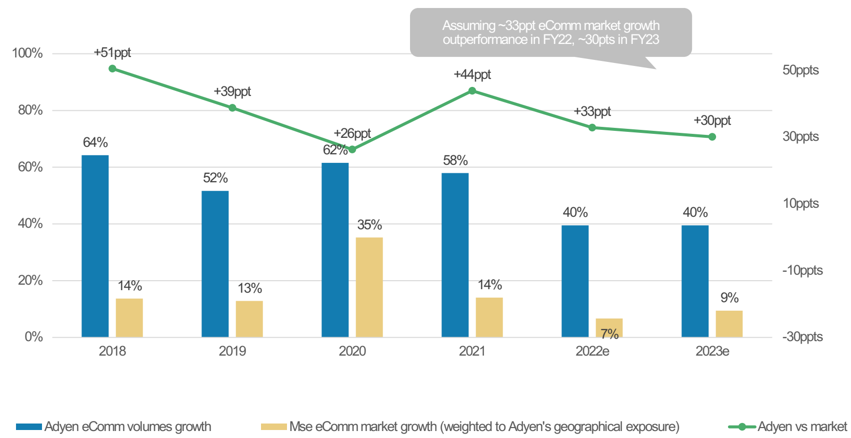
Exhibit 27: Adyen's disclosed merchant wins over time

Source: Company data, Morgan Stanley Research

How to think about the exposure?

Adyen is largely exposed to online volumes (c. 87% of net revenues online as of FY21). Within this, we estimate the majority of volumes are discretionary (c. 80-90%). We also estimate that >95% of Adyen's net revenues are transactional in nature, largely derived from a take-rate applied to volumes, as well as a smaller fixed fee per transaction, which is mainly linked to the company's gateway-only airline exposure. We have previously outlined Adyen's ability to significantly outperform broader e-Commerce growth. Our analysis of previous years has suggested outperformance in the range of 26-51ppts. Interestingly, the pace of outperformance is typically larger in a more normalised growth environment for e-Commerce, whereas in 2020 at the height of the COVID pandemic, the scale of outperformance was lower. We believe a large factor behind Adyen's ability to outperform the wider e-Commerce market so significantly is due to >80% of its growth coming from underlying merchant volume growth and wallet share gains. Adyen is weighted towards the largest enterprise merchants, meaning it will typically start out with a small percentage of a new merchant's volumes, perhaps low-single-digit, before growing this percentage over time. We think this is an important point, and means Adyen is somewhat insulated from any slowdown in e-Commerce market growth, or indeed a weakening of consumer spending given concerns around the impact of higher inflation / weakening consumer sentiment.

Exhibit 28: Adyen's historical e-Commerce volumes vs e-Commerce market growth (weighted to the company's geographical revenue exposure) and updated for latest MS FY22-23 e-Commerce growth assumptions



Source: Company data, Morgan Stanley Research estimates (e)

Exhibit 29: Adyen building blocks to FY22 – forecasts unchanged

	Adyen volumes estimates (€bn)			Take-rate		Revenues estimates (€m)		
	1H21	1H22e y/y growth	1H22e	1H21e	1H22e	1H21e	1H22e	1H22e y/y growth
eComm	150.1	40%	209.4	0.24%	0.21%	361.8	446.1	23%
Gateway - travel	12.6	139%	30.1	0.05%	0.05%	6.3	15.1	139%
Full stack - travel	8.7	98%	17.3	0.24%	0.21%	21.0	36.8	75%
PoS	22.8	97%	44.9	0.24%	0.21%	54.9	95.7	74%
eBay	21.7	60%	34.7	0.00%	0.05%	0.9	15.6	nm
Total ex-FX	**216.0**	**55.8%**	**336.5**					**32.3%**
FX tailwind		4%	9.5					4%
Total inc FX impact		**60.2%**	**346.0**	**0.206%**	**0.176%**	**445.0**	**609.2**	**36.7%**

	Adyen volumes estimates (€bn)			Take-rate		Revenues estimates (€m)		
	2H21	2H22e y/y growth	2H22e	2H21e	2H22e	2H21e	2H22e	2H22e y/y growth
eComm	198.8	40%	279.1	0.22%	0.20%	436.3	555.4	27%
Gateway - travel	20.3	69%	34.4	0.05%	0.05%	10.2	17.2	69%
Full stack - travel	8.3	44%	12.0	0.22%	0.20%	18.3	23.8	30%
PoS	41.8	87%	78.2	0.22%	0.20%	91.7	155.6	70%
eBay	30.6	9%	33.3	0.00%	0.08%	0.0	25.0	nm
Total	**299.9**	**45.7%**	**436.9**					**35.8%**
FX tailwind		4%	11.6					4%
Total inc FX impact		**49.6%**	**448.5**	**0.186%**	**0.173%**	**556.5**	**777.0**	**39.7%**

	Adyen volumes estimates (€bn)			Take-rate		Revenues estimates (€m)		
	2021	2022e y/y growth	2022e	2021	2022e	2021	2022e	2022e y/y growth
eComm	348.9	40%	488.6	0.23%	0.21%	798.1	1001.5	25%
Gateway - travel	33.0	96%	64.5	0.05%	0.05%	16.5	32.2	96%
Full stack - travel	17.1	71%	29.2	0.23%	0.21%	39.3	60.6	54%
PoS	64.6	91%	123.1	0.23%	0.20%	146.7	251.2	71%
eBay	52.3	30%	68.0	0.00%	0.06%	0.9	40.6	nm
Total	**515.9**	**50%**	**773.4**				**1386.2**	**34.2%**
FX tailwind		4%						4%
Total inc FX impact		**54.0%**	**794.6**	**0.194%**	**0.174%**	**1001.5**	**1386.2**	**38.4%**

Source: Company data, Morgan Stanley Research estimates (e); nm = not meaningful, y/y = year on year

Modelling the impact on the top line:

In our recent note , we outline the key assumptions supporting Adyen's growth across volumes, take-rates and net revenue. For FY22, we have already updated forecasts to account for the weaker growth in e-Commerce. As part of the analysis, we reduced our e-Commerce growth forecast by c. 6-7% to be conservative, greater than the 5pt slowdown implied by our latest global e-Commerce forecasts. We look for 40% e-Commerce volume growth in FY22, implying 33pts of outperformance vs. underlying e-Commerce market for FY22, down from 44pts in FY21. As a result, we leave our FY22 volume forecast unchanged, noting that our 2H22 volume forecasts implies a c. 10pt slowdown sequentially vs. 1H22. For FY23, we now expect volumes to slow to c. 39% ex-FX, a 15 point slowdown vs. our forecast for FY22, but c. 3% ahead of street. To get to our forecast, we update our previous analysis (laid out here), applying the same framework to FY23 forecasts. The main delta is around lower travel volumes (both full-stack and gateway/airlines), while our POS forecasts also come down slightly. More broadly, we believe a 15pt volume slowdown captures the impact of a weaker macro, especially around new merchant wins.

Exhibit 30: Adyen FY23 forecasts

	Adyen volumes estimates (€bn)			Take-rate		Revenues estimates (€m)		
	1H22	1H23e y/y growth	1H23e	1H22e	1H23e	1H22e	1H23e	1H23e y/y growth
eComm	215.4	40%	302.4	0.21%	0.19%	446.1	565.8	27%
Gateway - travel	31.0	31%	40.7	0.05%	0.05%	15.1	20.3	35%
Full stack - travel	17.7	12%	19.9	0.21%	0.19%	36.8	37.3	2%
PoS	46.2	75%	80.8	0.21%	0.19%	95.7	151.2	58%
eBay	35.7	-5%	34.0	0.05%	0.07%	15.6	24.1	nm
Total ex-FX	**346.0**	**38.1%**	**477.9**					**32.9%**
FX tailwind		1%						1%
Total inc FX impact		**39.2%**	**481.6**	**0.176%**	**0.166%**	**609.2**	**798.9**	**34.0%**

	Adyen volumes estimates (€bn)			Take-rate		Revenues estimates (€m)		
	2H22	2H23e y/y growth	2H23e	2H22e	2H23e	2H22e	2H23e	2H23e y/y growth
eComm	286.5	39%	397.8	0.20%	0.18%	555.4	702.2	26%
Gateway - travel	35.3	20%	42.3	0.05%	0.05%	17.2	21.2	23%
Full stack - travel	12.3	18%	14.5	0.20%	0.18%	23.8	25.6	8%
PoS	80.2	70%	136.4	0.20%	0.18%	155.6	240.8	55%
eBay	34.2	-3%	33.3	0.08%	0.07%	25.0	23.6	nm
Total	**448.5**	**39.2%**	**624.4**					**33.0%**
FX tailwind		0%						0%
Total inc FX impact		**39.2%**	**624.4**	**0.173%**	**0.162%**	**777.0**	**1013.4**	**33.0%**

	Adyen volumes estimates (€bn)			Take-rate		Revenues estimates (€m)		
	2022	2023e y/y growth	2023e	2022	2023e	2022	2023e	2023e y/y growth
eComm	501.9	40%	700.3	0.20%	0.18%	1001.5	1268.0	27%
Gateway - travel	66.3	25%	83.0	0.05%	0.05%	32.2	41.5	29%
Full stack - travel	30.0	15%	34.5	0.20%	0.18%	60.6	63.0	4%
PoS	126.4	72%	217.2	0.20%	0.18%	251.2	392.0	56%
eBay	69.9	-4%	67.3	0.06%	0.07%	40.6	47.8	nm
Total	**794.5**	**39%**	**1102.3**				**1812.3**	**33.0%**
FX tailwind		0%						0%
Total inc FX impact		**39.2%**	**1106.0**	**0.174%**	**0.164%**	**1386.2**	**1812.3**	**33.4%**

Source: Company data, Morgan Stanley Research estimates; nm = not meaningful y/y = year on year

Turning to take-rates, we updated our assumptions for 2H22 following the release of 1H22 results and make no changes to FY22 in this note. We forecast a 2H22 take-rate of 17.3bps, down 1.3bps y/y or 0.3bps vs. 1H22. We expect a lower impact from the rebound in travel/higher ATV on a sequential basis. Additionally, as our forecasts imply a 10pt sequential slowdown on volume growth to c. 50%, there should also be a slightly lower impact from share gains/tiered pricing.

For FY23, we apply our new volume forecast to our updated net revenue assumption, which implies a take-rate of 16.4bps for FY23, down c. 100bps y/y. The c. 3bps y/y decline in Adyen's take-rate in 1H22 was a function of: 1) growth with large merchants (tiered pricing model – higher volume results in lower price paid/take-rate); 2) rebound in lower take-rate gateway-only travel volumes; and 3) higher average transaction value (partly a result of the rebound in travel volumes), with part of Adyen's take-rate made up of a fixed gateway fee. During the roadshow, Adyen management suggested a broadly equal impact from all three factors. With this in mind, we expect factors 2) and 3) to be less impactful on a y/y basis in FY23, which suggests a 1bps decline is appropriate for FY23, especially since our volume forecast implies a 15pt slowdown vs. FY22, which should see a lower impact from higher volumes/tiered pricing.

Our FY22 volume/net revenue and take-rate forecasts are unchanged, since we recently updated our assumptions following the 1H22 results. For FY23, we adjust our net revenue forecast lower by c. 2%, placing us c. 1% below street. Considering our above street volume forecast, we continue to think the street is not modelling take-rates correctly. Turning to EBITDA, we again leave our FY22 forecast unchanged, as we look for a similar 3pt decline in margins y/y in 2H22. We note that, adjusting for the uptick in travel-related expenses/the UN SDG donation in 1H22 vs. 1H21, margins would actually have been up >100bps y/y, despite the higher pace of investment/new hires. As a result, we continue to see significant operating leverage within Adyen's business. We don't think there has been any structural change here. For FY23, we look for 150bps margin expansion to 61.5%, which puts us c. 1% below consensus.

We lower our price target from €2,625 to €2,540, implying 70% potential upside from current levels. Adyen remains our Top Pick in the payments space – we stay Overweight: Our price target change is driven by updated short- and mid-term forecasts. We continue to view Adyen as a structural winner within the payments space. We believe the strong volume growth (+60% y/y) in 1H22 demonstrates Adyen's ability to continue to take significant share. Below the line, we understand nervousness around higher levels of investment; however, we expect operating leverage/margin expansion to return from 2023 (once we normalise around travel/UN SDG costs) and don't see a structural change here. With the shares trading on c. 42x CY24e P/E or c. 2.6% FCFF yield, valuation is elevated; however, adjusting for growth (CY23e PEG 1.65x), we think it looks more reasonable for a structural winner that we believe can compound earnings at >30% out to CY25 – hence our Overweight rating.

Exhibit 31: Adyen: overview of our FY22 and FY23 forecast changes (€m)

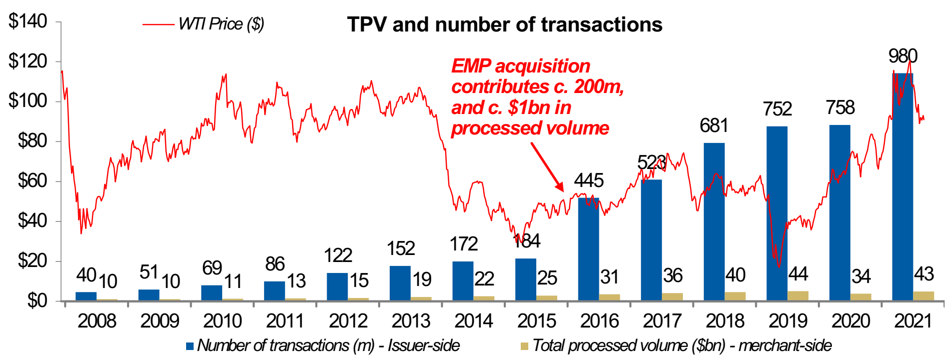
Summary				MS new vs.					MS new vs.	
December Y/E	**FY22 old**	**FY22 new**	**Cons.**	**MS old**	**Cons.**	**FY23 old**	**FY23 new**	**Cons.**	**MS old**	**Cons.**
Processed Volumes	**794**	**794**	**766**	0%	4%	**na**	**1,106**	**1,076**		3%
yoy growth	54.0%	54.0%				na	39.2%			
yoy org. growth	49.1%	49.1%				na	38.7%			
Total Net Revenue	**1,386**	**1,386**	**1,361**	0%	2%	**1,849**	**1,812**	**1,835**	-2%	-1%
yoy growth	38.4%	38.4%				33.4%	30.7%			
yoy org. growth	34.2%	34.2%				33.0%	30.3%			
Stated EBITDA	**831**	**831**	**819**	0%	1%	**1,138**	**1,115**	**1,131**	-2%	-1%
% margin	60.0%	60.0%				61.5%	61.5%			
Adj. Net Income	**629.249**	**629**		0%		**835**	**818**			
Adj. EPS	20.3	20.3	19.9	0%	2%	26.7	26.1	26.8		-3%

Source: Visible Alpha consensus, Morgan Stanley Research estimates; na = not applicable

Network International

What has the company said so far? Network International reported 1H21 results in August, delivering c. $205m of revenues in 1H, up 31.1% y/y, or c. 21% ex-DPO/organic, in line with MS/street expectations. By region, both the Middle East (+22%) and Africa ex-DPO (+21%) rebounded at a similar pace. Below the line, adj. EBITDA stood at c. $76.2m (c. 37.2% margin), c. 2% ahead of MS/street, with margins up 190bps y/y, reflecting strong top-line/cost control. Network International also reiterated its FY22 guidance, which is for group revenue growth of 27-29% and modest EBITDA margin expansion y/y. The company also announced a $100m share buyback programme (two $50m tranches). As part of the release, it flagged continued support from the acceleration of digital payments, as well as share gains in the UAE. Regarding the macro backdrop, the company noted it has not seen any slowdown across any of its regions to date.

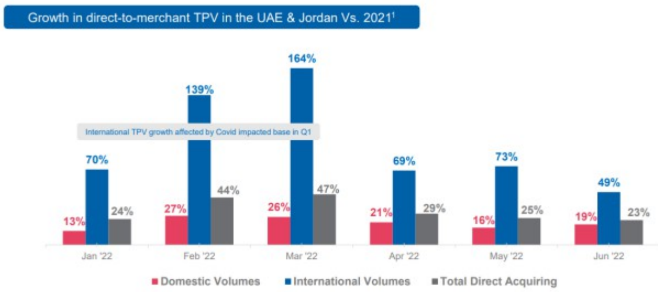
Exhibit 32: Network International TPV/number of transactions vs. WTI price



Source: Thomson Reuters, company data, Morgan Stanley Research

How to think about exposure? We view Network International as an idiosyncratic case compared to other names under coverage, given it is heavily exposed to the UAE, which comprises c. 65% of revenue, with the remaining 35% sourced from 40 countries across Africa. Given the reliance on the Middle East (majority UAE), investors have traditionally focused on oil price trends as a key driver of growth in the region. While Exhibit 32 shows that the company has been able to grow total processed volume and the number of transactions independently of the oil price, we nonetheless expect the current elevated oil price to provide some support to economic activity in the region. We also expect continued support from the rebound in tourist volumes following the easing of COVID restrictions. Most recent IMF forecasts suggest real GDP growth of c. 4% over 2022-25, while inflation is expected to remain between 2% and 4%. Turning to Africa, we see the company as somewhat diversified given its exposure to 40 countries across the continent, with strong cash-to-card tailwinds considering the very low starting point for digital payments.

Exhibit 33: Network International volume trends as of 1H22



Source: Network International

Exhibit 34: Network International's primary regions are under-penetrated – suggesting cash-to-card tailwinds should provide significant support

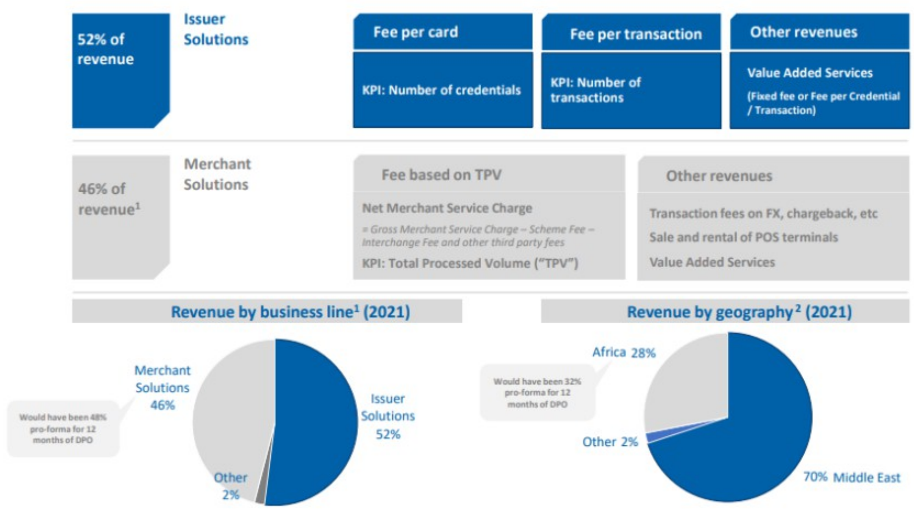
	Large consumer spending pool (PCE USD)[1]	Significant headroom (Digital as % of Tx vol)[2]	Fast growing (Forecast digital payment growth)[3]
Saudi Arabia	500m	18%	12-13%
Egypt	340m	25%	29-30%
South Africa	250m	39%	8-9%
UAE	230m	23%	8-9%
Kenya	100m	12%	11-12%[4]
Jordan	45m	22%	16-17%

Source: Network International

Modelling the impact on the top line:

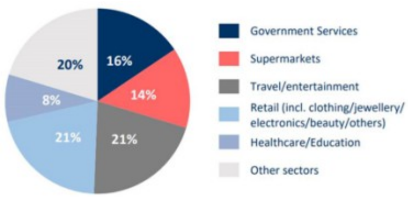
Although Network International reports by geography, it operates two business segments, Issuer Solutions and Merchant Solutions, with a broadly even split between the two (although Merchant Solutions is faster growing). We believe Issuer Solutions will be relatively shielded from any weakness linked to an economic downturn, as its revenue model is a mixture of cards hosted, fee per transaction (not linked to value) and value-added services. We also expect Saudi Arabia to contribute from FY23, with the company adding a further 2 customers in 1H22 for issuer outsourcing, bringing revenue visibility on the $50m mid-term target to 20% (implying a $10m contribution). We make limited changes to our implied forecasts for Issuer Solutions as a result.

Exhibit 35: Network International revenue model



Source: Network International. 1. POS – Point of Sale device, used by merchants to 'take payments'. 2. Represents H1 2022 data

Exhibit 36: Network International volume split for directly acquired TPV



Source: Network International

Merchant Solutions is primarily a direct acquiring business in the UAE and Jordan: Prior to the DPO acquisition, Merchant Solutions had two activities: direct acquiring (in UAE and Jordan only), and an acquiring processing business, which is in both the Middle East and Africa. The DPO deal (closed in 2H21) brought direct-to-merchant payment services across a further 21 African markets, enabling more than 60,000 SMEs and global enterprises to accept online payments, increasing Network International's exposure to online transactions (now 25-30% of Merchant Solutions volume). Considering the low penetration of digital payments across the MEA region (c. 19%), we expect the Merchant Solutions division to be broadly supported by continued cash-to-card trends. Nonetheless, to account for the weaker macro outlook and to be conservative, we lower our Middle East and Africa revenue assumptions by 1% and 2% respectively for FY23, reflecting the potential slowdown in volumes from broader economic shocks. We leave our FY22 forecasts unchanged.

EBITDA margin forecasts broadly unchanged: Below the line, we leave our FY22 adj. EBITDA forecast unchanged. For FY23, our lowered revenue forecast broadly flows through to EBITDA, resulting in a 2% cut and placing us 1% below consensus. Our EPS forecasts for FY22/23 are 11% and 5% ahead of street, respectively, as they include the impact of the announced buyback, something we expect consensus has not fully factored in. Combined, we make no changes to our FY22 forecasts, where we expect Network International to deliver c. 20% organic growth (27% ex-FX), the bottom end of the company's 27-29% guidance range. For FY23, we now look for organic growth of c. 16%, below the mid-term guidance for >20% growth. Our CY23 adj. EBITDA/EPS forecast falls by c. 2%.

We increase our price target from 440p to 460p – largely a function of a stronger USD – implying c. 57% potential upside from current levels. We stay Overweight: We update our mid-term forecasts and increase our WACC assumption by 50bps to 10% to account for rising rates/additional EM risk in Africa through the DPO acquisition. We continue to believe Network International will be somewhat insulated from a wider macro slowdown, thanks to tailwinds from cash-to-card, elevated oil prices and rebounding tourism. Considering the shares are trading on just 15x CY23e P/E or 8% FCFF yield, we don't believe investors/consensus are pricing in >20% growth; as a result, we think delivery of mid-teens growth with margin expansion should drive a re-rating. Delivery on the >20% growth target in CY23 would support further upside – hence our Overweight rating.

Exhibit 37: Network International: overview of our FY22 and FY23 forecast changes ($m)

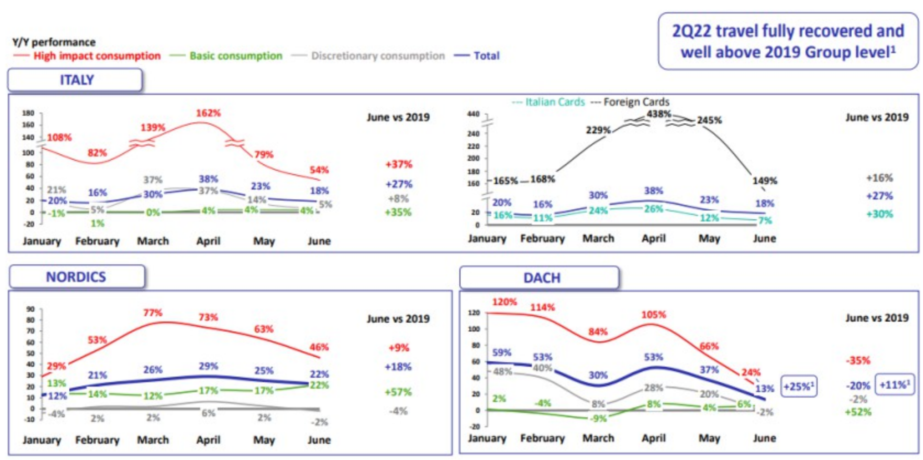
Summary				MS new vs.					MS new vs.	
December Y/E	FY22 old	FY22e new	Cons.	MS old	Cons.	FY23 old	FY23e new	Cons.	MS old	Cons.
Middle East	**290**	**290**		0%		**324**	**321**		-1%	
yoy growth	17.1%	17.1%				11.5%	10.5%			
yoy org. growth	17.1%	17.1%				11.5%	10.5%			
Africa	**150**	**150**		0%		**194**	**191**		-2%	
yoy growth	49.1%	49.1%				30.0%	28.1%			
yoy org. growth	26.1%	26.1%				31.0%	29.0%			
Other	**04**	**04**		0%		**04**	**04**		0%	
yoy growth	-1.4%	-1.4%				0.0%	0.0%			
Group Revenues	**444**	**444**	**442**	0%	0%	**522**	**516**	**520**	-1%	-1%
yoy growth	26.0%	26.0%				17.6%	16.3%			
yoy org. growth	19.8%	19.8%				17.9%	16.6%			
Adj. EBITDA	**181**	**181**	**178**	0%	1%	**223**	**219**	**221**	-2%	-1%
% margin	40.7%	40.7%				42.7%	42.4%			
Adj. Net Income	**94**	**94**		0%		**123**	**120**		-2%	
Adj. EPS	16.9	16.9	15.3	0%	11%	23.5	22.9	21.8	-2%	5%

Source: Visible Alpha consensus, Morgan Stanley Research estimates

Nexi

What has the company said so far? Nexi delivered a solid set of 2Q22 results, with revenues c. 1% ahead of MS/street. Overall revenue growth came in at +10.2% (vs. MS at 9.0% and street at c. 9%), slightly above the 7-9% guidance range for FY22. Growth was driven by mid-teens growth in Merchant Services & Solutions (+15.8% vs. MS/street at 14-15%). Below the line, adj. EBITDA of €395m was c. 3% ahead of consensus, a margin of 48.9%, up c. 4pp y/y, benefitting from synergies around the Nets/SIA deals. As part of the release, Nexi confirmed its FY22 ambition. On the call, management confirmed that Nexi had not seen any material change in terms of the economic environment/consumer spending, including within its SMB customer base (c. 60% of Nexi's acquiring business). Regarding inflation, management stated that its expects a positive benefit from inflation (40-50% of revenues directly exposed), which may offset impacts on real consumption.

Exhibit 38: Nexi volume trends



Source: Nexi (1) Net of discontinued clients due to optimised risk profile

How to think about exposure? Nexi operates through three divisions: 1) Merchant Services (c. 52% of net revenue), where the bulk of revenues are in commercial acquiring and so is transactional revenue, with a broadly even split between discretionary and non-discretionary spending; 2) Cards and Digital Payments (c. 32% of net revenue), offering a wide range of issuing services, namely around the supply, issue and management of cards (credit and prepaid) for consumers and businesses; and 3) Digital Banking & Corporate Solutions (c. 16% of net revenue), serving large financial institutions with services such ATM Management, clearing services (ACH for domestic/international – platform managed by equensWorldline) and digital corporate banking Services, KYC solutions and capital markets services.

Modelling the impact on the top line:

We cut our FY23 Merchant Services org. growth forecast by 4pts: Nexi's Merchant Services division is primarily exposed to traditional merchant acquiring (take-rate applied to volumes), as well as payment acceptance services (gateway, price per transaction) and the provision of terminals. Nexi has a c. 20% exposure to online within Merchant

Services. Additionally, c. 60% of the acquiring business is SMB focused. Acquiring activities are provided across Italy (market-share leader), the Nordics and Germany. While we would typically expect SMEs to fare worse in the face of an economic downturn, we note Italy in particular should provide an offset given strong cash-to-card dynamics, while higher inflation also should provide support to volumes. Nonetheless, similar to Worldline, in order to reflect the weakening backdrop, we make cuts to our 2H22 and FY23 growth forecasts for Merchant Services. We cut our 2H22 Merchant Services org. growth forecast by c. 1pt and now expect organic growth of 8%. Turning to FY23, we reduce our organic growth forecast again by c. 4pts and now look for 6% organic growth for FY23, placing us c. 5% below street.

We expect a more limited impact within the other two divisions: For Cards and Digital Payments, the majority of exposure is to issuer processing, with revenues driven by a combination of the number of transactions (which similar to Worldline we estimate at c. 50%), as well as the number of cards managed (we estimate c. 50%), which we don't expect to see a significant impact. We leave our FY22 forecasts broadly unchanged and cut our FY23 forecast by c. 1pt, placing us 3% below consensus for FY23 . For Digital Banking Solutions, we don't expect a large impact around ATM management and clearing services. However, for digital corporate banking and capital market services, the weaker macro backdrop and higher level of uncertainty may weigh on decision making. As a result, we cut our FY23 organic growth forecast by 1pt and now expect 2% growth for the division in FY23.

Synergies provide support at the EBITDA level: For FY22, Nexi is guiding to ~€100m if cash synergies in 2022 (with a €125m run-rate by the end of the year), of which €60m will be at the EBITDA level and €40m recurring Capex synergies. We expect these synergies to be largely independent of any economic slowdown. However, given our expectation for weaker top-line growth, we make modest adjustments to our FY22/FY23 margin forecasts, meaning our adj. EBITDA forecasts for each year fall by c. 1-4%. For FY22 we expect 15% EBITDA growth, slowing to 8% growth in FY23, with margins up c. 150bps y/y in FY23. Combined, we expect Nexi to deliver organic growth of c. 7.4% in FY22, vs. our previous forecast of 8%. For FY23, we now expect organic growth of 4.3%, down from 6.5% previously. Our FY22-24 EPS falls by c. 5-9% (impacted by higher share count). We note Nexi will hold a CMD on September 27th, where we expect the company to provide updated mid-term guidance around revenue growth and EBITDA.

We lower our price target from €13 to €10, implying 16% potential upside from current levels. We remain Equal-weight: We update our mid-term forecasts and decrease our terminal growth assumption to 1.5% in the base case, in line with Worldline. We also increase our WACC by 0.5% to 8.5%, reflecting the recent widening of BTP spreads/higher rate environment, noting Nexi has c. €5bn of net debt, with leverage of 3x net debt to EBITDA. While we see Nexi as a relatively defensive play, considering strong cash-to-card dynamics, we believe the integration of large-scale M&A poses a risk, both from a pure execution point-of-view, and from a broader competitiveness angle, considering rising complexity across the payments ecosystem. We see Worldline as a cleaner equity story, following the sale of TSS and the integration of Ingenico broadly complete. We also like the higher exposure to Merchant Services (c. 70% of revenue at Worldline vs. c. 50% at Nexi). Nexi shares are trading at 14.4x CY23e P/E or c. 6% FCF yield, and we stay Equal-weight.

Exhibit 39: Nexi: overview of our FY22 and FY23 forecast changes (€m)

Summary				MS new vs.					MS new vs.	
December Y/E	FY22 old	FY22e new	Cons.	MS old	Cons.	FY23 old	FY23e new	Cons.	MS old	Cons.
Merchant Services & Solutions	**1,753**	**1,736**	**1,761**	-1%	-1%	**1,920**	**1,845**	**1,946**	-4%	-5%
yoy growth	12.0%	10.9%				9.5%	6.3%			
yoy org. growth	12.0%	10.8%				9.0%	5.8%			
Card & Digital Payments	**1,022**	**1,022**	**1,031**	0%	-1%	**1,063**	**1,053**	**1,084**	-1%	-3%
yoy growth	4.7%	4.7%				4.0%	3.0%			
yoy org. growth	4.7%	4.7%				4.0%	3.0%			
Digital Banking Solutions	**506**	**506**	**504**	0%	0%	**521**	**513**	**515**	-1%	0%
yoy growth	4.7%	4.7%				3.0%	1.5%			
yoy org. growth	4.7%	4.7%				3.0%	1.5%			
Group Revenues	**3,281**	**3,264**	**3,296**	-1%	-1%	**3,504**	**3,412**	**3,544**	-3%	-4%
yoy growth	7.9%	7.4%				6.8%	4.5%			
yoy org. growth	7.9%	7.4%				6.5%	4.3%			
Adj. EBITDA (post synergies)	**1,649**	**1,635**	**1,626**	-1%	1%	**1,827**	**1,760**	**1,814**	-4%	-3%
% margin	50.2%	50.1%				52.1%	51.6%			
Adj. Net Income	**728**	**720**		-1%		**871**	**832**		-4%	
Adj. EPS	0.55	0.52		-5%		0.65	0.60		-9%	

Source: Visible Alpha consensus, Morgan Stanley Research estimates

Worldline

What has the company said so far? Worldline reported 2Q revenues c. 5% ahead of MS/street, supported by strong growth in Merchant Services (+18% organic) – for more detail, see here. Within this, volumes were also supportive, reaching €147bn in 1H22, up 30% y/y (in-store +30%/online +31%) and 28% vs. 1H19. On the call, management confirmed that Worldline had not seen any impact from the weaker macro/higher inflation on consumer spending/volumes, reiterating its FY22 guidance which is for 8-10% organic growth, OMDA margin expansion of 100-150bps and FCF conversion of 45% vs. OMDA.

Exhibit 40: Worldline volume trends

Source: Worldline. * Rolling 3-week average transaction volumes in euro millions on acquiring activities

How to think about exposure? Worldline operates through three divisions: 1) Merchant Services (c. 70% of net revenue), where the bulk of revenues are in commercial acquiring and so is transactional revenue, with a c. 50/50 split between discretionary and non-discretionary spending; 2) Financial Services, which contains issuer processing (c.40%), acquirer processing (c.30%), account to account payments (c.20%) and online banking services (c.10%); and 3) Mobility and e-Transactional Services (METS), where we assume an equal split between e-Government (now called Trusted Digitisation), e-ticketing (largely linked to domestic travel projects) and consumer and mobility.

Modelling the impact on the top line:

We cut our FY23 Merchant Services organic growth forecast by 4pts: Worldline's Merchant Services division has c. 50% exposure to traditional merchant acquiring (take-rate applied to volumes), 30% payment acceptance (gateway, price per transaction) and c. 20% from solutions and services (terminals, value-added applications, app-based services). Worldline has a c. 30% exposure to online within Merchant Services. Additionally, c. 60% of the acquiring business is SME focused and a further 15% is largely offline-only retailers. For 2H22, Worldline faces a much tougher comp (2H21 +12.2% organic vs. 1H21 +3.8%). In light of the tougher macro backdrop and pressure on consumer wallets from rising inflation, we cut our 2H22 Merchant Services organic growth forecast by c. 1pt and now expect 7.5%. Turning to FY23, we lower our organic growth forecast by c. 4pt and now look for 7%.

Financial Services has similar elements to Merchant Services, although Issuer Processing provides support: Revenue models within Financial Services differ by business line, with issuer processing having an element of the number of transactions (which we estimate at c. 50%), as well as the number of cards managed (we estimate c. 50%), which we do not believe will be impacted and thus forecast growth in line with previous divisional growth. In addition, software licensing also has a maintenance and support model, which should be more resilient than the transactional-based revenue in acquirer processing, whilst digital banking transactions should also remain resilient. We therefore expect Financial Services to be the most defensive area of growth in the face of a macro slowdown, forecasting divisional growth of c. 4% in FY23 (we leave our FY22 forecast unchanged).

Limited changes to METS forecast considering exposure to travel volumes / maintenance: We split METS into its three business lines: 1) e-Ticketing, which we believe to be largely transaction linked (which we believe is mainly related to domestic public transport use), 2) e-Government, which is broad project work, and 3) e-Consumer and mobility. For FY22 we leave our forecasts unchanged, since we already factor in a c. 3pt slowdown in 2H22 vs. 1H22 (6% organic growth vs. 9.4% delivered in 1H22). Turning to FY23, we expect a limited impact on buckets 1) and 3), but factor in a modest slowdown in project based work in the e-Government segment, which sees our FY23 organic growth forecast fall from 7% to 5.5%.

We adjust our FY23 OMDA forecast lower by c. 5%: Our lower top-line growth forecast for 2H22 results in a 1% cut to our FY22 OMDA estimate. For FY23, we reduce our OMDA forecast by c. 5%, reflecting a weaker top line and lower operating leverage, although we still expect margins to increase by c. 130bps, and sit c. 2% below consensus. Combined, we expect Worldline to deliver organic growth of c. 9.3% in FY22, vs. our previous forecast of 10%. For FY23, we now expect organic growth of 6.6%, below Worldline's mid-term guidance for 9-11% organic growth. We reduce our FY23 OMDA margin from 28.1% to 27.5% (up 160bps YoY) reflecting the weaker top-line dynamics. Our FY22-24 EPS, however, are broadly flat in FY23 due to lower levels of dilution from Worldline's convertibles (as reported at 1H22).

We reduce our price target from €49 to €48, implying 3% potential upside from current levels. We remain Equal-weight: Our price target change is driven by updated short and mid-term forecasts. Worldline is our favoured incumbent payments name, considering a cleaner equity story (sale of TSS/Ingenico integration complete), as well as higher exposure to Merchant Services and better than expected 1H22 growth. However, we note much tougher comps in 2H22 (2H21 +12.2% organic vs. 1H21 +3.8%), which we believe will act as a guide for Worldline's growth on a more normalised basis. Worldline shares are trading at 19x CY23 P/E or c. 5% FCF yield, and we stay Equal-weight.

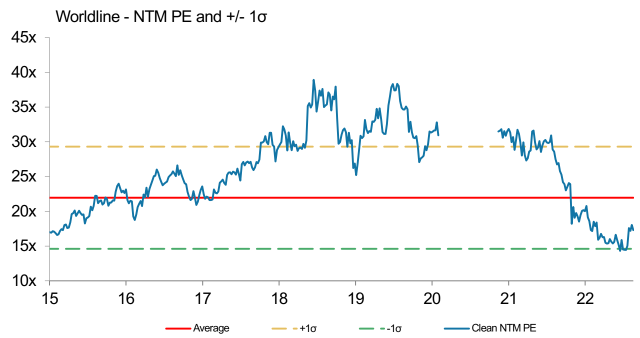
Exhibit 41: Worldline: overview of our FY22 and FY23 forecast changes (€m)

Summary				MS new vs.					MS new vs.	
December Y/E	**FY22 old**	**FY22e new**	**Cons.**	**MS old**	**Cons.**	**FY23 old**	**FY23e new**	**Cons.**	**MS old**	**Cons.**
Merchant Services	**3,019**	**2,989**		-1%		**3,409**	**3,270**		-4%	
yoy growth	25.0%	23.7%				12.9%	9.4%			
yoy org. growth	12.7%	11.6%				10.5%	7.1%			
Financial Services	**970**	**970**		0%		**1,026**	**1,011**		-1%	
yoy growth	4.6%	4.6%				5.8%	4.3%			
yoy org. growth	3.3%	3.3%				5.5%	4.0%			
Mobility & e-Transactional Service	**377**	**377**		0%		**405**	**399**		-1%	
yoy growth	8.8%	8.8%				7.3%	5.8%			
yoy org. growth	7.6%	7.6%				7.0%	5.5%			
Group Net Revenues	**4,366**	**4,336**	**4,355**	-1%	0%	**4,839**	**4,680**	**4,758**	-3%	-2%
yoy growth	18.3%	17.5%				10.8%	7.9%			
yoy org. growth	10.0%	9.3%				8.9%	6.6%			
Group OMDA	**1,132**	**1,123**	**1,134**	-1%	-1%	**1,361**	**1,288**	**1,312**	-5%	-2%
% margin	25.9%	25.9%				28.1%	27.5%			
Adj. Net Income	**577**	**570**		-1%		**737**	**705**		-4%	
Adj. EPS	1.99	2.06	2.08	4%	-1%	2.53	2.54	2.53	0%	0%

Source: Visible Alpha consensus, Morgan Stanley Research estimates

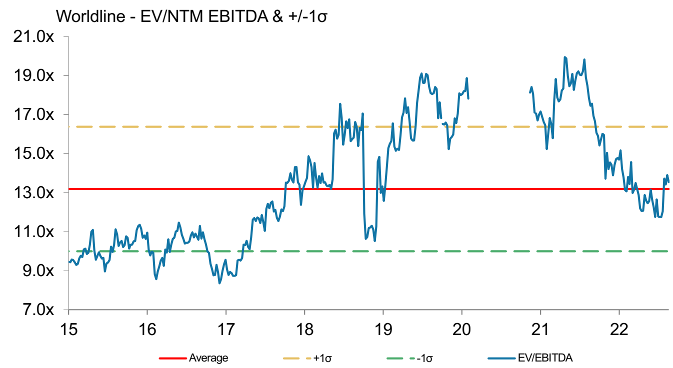
Europe – Payments Long-term Valuation

Exhibit 42: Worldline P/NTM Earnings



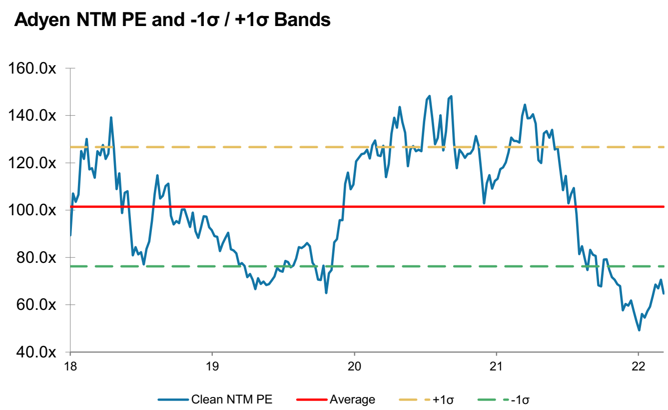
Data discontinuity (Feb-Nov 20) = period when consensus forecasts were ex-Ingenico. Source: Refinitiv, Morgan Stanley Research

Exhibit 43: Worldline EV/NTM EBITDA



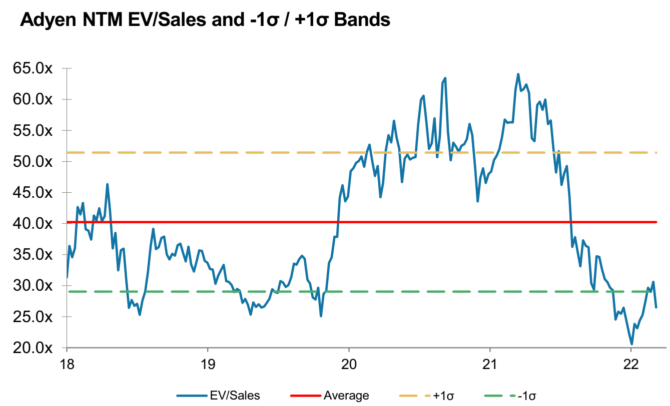
Data discontinuity (Feb-Nov 20) = period when consensus forecasts were ex-Ingenico. Source: Refinitiv, Morgan Stanley Research

Exhibit 44: Adyen P/NTM Earnings



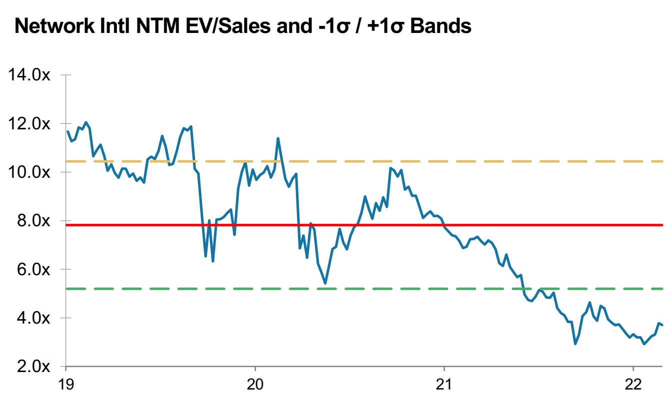
Source: Thomson Reuters TRSL, Morgan Stanley Research

Exhibit 45: Adyen EV/NTM Sales



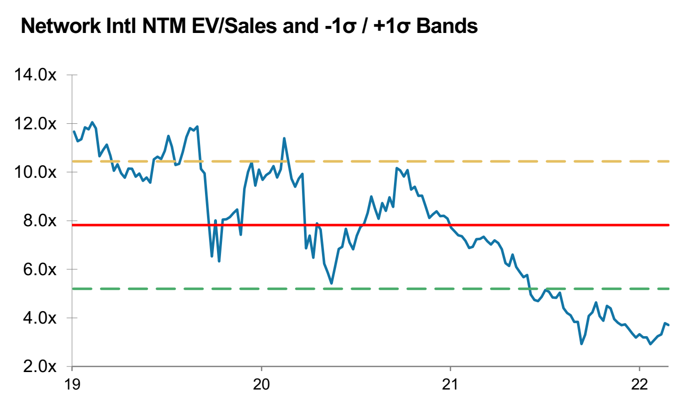
Source: Thomson Reuters TRSL, Morgan Stanley Research

Exhibit 46: Network International P/NTM Earnings



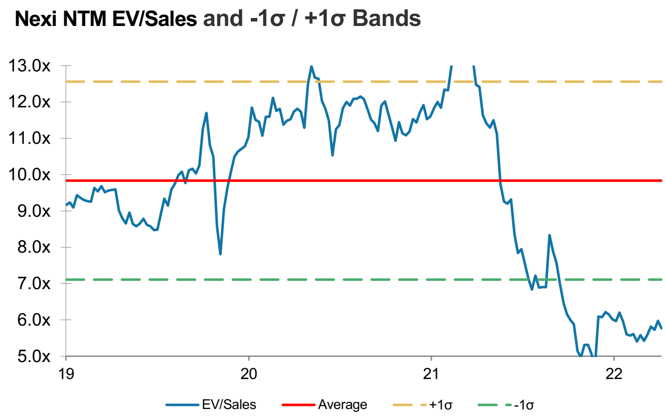
Source: Thomson Reuters TRSL, Morgan Stanley Research

Exhibit 47: Network International EV/NTM Sales



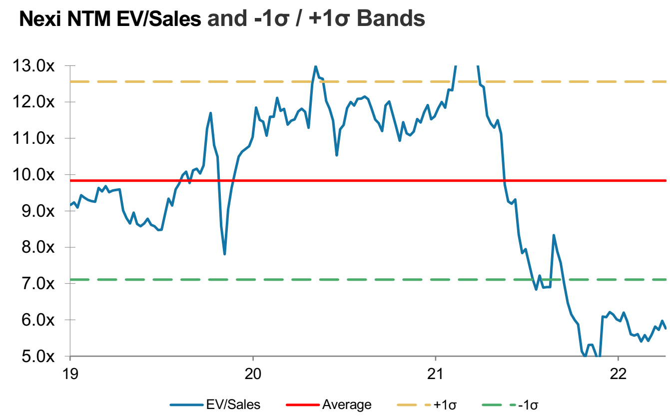
Source: Thomson Reuters TRSL, Morgan Stanley Research

Exhibit 48: Nexi P/NTM Earnings



Source: Thomson Reuters TRSL, Morgan Stanley Research

Exhibit 49: Nexi EV/NTM Sales



Source: Thomson Reuters TRSL, Morgan Stanley Research

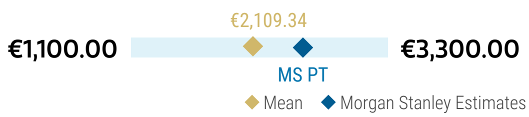
Risk Reward – Adyen NV (ADYEN.AS) Top Pick

A winner within the structurally attractive payments market

PRICE TARGET €2,540.00

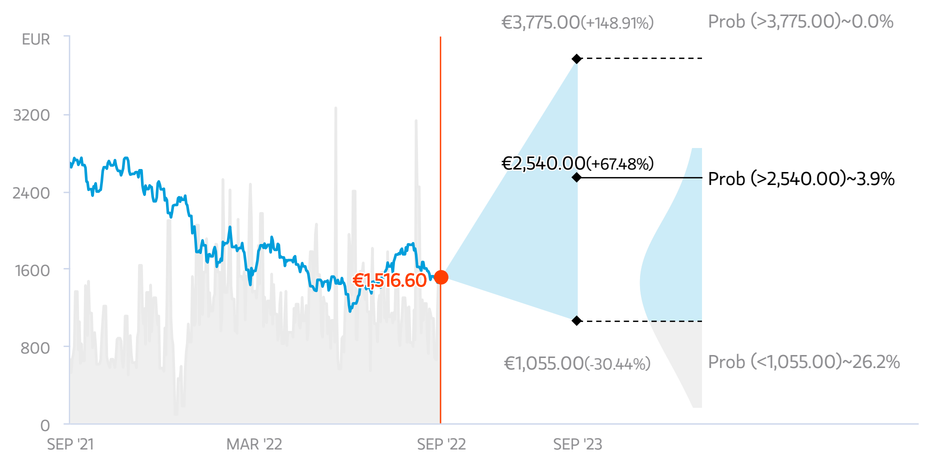
We value Adyen on a 10-year DCF model, with a WACC of 8% and terminal growth rate of 3.5%.

Consensus Price Target Distribution



Source: Refinitiv, Morgan Stanley Research

RISK REWARD CHART AND OPTIONS IMPLIED PROBABILITIES (12M)



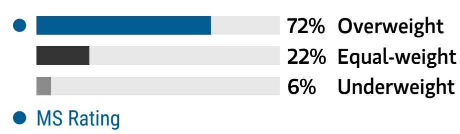
Key: Historical Stock Performance ● Current Stock Price ◆ Price Target

Source: Refinitiv, Morgan Stanley Research, Morgan Stanley Institutional Equities Division. The probabilities of our Bull, Base, and Bear case scenarios playing out were estimated with implied volatility data from the options market as of 12 Sep, 2022. All figures are approximate risk-neutral probabilities of the stock reaching beyond the scenario price in either three-months' or one-years' time. View explanation of Options Probabilities methodology here

OVERWEIGHT THESIS

- Structural growth: Online payments is a structural growth industry due to the shift from cash to card and offline to online, with a highly transactional revenue model providing good visibility.
- Online exposure: >85% of Adyen's processed volumes are online payments, with Adyen having some of the fastest growing companies signed up to its platform. This should secure above-market growth over the medium term.
- The COVID pandemic accelerated structural themes, including the cash-to-card migration and e-Commerce growth, as well as increasing the level of complexity across the payments landscape, something Adyen solves for.

Consensus Rating Distribution



Source: Refinitiv, Morgan Stanley Research

Risk Reward Themes

Disruption:	*Positive*
Secular Growth:	*Positive*
Market Share:	*Positive*

View descriptions of Risk Rewards Themes here

BULL CASE €3,775.00

Adyen scales on continued strong growth rates

Historically strong growth rates are maintained, allowing Adyen to scale up rapidly. We assume a further rebound in FY22, aided by an accelerating tailwind, allowing Adyen to grow at 43% in FY22 as the company continues to onboard new merchants at the same rate it has historically. Adj. EBITDA margins reach 68% in the terminal state.

BASE CASE €2,540.00

Structural shift drives above market growth

In the long run, we assume Adyen continues to grow above the eCommerce market, with revenues delivering a 34% CAGR to 2025 as the company takes wallet share from legacy-based incumbents. We see EBITDA margins reaching c. 65% by 2025 as the platform scales up.

BEAR CASE €1,055.00

New volume growth slows

Deceleration in new volume growth and pricing on US marketplace contract is lower than anticipated, resulting in a more muted rebound in FY22 with less than 40% growth. We assume Adyen does not encounter any operational leverage, with EBITDA margins reaching a ceiling of c. 63%, below the long-term target of >65%.

Risk Reward – Adyen NV (ADYEN.AS)

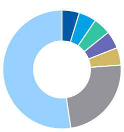
KEY EARNINGS INPUTS

Drivers	2021	2022e	2023e	2024e
Group net revenue (€, mn)	1,002	1,386	1,812	2,396
Organic Growth (%)	46	34	30	32
MS Adj. EBITDA (€, mn)	630	831	1,115	1,513
MS EPS (€)	14.7	19.1	25.7	34.6

INVESTMENT DRIVERS

- Increased penetration of alternative payment methods and eCommerce
- Delivery on growth expectations of mid-20s to low-30s in the medium term
- Market share gains from legacy incumbents

GLOBAL REVENUE EXPOSURE



- 0-10% APAC, ex Japan, Mainland China and India
- 0-10% India
- 0-10% Japan
- 0-10% Latin America
- 0-10% UK
- 20-30% North America
- 50-60% Europe ex UK

Source: Morgan Stanley Research Estimate
View explanation of regional hierarchies here

MS ALPHA MODELS

4/5 MOST	3 Month Horizon

Source: Refinitiv, FactSet, Morgan Stanley Research; 1 is the highest favored Quintile and 5 is the least favored Quintile

SUSTAINABILITY & ESG

		+1.0 / -1.0
Indicator of Change	0.10	
Disclosure Rate	29%	

RISKS TO PT/RATING

RISKS TO UPSIDE

- Further large merchant wins, driving incremental upside
- Regulatory risk from PSD2 leading to accelerated market share gains

RISKS TO DOWNSIDE

- Migration issues delaying traction on eBay volumes
- Online payments commoditises, leading to take-rate pressure

OWNERSHIP POSITIONING

Inst. Owners, % Active	81%
HF Sector Long/Short Ratio	2.5x
HF Sector Net Exposure	10.8%

Refinitiv; MSPB Content. Includes certain hedge fund exposures held with MSPB. Information may be inconsistent with or may not reflect broader market trends. Long/Short Ratio = Long Exposure / Short exposure. Sector % of Total Net Exposure = (For a particular sector: Long Exposure - Short Exposure) / (Across all sectors: Long Exposure – Short Exposure).

MS ESTIMATES VS. CONSENSUS

FY Dec 2023e

	Low	Morgan Stanley Estimates	Mean	High
Sales / Revenue (€, mn)	1,689	1,812	1,848	2,881
EBITDA (€, mn)	1,028	1,131	1,135	1,336
EPS (€)	24.26	26.13	27.05	33.28

◆ Mean ◆ Morgan Stanley Estimates

Source: Refinitiv, Morgan Stanley Research

Morgan Stanley | RESEARCH

IDEA

Risk Reward – Network International Holdings PLC (NETW.L) Top Pick

Leading MEA payments player

PRICE TARGET 460p

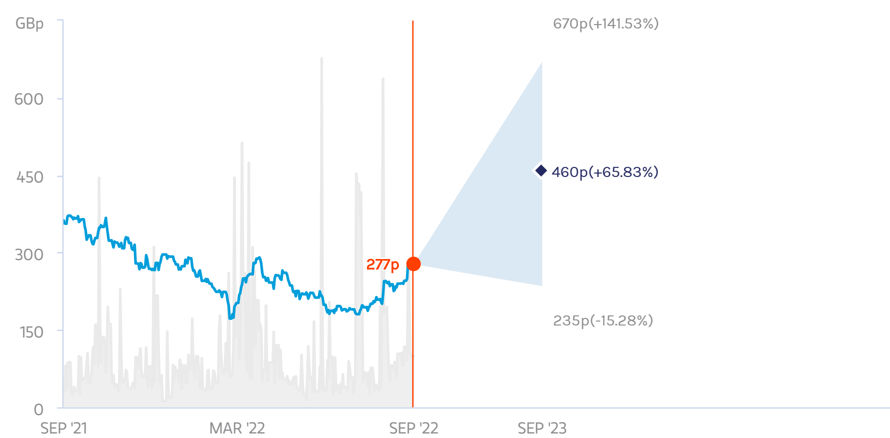
We use a 10-year DCF model to value Network International, with a WACC of 10% and terminal growth rate of 2%.

Consensus Price Target Distribution 303.79p 403p MS PT 482.44p

Source: Refinitiv, Morgan Stanley Research

◆ Mean ◆ Morgan Stanley Estimates

RISK REWARD CHART



Key: — Historical Stock Performance ● Current Stock Price ◆ Price Target

Source: Refinitiv, Morgan Stanley Research

OVERWEIGHT THESIS

- Network International is the clear leader in one of the most underpenetrated payments markets globally, Middle East & Africa.
- It is the only pan-regional scale player, positioned across the entire payments value chain, with Merchant Solutions generating c.46% of sales and Issuer Solutions c.53%.
- We expect a sharp recovery in Merchant Solutions as international volumes recover and travellers return to the UAE.
- Longer-term, we see Network International as a leader in a high-growth payments market.

Consensus Rating Distribution

89%	Overweight
11%	Equal-weight
0%	Underweight

● MS Rating

Source: Refinitiv, Morgan Stanley Research

Risk Reward Themes

Disruption:	*Positive*
Secular Growth:	*Positive*

View descriptions of Risk Rewards Themes here

BULL CASE 670p

Executing on opportunities not in guidance

Executing on growth opportunities, e.g. expansion in Saudi Arabia, providing a platform for a sustained acceleration in organic growth in the Middle East. In addition, Africa reaches an inflection point on the e-payments adoption S-curve, causing growth to accelerate to sustain in the 20s% range until 2024. Our FY22-26 revenue CAGR is c. 18%, c. 8% over FY26-32. Extra volume drives significant operating leverage and helps adjusted EBITDA margins expand to 46%.

BASE CASE 460p

Recovery continues

We forecast FY22 organic revenue growth of c. 20%, as the recovery from COVID impacts continues and international tourists return to the UAE. We expect adj. EBITDA margins to rebound to c. 41% on an MS adjusted basis c. 44% long-term. Importantly, we assume capex falls from a peak of c. 13% of sales in FY21 to 9.5% in FY24 as NI expands into Saudi Arabia and completes the ENBD migration.

BEAR CASE 235p

Outsourcing slows, capex higher for longer

We assume a slower recovery as COVID-related disruption lasts longer; lost contracts are not replaced by new merchant wins and fewer outsourcing deals. For Africa, we assume pressure from alternative payment methods, reducing NI's growth runway. Combined, this drives a revenue CAGR of 8% over FY22-26 and c. 2% in FY26-32. MS adj. EBITDA margins remain in the high-30s on higher investment, while the business benefits less from operational gearing due to slower growth.

Risk Reward – Network International Holdings PLC (NETW.L)

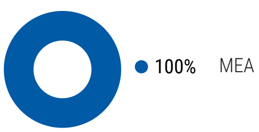
KEY EARNINGS INPUTS

Drivers	2021	2022e	2023e	2024e
Organic growth (%)	20.5	19.8	16.6	17.3
Co. adj EBITDA margin (ex Associate) (%)	38.3	40.7	42.4	45.2
Adj. FCFE (as % EBIT) (%)	32.1	71.9	82.8	0.0
Dividend (US$, mn)	0	14	18	25

INVESTMENT DRIVERS

- Increased card penetration in the Middle East and Africa
- Banks outsourcing payments
- Merchants requiring more value-added services

GLOBAL REVENUE EXPOSURE



Source: Morgan Stanley Research Estimate
View explanation of regional hierarchies here

MS ALPHA MODELS

4/5 MOST	3 Month Horizon

Source: Refinitiv, FactSet, Morgan Stanley Research; 1 is the highest favored Quintile and 5 is the least favored Quintile

SUSTAINABILITY & ESG

Indicator of Change	0.38	+1.0 / -1.0
Disclosure Rate	79%	

RISKS TO PT/RATING

RISKS TO UPSIDE

- Execution on Saudi opportunity providing medium-term upside
- Regulation driving a wave of bank outsourcing
- DPO acquisition accelerating group growth

RISKS TO DOWNSIDE

- Above guided capex persisting for longer due to Saudi opportunity and migration away from Emirates shared services
- Banking consolidation resulting in further contract losses.
- Banks choosing to keep payments in-house.

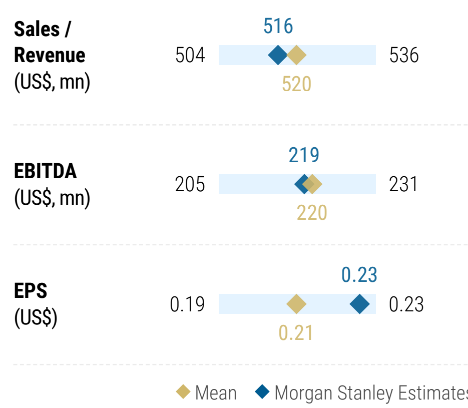
OWNERSHIP POSITIONING

Inst. Owners, % Active	91%
HF Sector Long/Short Ratio	2.5x
HF Sector Net Exposure	10.8%

Refinitiv; MSPB Content. Includes certain hedge fund exposures held with MSPB. Information may be inconsistent with or may not reflect broader market trends. Long/Short Ratio = Long Exposure / Short exposure. Sector % of Total Net Exposure = (For a particular sector: Long Exposure - Short Exposure) / (Across all sectors: Long Exposure – Short Exposure).

MS ESTIMATES VS. CONSENSUS

FY Dec 2023e



Source: Refinitiv, Morgan Stanley Research

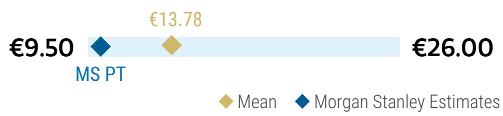
Risk Reward – Nexi SpA (NEXII.MI)

Pan-European scale player

PRICE TARGET €10.00

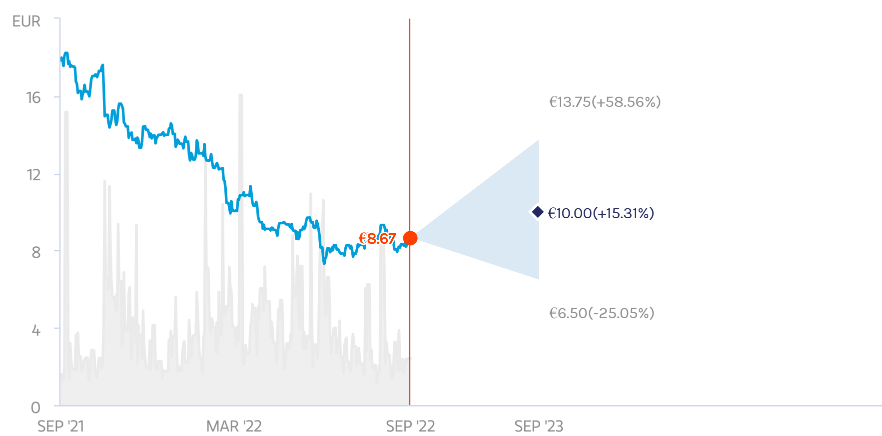
We use a DCF approach to value Nexi, applying a WACC of 8.5% and terminal growth rate of 1.5%.

Consensus Price Target Distribution



Source: Refinitiv, Morgan Stanley Research

RISK REWARD CHART



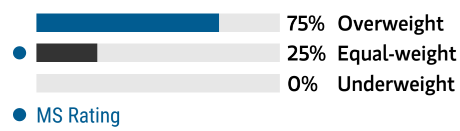
Key: Historical Stock Performance ● Current Stock Price ◆ Price Target

Source: Refinitiv, Morgan Stanley Research

EQUAL-WEIGHT THESIS

- Post Nets and SIA acquisitions, Nexi is present in more than 25 markets or ~65% of the European consumption, and has a €4.6tn addressable market opportunity (a ~4x jump from Nexi on a standalone basis).
- The company is solely exposed to European markets, but we believe cash-to-card tailwinds are less clear post pandemic, with a more challenging competitive landscape due to next-generation players / a more complex landscape.
- We are cautious on integration and synergies, which create some risk to Nexi's competitive positioning.
- Nexi is trading at a valuation premium to developed market peers, especially Worldline, despite weaker top-line growth, hence our Equal-weight rating.

Consensus Rating Distribution



Source: Refinitiv, Morgan Stanley Research

Risk Reward Themes

Disruption:	*Negative*
Market Share:	*Positive*
Self-help:	*Positive*

View descriptions of Risk Rewards Themes here

BULL CASE €13.75

Growth accelerates on back of integrations

The acquisitions of Nets/SIA prove successful, revitalising growth for the combined business as technology (e.g. e-Commerce) and financial synergies bear fruit. As a result, Nexi is able to sustain close to 7.5% organic growth out to FY24, and a c. 5% revenue CAGR thereafter. Cost synergies are realised, with operational leverage driving adj. EBITDA margins to c. 57% in terminals state. We apply a 2% terminal growth rate. Our bull case valuation implies c. 23x FY23 adj. P/E, c. 7x EV/Sales.

BASE CASE €10.00

Top-line recovery continues post COVID

We expect the combined group to deliver a c. 5.5% revenue CAGR across FY22-25, and c. 3% FY26-32. Margins expand to c. 54.5% on adj. EBITDA by 2024 on the back of merger synergies, and increase towards 56% in terminal state. We use a 2% terminal growth rate in our base case, and our valuation implies ~17x FY23 adj. P/E.

BEAR CASE €6.50

Growth slows

Competition within the payments industry intensifies (particularly in acquiring/processing), as vendors build scale and focus less on pricing on incremental volumes. It proves challenging to extract synergies from the Nets and SIA acquisitions, with platform complexity an increased debate for investors. We model a c. 4% FY22-25 growth CAGR, c. 1% FY26-32 and use 1% terminal growth, and a ~ 54% terminal adj. EBITDA margin. Our bear case valuation implies c. 11x adj. P/E, c. 4x EV/Sales.

Risk Reward – Nexi SpA (NEXII.MI)

KEY EARNINGS INPUTS

Drivers	2021	2022e	2023e	2024e
Org. revenue growth (%)	10.0	7.4	4.3	6.1
EBITDA (€, mn)	1,428	1,635	1,760	1,971
EBITDA margin (%)	47.0	50.1	51.6	54.5

INVESTMENT DRIVERS

- Organic growth rates
- Synergies from existing M&A transactions (e.g. Nets, SIA)
- Adj. EBITDA margin expansion
- Future M&A

GLOBAL REVENUE EXPOSURE

● 100% Europe ex UK

Source: Morgan Stanley Research Estimate
View explanation of regional hierarchies here

RISKS TO PT/RATING

RISKS TO UPSIDE

- Structural tailwinds around cash-to-card shift proving more resilient than expected
- Large-scale value-accretive M&A and increased confidence in availability of large-scale payments assets

RISKS TO DOWNSIDE

- Signs of technology integration challenges following the significant amount of M&A conducted by Nexi/Nets
- Increased pricing pressure in payments processing
- Increased competition/valuation multiples in payments M&A

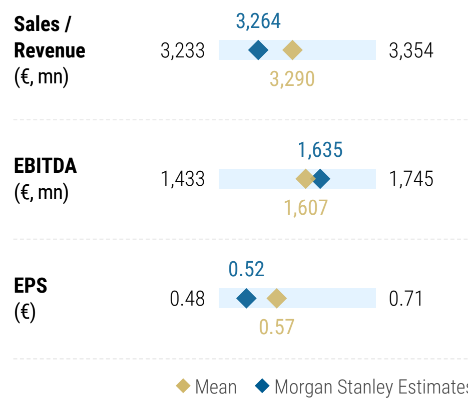
OWNERSHIP POSITIONING

Inst. Owners, % Active	92%
HF Sector Long/Short Ratio	2.5x
HF Sector Net Exposure	10.8%

Refinitiv; MSPB Content. Includes certain hedge fund exposures held with MSPB. Information may be inconsistent with or may not reflect broader market trends. Long/Short Ratio = Long Exposure / Short exposure. Sector % of Total Net Exposure = (For a particular sector: Long Exposure - Short Exposure) / (Across all sectors: Long Exposure – Short Exposure).

MS ESTIMATES VS. CONSENSUS

FY Dec 2022e



Source: Refinitiv, Morgan Stanley Research

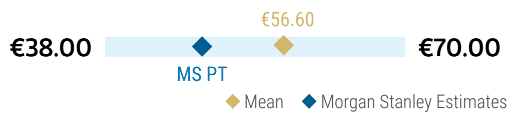
Risk Reward – Worldline SA (WLN.PA)

Durable growth in European payments, at a fair valuation

PRICE TARGET €48.00

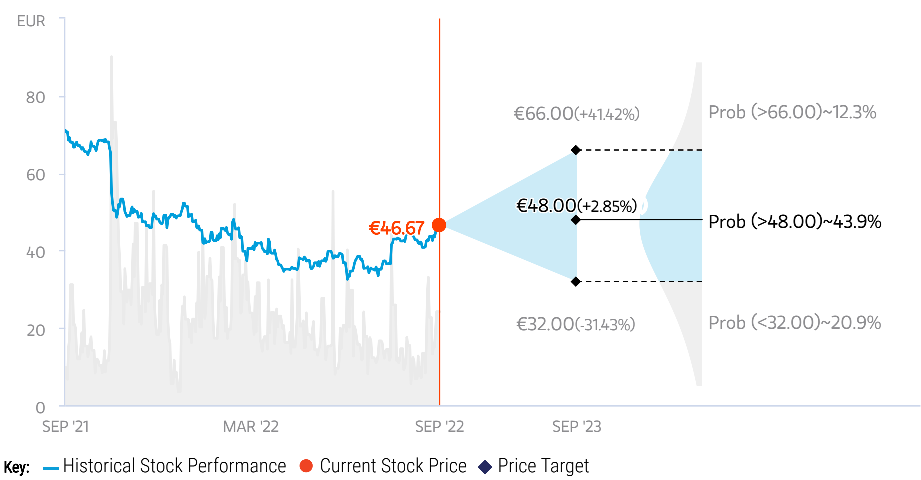
We use a DCF model to value Worldline, with a WACC of 8% and terminal growth rate of 1.5%

Consensus Price Target Distribution



Source: Refinitiv, Morgan Stanley Research

RISK REWARD CHART AND OPTIONS IMPLIED PROBABILITIES (12M)

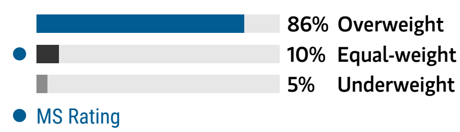


Source: Refinitiv, Morgan Stanley Research, Morgan Stanley Institutional Equities Division. The probabilities of our Bull, Base, and Bear case scenarios playing out were estimated with implied volatility data from the options market as of 12 Sep, 2022. All figures are approximate risk-neutral probabilities of the stock reaching beyond the scenario price in either three-months' or one-years' time. View explanation of Options Probabilities methodology here

EQUAL-WEIGHT THESIS

- Broad payments offering gives Worldline a wide coverage span of the payments value chain. The company's revenue mix is skewed to the offline payments space.
- Structural trends around the consumer shift from cash to card and e-Commerce are tailwinds for payments players like Worldline; however, disruption concerns have increased given the scale of the cash-to-card migration during the COVID pandemic vs. a weaker growth recovery.
- Worldline has been focused on consolidating European payments, achieving material synergies and raising margins - Ingenico is the latest acquisition.

Consensus Rating Distribution



Source: Refinitiv, Morgan Stanley Research

Risk Reward Themes

Secular Growth:	*Positive*
Market Share:	*Positive*
Special Situation:	*Positive*

View descriptions of Risk Rewards Themes here

BULL CASE €66.00

Ingenico integration drives strong growth

The acquisition of Ingenico proves successful, while disruption concerns prove overdone, revitalising growth for the combined business as technology (e.g. e-Commerce) and financial synergies bear fruit. As a result, Worldline is able to sustain close to 10% organic growth out to FY24, and a c. 4% revenue CAGR thereafter. Cost synergies are realised, with operational leverage driving adj. EBIT margins to c. 26% in terminals state. We apply 2% terminal growth.

BASE CASE €48.00

Leveraging Worldline + Ingenico

The combined group delivers a c. 8% revenue CAGR across FY22-25, and c. 3% FY26-32. Margins expand to c. 23.3% on adj. EBIT by 2024 on the back of merger synergies, and increase towards 24% in terminal state. We use 1.5% terminal growth for our base case. Our base case target implies ~19x FY23 adj. P/E

BEAR CASE €32.00

Growth slows

Competition within the payments industry intensifies (particularly in merchant acquiring/processing), as vendors build scale and focus less on pricing on incremental volumes. The acquisition of Ingenico also proves more challenging to extract synergies from, with platform complexity an increased debate for investors. We model a c. 5% FY22-25 growth CAGR, c. 2% FY26-32 and use 1% terminal growth, and a ~ 22% terminal adj. EBIT margin.

Risk Reward – Worldline SA (WLN.PA)

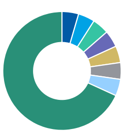
KEY EARNINGS INPUTS

Drivers	2021	2022e	2023e	2024e
Group net revenue (€, mn)	3,689	4,336	4,680	5,091
Organic growth (%)	3.3	8.0	5.7	7.9
OMDA (€, mn)	1,247	0	0	0
OMDA margin (%)	33.8	0.0	0.0	0.0

INVESTMENT DRIVERS

- Organic growth rates
- Synergies from existing M&A transactions (e.g. SIX Payment Services, Ingenico)
- Strategic review outcome for the terminals business
- Future M&A

GLOBAL REVENUE EXPOSURE



- 0-10% APAC, ex Japan, Mainland China and India
- 0-10% India
- 0-10% Japan
- 0-10% Latin America
- 0-10% Mainland China
- 0-10% North America
- 0-10% UK
- 70-80% Europe ex UK

Source: Morgan Stanley Research Estimate
View explanation of regional hierarchies here

MS ALPHA MODELS

4/5 MOST	3 Month Horizon

Source: Refinitiv, FactSet, Morgan Stanley Research; 1 is the highest favored Quintile and 5 is the least favored Quintile

SUSTAINABILITY & ESG

		+1.0 / -1.0
Indicator of Change	0.60	
Disclosure Rate	93%	

RISKS TO PT/RATING

RISKS TO UPSIDE

- Faster than expected consolidation in European payments with more value-accretive M&A (at scale) for Worldline to complete
- Accelerated move/success into online payments increases growth potential of the business

RISKS TO DOWNSIDE

- Accelerating price pressure in payments processing
- Integration of Ingenico carries risks
- Macro weakness

OWNERSHIP POSITIONING

Inst. Owners, % Active	86.5%
HF Sector Long/Short Ratio	2.5x
HF Sector Net Exposure	10.8%

Refinitiv; MSPB Content. Includes certain hedge fund exposures held with MSPB. Information may be inconsistent with or may not reflect broader market trends. Long/Short Ratio = Long Exposure / Short exposure. Sector % of Total Net Exposure = (For a particular sector: Long Exposure - Short Exposure) / (Across all sectors: Long Exposure – Short Exposure).

MS ESTIMATES VS. CONSENSUS

FY Dec 2023e

	Low	Morgan Stanley Estimates	Mean	High
Sales / Revenue (€, mn)	4,409	5,351	4,760	5,510
EBITDA (€, mn)	890	1,288	1,256	1,355
EPS (€)	1.79	2.50	2.58	3.21

◆ Mean ◆ Morgan Stanley Estimates

Source: Refinitiv, Morgan Stanley Research

Disclosure Section

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For valuation methodology and risks associated with any recommendation, rating or price target referenced in this research report, please contact the Client Support Team as follows: US/Canada +1 800 303-2495; Hong Kong +852 2848-5999; Latin America +1 718 754-5444 (U.S.); London +44 (0)20-7425-8169; Singapore +65 6834-6860; Sydney +61 (0)2-9770-1505; Tokyo +81 (0)3-6836-9000. Alternatively you may contact your investment representative or Morgan Stanley Research at 1585 Broadway, (Attention: Research Management), New York, NY 10036 USA.

Analyst Certification

The following analysts hereby certify that their views about the companies and their securities discussed in this report are accurately expressed and that they have not received and will not receive direct or indirect compensation in exchange for expressing specific recommendations or views in this report: Mark Hyatt; Laura C Metayer; Alastair P Nolan; George W Webb; Adam Wood.
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As of August 31, 2022, Morgan Stanley beneficially owned 1% or more of a class of common equity securities of the following companies covered in Morgan Stanley Research: Adyen NV, Network International Holdings PLC, Nexi SpA, Worldline SA.
Within the last 12 months, Morgan Stanley managed or co-managed a public offering (or 144A offering) of securities of Nexi SpA.
Within the last 12 months, Morgan Stanley has received compensation for investment banking services from Nexi SpA.
In the next 3 months, Morgan Stanley expects to receive or intends to seek compensation for investment banking services from Adyen NV, Nexi SpA, Worldline SA.
Within the last 12 months, Morgan Stanley has received compensation for products and services other than investment banking services from Nexi SpA, Worldline SA.
Within the last 12 months, Morgan Stanley has provided or is providing investment banking services to, or has an investment banking client relationship with, the following company: Adyen NV, Nexi SpA, Worldline SA.
Within the last 12 months, Morgan Stanley has either provided or is providing non-investment banking, securities-related services to and/or in the past has entered into an agreement to provide services or has a client relationship with the following company: Nexi SpA, Worldline SA.
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Morgan Stanley uses a relative rating system using terms such as Overweight, Equal-weight, Not-Rated or Underweight (see definitions below). Morgan Stanley does not assign ratings of Buy, Hold or Sell to the stocks we cover. Overweight, Equal-weight, Not-Rated and Underweight are not the equivalent of buy, hold and sell. Investors should carefully read the definitions of all ratings used in Morgan Stanley Research. In addition, since Morgan Stanley Research contains more complete information concerning the analyst's views, investors should carefully read Morgan Stanley Research, in its entirety, and not infer the contents from the rating alone. In any case, ratings (or research) should not be used or relied upon as investment advice. An investor's decision to buy or sell a stock should depend on individual circumstances (such as the investor's existing holdings) and other considerations.

Global Stock Ratings Distribution

(as of August 31, 2022)
The Stock Ratings described below apply to Morgan Stanley's Fundamental Equity Research and do not apply to Debt Research produced by the Firm.
For disclosure purposes only (in accordance with FINRA requirements), we include the category headings of Buy, Hold, and Sell alongside our ratings of Overweight, Equal-weight, Not-Rated and Underweight. Morgan Stanley does not assign ratings of Buy, Hold or Sell to the stocks we cover. Overweight, Equal-weight, Not-Rated and Underweight are not the equivalent of buy, hold, and sell but represent recommended relative weightings (see definitions below). To satisfy regulatory requirements, we correspond Overweight, our most positive stock rating, with a buy recommendation; we correspond Equal-weight and Not-Rated to hold and Underweight to sell recommendations, respectively.

STOCK RATING CATEGORY	COVERAGE UNIVERSE COUNT	COVERAGE UNIVERSE % OF TOTAL	INVESTMENT BANKING CLIENTS (IBC) COUNT	INVESTMENT BANKING CLIENTS (IBC) % OF TOTAL IBC	INVESTMENT BANKING CLIENTS (IBC) % OF RATING CATEGORY	OTHER MATERIAL INVESTMENT SERVICES CLIENTS (MISC) COUNT	OTHER MATERIAL INVESTMENT SERVICES CLIENTS (MISC) % OF TOTAL OTHER MISC
Overweight/Buy	**1356**	**38%**	**304**	**41%**	**22%**	**596**	**39%**
Equal-weight/Hold	**1589**	**45%**	**349**	**47%**	**22%**	**716**	**47%**
Not-Rated/Hold	**0**	**0%**	**0**	**0%**	**0%**	**0**	**0%**
Underweight/Sell	**610**	**17%**	**90**	**12%**	**15%**	**225**	**15%**
TOTAL	**3,555**		**743**			**1537**	

Data include common stock and ADRs currently assigned ratings. Investment Banking Clients are companies from whom Morgan Stanley received investment banking compensation in the last 12 months. Due to rounding off of decimals, the percentages provided in the "% of total" column may not add up to exactly 100 percent.

Analyst Stock Ratings

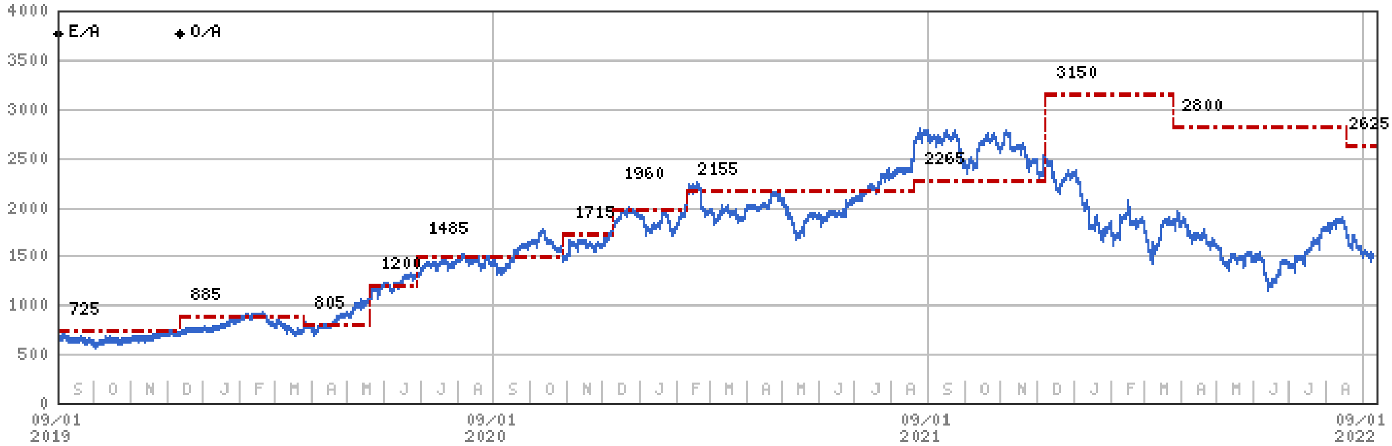
Overweight (O). The stock's total return is expected to exceed the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.
Equal-weight (E). The stock's total return is expected to be in line with the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.
Not-Rated (NR). Currently the analyst does not have adequate conviction about the stock's total return relative to the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.
Underweight (U). The stock's total return is expected to be below the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.
Unless otherwise specified, the time frame for price targets included in Morgan Stanley Research is 12 to 18 months.

Analyst Industry Views

Attractive (A): The analyst expects the performance of his or her industry coverage universe over the next 12-18 months to be attractive vs. the relevant broad market benchmark, as indicated below.
In-Line (I): The analyst expects the performance of his or her industry coverage universe over the next 12-18 months to be in line with the relevant broad market benchmark, as indicated below.
Cautious (C): The analyst views the performance of his or her industry coverage universe over the next 12-18 months with caution vs. the relevant broad market benchmark, as indicated below.
Benchmarks for each region are as follows: North America - S&P 500; Latin America - relevant MSCI country index or MSCI Latin America Index; Europe - MSCI Europe; Japan - TOPIX; Asia - relevant MSCI country index or MSCI sub-regional index or MSCI AC Asia Pacific ex Japan Index.

Stock Price, Price Target and Rating History (See Rating Definitions)

Adyen NV (ADYEN.AS) - As of 9/11/22 in EUR
Industry : Technology - Payments



Stock Rating History: 9/1/17 : /A; 7/23/18 : E/A; 12/12/19 : O/A

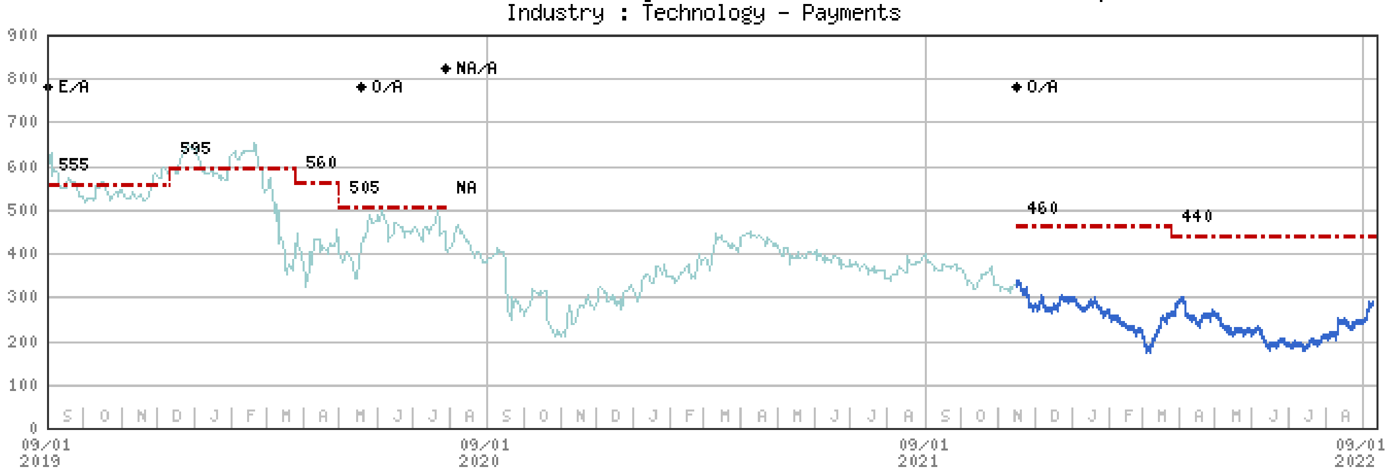
Price Target History: 7/23/18 : 570; 12/17/18 : 580; 2/5/19 : 630; 3/1/19 : 670; 7/9/19 : 705; 8/23/19 : 725; 12/12/19 : 885; 3/25/20 : 805; 5/19/20 : 1200; 6/29/20 : 1485; 10/30/20 : 1715; 12/10/20 : 1960; 2/10/21 : 2155; 8/19/21 : 2265; 12/8/21 : 3150; 3/25/22 : 2800; 8/18/22 : 2625

Source: Morgan Stanley Research Date Format : MM/DD/YY Price Target -- No Price Target Assigned (NA)
Stock Price (Not Covered by Current Analyst) — Stock Price (Covered by Current Analyst) —
Stock and Industry Ratings (abbreviations below) appear as ◆ Stock Rating/Industry View
Stock Ratings: Overweight (O) Equal-weight (E) Underweight (U) Not-Rated (NR) No Rating Available (NA)
Industry View: Attractive (A) In-line (I) Cautious (C) No Rating (NR)

Effective January 13, 2014, the stocks covered by Morgan Stanley Asia Pacific will be rated relative to the analyst's industry (or industry team's) coverage.

Effective January 13, 2014, the industry view benchmarks for Morgan Stanley Asia Pacific are as follows: relevant MSCI country index or MSCI sub-regional index or MSCI AC Asia Pacific ex Japan Index.

Network International Holdings PLC (NETW.L) - As of 9/11/22 in GBp
Industry : Technology - Payments



Stock Rating History: 9/1/17 : /A; 5/21/19 : E/A; 5/19/20 : O/A; 7/28/20 : NA/A; 11/16/21 : O/A

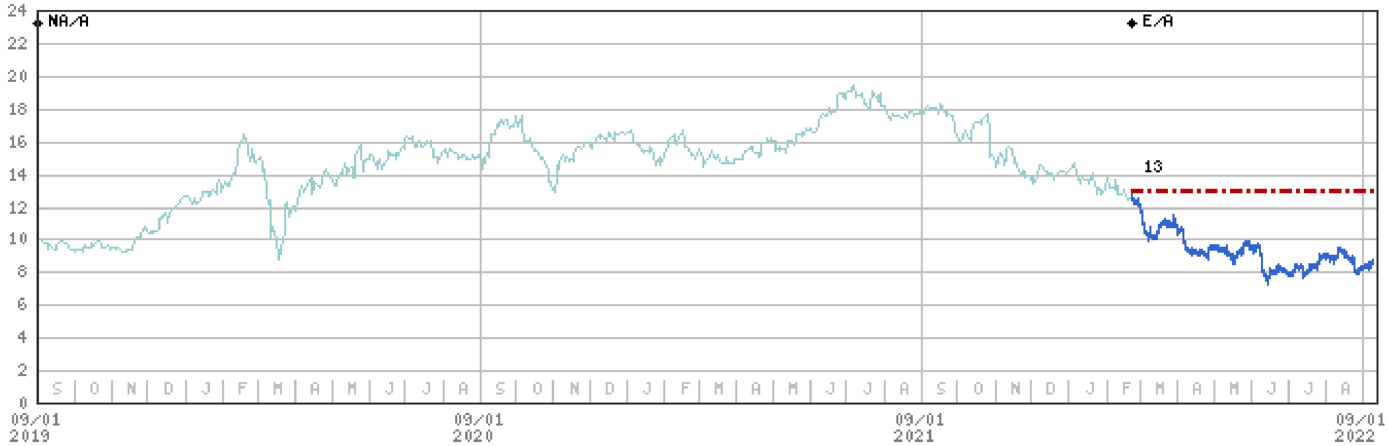
Price Target History: 5/21/19 : 555; 12/12/19 : 595; 3/25/20 : 560; 5/1/20 : 505; 7/28/20 : NA; 11/16/21 : 460; 3/25/22 : 440

Source: Morgan Stanley Research Date Format : MM/DD/YY Price Target -- No Price Target Assigned (NA)
Stock Price (Not Covered by Current Analyst) — Stock Price (Covered by Current Analyst) —
Stock and Industry Ratings (abbreviations below) appear as ◆ Stock Rating/Industry View
Stock Ratings: Overweight (O) Equal-weight (E) Underweight (U) Not-Rated (NR) No Rating Available (NA)
Industry View: Attractive (A) In-line (I) Cautious (C) No Rating (NR)

Effective January 13, 2014, the stocks covered by Morgan Stanley Asia Pacific will be rated relative to the analyst's industry (or industry team's) coverage.

Effective January 13, 2014, the industry view benchmarks for Morgan Stanley Asia Pacific are as follows: relevant MSCI country index or MSCI sub-regional index or MSCI AC Asia Pacific ex Japan Index.

Nexi SpA (NEXII.MI) - As of 9/11/22 in EUR
Industry : Technology - Payments



Stock Rating History: 9/1/17 : NA/A; 2/22/22 : E/A

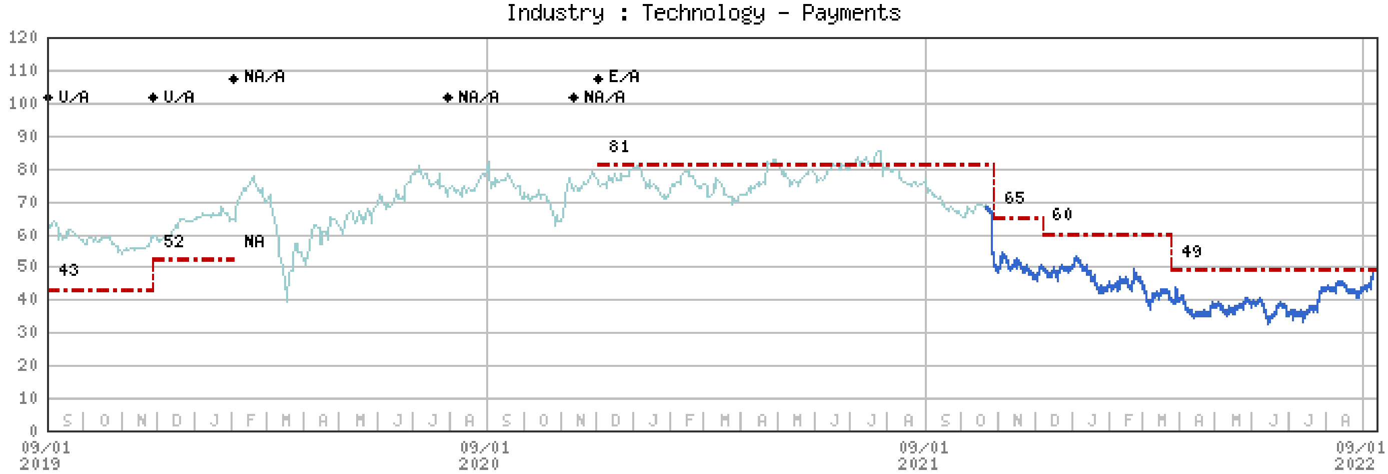
Price Target History: 2/22/22 : 13

Source: Morgan Stanley Research   Date Format : MM/DD/YY   Price Target --   No Price Target Assigned (NA)
Stock Price (Not Covered by Current Analyst) — Stock Price (Covered by Current Analyst) —
Stock and Industry Ratings (abbreviations below) appear as ◆ Stock Rating/Industry View
Stock Ratings: Overweight (O) Equal-weight (E) Underweight (U) Not-Rated (NR) No Rating Available (NA)
Industry View: Attractive (A) In-line (I) Cautious (C) No Rating (NR)

Effective January 13, 2014, the stocks covered by Morgan Stanley Asia Pacific will be rated relative to the analyst's industry (or industry team's) coverage.

Effective January 13, 2014, the industry view benchmarks for Morgan Stanley Asia Pacific are as follows: relevant MSCI country index or MSCI sub-regional index or MSCI AC Asia Pacific ex Japan Index.

Worldline SA (WLN.PA) - As of 9/11/22 in EUR
Industry : Technology - Payments



Stock Rating History: 9/1/17 : E/A; 12/17/18 : U/A; 11/28/19 : U/A; 2/3/20 : NA/A; 7/30/20 : NA/A; 11/12/20 : NA/A; 12/3/20 : E/A

Price Target History: 1/19/17 : 24; 12/15/17 : 41; 7/13/18 : 50; 12/17/18 : 43; 11/28/19 : 52; 2/3/20 : NA; 12/3/20 : 81; 10/29/21 : 65; 12/8/21 : 60; 3/25/22 : 49

Source: Morgan Stanley Research   Date Format : MM/DD/YY   Price Target --   No Price Target Assigned (NA)
Stock Price (Not Covered by Current Analyst) — Stock Price (Covered by Current Analyst) —
Stock and Industry Ratings (abbreviations below) appear as ◆ Stock Rating/Industry View
Stock Ratings: Overweight (O) Equal-weight (E) Underweight (U) Not-Rated (NR) No Rating Available (NA)
Industry View: Attractive (A) In-line (I) Cautious (C) No Rating (NR)

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INDUSTRY COVERAGE: Technology - Payments

COMPANY (TICKER)	RATING (AS OF)	PRICE* (09/12/2022)
Adam Wood		
Adyen NV (ADYEN.AS)	O (12/12/2019)	€1,516.60
Alastair P Nolan		
Network International Holdings PLC (NETW.L)	O (11/16/2021)	277p
Nexi SpA (NEXII.MI)	E (02/22/2022)	€8.67
Worldline SA (WLN.PA)	E (12/03/2020)	€46.67

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* Historical prices are not split adjusted.