

# Payment processing industry

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**Bloomberg Adria**

**Authors:**

Andrej Knez, Chief Markets Analyst

Matteo Mošnja, Corporate Finance Analyst

Jelena Zindović, Senior Corporate Finance Analyst





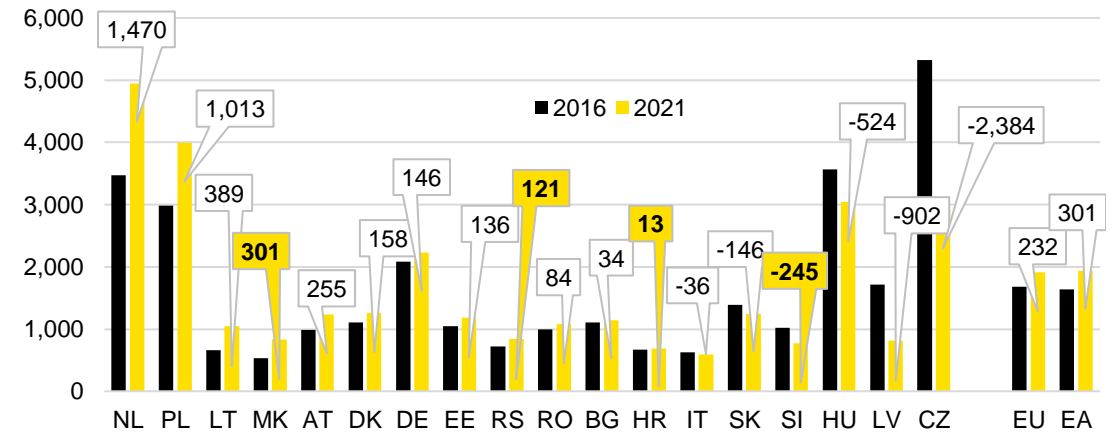
**Payment processing industry** is seeing big changes, with **increased demand for cashless payments** by customers. **Value of the EU cashless payments shaped a CAGR of almost 4% since 2013** onwards, only to **advance to a CAGR of 6% since 2016** and speed up after the pandemic with the value of cashless payments rising by 16% in 2021 against the previous year. The **value of the EU cashless payments landed at a staggering 278 trillion EUR in 2021 or 1900% of the EU GDP** (vs. 1700% in both 2013 and 2016). With transaction processing being the most widely outsourced service in the banking, in this report we focus on the industry trends and Adria region market development vs the EU peers. We also look into the financial results of the key non-bank payment service providers and examine the business prospects.

In Adria region, the **value of cashless payments as % of GDP is among the lowest in Europe** and only **North Macedonia is converging quickly to the European leaders**. When **comparing the number of cashless payments per transaction account, Croatia and Slovenia stand around the European averages**, while **Serbia and North Macedonia are far behind**. The overall status is even more puzzling when seeing that Croatian market carries one of the highest payment card-to-inhabitant ratio (2.2 cards per citizen) in Europe vs the Euro area average of 1.9 cards. In short, cashless payments are comparatively smaller in value in Adria countries, while the number of transactions follows the broader trends. The reasons behind the presented status we see in the following:

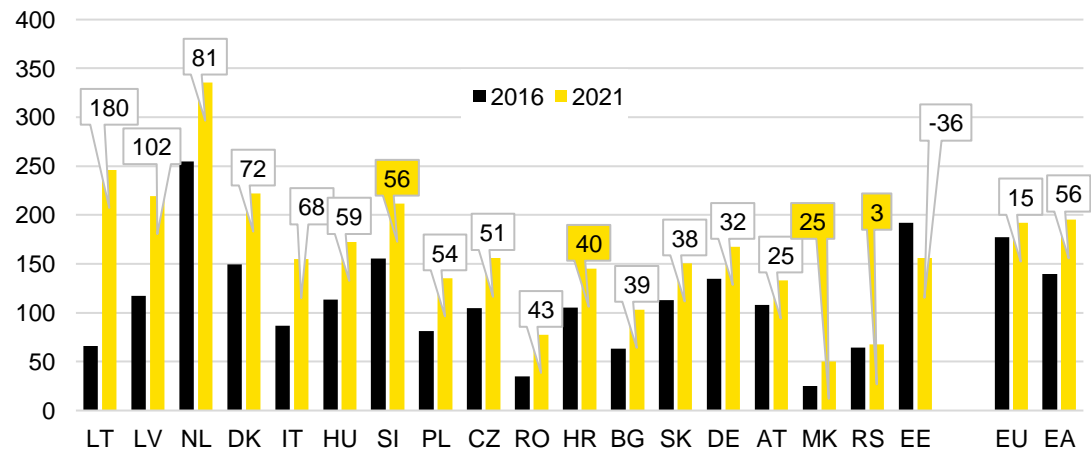
- general economic structure being more cash consumption oriented in Adria region alongside a legacy of payment principles;
- as we wrote in our [e-commerce report](#), e-commerce is in an early development stage - as a strong correlation factor with the value of cashless payments, we see online purchases from national sellers in the last 3 months, which accounted for 41% of surveyed population in 2022 in Slovenia, 39% in Serbia, 37% in Croatia, 23% in North Macedonia and 14% in B&H – all Adria countries were below EMU and EU averages (46% apiece) and below 17 other EU countries.

Still, early 2022 data show a material speed-up in development, with the value of cashless transactions in Croatia and Serbia rising by 27% and 26%, respectively.

**Exhibit 1. Cashless payments - as % of GDP in 2021**  
sorted descending by changes as pp of GDP (in callouts) since 2016



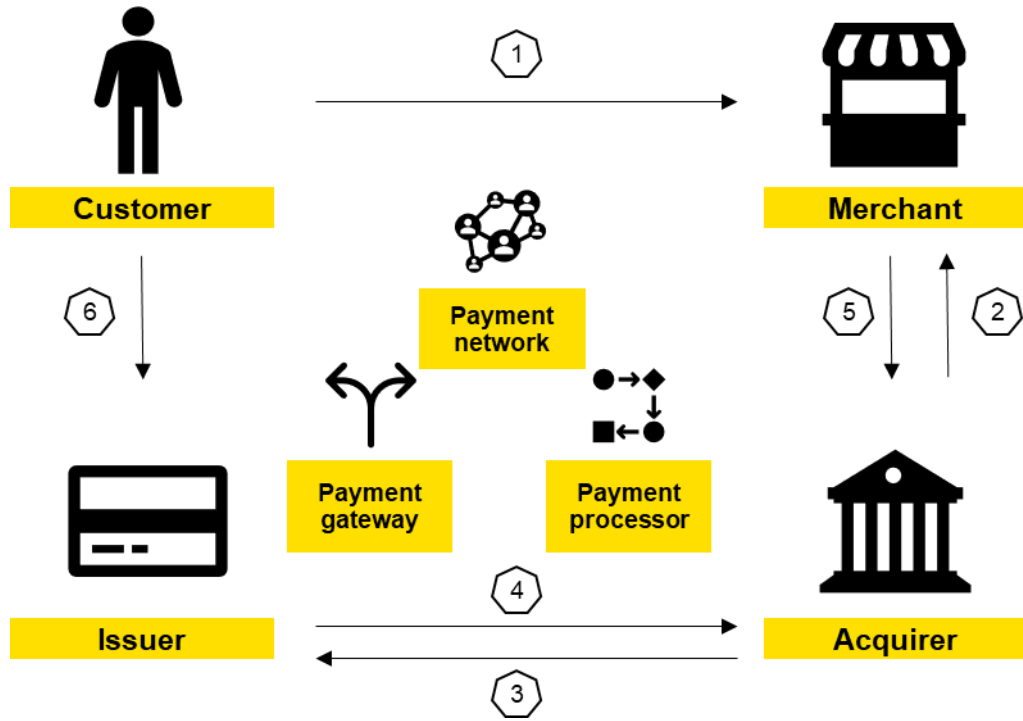
**Exhibit 2. Cashless payments - # per transaction account in 2021**  
sorted descending by # changes per transaction (in callouts) since 2016



Source: ECB, central banks, Bloomberg Adria analytics



Exhibit 3. Payment ecosystem



1. The customer selects goods and opts to pay with a card
2. The merchant submits the transaction via POS device
3. The acquirer submits the transaction to the issuing bank
4. The issuer inspects whether the customer has necessary funds in the account and sends funds to the acquirer (less any fees charged)
5. The acquirer deposits funds to the merchant's bank account (less any fees charged)
6. The consumer account is debited for the purchase amount

## Intro – understanding the payment ecosystem

The payment process entails multiple steps and involves several entities that interact with each other in order to execute a payment transaction.

1. **Customer** selects goods or services for purchase and swipes a debit/credit card.
2. A **payment gateway** is a **software application** that enables **merchants** to accept payments, encrypts and transmits payment data for processing.
3. **Payment processors** are companies that work in the background to provide payment processing services to merchants. Their responsibilities include establishing merchant accounts, accepting and processing credit, debit, and prepaid card payments, managing credit and debit card processing; and implementing certain anti-fraud measures. Processors may be associated with acquiring banks or they can be independent from the banks, that is, they can take an acquiring role as well, which is often the case nowadays.
4. The **acquirer** captures the transaction and forwards the information to the customer's **credit card network** (e.g. Visa, Mastercard, AMEX). The credit card network then routes the transaction to the cardholder's bank - the issuer, or **issuing bank** - and requests an approval.
5. The transaction is approved or declined depending on the availability of funds and the status of the cardholder's account. This approval process is known as authorization. The issuing bank sends the response back to the credit card network. If the authorization was approved, the issuing bank assigns and transmits an authorization code along with its response, and a hold is placed on the cardholder's funds.
6. The credit card network sends the approval to the merchant's payment processor, who in turn sends the approval to the acquiring bank.
7. The acquiring bank routes the approval code or response to the merchant's terminal. Depending on the merchant or transaction type, the merchant's terminal may print a receipt for the customer to sign or request another type of authorization such as PIN number.



## The settlement process

1. At the end of each day, the merchant closes out the day's sales and transmits the information to their payment processor, who in turn transmits the information to the acquiring bank. This step, in which the merchant initiates the transfer of funds to their account, is known as capture.
2. The acquiring bank routes all transaction information to the credit card network for settlement, who in turn passes on all approved transactions to the cardholder's issuing bank.
3. The issuing bank transfers the funds to the merchant's acquiring bank, minus the interchange fee.
4. The acquiring bank then deposits the amount, less the merchant discount fee, to the merchant's bank account.
5. The issuing bank bills the cardholder for the transaction.

## Industry trends

The above-described process is a testament of the magnitude of payment industry becoming deeply digitalized in the past decade, with large investments in new technologies and innovative digital solutions. **Digitalized environment has brought increasing competition to legacy players** not only by digital start-up banks, but also from non-banking financial institutions, fintech and Big Tech players. In such competitive environment expectations of customers have changed – **now they are looking for more innovative products and greater service and do not want to operate only as a background operations solution provider**. Traditional financial institutions, faced with competition and under pressure to deliver higher margins, choose to outsource (parts of) their payments business to be able to focus on basic services. Before digging deeper into the service industry, we look at the industry trends to ensure adequate understanding of the payment service providers' role in the changing payment landscape.

Nowadays, **cash is being replaced not only by the cards, but also by a wide range of alternative solutions such as e-wallets, account-to-account payments, or cryptocurrencies**. Mobile payment options, such as mobile wallets and mobile payment applications, have gained on popularity due to their convenience, speed, and ease of use - payment transaction can be realized by simply scanning a QR (quick response) code or using NFC (near-field communication) technology. While mobile wallets are used for in-store purchases, digital wallets can be used for online purchases and peer to peer payments, such as transfer of funds to friends or family. Consumer lending solutions like PNB (buy now pay later) have gone a step forward, providing digital customers convenience of delayed payment, without credit check, which is the reason of its today's universal acceptance. Maybe still not broadly used, there is no doubt that many modern payment solutions will become mainstream. Innovative digital payment solutions are widely accepted by younger generation, which is more technology familiar and less interested in traditional credit ecosystem. It is the reason more we believe that digital payment transactions will continue to grow in the following years.

**Softpos is a solution which allows the business to accept contactless payments directly on their smartphone** and without the use of any additional software and hardware such as POS terminals or mPOS. Payments are accepted easily and at every place, based on the usage of NFC technology. Softpos is especially convenient for small businesses such as delivery services, taxi drivers, hairdressers or groceries. With a usage of Softpos, investments in procurement and maintenance of expensive payment equipment no longer exists, resulting in lower operating costs.



## Industry highlights

Bloomberg Adria

Another example is **Android POS terminal** which works as a **portable cash register for mobile payment devices** with an Android operating system. It replaces traditional mobile POS devices and eliminates the need for clumsy cash registers, also resulting in lower expenses and more flexibility. On big retailers' side, the trend is going towards higher usage of a **Single POS terminals** providing the merchant **direct connection with multiple banks (acquirers) on a single physical device** and based on that to always use the lowest acquiring transaction fee.

Looking at the macro level, there is an increasing adoption of instant cross-border payment technology and there are growing **initiatives for establishing of national payment infrastructures**. In the EU, instant payment infrastructure (TIPS), which settles payment transfers in euro between the countries in Eurozone, central banks of Sweden, Denmark and Norway, have developed P27 platform, which enables the processing of payments in multiple currencies across borders - the Nordic region is now in a one instant payment system.

Another trend gaining traction globally is the **open banking**. Initiated by the regulator - such as introduction of PSD2 in EU - or being nudged forward through market competition - such as in US - open banking is expected to be a key driver of changes in the financial services industry in the following period. To encourage competition and innovations, legislation in the EU obliged banks to share customers' data with other financial and non-financial service providers. Decision what information, how much and to whom remains under control of consumers. Although still not widely distributed, we see emergence of open banking providers, usually by fintech startups. However, to keep the race on the market, Big Tech companies and banks will have to decide to build open banking applications, too. So far developed open banking solutions include services from personal finance management, digital debt advising, aggregation of all accounts into a single application, online banking without the use of a card or application and similar.

Complex market environment and growing competition are changing the roles of industry players rapidly. Therefore, examples of collaboration are not rarely seen, while **examples of consolidation** are much more exposed. Consolidation wave started with banks outsourcing payments businesses (for example, Banca Intesa sold its payment processing business to Nets), while it is going further with the need of players to increase volume of transactions to cover expenses of platforms.

**Networking companies**, such as Visa and Master card, are looking to adapt to the changing market conditions and are coming closer to the customer. In that respect, Visa recently acquired open banking aggregator Tink, while Mastercard bought a platform for A2A business, Vocalink. Initiations to squeeze networking companies are seen in many countries by introduction of national card schemes such as "girocard" in Germany, "Carte Bancaire" in France or "Dina Card" in Serbia. Dina Card is available free of charge for all current account owners in the country. By using of Dina Card for payment, interchange fee is kept at central bank level.





## Peer comparison

Given the complexity of the industry, **various stakeholders are involved in the payment value chain and that was our starting point for the selection of peer group. Our peer group is comprised of companies that provide outsourcing and maintenance of POS and ATM terminals, payment gateways, acquirers and payment processors.** In many cases, these companies have several roles within the value chain. Market leaders in terms of revenue size were cherry-picked for the purposes of peer comparison exercise. Despite looking fragmented, the market is highly consolidated, with the domination of two large European groups, Nexi and Payten, thanks to their acquiring spree across the globe, which involved Adria region as well.

Payment processing industry is a **business that does not require a significant amount of capital**, proven by the **extraordinary returns on equity** delivered by the selected peers. The average ROE of 10% is somewhat misleading due to negative ROE of Monri Payments. **Monri has a negative outstanding equity amount and if we exclude Monri for the sake of this exercise, average ROE equals 32%.**

Such strong return on equity is an indication of a great potential that this industry has to offer, however, it also comes as a result of many acquisitions which resulted in much greater market share of industry players and further accompanied by the goodwill which is usually presented solely in the consolidated financial statements of holding companies incorporated outside the Adria region.

The **industry is labour-heavy**; therefore, employee expenses generally account for the highest share of P&L expense, followed by processing related expenses such as equipment and data communication, infrastructure costs; including costs to maintain software applications. Employee expenses on average, for the selected peers, account for 30% of sales. Halcom Slovenia has the largest share of employee expenses in their P&L structure (i.e. 58.2%), which is then reflected in the second lowest EBITDA margin among the peer group (i.e. 17%). Share of employee expenses has increased by 5.5pp yoy, given the increase of employee expenses by 11%, while sales have remained relatively stable. Apart from employee expenses, cost of materials have also increased by 15% and pulled Halcom's (SI) profitability further lower.

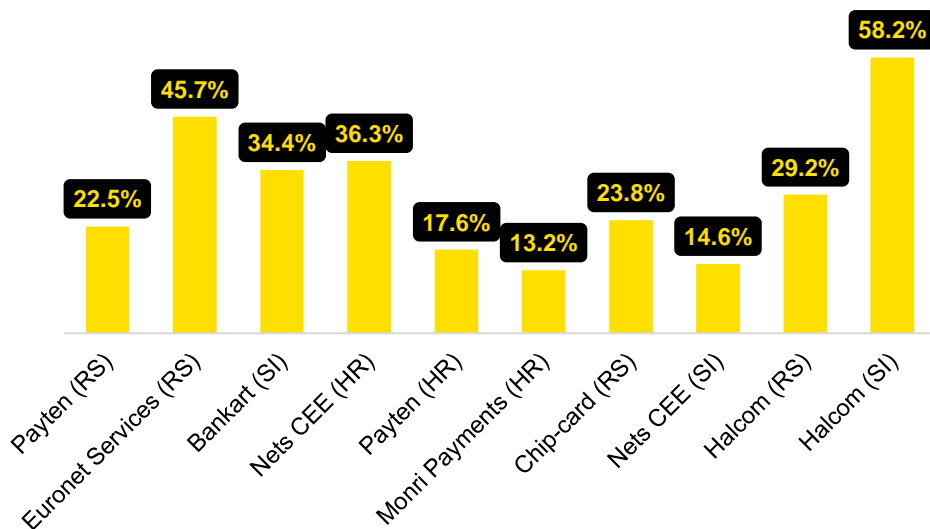
**Exhibit 4. Peer group financial data - Adria**

Company name	Sales			Sales growth			EBITDA margin			EBIT margin			ROE			ROIC			Net debt/EBITDA		
	EUR in millions			%			%			%			%								
	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Payten (RS)	12.1	15.2	18.4	20.7	25.7	20.8	37.5	31.7	35.9	17.1	12.7	15.1	18.4	13.4	16.7	12.5	8.4	12.1	0.8	0.6	(0.0)
Euronet Services (RS)	10.8	11.1	11.8	8.7	2.8	5.6	37.9	29.9	29.7	36.0	27.0	26.4	94.8	56.4	83.9	93.5	67.0	58.6	(0.9)	(0.9)	(1.7)
Bankart (SI)	32.4	32.9	34.9	9.7	1.6	6.3	23.3	21.6	24.0	9.2	7.7	9.2	14.4	10.9	13.1	13.3	9.6	11.0	(0.2)	(0.6)	(0.9)
Nets CEE (HR)	42.6	32.8	37.5	17.8	-22.9	14.2	20.0	23.9	28.2	8.3	6.3	11.2	7.1	4.8	7.8	6.3	3.6	7.2	(0.5)	(0.7)	(0.8)
Payten (HR)	16.8	14.6	13.6	-5.4	-13.2	-6.8	33.1	35.4	40.2	17.0	17.7	23.6	33.1	22.7	28.9	20.3	16.1	18.1	0.5	0.2	0.0
Monri Payments (HR)	1.1	1.7	3.4	15.3	45.2	107.5	-15.5	-9.2	16.3	-16.2	-10.2	15.5	n.a.	n.a.	-184.2	n.a.	n.a.	252.5	(1.6)	(1.3)	(0.2)
Chip-card (RS)	3.3	3.6	5.2	37.2	7.9	46.2	27.1	35.6	35.5	11.8	18.9	22.9	12.2	20.7	29.5	10.8	15.3	22.5	(0.3)	0.1	(0.2)
Nets CEE (SI)	19.3	19.4	18.7	16.8	0.4	-3.6	12.4	16.4	23.0	0.0	-2.5	7.6	-1.2	-5.6	16.0	0.0	-4.5	13.4	1.5	0.7	(1.4)
Halcom (RS)	4.3	4.7	4.7	12.5	7.6	0.3	9.3	12.1	10.0	7.8	10.0	7.4	65.1	82.2	62.3	63.2	81.9	56.2	(0.6)	(0.0)	(0.0)
Halcom (SI)	8.9	8.3	8.3	-0.5	-7.2	0.3	30.4	28.4	16.8	24.8	21.7	8.4	59.8	49.1	29.3	42.6	38.0	15.9	(0.0)	(0.0)	(0.1)
<b>Average</b>	<b>15.2</b>	<b>14.4</b>	<b>15.6</b>	<b>13.3</b>	<b>-5.0</b>	<b>8.5</b>	<b>21.5</b>	<b>22.6</b>	<b>26.0</b>	<b>11.6</b>	<b>10.9</b>	<b>14.7</b>	<b>33.7</b>	<b>28.3</b>	<b>10.3</b>	<b>29.2</b>	<b>26.1</b>	<b>46.8</b>	<b>(0.1)</b>	<b>(0.2)</b>	<b>(0.5)</b>
<b>Median</b>	<b>11.5</b>	<b>12.8</b>	<b>12.7</b>	<b>13.9</b>	<b>12.1</b>	<b>-1.4</b>	<b>25.2</b>	<b>26.1</b>	<b>26.1</b>	<b>10.5</b>	<b>11.4</b>	<b>13.2</b>	<b>18.4</b>	<b>20.7</b>	<b>22.8</b>	<b>13.3</b>	<b>15.3</b>	<b>17.0</b>	<b>(0.2)</b>	<b>(0.0)</b>	<b>(0.2)</b>

Source: Financial statements, Bloomberg Adria analytics



Exhibit 5. Cost of employees as % of sales



Source: Financial statements, Bloomberg Adria analytics

**Doing business is based on mid to long-term contracts with merchants and low churn**, i.e. high renewal rates. High customer retention rates were fuelling a lively M&A activity in the recent years, given the difficulties to acquire customers organically. Further, it translates from the fact that products and services offered are highly commoditized and nowadays most of the payment processors offer omnichannel solutions, that is, both retail and e-commerce payment processing. Moreover, nearly all the players offer payment gateways and payment processing solutions, cross border transactions, fraud monitoring, etc. New innovations like the one from Monri in Adria region (single POS) or BNPL product from Klarna are - in most cases - the sole door-opening solutions for the purpose of organic merchant acquiring.

Interestingly, the **entire peer group population has a negative net debt position**, i.e., cash amount exceeding outstanding debt. Given low capital

requirements and strong margins, that does not come as a surprise.

Certain companies like Nets and Payten in Croatia have experienced a **minor setback in 2020 due to the cut-off of most retail services following the COVID-19 widespread**. Indeed, tourism activity that generates a significant amount of card purchases has been suppressed by the civil protection measures. Other industry participants fared better, supported by the shift of consumer spending from retail to e-commerce. **E-commerce drives even more cashless transactions, hence 7 out of 10 peer companies have managed to achieve sales growth in 2020.**

Slovenian and Croatian companies Nets and Bankart are leading in terms of sales size given higher adoption of cashless transactions in their respective countries and due to their oligopoly-like market positions in these countries. A few competitors in their respective countries include Payten - incl. Monri which is owned by Payten - and banks that have payment processing solutions in-house.

Monri payments has delivered the lowest sales amount in 2021, however, it is the highest growing company among the peer group, with its 108% sales growth in the given year. Their **single POS solution** has solved a real-life problem in the Adria region. Prior to their innovative solution, merchants have had multiple POS devices tailored to different customer's card origin (i.e. issuer). Merchants with only one POS device had higher fees attached for the transactions in which customer's issuer bank was different than merchant's acquirer bank from which they've rented a POS device. In order to circumvent those higher fees, having multiple POS devices was the only solution. Monri's back-end connection with multiple banks has allowed merchants to communicate directly with the issuer bank over the Monri's POS and avoid paying higher fees.

Notable **difference between EBIT and EBITDA margins** is derived from the **short-termism in useful life of their tangible and intangible assets**. As an example, Payten depreciates its electronic equipment - which accounts for 94% of the tangible and intangible net book value - over the 1-3 years useful life.



# Peer comparison

Nets Croatia, unlike Payten, does not have a significant amount of electronic equipment in their ownership, however, their balance sheet is consisting of a considerable amount of software and capitalized internal development. Software specifically designed for card processing has a useful life of 4 years, while internally developed software which is being implemented into POS hardware and ATM's is depreciated over the 6-10 years useful life. That being said, the difference in EBIT and EBITDA margins for the selected peers amounts to 11pp on average.

## Global peers

We see the **mirroring image in the global peer group. Higher growth rates compared to the Adria region, but lower margins, lower returns and significantly higher indebtedness.** These companies are predominantly generating revenues from North American and Western European market, which have astronomically higher cashless transactions not only in absolute, but also relative terms compared to Adria region.

**Sales growth was fueled by growth initiatives such as new merchant acquiring, increase in payment processing volume, certain other services sold primarily to issuers,** and last, but not least due to **M&As** which significantly increased the size of companies like Nexi, Worldline, Fidelity, Fiserv, and Block. Synergies from these financial transactions are yet to materialize, since they've taken place only recently. Operational difficulties of merging two large companies and one-off expenses derived from such transactions have for sure aggravated the margin profile of selected global peers.

In addition, robust competition forced them to go full speed and behave in an imprudent manner, hence the **high median indebtedness** measured through **net debt/EBITDA ratio of 3x.** Management of these companies opted for speed instead of prudence which explains the mixed picture across all financial ratios.

Adyen stands out among the peers as a company that hasn't been particularly active in respect of M&A, but rather focused on internal operations. A result of such actions is manifested in the highest returns on equity and invested capital among the peer group.

Exhibit 6. Peer group financial data - Global

Company name	Sales			Sales growth			EBITDA margin			EBIT margin			ROE			ROIC			Net debt/EBITDA		
	EUR in millions			%			%			%			%								
	2020	2021	2022	2020	2021	2022	2020	2021	2022	2020	2021	2022	2020	2021	2022	2020	2021	2022	2020	2021	2022
Adyen	3,641	5,995	8,936	37.1	64.6	49.0	11.1	10.5	8.2	10.3	9.9	7.4	24.4	31.0	26.7	25.9	29.7	23.7	(6.5)	(7.1)	(8.7)
Fidelity	11,011	11,739	13,824	21.5	10.6	4.7	35.7	37.7	(83.2)	4.4	7.6	(111.0)	0.3	0.9	(44.8)	0.5	0.8	(26.8)	4.2	3.5	n.a.
Global Payments	6,512	7,211	8,540	51.1	14.8	5.3	35.5	37.9	27.0	12.0	15.9	7.1	2.1	3.6	0.5	2.1	3.1	0.6	3.1	3.3	5.3
Fiserv	13,028	13,727	16,877	45.8	9.3	9.3	35.4	34.8	40.0	12.5	14.1	21.1	2.9	4.2	8.2	2.5	3.2	5.6	3.9	3.7	3.0
Worldline	2,463	3,689	4,364	3.4	49.8	18.3	22.3	25.3	15.4	8.2	8.2	7.7	2.6	(8.1)	3.2	1.2	1.2	1.4	6.4	3.7	3.3
Nexi	1,560	2,801	5,208	0.4	79.5	85.9	28.7	20.5	n.a.	13.5	2.1	5.1	8.9	0.7	1.1	2.8	0.4	n.a.	5.8	8.0	n.a.
Paypal	18,819	21,463	26,184	20.7	18.3	8.5	21.6	22.4	19.3	15.3	16.8	13.9	22.8	20.0	11.5	10.5	14.3	9.0	(0.7)	(0.1)	0.1
Affirm	461	730	1,199	92.7	70.8	55.0	(19.3)	(40.0)	(59.2)	(21.2)	(44.1)	(64.2)	(25.8)	(17.1)	(27.2)	(0.3)	(14.1)	(13.5)	n.a.	n.a.	n.a.
Block	8,331	14,941	16,682	101.5	86.0	(0.7)	1.3	2.1	(1.2)	(0.2)	0.9	(3.6)	9.7	5.6	(5.3)	(0.4)	2.3	(3.9)	(6.5)	(0.8)	n.a.
<b>Average</b>	<b>7,314.1</b>	<b>9,144.1</b>	<b>11,312.6</b>	<b>41.6</b>	<b>25.0</b>	<b>23.7</b>	<b>19.1</b>	<b>16.8</b>	<b>(4.2)</b>	<b>6.1</b>	<b>3.5</b>	<b>(12.9)</b>	<b>5.3</b>	<b>4.5</b>	<b>(2.9)</b>	<b>5.0</b>	<b>4.5</b>	<b>(0.5)</b>	<b>1.2</b>	<b>1.8</b>	<b>0.6</b>
<b>Median</b>	<b>6,511.9</b>	<b>7,210.8</b>	<b>8,935.6</b>	<b>37.1</b>	<b>10.7</b>	<b>23.9</b>	<b>22.3</b>	<b>22.4</b>	<b>11.8</b>	<b>10.3</b>	<b>8.2</b>	<b>7.1</b>	<b>2.9</b>	<b>3.6</b>	<b>1.1</b>	<b>2.1</b>	<b>2.3</b>	<b>1.0</b>	<b>3.5</b>	<b>3.4</b>	<b>3.0</b>

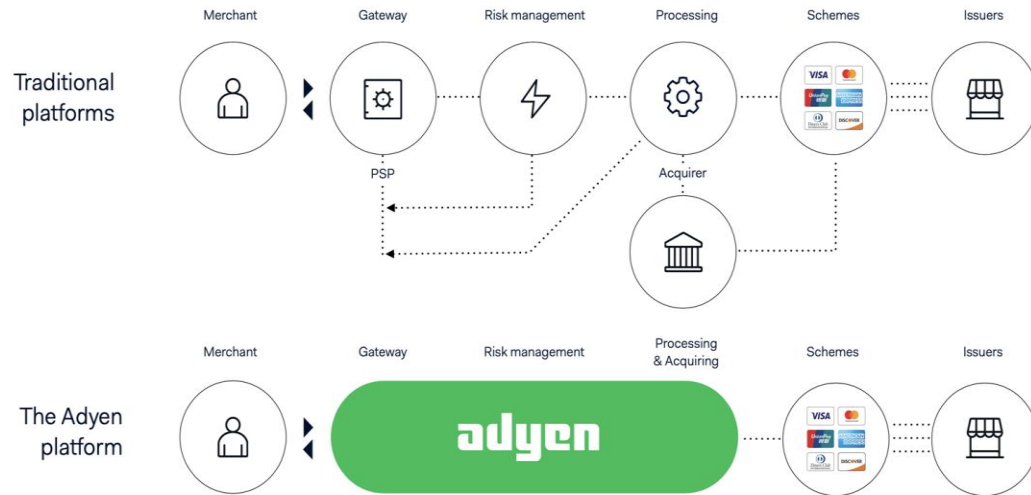
Source: Bloomberg, Bloomberg Adria analytics





Europe is Adyen's principal market in terms of processed volumes and net revenues, accounting for 56% of net revenues in FY22, however over the last couple of years operations in North America are toning down the gap with remarkable growth rate of 44% CAGR for the period 2019-2022, and now accounting for 26% of net revenues, compared to merely 15% back in 2019.

### Exhibit 7. Adyen's solutions

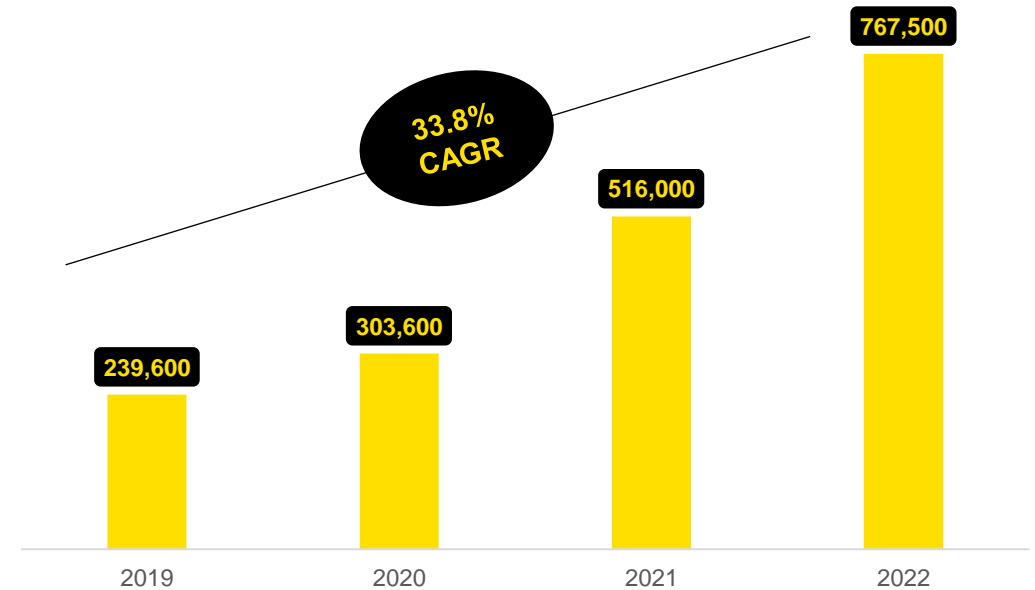


Source: www.adyen.com

**Adyen's secret sauce** was in **targeting large multinational corporations** within the merchant acquiring business by solving practical and operational issues for these corporations. They were the first to resolve the complexities on the merchant side arising from having multiple parties involved in the payment process. Prior to their multi-disciplinary approach merchants had one party as a gateway provider, another party responsible for processing, someone for risk management procedures, and then the acquirer. This meant four different parties

which were multiplied by the number of countries in which merchants had operations. The number of partnerships and administration burden going along with it was inefficient, hence Adyen combined all of the solutions under the same roof, alongside cross-border solutions as well. Such practicality has translated into sizable revenue growth, while targeting large multinational corporations has, meanwhile, allowed Adyen to auspiciously manage costs, unlike certain other payment service providers that are dealing with a large number of small merchants, thus resulting in operational burden that requires ample workforce.

### Exhibit 8. Adyen – processed volumes (in € millions)



Source: Bloomberg, Bloomberg Adria analytics



**Rapid consumer adoption of cashless transactions, novel industry innovations, and fast-paced industry evolution have led to vigorous M&A activity in the recent years.** One noteworthy financial transaction has occurred in 2019 when **Atos handed a 23.4% stake in Worldline** to its shareholders, valued at €2.3bn. The handout of shares by Atos has freed up liquidity of Worldline shares and increased free float to approx. 45%. Additionally, handout was followed by the public statement from Atos' Management, stating that they want to see Worldline consolidating the payment industry. That statement was a hint of what could have been expected going forward. In 2020, Worldline merged with Ingenico in a deal valued €8.6bn (EV/EBITDA ~16x), making it then a single payment processor that produces POS devices in-house. The major reason behind the acquisition is Ingenico's merchant acquiring business in the US. North America is a geography in which Worldline lacked major presence, so the deal has given it an immediate foothold in the market. The deal with Ingenico made Worldline a payment leader in Europe and among the top 5 payment service providers in the world. The implied equity value of the deal was €7.8bn, implying a premium of 16% to the closing market value of Ingenico's shares prior to the announced deal.

Another noteworthy historical transaction is the **merger of Nexi and Nets, followed by the merger of Nexi with Sia.** According to the public announcement merger with Nets will create cash synergies of c. €170m p.a., while the merger with Sia will benefit with c. €150m p.a. Nets shareholders have received 406.6 million of newly issued Nexi shares, resulting in a pro-forma ownership of 39% in Nexi + Nets (or 31% when considering Nexi + Nets + SIA).

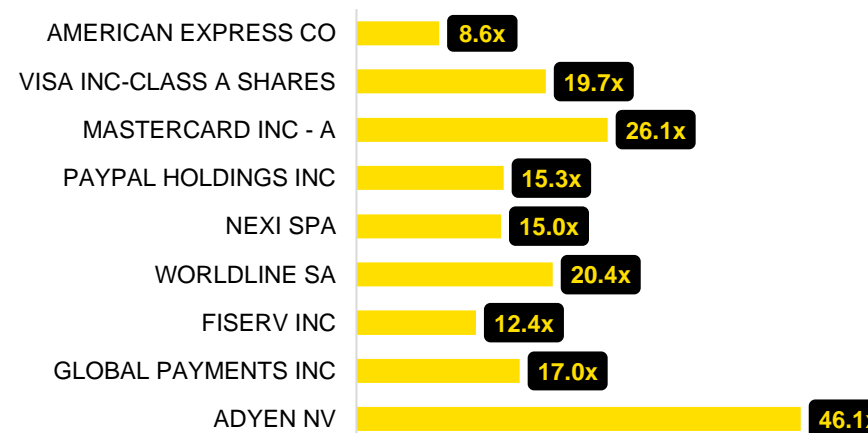
### Exhibit 9. EV/EBITDA multiples in precedent transactions

Acquirer	Target	EV/EBITDA multiple
Worldline	Ingenico	16x
Nexi	Nets	20x
Nexi	Sia	19x
Fidelity	Worldpay	24x
<b>Average</b>		<b>20x</b>

Existing Nexi shareholders received 61% stake in Nexi + Nets or 48% when considering Nexi + Nets + SIA. Transaction has been structured on the basis of equivalent 2020 expected EV/EBITDA multiples. Closing price of Nexi shares as of 13th November was equal to €14.71, resulting in an implied EV/EBITDA of 20x. Nexi will benefit from the merger through access to Nets' strength on the issuer side, considering that the issuer processing and issuer services have accounted for over 30% of Nets standalone sales. Merger with Sia was also an all-share deal valued at a similar multiple of ~19x EV/EBITDA.

The **largest transaction** by a significant margin within the payment processing industry was the **acquisition of Worldpay by Fidelity International Services**, occurred in 2019. Equity value of the transaction amounted to €29.4bn, boosted by the debt of €6.8bn, attaching an enterprise value of €36.2bn, or an implied EV/EBITDA multiple of ~24x according to the latest financial data prior to the deal announcement, i.e. YE2018. As for the current value of public companies, an average of 20x EV/EBITDA multiple for the 9 selected and listed payment processors, acquirers and payment networks is completely in line with the aforementioned M&A multiples, confirming the industry's attractiveness.

### Exhibit 10. EV/EBITDA multiples of listed payment providers



Source: Bloomberg, Bloomberg Adria analytics, March 17th, 2023



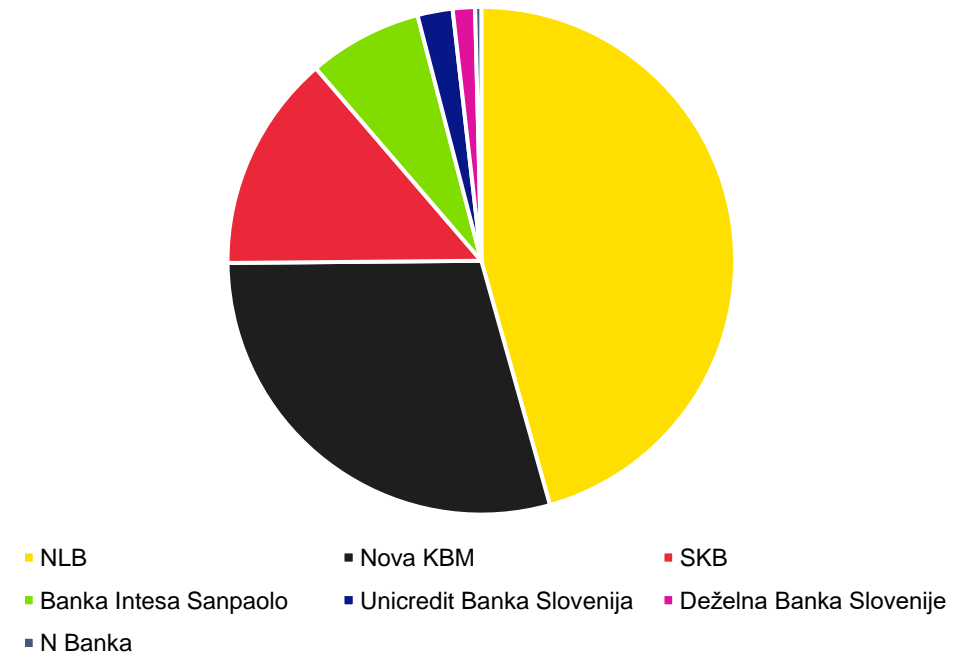
As often is the case, industry-wide trends from the West have found its way through Adria region as well. Nets Croatia and Nets Slovenia are now consolidated into Nexi group following the merger of Nexi and Nets. Monri payments was acquired by Payten back in 2019 and is - together with Chip Card, Payten Croatia and Payten Serbia – consolidated into Payten Holding, which is a subsidiary of Asseco. With that in mind, Adria's payment processing landscape is being dominated by Nexi, Payten, Bankart and legacy banks that have not yet divested their payment processing arms.

As for the legacy banks, the **European payment industry is in a phase of rapid consolidation, with banks seeking partners or disposing of their own units and specialized players ramping up their business.** Credit Agricole is in talks with Worldline for potential partnership in payments, while Italy's Banco BPM is considering a possible sale or partnership for its payment unit. Italian lenders including Intesa Sanpaolo, BPER, Banca Monte dei Paschi di Siena and Banca Carige have all sold their merchant-acquiring businesses in the past five years. UniCredit bank is also considering various options for its payments arm service, including potential joint ventures with European or US payment service providers.

It seems like that certain banks have identified the potential of the payment processing business, and at the same time the threat by certain payment processors which are becoming more vertically integrated, targeting not only merchant acquiring business, but also the issuer side of the ecosystem. In our opinion, banks are unable to compete with innovative, fast-paced payments processors offering new solutions and developing different business models. On the other hand, divesting its payment processing business is also dangerous for their long-term viability given the strong penetration of the payment processors in the merchant-acquiring market and emergence of a large number of digital wallets, some of them owned by the payment processors itself.

Joint venture is the go-to solution in our opinion. In Slovenia, banks have protected their position by investing into payment processing market leader Bankart, hence NLB has a ~46% stake in Bankart, followed by ~29% stake ownership by Nova KBM, ~14% by SKB and the remaining stakes owned by other Slovenian banks. Given the intensified competition within the whole payment ecosystem, highly active M&A market can be expected going forward. We wouldn't be surprised to see large mergers or acquisitions valued at tens of billions due to already highly consolidated market share in many regions of the world.

**Exhibit 11. Bankart ownership structure**



Source: [www.bankart.si](http://www.bankart.si)



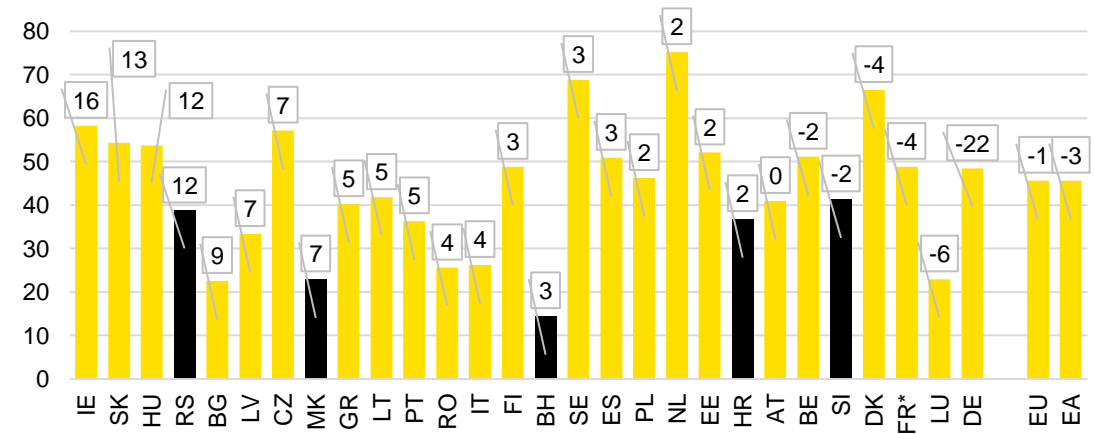
Looking forward, we believe value growth of cashless transactions will outweigh lower pricing and given the large share of employee expenses, which are fixed to some extent, profitability will hugely benefit from operating leverage in action. We anticipate continuous rise in payment processing value in Adria region grounded on two principal factors:

- 1) rising penetration of cashless transactions in the long term from currently low base, and
- 2) above-average inflation positively affecting payment value size in the short term.

**E-commerce development** carries a high potential for increase in the number of transactions. Adria countries still stand at the lower end of e-shoppers ratio distribution in Europe, however the share of online shopping is rising above the EU average in the recent years in all Adria region countries except Slovenia. Consumer habits are highly important in this respect, with female population being oriented onto apparel, while men are more buying electronics online – both of these categories are discretionary consumer goods and would be affected by retail spending adjustment to increased costs and poorer macro outlook. However, we still think this can be at least partly offset by online shopping’s fundamental advantage - competitive pricing given lower fixed costs and especially price discounts in sale promotions. Also, the 3P model rollout by certain companies in the region, coupled with synergy effects in some, will inevitably lead to product assortment expansion, more merchants, more customers and thus, more transactions.

The core upgrade in the volume of cashless transactions will, in our view, also come with firms aiming better profitability – business growth of smaller firms is here to benefit the most from e.g. mobile payment tools allowing their customers to pay more easily. Prompt digital payments also target better cash flow profiles against payment arrears. Needless to mention that providing the option of electronic payments to its customers the merchants are awarded by more customers and higher average transaction amounts.

**Exhibit 12. Online purchases in 3 months - % of surveyed population sorted descending according to changes 2022 vs 2020 (in callouts as pp)**



\*delta represented for 2022 vs 2021

Source: Eurostat, Bloomberg Adria analytics



Inversely, **take rates (i.e. commissions) of payment processors will, in our opinion, have an opposite course** for the following reasons:

- 1) market competition between existing players,
- 2) new competition arising from innovative payment solutions, and
- 3) higher contractual rebates (i.e. lower commissions/take rates) going along with higher processing volume with existing merchants.

Nevertheless, we anticipate that growth of value of cashless transactions will more than offset a decline in take rates. Adria region has somewhat lower presence of competitors due to first mover advantage of Nexi/Nets and Payten, which have managed to seize an enormous market share, and thus have lower pressure on their take rates from other market participants. Furthermore, there is still an immense number of unserved merchants and therefore, no need to start battling over the served ones with lower pricing.

Industry-wise, we also see a **potential in large legacy banks** still having not outsourced their payment processing solutions – (at least some of) these banks will presumably **spin off their payment processing departments** for later sale or joint venture with some of the market leaders in payment processing, which will then further increase processing volume for existing market players.

Alternative payment methods such as QR codes and digital wallets are on the rise and are targeting interchange fees and assessment fees captured primarily by payment networks such as Visa and Mastercard, together with card issuers (i.e., legacy banks). By circumventing payment network, payment processors may retain a larger portion of the fees, while at the same time they are able to offer merchants lower commissions for a win-win outcome. Current trends and turbulences in the payment industry are favouring payment processors, which got tired of doing the heavy work and receiving the smallest piece of pie in exchange.

Hence, they have decided to take over the whole payment ecosystem, from issuing to acquiring.

On the global scale, we see Paypal as the largest beneficiary of the current trends given their size, brand recognition and fact that they were the first to offer solutions that make them fully vertically integrated, from issuing, acquiring, gateway, processing and acting as a network in certain type of transactions such as payments directly from the Paypal account balance and QR code payments.



## Bloomberg Adria Team Analytics

**Andrej Knez, Chief Markets Analyst**  
andrej.knez@bloombergadria.com

**Ivan Odrčić, Lead Financial Markets Analyst**  
ivan.odrcic@bloombergadria.com

**Marina Petrov, Senior Financial Markets Analyst**  
marina.petrov@bloombergadria.com

**Jelena Zindović, Senior Corporate Finance Analyst**  
jelena.zindovic@bloombergadria.com

**Matteo Mošnja, Corporate Finance Analyst**  
matteo.mosnja@bloombergadria.com

**Ilija Nešić, Corporate Finance Analyst**  
ilija.nesic@bloombergadria.com

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