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Company: Adyen (OTCMKTS: ADYFY)

Recommendation: Buy

Market Capitalization: \$22B

Enterprise Value: \$24B

Current Price Per Share: \$6.97

Target Price Per Share: \$13.45

Expected Return: 93%

Disclosure: I have an ownership position in shares of Adyen at the time of writing.

## Business Background

Adyen was founded in 2006 by Pieter van der Does and Arnout Schuijff. Pieter and Arnout previously built a payments company called Bibit that they sold to WorldPay in 2004 for an estimated price of [€100 million](#).

Worldpay was then acquired by FIS (formerly Fidelity National Information Services). FIS recently announced that it will [spin off a majority stake](#) of WorldPay to private equity firm GTCR. GTCR will own 55% and FIS will retain a 45% stake. This is after FIS had to take a [\\$17.6 billion impairment charge](#) in 2019 amid its struggles to grow Worldpay.

Following the sale of Bibit, Pieter van der Does and Arnout Schuijff used the knowledge and experience they acquired from BiBit to build a new payments company that was even better than the one they sold to WorldPay in 2004. They called this new company “Adyen”, which means “Start Over Again” in Surinamese.

Adyen is a payment company based out of the Netherlands. It allows companies to accept payments from various channels including e-commerce websites, mobile phones, and point-of-sale terminals. Its customers consist of large, global enterprises that receive payments from around the world. **Exhibit B** shows a list of some of Adyen’s customers.

### Exhibit A: Payment Methods



Source: Company Website, Investopedia

### Exhibit B: Customers

Autodesk	Linkedin
Bonobos	L'Oreal
Booking.com	Louis Vuitton
Casper	McDonald's
Dollar Shave Club	Mercari
Dunkin	National Express
eBay	Netflix
Electrolux	O'Neill
Facebook	Pret A Manger
Farfetch	Quicksilver
Gofundme	Rosewood Hotels & Resorts
Hakkasan	Sephora
Happy Socks	Shein
Hello Fresh	Spotify
HMS Host	Swarovski
Hugo Boss	The Body Shop
Joe & the Juice	Tory Burch
Lego Holding	Uber
Levi's	Upwork

Source: [Company Website](#), [PR Newswire](#)

Adyen built a unified payment software in-house to make the payment process seamless and more efficient for its merchants. In order to do this, the company doesn't do acquisitions. Acquisitions add more payment systems overall but this makes the whole process slower since all of the connections to each payment process have to be managed and the more third parties there are, the higher the chance something gets messed up.

A unified payment system such as Adyen's allows updates and new services to be rolled out a lot quicker to merchants. Adyen goes as far to have its own private clouds, which the company builds out globally to make its unified system faster and more resilient.

An analogy to help understand why having the whole payment system done in-house, with no third parties, is faster and more efficient than acquiring many different payment systems would be to think of the way software is distributed today.

Adyen's process is similar to companies who have their software in the cloud so when an update needs to get rolled out, the software provider can roll out the updated software all at once. This is in contrast to when software was distributed by disks it was much slower to roll out updates since each computer had to be updated.

Adyen's revenue is divided into the following four different types: settlement fees, processing fees, sales of goods, and other services. **Exhibit D** shows a geographical breakdown of where Adyen earns revenues from.

#### Exhibit C: Company Revenue From Contracts With Customers By Goods or Service

Types of goods or services (in EUR'000)	H1 2023	H1 2022
Settlement fees	485,582	3,641,350
Processing fees	209,633	179,992
Sales of goods	41,178	28,173
Other services	117,157	97,966
<b>Total revenue from contracts with customers</b>	<b>853,550</b>	<b>3,947,481</b>
Costs incurred from financial institutions	(74,409)	(3,313,269)
Costs of goods sold	(40,034)	(25,683)
<b>Net revenue</b>	<b>739,107</b>	<b>608,529</b>

Source: Company Filings

#### Exhibit D: Geographical Breakdown

Net revenue - Geographical breakdown and year-on-year growth (in EUR '000)	H1 2023	YoY%	H1 2022	YoY%
Europe, the Middle East, and Africa (EMEA)	417,279	2.0 %	347,387	30 %
North America	187,452	2.3 %	152,469	52 %
Asia-Pacific	84,307	3.1 %	64,237	53 %
Latin America	50,069	1.3 %	44,436	25 %
<b>Total net revenue from contracts with customers</b>	<b>739,107</b>	<b>2.1 %</b>	<b>608,529</b>	<b>37 %</b>

Source: Company Filings

## How Payment Processing Works

When a consumer buys a product by card, there are five or six parties involved in the transaction, depending on whether the payment processing is also the acquiring bank. This can be confusing so let's break down each party.

1. **Consumer** - This is me or you when we buy a product or service in a store.
2. **Issuing Bank** - This is the consumer's bank and the bank that gave the consumer his or her credit or debit card.
3. **Merchant** - This is the store where you purchased your service or product from.
4. **Acquiring Bank** - This is the merchant's bank.
5. **Payment Processor** - This is the party that processes the payment, which means analyzing for fraud transactions and transferring the funds to the merchant.
6. **Card Networks** – The card networks are how data (which is money in our digital age) travels throughout the payment process. The biggest networks are Visa and Mastercard but there are other smaller ones like Discover and American Express. The networks play the same role as a highway. Just as drivers use a highway to travel from one place to another, the card networks act as a highway for data to transfer between the issuing bank, the acquiring bank, and the payment processor.

The reason I said there can be five parties in a transaction is because sometimes the payment processor and the acquiring bank are the same company. Adyen is both, the acquiring bank and the payment processor, in many of the countries it operates in.

To be both, Adyen needs to get a banking license, which is a lengthy process that requires approval. The reason they go through the trouble of doing both and getting a banking license is because of Adyen's grand vision of being a unified payment system where they do everything in-house.

This makes the whole process more efficient and gives merchants higher authorization rates<sup>1</sup>. Being the merchant acquirer also allows Adyen to capture more fees. Merchant acquirers capture higher fees because they take on the financial risk of a transaction completing. The longer time it takes for a transaction to complete (i.e., airline tickets), the more financial risk there is since the merchant can become insolvent before the transaction is complete.

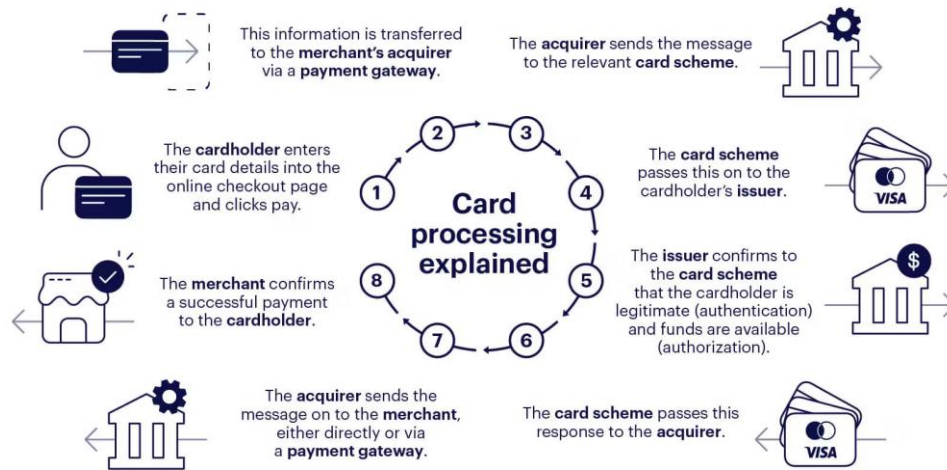
This is in contrast to some of Adyen's competitors who don't have a banking license. For example, the incumbents like FIS and Fiserv partner with banks instead of going through the process of acquiring a banking license.

**Exhibits E** and **F** show a typical transaction and the payment process that happens behind the scenes. I included both because **Exhibit E** shows the process in chronological order, which may be easier to follow, but **Exhibit F** gives a better idea of the relationship between each party.

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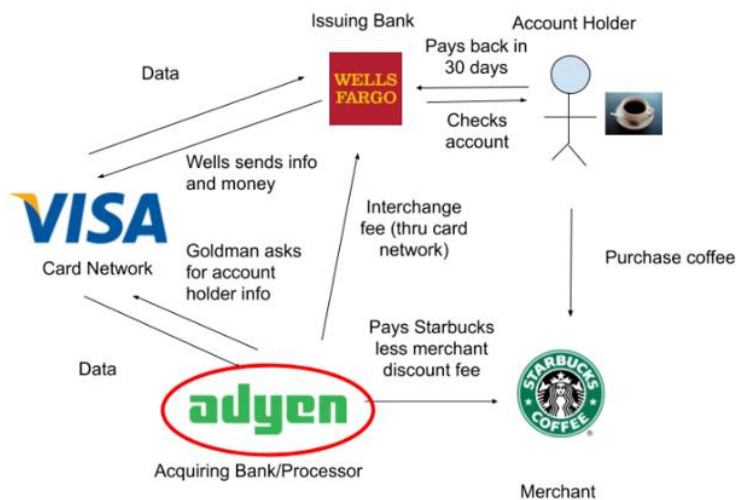
<sup>1</sup> [Authorization rates](#) is a measure of the percentage of successfully approved transactions and payments. These are important for a payment processor because if a consumer attempts to pay for a product and gets denied, even though the consumer has enough funds and the transaction isn't fraudulent, the merchant loses out on money and the consumer may choose not to shop at that same merchant again.

## Exhibit E: Card Processing Explained



Source: [Checkout.com](https://www.checkout.com)

## Exhibit F: The Payment Process



Source: [Business Breakdowns](https://www.businessbreakdowns.com)

When a customer goes to Walmart (the merchant) to buy a chair, they will insert their credit card into the POS (Point-of-Sale) terminal to make the payment. Behind the scenes is a very complicated process going on that happens in only a couple of seconds.

Once the customer inserts their credit card into the POS terminal, data is being transferred through the card network's highway (Visa or Mastercard) to the issuing bank (the bank that gave the customer his credit card).

The merchant acquirer runs a fraud check on both the customer and the merchant, and the issuing bank checks to see if the customer has an acceptable credit limit to purchase the transaction. If no fraud is found and the customer has enough credit then the issuing bank will

approve the transaction, which sends data back through the card network's highway to the merchant acquirer (Adyen). Then the merchant acquirer authorizes the credit card purchase, allowing it to go through.

This first process is called authorization. The [next two processes](#) are the settlement of the transaction and the funding, which is when the payment processor sends the merchant his money from the sale.

After the transaction is authorized, money isn't sent right away. This is where the settlement process starts. During the [settlement process](#), the merchant's bank communicates with the issuer's bank through the card networks (Visa or Mastercard) the details of the transaction.

The issuing bank and the merchant bank then agree to debit and credit the accounts of each party. The issuing bank will debit (decrease) the customer's bank account and the acquiring bank will credit (increase) the merchant's bank account. When the merchant's bank credits the merchant's account, the funding process is then complete.

During this whole process, different fees are taken during the transaction. [These fees consist](#) of the interchange fee, network assessment fee, and payment processing fee.

The interchange fee is the fee that the merchant acquirer pays to the card issuing bank. These fees are set by the card networks so it isn't negotiable. The interchange fee varies based on the type of card being used and the method of payment. For example, when the card is present for a transaction, fees associated with this method are higher than for card-not-present transactions.

The assessment fee is the fee that is paid to the card networks. These are fixed fees that will vary based on which card network used.

The payment processing fee, also known as the merchant service provider (MSP) fee, is the fee that the merchant acquirer or payment processor charge to process the payment. This fee is usually a fixed percentage of the transaction plus a markup. Adyen tries to be as transparent as possible on its pricing. They have a dedicated section on its website under the [pricing tab](#).

**Exhibit G** shows some of Adyen's payment methods for the United States. The highest fee in this process is the interchange fee that goes to the issuing bank. The reason this is the highest fee is because the issuing bank is taking the credit risk by issuing the customer a credit card. If the customer defaults by not repaying the issuing bank then the issuing bank is on the hook for the loss.



## Exhibit G: Adyen Pricing

<u>Payment Method</u>	<u>Shopper Country</u>	<u>Adyen Processing Fee</u>		<u>Payment Method Fee</u>
ACH Direct Debit	United States	\$0.13	+	\$0.27
Affirm	United States	\$0.13	+	Direct Contract with Affirm
Amazon Pay	Italy, United Kingdom, France, Sweden, Spain, United States, Austria, Netherlands Hungary, Cyprus, Luxembourg, Switzerland, Belgium, Denmark, Portugal, Ireland	\$0.13	+	Mastercard - .80% + Interchange++ Visa - .80% + Interchange++ American Express + .80% + 3.95% SEPA Direct Debit - .80% + € .25
American Express	Romania, Czech Republic, Greece, Canada, Italy, United Kingdom, Finland, France Poland, Sweden, Spain, Australia, Hong Kong, United States, Japan, United Arab Emirates, Brazil, Norway, Slovakia, Austria, Netherlands, Germany, Hungary, Cyprus, Luxembourg, Switzerland, Belgium, Denmark, Singapore, New Zealand, Mexico, Croatia, Liechtenstein, Malta, Slovenia, Gibraltar, Portugal, Ireland, The Baltics, Iceland	\$0.13	+	North America - 3.3% +\$0.10 Australia - 3.3% +AUD \$0.10 Global + .95%
Apple Pay	Global	\$0.13	+	Defined by card used
Mastercard	Global	\$0.13	+	Interchange++
Paypal	Global	\$0.13	+	Direct Contrat with PayPal + management service fee
Visa	Global	\$0.13	+	Interchange++

Source: Company Website

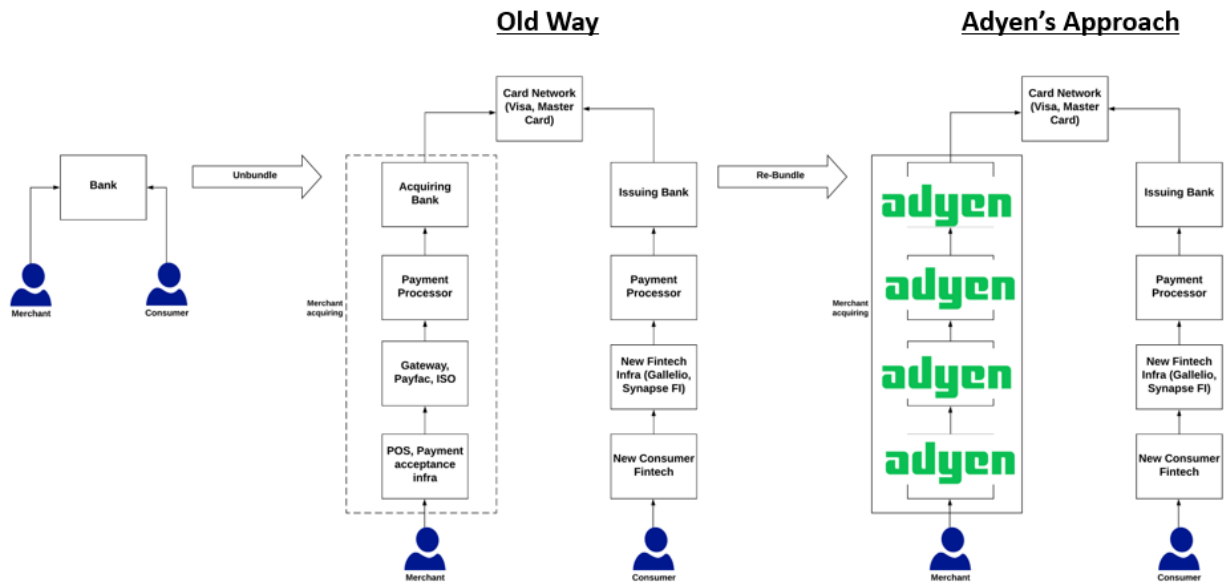
**Exhibit H** shows how the funds might be distributed in my example above if the merchant was selling the chair for \$100, but keep in mind that the fees can vary so they aren't exact. **Exhibit H** shows a list of the roles in a payment transaction along with some examples of the how the money flows for each role, and **Exhibit I** shows where Adyen is positioned in the old way of merchant acquiring versus Adyen's new approach.

Exhibit H: Example Of Fees That May Accrue To Each Party

Player	\$ Dollar
Merchant	\$100
Merchant Acquirer	\$0.35
Visa/Mastercard	\$0.12
Issuing Bank	\$1.98 (\$2.10 - \$0.12)
Merchant receives	\$97.55 (\$100 - \$2.10 - \$0.35)

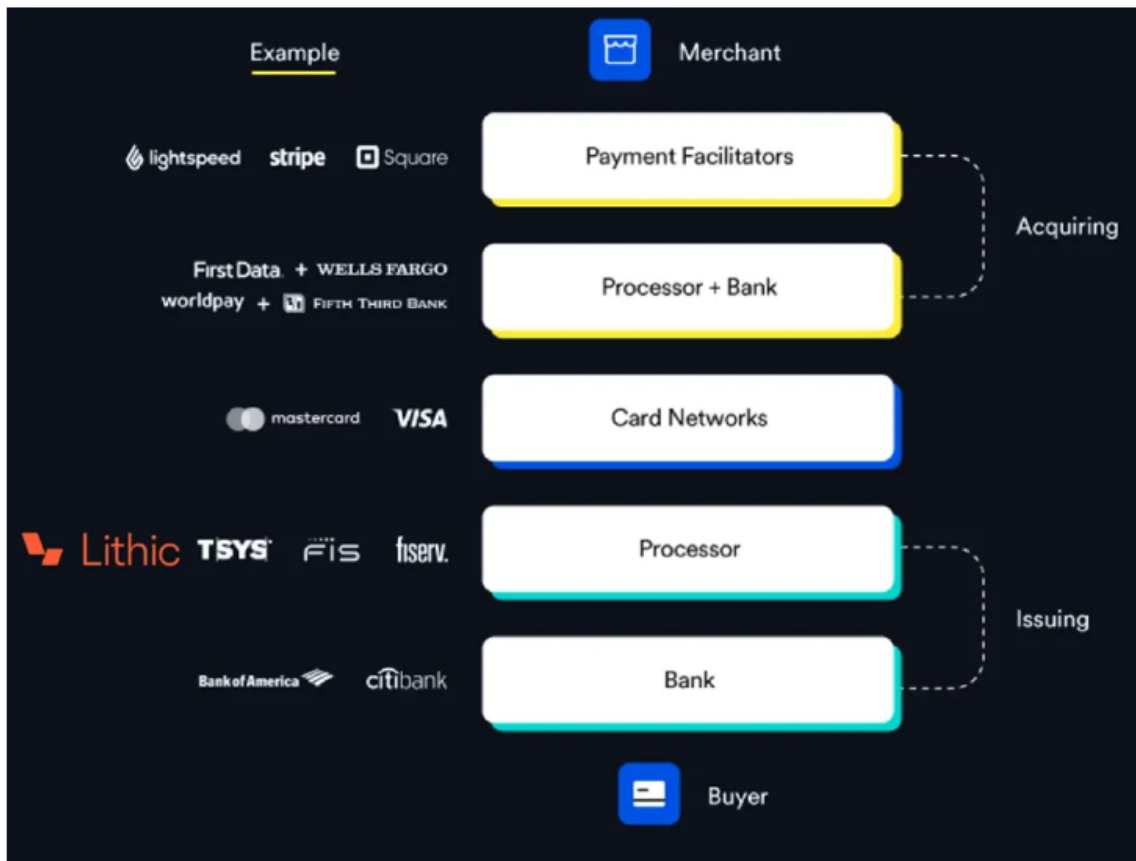
Source: [Stockopine](#)

Exhibit I: Old Way of Merchant Acquiring vs Adyen's Approach



Source: [Blog.thesharmas.org](http://Blog.thesharmas.org)

Exhibit J: Company Examples Throughout the Payment Landscape



Source: [Stockopine](http://Stockopine), Finix, Contrary Research








## What Created The Opportunity?

Adyen has been valued at a large premium since its IPO due to its high growth potential.

**Exhibit K** shows some valuation multiples that I pulled from Morningstar. The highest P/E ratio the company had was at the end of 2020 when it was 304.

Even after many of the high growth tech companies watched their stock prices get slaughtered in 2022, Adyen still traded at 73x earnings. Going into the H1 2023 conference call on August 17<sup>th</sup>, Adyen traded at a P/E ratio of 80x based on a market cap of \$48.5 billion and 2022 net income \$604 million.

### Exhibit K: Valuation Has Come Down Substantially

	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>Current</u>	<u>Trend</u>
Price/Earnings	128	304	194	73	36	
Price/Cash Flow	53	79	55	18	21	
Price/Book	33	59	50	19	7	
Enterprise Value/EBIT*	97	231	146	49	20	
Enterprise Value/EBITDA*	91	209	137	46	18	

*\* Enterprise Value includes cash payable to merchants and financial institutions*

Source: Morningstar

Going into the H1 2023 earnings call, the valuation was pricing in a near-certain probability that the company would continue to grow at the same 40%+ growth rate that it had been growing at with no interruption. That didn't happen though.

The company's growth slowed down due what the CEO referred to as a more competitive environment in North America. This surprised the street, and admittedly the CEO who was surprised about the underperformance of the US as well. This sent the stock price down 40% in a day.

Here is what Adyen's Co-Founder and Co-CEO said on the call:

"We have seen increasing competitive pressure in North America, and that's to my view, related to a higher interest rate environment, more companies are looking at the bottom line, and that's an environment in which they try to see if cheaper alternatives work. It's the part of the business that's easiest to switch, U.S. online. We are still growing, right? So it's not that we're shrinking there, but it's growing at a lower pace than anticipated.

## Exhibit L: Adyen Stock Price Last Six Months

Market Summary > Adyen Unsponsored Netherl 100 ADR Representing 1 Ord Shs

6.97 USD

-8.46 (-54.83%) ↓ past 6 months

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Sep 20, 4:00 PM EDT • Disclaimer

1D | 5D | 1M | **6M** | YTD | 1Y | 5Y | Max



Open	7.08	Mkt cap	20.32B EUR	52-wk high	18.69
High	7.18	P/E ratio	-	52-wk low	6.85
Low	6.95	Div yield	-		

Source: Google

The stock price has continued to fall even after the 40% drop. It currently trades at \$6.88 per share. Management refused to give guidance for the second half, which spooked the street even more. The company only reports twice a year also. When reviewing the conference call there are a couple observations that stand out.

One observation is that it is evident that growth slowed down; competition in North America, mostly from Braintree, increased, resulting in less payment volumes for Adyen; and margins came down due to higher salaries and wage expense (due to hiring more employees) and lower revenue growth.

Another observation is that despite the slowdown, the company still grew net revenue by 21%, EBITDA margins came down but are still high at 43%, churn was less than 1% so Adyen isn't losing any customers, and hiring will continue at the same pace in the second half of this year but slow down next year.

There are some short-term impacts affecting the stock that I expect to slow down next year and the following year. Payment volumes will still continue to grow though, and Adyen has arguably the best platform to capture where payments are evolving to.

Adyen has the lowest cost platform so if management wants to decrease prices to compete with companies like Braintree, they can. They chose not to though because they believe they have a high-value offering service that shouldn't be priced too low. Whether they choose to decrease price in the second half of the year or 2024 will remain to be seen but so far management has taken a long-term approach, which is beneficial to long-term shareholders.

To get an idea of management's long-term focus at the expense of the street's short-term focus, here is what the CFO said on the last earnings call:

"So of course, it's difficult for us to guide on the second half, given that the financial objectives we share are over the medium to long term. What we have shared is that we plan to grow the

team in a similar way as last year. Through half of the year, we did about half of that. We did about 550. Last year, we grew just under 1,200 people. So we plan to continue to grow the team at a similar rate to what we did this half year more on an absolute basis than a relative one.”

Management is still optimistic about EBITDA margins also. They are guiding for EBITDA margins to reach 65% over the long term.

### **Adyen’s Long Term Opportunity (How Much Will Payment Volumes Grow To?)**

Depending on which source that is used, total payment volume projections can vary widely. What has all been agreed upon though is that this industry is expected to continue to grow for the next decade.

Exhibit M: Adyen’s Processed Volumes



Source: [Company Filings](#)

Adyen’s processed volume for the first half of 2023 was €426 billion, up 23% year-over-year. Statista has the highest projections for payment volumes that I found with estimates of digital payments reaching \$14.8 trillion by 2027.

This may seem too bullish, but [according to Nilson](#), payment card volume topped \$40 trillion worldwide in 2022. Statista’s estimates expect digital payment volumes (online, e-commerce) to take more share away from card payment volumes. Adyen has a share in both channels. Adyen offers a payment gateway for ecommerce and they have POS terminals that process card payments.

Exhibit N: 2022 Payment Card Volume



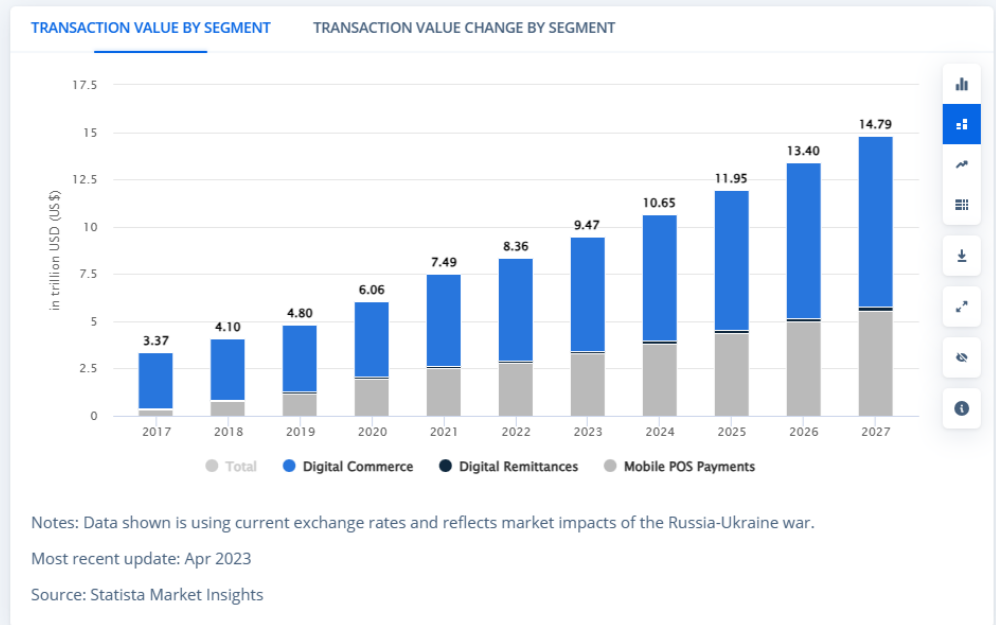
Payment Card Volume Topped \$40 Trillion Worldwide in 2022

May 24, 2023 16:00 ET | Source: The Nilson Report [Follow](#)

Source: Nilson Report, Global News Wire

Exhibit O: Total Transaction Value In The Digital Payments Market

Transaction Value



Source: [Statista](#)

JP Morgan estimates that global online payment volumes will reach \$6.8 trillion, and Mordor Intelligence estimates that the payments market will grow at a compounded annual growth rate of 10.8% over the next five years to reach \$4.31 trillion.

## Exhibit P: JP Morgan Online Payment Volume Projection

ONLINE

# \$6.8T

in global payment volumes

Online

The online economy is not just transforming how we shop but also how we work and even who we are. The combination of e-commerce, digital identity solutions as well as the growing gig and creator economies accounts for \$6.8 trillion in global payment volumes.<sup>1</sup>

Source: [JPM Morgan](#)

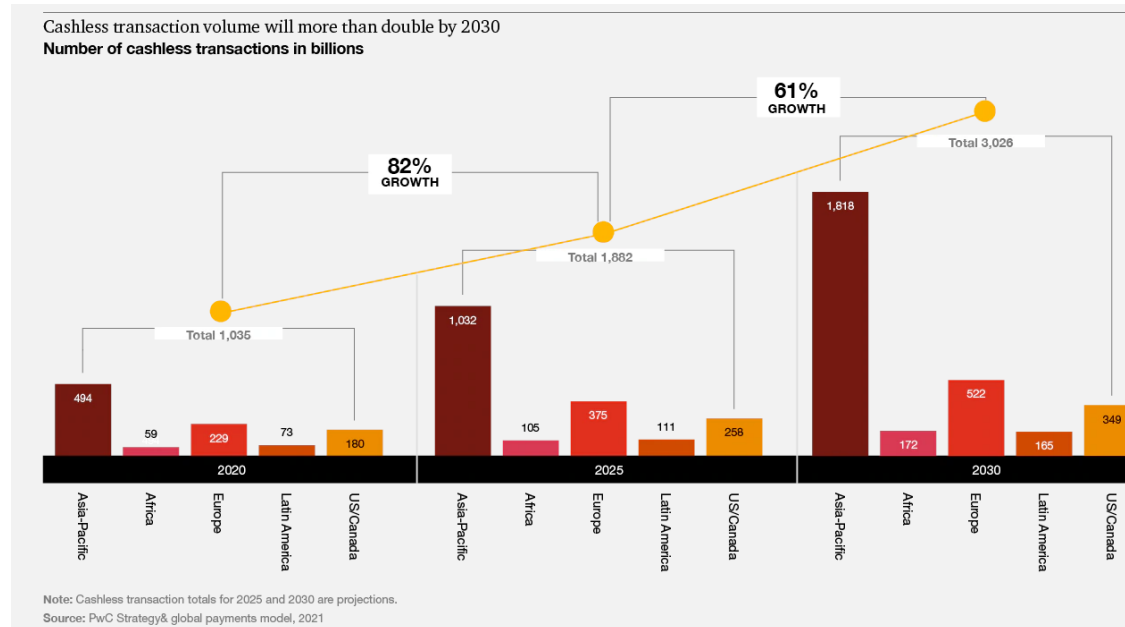
## Exhibit Q: Mordor Intelligence Payments Market Estimates

### Payments Market Analysis

The payments market is valued at USD 2.33 trillion in the previous year and was expected to register a CAGR of 10.88%, reaching USD 4.31 billion by the next five years. The key factor augmenting the market's growth include growing digitization, growth in E-commerce, rising internet penetration, and rapid adoption of mobile payments, among others.

Source: Mordor Intelligence

## Exhibit R: Cash Transaction Volumes Are Expected To Double By 2030

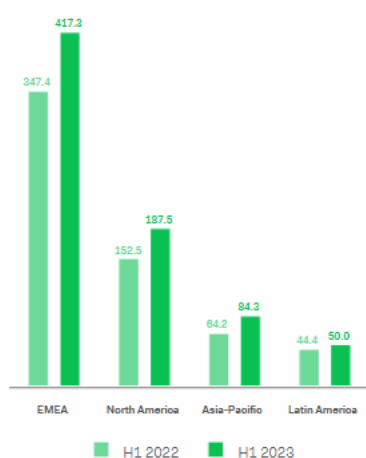


Source: PWC

Adyen has a large total addressable market and Adyen is in a good position to capture this. The company has the following tailwinds:

1. As mentioned earlier, total payments are expected to grow at a high rate over the next decade.
2. The payment industry is getting more complex with payments being made by made different devices (web, mobile, QR codes) in a global world where Adyen's unified payment system is built for a payment industry that is getting more complex.
3. Adyen earns a fee for each payment it processes and the overall price level (inflation) typically grows at around 3% a year.
4. Expert calls reveal that Adyen's unified payment system is a very good offering. The company's churn rate of less than 1% supports this.
5. Developing countries such as Africa, Asia-Pacific, and South America could present a huge opportunity for Adyen as the use of cash declines.

Exhibit S: Net Revenue Per Region (€)



Net revenue - Geographical breakdown and year-on-year growth (in EUR '000)	H1 2023	YoY%	H1 2022	YoY%
Europe, the Middle East, and Africa (EMEA)	417,279	2.0 %	347,387	30 %
North America	187,452	2.3 %	152,469	52 %
Asia-Pacific	84,307	3.1 %	64,237	53 %
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Source: Company Filings

## Does Adyen Have A Moat?

There are a lot of questions surrounding whether Adyen has a moat or not. These questions have become a lot more common after the most recent earnings call when management spoke about the competition they were facing in the United States. There isn't much differentiation in

payment processing so this business can be viewed as a commodity with companies competing on price. Merchant acquiring does have a little bit more differentiation than payment processing but price can still be a big factor when deciding which acquirer to use. There are some things to keep in mind though.

First, despite the payment processing industry being a commodity, the incumbents (Fidelity Information Services, Fiserv, and Global Payments) still generated solid revenue and operating income growth over the last ten years, resulting in good returns for shareholders.

Second, there are many different markets for payment processing and although there may not be much opportunity for a merchant acquirer in the United States to gain strong pricing power through a competitive advantage, this isn't the case elsewhere.

Processing payments and merchant acquiring in the US is much easier than other countries because of factors like the US dollar being the only currency transacted with in the US, the majority of payments go through only two payment networks (Visa and Mastercard), the regulations are similar for each state, and the large commercial banks and mid-sized banks have a decent size of the issuing side. This makes it easier to set up connections through the payment process, creating lower barriers to entry.

This process isn't so easy in other markets like Europe though. Adyen's high returns on capital (see **Exhibit T**), though slightly declining, are still signaling right now that there is likely some advantage that they have compared to their competitors.

In Europe, where Adyen started out, the payment process is much more complex, giving Adyen an advantage. There are multiple currencies used throughout Europe instead of just one, there are many different payment networks depending on which country you are transacting in, there are different regulations, and there are different rules to follow to obtain a banking license. All of this makes it harder to compete with Adyen. Adyen already has a head start in solving these problems and building its unified payment network that has been widely adopted already.

To summarize, Adyen has a competitive advantage in Europe where the market is more concentrated, but it doesn't have a competitive advantage in the US where the market is more fragmented. The moat that I see Adyen as possessing is a low-cost moat from economies of scale.

Since the company has so many large enterprises as its customers, the company may have less negotiating leverage with them, but they aren't losing any customers, and management is able to keep its take rates very low and generate high margins and returns.

Remember that management said on the call that they could have lowered prices to attract more volume but they chose not to engage in a price war in the US market. The advantage they have from lower costs also comes from their unified payment system where everything is built in house. Since it is built in house, the company is able to build a more efficient system because they don't have to manage a wide variety of systems from different acquisitions.

Here is what Adyen's CO-CEO said at a Goldman Sachs Conference on September 5, 2023 about its unified payment system:

"We fully control our platform. We're not dependent upon any third party there, also in a way how we, for instance, have our own private clouds that we build out globally, that gives us full

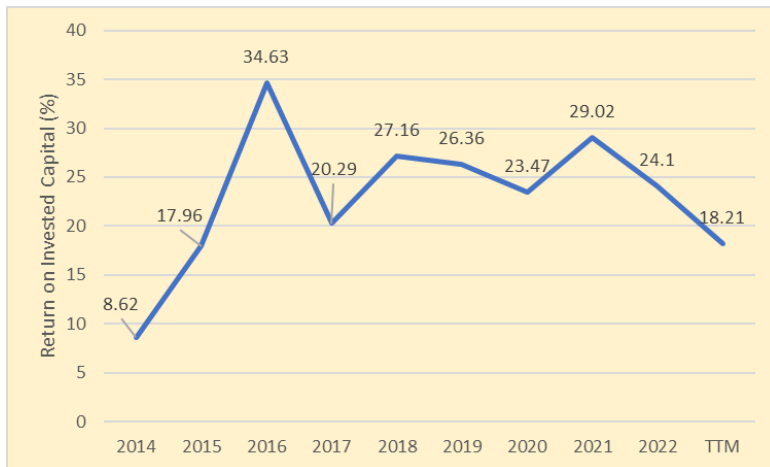


control. We have our own banking licenses in the main markets. So we're not dependent upon third parties. And if you look at taking friction out of the system that is only possible if you have all those building blocks. And we have those building blocks. That's how we're going to add value and why payments is just not a commodity.”

### Balance Sheet and Financial Analysis

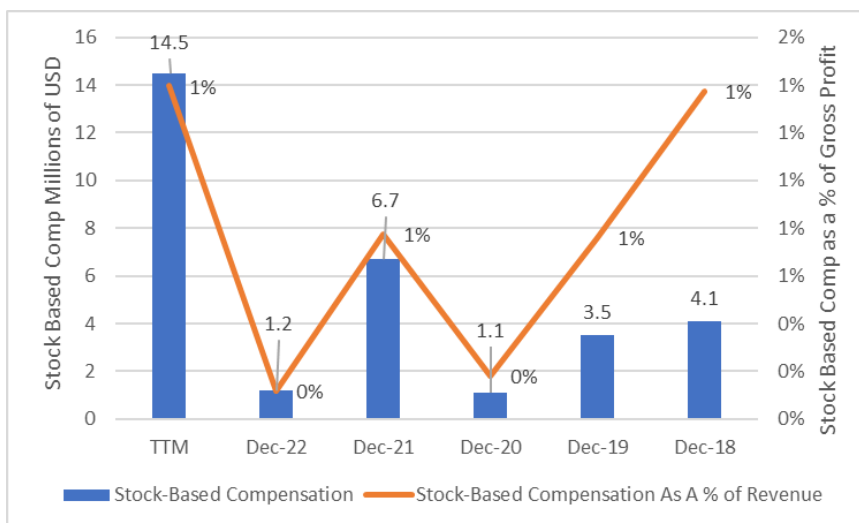
Adyen has an enviable balance sheet with very little financial risk coupled with high returns on equity and capital. Adyen’s decision to not do any acquisitions has helped keep its balance sheet in such good shape. It also pays out very little in share-based compensation and keeps its operating expenses under control. One advantage that the company had is being based out of the Netherlands. This allowed them to hire software engineers at cheaper pay had they been based out of Silicon Valley.

Exhibit T: Return on Invested Capital %



Source: Morningstar

Exhibit U: Stock Based Comp as a % of Gross Profit



Source: Company Filings

Adyen has no debt and lots of cash on its balance sheet. The company's cash position was \$6.997 billion when including the cash that Adyen has to pay out to its merchants. There is a current liability called "payables to merchants and financial institutions" in the amount of \$4.48 billion. This is the amount of cash that doesn't belong to Adyen since it needs to be paid to the company's merchants and financial institutions.

When deducting this amount that the company has to payout to merchants and financial institutions, the total cash balance was \$2.5 billion. The interest earned on the company's cash balance has helped offset some of the weakness in other areas of the business, including the higher wage expense from increased hiring last quarter, and the loss of revenue from payment volumes that went to competitors.

#### Exhibit V: Cash and Payables to Merchants and Financial Institutions

Cash and cash equivalents (in EUR '000)	June 30, 2023	December 31, 2022
Cash held at central banks	4,390,614	4,407,540
Cash held at banks, other than central banks	2,021,010	2,114,805
<b>Total</b>	<b>6,411,624</b>	<b>6,522,345</b>
<b>Payables to merchants and financial institutions</b>	<b>4,487,360</b>	<b>4,795,804</b>
Trade and other payables	152,307	147,827
Lease liability	12	33,200
Current income tax payables	6	4,441
<b>Total current liabilities</b>	<b>4,691,469</b>	<b>4,981,272</b>

Source: Company Filings

The company was able to generate such a large cash balance net of payable to merchants and financial institutions because of the large amount of cash its business model generates. Adyen has high operating and net margins due to the operating leverage that is embedded in its business model. The company's net income margin has been above 50% since December 2018 (see **Exhibit Y**).

To calculate net income margin, I used the company's gross profit instead of revenue since total revenue includes interchange fees that are payable to the issuing banks. Gross profit is a better indicator of the company's revenue and to better reflect the economics of this, Adyen changed the way it recognizes revenue starting in 2023. This is the reason that it may look like there was a large drop in year-over-year revenue for Q1 2023 and Q2 2023 but it is just a change in the way that revenues are accounted for starting in 2023.

Adyen generates lots of free cash flow due to its positive net income and due to the timing of when cash payouts to merchants and financial institutions occur. Adyen has been able to keep some of the cash due to the time lapse between when Adyen pays out its merchants, but the timing of these cash payouts can obscure free cash flow in a given period. This is why I used net income in my valuation model instead of free cash flow.

For example, as shown in **Exhibit W**, cash flow from operations was negative for the first half of 2023, but net income was positive. This was because the company paid out \$308 million in cash to merchants and financial institutions. When this is compared to the first half of 2022, Adyen retained \$560 million of cash instead of paying it out, resulting in cash generated from operations of \$1.16 billion.

## Exhibit W: Cash Generated From Operations

	Note	H1 2023	H1 2022
<b>Income before income taxes</b>		<b>373,018</b>	<b>359,629</b>
<i>Adjustments for:</i>			
- Finance income	9	(93,408)	(1,493)
- Finance expenses		2,291	8,772
- Other financial results	6	(2,808)	(36,043)
- Other income/(expense)	11	840	
- Depreciation of plant and equipment	11	22,187	12,066
- Amortization of intangible fixed assets		1,789	1,666
- Depreciation of right-of-use assets	12	16,948	11,681
- Equity-settled share-based compensation	3.2	6,000	9
- Cash-settled share-based payment plan		4,638	(1,630)
<i>Changes in working capital:</i>			
- Inventories	2	(32,438)	(32,274)
- Trade and other receivables		(30,876)	(40,432)
- Receivables from merchants and financial institutions		(63,371)	275,119
- Payables to merchants and financial institutions		(308,444)	560,309
- Trade and other payables		11,962	29,264
- Amortization and additions of contract assets	1.1	10,874	17,678
<b>Cash generated from operations</b>		<b>(70,797)</b>	<b>1,164,399</b>

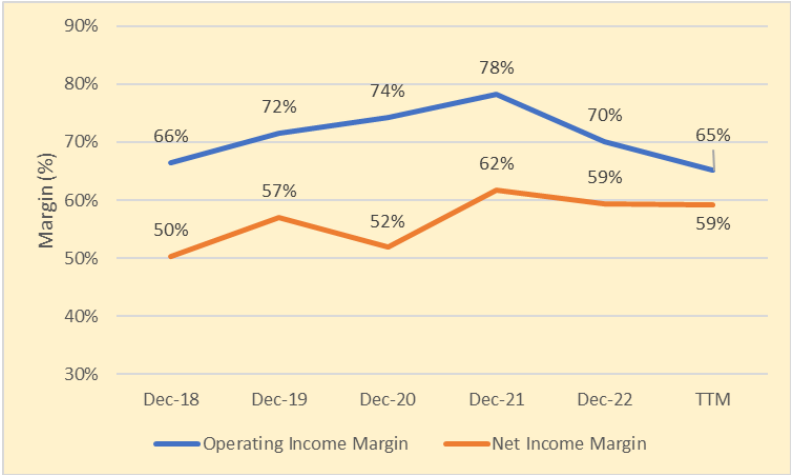
Source: Company Filings

## Exhibit X: Free Cash Flow



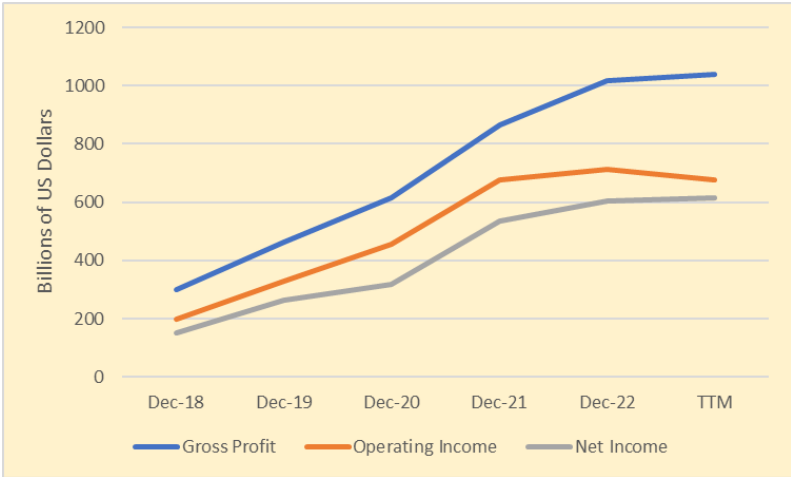
Source: Company Financials

Exhibit Y: Operating Leverage Drivers Higher Operating and Net Income Margins



Source: Company Financials

Exhibit Z: Gross Profit, Operating Income, And Net Income



Source: Company Financials

Despite the underperforming quarter, the company still realized a 33% operating margin, a 33% profit margin, and its processed volumes increased 23% year-over-year. It is a slowdown from the higher growth the company was realizing previously, but processed volumes are still growing, as is revenue, and there aren't many other companies out there that are doing 33% net income margins.

## Exhibit AA: H1 2023 Margins

<b>H1 2023</b>	
Revenue	853,550.00
EBITDA	320,017.00
<b>EBITDA Margin %</b>	<b>37%</b>
Income Before Net	
Finance income and	279,093.00
Income Taxes	
<b>Operating Margin %</b>	<b>33%</b>
Net Income	282,173.00
<b>Net Income Margin %</b>	<b>33%</b>

Source: Company Filings

## Valuation

For my valuation I used a 25% growth rate, a terminal growth rate of 5%, a required return of 10%, and P/E multiple of 25x for one base case, and a 30% growth rate, a terminal growth rate of 5%, a required return of 10%, and P/E multiple of 25x for a second base case.

The first scenario results in a value per share of \$11.15 and the second results in a value per share of \$13.45. Both cases represent double digit upside from the current share price.

It's important to keep in mind that the value is very sensitive to the growth rate. If growth is 15% with the same parameters of 5% terminal growth rate, 10% required return, and 25x multiple then the value per share drops to \$7.50 per share.

I included a more detailed look at the model in the appendix.

## Exhibit AB: Valuation Scenarios

	<b>Bear</b>	<b>Base</b>	<b>Base</b>	<b>Bull</b>
<b>Growth Rate</b>	15%	25%	30%	30%
<b>TV Growth Rate</b>	5%	5%	5%	5%
<b>Required Return</b>	12%	10%	10%	10%
<b>Multiple</b>	20x	25x	25x	30x
<b>Value</b>	\$16.3B	\$32.8B	\$39.7B	\$47.05B
<b>Shares Outstanding</b>	3.1M	3.1M	3.1M	3.1M
<b>Price Per Share</b>	\$5.73	\$11.15	\$13.45	\$15.81

Source: Author Calculations

## Catalysts

The company reports twice a year, but due to the uncertainty surrounding the stock, they [announced](#) that they will host an investor day on November 8<sup>th</sup>. This could help management clear up some of the uncertainty surrounding the stock and provide a support level under the share price.

Adyen's offering to merchants has been much simpler than its competitors. This has helped make the company more efficient and boost margins but additional services, similar to Stripe's offering, could provide a longer-term opportunity.

Hiring slows down in 2024 and boosts margins higher.

Long-term investments in hiring and infrastructure pay off.

New merchant wins and higher payment volumes lead to higher revenues and income. The company isn't likely to see much of a benefit from this in the near future but the 2<sup>nd</sup> half of 2024 should start to see these metrics pick up again.

## Risks

Competition intensifies further due to a slowing macro economy and price wars.

[Payment orchestrators](#) threaten to make payment processing more commoditized if merchants can connect to multiple payment processors and easily send volume to their preferred choice.

Pieter van der Does has been a huge asset to the company since he cofounded it. He is important to the company's growth, long-term vision, and the company's culture. He remains committed to the company but it's important to note that in November 2022 he did have a [medical procedure](#) and needed some time off. He has since returned after being out of the office for 6-8 weeks.

## Conclusion

I keep coming back to this quote from Paul Graham about Stripe being the next Google, shown in **Exhibit AC**. When Paul was asked a question in the comments, "Why not Adyen?", Paul replied, "the Collisons."

I don't doubt how special the Collison brothers are but Pieter van der Does is incredibly smart as well, and has an awful lot of passion for payments, not to mention an awful lot of experience after already selling Bibit to WorldPay.

Exhibit AC: Is Stripe The Next Google?





Source: Twitter.com

When elaborating on this comment further, Paul said that payments are much bigger than advertising, which is true. This presents a huge opportunity for not just Stripe but also Adyen, and an opportunity that I expect Adyen to capitalize on, especially more efficiently as they have in the past.

Whether or not Adyen or Stripe becomes the next Google isn't as relevant as what Adyen has going for it now. Total payments volume will continue to grow over the next decade, Adyen's unified payment system will differentiate it against its competitors, allowing the company to gain more payment volume, and earn high net income margins due to the high operating leverage embedded in its business model.

Management has kept expenses under control even despite the increased hiring over the last year. They pay little in stock compensation and have a long-term focus. I expect Adyen to benefit most where the markets are more concentrated and payment processing is more complex. These markets are in Europe and Asia Pacific. I see other opportunities in Latin America and Africa also.

My price target is \$13.45 per share.



## Appendix

Growth Rate	30%						
TV Growth Rate	5%						
Required Return	10%						
Year:	0	1	2	3	4	5	6
	<u>Dec-22</u>	<u>Dec-23</u>	<u>Dec-24</u>	<u>Dec-25</u>	<u>Dec-26</u>	<u>Dec-27</u>	<u>Dec-28</u>
Net Income	604.10	785.33	1,020.93	1,327.21	1,725.37	2,242.98	2,355.13
Discount Rate	<u>1.000</u>	<u>0.909</u>	<u>0.826</u>	<u>0.751</u>	<u>0.683</u>	<u>0.621</u>	
Discounted Net Income	<b>604.10</b>	<b>713.94</b>	<b>843.74</b>	<b>997.15</b>	<b>1,178.45</b>	<b>1,392.71</b>	
Sum of PV of Net Income	5,126.00						
TV Net Income	2,355.13						
Mutiple	25						
Terminal Value	58,878.25						
Discount Rate	0.62						
Discounted Terminal Value	36,558.76						
Discounted TV + Sum of PV of Net Income	41,684.76						
Shares Outstanding	3,100						
Price	<b>\$ 13.45</b>						