



Note:

The research below was conducted from January - April 2020 along with Fred Liu of Hayden Capital. The write up includes conversations with the company, retailers, customers, competitors, and past employees.

Background / History

Afterpay is a Buy Now Pay Later ("BNPL") product which allows shoppers to pay for their products in four equal payments rather than the entire amount upfront. Afterpay sits on the checkout page of an online retailer, and facilitates the purchase between the buyer and the seller. The buyer pays for the product in 4 payments spaced 2 weeks apart using their debit card (for a total of 6 weeks, with first payment due on purchase). If the buyer is late on a payment, they are given a 24 hour grace period, and then charged \$10 as a fee. Fees are capped at 25% of the product price or \$68 (whichever is *lower*). While Afterpay does assess first time buyers, its main way to control defaults is by using a one strike policy. If the buyer does not pay, they are banned from using the service until they've paid in full. Late fees do not compound, or increase (unlike traditional credit cards). Thus one can extrapolate that late fees are not a major source of revenue. Instead, A majority of Afterpay's revenues (75%) are earned from charging retailers a fee for the purchase (3-6% of Gross Merchandise Value).

Afterpay was started by Nick Molner and Anthony Eisen, who were neighbours in Sydney, Australia. [According to Nick](#), Anthony, an ex-banker approached him one day and asked "Everytime I'm working late at night, I see you're light on also working late at night?" Turns out Nick was running a successful business selling jewelry on eBay (his parents were jewelers), and while in college was the #1 store for selling jewelry on all of eBay Australia. That initial conversation struck up a friendship (and later partnership) between Molner, a young serial entrepreneur (~30 years old) and ex-Credit Suisse executive, Anthony Eisen (~47 years old).

Industry Overview

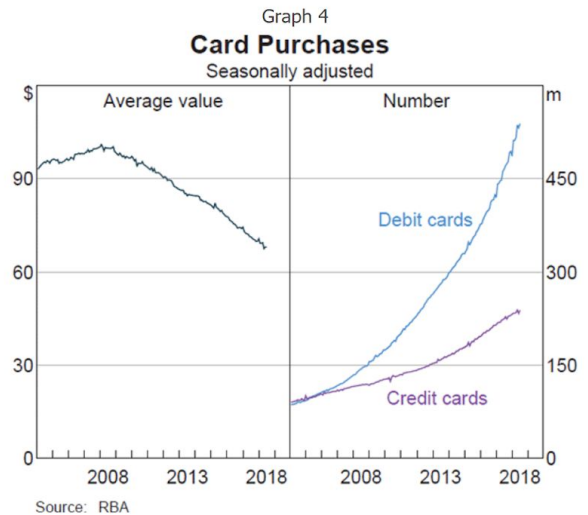
Afterpay's goal is to be 'the world's most-loved way to pay' and to attract 'the world's most valuable customer' which it deems to be millennials and GenZ. Its average customer is 33 years old and typically female. The company states that in 2020, millennials will have the highest spending power, almost AUD 15 trillion worldwide, and by 2025 millennials will contribute almost half of all salary earned in the United States¹.

In interviews Nick stated that the idea behind Afterpay was [started with the retailer](#) (although that has shifted and now the company clearly states the buyer is their customer). They discovered that 97% of users who logged onto a retailer's website did not end up making a purchase. Further, at the time, the main credit product offered to customers was 1) credit-cards, however penetration among millennials was very low (only 41% of Australian

¹<https://seekingalpha.com/article/4288342-afterpay-touch-group-limited-aftpf-ceo-q4-2019-results-earnings-call-transcript?part=single>

millennials own credit cards versus 61% of older generations²) and 2) the current product offered by retailers, lay-by (also known as lay-away), where stores offered credit to buyers, but would only hand-over the product once all installments were paid. This was less than ideal as it didn't help the customer to satisfy the want to own the product immediately and led to complicated operational and accounting issues for the retailer. The reason behind the first issue (millennials not having credit cards) was the kindling for the eventual Afterpay solution. [According to Molner](#), 'middle' millennials were just reaching adulthood during the financial crisis, and thus have an aversion to debt, and thus shied away from credit cards which are known to have very high rates.

Data released by the Reserve Bank of Australia³ backs up this growth of debit versus credit over the last few years. The graph on the right shows an explosion of purchases using debit cards since the financial crisis with Average value per transaction falling (non-credit purchases will tend to be smaller). The use of debit cards over credit cards was not a well known fact in Australia either, and in fact, when Afterpay was doing its IPO roadshow, many older investors did not understand the concept as they wondered why people wouldn't just use their credit card. As it turns out according to the company, 90% of purchases are done using a debit card⁴. For retailers, a customer using a debit card would understandably have a lower basket size than one using a credit card. Thus using a BNPL product converts the customer from one with debit characteristics to one with credit characteristics at no risk to the retailer and a marginally (1-2% higher) cost.



With regards to the retailer, the Afterpay aids in a few ways including a) increase of basket size (Afterpay is said to increase basket size by 20-40%) b) shopper referrals c) reduce operational burden of the layaway product d) increase cash-flow when selling on credit (Afterpay pays the retailer 100% upfront after deducting their commission). In return for this Afterpay charges the retailer a commission, which in FY2019 was on average 3.8% of GMV. This obviously means that the retailer shifts the credit risk on to Afterpay. Afterpay does have its own screening process (company claims it rejects 50% of first-time users⁵), but doesn't do full-blown credit checks (in fact for regulatory reasons it's careful to not label itself as a credit product, more on that below). It manages its risk by banning users who have not paid on-time until their bill is settled in full. However despite what might appear to be lax underwriting gross loss is just 1.1% (as of mid CY2019) of GMV, and 30% of users pay early⁶.

² <https://www.ratecity.com.au/credit-cards/news/young-australians-turning-away-credit-cards>

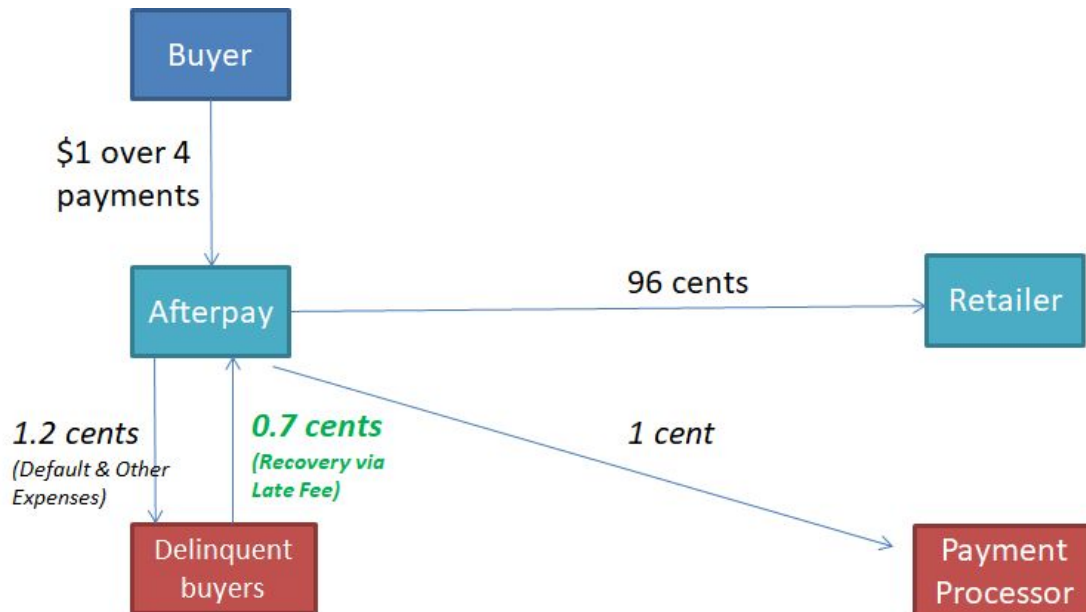
³ <https://www.rba.gov.au/publications/bulletin/2019/mar/pdf/new-payments-insights-from-the-updated-retail-payments-statistics-collection.pdf>

⁴ <https://www.afterpayfashionbeautyreport.com/>

⁵ <https://www.youtube.com/watch?v=wX0puo5Oq-Y>

⁶ <https://pca.st/qn1dp0vi>

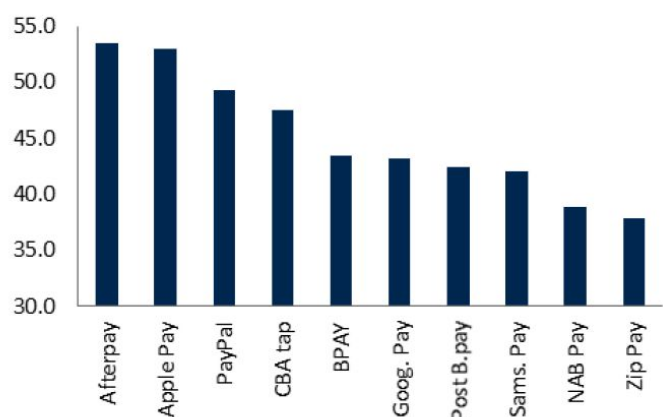
The below diagram shows the flow of \$1 via the entire ecosystem. In general leakage between the Buyer, Retailer, and Afterpay comes in the form of buyer default (some of which is recovered through the late fees), payment processing, and other operational costs. For every \$1 spent around there is a leakage of about 1.5 cents.



Why do Customers love it?

Afterpay is very careful to not 1) market itself or appear as a credit product and 2) Ensure that the end-customer has a very good experience. On the first part, Australian regulation, if it deems Afterpay is extending credit, would have to apply more stringent KYC processes which would slow customer acquisition and growth. On point 2) Afterpay founders have often quoted in interviews that their buyers are the key to their success, and thus are incredibly keen to ensure customer satisfaction. For example, Nick Molnar stated in [this interview](#) that some of their major retailer acquisition was organically driven by their users. There was an actual fan group called “Kmart needs Afterpay” that lobbied Kmart to install Afterpay as a payment solution even before Afterpay had gotten through to them with their own sales team. Similarly, Lululemon had to call Afterpay and ask them to ask their fans to stop calling the customer service hotline, as they couldn’t serve their customers due to lines being blocked by Afterpay fan calls. This customer ‘love’ and focus on the customer is illustrated by Afterpay having the highest NPS score (~55) of all its competitors in ANZ⁷. Afterpay is very careful to not be seen ‘gouging’ its

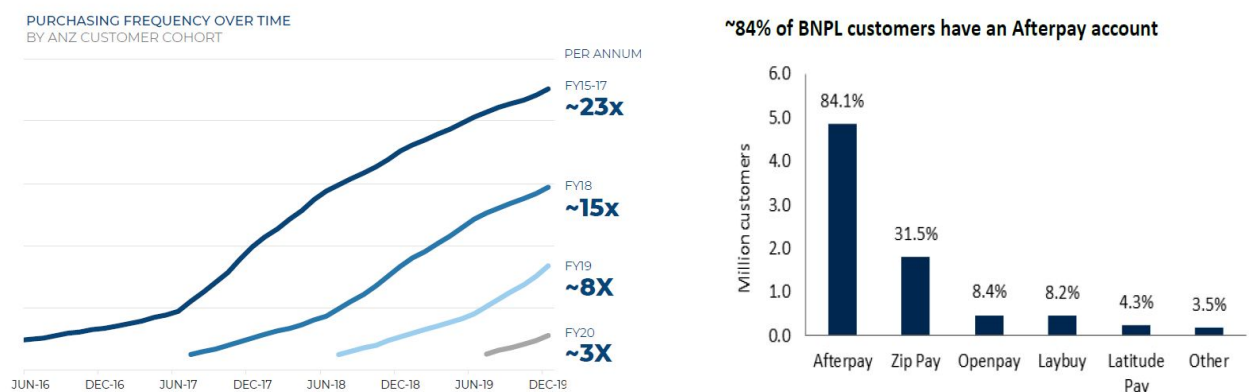
APT has highest NPS score among top-10 digital payments



⁷ RBC Capital Markets

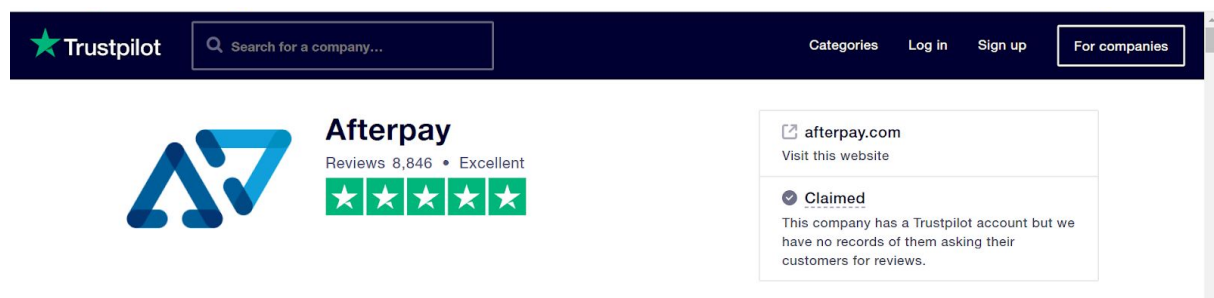
customers and thus has very tame ‘punishments’ for those who do not pay. We’ve also heard from internal sources that culturally, the company refuses to charge the customer anything, except late fees, and has never enforced a debt. It also has a ‘hardship’ program for those who find that they cannot pay or have missed payments where repayment schedules can be extended or modified.

Customer penetration in Australia is very deep with 84% of BNPL customers having an Afterpay account. Further, 27% of millennials in the country and 16% of the purchasing population in Australia have used afterpay. *Repeat customers are the main driver of revenue, with 98% of GMV being generated from them in ANZ*⁸. Further, according to a cohort analysis provided by the company, its earliest ANZ cohort analysis shows repeat buyers purchase 23x a year.



Source: Company earnings presentation, RBA Capital Markets,

A quick scan of TrustPilot customer reviews gives Afterpay 5 stars based on nearly 9,000 reviews. A scan of the reviews illustrates that buyers have taken to the no-interest concept, like discovering new places to shop, and have had very positive experiences with the company’s customer service.

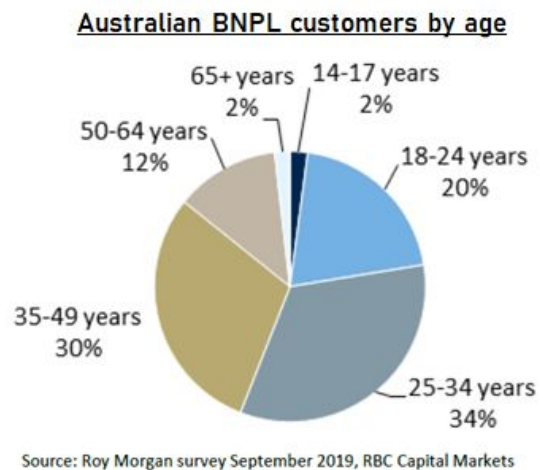


Also as stated in the introduction the average user is 33 years old, which is skewing toward the ‘older’ spectrum of millennials. Based on company commentary it seems that while early adopters skewed younger, more recently older customers have been adopting the service as

⁸ Company Data, mid-year update 13th November 2019.

well. While Afterpay is newer to the American market the company claims that 5% of American millennials have used Afterpay⁹.

Another point to note from our conversations from internal sources that one of the reasons Afterpay has created this passion within their customers is by tactically starting with Fashion retail which tends to have more of an emotional connection (say than electronics/household items) and allowed customers to achieve instant gratification. While competitors have moved into using BNPL to pay for high AOV products and utilities, Afterpay has stayed razor focused on the fast fashion category. Further, Afterpay presented itself as an “interest-free” payment option whereas some competitors positioned themselves as a credit type product.



Why do retailers love it?

The use case for retailers is actually quite simple for using a BNPL product. Retailers take zero end-customer credit risk (they just take very short-term credit risk of the BNPL provider) and in return they see larger basket sizes (range is around 40% for Afterpay), more repeat customers, and customers more likely to convert (leads from Afterpay convert 8x more than leads from google¹⁰). Obviously there is a cost-associated with this as retailers have to pay between 3-6% on average in commission, however as you can see from the unit economics below, it's well worth it for a retailer¹¹.

In USD	Fashion Retailer			Notes
	Non-BNPL Customer (via google)	BNPL Customer (via google)	BNPL Customer (via app)	
A) Average Cost Per Conversion	\$52.45	\$40.35	\$0.00	BNPL conversion is 1.3 of regular customer
B) Average Order Value	\$71.43	\$100	\$100	Afterpay AoV is ~US\$100, Afterpay increases AoV by 40%
C) Transaction Fee	1.50%	3.80%	3.80%	
D) Hypothetical Gross Margin	45%	45%	45%	
Profit (B*(D-C)-A)	-\$21.38	\$0.85	\$41.20	

The economics above show that the customer goes from loss-making to profit making on the first purchase (ie without considering repeat rates). We use a 1.3x conversion improvement for BNPL leads versus regular leads from Google because data shows that 30% of customers who use BNPL claim they would not have made the purchase without the

⁹ Conversation with Investor Relations on 5th May 2020.

¹⁰ Anecdotal from early Afterpay US employees.

¹¹ Data: <https://www.wordstream.com/blog/ws/2019/08/19/conversion-rate-benchmarks>,
https://csimarket.com/Industry/industry_Profitability_Ratios.php?ind=1301,
<https://www.digitalcommerce360.com/2017/02/07/3-must-know-benchmark-metrics-fashion-e-commerce-brands/>

payment option available to them¹². Further Afterpay claims that AOV increases by 40% based on data they have seen from their partners.¹³ Another powerful selling point of BNPL is that services like Afterpay have robust apps which track their store directory. Users download the app to find new brands, new deals, and trends. Leads from the app cost the retailer nothing, and according to Afterpay they send millions of leads to their retailer partners monthly (as of the half year 2020, Afterpay sent 14million leads/month to retailers with a conversion of 10-15%¹⁴). This is supported by our conversations with retailers who told us that after the increase in AOV, the second biggest benefit they see from using Afterpay is the leads they receive.

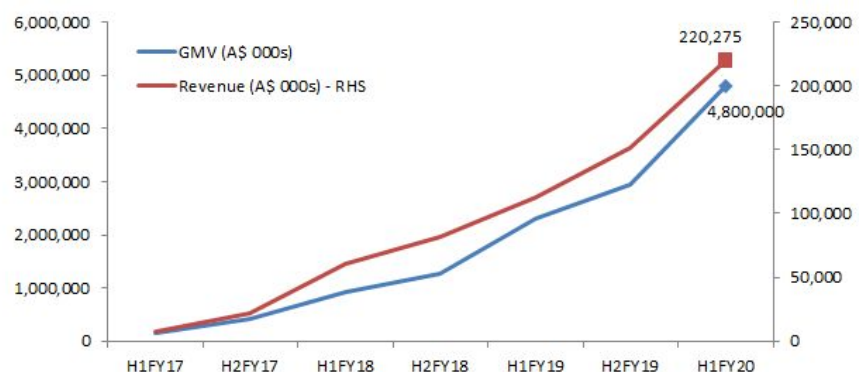
Now the obvious next question is how do retailers choose between BNPL providers. While we have seen some evidence of retailers choosing more than one provider, this seems to be more rare. Thus the choice comes down to a few aspects namely which provider can result in larger basket sizes, more conversion, higher repeat rates, and most importantly more leads. This is where our chats with retailers have illustrated that beyond an increase in basket size (which seems to increase around the same rate amongst various BNPL providers), the key differentiator is the amount of leads they get. Here we have anecdotally been told that Afterpay excels due to its superior shop directory, NPS scores, and passionate customer base. It should be noted that retailers interviewers we have read do point to the fact that switching between BNPL players is not too difficult, and cost and customer service are other big factors in deciding which provider to use.

Company Progress

Afterpay was launched in 2014, and initially tested its market with a few retailers and a few thousand customers and raised its first round of around A\$8MM.¹⁵ It went public 9-10 months later in May 2016 as it struggled to raise in private markets, and felt that retailers would be more open to using their solution if they were a public company (i.e not deemed a startup). In 2017 Afterpay merged with the Touch Group (which was responsible for a bulk of the tech behind the Afterpay Platform) to form Afterpay Touch.

Afterpay initially started its business in Australia, but has since expanded into New Zealand, UK (via acquisition of Clearpay) and the United States.

As of March 2020 they have 48k+ merchants



¹² <https://www.pymnts.com/buy-now-pay-later/2020/bnpl-covid-19-pandemic-sports-equipment-fitness>

¹³ <https://blog.afterpay.com/blog/how-afterpay-can-help-your-business-increase-aov>

¹⁴ Conversation with Investor Relations on 5th May 2020.

¹⁵ <https://www.smh.com.au/business/banking-and-finance/afterpay-fintech-float-closes-up-13pc-20160504-golye9.html>

(90% SMB) and 8.4MM active customers (4.4MM are in the United States). Its expansion was driven by strong outbound sales campaigns, which resulted in thousands of conversions on the SME side. More importantly a real focus on enterprise customers, which while are small in number compared to SMEs make up 38% of GMV (44% in America). Large customers were enticed by co-marketing campaigns (this can sometimes lead to exclusivity), which has high initial costs for Afterpay, but this cost has a quick payback period considering the rapid expansion of market share and share of wallet. Afterpay got their foot in the door by offering large brands discounted commission (matched credit card fees) to begin with, and proved the worth of the product over a trial-period.

To expand further on the 3-6% commission range, our conversations with Afterpay revealed that enterprise customers are charged around 3% (in fact no customer in the US is charged less than this), SMEs around 4-5%, and some smaller entities around 6% (can think of it as a barbelled distribution). Now, SMEs are more profitable due to the higher take rate and the fact that service requirement is much lower. Also Afterpay will spend more on co-marketing campaigns with enterprise customers (as a way to maintain bargaining power with enterprise customers and to not lower the 3% take rate). While Enterprise customers will push the overall adoption and brand, it's really the SME segment that will keep the NTM intact, thus as part of the thesis we need to see continued growth of GMV derived from SMEs. Tangentially Afterpay has launched a 'credit card' type service for merchants which can be used to put all the payments on while integration is still ongoing, allowing the onboarding of SMEs to quicken. We further understand that due to the Covid-19 issue and the ability to onboard merchants faster, SME adoption is actually *accelerating*, which may be something underappreciated by the market.

Financials (Figures past H12020 are projections):

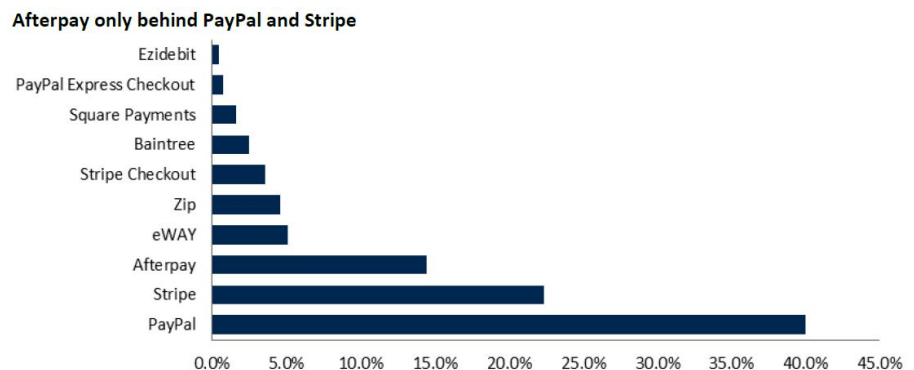
Statement (A\$ 000s)	FY 2019	H1 2020	H2 2020	FY 2020	H1 2021	H2 2021	FY 2021	H1 2022	H2 2022	FY 2022
GMV	5,247,200	4,800,000	5,290,000	10,090,000	7,319,274	8,452,863	15,772,137	9,399,677	10,655,323	20,055,000
Total Revenues	264,112	220,275	250,775	471,050	329,548	395,198	724,746	420,586	475,834	896,420
Cost of Revenue	59,562	55,416	65,664	121,080	80,512	77,209	157,721	93,997	86,498	180,495
Gross Profit	204,550	164,859	185,111	349,970	249,036	317,989	567,025	326,589	389,336	715,925
Operating Expenses	236,246	192,776	251,184	443,960	311,435	336,800	648,235	367,997	362,005	730,002
Operating Income	-31,696	-27,917	-66,073	-93,990	-62,399	-18,811	-81,210	-41,408	27,331	-14,077

Competition:

While the last 3.5 years have been explosive, the growth has dragged in a number of different competitors. Australia itself has several competitors (Zip, Humm, Splitit, Lattitude Pay, and OpenPay) which offer the same or similar products. International competitors include Klarna who competes with Afterpay in Europe, US, and now Australia. Another large competitor in the US is Affirm, which has a similar product (but charges interest), however focuses on the higher AOV space. Several look-alikes have cropped up across the world (like Addi in Columbia and Hoolah in SEA). Further Visa and Mastercard will also be entering the space, with the former meant to trial their version of the service early 2020 and the latter purchasing Vyze (although Vyze is more of a middle-man than lender).

Australian Competitors: **See attachment**

While there are several Australian competitors it is clear that Afterpay dominates the market (can see GMV numbers in the above spreadsheet). Afterpay is not only the largest BNPL player in Australia but the third most used payment option behind PayPal and Stripe (which would process card transactions). Further 84% of BNPL users in Australia have an Afterpay account¹⁶. We have heard from Australian consumers that one of the benefits of Zip is that they can pay utilities and other monthly expenses using the app, however for now it seems Afterpay has stayed away from such items as they have often said they want the brand to be associated with *exciting* purchases such as high-fashion.¹⁷



Source: Datanyze (accessed on 08 December 2019), RBC Capital Markets

Global Competitors (Focus on Klarna and Affirm):

One of the key features that differentiate Klarna and Affirm from Afterpay is they do extend credit (if customers do not want to use the BNPL option). Secondly Klarna has launched what's called a 'ghost card' (an instant credit card with a low limit) which allows customers to essentially shop on any on-line store without needing the vendor to be partnered with Klarna. Once the card is used the vendor will receive the full amount (less transaction costs as per a normal credit card) and the buyer gets charged a quarter of the cost immediately. The next three installments are paid as per a regular BNPL purchase. That said, the card is likely a loss making proposition as Klarna cannot charge the 3-6% fee that it would off a retailer who has a direct BNPL relationship with Klarna, but it still bears same the risk of loss as the traditional BNPL product (lower take-rate, same loss ratio).

Further, it seems clear from our reference checks with Afterpay competitors around the world that access to capital (both debt and equity) is a significant barrier to entry in this business and a key ingredient in scaling. Thus Afterpay has a large competitive advantage over Klarna and Affirm who are private and don't have access to public market funding. In the ongoing coronavirus environment it seems that this may be a large detriment to private BNPL players.

¹⁶ <https://www.similartech.com/compare/afterpay-vs-klarna>

¹⁷ <https://pca.st/qn1dp0vi>

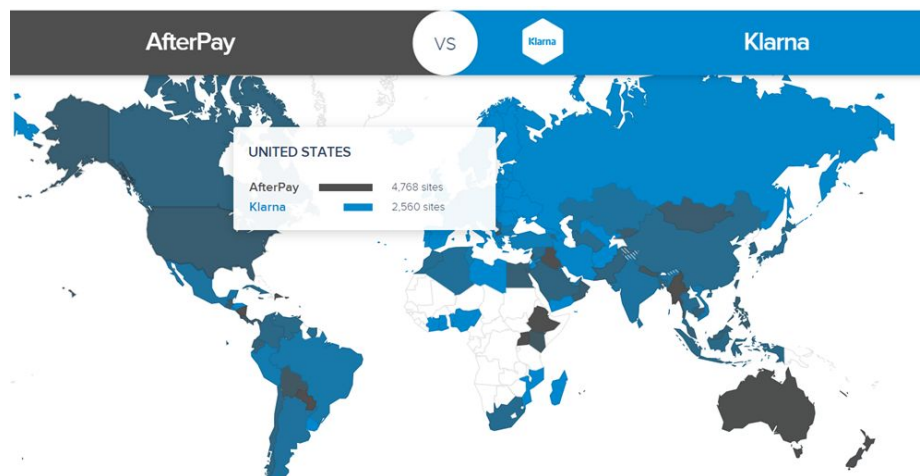
While Afterpay has a clear advantage in Australia where it is in a dominant market position (in fact Afterpay's competitor in Australia, Zip, has stated that they feel Afterpay will have Klarna "over a barrel"¹⁸ in the ANZ market), the next true battleground is in the United States where Afterpay's key competitor is Klarna (Affirm operates in a much higher AOV space). Thus it is important to try and track how Afterpay is doing against this key competitor.

Afterpay vs Klarna (In the US):

While we know in the US that Afterpay has 7,400 active merchants (as of 2019) and 3,600,000 active users, we don't have precise numbers on Klarna (it is a private company). We do know that Klarna seems to portray a small edge over the top 100 retailers in the US, with Klarna claiming a 10% market share whereas its closest competitor (which we assume is Afterpay) only has 6% market share. Although given that 10% is only 10 retailers, it's hard to draw many conclusions out of this data.

However data from SimilarTech¹⁹ paints a different picture when displaying how many websites use Afterpay vs Klarna.

While this data could be a bit dated/rough (as it doesn't quite reconcile with the 7,400 merchants that Afterpay says it has in the US and attributes website counts to the country where the most traffic comes from) it does show that Afterpay has a larger market share than Klarna purely



based on the number of sites. We believe moving fast and land-grabbing is hugely important as not only does it strengthen the flywheel (see thesis section below) but it can help Afterpay convert existing Klarna users (as the only reason they would use Afterpay, given the similar product functionality, is on a website that didn't have Klarna). Also in interviews with an ex-VP of Business Development for Affirm, the VP noted that *"Klarna's just never been able to figure out the US market. They're the easiest, easiest company to compete with. Just no questions. They just don't get it. They just keep trying to send Swedish people over here and to try to, it's just a different market."* This implies that while Klarna has been in the US longer, it does not mean they will eventually own most of the market. We have heard that Klarna has been very aggressive in signing on larger clients by reducing their commission to credit-card type rates, however our sense based on both merchant and customer feedback is that Klarna is being more aggressive without necessarily being better.

¹⁸ Zip Earnings call transcript, S12020

¹⁹ <https://www.similartech.com/compare/afterpay-vs-klarna>

With regards to major retailers in the US, Klarna boasts H&M, Adidas, IKEA, Zara, Expedia Group, Samsung, ASOS, Peloton, Abercrombie & Fitch, Nike and AliExpress on their platform where as Afterpay boasts American Eagle, Urban Outfitters, and Este Lauder.

In the UK we know that Afterpay has around 400 merchants, whereas the SimilarTech data shows Klarna has around ~2.1K, that said Europe is Klarna's homeground, whereas Afterpay has just begun its expansion in the country toward the end of 2019 (via clearpay).

With regards to funding both have reasonably deep pockets with Klarna counts Ant Financial, Central Bank of Australia, Dragoneer and Snoop Dogg as investors. Whereas Afterpay counts Tencent and Coatue as investors and has access to public market financing.

Visa and Mastercard (and other card networks):

NYU Professor Scott Galloway (the man who released a tirade on WeWork valuations) has claimed that Visa and Mastercard will be killers for BNPL companies²⁰. There is an argument that Visa and Mastercard have been slow to move into this space, having announced their intentions during mid-2019 and haven't made much progress as of date. Further Visa and Mastercard currently do not own the relationship with the end-customer (the buyer) so they would have to build that ecosystem from scratch. This will also become one of several verticals for the two behemoths and will be competing with nimble players who already have a huge lead over them.

Thesis / Opportunity

The goal of the company is to reach a GMV of A\$20billion by 2022 (and have stated they have enough credit facility/funding to hit A\$26bn²¹). As of March 2020 they have achieved a run rate of A\$9.7bn annually. The key drivers to that goal are 1) International expansion, toward the end of 2019, Afterpay raised US\$200million from Coatue Investments (who incidentally found out about Afterpay after mining retail data²²) to expand their US business and Canada later this year 2) Increasing average ticket value, which is currently A\$150 (made up of 3 items on average²³) via higher-cost items as well as expansion into paying for dental and optician services 3) Tie ups with partners (including Visa and Ebay) and 4) In-store products (which is ready to launch in the US and Canada, and will do so post-covid)

Our thesis rests on three key aspects of the business 1) Retailers will continue to see increased basket size, more repeat customers, and higher-converting leads from BNPL businesses (versus google) 2) Afterpay continues to strengthen its shop directory leading to a mini-flywheel model 3) Net Transaction Margins, over-time, remain healthy. Do note this is assuming a normal environment, for more notes on the coronavirus environment see "Risks" below.

²⁰ https://www.youtube.com/watch?time_continue=112&v=f2CdnZTIXME&feature=emb_logo

²¹ Conversation with Investor Relations, 5th May 2020

²² <https://www.afr.com/chanticleer/how-afterpay-hooked-a-big-fish-of-tech-investing-20191113-p53ac5>

²³ <https://www.afterpayfashionbeautyreport.com/>

Thesis 1) We have both company data and retailer checks verify that the using Afterpay does help companies increase their basket size by around 40%. Further, as stated above, we have been told anecdotally that leads from Afterpay convert 8x more than leads from google. Now none of this matters if retailers do not stick with Afterpay. However in Australia, for example, Afterpay owns around 30% of the brand's orders²⁴, which fundamentally creates stickiness as a retailer wouldn't want to lose those orders should they deactivate Afterpay. We expect this relationship and stickiness to continue.

With regards to leads, we stated above that Afterpay conservatively sends around 14 million monthly leads to retailers. In our conversations with the company they stated that if they can get those leads up to around 30 million a month they start to have as much value as any advertising/marketing company the brand may use. We do believe that in the future this could also be monetized. Further one of the key asks from the retailers beyond the BNPL product is data on the customers (shopping habits, spending amounts, etc) so they can make better decisions for their business. This data, along with the lead itself, is valuable to the point where we also see monetization likely.

A likely product innovation that could drive AOV safely is allowing making the first payment variable. For example let's say an item costs \$2000 which is much above a customer limit (say of \$1000) the customer could pay \$1000 upfront, and then pay the rest in the regular 4 payments, which would increase AOV without increasing customer limits. This is being trialed right now with merchants like Jetstar in Australia.

Thesis 2) Afterpay's shop directory is not only a barrier to entry for new participants but also a core component of a mini-flywheel model. The key here is getting brands onto the platform quicker and in higher volume than their competitors. As Afterpay brings more retailers onto the platform, more customers will be attracted. As customers are attracted more leads will be sent to the stores, and thus in turn attracting more retailers. Our understanding is that this will not be a winner take all model, but will result in a few large players owning most of the TAM. We have also seen some retailers have multiple BNPL offers on their website (like boohoo.com),

while we think this won't persist as it's confusing for the customer, it does show that the market can at least for the medium term, accommodate several players. In our conversations with Afterpay we



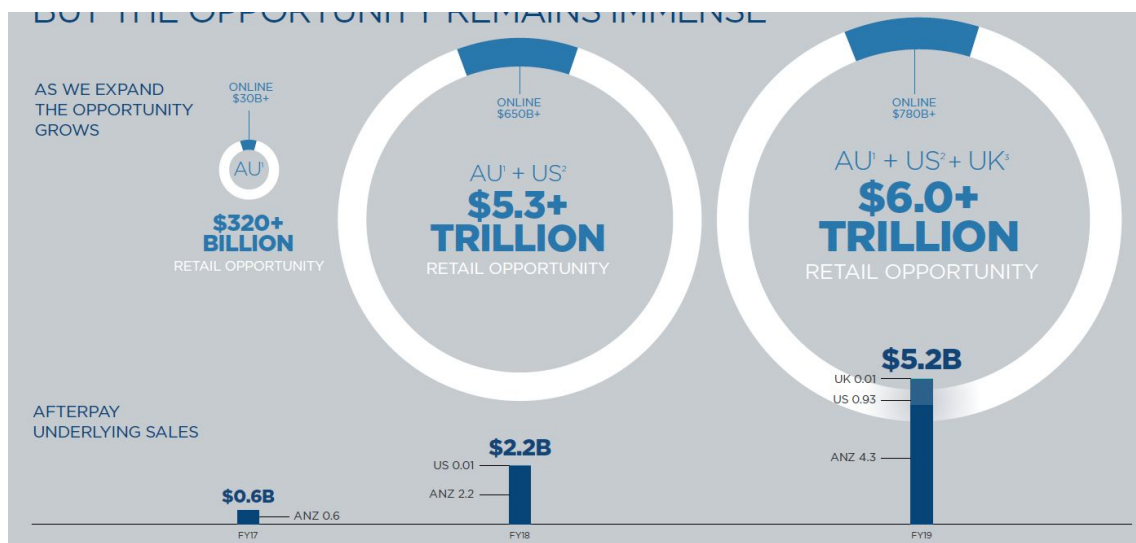
²⁴ <https://pca.st/qn1dp0vi>

also noted that there are strong examples where Afterpay has been the second BNPL player on boarded onto a platform only to perform better and then become the exclusive provider. The Hut group in the UK (which has multiple brands under it), started with Klarna and then brought on Afterpay, only to see Afterpay as superior and switch exclusively to Afterpay.

While there are a number of large players already in the market (namely Afterpay, Klarna, and Affirm), the TAM is very large, with key BNPL players only owning small amounts of the pie as of now (total TAM of \$780bn just for online in its key markets).

With respect to the market size of BNPL in the US (which is the largest/most important market), we need to extrapolate a little bit to come to a figure. We know that apparel eCommerce sales are around \$60-\$70billion annually²⁵ in the US. Klarna in 2019 sported a revenue of US\$123MM in the United States²⁶, if we assume that their take rate is ~4% that would imply a GMV of US\$3BN. Afterpay as of Q32020 has an annualized GMV of US\$2.2BN in the US. If we assume that Affirm has somewhat of a similar amount (let's assume \$2.5BN²⁷) and the smaller players account for another ~\$1bn we get a total BNPL market size in the United States of ~8.5-9bn which is roughly ~12-13% market share (this number is quite rough because not all of Affirm and Klarna GMV would be from apparel). This implies lots of growth opportunities within just the apparel vertical itself. Thus there are significant amounts of retailers still to add to the platform, strengthening the fly-wheel any further.

Further considering the large offline opportunity where Afterpay is just starting to make inroads (more so in ANZ where 24% of sales come from offline), the total retail opportunity could be much larger. Payments.com expects that the global BNPL market to grow by 28% annualized through 2023²⁸.



²⁵ <https://www.digitalcommerce360.com/article/us-ecommerce-sales/>

²⁶ Based on 2019 annual report, with revenues of SEK ~780MM

²⁷ Did US\$2bn in 2018, thus assuming at least a 25% growth for 2019 number
(<https://pitchbook.com/news/articles/affirm-scores-300m-series-f-at-reported-29b-valuation>)

²⁸ <https://www.pymnts.com/today-in-data/2020/rising-popularity-of-buy-now-pay-later/>

Thesis 3) Afterpay has a Net Transaction Margin target of 2% which essentially is driven by 3 inputs - the margin they can charge the retailer (3-6% on average), costs (like credit card processing fees), and defaults. It seems like the market has been set on a 3-6% average transaction fee and while a new entrant could temporarily come in and charge a lower fee, it won't make much sense if they can't back it up with customer volume, an area where they can't compete with the large players. So the real delta is from the default rate, which as of now has been very stable (again see coronavirus issues below). However if default were to increase significantly, the viability of the business model would be brought into question.

As noted earlier, we feel that the market is underestimating how quickly Afterpay is growing its SME space, which is far more profitable. If this trend continues, then it further strengthens the NTM (due to the higher take rates in the SME segment).

Management Compensation and Valuation

Management Remuneration and Shareholding:

Management is compensated in four components 1) Fixed Cash Component (Base Salary) 2) RSU's which vest over 3 years 3) Short-term Cash incentive (Bonus) 4) Long-term incentive via options (subject to long-term goal achievement. Short-term goals are based on financial - GMV & EBITDA (50%), number of customers (20%), number of merchants (10%), innovation (10%) and people (10%) where as Long-term goal are based on GMV (50%) and Net Transaction Margin (50%)

The key thing to note about the compensation structure is that there are no targets on Net Profit or Cash-flows which implies that the company is highly incentivized to grow (albeit sustainable growth as NTMs, and thus defaults, are a factor). During the ongoing pandemic however the company has stated it will sacrifice growth to ensure NTMs, but so far it hasn't had to do so.

Overall compensation in 2019 for the two founders was on average A\$700,000 however this is because they haven't received much by the way of long-term compensation yet. As of now they own ~15.44% of the company combined (equal split). The other major shareholders include EQT, Coatue Investments, and Tencent which picked up a 5% stake in the secondary market recently for roughly A\$300million.

With regards to quality of management, through our checks, we believe this is a top-notch team. Anthony Eisen's background in banking has made the company incredibly investor savvy both from an equity and credit side. Strong investor relations has helped them both raise equity and credit facilities, which we believe is one of the key moats of the business and core ingredient of scale. Nick Molnar leads the expansion in new markets, and has been incredibly successful in bringing in large brands. The co-founders are also supported by a solid risk team, which is headed by ex-PayPal and ex-eBay professionals.

Valuations (Done as of 7th May 2020)

The recent market correction has drastically reduced valuations of Afterpay, and at one point was trading at 0.25x FY19-20E GMV. Since then the stock price has recovered and the market is valuing the company at roughly 1x FY19-20E GMV. With regard to competitors, its closest public competitor Zip is trading at around 0.6x FY19-20E GMV, but considering Afterpay's much larger scale and growth, the premiums is warranted.

in local CCY	GMV ARR (bn)	Market Cap (bn)	Ratio
Afterpay	10.40	10.55	1.01
Zip	2.18	1.28	0.59
Splitit	0.09	0.16	1.65
OpenPay	0.18	0.11	0.58
Etsy	5.60	9.08	1.62
eBay	85.04	28.99	0.34
Average			0.96

However another way to determine valuations is by comparing to other e-commerce 3P plays. For example, eBay did ~US\$85bn in GMV (ARR) in Q12020, and is currently trading at 0.34x which in comparison, makes Afterpay look very expensive. However eBay has

had a negative growth rate in GMV on a YoY basis, whereas Afterpay GMV has been doubling YoY the last few years. Another example Etsy, did a GMV of \$5.6bn (ARR) in Q1202, and trades 1.62x GMV. That said Etsy has a significantly higher take rate (~16%) but a much lower GMV growth rate (~20-30%) than Afterpay. Etsy charges also for a number of services beyond just commission which on its own is just 5%.

Overall we feel that a 1x FY2020 GMV valuation is fair for Afterpay considering its growth trajectory. If we assume that FY2021 GMV is going to be at least A\$15.6BN then current metrics look quite cheap actually.

Risks

Besides competition risk, there are a number of regulatory risks that can significantly affect the business.

- Debt Spirals:** There seems to be talk of more regulation in the industry. Even though most stakeholders would agree that BNPL is much better than credit cards or payday loans, there is also a risk of debt spiraling. This can occur if a buyer has not kept track of how many items they have purchased and then get hit with a lump-sum payment that they may not be able to pay (or if they borrow from multiple providers). Also an inquiry into the BNPL industry by one of the regulators revealed that 40% of customers earn A\$40,000 or less²⁹. Afterpay and Zipco were asked to testify in front of the Australian Senate to address this. Afterpay addressed this issue by stating that a user who misses even 1 payment is suspended until the debts are cleared, and thus this stops the debt spiral before it starts.

²⁹ <https://www.youtube.com/watch?v=wX0puo5Oq-Y>

- **Increased regulation:** Australia has a National Credit Code, but it doesn't apply to short-term (less than 68 days) low-cost loans. But there are calls for this to apply to by now pay later companies. Regulators also fear that BNPL lenders are using more than one service at the same time. Afterpay has repeatedly urged regulators that it not regulate BNPL companies like they do big institutions. In response to this the industry (including the major players like Afterpay and Zipco) have come up with a draft 'code of conduct' which promises to make late fees fair and capped, limit services to those above the age of 18, freeze and even waive fees in case of financial hardship among other measures³⁰. That said, following this code is voluntary. It should also be noted that in California Afterpay was fined for giving out "unlicensed loans", where Afterpay essentially had to return any late fees collected. It does appear now that Afterpay has gotten licensed.
- **Retail Surcharge:** The other key risk is the RBA reviewing rules whereby BNPL providers do not allow retailers to levy a surcharge for consumers using their product. In Australia retailers can levy a surcharge if a credit card is used (which might explain the quick adoption of afterpay vs credit cards). Although allowing the retailer to charge additionally for credit card use does not make sense, as its Afterpay who absorbs the payment processing costs³¹.
- **Current Environment:** The coronavirus outbreak and subsequent global lockdown does raise some concerns. Namely that customers will stop purchasing and more severely, will default on their payments. Taking the second issue first, there are a number of reasons why defaults are mitigated. First off the 3-4% (avg) take rates means that defaults have to essentially triple for current rates in order to start affecting the balance sheet. That said, in this environment this could happen quickly, however this analysis by [ECP capital management](#) shows that one of the benefits of the Afterpay model is that working capital cycles are very short (8 weeks) and within two weeks you start to get indications that default might occur, thus you can limit exposure to any one customer. Tracking Afterpay fan pages on Facebook, it seems that Afterpay has already started to cut customer limits and on occasion charge immediately for the first payment (which lowers the risk of default by 25%). Even if there are a slew of customer defaults, Afterpay's revolving credit lines are close to A\$1 billion, which as of end 2019 was 80% unused. While this would cause a leveraging of the balance sheet, deleveraging of the balance sheet would occur once 'defaulted' customers are cycled out of the platform. With regard to customer spend declining we do believe this will occur as financial uncertainty builds across the world. To counter this however we do think while the pie will shrink, BNPL models will own more of the pie as customers will jump on any solution that allows them to delay payments at no cost for items that they need or have an emotional connection to. Further a mid-season update from the company showed that while orders declined toward the end of march, were up 10% the first two weeks of April. This along with commentary on a slew of retailer signups gives credence to our above points.

³⁰ <https://www.businessinsider.com.au/australia-buy-now-pay-later-industry-code-afterpay-zip-2020-1>

³¹

<https://www.afterpaytouch.com/images/06022020-Afterpay-Submission-to-RBA-Issues-Paper-on-Retail-Payments-Regulation.pdf>

- **Cash-flow:** The above risk notwithstanding Afterpay has over A\$400MM in cash on the balance sheet which should cover the next 1.5 years worth of cash employee expenses and other operating expenses. This does not include marketing expenses, but that would be scaled back if macro conditions deteriorate. Further the company in its mid-season update in April has mentioned that the ANZ business is already cash-flow positive.

7. Conclusion

In order to come to the conclusion that Afterpay is a solid business to purchase, one must come to terms with two assumptions. The first is that the BNPL space is here to stay and will continue to grow at rapid rates and second that Afterpay will be the leader (or at least top two) in the BNPL space.

If we look at the facts the BNPL space is very exciting. 40% growth in basket sizes, millions of customer leads monthly, 20-30% share of pie, 23-24x annual customer repeats, 28% industry growth through 2023, and default rates very comparable to the best banks in the world. Given this we believe that despite the competition in the space Afterpay will outperform its competitors due to a razor focus on fast-fashion and low AOV items, an ability to execute better than its competitors by building a stronger shop directory, and keeping the risk to its balance sheet limited through risk modelling and maintaining high-take rates.