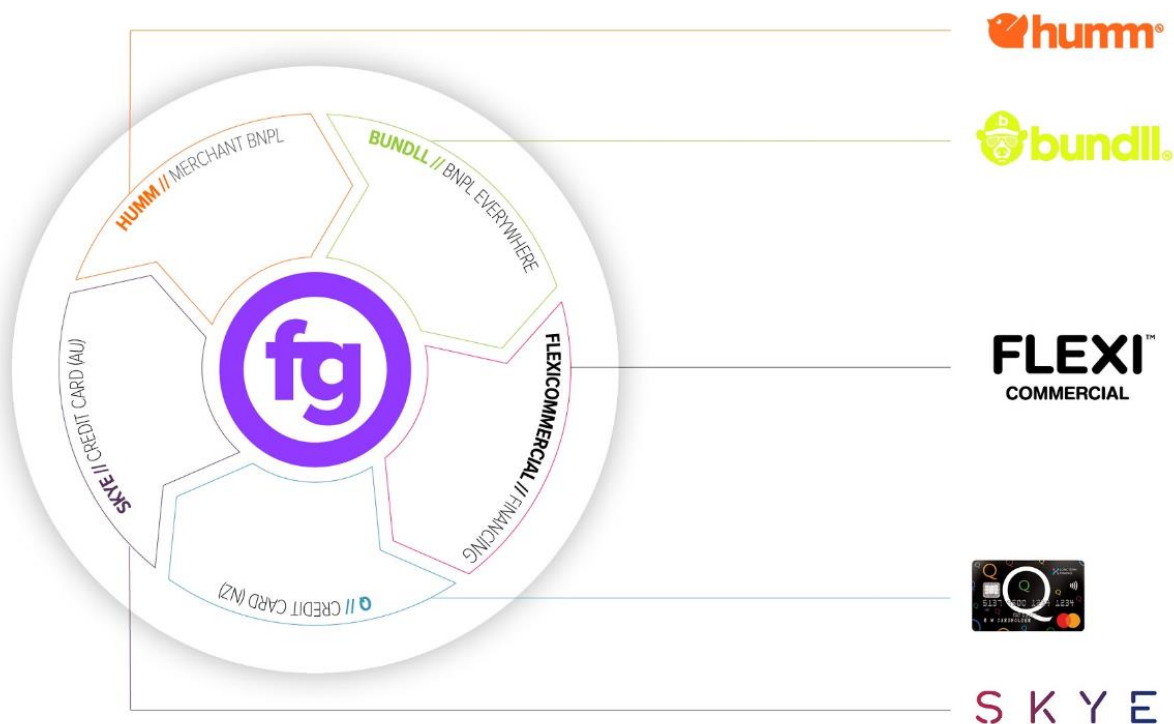


# Flexigroup (FXL.AX)

## AUSTRALASIA'S MOST COMPLETE FINANCIAL PRODUCT ECOSYSTEM



Current Price	\$0.85
52-week range	\$0.380 - \$2.710
Market Cap (Million)	\$382.14
Shares outstanding	394.39
Rating	Buy

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## Executive Summary

The purpose of this report is to analyse the performance of Flexigroup to determine if they are a good investment option. Flexigroup is a fintech company who are moving into the rapidly growing buy now pay later (BNPL) space. With 5 product offerings covering business and consumer markets. I have reviewed 3 public announcements and their impact on the share price since the current CEO commenced in September 2018. Technical analysis indicated that are in a slight long-term downward trend unable to break a resistance range of \$2.45 within the last 4 years. The current pandemic has had a huge impact on the share price presenting a good buying opportunity.

A Macro PESTEL analysis has been performed highlighting the economic support the government is currently providing. A micro swot analysis is included along with a peer analysis of key competitors.

5 ratios have been used to evaluate Flexigroup alongside 4 main competitors in BNPL indicating the good financial position of Flexigroup. Current ratio, cash cycle days and growth rate of sales all highlight Flexigroup is in a far superior position to all competitors. Customer and merchant acquisition growth is good, but show they are not the leaders in BNPL and have a lot of growth potential in this area.

A Dupont 3 factor analysis has been completed and compared to peer in order to evaluate ROE. Profit margin is strong, and they are the only company making a profit to date at 14.6% LY. Total asset turnover is low but stable at .15 LY. Financial leverage has slightly increased to 5.01 LY. Overall ROE has declined slightly due to decline in profit margin and total asset turnover but held up by an increase in financial leverage. Comparatively ROE is excellent at 11.31% LY and have delivered double digit growth in the previous 5 years while no competitors posting a positive ROE to date.

A dividend discount model (DDM) has been conducted to estimate the intrinsic value at \$0.98 cents per share. To from the inputs required the Capital Asset Pricing Model (CAPM) has been used to calculate a required return on 11%. A regression analysis has been completed to calculate Beta used in CAPM. A multistage growth model has been implemented with growth rates estimated with consideration to the current economic conditions of Covid-19. A sensitivity analysis has also been included to demonstrate the different outcomes when changing growth or required return inputs.

Taking into consideration their historical performance of strong ROE, excellent ratio competitor analysis, and intrinsic value of \$0.98 cents extrapolated from DDM I recommend a buy of Flexigroup. Technical analysis has not yet indicated a buy signal however other fundamentals

are strong. Covid-19 economic market impacts have pushed the share price down substantially and I believe it is now undervalued trading at \$0.85 cents as of May 4<sup>th</sup> 2020. They have enough business maturity, track record and government support to remain during this difficult economic time and have good growth opportunities ahead.

## Introduction

Flexigroup (2020) is one of Australia's original fintech companies commencing in consumer finance in 1991. They are a diversified financial services company with an ecosystem providing business finance for small to medium enterprise, credit cards, interest free, layby and buy now pay later (BNPL) payment solutions for consumers and businesses (Thomson Reuters 2020). They have access to four markets, Business to Consumer, Business to Business, Retail to Consumer and Online, operating in Australia, New Zealand and Ireland (Thomson Reuters 2020). Flexigroup (2020) intend on making a richer, fuller life for everyone and have over 1.7 million customers. Their product offerings are summarised in Appendix 1 (Flexigroup, 2020).

Consumer trends have shown a shift in consumer finance products toward BNPL options. To capture this emerging and growing market opportunity Flexigroup commenced a 3-year transformational plan in February 2019. Flexigroup (2019) have simplified product offerings from 12 consumer facing brands to 5. Launching Humm in April 2019 to cater for bigger purchases, and Bundl in February 2020 capturing everyday spending with Mastercard and pay later as one Bundl (Thomson Reuters 2020). Between Humm and Bundl Flexigroup captures almost any payment in the market.

## Financial Performance

Below is a review of 3 public announcements and an analysis of the impact on share price.

**6 August, 2018**

**Open \$2.27, Close \$1.97**

Reuters informs (2018) CEO Symon Brewis-Westen resigned effective from, September 3<sup>rd</sup>, and appoints the current CEO Rebecca James.

Market reacts negatively dropping -13.6% on day of announcement supported with strong volume up 436% as shown in Appendix 1. This is likely to be a reaction to losing Brewis-Westen and the uncertainty of James. It is common for new CEO's to take the business in a different direction and the uncertainty of future directional changes brings new risks for investors.

The share price continues to fall -20.4% before beginning to rebound on 20 August after releasing results at the higher end of guidance. This positive result, and bounce in share price,

captures investor show of confidence. However, the price rebound was short lived before continuing to fall until 18 February, 2018 at a bottom of \$1.10 as seen in Appendix 1.

## Technical analysis

Reviewing previous 5 years reveals a slight downward trend as shown in figure 1.1 with a resistance level approximately \$2.40-\$2.50. The price around time of announcement is a resistance level where larger supply is expected after recovery phase commencing November 2017.

50-day MA (blue) crossed the 200-day MA (yellow) from below indicating a positive change in trend and buy signal on February 12<sup>th</sup> 2018 as seen in figure 1.2. However, this is not supported with volume (Appendix 1 shows decrease), therefore, should not be viewed at an entry point. The 50-day MA crosses 200-day MA from above indicating a sell signal on October 22<sup>nd</sup> 2018 at a price of \$2.01, but again is not supported with stronger volume (14% decrease) and therefore not a buy signal.





**February 24th 2020**

**Open \$1.86, Close \$1.835**

Reuters informs (2020) Flexigroup sees transaction volume in FY20 growing between 10-15%, they expect to balance margins with growth and maintain double digit ROE. Also declared fully franked dividend of 3.85 cents per share.

Mickleboro (2020) suggests the growth increase of 28% on the prior corresponding period was driven by new product launches, new customer segments, and new partnerships. There was a 15% lift in retail partners to 69,000 and a 12% increase in active customers to 1.87 million, with receivables growing 7% on the same period last year to \$2.7 billion (Mickleboro 2020).

Under normal market conditions there share price may have rallied on the back of good news, however market appears neutral to the news with only a slight decline in price. In the context of global markets, which began falling February 20<sup>th</sup> due to uncertainty surrounding Covid – 19. The lack of falling should be viewed comparatively as a positive response, supported with good volume up 86%. However, the stability in price was short lived and the price fell to a bottom of \$0.40 on 23<sup>rd</sup> March as shown in Appendix 1 and figure 1.2.



## Technical analysis

Appendix 1 shows that FXL performed better than the market on the day but had an overall larger decline to the current low. S&P ASX200, All Ords and S&P/ASX 200 diversified financials fell 36.5% and 37.1% and 47.9% respectively from peak to low in while FXL fell 78.2% in the same corresponding period.

The fall in price from the announcement appears unrelated to the announcement itself as it performed comparatively better on the day (see appendix 1). The fall is more a symptom of prevailing market conditions. The steeper decline in financials reflect the risk and uncertainty of businesses based on borrowing, lending and overall spending of SME's and retail consumers.

Referring to figure 1.2, the next buy signal was on June 5<sup>th</sup> 2019 at a price of \$1.74 when 50 MA crosses 200 MA from below, and on strong volume (increase 668%, Appendix 1). This breakthrough of the long-term trend indicates bullish change in trend. However, this trend is broken as global markets fall and almost all stocks begin to fall February 20<sup>th</sup>. The short-term trend crossed the long-term trend from above on March 3<sup>rd</sup>, 2020 at a price of \$1.36. this is supported with heavy volume (up 198%) confirming a sell signal.

### **March 19<sup>th</sup>, 2020**

**Open \$0.750, Close \$0.595**

Reuters (2020) informs Flexigroup withdraws guidance regarding volume growth objective of 10-15%, and target ROE FY20. Profits likely to be lower due to market conditions and investment as part of 3yr transformational plan (Reuters 2020)

Further business update released March 20<sup>th</sup> helped ease investors' minds outlining a few key concerns. Firstly, the funding base should be protected due to diverse funding source being warehouse, corporate and banks (Flexigroup, 2020). This is further supported with Australian government providing support to non-bank lenders for the interests of SME's and consumers (Flexigroup, 2020). Profits will be lower due to market conditions and investment into the 3yr transformation plan, and any change to losses as a result of COVID-19 is expected to be within risk tolerance parameters (Flexigroup, 2020).

Unlike other BNPL businesses Flexigroup will be somewhat comparatively protected due to its diverse business model, with no individual business contributing to more than 35% of pre-tax profit (Flexigroup, 2020).

### Technical analysis

Market reaction is negative sending share price plummeting -25.2% on strong volume up 203% (see Appendix 1). However, Confidence is reflected in that while the business did fall to a further low, it performed comparatively stronger than the 3 indexes listed in Appendix 1 for the same corresponding period. While the market appears to be recovering the 50-day MA is still below the 200-day MA. Until this trend changes there is no new buy entry point from a technical perspective as shown in figure 1.2.

## Macro-Economic Factors

Covid-19 is the global dominating story that is impacting all areas of business as the world adapts to a new way of living and operating. The economic instability and uncertainty around the length of impact has halted growth in most industries, interrupting production and disrupting international supply chains as global GDP is set to fall and unemployment to rise. Covid-19 impacts will be felt for some time resulting in several changes from how we interact socially, impacting consumer trends, technological needs and capabilities. In the short-term governments around the world are announcing new fiscal policy and monetary policies to support the economy. These measure for Australia is outlined in the PESTEL below and are a combination of measure set to support households, individuals and small to medium sized business. The goal of the government stimulus packages is ultimately to keep the economy moving by encouraging consumer spending (both business and individual) and job retention.

## PESTEL Analysis

Political	Government policy <ul style="list-style-type: none"><li>Stimulus packages of \$320 billion (16.4% of annual GDP)</li></ul>
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	<ul style="list-style-type: none"> <li>• Temporary increase to thresholds at which creditors can issue statutory demand</li> <li>• Increasing instant asset write off from \$30,000 to \$150,000 and expanding business with aggregated annual turnover from \$50 million to \$500 million</li> <li>• Accelerated depreciation deductions to boost business investment</li> <li>• Reducing deeming rates</li> <li>• Providing the Australian Office of Financial Management (AOFM) with \$15 billion to invest in structured finance markets used by smaller lenders, non-ADI's and smaller ADI's. This support will be provided by making direct investments in primary market securitisations by these lenders and in warehouse facilities.</li> <li>• Coronavirus SME Guarantee Scheme. Government providing a guarantee of 50 per cent to SME lenders to support new short-term unsecured loans to SMEs. Guaranteeing up to \$40 billion of new lending to meet cash flow needs and enhancing lenders' willingness and ability to provide credit.</li> <li>• Cutting red tape by providing a temporary exemption from responsible lending obligations for lenders providing quick and efficient credit to existing small business customers.</li> </ul> <p>Temporary changes to superannuation</p> <ul style="list-style-type: none"> <li>• Early release of super - those affected by Coronavirus can access up to \$10,000 in 2019-20 and a further \$10,000 in 2020-21 Tax free</li> <li>• Reducing superannuation minimum drawdown requirements for account-based pensions and similar products by 50 per cent for 2019-20 and 2020-21. This measure benefits retirees by reducing the need to sell investment assets to fund minimum drawdown requirements.</li> </ul> <p>ATO</p> <ul style="list-style-type: none"> <li>• Temporary reduction and deferral of payments</li> <li>• For coronavirus affected areas - Relief from taxes and government charges (This supports over 3.5 million businesses employing more than 9.7 million employees.)</li> </ul> <p>RBA</p> <p>Supporting the flow and reducing the cost of credit</p> <ul style="list-style-type: none"> <li>• Further easing in monetary policy by reducing the cash rate to 0.25%.</li> <li>• Banks will have access to \$90 billion of funding at a fixed interest rate of 0.25%, low-cost funding and incentives to banks expand their business loans to SMEs.</li> <li>• Providing liquidity to government bond market to support smooth functioning of benchmark pricing for financial assets</li> </ul>
Economic	<p>Cash flow support measures for SMEs</p> <ul style="list-style-type: none"> <li>• \$100,000 for SME's and NFP's that employ staff to keep operating. I.e. pay bills and retain staff</li> <li>• Wage subsidies for apprentices and trainees of 50% max \$21,000</li> </ul> <p>Cash flow support for households and individuals</p> <ul style="list-style-type: none"> <li>• Job keeper payment program worth \$130 billion (\$1500 fortnightly payment)</li> <li>• Payment increases on support payments to \$550 per fortnight</li> <li>• Social security payment x 2 \$750</li> </ul>

	<p>Unemployment expected to rise to 10% consequently decreasing consumer spending</p> <p>Deflation expected in line with low consumer confidence</p>
Social	<ul style="list-style-type: none"> <li>• Population growth will halt or considerably slow down due to closed borders due to Covid-19</li> <li>• Increased attention on healthcare, including mental health</li> <li>• Social distancing and gathering restrictions have changed consumer buying trends with many brands closed for physical shopping and only open via online platform.</li> </ul>
Technology	<ul style="list-style-type: none"> <li>• Increased use and reliance on technology to stay connected is changing the way business operates as people work from home.</li> <li>• Social media platforms now vital for social interaction</li> </ul>
Environmental	<ul style="list-style-type: none"> <li>• With production paused many businesses will have carbon credits to use once regular levels of production resume</li> <li>• Positive environmental impacts as a result of Covid-19 as people and not traveling around – reduced fuel consumption and wildlife preservation</li> </ul>
Legal	<ul style="list-style-type: none"> <li>• Health and safety will be a strong topic for the coming year and inquiries will be launched into Covid-19 disaster</li> <li>• Government has enacted temporary relief for directors from any personal liability for trading while insolvent</li> <li>• Temporary flexibility in the Corporations Act 2001 with unforeseen events arising from Coronavirus.</li> </ul>

Sources: Australian Government – The Treasury

Australian Government – Australian Office of Financial Management

Australian Government – Australian Taxation Office

Reserve Bank of Australia

## Micro analysis

## SWOT analysis of Flexigroup

A SWOT analysis reviews the internal strengths, weaknesses of Flexigroup as well as the external opportunities and threats within an industry context. A summary of industry peer comparisons can be seen in appendix 2.

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>• No individual business reporting segment contributes more than 35% of group pre-tax profit.</li> <li>• The diversity of FXL is a key differentiator.</li> <li>• Across all FXL segments over 75% of our customers are over the age of 35, with a strong penetration of home ownership.</li> <li>• Supported businesses have been trading on average for more than four years.</li> <li>• Business maturity brings loyalty, goodwill and reputation.</li> </ul>	<ul style="list-style-type: none"> <li>• Large costs allocated to marketing as part of 3yr transformational plan (commenced February 2019) expense is needed due to crowded market.</li> <li>• Recently consolidated several product offerings. Unprofitable legacy business still impacting.</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>• Nearly 2 million Australians (1 in 10) used a BNPL product in 2019.</li> <li>• BNPL payments represented 8% of all payments in 2019, an increase of more than 166% from 2018.</li> <li>• Renegotiation with suppliers due to maturity may put them in a better position than competitors.</li> <li>• Diversification into further sectors – e.g. paying council rates.</li> <li>• Possible increase for commercial borrowing by SME's as a result of government spending for small business.</li> </ul>	<ul style="list-style-type: none"> <li>• Increase in unemployment due to Covid-19 will lead to more hardship defaults or inability to pay. Resulting in decreased cash flow increased bad debts and impacted profit margin.</li> <li>• Dependent on discretionary spending - heavily impacted by Covid-19.</li> <li>• A crowded market – Afterpay, Z1P, Splitit, Sezzle Openpay, Brighte, CreditLine, Klarna, Laybuy compete with Humm and Bundll.</li> <li>• Regulations – under review – an area of uncertainty.</li> </ul>

Source: Flexigroup  
Finder

## Peer analysis

As Flexigroup's growth opportunities are in the BNPL space, the following companies have been chosen because their core business is BNPL. A peer comparison outlining the product offerings and cost can be found in Appendix 2.

A comparison of 5 ratios has been completed to evaluate Flexigroup in the context of competitors.

Competitors of Flexigroup – offering Humm and Bundl

1. Afterpay
2. Zip
3. Splitit Payment
4. Sezzle

## Ratio Comparison

### Current ratio

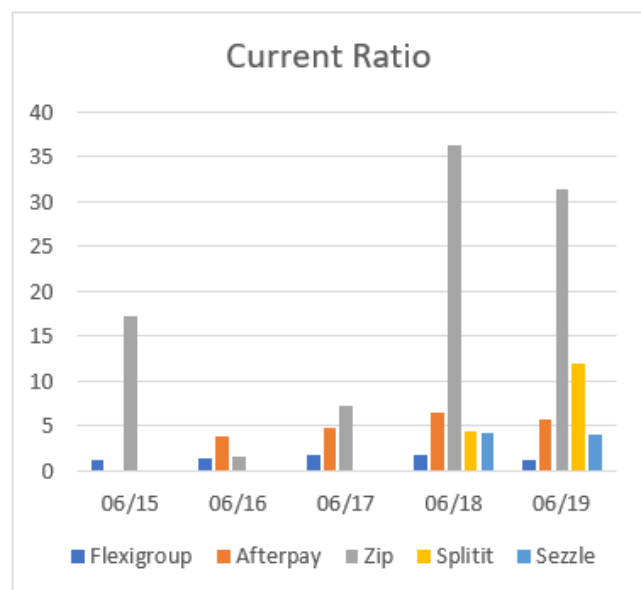
Current ratio examines the relationship between current assets and current liabilities as a measure of internal liquidity (McLeod 2020). The ratio provides insight into whether the company has enough current assets to meet their current (12 months) liabilities and is therefore solvent (McLeod 2020). The higher the ratio, the more liquid the company is.

Comparatively Flexigroup has a much lower ratio as shown in Figure 2.1, and Appendix 2 ranging between 1.18-1.86 over the preceding 5 years. This indicates the company can meet its short-term debts without issue. However, 2019 has the lowest ratio or 1.18 meaning that for every \$1 of current debt there is \$1.18 of current assets to meet the obligations.

All the competitors appear to be in a healthier position from a creditor's perspective, however a very high ratio

may be an indicator that management may not be deploying the assets effectively. For example, Zip on 31.39 for 2019. Zip also has the largest variance between 1.68-36.3, while Afterpay remains more stable with 3.89-6.65 (see Appendix 2). Overall, while Flexigroup is low, it is consistent, demonstrating good use of assets and maturity. Based on current ratio alone I would recommend a buy.

Figure 2.1



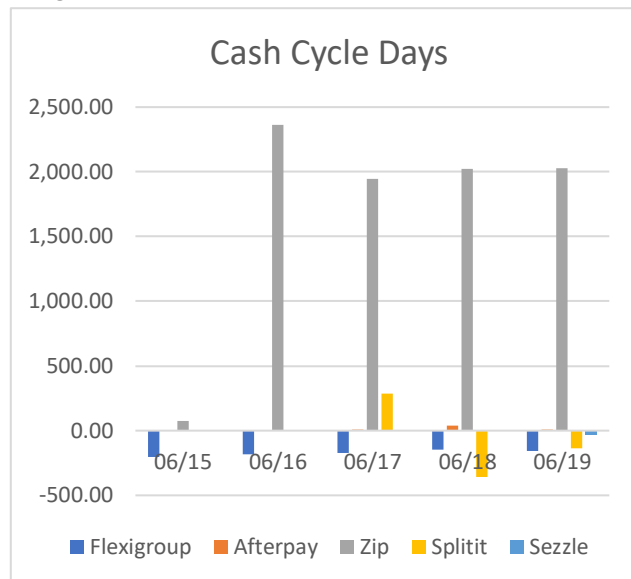
## Cash Cycle Days

Cash cycle examine receivables, inventory and payables. The value represents the sum of Average Inventory (Days) and Average Receivables Collection Period (Days) minus Average Payables Payment Period (Days) for the year Morningstar (2020). The smaller number is better, indicating the company's ability to keep cash for longer, as it is receiving cash quicker while paying slower.

Flexigroup is outperforming peers, consistently receiving money faster than paying out year on year as shown in figure 2.1 and Appendix 2.

Splitit has also showed better cash flow from 2018 onwards. Zip is extremely high at 2029 for 2019 which could indicate payment loss or bad debt issues within the business. They may also have less bargaining power when negotiating payment details contributing to extreme high numbers.

Figure 2.1



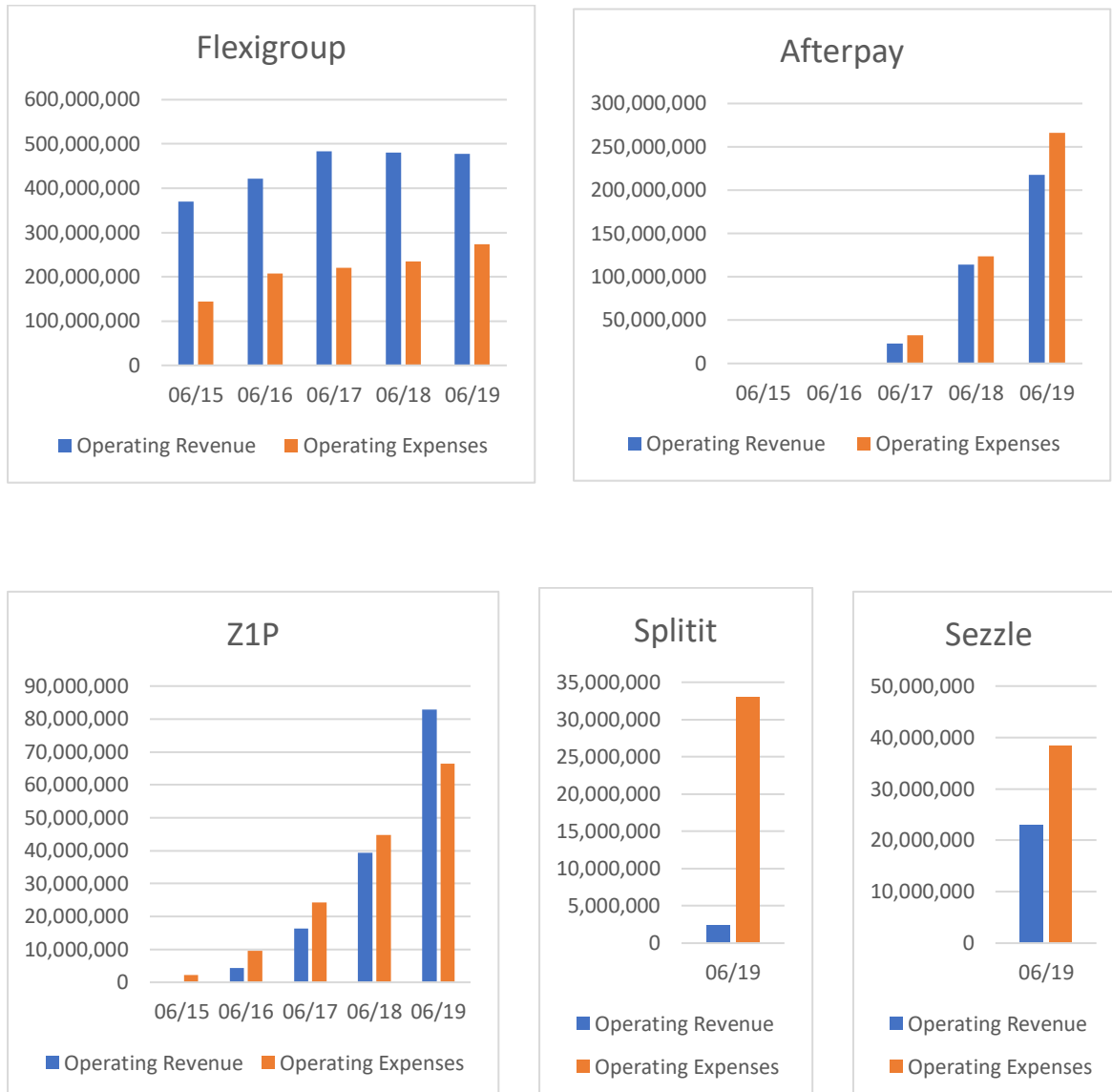
Overall Flexigroup is the only company cycling cash flow to their advantage and would therefore be a buy.

## Growth rate of sales

Examines if a company is growing its earnings by either growing revenue or by cutting expenses (Reilly Brown & Leeds 2019). Flexigroup are outperforming all peers with revenue exceeding expenses every year and are in a much healthy position as shown in figure 2.3. Operating revenue has declined slightly, and operating expenses have grown as outlined in Appendix 2. This will impact the business profit margin; however increased expenses are part of the marketing strategy for transformational growth of Humm and Bundll and are not a cause of concern. Zip and Afterpay have strong sales growth, almost doubling year on year (see figure 2.3 and Appendix 3). Zip is demonstrating better cost control measure, Afterpay expenses remain higher than revenue, however this is due to aggressive marketing growth

strategy. Splitit and Sezzle are still in infancy and should be monitored over the following 3-5yrs. Overall Flexigroup historical performance is excellent indication a buy recommendation.

Figure 2.3

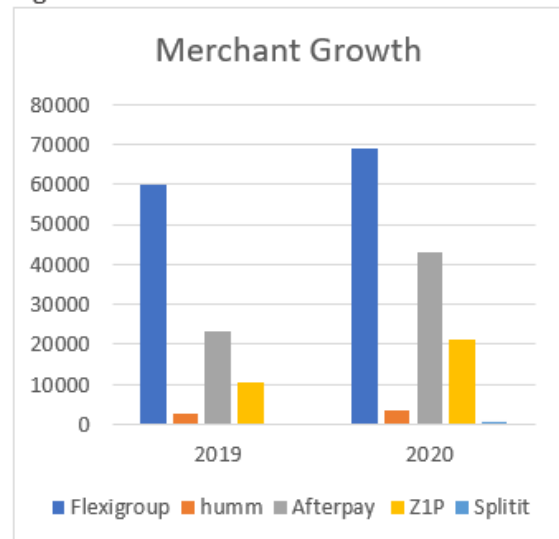




## Merchant growth

Humm merchant growth looks great in isolation at 29% as shown in appendix 2, however when compared to Afterpay at 86% and Zip at 100% it is evident that they are the clear market leaders in BNPL as shown in figure 2.4. In a rapidly growing area, there is plenty of opportunity for Humm and Bundll to grow as more merchants see the sales potential of employing BNPL. Flexigroup has a much larger merchant base as seen in figure 2.4. The established business relationships and diversified core businesses is a key differentiator, providing other avenues of revenue other than BNPL. The launch of Bundll will also have a large impact on the coming year as the relationship with Mastercard opens the door to most merchants. Because of the protection of multiple revenue streams, maturity, bringing reputation, relationships and good merchant growth I would recommend a buy/hold.

Figure 2.4

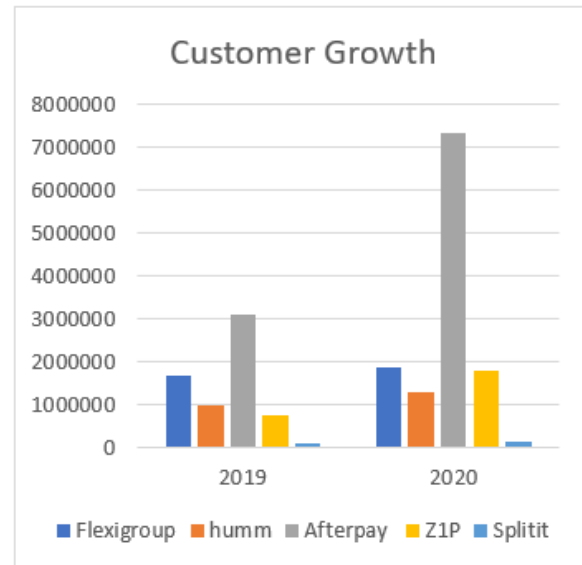


## Customer growth

Humm's customer growth appears strong at 32%, see Appendix 2. However, compared to Afterpay, Zip and Splitit customer acquisitions are substantially lower. Afterpay and Zip are the clear market leaders with phenomenal growth as seen in figure 2.5. in a crowded and saturated market and may be difficult to gain market share away from Afterpay and Zip when that are now synonymous with BNPL.

Flexigroup has grown 12% (mostly from Humm). While smaller, double digit growth for a mature business is very good. There is good opportunity for growth as more consumers move to BNPL. Bundll will be particularly easy for new consumers as its simple and similar to a credit card. Overall, the 2 offerings of Humm and Bundll meet almost all the needs of customers as a BNPL platform. More people are set to take up BNPL as a payment option in the future. However, due to the popularity and media attention of Afterpay and Zip I recommend a hold based on this ratio.

Figure 2.5



## Return on Equity (ROE)DuPont Analysis

### ROE DuPont Analysis

Return on Equity (ROE) measures the rate of return earned on the capital provided by shareholders, indicating how well the business uses investment fund (common equity) to generate sales (net income).

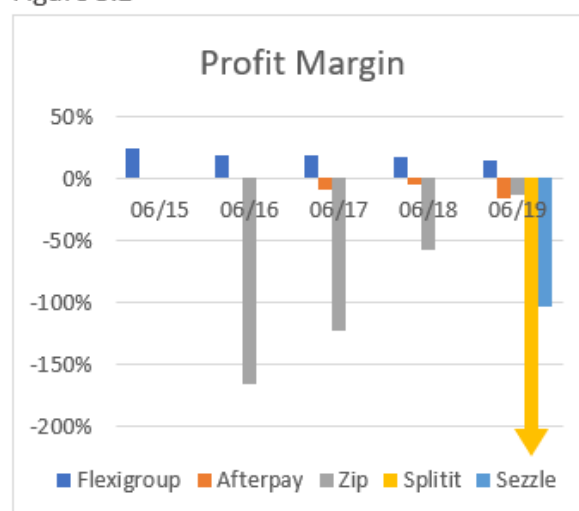
A DuPont 3 factor analysis has been completed to better evaluate profitability, operating efficiency and the level of financial risk compared to its competitors. This is split into 3 components to better understand changes in ROE over time (McLeod 2020)

### Profit Margin

Net profit margin is an operating profitability ratio that shows how much profit is retained after all costs, indicating the businesses ability to control expenses. Flexigroup is the only business returning a profit, strongly outperforming its competitors as shown in figure 3.1. An increase in profit margin will result in a higher ROE.

Flexigroup net profit has been declining due to a combination of declining operating revenue over the preceding 3 years while increasing operating expenses have affected net income (see Appendix 3 profit and loss statement). Increase in expenses is expected due to the growth expansion plan and aggressive marketing campaign of Humm and Bundll into BNPL, therefore is not a cause for concern.

Figure 3.1



Zip has shown consistent improvements

and may post a profit this year depending on Covid-19 impacts as shown in figure 3.1. Zip improvements are due to phenomenal improvements in net sales which has more than doubled each year since 2016 as seen in Appendix 3, while operating expenses are growing at a slower rate showing good management control.

Afterpay has also has incredible growth in net sales, its operating expenses have increased at a faster rate effecting it overall net income as seen in Appendix 3.

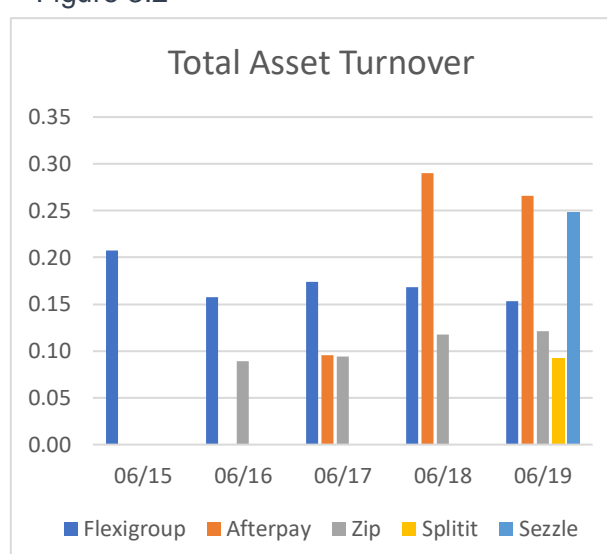
## Total Asset Turnover

Total asset turnover is an operating efficiency ratio. It indicates the effectiveness and ability the managers to generate sales through its asset base. If asset turnover increases then the business is generating more sales per asset owned, resulting in a higher ROE.

All business are relatively low with

Flexigroup sitting on .15 for 2019 (see Appendix 3), meaning that for every \$1 invested in assets only 15c of sales are being generated. Flexigroup net sales have declined slightly over the previous 3 years as assets have increased which has contributed to the decline in TAT ratio as seen in figure 3.2.

Figure 3.2



Afterpay is demonstrating the best operating efficiency and has been substantially higher

over the previous 2 years, with the slight pull back in 2019 due to total assets increasing at a faster rate than the net sales as shown in Appendix 3.

Zip net sales is growing at a slightly higher rate than growth in total assets generating a stable and slight increase in asset efficiency, this is an improvement but is still below Flexigroup. Sezzle's performance is also relatively better, however it's still in infancy and difficult to compare.

## Financial leverage

Financial leverage is an equity multiplier to show how much the company has financed assets with equity or debt (Hargrave 2019). The larger the multiplier the larger financial leverage. A lower multiplier indicates the use of more equity and less debt to purchase assets. The higher the financial leverage the higher the ROE.

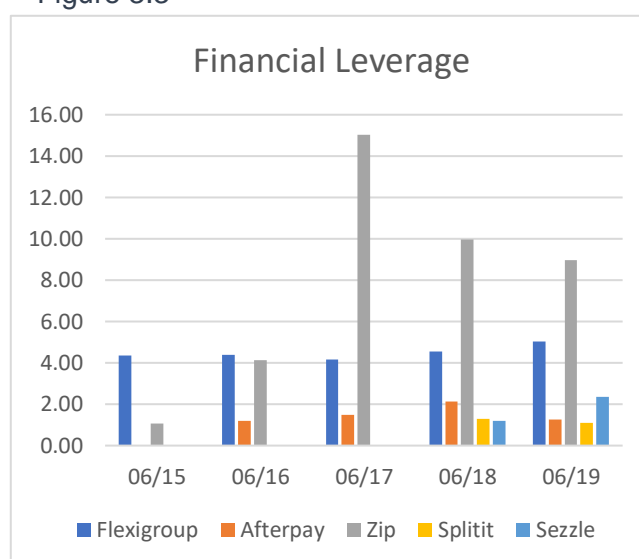
Flexigroup common equity has decreased over the preceding 3 years while its assets have increased, meaning that they are utilising more debt to purchase assets, results in higher financial leverage (see figure 3.3 and Appendix 3). Due to the cyclical and volatile nature of BNPL, increased debt may indicate more risk, however, can also be a strategic tax advantage. The increase has only been small and is therefore not a cause for concern.

Afterpay has significantly less debt. The drop in financial leverage in 2019 is largely driving by a 253% increase in common equity relative to a 109% increase in total assets as shown in Appendix 3.

Zip has significantly higher financial leverage with a spike in 2017 largely due to 261% assets growth financed by debt as equity remained stable. While asset growth continued into 2018 and 2019 by 293%, common equity has also grown by 582% over the same period reducing the amount of financial leverage (see Appendix 3)

Splitit has low financial leverage which has decreased further with issue of new equity. Sezzle also has low financial

Figure 3.3



leverage which has increased in 2019 due to an increase in assets financed by debt while equity has reduced as shown in Appendix 3.

## ROE conclusion

An increased profit margin, asset turnover and financial leverage will result in a higher ROE. A higher ROE might appear better, but if it comes from higher financial leverage (Debt) then it may not be good if the business risk has increased due to additional debt

Return on Equity has declined over the last 5 years but has remained relatively stable with Flexigroup being the only comparative business posting a positive ROE year on year as shown in figure 3.4.

When looking at the components profit margin and total assets have decreased which in turn have led to the drop in 2019. This is not a good trend as these are the key positive drivers of ROE. Financial leverage has increased which increases ROE as shown in Appendix 3. An increase in debt finance is an increase in risk, especially given the current economic environment where profit margin is

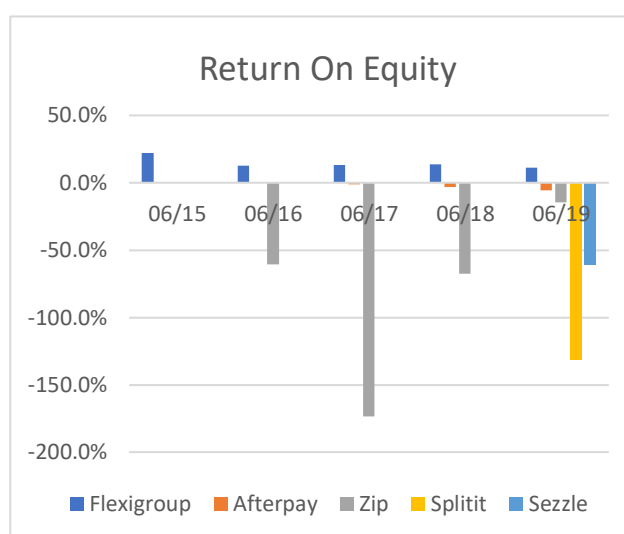
Figure 3.4

expected to substantially be impacted. Had the financial leverage had no change the ROE would have been 9.96% as opposed to 11.31%. Thus, the increase in financial leverage is making the ROE appear better than it is.

Flexigroup maturity and diversified areas of business should help smooth results and continue to see profit from other areas of the business with no single business unit being more than 35% of net profits (Flexigroup 2020)

Afterpay ROE has remained negative with a negative outlook as profitability is most likely out of reach due to economic environment. If growth continues, they may look to profit next financial year depending on economic factors.

Zip are showing steady signs of improvement but remains negative and unlikely to profit this financial year. Their ROE is also somewhat inflated due to high financial leverage which highlights that is a riskier business.



Splitit and Sezzle have a difficult task ahead before becoming profitable and utilising asset bases more effectively. I would not expect to see a positive ROE for at least 2-3 years.

Overall Flexigroup is the only company to have a positive, stable double-digit ROE over 5 years, trending well above competitors. All areas of profitability, asset efficiency and leverage are comparatively superior and would therefore recommend a buy based on ROE.

## Valuation

### Capital Asset Pricing Model (CAPM)

CAPM indicates the required rate of return on risky assets and helps value the asset by providing an appropriate discount rate used in the Dividend Discount Model (McLeod 2020).

CAPM depicts the relationship between the required rate of return and level of systematic risk. A market portfolio forms a benchmark proxy and is used in CAPM calculation. It is assumed the correct fully diversified market portfolio has been selected. See Appendix 4 for computation inputs resulting in a required return of 11%.

### Beta

Beta measures the relative risk with the market, the assets systematic risk (McLeod 2020). The markets portfolio Beta is set at 1 to indicate how the asset moves relative the market.

A regression line is computed to get the changes of daily periods between the securities return and market portfolio return over a 6-year period (Reilly, Brown & Leeds 2020). The market portfolio chosen is S&P/ASX 200. Using a different proxy will lead to different beta.

Betas for individual assets are not stable in the long run and tend to regress toward the mean, therefore an adjusted beta is required. The analysis in Appendix 4 gives a raw beta of 1.192 and an adjusted beta of 1.284. The adjusted beta has been calculated and used in CAPM giving a required return on 11% as shown in Appendix 4.

### Dividend Discount Model (DDM)

The dividend discount model attempts to value the price of a stock by determining the intrinsic value, which is equal to the present value of all future cash flows (Reilly, Brown & Leeds)

Multistage growth model has been chosen. The advantage of this model captures different stages of growth at different times, with flexibility to capture abnormal financial activity. This captures current market conditions with an estimate of zero growth, abnormal growth as the economy rebounds, and finally stabilised, sustainable growth giving a more realistic estimate of growth. Another advantage of DDM is that it is a simple way to estimate the intrinsic value of a company.

The following estimates will affect the accuracy of the model

1. The stream of returns – Dividends
2. The required rate of return – Calculated by CAPM
3. Time pattern of returns
4. Growth rate – Estimated below

The disadvantages of DDM is that the estimate is highly dependent on 2 key inputs, being the growth rate and required rate of return, which are very sensitive.

Small changes can result in significant differences in the final estimate of intrinsic value as shown in the sensitivity analysis (figure 5.2). Inputs are always changing and therefore susceptible to error because it relies heavily on speculation and assumptions.

Other disadvantages are that intangible values are not considered, for example brand loyalty. Also, it is only appropriate for companies paying a dividend (generally mature companies) and not growth companies.

## Assumptions

- Sustainable growth rate is expressed as a perpetuity, estimated at long run GDP
- Multistage growth is the most appropriate for current conditions (not zero growth, or constant growth)
- When and by how much dividends will change over the time period
- Payout ratio and required return remain constant
- The company will continue to pay out regular dividend.

## Growth rate

Generally, the dividend growth rate is estimated by multiplying the retention rate by ROE. In the case of Flexigroup this would be 6.39% as shown in appendix 5. However, these are not 'normal' economic times and would not be appropriate or realistic to assume under today's conditions that Flexigroup will grow 6.39%. Reilly, Brown & Leeds (2019) argues "changes in a company's individual earnings can be attributed to changes in aggregate earnings and industry earnings with aggregate earning being the most important".

Taking into consideration today's global economic climate during the pandemic I have assumed a 0% growth rate in year 1. Year 2 sees earnings recover to pre Covid-19 conditions and I have therefore chosen a rate of 6% based on the retention rate multiplied by ROE calculation. Year 3 I have chosen higher growth of 8% as the market should have fully



recovered, with business and individual spending more. There will also be a significant increase in the number of customers and therefore transaction volume as BNPL will be an entrenched way of purchasing for consumers. Years 4 and 5 have a healthy but lower growth rate of 5% because by this stage most consumers will be using a BNPL platform and attracting new customers may be more difficult.

Finally, the perpetuity growth rate has been chosen based on long run GPP. The prior 10 years has a mean of 2.6% but has been declining over time when looking at the last 60 years as shown in Appendix 5. It is clear the trend is declining, so based on this, I have estimated a perpetual growth rate of 2.1%.

The intrinsic value is estimated to be \$0.98 cents per share with the present value of all future cash flows summed up in figure 5.1. Calculations are provided for in Appendix 5.

Figure 5.1

Required Return	11.00%		1	2	3	4	5		6	
			2020	2021	2022	2023	2024		2025	
		Growth	0.00%	6.00%	8.00%	5.00%	5.00%		2.10%	
previous Dividend	\$ 0.077		\$ 0.077	\$ 0.082	\$ 0.088	\$ 0.093	\$ 0.097	\$ 0.099		
		Terminal value					\$ 1.115			Intrinsic Value
		PV	\$ 0.069	\$ 0.066	\$ 0.064	\$ 0.061	\$ 0.058			0.981
		PV of terminal value					\$ 0.662			

## Evaluation of Valuation

The current share price as of 4<sup>th</sup> May 2020 is \$0.85 cents (Morningstar 2020). The intrinsic value as estimated by DDM is \$0.98 cents per share, suggesting the company is undervalued trading at \$0.85c. The DDM is an estimate only based on assumption that the value of a stock is the present values of all expected future cash flows. This is highly dependent on required return and growth rate, as shown in sensitivity analysis in figure 5.2. The company has a strong history of paying dividends and it is assumed they will continue to do so, therefore DDM is an appropriate valuation model.

## Evaluation and Recommendation.

Based on the intrinsic value of \$98 cents derived using DDM against the current share price of \$0.85 cents, and taking into consideration ratio analysis, ROE, micro and macro-economic factors I recommend a buy of Flexigroup. Technical analysis does not indicate a buy, with the 50-day moving average yet to cross the 200-day moving average from below. The share price is however trending higher from its low of 40c on March 23<sup>rd</sup>. Before global markets fell triggering a sell on 3<sup>rd</sup> March the technical analysis shows they were in a bullish trend.

Reviewing the fundamentals, the DDM indicates that Flexigroup is undervalued at the current share price of \$0.85 cents. A peer analysis of ratios also supports that Flexigroup is in a good position relative to its competition. Current ratio shows the business is solvent. Cash cycle days shows they are receiving money faster than they are paying out, which is advantageous, growth rate of sales illustrated that operating revenue far exceeds operating expenses. Merchant and customer acquisition growth of Humm is good at 29% and 32% respectively. Bundll with help support the overall growth of Flexigroup. Double digit ROE of 11% LY is excellent.

When comparing these ratios to competitors in BNPL, it evident the Flexigroup is in a good position to weather the current pandemic, especially in light of the government economic support for lenders, small businesses and individuals. The fall in price has created an excellent

buying opportunity for a solid mature business with a good track record. Based on the evidence contained in this report my recommendation is buy.

## Reference list

Australian Government Australian Office of Financial Management, *Structured Finance Support Fund*, Australian Government, viewed 26<sup>th</sup> April2020 <<https://www.aofm.gov.au/sfsf>>

Australian Government Australian Taxation Office, *Support for businesses and employers*, Australian Government, viewed 28<sup>th</sup> April2020 <<https://www.ato.gov.au/General/COVID-19/Support-for-businesses-and-employers/>>

Australian Government Australian Taxation Office, *Support for individuals and employees*, Australian Government, viewed 28<sup>th</sup> April2020 < <https://www.ato.gov.au/General/COVID-19/Support-for-individuals-and-employees/>>

Australian Government Australian Taxation Office, *Support for tax professionals*, Australian Government, viewed 28<sup>th</sup> April2020 <<https://www.ato.gov.au/General/COVID-19/Support-for-tax-professionals/>>

Australian Government The Treasury, *Economic Response to the Coronavirus*, Australian Government, viewed 26<sup>th</sup> April2020 < <https://treasury.gov.au/coronavirus>>

Australian Government The Treasury, *Coronavirus SME Guarantee Scheme - Supporting the flow of credit*, Australian Government, viewed 26<sup>th</sup> April2020 < <https://treasury.gov.au/coronavirus/sme-guarantee-scheme>>

Australian Government The Treasury, *Support for Businesses*, Australian Government, viewed 26<sup>th</sup> April2020 <<https://treasury.gov.au/coronavirus/businesses>>

Australian Government The Treasury, *Supporting individuals and households*, Australian Government, viewed 26<sup>th</sup> April2020 <<https://treasury.gov.au/coronavirus/households>>

Australian Government The Treasury, *Support the Flow of Credit*, Australian Government, viewed 26<sup>th</sup> April 2020 < <https://treasury.gov.au/coronavirus/business-investment>>

Barry, E 2020, 'How will we be using buy now pay later one year from now?', *Finder*, 13 March, viewed 15<sup>th</sup> April 2020, < <https://www.finder.com.au/how-will-we-use-bnpl-one-year>>

Barry, E 2019, 'Purchases with Afterpay and Zip could soon cost more', *Finder*, 18<sup>th</sup> October, viewed 15<sup>th</sup> April 2020, < <https://www.finder.com.au/afterpay-zip-rba-surcharge-announcement>>

Flexigroup 2020, *Buy now pay later everywhere*, Flexigroup, viewed 8<sup>th</sup> April 2020, <<https://www.flexigroup.com.au/consumer/bundll>>

Flexigroup 2019, *FlexiGroup reports 1HFY19 result*, Flexigroup, viewed 10<sup>th</sup> April 2020, Flexigroup

Flexigroup 2020, *FlexiGroup business update*, Flexigroup, viewed 10<sup>th</sup> April 2020, Flexigroup

Flexigroup 2020, *Humm: buy now pay later*, Flexigroup, viewed 8<sup>th</sup> April 2020, <<https://www.flexigroup.com.au/consumer/humm>>

Flexigroup 2020, *over 25 years innovating the way people pay*, Flexigroup, viewed 30<sup>th</sup> March 2020, <<https://www.flexigroup.com.au/about-us>>.

Hargrave, M, 2019, 'DuPont Analysis', *Investopedia*, 25<sup>th</sup> June, viewed 25<sup>th</sup> April 2020, <<https://www.investopedia.com/terms/d/dupontanalysis.asp>>

Horne, B, Barry, E, 2020, 'Compare interest-free finance providers', *Finder*, 12<sup>th</sup> February, viewed 15<sup>th</sup> April 2020, < <https://www.finder.com.au/interest-free-finance>>

Mickleboro, J 2020, 'Flexigroup share price lower following half yearly result release', *The Motley Fool*, 25 February, viewed 15<sup>th</sup> April 2020, <[https://www.fool.com.au/2020/02/25/flexigroup-share-price-lower-following-half-year-results-release/?utm\\_source=stocklight&utm\\_campaign=stocklight&utm\\_medium=web\\_link](https://www.fool.com.au/2020/02/25/flexigroup-share-price-lower-following-half-year-results-release/?utm_source=stocklight&utm_campaign=stocklight&utm_medium=web_link)>

Morningstar 2019, *Afterpay Limited – Business Summary*, Morningstar, viewed 12<sup>th</sup> April 2020 <<https://datanalysis-morningstar-com-au.ezproxy.lib.rmit.edu.au/af/company/bussummary?ASXCode=APT&xtm-licensee=datpremium>>

Morningstar 2019, *Sezzle Inc – Business Summary*, Morningstar, viewed 12<sup>th</sup> April 2020 <<https://datanalysis-morningstar-com-au.ezproxy.lib.rmit.edu.au/af/company/bussummary?ASXCode=SZL&xtm-licensee=datpremium>>

Morningstar 2019, *Splitit Payments Ltd – Business Summary*, Morningstar, viewed 12<sup>th</sup> April 2020 <<https://datanalysis-morningstar-com-au.ezproxy.lib.rmit.edu.au/af/company/corpdetails?ASXCode=SPT&xtm-licensee=datpremiumm>>

Morningstar 2019, *Zip Co Limited – Business Summary*, Morningstar, viewed 12<sup>th</sup> April 2020 <<https://datanalysis-morningstar-com-au.ezproxy.lib.rmit.edu.au/af/company/bussummary?ASXCode=Z1P&xtm-licensee=datpremium>>

Reilly, F, Brown, K & Leeds, S 2019, *Investment Analysis & Portfolio Management*, 11<sup>th</sup> edn, Cengage Learning, Boston, USA.

Reserve Bank of Australia, *Supporting the Economy and Financial System in Response to COVID – 19*, Reserve Bank of Australia 2020 <<https://www.rba.gov.au/covid-19/>>

Thomson Reuters, *Business Summary*, Thomson Reuters Eikon, viewed 10<sup>th</sup> April 2020, <<https://apac1.apps.cp.thomsonreuters.com/web/Apps/Corp/2.5.8/?s=FXL.AX&st=RIC&app=true#/Summary>>

Thomson Reuters, Edited Transcript Half Yearly 2020 FlexiGroup Ltd Earnings Call , Thomson Reuters, viewed 12<sup>th</sup> April 2020

Thomson Reuters, *Ratios-key metrics*, Thomson Reuters Eikon, viewed 12<sup>th</sup> April 2020, <<https://apac1.apps.cp.thomsonreuters.com/web/Apps/Corp?s=FXL.AX&st=RIC&app=true>>

Thomson Reuters, *Ratios-overview*, Thomson Reuters Eikon, viewed 12<sup>th</sup> April 2020, <<https://apac1.apps.cp.thomsonreuters.com/web/Apps/Corp?s=FXL.AX&st=RIC&app=true>>

## Appendix 1

### Flexigroup product offerings

Product	Market Segment	Features
Humm	BNPL	Interest free payment platform 10 weeks to 60 months Up to \$30,000
Bundll	BNPL	Delivered via Mastercard network 2 weeks interest free Daily needs – up to \$1000
Flexi commercial	Business financing	SME business Focus on leasing solutions (especially tech) Chattel mortgages for larger purchases
Q Mastercard	Credit card	NZ offering Interest free Payment holiday options
Skye Mastercard	Credit Card	Au offering 110 days interest free No foreign transaction fees

Source: Flexigroup



## Appendix 2

### Peer comparison

Provider	How it works	Costs
<b>Afterpay</b>	Select Afterpay at the checkout online or in-store. Repay in four equal fortnightly instalments. (Australia, New Zealand, United States, United Kingdom (under clearpay brand))	Late payment fees of \$10 and a further \$7 if you still haven't paid the next week
<b>Zip Money</b>	Sign up online or at the checkout and receive a line of credit between \$1,000 and \$50,000. You can then use it at any Zip Money retailer. (Australia, New Zealand)	Receive 3 months interest-free 19.9% p.a. rate applies after 3 months to outstanding balance \$6 monthly fee applies when you have an outstanding balance Late fees apply
<b>Zip Pay</b>	Sign up online or at the checkout for a credit limit up to \$1,500. You can use your credit line at any Zip Pay retailer. (Australan. New Zealand [acquired PartPay Lmt operating in New Zealand, United Kingdom, South Africa])	0% p.a. interest rate Up to 60 days fee-free. A \$6 monthly fee will apply after this period if you do not repay your purchase in full and will remain as long as you have an outstanding balance Minimum monthly repayment of \$40
<b>Splitit</b>	Choose Splitit as a payment option at the point of sale when using an existing credit or debit card. Reserves the total purchase amount on your line of credit or debit card, then choose how many instalments you want to use to repay once a month. They operate as an intermediate technology layer between a merchant and payment gateway, being an e-service, is globally connected to more then 80 payment and partners in 30 countries around the world.	No interest no late fees
<b>Sezzle</b>	(US provider) purchase today with 4 payments over the following 6 weeks. Option to reschedule their payment for free	interest free late fee \$10 max
<b>Humm</b>	Sign up for Humm online or via the app to use at a range of stores and pay no interest. Apply for up to \$30,000 with terms up to 60 months.	\$0 monthly fee for terms of 2.5 months or less \$8 monthly fee for terms of 5-60 months Late fees apply \$6
<b>Bundll</b>	Shop online or in store at all locations that accept MasterCard and bundle everything from food, train tickets, fuel to entertainment. You can repay interest-free in 14 days.	No early payout fee Late fees apply after a 24 hour grace period

<b>Openpay</b>	Select Openpay at the checkout online or in-store. Repay in fortnightly instalments.	Processing fees of \$2.50 to \$3.95 for long plans
		Late fees apply
<b>Brighte</b>	Sign up for a Brighte account online to pay for home improvements or home energy installations. All plans are interest-free.	\$4 monthly account-keeping fee
		\$4.99 late payment fee
<b>CreditLine</b>	Shop at participating merchants for an interest-free promotional period. Get your choice of three 0% interest plans.	Establishment fee of \$25
		Monthly account servicing fee of \$4.95 for balances over \$10
		\$20 late fee
		ATM and EFTPOS withdrawal fees
		Payment advance
<b>Klarna</b>	Shop now with over 200,000 online retailers including asos, H&M, Topshop, boohoo, Nasty Gal, MVMT and Abercrombie and Fitch and pay later over four interest-free instalments.	Late fees apply
<b>Laybuy</b>	Shop online or in store at their partnered stores and pay in six weekly payments.	No sign up fee
		No interest
		\$10 late fee
		Transaction fee for merchants

Source: Morningstar  
Finder

## Ratio Comparison

Note: comparison companies are younger and don't contain full 5yrs data.

Afterpay only has data for 2016-2019 inclusive.

Splitit only has data for 2017-2019 inclusive.

Sezzle only has data for 2018-2019 inclusive.

## Current Ratio

Current Ratio = Current Assets / Current Liabilities					
Year	Flexigroup	Afterpay	Zip	Splitit	Sezzle
06/15	1.2139		17.15		
06/16	1.3228	3.89	1.68		
06/17	1.8625	4.71	7.26		
06/18	1.7815	6.56	36.37	4.35	4.29
06/19	1.1789	5.78	31.39	11.96	4.03

## Cash Cycle Days

Cash Cycle Days = Average Inventory (Days) + Average Receivables Collected (Days) - Average Payables Payment Period (Days).						
Year	Flexigroup	Afterpay	Zip	Splitit	Sezzle	
06/15	-204.20		75.10			
06/16	-182.80		2,363.50			
06/17	-172.20	8.30	1,947.40	285.80		
06/18	-144.20	37.20	2,023.90	-358.30		
06/19	-158.00	9.60	2,029.50	-136.50	-26.90	

## Growth Rate of Sales

Growth rate of sales - Flexigroup					
	06/15	06/16	06/17	06/18	06/19
Operating Revenue	369,900,000	421,700,000	484,100,000	480,600,000	477,400,000
Operating Expenses	143,500,000	207,000,000	219,800,000	235,000,000	273,700,000

Growth rate of sales -Afterpay					
	06/15	06/16	06/17	06/18	06/19
Operating Revenue		0	22,905,727	113,899,000	217,963,000
Operating Expenses			32,847,682	123,630,000	265,929,000

Growth rate of sales -Zip					
	06/15	06/16	06/17	06/18	06/19
Operating Revenue	0	4,298,601	16,432,325	39,274,390	82,876,663
Operating Expenses	2,129,949	9,597,408	24,311,928	44,783,051	66,415,713

Growth rate of sales -Splitit					
	06/15	06/16	06/17	06/18	06/19
Operating Revenue				0	2,350,092
Operating Expenses					32,986,894

Growth rate of sales -Sezzle					
	06/15	06/16	06/17	06/18	06/19
Operating Revenue					22,923,716
Operating Expenses					38,358,842

## Merchant Growth

Merchants Growth					
	Flexigroup	hummm	Afterpay	Z1P	Splitit
2019	60000	2630	23200	10500	
2020	69000	3400	43200	21000	720
Increase	15%	29%	86%	100%	

## Customer Growth

Customers Growth					
	Flexigroup	hummm	Afterpay	Z1P	Splitit
2019	1670000	988000	3100000	738000	76623
2020	1870000	1300000	7300000	1800000	118783
Increase	12%	32%	135%	144%	55%

## Appendix 3

### Calculations

1. Profit Margin = net income / net sales
2. Total Asset Turnover = net sales / total assets
3. Financial Leverage = total assets / common equity

### Definitions \*source: Morningstar

Net income = Net profit after tax before abnormal from Profit and Loss Statement

Net Sales = operating revenue from Profit and Loss Statement

Total Assets = Total Assets from Balance Sheet

Common Equity = total equity from Balance Sheet

## ROE calculation data

	FlexiGroup limited (FXL)				
Item	06/15	06/16	06/17	06/18	06/19
Net Income	90,100,000	76,600,000	90,000,000	84,400,000	69,700,000
Net Sales	369,900,000	421,700,000	484,100,000	480,600,000	477,400,000
Total Assets	1,786,200,000	2,679,600,000	2,785,900,000	2,854,200,000	3,108,900,000
Common Equity	410,500,000	612,400,000	671,800,000	627,600,000	616,100,000
Profit Margin	24.36%	18.16%	18.59%	17.56%	14.60%
Total Asset Turnover	0.20709	0.15737	0.17377	0.16838	0.15356
Financial leverage	4.35128	4.37557	4.14692	4.54780	5.04610
ROE	21.95%	12.51%	13.40%	13.45%	11.31%

	Afterpay Limited (APT)				
Item	06/15	06/16	06/17	06/18	06/19
Net Income		0	-2,156,588	-6,090,000	-36,291,000
Net Sales		0	22,905,727	113,899,000	217,963,000
Total Assets		179,993,992	240,327,898	392,225,000	820,468,000
Common Equity		149,099,368	160,083,417	183,555,000	648,516,000
Profit Margin		0.00%	-9.42%	-5.35%	-16.65%
Total Asset Turnover		0.00000	0.09531	0.29039	0.26566
Financial leverage		1.20721	1.50127	2.13683	1.26515
ROE		0.00%	-1.35%	-3.32%	-5.60%

	Zip Co Limited (Z1P)				
Item	06/15	06/16	06/17	06/18	06/19
Net Income	-1,746,258	-7,089,753	-20,190,588	-22,549,726	-11,133,810
Net Sales	0	4,298,601	16,432,325	39,274,390	82,876,663
Total Assets	1,357,571	48,311,345	174,551,352	333,067,885	685,162,347
Common Equity	1,278,420	11,700,711	11,625,317	33,380,326	76,299,545
Profit Margin	0.00%	-164.93%	-122.87%	-57.42%	-13.43%
Total Asset Turnover	0.00000	0.08898	0.09414	0.11792	0.12096
Financial leverage	1.06191	4.12892	15.01476	9.97797	8.97990
ROE	0.00%	-60.59%	-173.68%	-67.55%	-14.59%

	Splitit Payments Ltd (SPT)				
Item	06/15	06/16	06/17	06/18	06/19
Net Income				0	-30,649,528
Net Sales				0	2,350,092
Total Assets				17,518,462	25,600,520
Common Equity				13,499,093	23,363,969
Profit Margin				0.00%	-1304.18%
Total Asset Turnover				0.00000	0.09180
Financial leverage				1.29775	1.09573
ROE				0.00%	-131.18%

	Sezzle Inc (SZL)				
Item	06/15	06/16	06/17	06/18	06/19
Net Income					-23,688,592
Net Sales					22,923,716
Total Assets				64,814,395	92,125,513
Common Equity				54,484,273	38,997,766
Profit Margin				0.00%	-103.34%
Total Asset Turnover				0.00000	0.24883
Financial leverage				1.18960	2.36233
ROE				0.00%	-60.74%

## Tables related to graph data

	Profit Margin				
Year	Flexigroup	Afterpay	Zip	Splitit	Sezzle
06/15	24%		0%		
06/16	18%	0%	-165%		
06/17	19%	-9%	-123%		
06/18	18%	-5%	-57%	0%	0%
06/19	15%	-17%	-13%	-1304%	-103%

Note: Splitit and Sezzle are new businesses and can't be compared at this time.

	Total Asset Turover				
Year	Flexigroup	Afterpay	Zip	Splitit	Sezzle
06/15	0.21		0.00		
06/16	0.16	0.00	0.09		
06/17	0.17	0.10	0.09		
06/18	0.17	0.29	0.12	0.00	0.00
06/19	0.15	0.27	0.12	0.09	0.25

	Financial Leverage				
Year	Flexigroup	Afterpay	Zip	Splitit	Sezzle
06/15	4.35		1.06		
06/16	4.38	1.21	4.13		
06/17	4.15	1.50	15.01		
06/18	4.55	2.14	9.98	1.30	1.19
06/19	5.05	1.27	8.98	1.10	2.36

	ROE				
Year	Flexigroup	Afterpay	Zip	Splitit	Sezzle
06/15	21.9%		0.0%		
06/16	12.5%	0.0%	-60.6%		
06/17	13.4%	-1.3%	-173.7%		
06/18	13.4%	-3.3%	-67.6%	0.0%	0.0%
06/19	11.3%	-5.6%	-14.6%	-131.2%	-60.7%



## Appendix 4

### CAPM

Required rate of return - Determinants

- Economy's Risk-Free Rate +
- Expected rate of inflation during holding period +
- Risk premium – company specific determined by uncertainty of returns due to
  - o Business risk
  - o Financial risk
  - o Liquidity risk
  - o Exchange rate risk
  - o Country risk

To estimate the required rate of return, using CAPM which is the risk-free rate + Beta \* risk premium.

Required return has been calculated on the following inputs

- Risk Free Rate = 10-year Australian Government Bond Yield = 1%
- Expected Market premium as sourced from Bloomberg = 9.86%
- Risk premium = RFR- E(R)m = 8.86%
- Adjusted Beta = 1.1284

## Calculation

$$E(R_i) = RFR + \beta_i [E(R_m) - RFR]$$

<b>CAPM</b>	
Risk Free Rate (10 year Aust Gov Bond Yeild)	1
Expected Market Return	9.86
Risk Premium	8.86
Raw Beta	1.191577876
<b>Adjusted Beta</b>	<b>1.128357177</b>
Required Return	10.99724458

## Beta

<b>SUMMARY OUTPUT</b>								
<i>Regression Statistics</i>								
Multiple R	0.340042779							
R Square	0.115629092							
Adjusted R Square	0.115045734							
Standard Error	0.026181571							
Observations	1518							
<b>ANOVA</b>								
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>			
Regression	1	0.135869908	0.135869908	198.2128781	2.12195E-42			
Residual	1516	1.039179606	0.000685475					
Total	1517	1.175049514						
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-0.000721861	0.000672179	-1.07391198	0.283033034	-0.002040361	0.000596638	-0.002040361	0.000596638
X Variable 1	<b>1.191577876</b>	0.084636266	14.07880954	2.12195E-42	1.025561297	1.357594454	1.025561297	1.357594454

covariance	7.51649E-05
stdv	0.007942302
beta	1.191577876
adjusted	1.128357177

## Appendix 5

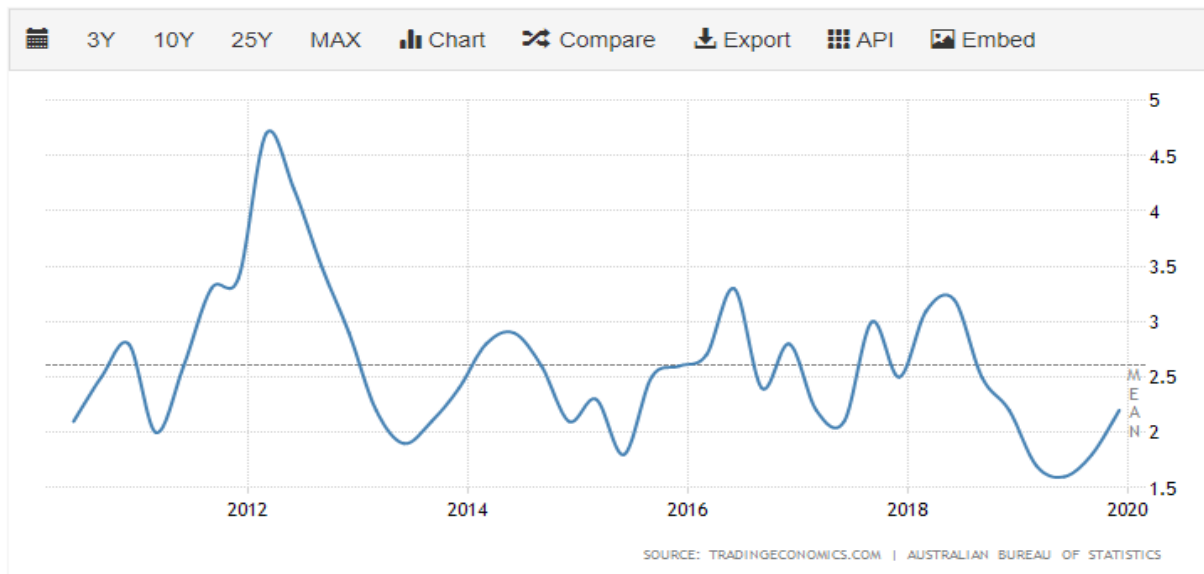
### Growth rate

Growth rate = retention rate x return on equity

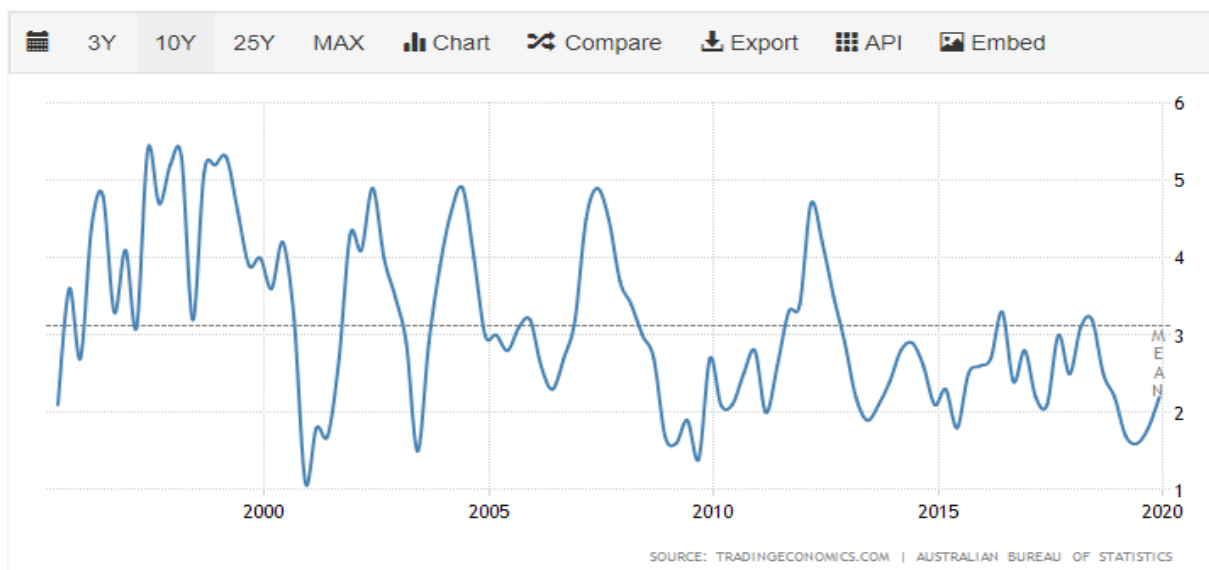
$$= (1 - \text{payout ratio}) \times (\text{return on equity})$$

$$= (1 - .4194) \times (.11) = .0639 = 6.39\%.$$

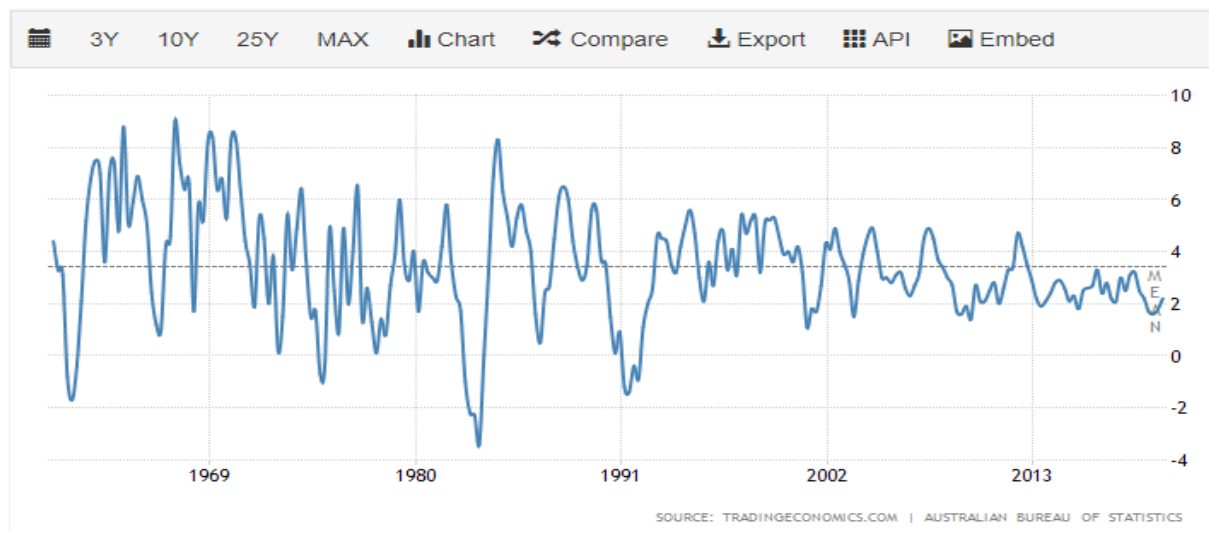
Long run growth rate – 10 year, mean 2.6%



25 year – mean 3.2%



60year – mean 3.6%



## Intrinsic value

Required Return	11.00%		1	2	3	4	5		6	
			2020	2021	2022	2023	2024		2025	
		Growth	0.00%	6.00%	8.00%	5.00%	5.00%		2.10%	
previous Dividend	\$ 0.077		\$ 0.077	\$ 0.082	\$ 0.088	\$ 0.093	\$ 0.097	\$ 0.099		
		Terminal value					\$ 1.115			Intrinsic Value
		PV	\$ 0.069	\$ 0.066	\$ 0.064	\$ 0.061	\$ 0.058			0.981
		PV of terminal value					\$ 0.662			

### Calculations for intrinsic value

$$D1 = D_0 * (1 + g) = .077 * (1 + 0) = .077$$

$$D2 = D1 * (1 + g) = .077 * (1 + .06) = .082$$

$$D3 = D2 * (1 + g) = .082 * (1 + .08) = .088$$

$$D4 = D3 * (1 + g) = .088 * (1 + .05) = .093$$

$$D5 = D4 * (1 + g) = .093 * (1 + .05) = .097$$

$$D6 = D5 * (1 + g) = .097 * (1 + .02) = .099$$

$$Terminal Value = D6 / (k - g) = .099 / (.11 - .021) = 1.115$$

$$PV1 = D1 / (1 + k) = .077 * (1 + .11) = .069$$

$$PV2 = D2 / (1 + k)^2 = .077 * (1 + .11) = .066$$

$$PV3 = D3 / (1 + k)^3 = .077 * (1 + .11) = .064$$

$$PV4 = D4 / (1 + k)^4 = .077 * (1 + .11) = .061$$

$$PV5 = D1 * (1 + k) = .077 * (1 + .11) = .058$$

$$PV \text{ of terminal Value} = \text{termianl value} / (1 + k)^5 = 1.115 / (1 + .11)^5 = 0.662$$

$$\text{Intrinsic value} = PV1 + PV2 + PV3 + PV4 + PV5 + PV \text{ of terminal value} .069 + .066 + .064 + .061 + .058 + .662 = .981$$