

Debt and SMEs in New Zealand

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Abstract

This paper examines the structural barriers preventing New Zealand’s small and medium-sized enterprises (SMEs) from accessing affordable debt. Despite representing 99% of all businesses and a third of national GDP, SMEs face far tighter lending conditions than residential borrowers. Through quantitative scenarios, the paper demonstrates how short loan terms, high interest rates, and restrictive loan-to-value ratios severely constrain cash flows, leading many profitable firms toward financial stress. It also highlights how regulatory incentives—particularly the Reserve Bank’s high capital adequacy ratio—encourage banks to favor residential mortgages over business loans. The analysis identifies three key issues: limited understanding of cash-flow dynamics, policy-driven risk aversion among banks, and a feedback loop reinforcing SME credit scarcity. Recommended measures include recalibrating risk weights, strengthening bank verification processes, and launching nationwide financial education initiatives to help SMEs manage debt sustainably and unlock growth potential.

Issue

Kiwi SMEs, representing 99% of the total businesses and 35% of the country's GDP (MBIE, 2017), do not have access to the same lending conditions as the residential mortgage market. This briefing will provide insights into the implications of tight lending conditions for SMEs - with up to 50 employees - and recommendations on how to improve the situation.

Background

Businesses should continuously endeavour to find an **optimal mix of capital structure**. Relying excessively on loans would be unsustainable and put a company in jeopardy, but so would an insufficient level of debt. Indeed, debt lets a company generate more revenues from the same equity, yielding a higher return on equity (ROE). Debt funding is, therefore, crucial for businesses to thrive.

When facing unfavourable lending conditions from banks, large corporations can, for instance, readily issue bonds to borrow money at a lower cost of debt. However, the associated administrative toll and complexity are prohibitive for SMEs, lacking the critical mass required to leverage the slight rate difference between bonds and banks. In fact, SMEs rely almost exclusively on banks to fund their debt.

Current State

Banks generally offer **principal-and-interest** (P&I) loans, for which borrowers must pay interests and a portion of the principal each month. Under certain conditions (no bank that I contacted accepted to disclose these specific conditions), banks can allow up to 5 years of interest-only payments (ANZ, 2020).

A typical **residential mortgage** generally covers 80% of a house price at less than 3% interest (Squirrel, 2020). Most banks can even offer to fund 90 to 95% and amortise the loan over 30 years. Indeed, since May 2020, the Reserve Bank of New Zealand has removed the mortgage loan-to-value ratio restrictions for banks in response to the COVID-19 pandemic (Kiwibank, 2020). In contrast, banks will probably propose to fund around 70% of a **commercial property** (Global Finance, 2020) at 5.5% with a 15-year term (interest.co.nz, 2020). If the business owner wants to fund 100% of the asset through debt and repay over 30 years, they will have to use their own house as security (Global Finance, 2020).

Otherwise, for a **business loan**, the bank will agree to fund 50% of the investment at 8% with a 5-year repayment (Global Finance, 2020). Again, the owner would need to secure the loan with their home to fund up to 80% of their house value through debt (Global Finance, 2020).

| | Residential mortgage | Commercial property loan | Secured | Business loan | Secured |
|---------------|----------------------|--------------------------|----------|---------------|---------|
| LVR | 80-95% | 70% | 100% | 50% | 80% |
| Interest rate | 2.75% | 5.5% | 5.5% | 8% | 8% |
| Term | 30 years | 15 years | 30 years | 5 years | 5 years |



 e.g. owner's house as security

Figure 1: Differences in lending conditions depending on the type of loan.

Analysis

Impact on Investments

For a given return on asset, the **return on equity** (ROE) will change dramatically depending on the loan-to-value ratio (LVR). A lower LVR implies a higher initial investment and therefore, a lower ROE (see example below).

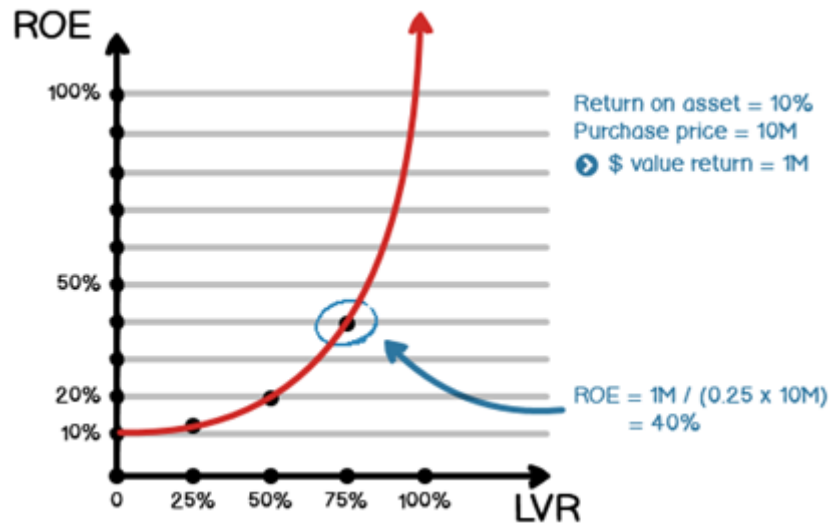


Figure 2: Relationship between the return on equity (ROE) and the loan-to-value ratio (LVR).

Consequently, bank policies impact the firm's ability to develop.

However, poor lending conditions have a much more profound effect on SMEs. Understanding the magnitude of this impact requires to know the difference between **profit and cash flows**.

Impact on Cash Flows

Profit after tax does not necessarily reflect the company's ability to pay its debts. Indeed, it also includes revenues and expenses for which cash has not yet been exchanged. For instance, when a business sells at credit, profit will go up, but the related cash inflow will only occur **later**. Similarly, expenses associated with building up inventory will be missing from the income statement until the goods are sold.

Furthermore, depreciation in the income statement does not necessarily reflect the cash spent to buy and maintain fixed assets, essential to sustain the business (e.g. computers). Often, it is not a reasonable indication of long-term average capital expenditure.

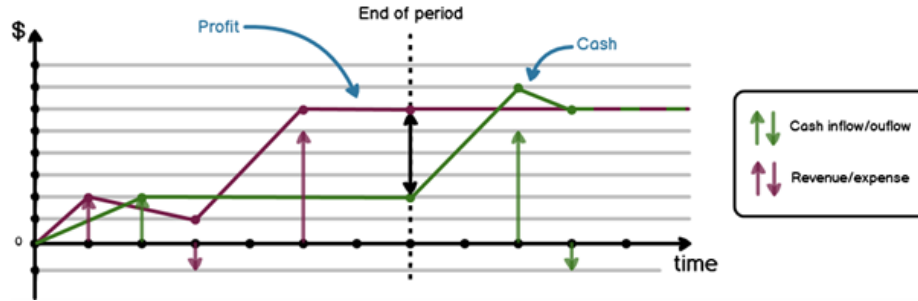


Figure 3: Profit and cash evolution over time.

Therefore, a relevant proxy for available cash flow is defined as follows.

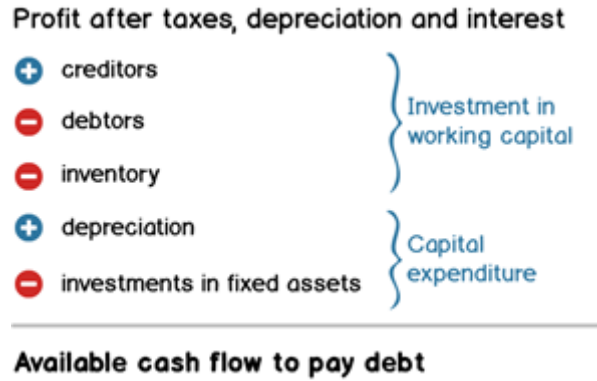


Figure 4: Proxy for available cash flow for principal repayment.

Firms can, consequently, make a profit but still default on their debt. The scenarios below are representative of loan conditions that NZ SMEs typically encounter.

Scenario 1. Buying a business

The bank agrees to partially fund the purchase of a small machinery manufacturing business, under the following conditions.

| | |
|------------------|------------------------|
| Purchasing price | \$375,000 |
| LVR | 80% (secured) |
| Type of loan | P&I |
| Term | 5 years |
| Interest rate | 8% |

Assumptions for the simulation: Building up inventory and debtors during the first year, then static business (no growth and, therefore, no further movement in working capital items).

Despite making a profit, the business would struggle to pay its debt, as highlighted by the chart below (see Appendix 1 for calculation details).

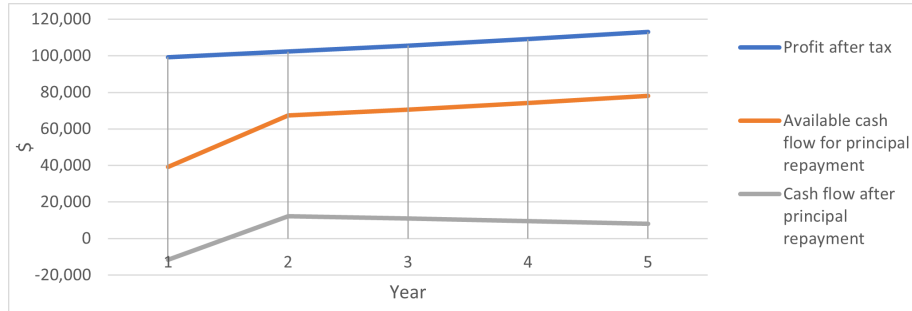


Figure 5: Projected profit after tax and cash flows.

The first year, the company would not have the cash flow to honour its principal repayment. Even if it finds a way to meet its obligations that year (e.g. by limiting its capital expenditure), the business would be significantly exposed to experience financial hardship during the subsequent years. Indeed, any unexpected expense (e.g. equipment maintenance) or revenue loss could lead to a default.

More favourable lending conditions would have a positive effect on the company's cash flows, as visible in the following diagram.

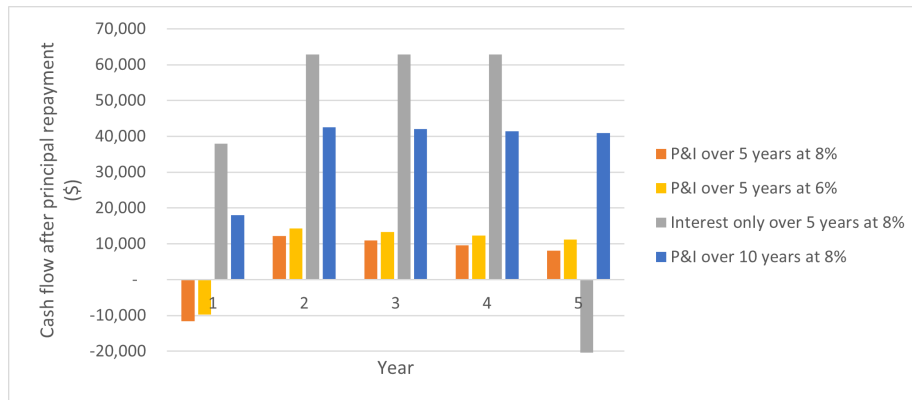


Figure 6: Cash flow after principal repayment under various loan conditions. The chart does not display Year-5 cash flow under the “Interest-only over 5 years at 8%” conditions (i.e. -\$227K) for convenience.

Regardless of the loan type and interest rate, a 5-year loan is a significant burden on a business' ability to thrive. On the other hand, a 10-year term would let the company have enough cash flow to grow serenely.

Scenario 2. Purchasing a commercial property

A firm purchases the property it currently operates in, through a distinct entity.

| | |
|------------------|-------------------------|
| Purchasing price | \$400,000 |
| LVR | 100% (secured) |
| Type of loan | P&I |
| Term | 15 years |
| Interest rate | 5.5% |

Assumptions for the simulation: The loan is compounded yearly - instead of monthly - for simplification purposes.

The owning entity would make a profit from this asset, but it would still default on the debt. Indeed, the profit after tax would never be sufficient to cover the principal repayment under these conditions (see Appendix 2 for calculation details).

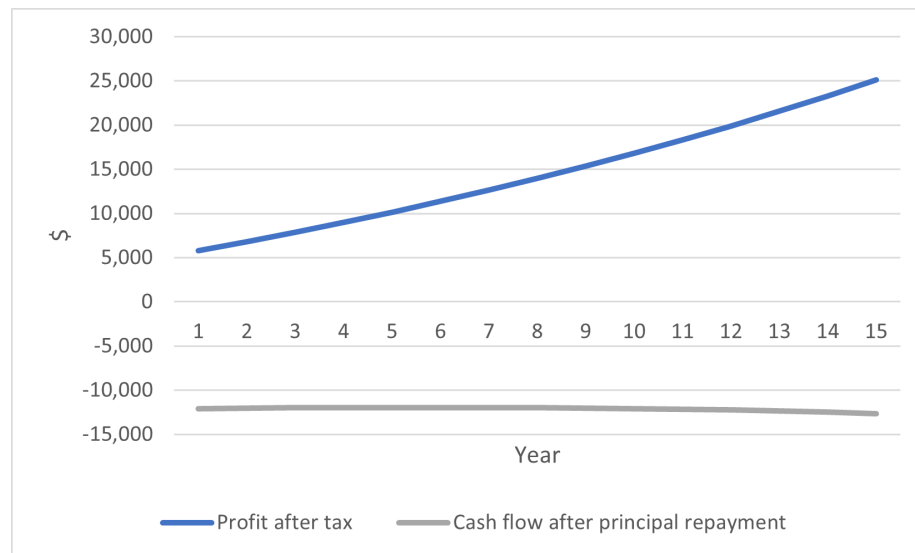


Figure 7: Projected profit after tax and cash flows.

Furthermore, the cash flow analysis below reveals that the property owner would fail to meet its obligations whatever the interest rate if the term remains at 15 years.

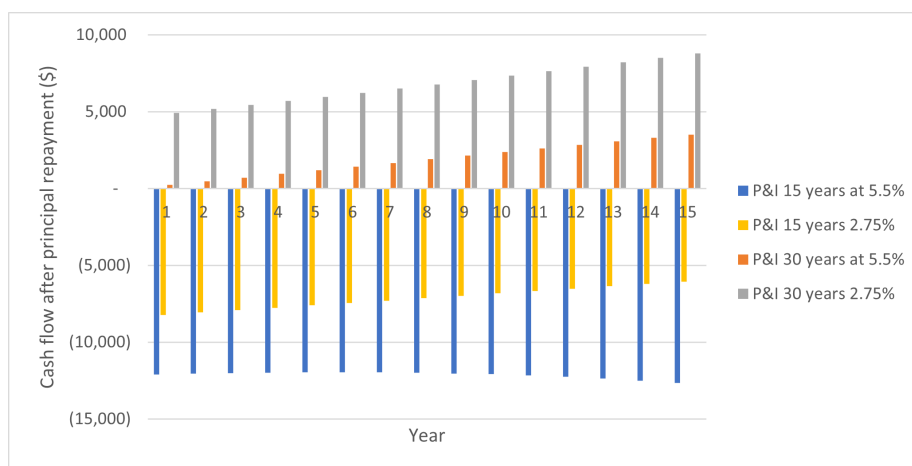


Figure 8: Cash flow after principal repayment under different loan conditions.

At the 5.5% interest rate, the entity would require a 30-year loan to have just enough cash flow available for principal repayment. Nevertheless, any unplanned expense would not be possible to incur.

In contrast, if the lending conditions were the same as a residential mortgage, the property owner could honour its payments even under unexpected circumstances. Banks mainly justify this difference in lending conditions by the capital adequacy ratio (CAR) policy.

Capital Adequacy Ratio

The **capital adequacy ratio** corresponds to the ratio that banks must maintain between their capital and their assets (e.g. loans). In December 2019, the Reserve Bank of New Zealand (RBNZ) raised the CAR from 10.5% to 18% for the leading NZ banks (i.e. ANZ, ASB, BNZ and Westpac) and 16% for the smaller ones (e.g. Kiwibank) (CNBC, 2019)(Vaughan, 2019). It means that banks must now hold between 16% and 18% of their loans in capital, making this CAR one of the strongest in the world (Index Mundi, 2019).

It is interesting to note that all assets do not have the same weight in this ratio. Indeed, banks can discount assets depending on their **perceived risk**. Typically, in New Zealand, residential mortgage loans are considered safer than business loans. The following figure illustrates how a bank can maintain the same ratio by increasing the number of residential mortgages and reducing its exposure to business loans.

The capital adequacy ratio policy thus appears to incentivise banks to favour residential mortgages at the expense of business loans.

Hypotheses

Residential mortgage risk weight = 50%

Business loan risk weight = 100%

| | Distribution 1 | | Distribution 2 | |
|-----------------------|----------------|-------------------------|----------------|------------------------|
| | Assets | Risk-weighted assets | Assets | Risk-weighted assets |
| Residential mortgages | 20M | $20 \times 50\% = 10M$ | 30M | $30 \times 50\% = 15M$ |
| Business loans | 10M | $10 \times 100\% = 10M$ | 5M | $5 \times 100\% = 5M$ |
| Total | 30M | 20M | 35M | 20M |

Different total assets but same total risk-weighted assets

Figure 9: Examples of asset distributions yielding the same capital adequacy ratio.

Conclusions

Knowledge Gap

The **lack of understanding** of the difference between profit and cash flows is the primary enabler to debt default, significantly increasing the perceived risk associated with lending to businesses.

- Firms do not use a relevant proxy for available cash flow and, therefore, contract loans without having the ability to pay them back.
- Banks allow firms' behaviour by performing inadequate verifications before authorising a loan.
- In an attempt to reduce risk, banks harden lending conditions for SMEs, which put a financial strain on these companies and generate a self-fulfilling prophecy.



Figure 10: Loan to businesses risk cycle.

Loan Term

Loan **duration** is the main impediment for SMEs to secure funding through debt.

- The pressure associated with principal repayment prevents the businesses from investing in fixed assets and expanding their operations - which requires investment in working capital.
- Interest-only periods could relieve this pressure momentarily, but the companies would probably still struggle to repay the principal as the overall interest rate is ultimately higher in these conditions.
- Debt funding is crucial for a company to leverage its existing equity and generate more earnings - potentially creating a competitive edge. Since issuing bonds is virtually unachievable for SMEs, banks effectively hold them captive.

Bank Policies

Banks seem to focus more on responding to **policy incentives** rather than assessing the risks associated with the loans they issue.

- Business owners who secure their commercial property loans with their houses are still in a worse position than they would be in the residential mortgage market, even though the risk is arguably the same.
- Commercial property investments are more sensitive to rises in the cost of debt - compared to investments in businesses - as their cost of equity is relatively low. This situation could generate resentment towards bank policies in this area.
- Bank policies are likely to fuel the current kiwi housing bubble. Therefore, the risk of residential mortgages will remain limited as long as house prices are rising. However, banks could witness a surge in the default rate if the bubble eventually bursts.
- A review of the RBNZ risk assessment policy might completely reshape the kiwi financial landscape regarding debt funding for both businesses and individuals as banks would re-optimize their capital adequacy ratio accordingly.

Investment Opportunities

Foreign investors might seize investment opportunities at the expense of kiwi businesses.

- Professional investors develop an expectation of the return on equity they require to make an investment decision. If the LVR is too low, the return on equity will not meet their expectations, and they will then refuse to pursue the investment.
- On the other hand, foreign investors may not have the same constraints regarding debt funding - causing an **unfair advantage** over kiwi businesses and investors.

Recommendations

Adjusting the Risk Assessment

The RBNZ could reassess the risk weight of the different asset classes, while considering the housing bubble, to reduce the gap between residential mortgages and loans to businesses.

Expected effects

- Limiting the incentive to invest heavily in residential mortgages
- Balancing the banks' assets distribution
- Reducing the perceived risk associated with loans to businesses
- Easing the businesses' lending conditions

Encouraging Banks to Reinforce Verifications

Banks should intensify controls to ensure that companies will be able to repay their debts.

Expected effects

- Preventing default from businesses
- Reducing the actual risk associated with loans to businesses

Raising Awareness Towards Debt Repayment

The government should launch a campaign to educate SMEs on the difference between profit and cash flows, as well as its implications for debt repayment.

Expected effects

- Improving the overall knowledge about financing activities
- Preventing default from businesses
- Reducing the actual risk associated with loans to businesses

Appendices

Calculation Details - Buying a Business

Scenario's lending conditions

| | |
|--------------------------------|-----------|
| Purchase price | \$375,000 |
| Bank loan conditions | |
| LVR | 80% |
| Debt | \$300,000 |
| Term (months) | 60 |
| Interest rate (p. a.) | 8.00% |
| Monthly interest rate | 0.667% |
| Monthly P&I payment | 6,083 |
| Annual P&I payment | 72,995 |

Loan's payment schedule

| Year | 1 | 2 | 3 | 4 | 5 |
|----------------------------|--------|--------|--------|--------|--------|
| Interest | 22,163 | 17,944 | 13,375 | 8,426 | 3,067 |
| Principal repayment | 50,832 | 55,051 | 59,620 | 64,569 | 69,928 |

Calculations are made on a monthly payments' basis, but this table displays annual figures for convenience.

Cash flow analysis

| Year | 1 | 2 | 3 | 4 | 5 |
|--------------------------|----------------|----------------|----------------|----------------|----------------|
| Revenues | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 |
| COGS | 600,000 | 600,000 | 600,000 | 600,000 | 600,000 |
| Gros profit | 400,000 | 400,000 | 400,000 | 400,000 | 400,000 |
| Expenses | 200,000 | 200,000 | 200,000 | 200,000 | 200,000 |
| EBITDA | 200,000 | 200,000 | 200,000 | 200,000 | 200,000 |
| Depreciation | 40,000 | 40,000 | 40,000 | 40,000 | 40,000 |
| Interest | 22,163 | 17,944 | 13,375 | 8,426 | 3,067 |
| Profit before tax | 137,837 | 142,056 | 146,625 | 151,574 | 156,933 |
| Tax | 38,594 | 39,776 | 41,055 | 42,441 | 43,941 |

| Year | 1 | 2 | 3 | 4 | 5 |
|--|----------------|----------------|----------------|----------------|----------------|
| Profit after tax | 99,243 | 102,280 | 105,570 | 109,133 | 112,992 |
| Subtract Invest- ment in working capital | 25,000 | - | - | - | - |
| Add back Deprecia- tion | 40,000 | 40,000 | 40,000 | 40,000 | 40,000 |
| Subtract Invest- ment in fixed assets | 75,000 | 75,000 | 75,000 | 75,000 | 75,000 |
| Available cash flow for re- payment | 39,243 | 67,280 | 70,570 | 74,133 | 77,992 |
| Principal repayment | 50,832 | 55,051 | 59,620 | 64,569 | 69,928 |
| Cash flow after principal payment | -11,589 | 12,229 | 10,950 | 9,564 | 8,064 |

Calculation Details - Purchasing a Commercial Property

Scenario's lending conditions

| | |
|-------------------------------|---------------|
| Rent | 30,000 |
| Purchase value | 400,000 |
| Bank loan conditions | |
| LVR | 100% |
| Debt | 400,000 |
| Term (years) | 15 |
| Annual interest rate | 5.5% |
| Annual P&I payment | 39,850 |

For simplification purposes, payments occur yearly.

Loan's payment schedule

| Year | Interest | Principal repayment |
|------|----------|---------------------|
| 1 | 22,000 | 17,850 |
| 2 | 21,018 | 18,832 |
| 3 | 19,982 | 19,868 |
| 4 | 18,890 | 20,960 |
| 5 | 17,737 | 22,113 |
| 6 | 16,521 | 23,330 |
| 7 | 15,238 | 24,613 |
| 8 | 13,884 | 25,966 |
| 9 | 12,456 | 27,395 |
| 10 | 10,949 | 28,901 |
| 11 | 9,359 | 30,491 |
| 12 | 7,682 | 32,168 |
| 13 | 5,913 | 33,937 |
| 14 | 4,047 | 35,804 |
| 15 | 2,078 | 37,773 |

Cash flow analysis

| Year | Net rent | Interest | Profit from rent | Tax on profit | Profit after tax | Cash flow after principal repayment |
|------|----------|----------|------------------|---------------|------------------|-------------------------------------|
| 1 | 30,000 | 22,000 | 8,000 | 2,240 | 5,760 | -12,090 |
| 2 | 30,450 | 21,018 | 9,432 | 2,641 | 6,791 | -12,041 |
| 3 | 30,907 | 19,982 | 10,924 | 3,059 | 7,865 | -12,002 |
| 4 | 31,370 | 18,890 | 12,481 | 3,495 | 8,986 | -11,974 |
| 5 | 31,841 | 17,737 | 14,104 | 3,949 | 10,155 | -11,958 |
| 6 | 32,319 | 16,521 | 15,798 | 4,423 | 11,374 | -11,955 |
| 7 | 32,803 | 15,238 | 17,566 | 4,918 | 12,647 | -11,965 |
| 8 | 33,295 | 13,884 | 19,411 | 5,435 | 13,976 | -11,990 |
| 9 | 33,795 | 12,456 | 21,339 | 5,975 | 15,364 | -12,030 |
| 10 | 34,302 | 10,949 | 23,353 | 6,539 | 16,814 | -12,087 |
| 11 | 34,816 | 9,359 | 25,457 | 7,128 | 18,329 | -12,162 |
| 12 | 35,338 | 7,682 | 27,656 | 7,744 | 19,912 | -12,255 |
| 13 | 35,869 | 5,913 | 29,955 | 8,387 | 21,568 | -12,369 |
| 14 | 36,407 | 4,047 | 32,360 | 9,061 | 23,299 | -12,504 |
| 15 | 36,953 | 2,078 | 34,875 | 9,765 | 25,110 | -12,663 |

Rents increase each year by 1.5%.

Video Presentation

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