



National Certificate of Educational Achievement
TAUMATA MĀTAURANGA Ā-MOTU KUA TĀEA

Exemplar for Internal Achievement Standard

Agribusiness Level 3

This exemplar supports assessment against:

Achievement Standard 91870

Analyse the effect of financing options of a strategic capital expenditure decision on a business

An annotated exemplar is an extract of student evidence, with a commentary, to explain key aspects of the standard. It assists teachers to make assessment judgements at the grade boundaries.

New Zealand Qualifications Authority

To support internal assessment

	Grade Boundary: Low Excellence
1.	<p>For Excellence, the student needs to comprehensively analyse the effect of financing options of a strategic capital expenditure on a business.</p> <p>This involves evaluating the consequences using financial and non-financial information, and justifying the best option for the business. The justification includes evaluating the impact of this option on the business.</p> <p>The student has comprehensively explained a mortgage and an equity partnership as financing options to convert a farm from sheep/beef to dairy (1).</p> <p>Financial information (2) and non-financial information (3) have been used to explain the consequences of each option.</p> <p>The student has recommended a mortgage as the most viable option for financing the farm conversion (4). In justifying this option, the student has focused on low interest rates, maintaining the present shareholding structure, and decision-making (5).</p> <p>For a more secure Excellence, the student would provide further detail of how the equity structure would change under the equity partnership option. The financial implications for the XXXs of an equity partner wishing to exit the business would also be explained in detail. A representative and quantified interest rate could be used in the student's justification for the mortgage.</p>

Bill and Nancy XXX currently own a sheep and beef farm in a 50:50 partnership. They are looking at converting their farm to a dairy farm and bringing their daughter Emily into the partnership, changing the share to 45:45:10. The total cost for the conversion will be \$4,030,000. When they sell their old stock they will get \$400,000 and Emily is bringing an additional \$400,000, leaving a balance to be funded of \$3,230,000. The projected profit of their dairy farm is \$324,500. Bill and Nancy have stated that they have two financing options: a mortgage and creating an equity partnership.

A **mortgage** is an option where a bank lends to a customer to purchase land and/or buildings, using the new asset as security, for a term of up to 30 years. If the customer defaults on payments the bank can take action to get their money back. Following reminders, the bank could take over ownership of the security, in this case the farm itself, that was specified in the mortgage agreement. Banks are currently offering mortgages at up to 5%. The table below shows the cost of the loan over three repayment terms. ①

[Table deleted from this exemplar for space reasons.]

The table indicates that the mortgage cost is increasing by roughly \$1 million every ten years, proving that the best course of action is to repay the mortgage as quickly as possible. The projected profit for Nancy and Bill's farm is \$324,500 per year which is the *maximum* they wish to use to repay their loan each year. If this profit was spread over 12 monthly payments of \$27,041 per month, they could repay the loan in 13 years and 10 months. However, this is the best scenario. They would not want to use all their projected profits on mortgage repayments. Over that period the business would pay interest of \$1,247,960 and have a total loan cost of \$4,477,960. The XXXs would need to consider the security they would need for the loan, a tangible asset worth at least \$3,230,000. The security would need to be their farm as it is valued at \$4,000,000. As the finance is needed to convert from sheep and beef to dairy, the value of the buildings and equipment might not be able to be accurately valued until the conversion is complete. So the security would need to be the land. ②

A benefit for the XXXs getting a mortgage is that they will get to retain full ownership of their farm. Another benefit is that providing they meet the lending criteria and are accepted for the mortgage, the total amount of \$3,230,000 would be guaranteed and it would be available to them as soon as the mortgage is approved so the conversion could start immediately. However, there are also negatives associated with the mortgage. One of the disadvantages will be having a large amount of interest to pay back to the bank even though the interest decreases as the principal is repaid. Another negative is the potential of losing their farm. If the price of milk solids drops (as seen in stress testing below), then the profit XXXs will be making might not be enough to pay the loan payments for the month. If they cannot keep up with mortgage repayments then the bank may take control over their security, the farm, and sell it to get their money back. ③

An **equity partnership** is a financing option for rural businesses. In an equity partnership, one of the XXXs (as the original shareholders of the farm) would become the equity manager and would prepare an information memorandum about the farm and use it to advertise for an equity partner or investor. If they manage to attract an equity partner this person (or business) would become a shareholder and would join the board of directors. A legal contract that is acceptable to both parties' lawyers would be drawn up and signed. It would cover things like the shareholding percentages, how profits will be distributed, how decisions will be made and what happens if the equity partner wants to sell their shareholding. The size of the shareholding would be calculated using the value of the farm and how much capital the investor is contributing to the partnership. The farm has a current valuation of \$4,000,000 and they need \$3,230,000 to do the conversion, bringing the new valuation to \$7,230,000. Bill and Nancy's equity value of the converted farm would be 55.3% if an equity partner could contribute the \$3,230,000 they need. ①

These are my recommendations for Bill and Nancy if they were to take on one or more equity partners. ②

- They would eventually regain full ownership of their farm by buying out the equity partner(s).
- They will have repaid the partner(s) before 20 years is up, it can be fully repaid earlier but not later.
- The minimum an investor can invest is \$1,000,000. It would be easiest if there was only one equity partner (an individual or a business, such as another farm), but it might be difficult to attract one partner with \$3,230,000 to invest.
- Decisions for what happens on the farm is based upon what share of the farm they have, so the XXXs having a 55.3% share of the farm will still make the final decisions as they have the majority share of the farm.

[Some detail omitted from student evidence for space reasons.]

There are a few benefits and disadvantages with of taking on an equity partner. One of the benefits is that Bill and Nancy will get to set the terms of the agreement. Equity partnerships or farm syndicates are quite common in the rural sector because farms operate on such a big scale that they need millions of dollars of capital investment and a wide range of farm management and business skills. While the XXXs are wanting a capital injection from an equity partner, there is also the potential for them to be able to tap into new thinking, ideas and farming or business skills. It would be important for the XXXs to check out a potential investor's business background and reputation. If they do not have more than capital to offer, their decision-making role in the farm could be minimal, but the potential equity partner might not agree to this.

3

One disadvantage is that until they repay the equity partner the XXX family will not have full ownership of their farm. However, they will own most of the equity therefore will have the advantage when it comes to decision-making.

3

Through stress testing, I have found that if the price of milk solids drops to \$5.203 or less then the profit being made by Bill and Nancy will be \$0 or less. Obviously any decrease in the price of milk solids will be bad as it will decrease the profit made by Bill and Nancy, but \$5.203 is the line where they will stop making money from their dairy farm and where it will start costing them money. However any increase in the price of milk solids will result in an increase in profit for Bill and Nancy. If the price of milk solids decreases, then the amount of profit being made by Bill and Nancy will decrease and this could affect their ability to be able to make the required mortgage repayments, and will reduce the ability for shareholders to earn dividends which would be of concern to an equity partner. However, if the price of milk solids increases then they will be making more profit, and they could possibly either save the extra profit (over the projected \$324,500) so that if the price of milk solids drop, they will have that money available to help reach the necessary monthly mortgage payments, or they could make larger repayments reducing the loan term and reducing the amount of interest payable.

2

The unpredictability of milk solids price, therefore, profit and the ability to repay is a financial consequence of taking on a mortgage to convert the farm. Another financial consequence is the cost of mortgage interest that must be paid to the bank. The opportunity cost of paying over \$1M in interest over the term of the mortgage is that these funds cannot be used for farm expenses, for other capital expenditure or as profits that could be distributed in dividends to the XXXs. Because the equity structure of the farm will be different, it might be difficult for the farm to get debt finance (in addition to the mortgage) for any other capital expenditure, or even short-term finance.

2

A non-financial consequence of the mortgage is the risk of losing control of the farm should the business be unable to complete mortgage repayments and the bank seizes the security to recover what is owing.

3

A financial consequence of taking on one or more equity partners is that dividends for the XXX family members could be reduced as the partner/s will also be entitled to dividends. Also, there will be financial implications for the XXXs if the equity partner/s want to exit the business by selling their shares.

2

A non-financial consequence of taking on equity partners is that the new shareholder/s and the XXXs might not be compatible. They might have different visions for the farm and different decision-making and management styles. Even though Bill or Nancy XXX would be the equity manager, difficulties could arise that could make the shareholder relationships unhappy.

3

I recommend that the XXX family apply to their current bank for a mortgage and negotiate the lowest interest rate they can, fixed for as long as possible.

4

At present mortgage interest rates are at an all-time low so it is a good time for the farm to borrow. A mortgage is a relatively low risk financing option as all the facts and figures for the loan are known for as long as the mortgage is fixed for. Despite having to sacrifice a significant amount of money in interest over a 14-20-year term, ownership of the company and decision-making will not be affected as Bill, Nancy and their daughter will remain the only shareholders. As the farm is a family owned private company this is important because of succession planning where Emily might take over the farm when her parents die, or maybe there are other children who will be left shares in the farm. Although the XXXs would not get the benefit of an outsider's ideas and skills if a mortgage is taken out, there are farm advisors who could help the XXXs to upskill and to learn about dairy farming.

5

	Grade Boundary: High Merit
2.	<p>For Merit, the student needs to analyse, in depth, the effect of financing options of a strategic capital expenditure on a business</p> <p>This involves giving a thorough explanation of the effect of financing options of a strategic capital decision. This includes examining the consequence(s) using financial and non-financial information, and selecting the best option for the business.</p> <p>The student has thoroughly explained a mortgage extension and vendor finance as viable options for financing a harvester (1). Crowd funding has been thoroughly explained though recognised as an inappropriate financing option (2).</p> <p>Consequences are supported by financial information/understanding (3). Non-financial information has also been used (4). The student has recommended vendor finance as the best option (5).</p> <p>To reach Excellence, the student could provide further justification of why vendor finance is a better option for the orchard business than adding the cost of the harvester to the mortgage. For example, the student could recognise that a relatively small amount of \$120,000 spread over a 30-year mortgage would accrue too much interest, whereas the asset financing represents short-term borrowing.</p> <p>The points made in the conclusion could apply under either of the viable financing options and are not isolated to the decision to use asset or vendor finance (6).</p>

Mandy ABC is the owner of a mandarin orchard in Gisborne. The orchard has a current valuation of \$2,000,000. At the peak of each season Mandy employs 30 people to hand pick the mandarins, however, over the past three years she has noticed that approximately 15% of her produce has been unpicked. Each year there is an approximate 5% loss of produce as some mandarins may be picked/harvested before they ripen or become damaged during harvest/sorting.

Mandy has decided to investigate buying a second-hand citrus harvester for \$120,000. The harvester will reduce the orchard's wage expense because although the 30 pickers will not be needed an additional five workers will need to be employed in the sorting shed. As the orchard cannot afford to buy the harvester outright, Mandy needs to investigate financing options to pay for it. There are three possibilities for financing the harvester.

Increase the mortgage

The orchard has a \$750,000 mortgage over a 30-year term on a floating interest rate of 5.79% per annum. Repayments are \$4,396 per month (\$2,083 interest and \$2,313 principal). This means over the span of the mortgage she would pay a total of \$1,582,514 (\$750,000 principal and \$832,514 interest). If the mortgage is increased to \$870,000 to pay for the citrus harvester repayments would be \$5,099 monthly (\$2,416 principal and \$2,683 interest), an increase of \$703 per month. By the end of the term, Mandy would have paid an extra \$253,203. **That means the harvester in the end would cost her \$253,203 instead of the \$120,000.**

[Tables verifying all calculations have been omitted from this exemplar.]

The security for a mortgage is usually the property/land the mortgage has been used to buy, and land usually appreciates in value. The harvester is not land and is likely to depreciate. This might be of concern to the bank. They might ask that the security be a building. According to the New Zealand reserve bank, the addition to the mortgage would be an investor loan, which has tighter restrictions for investment in property, and these restrictions relate to the risks that are associated with the loan. The low-deposit loans in the high-LVR (LVR stands for loan-to-value ratio) category require a 35% deposit from the purchaser and allow for a 65% external investment from external sources such as a bank. **Before a mortgage increase Mandy had an owner's equity of 62.5% totalling \$1,250,000 while the external finance (comprised of just the mortgage) totalling 37.5% (\$750,000). It is very viable for Mandy to increase her mortgage to purchase the harvester if she wishes as the investor finance remains below the reserve bank's standard of 65%.**

Paying over twice the harvester's value by adding it to the mortgage is very unwise so it is not a sensible business option for Mandy and her business. It would increase her financial risk. **As it is a second-hand harvester it may depreciate a lot faster as it may already have had a long service life, which would also increase maintenance costs significantly. The increased mortgage will also decrease Mandy's equity in her business.**

Asset/equipment finance

The business selling the used harvester allows approved purchasers to buy the machine on credit, like hire purchase. Asset/equipment finance does not use a business's existing capital. **The finance can usually be tailored to the asset lifespan and payment amount and the asset's ability to generate a cash flow into the business such as income from seasonal mandarin harvests. A significant advantage of this option would be this flexibility and ability to adjust repayments in line with the seasonal income.** This advantage is not offered by other financing options. Asset/equipment financing would be a viable option for Mandy and her business as it does not risk her orchard or any

other current assets as security for the financing loan. If Mandy cannot keep up with the repayments the lender would force the sale of the harvester rather than assets such as business vehicles, other equipment or the orchard land. **Mandy would end up paying \$192,000 for the second-hand harvester. There will be an establishment fee of \$2,000 to set up the contract.**

3

Crowd Funding

Crowd funding is a newish type of financing option where a business relies on members of the public financing the expansion of a business. Crowd funding via an internet platform can speed up the process of collecting money compared to personally collecting money by hand depending on the public's view of an effect something like Mandy's harvester would have on the community. Crowd funding is held through online forums that connect businesses with investors whom wish to sacrifice money in hopes of a return of some sort whether it is an influx of money in a region or an increase in production. Crowd funding usually also does not limit the amount of money you can raise unless it is over a very high quantity e.g. millions. Crowd funding sites do charge fees to use their services, which is a risk those applying do need to consider as this increases their financial risk. Crowd funding can bring communities together and increase trust between community members.

2

If Mandy decided to crowd fund she is unlikely to raise the required \$120,000 within a reasonable time frame and potential crowd funders might wonder what they could personally gain from helping a for-profit business buy a fixed asset. However, as Gisborne is a large fruit growing area she may be able to rent a harvester off another citrus orchardist or combine spare funds with local citrus orchardists to co-own the harvester or buy a new one. This would likely be best as the costs are equally shared through all parties and allow for better supply chains throughout the community.

4

Best option

Overall, it would be best for Mandy to use equipment/asset financing to fund the harvester. This is because if she cannot afford the finance payments, the harvester will be sold instead of any of her other business assets. This is not a good situation to be in, but it would put Mandy back into the position she was in before buying the harvester.

5

Over the six-year period, she would pay a total of \$192,000 (the extra \$72,000 is interest) for the harvester if using equipment financing instead of the \$253,203 if she financed through her mortgage. This is better than paying double the harvesters' value by adding the \$120,000 to the business mortgage and minimises her long-term risk, as the harvester will be paid for in the medium-term. Mandy's orchard business would pay less for the harvester than financing through a mortgage increase and would not be at the mercy of finding enough members of the public willing to contribute to a crowd fund campaign.

Conclusion

Purchasing the harvester will reduce the orchard's wage expenses by 20 net employees; picker jobs will reduce by 25 but five people will be redeployed to the sorting shed. This reduction in staff will negatively impact on employment in the region. Timeframes for harvesting and sorting should theoretically decrease significantly but the staff will have to be taught how to operate in and around the harvester to reduce the risk of injury. The orchard may be charged higher ACC premiums due to the added risk of the harvesting machine. Mandy may also have to look at bringing migrant workers in for peak season as "the supply and quality of labour is not always available from within Gisborne". However, Mandy can afford the harvester and it will benefit her business as there will be less production waste, reduced harvest times and the quality and quantity of mandarins would increase, allowing Mandy to export more mandarins overseas.

6

	Grade Boundary: Low Merit
3.	<p>For Merit, the student needs to analyse, in depth, the effect of financing options of a strategic capital expenditure on a business</p> <p>This involves giving a thorough explanation of the effect of financing options of a strategic capital decision. This includes examining the consequence(s) using financial and non-financial information, and selecting the best option for the business.</p> <p>The student has thoroughly explained IPO and private equity partner options that an egg business could use to finance its new farms (1). A bank loan was explained in detail prior to the student deciding that mortgage finance was more appropriate for the size of the principal (2).</p> <p>While the student has not calculated any interest or repayment amounts for the bank loan/mortgage or equity partner options, the financial understanding is demonstrated in the accurate use of references to expenses, revenue and liabilities (3).</p> <p>The student has used several pieces of non-financial information in explaining the consequences of the options (4). The student has recommended an equity partner as the best financing option (5).</p> <p>For a more secure Merit, the student could include further financial evidence to strengthen their explanations of the options. For example, the student could research and calculate mortgage repayments and discuss how equity partners are rewarded for their investment.</p> <p>The student would also need to demonstrate an understanding that equity partners assume a portion of the ownership of the business and, depending on the agreement, are likely to be involved in decision-making.</p>

Student 3: Low Merit

Intended for teacher use only

One of the many strategic capital expenditure decisions that ABC Eggs have had to make is around how to finance two large scale farms and barns in [location 1] and [location 2] at a total cost of \$60M.

One of the goals behind the building plans was to maintain and grow short-term profitability while ensuring ABC would comply with the government's ruling that by 2022 no more caged eggs would be sold in New Zealand. ABC will have to abolish all caged farms they currently have producing eggs, and replace them with free range and barn-bred egg production. The reason for this is that although demand for cheap eggs (which tend to come from caged chickens) has grown in certain large markets, there has been considerable discussion about the animal abuse associated with caged egg production.

ABC wants to take a proactive approach to moving away from caged egg production as soon as possible. Not only will this mean the company is well prepared for when the new legislation takes effect in 2020. They will be in a better position to promote the company to consumers as ethical and to shareholders as sustainable. The two new plants will create a platform for continued growth, allowing ABC Eggs to create higher profit margins in the short-term and long-term.

There are several financing options for ABC Eggs to gain the \$60M required to build the two new plants.

One option is a bank loan which is when money is lent by the bank to a business and is paid off over a certain term. Interest is charged and repayments are fixed so that it is easy for the business to budget to cover their repayments. The bank needs security over a fixed asset of the borrower. If the borrower defaults on payments the asset may be sold by the bank so that the balance of the loan can be recovered. An advantage for ABC Eggs of taking out a bank loan would be that shareholders would retain 100% ownership and decision-making would not be affected. Another advantage is that because ABC Eggs is a large and established company there are many assets to use as security. However, there are also disadvantages of a bank loan. One of these is that because the loan is so large the company will be committed to paying it back for a long time. This creates an ongoing expense against revenue, and having a large liability on the balance sheet for many years. The security needed for a bank loan would need to be of a high enough value to satisfy the bank that they could recover any amount owing, potentially up to \$60M. This would be difficult as the current farms are set up for caged farming and the two new farms will take at least a year to be fully established so the value of assets could be hard to estimate. It has been difficult for me to calculate the interest and repayments that will be payable on a \$60M loan as online calculators do not go that far. This is probably because amounts that high are better taken as a mortgage rather than a loan.

Another financing option is an initial public offer, or an IPO. ABC Eggs is a private limited liability company. It was originally a family-owned company but over several years more shareholders have bought shares until now there are approximately 25 shareholders who all know each other. An IPO happens when a company wants to open the shareholding opportunity to members of the public in order to attract much more capital.

There are more disadvantages than advantages of the IPO option. One of the few advantages is that it would allow current shareholders to exit ABC Eggs. Some shareholders want out. They want their capital back, but the company is not able to buy out their shares. Some shareholders also do not want to be involved in the big reorganisation and growth that will be necessary if ABC is to be ready for when caged egg production stops. With an IPO, current shareholders in ABC Eggs can release their shares onto the share market for new shareholders to buy. One of the disadvantages of an IPO is the huge cost and time taken to prepare a prospectus and get all the accounting and legal documents

ready for the IPO. There are financing options that are more cost and time efficient. An IPO also results in the founding shareholders losing some control as the IPO is managed from outside the company.

4

The final financing option that was open to ABC was to take on a private equity partner. They have found a possibility, the Australian company DEF Capital. One of the reasons that ABC is interested in DEF is the large amount of capital that DEF could offer towards the \$60M. By partnering with DEF ABC Eggs could achieve their goal of establishing at least one of the new farms almost straight away, improving short-term profitability for the company. Another important advantage of partnering with DEF is the ability to create an exit strategy for existing shareholders. By entering into an equity agreement with DEF Capital current shareholders would be able to release a significant amount of their capital, around 75%.

1

Although there would be a loss of ownership status with the private equity partner option, DEF would share the goal of wanting to grow and diversify the company and to receive high profit returns. This is because DEF was established as an investment company. ABC has eggs as their product, but DEF has money to invest for the highest profit they can get. This could cause a difference in views. For example, ABC might want to minimise or eliminate cruelty to animals, but DEF might just be interested in the cheapest way of doing things.

4

4

There are positive and negative consequences to this financing option. One non-financial long-term benefit of having a private equity partner is that building the two new farms will enable more workers to be employed and productivity to be increased. Another non-financial benefit is that more capacity will be available for free-range production so ABC Eggs will not face the consequences of breaking the government regulation to be enforced from 2020. The significant injection of cash from DEF Capital means ABC can buy back the shares of the shareholders who want to exit the company. A financial benefit is that building the two new farms will be possible with the equity partner and this should result in increased revenue and, in the long run, profitability. ABC Eggs will not be committed to the principal and interest repayments that would be necessary over many years if the bank loan (or mortgage) option had been adopted.

3

Partnering with the equity partner ensures ABC Eggs has long-term viability. I recommend it as the best option for ABC Eggs.

5

	Grade Boundary: High Achieved
4.	<p>For Achieved, the student needs to analyse the effect of financing options of a strategic capital expenditure decision on a business.</p> <p>This involves explaining the effect of financing options of a strategic capital expenditure decision and the consequence(s) on a business.</p> <p>The student has explained vendor financing, a bank loan and crowd funding as possible financing options for Sanford to buy a fishing vessel (1).</p> <p>Interest rates for the first two options have been researched and repayments have been calculated (2). Consequences of options on Sanford have been explained (3).</p> <p>To reach Merit, the student could recognise that the amount required of \$4.2M is better suited to a mortgage than a bank loan, as interest rates are lower. The second table would be adjusted to reflect bank loan interest rates rather than mortgage interest rates.</p> <p>The student would also demonstrate an understanding that finance sought from Sanford's existing shareholders is not an example of crowd funding (4).</p>

Student 4: High Achieved

Intended for teacher use only

Sanford Ltd wants to purchase a second-hand fishing vessel costing \$4,200,000 to allow the company to remain competitive and meet demand from an increasing trade market. This purchase will be a capital expenditure.

Although Sanford has a current net asset value of \$575,836,000 there is not enough cash on hand to purchase the vessel outright, so the company is looking at financing options.

Sanford wants to pay off its loan in six years or less and is considering three different financing methods to purchase the vessel. This report will compare the options of using vendor financing, increasing their borrowings with BNZ, and using crowdfunding.

The first option is **vendor financing** from the seller of the vessel. **It is like hire purchase. Sanford will get possession of the trawler once the contract has been signed but ownership of it would not transfer from the vendor/seller until the final repayment has been made.** There would be a one-off \$2,000 establishment fee to set up the contract, but the first 12 months would be interest-free. Despite the interest free period, using vendor finance is risky as the interest rate is higher and often floating. Using the AA loan calculator as a point of reference, interest rates can vary from 9.95% to 15.95% or higher.

Changes in a floating interest rate can result in a higher or lower rate of interest which can be difficult for Sanford to predict and budget for. The chart below uses a 12.45% interest rate to calculate repayments over a six-year loan period. Over the five years that interest is charged, a total of \$845,373.50 would be paid in interest.

Year	Interest rate	Interest repayment	Principal repayment	Total paid (rounded)	Total owing
1	0%	0	702,000	\$702,000	\$3,500,000
2	12.45%	\$281,124	700,000	\$1,683,124	\$2,800,000
3	12.45%	\$224,899	700,000	\$2,608,024	\$2,100,000
4	12.45%	\$168,674	700,000	\$3,476,698	\$1,400,000
5	12.45%	\$112,449	700,000	\$4,289,148	\$700,000
6	12.45%	\$56,224	700,000	\$5,045,373	0

Another funding option is a **bank loan**. The 2017 interim report shows that Sanford has \$206,282 in secured loans with BNZ. The interest rate being charged for BNZ loans ranges from 2.62% to 3.06%. By increasing their current loans Sanford would be able to receive lower interest rates than for vendor financing, resulting in much less interest being payable. Also, **due to Sanford's existing relationship with their bank, they might be able to negotiate to refinance their current loan, allowing them to remain flexible and potentially able to extend the term of the loan if required.** The bank will require the fishing vessel to be used as security for the loan. If Sanford defaults on the loan the bank can sell the vessel to recover the money they are still owed. The table below shows the hypothetical repayments for a BNZ loan calculated on a hypothetical change to the interest rate each year.

Year	Interest rate (floating)	Interest repayment	Principal repayment	Total paid (rounded)	Total owing
1	2.62%	\$16,030	700,000	\$716,030	\$3,500,000
2	2.72%	\$12,868	700,000	\$1,428,898	\$2,800,000
3	2.82%	\$9,929	700,000	\$2,138,827	\$2,100,000
4	2.92%	\$7,447	700,000	\$2,846,274	\$1,400,000
5	2.72%	\$5,147	700,000	\$3,551,421	\$700,000
6	3.06%	\$2,288	700,000	\$4,253,709	0

Crowdfunding is defined by the Merriam-Webster dictionary as “the practice of obtaining needed funding, as for a new business, by soliciting contributions from many people from the online community”. Sanford Ltd is already a well-established business and, if it were to use crowdfunding, it would have the most favourable outcome by crowdfunding from its shareholders rather than the public.

1

4

Due to the large amount of money needed (\$4,200,000) and Sanford's financial position, there is a very small chance that Sanford will get financed via crowdfunding, and an even smaller chance the boat will get funded within the six-year period that Sanford intends to repay the shipping vessel in. If Sanford did use crowdfunding, they would not need to pay interest on money received. However, there is no certainty over whether they would be able to raise the funds required to buy the vessel. Crowdfunding is most successful when contributors get something in return. For example, the most successful crowdfunding campaign was the Pebble Time smartwatch which raised \$US20,338,986 for its production, with contributors (pledgers) receiving gifts, such as a discount on the watch, in return for the money they gave. Unless Sanford can offer contributors some type of benefit or reward to encourage them to provide funding for their shipping vessel, they are unlikely to gain traction in interesting potential contributors.

3

CONCLUSION

The best option for Sanford to use to fund their shipping vessel is to increase their borrowings with their current bank, BNZ. This is because Sanford already has loans with the bank and could have the option to refinance their loan as required.

If unable to increase borrowings from BNZ, Sanford could also use vendor financing, although they would be required to pay much higher interest rates.

The odds that Sanford would be able to successfully finance their new boat through crowdfunding is so low that it shouldn't be seriously considered.

With the loan and vendor financing, cash is guaranteed to be received over a medium-term period (5-10 years).

	Grade Boundary: Low Achieved
5.	<p>For Achieved, the student needs to analyse the effect of financing options of a strategic capital expenditure decision on a business.</p> <p>This involves explaining the effect of financing options of a strategic capital expenditure decision and the consequence(s) on a business.</p> <p>The student has explained a bank loan, vendor financing and crowd funding as possible financing options for a farm (1). They have researched a loan interest rate and calculated repayment amounts (2).</p> <p>The stress of repaying a loan over a medium term, and loan applicants' ages being potential barriers to borrowing \$3.245M, have been identified as consequences (3).</p> <p>For a more secure Achieved, the student could account for the difference between the finance required and the loan principal (4). They would also demonstrate more accurate understanding of how equity partnerships operate. The use of the farm as security would be further explained (5).</p>

The XXXs have owned their 250-hectare sheep and beef farm for the past 30 years. The farm has a current valuation of \$4,000,000, is partly irrigated and has no debt. At present the ownership structure is a partnership with Bill and Nancy each having a 50:50 share. Bill and Nancy's daughter Emily recently sold one of her houses and is keen to return to the family farm. Emily is going to invest \$400,000 into the partnership, becoming a third partner with a 10% share, taking her parents' shares to 45% each.

The family wants to convert the sheep and beef farm into a dairy farm. The total cost will be \$4,030,000. They will be able to sell their livestock for \$400,000. Also taking Emily's \$400,000 into account, they will have a shortfall of \$3,230,000 and are looking at how they can raise this money.

BANK LOAN

A bank loan is an amount of money loaned with interest by a bank to a borrower, using security, for a certain period. If the XXX family borrow \$3,245,000 at an interest rate of 5% from ASB Bank they would be repaying the amounts shown in the table below, depending of the term of their loan.

Term	Monthly payment	Annual payment	Total interest	Total cost of loan
5 years	\$60,954	\$731,448	\$427,254	\$3,657,245
10 years	\$34,259	\$441,108	\$881,099	\$4,111,099
15 years	\$25,543	\$306,516	\$1,367,674	\$4,597,674
20 years	\$21,317	\$255,804	\$1,885,977	\$5,115,977
25 years	\$18,882	\$226,584	\$2,434,678	\$5,664,678

The XXXs will be paying off the loan over however many years they choose. For example, if they choose a 10-year term they would be paying \$34,259 per month, or \$441,108 each year and over the 10-year term they would pay \$881,099 in interest.

Choosing a 25-year term for the loan makes the monthly payments easier to manage which could be less worrying for the family, but they would end up paying almost 75% more than the \$3,245,000 they originally borrowed. Also, the bank might not let the XXXs have such a long term because the parents are already in their 60s.

CROWDFUNDING

This is a way of funding a project by many people contributing money for the project. The XXXs could look at the Pledge Me Projects website to see how crowdfunding works. The problem with the farm using Pledge Me is that it could take a very long time for enough contributors to sign up to pledging, or that people cannot see any benefit to them for investing in the XXX's farm. This option would be a last resort if the family cannot access funds any other way.

EQUITY PARTNER

Bill, Nancy and Emily could try to interest one or two wealthy people to join their partnership as equity partners. This would mean that until their contributions are paid back, the equity partners own part of the value of the farm and will be entitled to part of the profits, but they

will not be involved in decision-making or day-to-day farm matters. More than one equity partner would be needed but things could become very complicated if there were too many equity investors. Two would be best as this would give enough of an investment to convert the farm.

RECOMMENDATION

Borrowing from the bank would mean that the XXXs keep 100% ownership of their farm and it is the fastest way to raise the money they need. The repayments to the bank are known and fixed. If milk production drops and the XXXs can't pay their repayments the bank might lengthen the term of the loan because **the farm is being used as a security blanket.**

5

Crowdfunding is just a waiting game and could take years to raise enough money although the XXXs would also keep full ownership of their farm.

Equity partnership could be good, but it might take a while to find partners with so much money to invest in the farm. An equity partner might want out of the deal before the agreed time is up so another equity partner would need to be found. Or the equity partner could die. Therefore the XXXs would need to pay a lawyer to write a contract that covers all those things that could go wrong.

So I recommend that the XXXs borrow the \$3,230,000 from the bank for, say, 15 years and hope that the farm's income is enough to keep up with the monthly repayments.

	Grade Boundary: High Not Achieved
6.	<p>For Achieved, the student needs to analyse the effect of financing options of a strategic capital expenditure decision on a business.</p> <p>This involves explaining the effect of financing options of a strategic capital expenditure decision and the consequence(s) on a business.</p> <p>The student has briefly explained a bank loan and a merger as potential financing options to allow ABC Eggs to establish new farms (1). A third option, taking on an equity partner, has been explained in more detail (2).</p> <p>To reach Achieved, the student could include in their explanation of a bank loan reference to interest being payable. The use of security for the loan in a 'worst case scenario' would need to be explained (3).</p> <p>The student would also need to expand on what an equity partner having 'active involvement' would mean for decision making and ownership of the business (4).</p>

Student 6: High Not Achieved

Intended for teacher use only

ABC Eggs is a company that produces eggs and a broad range of egg and non-egg products. The company is vertically integrated which means it owns and manages everything from production to supplying their products. This is a point of difference to many other similar large-scale companies as ABC Eggs does not have many people 'clipping the ticket' along the supply chain. ABC Eggs is an innovative company with many goals for expansion. Recently, challenges within the market for eggs have arisen, such as a new law banning caged egg sales by 2022, and the challenge of pushing egg products further up the value continuum.

In order to face business challenges ABC Eggs has created goals which include growing their market share, creating an exit strategy for shareholders, creating a platform for growth, and maintaining short-term profitability. The Board has decided to achieve their goals by expanding, building two new large scale farms in [location 1] at a cost of \$20M, and [location 2] for \$40M. As these are costly large projects ABC Eggs has had to go through intensive strategic capital expenditure planning in order to find suitable finance options for the operations.

A **bank loan** was considered. This would have allowed ABC Eggs to keep 100% ownership of the company, but it wouldn't free up any cash for shareholders who want to get out of the company. Shareholders would only be able to sell their shares to each other. **The bank would want ABC Eggs to specify a fixed asset that could be used as security in a worst-case scenario.**

1

3

A **merger** was also considered. The merger option could have added combined knowledge to ABC Eggs and could have allowed struggling firms to benefit. However, the process of finding a business with synergy and a suitable partner proved too difficult. This option would have also increased the price for consumers as a result of increased market share. If established, this would have gone against the goal of short-term profitability as a result of higher prices.

1

To fund the two builds ABC Eggs decided to pursue a **private equity partner**, DEF Capital. This company is located offshore and allows current shareholders in ABC Eggs to release shares (75%). As an exit strategy for shareholders was a goal for ABC Eggs, having a private equity partner creates the opportunity for shareholders to sell up when they want to. The DEF Capital option for financing also provided large amounts of funding with active involvement. This will prove beneficial to get the ball rolling on ABC's expansions because the access to capital over a short time frame will allow the company to build the new plants and start producing before the shutdown of the caged egg farms. This relates to the goal of maintaining short-term profitability which works to counteract the challenge of the government intervention of no caged egg production by 2020.

2

The decision to use DEF Capital as a financing option has potentially serious consequences for ABC Eggs. The change in ownership status has meant that the previous management control is lost as DEF now have their input into ABC. This could influence the values and direction of the company. The equity partner is offshore. This means there will be more of an international perspective on decision-making, which could be positive or negative for ABC. The equity partner could bring innovative new ideas and add value to the company. On the other hand, ideas/decisions could clash. DEF might just want to make decisions that lead to the most profit, but the current shareholders will be more aware of the New Zealand market, caring for the chickens, etc.

2

The short-term benefits of the decision to take on DEF as an equity partner is the ability to start the building programme and maximise profits before the 2020 ban on caged egg production kicks in. ABC Eggs can also release shareholders who want to sell their shares to the company, in many cases because of the upcoming ban on caged egg production.

4

The equity partner decision also involves active involvement by DEF and high returns for them. Other financing options could have provided straight financing but would not have added to the knowledge pool of ABC Eggs. An incentive for DEF Capital is to help grow and diversify the eggs company in order to maximise their profit share.

4