Review - ratios

17. Spielgeist Games

A. Calculate the change in gross profit margin for Spielgeist from 2021 to 2022.	2

2022: 4684/6294 =74.42%

Change = 74.42-75.13 = -0.71%

B. Calculate the change in profit margin for Spielgeist from 2021 to 2022.	2

2022: 1182/6294 = 18.78%

Change = 18.78-25.14= -6.36%

C. Calculate the change in return on capital employed for Spielgeist from 2021 to 2022.	2

2022: 1182/(10817+1261) = 9.79%

Change = 9.79-9.67 = .12%

D. Calculate the change in current ratio for Spielgeist from 2021 to 2022.	2

2022: 4813/2993 = 1.61:1
Change = 1.61-1.48 = 0.13

E. Explain two reasons that Spielgeist may want to have a large amount of liquidity.	4

Answers may include, but are not limited to:

- It is always good to have at least some amount of cash on hand in case business conditions deteriorate or there is some external shock.
- It may want to have cash built up in case it identifies a good investment opportunity. It would probably take a lot of money to create a streaming platform that would work well, for instance. For instance, there may be other acquisitions that Spielgeist wants to be able to complete if the opportunity arises.
- It's possible that Spielgeist is earning a decent return on the liquidity by investing it in interest-bearing accounts and investments that are still considered liquid, and that this small return is better than trying to invest it in riskier ways that would tie up the money longer term.
- Other things that they could do with extra cash include buying back shares, paying dividends, and investing it. None of these may be particularly appealing because they eat into the firm's cash cushion, and while investing it sounds like a good idea in theory, they may not be able to identify enough productive investment opportunities to make this a good use of cash.

F. Explain why keeping track of the quick ratio would not be useful to investors for a digital gaming company such as Spielgest.	4

They don't even list stock/inventory on their balance sheet, which makes sense because their games would all be digital and they don't really have a physical inventory of products. Their only stock might be things like supplies that they use internally for operations but don't actually sell to customers. Thus, the quick ratio isn't going to be different from the current ratio, and it wouldn't lead to any useful insights on their liquidity. The rationale for the quick ratio is that it strips out stock to reveal the firm's liquidity in terms of assets that can be used as cash quickly, but for this firm that level of analysis is not necessary.

G. With the use of financial information, examine Spielgeist's financial performance from 2021 to 2022.	10

Positive aspects of their financial performance may include, but are not limited to:
- Return on capital employed has risen a bit, and while we don't know the interest rate on savings if the firm kept money in the bank instead of investing it, a firm this large and profitable in a growing industry is probably able to borrow at a reasonable cost, and it's highly unlikely that they could get an interest rate on savings that's even half as much as their ROCE number. It says that interest rates are still below their historic average.
- The current ratio is in acceptable range, and it increased a bit from 21 to 22. This number should be seen as especially good because they have no stock, so this liquidity is largely usable. Their cash alone is more than their current liabilities.
- With interest rates on the rise, their cash cushion should leave them in a better position than many other firms to minimize the impact of rising borrowing costs.
- While profit margin declined a lot, it's still an extremely healthy level of profits. It may also just be that the 21 number was a little higher than normal.
- Gearing ratio decreased

Negative aspects of their financial performance may include, but are not limited to:
- You could argue that they have too much cash, considering that it's more than $1b more than their current liabilities, and in percentage terms is around 30% more. Some of that money could be put to better use in longer term investments or simply returning more money to shareholders.
- The gross profit margin declined a bit. *Realistically though, to say that this is actually problematic is to be overly critical given the rest of the firm's performance.*
- Profit margin declined by more than 6%, which is pretty substantial in this instance, because thinking of it another way, 18.78 is about 25% lower than 25.14.
- Given that GPM declined only a little, and profit margin declined by a lot, then this means that expenses are increasing a lot in proportion to revenue.

H. Discuss the merits of Spielgeist merging with a video streaming company.	10

For full marks the student should really bring in both financial and nonfinancial factors as they are analyzing.

Non-quantitative advantages of the merger may include, but are not limited to the following:
- Economies of scale: they may be able to benefit from each other's R&D, technology systems, management expertise, ability to make bulk purchases, or any number of other cuts in average cost of production related to scale.

- The entertainment industry is consolidating around a smaller number of very large firms, and if Spielgeist doesn't merge, then it may find itself one of the smaller firms with more limited offerings. There could be a sort of network effect in which customers gravitate towards larger firms with a wider selection, which enables those firms to spend on even more selection, attracting more customers. Gaming is often very social too, which can also generate network effects around the services that most gamers are using.

- Case study clearly states that they may be able to offer the widest selection of entertainment if they merge

- Borrowing costs are low at the moment

- The two firms' products could benefit from collaboration, like some kind of tie-up with films/tv shows and games

Non-quantitative disadvantages of the merger may include, but are not limited to the following:

- The potential for diseconomies of scale, such as communication problems

- Possible culture clash between the organizations

- It's not entirely clear how the merger of their services would work, and you can make the case that sometimes things seem like a more natural fit than they actually end up being (for example, the disastrous merger of AOL and Time Warner in 2000)

- There may be regulatory hurdles for the merger if the government applies antitrust legislation or investigation

Quantitative disadvantages of the merger may include, but are not limited to the following:

- Spielgeist has a good return on capital (we aren't told the interest rate on borrowing, which should be a basis of comparison, but we are at least told that it is low), so this may indicate that additional investment required to merge the streaming systems would be worth it.

- Spielgeist has a good liquidity position [current/acid ratio, creditor/debtor days], and it arguably *should* be spending some of that cash on R&D or big investments like this merger

- Gearing ratio is quite manageable, so they probably have a lot of runway for more spending

- It made more than $1bil in operating profits, so the debt looks manageable, its NPM is above the industry average, and it seems that if any firm is in a place to take a risk like this, it's Spielgeist

Quantitative disadvantages of the merger may include, but are not limited to the following:

- Spielgeist has a large part of its book value in goodwill, which is a notoriously difficult thing to measure. If it is overvaluing its prior acquisitions, then the return on capital and gearing ratio would start to look worse, meaning that they're not in a great position to invest in merging the two services

- It already has more than $1bil in long term debt, and this could add to it

I. Calculate the change in debtor days for Spielgeist from 2021 to 2022.	2

2022: 583/6294 = 0.0926279 * 365 = 33.81 days

Change = 33.81-37.96 = -4.15 days

J. Calculate the change in creditor days for Spielgeist from 2021 to 2022.	2

2022: 703/1610 = 0.43664596 *365 = 159.38 days
159.38-204.06 = -44.68 days

K. Calculate the change in gearing ratio for Spielgeist from 2021 to 2022.	2

1261/(1261+11331) = 10.01%

Change = 10.01-11.18 = -1.17%

L. Analyze Spielgeist's efficiency based on its efficiency ratios.	6

The firm is not very highly geared, and the gearing ratio declined a bit, which is a positive sign for its efficiency. While the total debt levels are high (more than $1bil each in short term and long term obligations), they are not extremely high in comparison with the book value of the company. I would also want to compare this to the return on capital employed, which is in the neighborhood of 9% at a time when interest rates are near historic lows. This suggests that they have a manageable debt level, and what borrowing they do take on is being productively employed to bring in more profits. They could probably take on a lot more debt and still be relatively safe. The creditor days are above the debtor days, which is better than the other way around. The creditor days number seems high, but if their trade creditors are willing to extend them this much credit, then it's actually a good thing. They have enough cash that they wouldn't have a problem paying creditors sooner if it were demanded. We cannot see inventory turnover because there is no stock.

M. Discuss the merits of Spielgeist merging with a video streaming company.	10

For full marks the student should really bring in both financial and nonfinancial factors as they are analyzing, because the financial factors alone won't address this particular type of strategic move.

Non-quantitative advantages of the merger may include, but are not limited to the following:

- Economies of scale: they may be able to benefit from each other's R&D, technology systems, management expertise, ability to make bulk purchases, or any number of other cuts in average cost of production related to scale.

- The entertainment industry is consolidating around a smaller number of very large firms, and if Spielgeist doesn't merge, then it may find itself one of the smaller firms with more limited offerings. There could be a sort of network effect in which customers gravitate towards larger firms with a wider selection, which enables those firms to spend on even more selection, attracting more customers. Gaming is often very social too, which can also generate network effects around the services that most gamers are using.

- The case study clearly states that they may be able to offer the widest selection of entertainment if they merge

- Borrowing costs are low at the moment, but they are rising. Making this move now may be less costly than in the future.

- The two firms' products could benefit from collaboration, like some kind of tie-up with films/tv shows and games

Non-quantitative disadvantages of the merger may include, but are not limited to the following:
- The potential for diseconomies of scale, such as communication problems

- Possible culture clash between the organizations

- It's not entirely clear how the merger of their services would work, and you can make the case that sometimes things seem like a more natural fit than they actually end up being (for example, the disastrous merger of AOL and Time Warner in 2000)

- There may be regulatory hurdles for the merger if the government applies antitrust legislation or investigation

Quantitative disadvantages of the merger may include, but are not limited to the following:
- Spielgeist seems to have a fairly good return on capital (we aren't told the interest rate on borrowing, which should be a basis of comparison, but we are at least told that it is low), so this may indicate that additional investment required to merge the streaming systems would be worth it.

- Spielgeist has a great liquidity position, and it arguably *should* be spending some of that cash on R&D or big investments like this merger

- The gearing ratio is extremely good, so they probably have a lot of runway for more borrowing and spending

- It made more than $1bil in operating profits last year, so the debt looks manageable, and though its profit margin fell in 2022, it's still quite high and suggests that Spielgeist is in a very good position to try a big move like this.

Quantitative disadvantages of the merger may include, but are not limited to the following:
- Spielgeist has an awfully large part of its book value in intangibles, which is a notoriously difficult thing to measure, and difficult to convert into cash if it ever needed to sell assets. If it is overvaluing its intellectual property etc., then its net assets value would not be as high as they claim on this balance sheet, meaning that they're not in a great position to invest in merging the two services

- It already has more than $1bil in long term debt, and this could add to it