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Introduction

The company that we have chosen is Kobay Technology Berhad (Stock Code: 6971). Through its subsidiaries, it primarily engages in manufacturing of precision machining and metal stamping components, sheet metal fabrications (enclosures) & die casting and plating/surface treatment. Besides that, Kobay also engages in the fabrication and machining of oil and gas subsea components and structures respectively. Kobay also manufactures and supply customized precision carbide and tool steel parts to major semiconductor companies, particularly the transfer mould parts, trim and form tooling. Through its subsidiary, KT Microhandling, they also supply high performance test head manipulator and test interfacing solutions for testing process of semiconductors. Finally, through its Omni Value Chain Sdn. Bhd. Subsidiary, Kobay also offer solutions with value added solutions to customers such as efficient project management. Besides that, Kobay is also involved in property development especially Penang and KL. **The company operates in Malaysia, Singapore, USA, and other foreign countries. It derives the majority of the revenue from the precision metal components segment.**

Kobay Technology Bhd Financial Ratio

	<u>Profitability Ratio</u>		
Accounting Ratio	Formula	Calculation (Year 2018)	Calculation (Year 2017)
Gross profit as a percentage of sales.	$\frac{\text{Gross profit}}{\text{Sales}} * 100\%$	$\frac{\text{RM42,378,120}}{\text{RM156,609,921}} * 100\%$ =27.1%	$\frac{\text{RM28,028,803}}{\text{RM125,429,203}} * 100\%$ =22.3%
Net profit as a percentage of sales.	$\frac{\text{Net profit before tax}}{\text{Sales}} * 100\%$	$\frac{\text{RM18,858,098}}{\text{RM156,609,921}} * 100\%$ =12.0%	$\frac{\text{RM7,627,351}}{\text{RM125,429,203}} * 100\%$ =6.1%
ROCE	$\frac{\text{Net profit before tax and interest}}{\text{Capital employed}} * 100\%$ <u>Net profit before tax and interest</u> = Net profit before tax + Finance Cost <u>Capital Employed</u> = Shareholders' funds + Non-current liabilities = <u>Equity attributable to owners of the Company + Loans and borrowings</u> Where: Shareholders' funds = Capital + Retained profits + Reserves	$\frac{\text{RM19,073,277}}{\text{RM165,926,666}} * 100\%$ =11.5% Net Profit before tax and interest = RM18,858,098 + RM215,179 = RM19,073,277 Capital Employed = RM158,600,712 + RM7,325,954 = RM165,926,666	$\frac{\text{RM7,729,300}}{\text{RM154,528,801}} * 100\%$ =5.0% Net Profit before tax and interest = RM7,627,351 + RM101,949 = RM7,729,300 Capital Employed = RM145,754,876 + RM8,773,925 = RM154,528,801
	<u>Liquidity Ratio</u>		
Current Ratio	$\frac{\text{Current asset}}{\text{Current liabilities}}$	$\frac{\text{RM113,885,489}}{\text{RM37,300,305}}$ =3.1:1	$\frac{\text{RM90,000,748}}{\text{RM30,353,050}}$ =3.0:1
Quick Ratio	$\frac{\text{Current asset-inventories}}{\text{Current liabilities}}$	$\frac{\text{RM98,760,990}}{\text{RM37,300,305}}$ =2.6:1 Current assets - inventories: $\frac{\text{RM113,885,489} - \text{RM15,124,499}}{\text{RM37,300,305}}$ =2.6:1	$\frac{\text{RM75,112,358}}{\text{RM30,353,050}}$ =2.5:1 Current assets - inventories: $\frac{\text{RM90,000,748} - \text{RM14,888,390}}{\text{RM30,353,050}}$ =2.5:1

	<u>Efficiency Ratio</u>		
Inventories turnover period in times	<u>Cost of good sold</u> Average inventories $\frac{\text{Average inventories}}{(\text{Opening Inventories} + \text{Closing Inventories})/2}$	<u>RM114,231,801</u> RM15,006,444.5 =7.6 Times Average inventories = $(\text{RM15,124,499} + \text{RM14,888,390}) / 2 = \text{RM15,006,444.5}$	<u>RM97,400,400</u> RM14,738,647 =6.6 Times Average inventories = $(\text{RM14,888,390} + \text{RM14,588,904}) / 2 = \text{RM14,738,647}$
Inventories turnover period in days	<u>Average inventories</u> *365 Cost of goods Average inventories same average inventories in inventories turnover period in times	<u>RM15,006,444.5 *365</u> RM114,231,801 =47.9 days	<u>RM14,738,647 *365</u> RM97,400,400 =55.2 days
Trade receivable turnover in days	<u>Trade receivable</u> *365 Revenue	<u>RM31,784,982 *365</u> RM156,609,921 =74.1 Days	<u>RM31,404,152 *365</u> RM125,429,203 =91.4 days
Trade receivable turnover in times	<u>Revenue</u> Trade Receivable	<u>RM156,609,921</u> RM31,784,982 =4.9 times	<u>RM125,429,203</u> RM31,404,152 =4.0 Times
Trade payable turnover in days	<u>Trade payable</u> *365 Purchases Purchases = Cost of sales - Opening Inventories + Closing Inventories	<u>RM19,139,192*365</u> RM114,467,910 =61 days Purchases = RM114,231,801 - RM14,888,390 + RM15,124,499 = RM114,467,910	<u>RM18,638,563*365</u> RM97,699,886 =69.6 days Purchases = RM97,400,400 - RM14,588,904 + RM14,888,390 = RM97,699,886
Trade payable turnover in times	<u>Purchases</u> Trade Payables Purchases same as purchases in trade payables turnover in days	<u>RM114,467,910</u> RM19,139,192 =6.0 Times	<u>RM97,699,886</u> RM18,638,563 =5.2 Times

Profitability Ratios

Gross profit as a percentage of sales (Gross profit margin):

1. Gross profit ratio for KOBAY has **increased to 27.1% (2018) from 22.3% (2017)** . This represents an **absolute increase of 4.8%** compared to 2017. This increase shows that KOBAY's products and services in 2018 are delivered at a more profitable level compared to 2017.
2. Gross profit ratio increase caused by the **increase in the gross profit figure**, which has **increased relatively by 51.2%** or RM14,349,317 (i.e. (2018) RM42,378,120; (2017) RM28,028,803). **The increase in the gross profit figure relative increase is higher than the relative increase in revenue**, which is **24.9% relative increase**, or RM31,180,718 (i.e. (2018) RM156,609,921; (2017) RM125,429,203).
3. Gross profit figure increase is largely due to the **increase in the revenue**. KOBAY's revenue for 2018 has **increased by RM31,180,718** (i.e. (2018) RM156,609,921; (2017) RM125,429,203). This is mainly due to the RM20,446,068 or **17.4% relative increase in the sale of goods** (i.e. (2018) RM137,730,395; (2017) RM117,284,327). The **cost of sales** however, have only **increased by RM16,831,401 or 17.3%** (i.e. (2018) RM114,231,801; (2017) RM97,400,400).
4. The increase in gross profit is largely brought by the **manufacturing division** which recorded a **revenue of RM140.4 million in 2018**, compared to RM118.6 million in 2017, which is a **18.4% relative increase**. This is largely thanks to the **Precision Machining Components and Tooling & Equipment division, with revenue of 130.8 million** from machining customized precision carbide and tool steel parts semiconductor customers in line with the boom in semiconductor industry.

Net profit as a percentage of sales (Net profit margin):

1. **Net profit as a percentage of sales** of KOBAY Technology Berhad **increased to 12% (2018) from 6.1% (2017)**. This represents an **absolute increase of 5.9%**. This shows that for every RM1 sales, the company made a net profit of 12 sen for 2018, much better than making 6 sen in 2017.
2. This is due to KOBAY's **increase of net profit before tax**. The Group's **net profit before tax increased relatively by 147.2%** or RM11,230,747 (i.e. (2018) RM18,858,098; (2017) RM7,627,351). This **relative increase in net profit before tax** is **much higher** than the **24.9% relative increase in revenue**, which caused the increase in the net profit margin ratio (i.e. Revenue (2018) RM156,609,921; (2017) RM125,429,203).
3. The increase in net profit before tax is also caused by the **increase in gross profit**, which has **increased relatively by 51.2%** or **RM14,349,317** (i.e. (2018) RM42,378,120; (2017) RM28,028,803).
4. The increase in the gross profit is mainly caused by the **Manufacturing Division** of KOBAY which **achieved a RM22.8 million of profit before taxation** (RM17.5 million + Manufacturing Tax Expense: RM5,321,287), a strong growth as compared to last year's profit before taxation of RM11.9 million (RM9.5 million + manufacturing tax expense: RM2,416,796). Similar to the gross profit, this is due to the semiconductor boom that caused the upsurge of demand for the segment's equipment business.
5. In this case, higher revenue incurred higher expenses for the company. Therefore, we can see that KOBAY is trying their best to optimize the operating and administrative expenses. This can be proven in the annual report, **administrative and general expenses** of KOBAY Technology Berhad had **increased** only by RM2,464,500 or **12.7%** (i.e. (2018) RM21,877,925; (2017) RM19,413,425). The selling and distribution expenses and finance costs also **increased** to **RM5,037,641** and **RM215,179** respectively in **2018** (2017: RM4,350,307 and RM101,949). This resulted in the **total costs incurred** in 2018 to **increase relatively by 13.7%** or **RM3,265,064** (i.e. (2018) RM27,130,745; (2017) RM23,865,681). However, even after taking the

expenditures, the **net profit before tax figure** had **increased relatively by 147.2%** or **RM11,230,747**. The 147.2% relative increment of net profit before tax completely negates the negative effects to the ratio from the increment of revenue (24.9%). Due to these factors, the net profit as a percentage of sales has an absolute increase of 4.8% in 2018.

Return on Capital Employed (ROCE):

1. The **ROCE** of KOBAY has increased from 5% in 2017 to 11.5% in 2018. This represents a **6.5% absolute increase**, which more than doubles the ROCE of KOBAY in 2017. This shows that KOBAY is more efficient in generating profit from the capital invested in 2018 compared to 2017.
2. This is mainly because the **net profit before tax and interest (NPBTI) increased relatively by 146.8%**, or **RM11,343,977**, (i.e. (2018) RM19,073,277, (2017) RM7,729,300). However, the capital employed remained stable in 2018, only increased by RM12,845,836, or 8.8% relative to the capital employed of previous year, attributed to the efficiency in the administration and selling and distribution department. (i.e. (2018) RM19,073,277, (2017) RM7,729,300).
3. The increase in NPBTI is mainly caused by the **increase in gross profit**, which has increased by 1.5 times, or RM14,349,317 or **51.2% relative to 2017** (i.e. RM42,378,120 in 2018, from RM28,028,803 in 2017). As a side note, one of the factor is the due to the efficiency of KOBAY, which **administrative expenses and the selling & distribution department expenses only increased by 12.7%/RM2,464,500** (i.e.: (2018) RM21,877,925; (2017) RM19,413,425) and **15.8%/RM687,334 respectively** (i.e.: (2018) RM5,037,641; (2017) RM4,350,307).
4. Similar to the gross profit margin, the **increase in gross profit** is due to the **semiconductor boom that caused the upsurge of demand for the segment's equipment business**. Besides that, from the annual report, one of the reason is due to the **conversion of all usage of halogen bulb to LED bulb for energy saving**.
5. Furthermore, according to one of the employees review on Jobstreet, KOBAY's employees are also required to be on standby, adapt and perform jobs that are not within the job scope, **minimizing employment needs and expenses** even when facing increasing sales. (Appendix 20)

Liquidity Ratios

Current Ratio:

1. The current ratio of KOBAY Technology Berhad has increased **by 0.1 times** from **3.0 times (2017) to 3.1 times (2018)**. This means for every ringgit of current liabilities, KOBAY has RM3.10 in current assets to cover it in the year 2018 compare to RM3 in 2017. This shows KOBAY is able to easily service its short-term liabilities in both years.
2. This is due to the **RM23,884,741 increase or 26.5%** ,the previous year in current assets, especially in **property development and cash and cash equivalents**, (i.e (2018) RM113,885,489; (2017) RM90,000,748).
3. One of the factors causing the increase in current asset is the property development costs, which has increased by **RM5,992,453 or 45.5%** (i.e. (2018) RM19,164,083; (2017) RM13,171,630). This is mainly due to the increase in property **development costs** as property development division is still operating at its infancy development stage. As an evidence, **development cost** incurred **increased relatively by RM8,324,789** (i.e. (2018) RM10,448,638; (2017) RM2,123,849).
4. Besides, the group is committed to sell the investment properties and subsequently, through KOBAY Sawin Sdn. Bhd. Therefore, there is an assets held for sale (current assets) **worth of RM1,976,069** in year 2018 only and this sale is expected to be completed by December 2018.
5. On top of that, cash and cash equivalents also has a big **increment of RM14,115,671 or 51.0% relative to last year ((2018) RM41,815,361; (2017) RM27,699,690)**. This is due to the **cash and bank balances** also **increased by RM9,272,967, or a 40.9% relative increase (i.e. (2018) RM31,972,072; (2017) RM22,699,105)**. This is mainly due to the **better collection of debts**

from trade receivables which is shown in trade receivables turnover and increases of the net profit and the revenue.

6. For the **current liabilities**, it shows **increment** of only **RM 6,947,255 or 22.9% (i.e.: (2018) RM37,300,305; (2017) RM30,353,050)**. This is evident especially in **progress billing**, which **increased relatively by RM2,884,700 (i.e.: (2018) RM3,254,688; (2017) RM369,988)**. However, in 2018 **the increment of current assets is much higher**, negating the negative impact of the increase in current liabilities, **driving the current ratio up**.

Acid test/Quick ratio:

1. **Quick ratio** of KOBAY Technology Berhad has increased to 2.6 times in year 2018 from 2.5 times in year 2017, which is an **absolute increase of 0.1 times**. This indicates that KOBAY has slightly better liquidity in 2018 compared to 2017 excluding its inventory.
2. This is due to the **increase of current assets** excluding inventory in the year of 2018 of RM23,648,632, or a **relative increase of 31.5%** compared to 2017 (i.e. (2018) RM98,760,990 [RM113,885,489 - RM15,124,499]; (2017) RM75,112,358 [RM90,000,748 - RM14,888,390]). Although the **current liabilities** for 2018 increased by RM6,947,255, a **relative increase of 22.9%** compared to 2017 (i.e. (2018) RM37,300,305; (2017) RM30,353,050), its negative impact on the current ratio is completely negated by the significant increase in the current assets excluding inventory.
3. The biggest factor for the increase in total current assets excluding inventory is the **increase in cash and cash equivalents** of KOBAY. At a RM14,115,671, or a **50.1% relative increase** (i.e (2018) RM41,815,361; (2017) RM27,699,690), it accounts for **59.7% of the total increase in the figure for total current assets excluding inventories**. The other factor is due to the increase in property development costs of RM5,992,453, a relative increase of 45.5% (i.e. (2018) RM19,164,083; (2017) RM13,171,630). The increase in the cash and cash equivalents is caused by the **increase in the Ringgit Malaysia held by KOBAY**, which increased by RM12,248,100, or **48.7%** in 2018 compared to 2017 (i.e. (2018) RM37,423,307; (2017) RM25,175,207). This is the result from the healthy net profit of KOBAY in 2018 which in total is RM18,858,098.

4. For property development costs, the major factor for increase in 2018 is the **development costs incurred** which **increased by RM8,324,789** (i.e. (2018) RM10,448,638; (2017) RM2,123,849). This is due to **development of Phase 1 Lavanya Residence, Langkawi** which is KOBAY's sole **ongoing property development project** in 2018.

Efficiency Ratios

Inventories turnover :

1. **Inventories turnover period in days** of KOBAY Technology Berhad had decreased to **47.9 days (2018)** from **55.2 days (2017)**. This means KOBAY needs 7.3 days, or one week less to sell their entire inventory in 2018 compared to in 2017. This shows that KOBAY's inventory is moving faster in 2018 compared to 2017.
2. This decrease in inventory turnover period in days is due to the large **increase of revenue and purchases**. KOBAY has successfully driven their sales growth and increase their stock purchases simultaneously during the year 2018.
3. The **cost of goods sold increased relatively by 17.3%**, or RM16,831,401 (i.e. (2018) RM114,231,801; (2017) RM97,400,400). However, the **average inventories** had only marginal increase, a **relative increase of 1.8%**, or RM267,797.5 (i.e. (2018) RM15,006,444.5; (2017) RM14,738,647), showing the inventories are being sold quicker.
4. According to the annual report of KOBAY, the **manufacturing division** recorded a **revenue** increase of RM21.8 million, or a **18.4% relative increase** (i.e.: (2018) RM140.4 million; (2017) RM118.6 million),. This is because KOBAY **received higher orders from semiconductor customers** in line with the boom in semiconductor industry and due to the upsurge of demand for the segment's equipment business in the market. This shows that their **products have an increasing demand and higher sales** compared to last year. To meet these sales amount and demands, KOBAY must had purchased more raw materials to make more goods, which raised their total purchases. As a consequence, as KOBAY's purchases increase, the cost of goods sold will also increase.

Trade Receivables turnover :

1. **The trade receivable turnover ratio in number of days had decreased to 74.1 days (2018) from 91.4 days (2017).** KOBAY collected its trade receivables 17.3 days faster in average in 2018 compared to 2017. This indicates that KOBAY is collecting debts more efficiently in 2018 compared to 2017.
2. **The decrease of this ratio is due to the increase in KOBAY's sales (or revenue). KOBAY's sales has increased by RM31,180,718, or 24.9%,** compared to the previous year (i.e. (2018) RM156,609,921; (2017) RM125,429,203). However, the trade receivables had only increased marginally by RM380,830 or 1.2% (i.e. (2018) RM31,784,982; (2017) RM31,404,152). This shows that despite increasing sales, KOBAY is still able to keep its trade receivables under control. These factors caused the trade receivables collection period to decrease.
3. **The increase in KOBAY's sales is mainly due to sale of goods, with an increase of RM20,446,068 or 17.4%** (i.e. (2018) RM137,730,395; (2017) RM117,284,327). Besides, Group's Property Development Division generated a revenue of RM12.1 million (2018) compared to RM2.3 million in last financial year.
4. **KOBAY's sales of goods figure has greatly increased** mainly due to **higher orders received from customized precision carbide and tool steel parts semiconductor customers** in line with the boom in semiconductor industry and **upsurge of demand for the segment's equipment business** in the market. The Group's Precision Machining Components and Tooling & Equipment division achieved a total revenue of RM130.8 million in 2018.
5. Despite that, KOBAY was able to keep its trade receivables figure nearly the same. KOBAY's performance in lowering its trade receivables turnover in days displays better efficiency in managing trade receivables.

Trade payable turnover(in days):

1. KOBAY's trade payables turnover has **decreased to 61 days (2018)** from **69.6 days (2017)**, which is a **8.3 days decrease** in 2018.
2. This is because **KOBAY purchases, the denominator had increased significantly by RM17,361,262 or relatively by 17.2%** (i.e. (2018): RM114,467,910; (2017): RM97,699,886), which contributed to the reduction. However, KOBAY's closing trade payables, the numerator, only **increased by RM500,629, or 2.7%** (i.e. (2018) RM19,139,192, (2017) RM18,638,563).
3. The increase in the **purchases**, which is a **relative increase of 17.2%**, or RM17,361,262 is **much higher than the increase in the trade payables**, which is a relative increase of 2.7%, or RM500,629. This completely negated the negative effects of the trade payables increase, and decreased the trade payables turnover days.
4. **The increase in KOBAY's purchases is due to the KOBAY's increasing need in the procurement of raw materials to handle the larger sales volume.** This is evident from the revenue of KOBAY, which a large part is solely from manufacturing alone. To increase its revenue, KOBAY needs to sell more products. Therefore, KOBAY will need to stock up its warehouse with more products to sell to its customers. Indirectly, KOBAY also need to increases its purchases in order to fulfill the market demand of its products.

Introduction:

- Accounting ratios, also known as financial ratios, are used to measure the profitability and efficiency of a company based on the financial reports.
- **Ratio shows the mathematical relation between the quantity or value of one item and the quantity or value of another item.** The relationship can be illustrated in the form of percentage or ratio. We will be discussing on 3 main ratio analysis categories: profitability ratio, liquidity ratio and efficiency ratio.

Profitability Ratios:

- For most of these ratios, having a higher value relative to a competitor's ratio or relative to the same ratio from a previous period indicates that the company is operating well.
- **The first advantage is company with good profitability ratio in acquiring assets or liabilities,** as the suppliers can be more certain that the company will not fail. By calculating profitability ratio, a company can let external people know about the company management performance in utilizing the capital efficiently. With this verification, external people are able to judge the management performance across different companies in the similar industry and the efficiency of the overall funds' utilization of the company which covers both types of capital, the equity as well as debt.
- **Besides, profitability ratios can assist the company to check the basic operation efficiency.** This is done by narrowing down the cause of problems if present in the basic operations. This is because through profitability ratios, a company can understand its profit margin. For example, through gross profit, a company can see its overall sales, as this is used to take care of general and administrative expenses and net profit. Thus, the higher this ratio, the higher the chances of improvement in net profit margins.
- **Lastly, calculating profitability ratio also can allow the company to comprehend their company trend more clearly during the year.** This helps the company to easily determine whether they are likely on the right or wrong track to success. This allows them to make decisions to further lift up their performance or to tackle the problems encountered in maximizing business profitability.

Liquidity Ratios:

- Two examples of liquidity ratios are: current ratio and quick ratio.
- **A higher liquidity ratio indicates the company is in better position to settle all short-term outstanding debts and is able to liquify its assets to settle its debts.** Meanwhile, liquidity ratios of less than 1 indicates having a higher risk of encountering difficulty settling their liabilities as they fall due.
- **One of the advantages is KOBAY can monitor its financial health easily when dealing with current liabilities.** If the liquidity ratios are less than 1, KOBAY may face issues in paying back its current liabilities as they fall due with its assets such as cash and inventory. Using the current ratio and the quick ratio, KOBAY will be able to see this and quickly take measures to improve its liquidity, to prevent the company facing possible risk of closure.

Efficiency Ratios:

- **The first advantage is efficiency ratios provide a much quicker evaluation on a company's current business policies compared to comparing raw values in financial statements.** A very good trade receivable turnover ratio can quickly show to company that the company has strong credit practices, but strict credit restrictions may be causing the company to lose potential sales. Low accounts receivable turnover ratio in times may indicate that the company is being too generous with your credit and are having trouble collecting your debts. Alternatively, a low receivables ratio in times may indicate that the company's collection practices are not working or the company's collections department requires corrective action. This allows the company to easily understand their current business practices, and take measures to rectify them to improve overall business performance.
- **The second advantage of efficiency ratios is that it suggests sales volume of the company.** Generally speaking, a lower inventory turnover ratio in times implies poor sales and/or poor inventory management together with overstocking, old stock becoming obsolete and possibly a poor product line or disappointing marketing campaign. Conversely, a higher inventory turnover rate in times could suggest strong sales for the company, and effective buying.
- **The third advantage is it signals creditworthiness and makes the company more sought after by creditors.** Creditors are more likely to provide business with larger amount of trade payables to fund business operation when a company has good trade payable turnover ratios. This

is because the risk of offering such trade payables are minimized, and the creditors are more certain that the company will pay them back on time. Besides that this also opens up the company to trade payables with longer period of settlement due to the trust placed on them. This can allow a company to increase sales because they do not require cash upfront to purchase the inventories required for sales.

Conclusion:

KOBAY has shown an increase in its profit margin from its improvement in its profitability ratios, highlighting its company's improving profitability. Besides that, KOBAY also had shown improvement in its liquidity, recording an increase in the company's liquidity ratios, showcasing its financial stability improvement in 2018 compared to 2017. Finally, the company also achieves a significantly better efficiency in 2018, from its increasing inventory turnover rate, better credit control, and decreasing days to settle trade payables. Therefore, based on these positive factors, **KOBAY has a very good financial outlook, and is good company for investment.**