

Analysis of cash flow statement with Drägerwerk AG as an example

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Abstract. Usually, the normal development of the enterprise because of the daily business transactions constantly, need to estimate the cash flow of the enterprise, so that the enterprise decision-makers grasp the current development of the enterprise, real-time evaluation of the enterprise, so as to make decisions for the enterprise. According to International Accounting Standard (IAS) 7, the cash flow statement reflects the addition and subtraction of cash flow. The main purpose of cash flow statement is to provide information about the financial situation of an enterprise, including the source and use of funds, for decision makers and investors of an enterprise. Cash flow statement is an important index to measure the sustainable development of enterprises and the main factor to measure the financial strength of enterprises. As an integral part of financial statements, cash flow statement can reflect the net assets of enterprises with fair value, and show the operating results and financial status of enterprises through flow changes. It provides a reference for enterprises to test whether they can fulfill their payment obligations, pay dividends and pay dividends to investors. In this context, cash flow statement plays an increasingly important role in the development of enterprises. In order to make a better economic decision, we must study the cash flow statement in an all-round way. Firstly, it studies what information can be disclosed in the cash flow statement. The second research problem discusses the direct method and indirect method for calculating cash flow. Considering that cash flow statement is an important financial statement of an enterprise, any enterprise needs cash flow statement to help enterprise management and investors make decisions. Therefore, the third problem is the specific calculation of cash flow statement and the matters needing attention in the application process.

Keyword: Cash flow statement, direct method, indirect method, cash flow.

1. Theoretical basis of cash flow statement

1.1 Theoretical basis of cash flow statement

1.1.1 Terminology of cash flow statement

Cash flow statement reflects the change of cash flow of an enterprise, and can judge the solvency, dividend level and development level of an enterprise. As defined in IAS 7, the cash flow statement shows changes in cash and cash equivalents. Therefore, the balance of various cash flows in different fields of enterprises is called cash flow after being combined.

According to IAS 7, the purpose of the cash flow statement is to show the flow of cash and cash equivalents arising from operating, investing and financing activities. As an accounting tool, cash flow statement can play a role inside and outside the enterprise.

1.1.2 Function of cash flow statement

The cash flow statement is prepared to make cash flows transparent, to obtain information about the ability of the company to generate cash, meet financial obligations, pay dividends and maintain credibility, and to reflect the impact of investment and financing transactions on the financial position of the company. In addition, the cash flow statement reflects the changes in the financial net assets and financial structure of enterprises. And the source of the company's funds and how to use them can be used by the company's decision makers and investors to help them make decisions.

1.1.3 Essential characteristics of cash flow statement

In addition to the balance sheet and income statement, the cash flow statement, management report, notes, segment report and statement of use of equity together constitute the financial statements of the Company. IAS 7 requires the statement of cash flows to reflect only all inflows and outflows of cash and cash equivalents. Therefore, it is also considered to be a special form of financial statement reflecting the liquidity of financial situation. Cash flow statement also plays an important role in personal and consolidated financial statements. As an information tool, it can provide information about all cash transactions over a period of time and their impact on cash and cash equivalent margin. It is precisely because of these characteristics of cash flow statement that external investors and managers can clearly obtain the information of enterprise cash flow and make decisions on the basis of cash flow statement.

1.2 Theoretical basis of cash flow

1.2.1 Concept of cash flow

Cash flow is the net inflow of cash that affects changes in cash over a period of time (usually a financial year, that is, one year). Therefore, other income and expenses that did not have an impact on cash during the reporting period were not included in the cash flow. Such as depreciation of fixed assets, depreciation of intangible assets, reversal of provisions, etc. Cash flow within an enterprise mainly comes from three aspects, namely, cash flow from operating activities, investment cash flow (CFI) and financing cash flow (CFF).

1.2.2 Cash flow type

Cash flow generated from daily business activities refers to all transactions involved in normal daily business activities of enterprises that may cause cash changes. Business activities mainly include selling goods and services, collecting rent, repaying debts with cash, paying wages to workers, collecting taxes, interest income and interest expenses, donation activities, etc.

Cash flows from investment activities mainly record the increase or decrease of all cash in the investment department. For example, invest in real estate, plant and equipment of other companies. It is also an investment in financial products, such as stocks, funds, fixed assets investment and capital preservation investment.

The cash flow generated from financing activities essentially refers to the long-term financial transactions between the company and shareholders and creditors. This cash flow shows the amount of net cash the company receives from new equity and debt, such as: B. Capital increase, or from new loans, after deducting all payments to investors, such as dividends to shareholders, repayment of loans, repayment of bonds. That is, the capital inflow generated by enterprise financing activities mainly includes the inflow of raising funds and the inflow generated by bank loans. Funds received. The outflow of funds from financing activities mainly comes from the payment of cash dividends, the repayment of loan principal and the funds paid by stock repurchase.

2. Calculation method of cash flow statement

2.1 Direct method

2.1.1 Direct cash flow method

Cash flow statement is one of the indispensable financial statements inside and outside an enterprise. Business decision makers and outside investors pay close attention to the cash flow statement. According to IAS 7, the cash flow statement is calculated by direct method and indirect method.

Direct method is a calculation of cash flow statement, which can reflect the source and direction of cash flow of enterprises. For example, accounting activities such as paying wages to employees, purchasing raw materials, and repaying debts.

Direct method refers to presenting all kinds of cash flows through the main income and expenditure categories of cash flows, starting from the operating income in the income statement, adjusting the increase or decrease of related items and calculating cash flows.

2.1.2 Direct cash flow accounting

The direct cash flow method is more suitable for calculating the profitability of investments than the indirect cash flow method because it does not require the use of a balance sheet. The following table shows how it is calculated.

1Table 1. Direct cash flow calculation.

Direct cash flow calculation
1.-Investment in fixed assets
2 + Release of fixed assets
3.-Net current assets investment
4. + Release of net current assets
5. + Deposits arising from investment
6.-Investment expenditure
7.-Tax payments arising from investments
8.= Cash flow

Source: Adapted from: Lachnit, L.; S. Muller. Balance Sheet Analysis, 2017, p. 253

Table 1 shows the direct method of cash flow. However, due to the change of market price, the allocation principle of intangible assets or fixed assets will change. Therefore, the method of calculating cash flow directly and indirectly is more suitable in practice.

2.2 Indirect method

2.2.1 Indirect cash flow method

Indirect method is another method to calculate cash flow. Enterprise leaders and investors can clearly understand the cash flow of enterprises in the cash flow statement calculated by indirect method, so as to make better decisions.

The indirect method calculates cash flow from net profit. In calculating cash flow, income and expenses excluding cash, such as depreciation and accounts receivable, are deducted or added.

2.2.2 Indirect cash flow accounting

The following table shows the indirect calculation method of cash flow.

2Table 2. Calculation of indirect cash flow.

Indirect cash flow calculation
1. Net income/loss
2. +/-Depreciation/amortization of fixed assets
3 +/-Increase/decrease in reserves
4. +/-Other invalid expenses/income
5. +/-Increase/decrease in inventory, increase/decrease in accounts receivable/payable Trade and other assets/liabilities not classified as investment or financing activities
6. +/-Gains and losses on disposal of fixed assets
7. +/-Interest expense/interest income
8.-Other investment income
9. +/-Expenses/income for special items or income tax
Page 10 +/-Deposits/Payments for Special Items
Page 11 +/-Income Tax
Page 12 = Cash flows from operating activities

Source: Reference: Hubert, B. Accounting and Valuation, 2017, p. 89

Table 2 shows the indirect method of cash flow. Indirect method can see the source and destination of funds more intuitively, but indirect method can only calculate the cash flow generated by business activities. The cash flow generated by investment and financing can only be obtained by direct method.

To sum up, only by fully combining direct method with indirect method can we know the changes of enterprise cash flow more accurately. Only in this way can we better reflect the financial situation of the company. Business decision makers and outside investors can make more informed decisions.

3. Practical example of Drägerwerk AG cash flow statement

3.1 Introduction to Drägerwerk AG

Drägerwerk AG was founded in 1889 in Lubeck and is owned by the family. Drägerwerk AG is a global leader in medical and safety technology. Drägerwerk AG's products, such as respirators, are designed to support and save more lives. It is also a recognized brand in the field of global security technology. As the coronavirus disease (COVID-19 pandemic) continued to spread around the world in 2019, Drägerwerk AG helped maintain key facilities in Germany and deployed a large number of employees for health care work.

3.2 Drägerwerk AG cash flow statement

3.2.1 Financial situation of Drägerwerk AG in 2020

Cash flow refers to the funds that can be used by the company itself without borrowing or borrowing from outside the company, and without requiring investors to inject capital into the company. These funds will be used for the further operation and management of the company. Changes in these funds are reflected in the cash flow statement. Cash flow statement, as a part of financial statements, plays an important role in the formulation and development of enterprise decision-making. Therefore, the analysis of enterprise cash flow statement can help the decision-making and progress within the enterprise.

As mentioned earlier, the inflow and outflow of cash flow are introduced from three aspects: operating activities, investment and financing.

In 2020, Drägerwerk AG received a positive cash inflow of nearly 460 million euros from its business activities. This is mainly due to the increased profitability of Drägerwerk AG's cash. In its investment activities, Drägerwerk AG's net cash outflow even reached 263.1 million euros. Among them, current assets and fixed assets invest the most. In terms of financing, Drägerwerk AG had a cash inflow of 114.3 million euros. This mainly includes proceeds from borrowings and proceeds from capital increase.

3.2.2 Changes in cash flow in the past three years

In order to better understand the development of Drägerwerk AG in recent years and the impact of COVID-19 pandemic, it is meaningful to analyze the cash flow statement of the past three years.

Affected by the rapid spread of COVID-19 pandemic in recent years, the cash flow generated by Drägerwerk AG's operating activities in 2019 increased by more than 40 times compared with that in 2018, which is a very rapid development. The cash flow generated from operating activities in 2020 has nearly tripled compared with 2019. Although the number is still increasing, the speed is relatively flat compared with 2019, which is related to the effective control of COVID-19 pandemic. Drägerwerk AG invested abroad during the three-year period from 2018 to 2020, resulting in negative investment cash flow and increased investment in these three years. Investment expenditure is mainly fixed assets and non-current assets. In the past three years, the cash flow generated by financing activities has also changed. The cash flow generated by financing in 2018 is negative. The financing situation in 2019 is the worst in the past three years. Cash flow generated from financing in 2020 mainly includes cash from acquisition of ownership interests of subsidiaries and proceeds from borrowing. See Annex 1 for detailed data.

3.3 Cash flow statement in notes to financial statements

Cash inflows and outflows of Drägerwerk AG are detailed in the notes. The reasons for any changes in cash, direction and amount are clearly described. The notes also highlight the reasons why the cash flow changes in Drägerwerk AG's cash flow statement do not correspond directly to the balance sheet. That is, due to exchange rate changes and accounting event adjustments, no cash flow changes have been caused. If the decision-makers or investors of an enterprise want to know more accurately how each cash flow changes in the enterprise, they can refer to the notes of the enterprise. It will contain all the useful information.

Drägerwerk AG uses indirect method to prepare cash flow statement. Indirect methods facilitate the provision of information. Therefore, Drägerwerk AG can easily assess the financial situation of the company. The indirect method based on the current profit can reflect the difference between the cash flow of operating activities and the current income, and give the corresponding reasons. Therefore, in practice, indirect method is a common method to calculate cash flow.

4. Executive summary

The cash flow statement shows the development of enterprise cash flow. The funds shown in the cash flow statement can be used to invest in working capital, invest in fixed assets, repay creditors' debts and pay dividends to investors. Therefore, it can also reflect the financial situation of the company.

Cash flow statement, income statement and balance sheet serve as the basis for investors and company decision makers to conduct financial evaluation and evaluation. In order to protect the company's sustainability objectives, these financial statements should be prepared on the basis of business plans. In the daily business activities of an enterprise, the internal and external cash flow statements of the enterprise shall be measured. Internally, by monitoring the company's cash flow direction, the company's management can help make decisions. Externally, the cash flow statement can help investors decide whether to invest in a company. To sum up, cash flow statement plays an important role in enterprises, so we should make full use of cash flow statement to promote the development of enterprises.

Table 3. Cash flows of Drägerwerk AG in the past three years

In thousands	2020	2019	2018
Business activities			
Group net income	249.886	33.790	34.899
+ Depreciation/amortization of non-current assets	124.467	127.135	85.263
+ Interest income	36.433	17.048	10.994
+ Income tax	110.279	15.737	16.754
+ Increase in reserves	50.491	13.437	3.349
+/-Other non-cash expenses/income	37.461	-798	13.697
-Income from disposal of non-current assets	-140	-880	-221
-Inventory increase	-	-24.515	-76.925
-Increase in leased equipment	-10.577	-12.747	-11.462
+/-Decrease/increase in trade receivables	-95.388	434	-40.988
+/-Decrease/increase in other assets	-549	7.700	-3.425
+/-Increase/decrease in accounts payable	29.714	3.870	-2.331
+ Increase in other liabilities	146.233	11.600	28.042
+ Dividends received	331	328	245
-Income tax payment	-41.376	-18.433	-49.878
-Payment of interest	-18.126	-12.355	-7.360
+ Interest payment	2.830	3.068	3.439
Cash flow from operating activities	459.980	164.420	4.090
Investment			

-Investment expenditure on intangible assets	-4.921	-5.878	-4.618
+ Proceeds from disposal of intangible assets	68	0	-
-Expenditure on investment in fixed assets	-	-58.512	-57.108
+ Proceeds from disposal of property, plant and equipment	110.019	3.494	1.802
-Investment expenditure on non-current assets	918	-2.182	-3.754
+ Proceeds from disposal of non-current assets	-	1.510	176
-Payments for acquisition of subsidiaries	149.721	-500	-
+ Proceeds from the sale of subsidiaries	42	-	-
Cash outflow from investment activities	549	-62.067	-63.503
Financing activities	-		
-Payment of dividends (including coupons)	263.085		
-Payment for the purchase of treasury shares of ESOP	-5.454	-4.001	-11.042
+ Proceeds from transfer of treasury shares from employee stock ownership plans	-7.284	-2.637	-2.791
+ Borrowing income	3.783	1.893	2.029
-Payments for repayment of loans	110.674	7.709	3.731
-Balance of other bank liabilities	-12.404	-15.256	-51.581
-Amortization of lease liabilities	-9.600	-39.658	54.225
-Payments for the purchase of ownership interests in subsidiaries	-40.541	-35.587	-566
-Profits distributed to non-controlling shareholders	75.217	-	-3
Cash outflow from financing activities	-140	-332	-168
Changes in cash and cash equivalents in the financial year	114.252	-87.869	-6.167
+/-Changes in the value of cash and cash equivalents related to exchange rates	311.147	14.484	-65.579
+ Cash and cash equivalents at the beginning of the financial year	-10.131	2.269	-2.428
Cash and cash equivalents for December of the fiscal year ended December 31	196.314	179.561	247.568
	497.330	196.314	179.561

Source: According to <https://www.draeger.com/corporate/content/annual-report-2020-p6ehyb4Gdk.pdf>, accessed on Dec. 31, 2021

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