# BUDGET ANALYSIS CASH FLOW WITH MODEL ANALYSIS BY MILLER AND ORR AS A MAIN ELEMENT SUPPORTING POLICY OFTIMIZATION, PLACEMENT OF FOUND AND DEBT MANAGEMENT AT THE PT JASA MARGA (PERSERO) Tbk

#### Maya Sova

Universitas Respati Indonesia \*corresponding author: maya.sova72@gmail.com

#### **Abstract**

Fund placement optimization policy and debt management are the composition of short-term debt and long term debt used by the company. Therefore, the main problem of the debt management is treasury cash management arrangements which aim to maximize the utilization of cash without neglecting the company's liquidity. The company has cash based on variety of motives that the transaction motive, motive of precaution and speculation motive. Model Miller and Orr used in this study was to determine the cash optimum, where the model assumption Miller and Orr, cash flow in to and out irregular in both time and amount for each period but the distribution of daily cash flow ( the difference between cash coming in and cash out) is normal. The conclution of this study are a model of Miller and Orr shows the characteristic activities of the funding requirements, combined with the risk analysis decisions more optimal relative, because of the potensial gain from excess funds more leverage and the potensial high cost of funds on debt management more minimal.

# Keywords: Cash, Debt Management and Model Miller and Orr

# 1. PRELIMINARY

Cash is the company's highly liquid assets that can be used immediately to meet the financial obligation of the company, Besides cash also has a fairly large risk, because in general cash was subjected to the abuse, and the cash balance very quickly changes for their transaction in form of inflows or discharge flow of cash. Entrance and exit of cash can be classified into three groups, there are:

- a. Cash flow from operating activities: namely cash infow and discharge in relation to the company's routine operation, operating revenues, operating expenses of payment and so on.
- b. Cash flow from investing activities, namely the entrance and exit of cash flow for their investment activities on fixed assets and other long-term assests.
- c. Cash Flow from Financing activities (financing): namely the entrance and exit of cash flow because of changes in the capital, retained earning, and long term loans.

The provision of cash very small resulted in the company's activities may be disrupted and on the other hand, excessive supply of cash is a waste because the funds are not fully utilized.

Therefore, provision should be sufficient cash, that can support the smooth course of the company's activities and no waste.

- a. The provision of sufficient cash for short-term operation and long-term.
- b. The use of company funds effectively at any time.
- c. Determination of responsibility for cash receipts and giving enough protection to the funds deposited.
- d. The implementation of controls to ensure that payments made only for legitimate purposes.
- e. The implementation of sufficient cash accounting

Based on the cash management purposed it is closely associated with the cash management policy on the management of funds, either in relation to the placemen or investement funds, and the provision of foreign funding in the form of short-term funds and long term. Short-term acceptance necessary detail for each budged period up to one year. Long-term is more general in nature, this method is called the method of adjusted net income (modified).

Cash and cash equivalents are part of the current assets of the most current, financial managers hold cash portion with enough goals to reinvest in the company aktiva, distribute to investors and keep in company. Based on trade off theory, companies draw up cash at an optimal level by considering the marginal costs and benefits of holding cash.

Financing policies are generally divided into two, there are;

- a. The short-term, where the funds are from the sources of short-term financing funds that aim to routine operational needs of the company, and if there are surplus funds, short-term financing was immediately repaid.
- b. The long-term funding, where the funds come from sources of long-term financing funds which are intended to finance the company's investment activities and additional production capacity or expand the business to increase revenue in the future, and repayment is also adjusted to the revenue target will be achieved.

Investment policy funds are divided into three, tree are;

- a. Short-term investment, in the form of time deposits with maturities of 1-3 months.
- b. The medium-term investmenent, such as investment in money market securities or capital markets with maturities of 3-12 months.
- c. Long-term investment, such as investment in equity participation in other companies or investment to fixed assets addition that will add revenue.

In establishment of policies for funding is rare lack of conformity between the character of the funding requirements with the type of funding source is used. For example, the funding requirements due to the activity of production capacity expansion, should the sources used are derived from long-term and not the opposite.

Similarly the investment policy of the fund, by identifying the type of surplus funds will be set in terms of what these fund are invested, such excess fund only occurs in a span of 2 month then the investment is short-term investment. However, if excess fund predicted to occur over a long period it is more appropriate to use in a long-term investment as well, because usually the longer the investment is then acceptable yield will be higher.

A variety of models of management or cash management have been developed with a view to determining how much cash balances should be provided and how the funds should be invested. If we can set the cash needs of measures taken on the funding or cash placement well be determined.

One model that may be applied in order to optimize cash management fund investment policy and provision of financial recources is the model theory Miller and Orr. Issues to be discussed in this study was 'how to optimize the investment policies of funds and provision of financial recources sufficient for the operation of short-term and long-term by using the model of Miller and Orr.

# 2. DISCUSSION

#### 2.1 Cash Budget

Simply stated the budget is a plan events in the future that is expressed in a currency or other quantitative measures. An enterprise budget is a plan that detailed how the funds well be used for manpower expense, operating expenses, other operating burderr and capital expenditure as well as

how funds for that purpose will be obtained.. In general, the primary function of the budged for the wearer is as follows:

- a. Stating when and how the financial needs of companies in the period.
- b. Being a basic to take corrective action when a budgeted amount is different from the actual or real amounts.
- c. The foundation evaluates companies. The plan implemented by the human and budgetary provide benchmarks for evaluating the units responsible for implementing these plan and in turn control activities. Budged cash (cash budged) presents projection of cash flows into and out of companies for a certain period.

All activites and the acquisition of such asset must be spent, and for it to be prepared a cash flow analysis or a cash budged, which reflects a combination of activities budgeted cash flow, positive net cash flow shows that the company has abundant spending and require an alternative placement of investment funds, but if the increase in activity resulted in a net cash flow is negative, it would require additional spending and at will deal directly with the alternative election spending.

The cash budged can be used as a means of checking the entire program budget, because if the target achieved, the operating results will be reflected in the cash position, Conversely, if the budget failed to reach targets, the financial managers are forced to seek additional sourcess of cash to another, the cash budget not only shows the overall amount of spending required, but also where and when funds are needed. The cash budget indicates the amount of funds required every month, every week and every day.

Cash budget period depends on various factory, including budgetary purpose. The financial condition of the company and the opinion of the executives about the practical as well as the precision of the estimate. For example, for short-term estimates will be used to determine the need for cash, perhaps to 1 to 3 months to come if the cash margin is low, it is necessary to estimate the cash receipts and payment on a weekly and even daily basis. Conversely when the cash margin is large enough, if can develop a monthly period, semester or even years.

The format of arrangement can be structured cash budget based on priorities and evaluation of the impact of transaction. Cash budged format ideal for companies with characters such transactions on PT. Jasa Marga (persero) Tbk. Can be seen in the following table:

Uraian	Total	Jan	Feb	Mar	Apr	Mei	Jun	Jul	Agust	Sep (dala)	Okt n milyarru	Nov piah) 75	Des
Beginning balance	564	564	514	549	348	150	120	75	75	75	75	7	108
Acceptance of operation		-	-										
Revenues	2730	194	199	202	214	225	230	248	236	246	235	249	252
Other Income	150	12,5	12,5	12,5	12,5	12,5	12,5	12,5	12,5	12,5	12,5	12,5	12,5
Operation Production			2 3	3	52			3 3		3	13		
Operating Costs	(980)	(79,00)	(86)	(78)	(82)	(73)	(96)	(62)	(104)	(124)	(56)	(42)	(96)
Salary Expenses	(680)	(56,67)	(56,67)	(56,67)	(56,67)	(56,67)	(56,67)	(56,67)	(56,67)	(56,67)	(56,67)	(56,67)	(56,67)
Cash Position After The Operating Expenses	1.174	635	583	539	436	257	210	217	163	153	210	238	218
Financial Expenses													
Debt Principal Payment	(275)			(68,75)		3.00	(68,75)	1.5	- 8	(68,75)	-	-	(68,75)
Debt Interest Payment	(750)	(62,50)	(62,50)	(62,50)	(62,50)	(62,50)	(62,50)	(62,50)	(62,50)	(62,50)	(62,50)	(62,50)	(62,50)
Deviden Payment	(125)	-	-	-		(4)	(1,25)			-	-	-	-
Payment Of Tax Liability	(120)	(10,00)	(10,00)	(10,00)	(10,00)	(10,00)	(10,00)	(10,00)	(10,00)	(10,00)	(10,00)	(10,00)	(10,00)
Cash Position After The Operating Expenses	514	562	511	397	364	185	(57)	144	90	12	137	165	77
Investment Spending					THE PARTY OF	1790				7 77550	( 14 CMM)	10.000	0.000
Payment Acquisition Of Fixed Assets	(700)	(48)	(52)	(49)	(89)	(65)	(35)	(56)	(62)	(94)	(34)	(57)	(59)
Equity Capital	(350)	140	-	- 12	(125)	-	- 2	(175)	28	-	(50)	- 12	
Cash Position After The Spending investment	(536)	(514)	(459)	(348)	(150)	(120)	(92)	(87)	28	(82)	53	108	18
Minimum Cash Requirement	(75)	(75)	(75)	(75)	(75)	(75)	(75)	(75)	(75)	(75)	(75)	(75)	(75)
Cash Position after Total					-	, A							
Expenditure The Withdrawal of	(611)	439	384	273	75	45	(167)	(162)	(47)	(157)	(22)	33	(57)

The composition of these tables illustrate the scale of spending priorities to be financed. Getting to the top position it is increasingly prioritized financing using internal funds. The format also allows the analysis of the funding decision, in which the activity of a shortage of funds that need be financed.

# 2.2 Miller and Orr Models

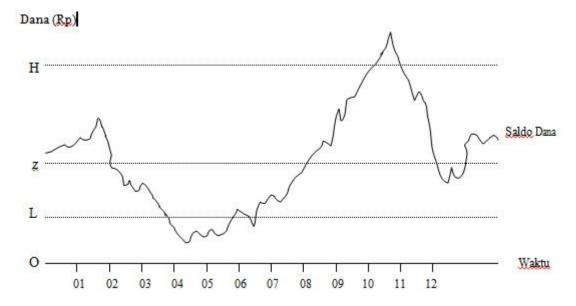
Mathematical models for determining to optimal cash:

- a. Model Baumol
- b. Model Miller and Orr
- c. Model Beranek

The planning process is a process which is inseparable from the tasks of financial managers and good planning can be used as a tool of control. The important factor in planning is to estimate or estimate funding needs for the coming year. Because it needs to know about the various models for the control of fund for all activities of the company, One the models of miller and Orr.

Models miller and Orr is actually used for the control of funds in the short term, but can also be used to analyze the need for fund in the long time. Miller model can accommodate the needs of funds that fluctuate randomly. This model uses the theory of supervision, such as the upper limit and lower limit.

Miller and Orr Model can be shown with the picture below:



# 2.3. The combination between Miller and Orr Model Analysis of the Cash flow Budget Analysis.

In the conditions Pt. JasaMarga (Persero) Tbk can be translated as follow:

H: Funds used for all expenditure incurred within a period of 1 month. L: Minimum funds should be available to be company.

Z: The average rate expenses from operation that must be paid every month.

If the conditions of the balance of funds In the position between lines Z and H, the measures taken are placed funds in the short and medium term investements. And if the condition of the fund is above the line H then the policy is to invest these funds in the form longer.

Vice versa, if the position of the funds underline position between Z and H then the policy will be financed by short-them loans, and if the positions of the funds underline L then attempted to use long-term loans.

Investement in securities easily been due to the nature of the investement made in to cash (very well) to determine how many securities are converted into be used models of miller and Orr.

More profound analysis can be done by taking in to account the characteristics of the level of fund balance. This is illustrated by a cash budget position, wich if funding for the company's operation should be financed by the company's operating income and operating requiretements fulfilled if the funds are used for for the payment of financial obligations such as interest and repayment of the loan. Usually the payment on financial liabilities carried at certain times, and before the liability maturity and available then it should be placed on short-term investment until the time of the payment. After the financial and operational needs are met, then the available funds are used for investment activities in the form of the capacity expansion and investments or expansion of the company. And if there are excess funds, the investments can be made with a term of more than one year.

At the time of the fund positions occur minus, then the analysis performed at the needs of any activities there is a shortage of funds, for example, if at the time to meet the need of financial and operational it should use source of short-term funds, because it is assumed deficit of funds only occurs in a time not too long and will met back with the results the operating income. Then, when a deficit occurs when the funds meet the needs of the investement activity should be a source of funding comes from sources long term, assuming the investement made will increase revenue in a period of more than one years. And if for the company's expansion requires substantial fund, the fund should be obtained through the edition of equity, for example by issuing new shares for a period of time the refund is not restricted.

By doing a blend of analytical models of Miller and Orr with budget analysis based on the cash flow characteristics of the activity of the fund needs decision taken relatively more optimal, because the potential gain from excess funds more leverage as well as the potential cost of funds over the minimal needs more fund.

## 3. CONCLUSION AND RECOMMENDATION

#### 3.1 Conclusions

- a. The cash budget not only shows the overall amount of spending required, but also where and when funds are needed, the cash budget indicates the amount of fund required every month, every week and every day.
- b. Format arrangement can be structured cash budget based on priorities and evaluation of the impact of transactions.
- c. Miller and Orr model can accommodate the needs of funds that fluctuate randomly.
- d. This model used the theory of supervision, such as the upper limit and lower limit by performing a blend of analytical models of Miller and Orr with budget analysis wich is based on cash flow characteristic of the activity of the fund needs decision taken relatively more optimal, because the potential gain from axcess funds more leverage as well as the potential cost of funds over the minimal needs more fund.

#### 3.2 Recommendation

a. Miller and Orr Model do not take into account the risk analysis that occurs because asually high yields will be directly proportional to the risk that may occur, therefore recommended also need to be combined with models of risk analysis.

b. Determination cash flow budget based on the accuracy of the estimation and forecasts are done, it should be in making forecasts should use quantitative forecasting method to make it more measurable degree of accuracy.

#### REFERENCES

- [1] Anggita, Bandi, Sri, Accrual Quality and Leverage effect on Cash Holding Company, JAKI(Journal of Accounting and finance Indonesia), volume 7, No 2, December, 2010.
- [2] Arthur J Keown, et al. (2001). *Dasar-dasar Manajemen Keuangan*. Edisi ke-7. Salemba 4. Jakarta
- [3] Brigham, Eugene F. Dan Joel F.Houston, (2006). *Dasar-dasar Manajemen Keuangan, Buku Satu, Edisi Kesepuluh*, Alih Bahasa Ali Akbar Yulianto, Salemba Empat, Jakarta.
- [4] Dr.Suad Husnan, M.B.A, Book 2, Financial Management theory and Application of short-term Decisions, BPEF, Yogyakarta, 1998.
- [5] Douglass Garbutt, Cash management, Management series, No 155, PT Pustaka Binaman pressindo,1990.
- [6] Dra Farah Margareta, M.E., theory and applications financial Management, grasindo, Ancestor Way, Jakarta in 2005.
- [7] Kasmir, (2009). *Analisis Laporan Keuangan, Edisi Pertama*, PT. Rajagrafindo Persada, Jakarta.
- [8] Mamduh M. Hanafi dan Abdul Halim, (2005), "Analisis Laporan Keuangan", Yogyakarta.
- [9] Ma'ruf, Muhammad. (2006). Analisis Faktor-Faktor Yang Mempengaruhi Manajemen Laba Pada Perusahaan Go Public di Bursa Efek Jakarta. Skripsi: Universitas Islam Indonesia.
- [10] Sartono, Agus R (2001). *Manajemen Keuangan*. Edisi Tiga. Yogyakarta: BPFE Simamora, Henry, (2001). *Akuntansi Basis Pengambilan Keputusan Bisnis*, Jilid Dua, Cetakan Pertama, Penerbit Salemba Empat, Jakarta.
- [11] Simorangkir, Charles (2003), *Manajemen Keuangan*, Jakarta: BadanPenerbitan FE Universitas Indonesia.
- [12] Suprihatmi dan Wahyuddin. (2003). "Pengaruh Rasio Keuangan Terhadap Kemampuan Memprediksi Perubahan Laba Pada Perusahaan-Perusahaan Manufaktur Yang Terdaftar di PT Bursa Efek Jakarta". *Jurnal Manajemen Daya saing*, Vol.4, No.2.
- [13] Syamsudin, Lukman. (2009). Manajemen Keuangan Perusahaan. Edisi Baru. Jakarta: PT. Rajagrafindo Persada.
- [14] Tampubolon, Manahan P.(2005). Manajemen Keuangan, Bogor: Ghalia Indonesia.
- [15] Van Horne, James, C. And John, M. Wachowicz (2005). Prinsip-prinsip Manajemen Keuangan Buku Satu Edisi 12 (Ahli Bahasa: Dewi Fitriasari & Deny Arnos). Jakarta: Salemba Empat.
- [16] Warsidi dan Bambang Agus Pramuka (2000). "Evaluasi Kegunaan Rasio Keuangan Dalam Memprediksi Perubahan Laba di Masa Yang Akan Datang "Jurnal akuntansi dan Ekonomi, Vol. 2, No. 1