Non Fund Based Working Capital Assessment

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Assessment of Letter of Credit for normal business as well as for seasonal

Introduction :

Bank provides working capital in the form of fund based working capital facility as well as in the form of non fund based working capital facilities. In the case of non fund based facility , banks would not provide fund but with the help of bank's facility , borrower would be able to build up current asset . You have already learnt the assessment of fund based working capital as well as term loan for capacity expansion project . In this chapter you would know the methods of assessment of non fund based facilities . In the case of non fund based facilities , banks generally provide two types of facilities namely , the Letter of Credit and Bank Guarantee. In this lesson , we shall discuss the assessment of Letter of Credit facilities for working capital purpose of a borrower. In this lesson , you would learn how to assess the Letter of Credit facilities for normal working capital purpose as well as for seasonal business.

Your learning :

While you are assessing the LC Limit of a borrower for working capital purpose , you are issuing commitment on behalf of the borrower(who is a purchaser) to its supplier that in case the supplier performs as per LC , you would make payment . So while assessing the LC , you would know that you are issuing an instrument which would be used for purchase of goods and services . You would be calculating the purchase requirement of the borrower .

Purchase of borrower can happen either from domestic sources or from abroad sources . You should know the segregation of total purchase into domestic purchase and import purchase . If you can recollect this data is available in the Form II and Form III of the CMA Format .

Once you have calculated the domestic and import purchase , each of this purchase can happen either in cash or in credit . For cash purchase , no LC is required . LC would be required for credit purchase only. You would have to first segregate total import purchase into two categories namely credit purchase and cash purchase. Subsequently you would segregate the total domestic purchase into credit purchase and cash purchase .

The entire credit purchase may not happen with Letter of Credit . Since LC involves costs , the borrower wants to negotiate with the suppliers to purchase without LC . In case the supplier is not agreeing , then only LC is provided by the borrower from its bank. You have to calculate how much percentages of credit purchase both domestic and import would be under LC . Once this is found out , you have been able to calculate total annual LC purchase amount separately for import purchase as well as for domestic purchase.

Now you have to calculate the buying frequency of the borrower . Many factors determine the buying frequency of the borrower under LC. Factors like sources of materials, availability of materials in the near future , requirement of materials for production purpose , relative importance of materials in the overall production processes are some of important factors to be considered for determining the number of LC through which the entire LC purchase would be carried out.

Once you have decided buying frequency under LC (both for import and domestic purchase separately) , you would be finding out the period each LC would outstanding from the date of opening of LC . This period is called LC period . You would be using the following steps for calculation of LC period of a borrower :

A. You would segregate the number of LC into Sight LC and Usance LC respectively. In the case of Sight LC , once the LC is opened it would be outstanding for a period till the sight of the documents by the buyer i.e. your customer . You have to understand from the borrower how much time it takes to receive document by the borrower from the date of opening the LC. Assuming that this is 20 days , the total number of annual LC through which the purchase would happen is 365/20 = 19 LC.
B. In the case of Usance LC , you would calculate the LC period by using a formula LC period = Usance period + Lead Time , the lead time is the time between the LC opening date and start of Usance period . For e.g. if LC stipulates that the Usance period is 90 days from date of shipment and shipment takes place 15 days from date of opening of LC , the LC period is

105 days . Once you have calculated the LC period , you would calculate the number of LC by using the formula : 365 / LC period .

Once you have calculated number of LCs through which the entire LC purchase would happen , you can calculate the LC Limit by using the following formula :

LC Limit = Total LC Purchase / No of LC required

In the case of seasonal business , the purchase requirement of the borrower is not uniform . In this type of business , purchase may happen in fewer installments and there can be overlapping of LCs . If the borrower is having seasonality in business , you would ask the borrower to give you the purchase schedules to find out if there is any overlapping of LC. In case there are overlapping of LCs , you can calculate the LC limit by taking into consideration this factor. For e.g. the total requirement for purchase under LC is Rs 450 million and it would be purchased under two equal amount LCs of 90 days Usance each and lead time is 10 days each . The purchase would take place in the month of June and August as this matches with the production schedule of the borrower . Under this situation , the LC requirement would be calculated by using the following format :

	June	July	August	Sept	October	Nov
Opening Balance of LC	0	225	225	450	225	225
LC Issued	225	0	225	0	0	0
LC Retired	This LC would be retired after 100 days		This LC would be retired after 100 days of 1st August i.e. 9th November	225 [1 st LC would be retired in this month]	0	225

Closing LC	225	225	450	225	225	0

The LC Limit would be Rs 450 millions . You can find out that in the case of seasonal LC , the LC requirement would be higher compared to normal LC due to some overlapping of LCs.

Your job :

Once you have received the application for LC assessment , you should first check whether the borrower is also asking for fund based working capital facilities . In case the borrower is asking for fund based working capital facilities, you would have to find out whether you are assessing the fund based limit under MPBF method . In case you are assessing the fund based limit under MPBF method , you have already justified CMA data . In case you are not going to assess the fund based working capital limit under MPBF method you should collect the following data separately from the borrower :

	Indigenous		Imported	
	Estimate	Projectn	Estimate	Projectn
Consumption of Raw Material A				
Closing stock of Raw Material B				
Opening Stock of Raw Material C				
Purchase of Raw Material D = A +B-C				
Consumption of Spares A				
Closing stock of Spares B				
Opening Stock of Spares C				
Purchase of Spares D = A +B-C				

Once you have received the above data , you would have to collect the following data from the borrower with proper justification . You may use the past pattern of purchase of the borrower to justify the below numbers.

		Domestic		Import	
	Formula	Estimate	Projection	Estimate	Projection
Percentage of total purchase under credit	A				
Percentage of total credit purchase under LC	B				
Percentage of total LC purchase under Sight LC	C				
Percentage of total LC purchase under Usance LC	D				
Average Lead time for Sight LC	T1				
Average Lead time for Usance LC	T2				
Average LC period for Sight LC	T3				
Average LC period for Usance LC	T4				
No of sight LC to be opened in a year	N_S = 365/[T1+T3]				
No of Usance LC	N_U=				

to be opened in a year	365/[T2+T4]				
Sight LC Limit	P*A*B*C/ N_S				
Usance LC Limit	P*A*B*D/ N_U				

Where P is the total estimated or projected purchase amount of raw material . Similarly you can calculate the total purchase amount of spares and from this by following the same process you can calculate the LC limit for purchase of spares.

Usefulness of learning :

You would be using the same CMA Form as submitted by the borrower for which you have assessed the fund based working capital limit under MPBF method. You have already justified the estimate and projected consumptions of the borrower from Form II . You have also justified the closing and opening stock of Raw Material (both imported and indigenous) of the borrower from Form III . You have justified the following numbers associated with purchase of raw materials of the borrower both for the estimated year and projected year.

	Indigenous		Imported	
	Estimate	Projection	Estimate	Projection
Consumption of Raw Material From From II A	1219.40	1565.20	522.60	670.80
Closing stock of Raw Material From Form III B	210	326.13	120	80
Opening Stock of Raw Material From Form III C	175	210	110	120
Purchase of Raw Material D = A +B-C	1254.40	1681.33	532.60	630.80

You have discussed with the borrower about the data related to the following table and you have accepted the following data based on the discussion , past purchase pattern and the industry pattern :

		Domestic		Import	
	Formula	Estimate	Projection	Estimate	Projection
Percentage of total purchase under credit	A	70%	70%	100%	100%
Percentage of total credit purchase under LC	B	75%	70%	100%	100%
Percentage of total LC purchase under Sight LC	C	0%	0%	0%	0%
Percentage of total LC purchase under Usance LC	D	100%	100%	100%	100%
Average Lead time for Sight LC	T1				
Average Lead time for Usance LC	T2	5	5	10	10
Average period for Sight LC	T3				
Average Usance period for Usance LC	T4	90	90	120	120
No of sight LC to be opened in a year	N_S = 365/[T1+T3]				
No of Usance LC	N_U=	4	4	3	3

to be opened in a year	365/[T2+T4]				
Sight LC Limit	P*A*B*C/ N_S				
Usance LC Limit	P*A*B*D/ N_U	165	205	178 say 180	210

You would sanction the following LC limit for the borrower if you assess the limit based on estimated numbers :

		Domestic	Import
Usance LC Limit	P*A*B*D/ N_U	165	178 say 180

You would sanction the following LC limit for the borrower if you assess the limit based on projected numbers :

		Domestic	Import
Usance LC Limit	P*A*B*D/ N_U	205	210

Questions you may have :

Is LC assessment linked with fund based working capital assessment limit ?

Would not LC limit be part of fund based working capital limit ?

How cash budget and LC Limit is related ?

What would be the accounting entries for LC Limit in bank's balance sheet ?

What are benefits of bank for issuance of LC ?

Knowledge check :

1. LC Limit would assessed by :
    a. **Buyers bank**
    b. Seller bank
    c. Suppliers bank
    d. Exporters bank
2. LC Limit would be calculated from …………….. of the …………. :
    a. Sales ; seller
    b. **Purchase ; buyer**
    c. Sales ; buyer ;
    d. Tax payment ; buyer
3. If the Usance period is 90 days and lead time is 7 days then LC period is :
    a. **97 days**
    b. 83 days
    c. 100 days
    d. 110 days
4. For LC assessment , you would be using the figures from :
    a. Form I and Form IV of CMA format
    b. **Form II and Form IV of CMA Format**
    c. Form V of CMA Format
    d. Form VI of CMA Format
5. The closing stock of domestic raw material as on March 31, 2017 was Rs 20 million and the same is estimated as on March 31, 2018 was Rs 30 million and the domestic consumption of raw material for FY 2017-18 is estimated at Rs 200 million and the LC purchase is 50% of the total purchase , what would be the LC purchase amount for FY 2017-18 :
    a. Rs 110 million
    b. Rs 90 million
    c. **Rs 105 million**
    d. Rs 80 million

Assessment of Bank Guarantee

Introduction :

Bank provides working capital in the form of fund based working capital facility as well as in the form of non fund based working capital facilities. In the case of non fund based facility , banks would not provide fund but with the help of bank's facility , borrower would be able to build up current asset . You have already learnt the assessment of one non fund based working capital facility i.e. Letter of Credit . In this lesson you would know the methods of assessment of another non fund based facility called Bank Guarantee. In this lesson , we shall discuss the assessment of Bank Guarantee facilities for working capital purpose of a borrower. In this lesson , you would learn how to assess the Bank Guarantee facilities for a construction company as construction companies would require significant portion of their working capital requirement through Bank Guarantee .

Your learning :

While you are assessing the BG Limit of a borrower for working capital purpose , you are issuing commitment on behalf of the borrower(who is an applicant) to its customer (who is a beneficiary) that in case the borrower does not performs as per a underlying contract , the banker would make payment . So while assessing the BG , you would know that you are issuing an instrument which would be paid for non performance of the applicant under a contract . You need to know the contract and you need to determine the probability of non performance by the borrower .

You should know that there are two types of bank guarantee namely Performance Bank Guarantee and Financial Bank Guarantee. In the case of performance bank guarantee , bank is guaranteeing the performance of the borrower . In case the borrower fails to perform , due to non performance , the bank guarantee can be invoked by the beneficiary. In the case of financial bank guarantee , the bank is guaranteeing the financial commitment of the borrower . In case the borrower fails to fulfil the financial commitment , due to non fulfilment , bank guarantee can be invoked.

You should understand the entire process to assess the bank guarantee requirement of a customer . Among different types of borrowers , borrowers from civil construction or contracting industries require maximum amount of bank guarantee for meeting their working capital requirements . If you know important aspects of bank guarantee assessment for civil construction or contracting industries , you would be able to assess bank guarantee requirement of almost all industries.

Bid Bond assessment :

In the case of construction industry , the borrower would have to get the project by tendering process. In the tendering process, the borrower has to submit tenders by quoting the rate at which it would complete the work. It may happen that borrower may submit tenders by quoting very low rate and subsequently it may not start the work at all after getting selected due to its Lowest Bidder (popularly called L1) criteria. The issuer of the contract (the entity which is conducting the tendering) would ensure that this does not happen . It would stipulate a certain portion contract value has to be submitted at the time of submitting of tender by the bidder so that if the bidder does not start the work after become successful in the contract , the money would be forfeited. This is called Earnest Money Deposit (EMD) and this varies generally between 2% to 5% of the tender amount . The bidder can submit a Financial Guarantee equivalent to this amount in lieu of EMD to the principal. Since construction company has to submit large number of tenders , participating in tenders with EMD would result in blockage of fund. The construction company (which is the applicant i.e. your borrower) would submit a financial bank guarantee which is called Bid Bond. If the construction company is not successful in the tendering process, the bid bond would be returned by the principal . In case the construction company is successful , the construction company has to submit a certain portion of the contract value in the form of performance guarantee. In case the construction company is not submitting the performance guarantee , the bid bond would be invoked.

You should know the following information to assess the bid bond amount required for a construction company for a particular financial year .

- Total amount of tenders your borrower would be participating . This depends on the estimated sales or projected sales amount , the average tenure for completion of contract and the success rate of the tenders . This is explained with the help of the following example :
  - Estimated turnover : Suppose that your borrower would generate sales for the next financial year to the tune of Rs 1300 million from the existing contract (i..e the contract already in hand) and your borrower is targeting a turn over of Rs 2000 million . Under such situation , the borrower must generate an additional turn over from the newer contract to the tune of Rs 700 million .
  - Average tenure for completion of contract : Suppose that your borrower requires 3 years on average to complete a contract , then your borrower must bag new contracts to the tune of Rs 2100 million in the next financial year.
  - Success ratio : Your borrower would not be successful in all tenders it participate. Depending on success rate , your borrower has to bid for certain values of contracts. If the success rate is 10% then the borrower has to bid for Rs 21000 million worth of contracts to get new order books of Rs 2100 million.
- Percentage of the tender amount would be given in the form of Bid Bond : If the bid bond amount is 2% of the total tender amount , then your borrower would be requiring total bid bond amount through out the financial year to the tune of Rs 420 million.
- Duration of bid bond to be kept by the Principal : The bid bond would be returned within a time period by the principal . In case of successful bidder , the bidder has to submit the performance guarantee in lieu of bid bond. This duration varies from 1 month to 2 months. If principals of your borrower take

2 months from issuance date to return the bid bond , then two months bid bond would be outstanding at every point of time . In the above example the bid amount would be Rs 70 million . This would be bid bond limit to be sanctioned by you.

Performance guarantee :

Once your borrower turned successful in the tendering process, your borrower would have to submit performance bank guarantee to the client that the project would be completed on time. In case the project is not completed on time such bank guarantee would be invoked. Performance bank guarantee requirement for timely completion of projects would be assessed by using information about average percentage of new contracts to be given as performance guarantees , the average tenure of new performance guarantees ,the proposed amount of performance guarantees issued in previous years which would be returned during the year and opening balance of performance guarantee amount at the start of the financial year . You would use the following methodologies to calculate performance guarantees requirement of a borrower for a financial year :

- Percentage of contract to be given as performance guarantee : Based on past experience and depending on the nature of principals you would accept an average percentage of new contract to be given as performance guarantee. Your borrower has submitted that 10% of the new contract would be given in the form of performance guarantees for timely completion of projects and you have accepted this number based on above mentioned criteria. Total performance guarantees to be issued for new contract would be Rs 210 million which is 10% of new contracts valued at Rs 2100 million.
- Average tenure of new performance guarantees : : Based on past experience and depending on the nature of principals you would accept an average

tenure of performance guarantees of new contracts to be given as performance guarantee. Your borrower has submitted that average tenures for which performance bank guarantees to be given for for timely completion of new contracts would be of average of 2 years and you have accepted this number based on above mentioned criteria. This shows that no performance guarantee which would be used in the financial year would be returned during that financial year . In the above example the entire amount of performance guarantees to the tune of Rs 210 million would be outstanding .

- Schedule amount of earlier bank guarantee issued to be returned during the financial year : Out of bank guarantees issued in earlier years , some bank guarantees would be returned in the coming financial year . Your borrower would give this amount and you would verify from the books of the borrower as these bank guarantees have already been issued with expiry dates mentioned in bank guarantees . In the present case your borrower has submitted that Rs 50 million of existing performance bank guarantees would be returned in the coming financial year . This amount would be used for calculation of limit of the performance guarantees in the coming financial year .
- Opening performance bank guarantee amount as on the beginning of the coming financial year : This amount can be obtained from the closing balance of previous year . This amount can be verified from books of the borrower . Your borrower has submitted that the opening balance of performance guarantees for the coming financial year is Rs 140 million and you have accepted this figure from books of accounts and other records of the borrower .

You would assess the bank guarantee limit on account of performance guarantee to be given for timely completion of the project by using the following format :

Serial No	Particulars	Amount (Rs million)

1	Opening balance of performance guarantee at the beginning of the estimated FY	140
2	New Performance Guarantee to be issued during estimated FY	210
3	Amount of Performance Guarantee issued in previous financial years returned during estimated FY	50
4	Amount of Performance Guarantee issued in estimated financial years returned during estimated FY	0
5	Closing Performance Guarantee amount	300

You would sanction a performance bank guarantee limit for timely completion of project at Rs 300 million.

Mobilisation advance guarantee :

Once your borrower turned successful in the tendering process, your borrower would have to complete the project within time and for this you have already given performance guarantee. Since construction involves large amount of fund , the principal would give advance to mobilise resources. This is called mobilisation advance and this amount would be deducted from the running bills . Your borrower has to submit mobilisation advances guarantees to the tune of mobilisation amount to the principal . In case the borrower would not return the mobilisation advance , such bank guarantee would be invoked. Mobilisation bank guarantee requirement would be assessed by using information about average percentage of new contracts to be given as mobilisation advance guarantee , the amount of new mobilisation advance taken during the estimated year deducted from running bills , the amount of mobilisation guarantees issued in previous years which would be returned during the year and opening balance of mobilisation advance guarantee amount at the start of the financial year . You would use the following methodologies to calculate mobilisation guarantees requirement of a borrower for a financial year :

- Percentage of contract to be given as mobilisation advance guarantee : Based on past experience and depending on the nature of principals you would accept an average percentage of new contract to be given as mobilisation advance guarantee. Your borrower has submitted that 10% of the new contract would be given in the form of mobilisation advance guarantees for mobilisation advance to be taken from principal and you have accepted this number based on above mentioned criteria. Total mobilisation guarantees to be issued for new contract would be Rs 210 million which is 10% of new contracts valued at Rs 2100 million.

- Amount of mobilisation amount deducted from new contracts of running bills of new contract : Based on past experience and depending on the nature of principals you would accept a given percentage of the total billings from new contracts as deduction towards mobilisation advance taken during the estimated financial year . Your borrower has submitted that 10% of the current years billing from newer contract would be deducted towards recovery of mobilisation advance taken during the estimated year . In the above example an amount of Rs 70 million which is 10% of billing from newer contract for estimated FY would be deducted from mobilisation advance amount .

- Amount of mobilisation guarantees issued in previous years which would be returned during the year: Out of mobilisation advance bank guarantees issued in earlier years , some bank guarantees would be returned in the coming financial year . Your borrower would give this amount and you would verify from the books of the borrower as these bank guarantees have already been issued with expiry dates mentioned in bank guarantees . In the present case your borrower has submitted that Rs 130 million of existing mobilisation advance bank guarantees would be returned in the coming financial year . This amount would be used for calculation of limit of mobilisation advance guarantees in the coming financial year .
- Opening mobilisation advance bank guarantee amount as on the beginning of the coming financial year : This amount can be obtained from the closing balance of previous year . This amount can be verified from books of the borrower . Your borrower has submitted that the opening balance of mobilisation advance guarantees for the coming financial year is Rs 160 million and you have accepted this figure from books of accounts and other records of the borrower .

You would assess the bank guarantee limit on account of mobilisation advance by using the following format :

Serial No	Particulars	Amount (Rs million)
1	Opening balance of mobilisation advance guarantee at the beginning of the estimated FY	160
2	New Mobilisaiton Guarantee to be issued during estimated FY	210

3	Amount of Mobilisation Advance Guarantee issued in previous financial years returned during estimated FY	130
4	Amount of Mobilisation Advance Guarantee issued in estimated financial years returned during estimated FY	70
5	Closing Mobilisation Advance Guarantee amount	170

You would sanction a mobilisation advance bank guarantee limit at Rs 170 million.

Your job :

Once you have received the application for BG assessment , you should first check whether the borrower is also asking for fund based working capital facilities . In case the borrower is asking for fund based working capital facilities, you would have to find out whether you are assessing the fund based limit under MPBF method . In case you are assessing the fund based limit under MPBF method , you have already justified CMA data and you would justify the estimated sales figures from Form II . In case you are assessing the limit in any other method , you would be validating the estimated sales data .

You should also check that you have the following data from the borrower :

Serial No	Particulars	Formula	Unit	Verification source

1	Estimated Sales Amount	A	Rs million	Estimated sales / Form II
2	Estimated sales from existing contract	B	Rs million	Existing contract book
3	Estimated sales from new contract	C= A-B	Rs million	Derived
4	Average tenure of the contract completion period	T	Years	Principal nature and past track record
5	Amount of new contracts to be obtained	D= C*T	Rs million	Derived
6	Success ratio	R%	%	Past track record and industry data
7	Percentage of new contract to be taken as performance guarantee for timely completion of the project	X%	%	Past track record and industry data

8	Opening Performance Guarantee amount	Y	Rs million	Existing contract
9	Amount of performance guarantee which would be returned during the year	Z	Rs million	Existing contract
10	Percentage of new contract amount to be taken as mobilisation advance	M%	%	Past track record and industry data
11	Opening mobilisation guarantee amount	N	Rs million	Existing contract
12	Amount of mobilisation advance guarantee to be returned which was issued at earlier Financial Years	O	Rs million	Existing contract and estimated years turn over

13	Amount of mobilisaiton advance guarantee issued in estimated FY which would be returned during the FY	P	Rs million	Estimated years turn over

Usefulness of learning :

You can use the above information for assessment of bank guarantee limit .

Questions you may have

Is BG assessment linked with fund based working capital assessment limit ?

Would not BG limit be part of fund based working capital limit ?

How cash budget and BG Limit is related ?

What would be the accounting entries for BG Limit in bank's balance sheet ?

What are benefits of bank for issuance of BG ?

Knowledge check :

6. BG Limit would assessed by :
    - **a. Civil Contractors bank**
    - b. Seller bank
    - c. Suppliers bank
    - d. Exporters bank
7. Bid bond is an example of   instrument

a. Letter of Credit

b. Financial Bank Guarantee

c. Performance Bank Guarantee

d. Deferred Payment Guarantee

8. Mobilisation Advance Guarantee is an example of   instrument

a. Letter of Credit

b. Financial Bank Guarantee

c. Performance Bank Guarantee

d. Deferred Payment Guarantee

9. Bank Guarantee would be paid on :

a. Performance of the beneficiary

b. Performance of applicant

c. Non performance of beneficiary

d. Non performance of applicant

10. Which of the following instrument is used for taking short term advance from client of business entity :

a. Letter of Credit

b. Performance Bank Guarantee

c. Financial Bank Guarantee

d. Deferred Payment Guarantee