



2017 Bank Study Project Class of 2019

(Revised 7/5/17)

BASIC CREDIT ANALYSIS Gary Higgins

NOTES:

1. Please use 8 1/2" x 11" paper (or paper folded to that size).
2. Attach the **Freshman Cover Sheet – Class of 2019** from <http://www.gsblsu.org/students-3/> as the first page of your project.
3. Please staple your project or use a binder clip. **DO NOT** use paper clips or any kind of folder or binder.

Complete and mail by September 15, 2017

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Basic Credit Analysis
2017
Bank Study Problem

Great Walls Inc.

With their superior knowledge of construction technology and also knowing the need by people for increased privacy, founders of Great Walls Inc. -- George Fowler and Charles Perkins -- are using their combined expertise to assist homeowners worldwide to achieve the objective of complete security with a beautiful environment.

Great Wall of Privacy, the product that promises to revolutionize neighborhoods, is constructed with brushed steel panels in a choice of thirty soft colors, accented by wrought iron ivy and enhanced by security cameras concealed in the ivy.

As Fowler and Perkins are fond of saying, "The wall is going to look so fantastic that your neighbor will want to pay for it."

Dottie Malone, representing the Forward Community Bank, is considering these facts while listening to Fowler and Perkins describe their need for financing in 2018.

Growth rate in sales for Great Walls is predicted to be eight percent in 2018 and in 2019. Fowler and Perkins believe this estimate is conservative because foreign sales are just beginning to increase.

Based on past sales statistics, cash sales will represent 8 percent of total sales, bank credit cards 40 percent, and customer charge accounts 52 percent. Collection of customer charge accounts will be 45 percent in the first month following sales, 35 percent in the second month, 18 percent in the third month, with the remaining 2 percent written off as credit loss.

The company's cost of goods sold will be 66.50 percent in each of the two years, 2018 and 2019. Sales commissions will equal 6 percent of sales.

For budgeting purposes, several expenses are divided into twelve equal monthly payments. These expenses are salary expense \$630,000; advertising

expense \$230,000; lease expense \$280,000; and employee services and training \$150,000.

Another expense, maintenance & other, is related to labor and products for which payment is delayed for various reasons. Delay in payment results in accrued expenses that are shown in a separate balance sheet account. In the forecast year, 2018, maintenance & other expense will be \$95,000, but the company's managers intend to pay out \$155,000. This will result in lowering accrued expenses by the difference of \$60,000.

For each \$100,000 of predicted bank card sales each year, \$10 per month is budgeted for the bank card terminal fee. Another fee is the 2.50 percent of bank credit card sales that is paid to the bank each month. Credit losses on bank card sales are expected to be 2.00 percent, computed at the end of three months following sales.

Currently, Great Walls Inc. has 200,000 shares of common stock outstanding with a par value of \$1.00 per share. Fowler and Perkins intend to issue 10,000 new shares of stock on January 1, 2018. The par value of the new shares will be \$1.00 and the issue price is expected to be \$25.00. Great Walls Inc. capital surplus will increase by \$24 for each new share, for a total increase of \$240,000 added to the \$850,000 forecast for December 31, 2017. A dividend of \$1.25 per share will be paid in 2018.

For the 2018 cash budget, interest rates are predicted to be 5.00 percent for short-term borrowing on the line-of-credit, 0.50 percent for short-term investments in Treasury securities, and 7.50 percent for borrowing on a long-term bank loan

Fowler and Perkins are requesting approval by Dottie Malone for bank financing to cover 80 percent of a new plant that will support their company's expected growth in sales. The total amount of their request for long-term funding is \$6,620,653 which includes \$1,600,000 for the new facility (cost \$2,000,000), \$278,115 current portion of long-term debt at end of 2017, and \$4,742,538 non-current portion of long-term debt at the end of December 2017. They ask Malone for a ten year term for the new total long-term loan.

All of the data shown above may be entered on Back (background) spreadsheet – the first spreadsheet in a simulation program that has the

borrower's name, Great Walls, Inc. Input numbers should be entered in the shaded, or blue cells on the Back spreadsheet. The program will use the data to compute a tax number in cell H4. This number should be copied into cell H5. The program will immediately compute a new tax number, which again is copied into cell H5. After three to five repeats, the two numbers should be equal. This shows that the balance sheet is in balance and all the results for the forecast are accurate.

One advantage of the simulation program is that one or more input values on the Back spreadsheet can be changed and the balancing can still be achieved, so that What-if questions may be answered. However, this is also a problem since incorrect input values can result in a balanced program with the user not aware of the error. To avoid this possibility the correct tax number will be given.

If your computed tax is different from the correct number after the two tax cells are balanced, then there are input errors to locate. Compare your input numbers on the Back spreadsheet with the numbers given in the project. You may email Paul at Cretien619@aol.com for assistance.

After the computed tax and your copy of the tax are equal, the tax should be the correct amount \$164,252.73.

Interest rates and percentages should be entered as decimal fractions. This means that five and a half percent would be entered as 0.055.

There are several exhibits on the Back spreadsheet:

1. Repayment schedule for the new term loan Row 70
2. Repayment schedule for the previous term loan Row 114
3. Fixed assets and depreciation Row 139
4. Monthly sales indexes as proportions of 12 Row 160

Because some banks are reluctant to combine the new loan with the previous long-term debt, an alternative simulation program that separates the new and previous term loans will be available from Paul at Cretien619@aol.com. This additional program is called Alternative B.

Questions for discussion related to the credit requests include the following:

1. Charts under the cash budget show monthly cash flows and the borrowing or repayment of funds from the requested line-of-credit. Discuss the application and use of short-term borrowing for Great Walls Inc. Is this source of financing being used appropriately? Explain why or why not.
2. To what extent is Great Walls financing its growth with bank debt? Are there better alternative sources for the company?
3. Compare Great Walls' liquidity and turnover ratios with those of the peer group. Do these ratios show any credit risk?.
4. Show how depreciation cash flow is used to repay term loan principal.
5. Do the earnings of Great Walls provide sufficient coverage of interest and principal payments? Explain why or why not.
6. In analyzing the credit of Great Walls, would you approve the requested loans? Explain why or why not.
7. Are there additional questions that may be answered by What-if analysis? Try two What-if questions by changing one or more input values on the Back spreadsheet. Discuss the results of your What-if analysis.

For assistance on this project or questions on the simulation program, please e-mail Paul Cretien. Cretien619@aol.com