Pequeño Technology, Inc.¹

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ABSTRACT

This short case is designed for use in an undergraduate finance course to help students understand dividend policy (cash, stock, residual, stable dollar) and the effect of dividends on a firm’s financial structure.

Keywords: Dividend Policy, MSGR, MIGR, Beta, Cost of Equity, Leverage, Cash Dividend, Stock Dividend, Residual Dividend, Stable Dollar Dividend.

¹ Pequeño Technology, Inc. Teaching Note and two Excel files (a template for students and a solution to accompany the teaching note) are available from the authors: Brad Stevenson (bstevenson@bellarmine.edu) and David Collins (dcollins@bellarmine.edu).
INTRODUCTION

The CEO of Pequeño Technology, Shelly Krakowski, is busy preparing for next week’s board meeting. Trying to work through the pressure, Shelly had dared to think that the board meetings would be getting easier. When she took over as CEO three years ago, the fledgling technology company had just gone public and Shelly had done a masterful job managing the rapid growth of the firm. However, while Pequeño was on a healthy trajectory, a new issue has arisen, dividends.

THE HISTORY OF PEQUEÑO TECHNOLOGY

Pequeño Technology began as the brainchild of Buddy Lebowitz. As an engineer with a background in medical technology, Buddy had designed and built less invasive devices for use in a variety of surgical settings. As with many medical device startups, Buddy had received capital in the early stages of the company from multiple venture capital firms. After several successful years, Pequeño Technology completed an initial public offering, which allowed the VC firms to cash in on their earlier investment.

After the IPO, 30% of Pequeño’s shares were held by Buddy and other employees of the firm’s infancy, 20% by institutional investors (mostly pension funds), and the 50% by individual investors. The stock was traded on the NASDAQ and had a current price of $15.25 per share.

As a medical technology firm, Pequeño Technology spent a lot of money on R&D and a large portion of the firm’s employees were researchers, headed by Buddy. Buddy wanted to relinquish control of the day to day operations and return full-time to research. To achieve that goal, the board hired Shelly, who had a successful career as CFO at another medical technology firm, to be CEO. With her background in finance and accounting, Shelly relied on Buddy to guide the firm’s research agenda while she exercised operational control of Pequeño Technology.

PREPARING FOR THE BOARD MEETING

With the combination of Buddy’s cutting edge designs and Shelly’s business savvy, Pequeño Technology is having a very successful run. The firm is in great financial shape and is very profitable. While the board is very happy with the direction of the firm, now that the firm is on solid financial footing, some members believe that Pequeño should begin dividend payments to shareholders. Other board members believe the firm should reinvest all earnings and that if shareholders want cash flows they can sell shares to meet their needs. While Shelly has a definite opinion as to the direction the firm should take in regards to dividends, her objective is to present the pros and cons of pursuing a dividend policy so the board can review her recommendation and, hopefully, put the issue to bed for a while.

QUESTIONS

1) In preparation for the board meeting, Shelly has gathered data for the last two fiscal years for Pequeño Technology as well as a forecast for the next two years (Tables 1 – 3). In the forecast, no dividends are paid. Compute the MSGR (Maximum Sustainable Growth Rate) and MIGR (Maximum Internal Growth Rate). Compared to the growth that has
taken place in the current period and in the forecasted years, what do the MIGR and MSGR rates tell you?

2) Suppose that Pequeño Technology has a beta of 1.45, the current risk-free rate is 4% and the market risk premium is 6%. If Pequeño Technology has flotation costs for equity of 7%, what is their cost of internal equity and cost of external equity? How does this distinction influence their dividend decision?

3) Measure the relative position of debt to equity in Pequeño Technology’s capital structure. Do they seem highly levered? What do you think the typical leverage position is of Pequeño Technology’s competitors? How does Pequeño Technology’s relative degree of leverage influence their dividend decision?

4) One of the board members, Steve Manzana, calls Shelly before the meeting. Steve says, “I think paying a cash dividend is a poor decision at this point with our rapid growth. What is your opinion on paying a stock dividend to our shareholders? This would allow us to pay a dividend but not bleed any cash.” Is Steve right? Suppose they paid a 5% stock dividend in 2015, how would this transaction affect Pequeño Technology’s balance sheet? Which shareholders would it benefit most from this as opposed to a cash dividend?

5) Examine the financial statements for Pequeño Technology. If you were Shelly, what type of dividend policy (no dividend, residual and stable dollar) would you recommend and why? Justify your choice with data from the statements. In your argument, explain what negative consequences the other policy would have for Pequeño Technology.

| Table 1: Pequeña Technologies, Inc. Balance Sheet |
|-----------------|---------|---------|---------|---------|
|                | 2013    | 2014    | 2015    | 2016    |
| Cash & cash equivalents  | $1,881.00 | $2,163.20 | $2,595.84 | $3,115.01 |
| Trade accounts receivable, net  | $1,809.00 | $2,081.00 | $2,497.20 | $2,996.64 |
| Inventories, net  | $1,873.00 | $2,154.50 | $2,585.40 | $3,102.48 |
| Deferred income taxes, current portion  | $480.00 | $577.47 | $489.45 | $733.35 |
| Total current assets  | $6,043.00 | $6,976.17 | $8,167.89 | $9,947.48 |
| Machinery & equipment  | $6,803.00 | $7,803.40 | $9,364.08 | $11,236.90 |
| Equipment held for lease  | $694.00 | $757.00 | $908.40 | $1,090.08 |
| Building & improvements  | $3,115.00 | $3,581.25 | $4,297.50 | $5,157.00 |
| Vehicles  | $160.00 | $170.00 | $204.00 | $244.80 |
| Furniture, fixtures, computers & software  | $1,850.00 | $2,125.40 | $2,550.48 | $3,060.58 |
| Land  | $202.00 | $232.00 | $278.40 | $334.08 |
| Less: accumulated depreciation  | $3,101.00 | $4,105.00 | $4,926.00 | $5,911.20 |
| Property, plant & equipment, net  | $9,723.00 | $10,564.05 | $12,676.86 | $15,212.23 |
| Intangible assets, net  | $1,198.00 | $1,295.00 | $1,554.00 | $1,864.80 |
| Total assets  | $16,964.00 | $18,835.22 | $22,398.75 | $27,024.51 |
Table 1: Pequeña Technologies, Inc. Balance Sheet

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demand line of credit</td>
<td>$1,874.00</td>
<td>$2,162.16</td>
<td>$2,493.26</td>
<td>$2,991.91</td>
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<tr>
<td>Accounts payable</td>
<td>$2,280.00</td>
<td>$2,327.00</td>
<td>$2,792.40</td>
<td>$3,350.88</td>
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<tr>
<td>Customer deposits</td>
<td>$321.00</td>
<td>$715.00</td>
<td>$858.00</td>
<td>$1,029.60</td>
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<tr>
<td>Total current liabilities</td>
<td>$4,475.00</td>
<td>$5,204.16</td>
<td>$6,143.66</td>
<td>$7,372.39</td>
</tr>
<tr>
<td>Revolving line of credit</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$912.88</td>
<td>$1,095.46</td>
</tr>
<tr>
<td>Subordinated promissory notes</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$1,161.67</td>
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<tr>
<td>Total long term liabilities</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$912.88</td>
<td>$2,257.13</td>
</tr>
<tr>
<td>Total liabilities</td>
<td>$4,475.00</td>
<td>$5,204.16</td>
<td>$7,056.54</td>
<td>$9,629.52</td>
</tr>
<tr>
<td>Common stock</td>
<td>$2,100.00</td>
<td>$2,100.00</td>
<td>$2,100.00</td>
<td>$2,100.00</td>
</tr>
<tr>
<td>Additional paid-in-capital</td>
<td>$3,077.00</td>
<td>$3,077.00</td>
<td>$3,077.00</td>
<td>$3,077.00</td>
</tr>
<tr>
<td>Retained earnings (accumulated deficit)</td>
<td>$7,312.00</td>
<td>$8,454.06</td>
<td>$10,165.2</td>
<td>$12,217.9</td>
</tr>
<tr>
<td>Total shareholders' equity (deficit)</td>
<td>$12,489.0</td>
<td>$13,631.0</td>
<td>$15,342.2</td>
<td>$17,394.9</td>
</tr>
<tr>
<td>Total Liabilities and Shareholder's Equity</td>
<td>$16,964.0</td>
<td>$18,835.2</td>
<td>$22,398.7</td>
<td>$27,024.5</td>
</tr>
</tbody>
</table>

Table 2: Pequeña Technologies, Inc. Income Statement

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net revenues</td>
<td>$11,679.75</td>
<td>$13,431.71</td>
<td>$16,118.06</td>
<td>$19,341.60</td>
</tr>
<tr>
<td>Cost of sales</td>
<td>$6,359.85</td>
<td>$7,283.05</td>
<td>$8,726.00</td>
<td>$10,470.00</td>
</tr>
<tr>
<td>Gross profit (loss)</td>
<td>$5,319.90</td>
<td>$6,148.66</td>
<td>$7,392.06</td>
<td>$8,871.60</td>
</tr>
<tr>
<td>Selling &amp; marketing</td>
<td>$498.00</td>
<td>$579.00</td>
<td>$703.00</td>
<td>$842.50</td>
</tr>
<tr>
<td>General &amp; administrative</td>
<td>$604.66</td>
<td>$860.75</td>
<td>$878.55</td>
<td>$1,054.86</td>
</tr>
<tr>
<td>Depreciation Expense</td>
<td>$602.34</td>
<td>$1,004.00</td>
<td>$821.00</td>
<td>$985.20</td>
</tr>
<tr>
<td>Research &amp; development</td>
<td>$1,627.00</td>
<td>$2,006.40</td>
<td>$2,425.00</td>
<td>$2,911.50</td>
</tr>
<tr>
<td>Total operating expenses</td>
<td>$3,332.00</td>
<td>$4,450.15</td>
<td>$4,827.55</td>
<td>$5,794.06</td>
</tr>
<tr>
<td>Income (loss) from operations</td>
<td>$1,987.90</td>
<td>$1,698.51</td>
<td>$2,564.51</td>
<td>$3,077.54</td>
</tr>
<tr>
<td>Interest expense</td>
<td>$63.00</td>
<td>$67.00</td>
<td>$120.00</td>
<td>$145.00</td>
</tr>
<tr>
<td>Income (loss) before income taxes</td>
<td>$1,924.90</td>
<td>$1,631.51</td>
<td>$2,444.51</td>
<td>$2,932.54</td>
</tr>
<tr>
<td>Income tax provision (benefit)</td>
<td>$577.47</td>
<td>$489.45</td>
<td>$733.35</td>
<td>$879.76</td>
</tr>
<tr>
<td>Net income (loss)</td>
<td>$1,347.43</td>
<td>$1,142.06</td>
<td>$1,711.15</td>
<td>$2,052.78</td>
</tr>
</tbody>
</table>

Weighted shares outstanding - basic | 3,000,000 | 3,000,000 | 3,000,000 | 3,000,000 |
Weighted shares outstanding - diluted | 3,000,000 | 3,000,000 | 3,000,000 | 3,000,000 |
Year-end shares outstanding | 3,000,000 | 3,000,000 | 3,000,000 | 3,000,000 |
Table 3: Pequeño Technologies, Inc. Statement of Cash Flows

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cash Flows from Operating Activities</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net Income</td>
<td>$1,142.06</td>
<td>$1,711.15</td>
<td>$2,052.78</td>
</tr>
<tr>
<td>Depreciation</td>
<td>$1,004.00</td>
<td>$821.00</td>
<td>$985.20</td>
</tr>
<tr>
<td>Acct. Receivables</td>
<td>-$272.00</td>
<td>-$416.20</td>
<td>-$499.44</td>
</tr>
<tr>
<td>Inventory</td>
<td>-$281.50</td>
<td>-$430.90</td>
<td>-$517.08</td>
</tr>
<tr>
<td>Deferred Income Taxes</td>
<td>-$97.47</td>
<td>$88.02</td>
<td>-$243.90</td>
</tr>
<tr>
<td>Demand line of credit</td>
<td>$288.16</td>
<td>$331.10</td>
<td>$498.65</td>
</tr>
<tr>
<td>Accounts payable</td>
<td>$47.00</td>
<td>$465.40</td>
<td>$558.48</td>
</tr>
<tr>
<td>Customer deposits</td>
<td>$394.00</td>
<td>$143.00</td>
<td>$171.60</td>
</tr>
<tr>
<td><strong>Net Change in Cash from Operating Activities</strong></td>
<td>$2,224.25</td>
<td>$2,712.57</td>
<td>$3,006.29</td>
</tr>
</tbody>
</table>

| **Cash Flows from Investing Activities** |            |            |            |
| Net PP&E                         | -$1,845.05 | -$2,933.81 | -$3,520.57 |
| Intangible Assets                | -$97.00    | -$259.00   | -$310.80   |
| **Net Change in Cash from Investing Activities** | -$1,942.05 | -$3,192.81 | -$3,831.37 |

| **Cash Flows from Financing Activities** |            |            |            |
| Revolving line of credit         | $0.00      | $912.88    | $182.58    |
| Subordinated promissory notes    | $0.00      | $0.00      | $1,161.67  |
| Dividends                        | $0.00      | $0.00      | $0.00      |
| **Net Change in Cash from Financing Activities** | $0.00      | $912.88    | $1,344.25  |

| **Net Increase in Cash**         | $282.20    | $432.64    | $519.17    |
| **Cash at the Beginning of the Year** | $1,881.00  | $2,163.20  | $2,595.84  |
| **Cash at the End of the Year**  | $2,163.20  | $2,595.84  | $3,115.01  |