NED Conference
Small Business and Entrepreneurship: Financial Literacy

Elliott Parker, Ph.D.
Professor of Economics
University of Nevada, Reno

September 21, 2016
Engine of Growth?

- Small businesses with fewer than 10 workers accounted for 11% of all jobs in 2011-2014,
- ...but created 18% of all new jobs.
- ...and also lost 21% of all jobs destroyed.
Only some small businesses – the new and successful startups – really create new jobs.

Most new firms fail.

Established small firms do neither.
• Small firms created only 5% of the total net jobs in 2011-2014.
• Relatively stable.
Why are so many jobs destroyed?

• Startup firms are inherently risky – ideas that may or may not succeed.
• They have more trouble getting financing.
• Their owners are inexperienced and, frankly, many are not financially literate.
How does Nevada Compare?

• Only 9% of jobs in 2011-2014 were in small businesses.

• ... but still 18% of jobs created and 20% of jobs destroyed.
• Same pattern in Nevada, if you just **double** all the rates.

• Small businesses accounted for 11% of all net jobs created from 2011-2014.
Nevada needs Financial Literacy

Nevada suffered more than any other state during the Great Recession.

• Largest jump in poverty rate, biggest drop in income.
• Highest personal bankruptcy rate.
• Highest foreclosure rate.
• Largest share of underwater mortgages.
Why is Financial Literacy Needed?

- Financial education has failed to keep up with the growing complexity of financial instruments.
- Investments are increasingly being decentralized to the individual, who often lacks the skills or confidence.
- Student loan debt rising, payday loan stores proliferate.
- Only 14 states required personal finance course in high school, and only 22 require an economics course.
Financial Ignorance is Astounding

- Half of older Americans don’t understand compound interest.
- Only a third of Americans plan for retirement.
- Most Americans don’t save enough -- for even a poor retirement -- but private employers are dismantling or underfunding their pension plans.
- Financial literacy in other countries is not that much better.
Clark County Study

- Involved 19 schools, 43 teachers, and 4000 students.
- Student background mattered, funding and class size mattered, and the specific curriculum mattered.
- Teacher involvement, education, and experience mattered even more. District involvement is crucial.
- Teaching students earlier also mattered.
Different Audiences for...

A. Poor people who struggle with the high cost of being poor.
B. People with decent jobs who make poor financial decisions.
C. Small entrepreneurs who can’t manage their business.
D. Students who may become one of the above.
What do we mean by Financial Literacy?

• Basic Knowledge and Behavior
• How Finance Works
• General Principles
• Specific Strategies
Basic Knowledge and Behavior

• **Terminology**: knowledge of many terms like debt, equity, interest, and dividends.

• **Numeracy**: ability to feel comfortable doing arithmetic, and a basic understanding of probability, risk, and uncertainty.

• **Discipline**: planning ahead and keeping track.
How Finance Works

• People with lots of savings are not usually the people with great new ideas.
• Savers lend to borrowers but need confidence they will get repaid, given the risk.
• Banks act as intermediaries between the two, but dislike risk.
• Venture capitalists don’t mind the risk, but they want a lot of income and control in return.
General Principles

For example:

• Compound interest.
• The risk-return tradeoff.
• Bubbles versus fundamentals.
• Opportunities are not left unexploited.
Specific Strategies

• How to get and use credit, which loans to pay first, how to not worry your creditors.
• Saving first, spending second.
• How to manage bank accounts.
• When to hire, when to fire.
An Example of a Simple Strategy

Saturday Night Live:
[https://vimeo.com/41152287]
Kate Marshall
Nevada State Treasurer, 2007-2015
Financial Literacy
for small businesses

• Why is financial literacy important?
  • 80% small businesses handle finances themselves
  • 40% small businesses owners self identify as financially illiterate
  • Success in early stages requires financial capability
  • For the small business owner the line between personal and business finances is often thin
# Financial Literacy

## Jane’s Debts

<table>
<thead>
<tr>
<th>DEBT</th>
<th>DESCRIPTION</th>
<th>AMOUNT OWED</th>
<th>INTEREST RATE</th>
<th>MINIMUM PAYMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Credit Card #1</td>
<td>$ 4,400</td>
<td>13.00%</td>
<td>$ 50</td>
</tr>
<tr>
<td>2</td>
<td>Auto Loan</td>
<td>$ 14,315</td>
<td>3.99%</td>
<td>$ 335</td>
</tr>
<tr>
<td>3</td>
<td>Student Loan</td>
<td>$ 4,900</td>
<td>4.00%</td>
<td>$ 80</td>
</tr>
<tr>
<td>4</td>
<td>Credit Card #2</td>
<td>$ 9,000</td>
<td>13.50%</td>
<td>$ 110</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$ 32,615</td>
<td></td>
<td>$ 575</td>
</tr>
</tbody>
</table>
## FINANCIAL LITERACY

### Jane’s Debts

<table>
<thead>
<tr>
<th>DEBT</th>
<th>DESCRIPTION</th>
<th>AMOUNT OWED</th>
<th>INTEREST RATE</th>
<th>MINIMUM PAYMENT</th>
<th>Interest</th>
<th>Principal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Credit Card #1</td>
<td>$4,400</td>
<td>13.00%</td>
<td>$50</td>
<td>$47.67</td>
<td>$2.33</td>
</tr>
<tr>
<td>2</td>
<td>Auto Loan</td>
<td>$14,315</td>
<td>3.99%</td>
<td>$335</td>
<td>$47.60</td>
<td>$287.40</td>
</tr>
<tr>
<td>3</td>
<td>Student Loan</td>
<td>$4,900</td>
<td>4.00%</td>
<td>$80</td>
<td>$16.33</td>
<td>$63.67</td>
</tr>
<tr>
<td>4</td>
<td>Credit Card #2</td>
<td>$9,000</td>
<td>13.50%</td>
<td>$110</td>
<td>$101.25</td>
<td>$8.75</td>
</tr>
</tbody>
</table>

$32,615

$575
## FINANCIAL LITERACY

### Jane’s Debts

<table>
<thead>
<tr>
<th>DEBT</th>
<th>DESCRIPTION</th>
<th>AMOUNT OWED</th>
<th>INTEREST RATE</th>
<th>MINIMUM PAYMENT</th>
<th>MONTHS TO PAY OFF</th>
<th>TOTAL INTEREST PAID</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Credit Card #1</td>
<td>$ 4,400</td>
<td>13.00%</td>
<td>$ 50</td>
<td>287</td>
<td>$ 9,821</td>
</tr>
<tr>
<td>2</td>
<td>Auto Loan</td>
<td>$ 14,315</td>
<td>3.99%</td>
<td>$ 335</td>
<td>47</td>
<td>$ 1,151</td>
</tr>
<tr>
<td>3</td>
<td>Student Loan</td>
<td>$ 4,900</td>
<td>4.00%</td>
<td>$ 80</td>
<td>69</td>
<td>$ 590</td>
</tr>
<tr>
<td>4</td>
<td>Credit Card #2</td>
<td>$ 9,000</td>
<td>13.50%</td>
<td>$ 110</td>
<td>227</td>
<td>$ 15,891</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$ 32,615</td>
<td></td>
<td>$ 575</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## FINANCIAL LITERACY

### Jane’s Debts

<table>
<thead>
<tr>
<th>DEBT</th>
<th>DESCRIPTION</th>
<th>AMOUNT OWED</th>
<th>INTEREST RATE</th>
<th>PAYMENT</th>
<th>MONTHS TO PAY OFF</th>
<th>TOTAL INTEREST PAID</th>
<th>INTEREST SAVINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Credit Card #1</td>
<td>$4,400</td>
<td>13.00%</td>
<td>$225</td>
<td>23</td>
<td>$571</td>
<td>$9,250</td>
</tr>
<tr>
<td>2</td>
<td>Auto Loan</td>
<td>$14,315</td>
<td>3.99%</td>
<td>$335</td>
<td>47</td>
<td>$1,151</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Student Loan</td>
<td>$4,900</td>
<td>4.00%</td>
<td>$80</td>
<td>69</td>
<td>$590</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Credit Card #2</td>
<td>$9,000</td>
<td>13.50%</td>
<td>$110</td>
<td>227</td>
<td>$15,891</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>$32,615</td>
<td></td>
<td>$750</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## FINANCIAL LITERACY

### Jane’s Debts

<table>
<thead>
<tr>
<th>DEBT</th>
<th>DESCRIPTION</th>
<th>AMOUNT OWED</th>
<th>INTEREST RATE</th>
<th>PAYMENT</th>
<th>MONTHS TO PAY OFF</th>
<th>TOTAL INTEREST PAID</th>
<th>INTEREST SAVINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Credit Card #1</td>
<td>$4,400</td>
<td>13.00%</td>
<td>$50</td>
<td>287</td>
<td>$9,821</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Auto Loan</td>
<td>$14,315</td>
<td>3.99%</td>
<td>$510</td>
<td>30</td>
<td>$738</td>
<td>$413</td>
</tr>
<tr>
<td>3</td>
<td>Student Loan</td>
<td>$4,900</td>
<td>4.00%</td>
<td>$80</td>
<td>69</td>
<td>$590</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Credit Card #2</td>
<td>$9,000</td>
<td>13.50%</td>
<td>$110</td>
<td>227</td>
<td>$15,891</td>
<td></td>
</tr>
</tbody>
</table>

**Total**

- **$32,615**
- **$750**
# Financial Literacy

## Jane’s Debts

- **Add to Payment of Debt with Highest Interest Rate First (+ $175)**

<table>
<thead>
<tr>
<th>DEBT</th>
<th>DESCRIPTION</th>
<th>AMOUNT OWED</th>
<th>INTEREST RATE</th>
<th>PAYMENT</th>
<th>MONTHS TO PAY OFF</th>
<th>TOTAL INTEREST PAID</th>
<th>INTEREST SAVINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Credit Card #1</td>
<td>$4,400</td>
<td>13.00%</td>
<td>$50</td>
<td>287</td>
<td>$9,821</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Auto Loan</td>
<td>$14,315</td>
<td>3.99%</td>
<td>$335</td>
<td>47</td>
<td>$1,151</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Student Loan</td>
<td>$4,900</td>
<td>4.00%</td>
<td>$80</td>
<td>69</td>
<td>$590</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Credit Card #2</td>
<td>$9,000</td>
<td>13.50%</td>
<td>$285</td>
<td>40</td>
<td>$2,182</td>
<td>$13,709</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$32,615</td>
<td></td>
<td>$750</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total: $32,615

Interest Saved: $13,709
Three Takeaways

• Due Diligence
  – If you are going to borrow $$, the devil is in the details, shop around, compare rates and fees.

• Budgets
  – It’s not just about creating a budget, but comparing your budget to your monthly expenses to know where you stand.

• Credit Rating
  – Every small business owner should know their credit score.