Effect of Increased Individual Income Tax Rates on Business Owners and Their Employees

Estimates for the Nation and the States of Illinois and Michigan

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Anderson Economic Group, LLC
Executive Summary

The most visible disagreement in the recent fiscal debate in Congress centered on the decision to increase tax rates on top earners. Some of those who opposed this rate increase invoked the argument that higher tax rates will fall disproportionately on owners of small businesses, and that further taxation of these business owners will result in adverse economic consequences, such as lower employment, wages, or investment.

However, there are no reliable estimates of the number of business owners, companies, or private sector employees that would be affected by these changes. In this report, we estimate the extent to which additional taxes will be paid by business owners due to an increase in the top federal income tax rate and reinstatement of a cap on certain exemptions and deductions. In turn, we consider the evidence as to whether increasing income taxes for business owners will have an impact on employment and investment by these business owners.

THE FISCAL CLIFF AND CHANGES TO THE INDIVIDUAL INCOME TAX

The post-election period in the U.S. Congress was consumed by the search for a resolution to the so-called “fiscal cliff,” a coincidence of events that would have resulted in significant tax increases and spending cuts in the new year, barring legislative action. Virtually all parties agreed that these tax increases and spending cuts should not go into effect, as a whole, and in response, they passed a law that would delay the majority of the spending cuts and make at least a portion of the tax cuts permanent.

In the following report, we investigate two main changes to federal income taxes that were passed by the U.S. Congress on January 1, 2013, as part of the American Taxpayer Relief Act of 2012:

• Increases in the marginal tax rates for individual taxpayers who report taxable income of over $400,000 ($450,000 for married couples filing jointly) from all sources for 2013 and future years. As further explained below, this includes taxes on wages and salary, and on income imputed to owners of many small and medium sized businesses (as well as many large businesses) that are organized as S corps, partnerships, LLCs, and sole proprietorships.
• Imposing phase outs of exemptions and itemized deductions for high-income taxpayers (the so-called “Pease” and “PEP” provisions) that have the effect of increasing the marginal tax rates on adjusted gross income over $250,000.

In this report, we look at the extent to which the reforms to the federal income tax will affect business owners, and review the evidence on how this might impact the economy.

OVERVIEW OF APPROACH

The following report consists of three main sections. In the first section, we review the landscape of businesses nationally. We show how many tax filers in the nation report business income from S corporations, partnerships, and sole proprietorships. The net income from these businesses is taxed as individual income for their owners.
**Executive Summary**

In that same section, we separate out S corporations, sole proprietorships, and partnerships that are involved in business activity and that employ workers from those that are used as passive investment vehicles or represent contract work for a single employer. Opponents to tax hikes worry particularly about how these businesses would be impacted by an increase in rates on top earners. We also estimate the distribution of net business income from S corporations, partnerships, and sole proprietorships among ranges of taxable income for individuals. This analysis allows us to estimate the number of business owners that are affected by a change in rates. See “Businesses and Business Owners” on page 6 and “Business Income and Individual Income Taxes” on page 11.

In the second section, we look particularly at the impact of changes to the federal income tax on businesses and business owners in the states of Illinois and Michigan. This analysis informs taxpayers and workers in these states on how they might be impacted by the reforms passed by Congress on January 1. See “State Snapshot: Michigan and Illinois” on page 15.

In the final section, we review economic research on the impact of changing rates on entrepreneurs and the self-employed and discuss the extent to which tax rate changes might impact investment, employment, and wages for these businesses. See “Impact of Higher Rates on Businesses” on page 21.

**LIMITATIONS AND ASSUMPTIONS**

There are some important limitations to the analysis and findings presented here:

- There are many other important policy reforms contained in the Taxpayer Relief Act of 2012, the legislation passed by Congress to resolve the fiscal cliff. We consider only the impact of the two changes to the federal income tax outlined above.
- We consider only the impact on the hiring and investment decisions of S corporations, partnerships, and sole proprietorships. We do not consider the impact of these tax changes on the economy, as a whole.
- This report sheds light on only one element of the economic impact of changes to federal income tax rates. The money raised through tax increases will be used for deficit reduction and/or further spending, which will arguably have an economic impact of its own. In this report, we do not model the potentially positive impact of deficit reduction or public spending, nor do we compare the negative impact of tax increases on business owners to the impact of an alternative policy which would raise a similar amount of revenue.

We have also made several assumptions in our analysis regarding:

- The extent to which owners own businesses of multiple types.
- The distribution of total income and net business income among various tax brackets.
- The relationship between employment and net business income.
- The allocation of net income to business filers at the state level.
- The share of businesses that engage in business activity and employ workers at the state level.

We describe our analysis and our assumptions in more detail in “Methodology” on page 25.
We summarize the findings of our analysis below.

1. We estimate that approximately 2.5% of the country’s individual taxpayers will be subject to tax increases under reforms to the federal income tax. In particular, over 85,000 income tax filers in Michigan and 180,000 filers in Illinois will be subject to these tax increases.

Approximately 3% of individual taxpayers in the United States report adjusted gross income above $200,000. That share is 2.1% in Michigan and 3.3% in Illinois. Of these, we estimate that most would be affected by the increases in marginal tax rates arising from the implicit tax increases from phasing out exemptions and deductions, the direct tax increase from raising the stated marginal tax rates, or both. We estimate that approximately 86,000 tax filers in Michigan and 180,000 tax filers in Illinois (including both single and joint filers) would see an increase in marginal rates on the same reported income. Because many of these are joint filers (over a third of filers in Illinois, and over half in Michigan), this implies approximately 370,000 individual taxpayers in Illinois and Michigan will see tax increases due to these provisions.1

2. Though many think of the federal income tax as a tax on salaries and wages alone, it also is a tax on the income of many businesses. One in five income tax filers declare business income on their return, and many of those tax filers own businesses with employees.

Of the 144 million individual income tax returns filed in 2010, one in five declared at least some business income from a sole proprietorship, S corporation, or partnership. The share of tax filers receiving income from a sole proprietorship, partnership, or S corporation in Michigan and Illinois are similar, at 19% and 18%, respectively. Net business income from these entities is declared as a part of individuals’ adjusted gross income, and tax filers pay taxes on this income in the same way that individuals who earn a regular salary or wage pay taxes on their income. Business income accounted for eight percent of all adjusted gross income. While some business income is declared by owners of businesses that do not employ workers, over half of business income is declared by owners of businesses with employees.

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1. These estimates of taxpayers affected include a significant share of taxpayers who pay the alternative minimum tax (AMT) in addition to the regular income tax rate on their income. The share of people who pay the AMT under the new law will likely go down due to these reforms to the federal income tax, because many taxpayers will pay higher income taxes under the regular income tax system. We do not estimate the share of taxpayers to whom this status applies. The interaction between the AMT and the regular income tax is notoriously complex, and therefore it is virtually impossible to disentangle how changes in one affect the other, especially in conjunction with the effects of other changes in the tax law that affect the individual preference items that are included in the AMT calculation (such as the itemized deduction phase-out).
Executive Summary

3. Net business income from entities engaged in business activity accounts for over 20% of the total adjusted gross income of taxpayers who pay income taxes at the top marginal rate.

Taxable income includes net business income from sole proprietorships, partnerships, and S corporations. Taxpayers with greater income are much more likely to have income from a business than those at the lower end of the income spectrum. We find that over one-fifth of all income of those who pay the top marginal rate is net business income from a sole proprietorship, an S corporation, or a partnership that engages in business activity. In addition, over half of all tax filers in these brackets declare at least some income from a sole proprietorship, an S corporation, or a partnership that engages in business activity.

4. Approximately 22% of private sector workers in Illinois and 19% of private sector workers in Michigan are employed by businesses whose earnings are taxed at levels that are subject to these tax changes. The national average is 21%.

Over 600,000 workers in Michigan and over 1.0 million workers in Illinois are employed by firms whose earnings are taxed as income for owners that have adjusted gross income above $250,000. Earnings from a majority of these companies are affected by the increase in marginal rates and the phase-out of deductions and exemptions contained in the recently-passed legislation. Nationally, 22.5 million workers are employed at such firms, or about 21% of all private sector employment.

### TABLE 1. Number of Businesses and Employees Potentially Impacted by Federal Income Tax Changes

<table>
<thead>
<tr>
<th></th>
<th>Number of Businesses that Employ Workers</th>
<th>Number of Employing Businesses Impacted</th>
<th>Number of Employees at Impacted Businesses</th>
<th>Share of Total Non-Farm Private Sector Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nation</td>
<td>4,297,824</td>
<td>1,043,952</td>
<td>22,530,733</td>
<td>21%</td>
</tr>
<tr>
<td>Illinois</td>
<td>188,666</td>
<td>49,633</td>
<td>1,041,162</td>
<td>22%</td>
</tr>
<tr>
<td>Michigan</td>
<td>126,331</td>
<td>25,064</td>
<td>629,139</td>
<td>19%</td>
</tr>
</tbody>
</table>

Analysis: Anderson Economic Group, LLC

Note: Estimates are based on 2010 figures. Businesses include only sole proprietorship, S corporations, and partnerships.

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2. An exception to this is taxpayers who declare negative adjusted gross income. Since business losses are deducted in calculating net business income before it is added into adjusted gross income, a significant majority of all filers who declare a negative adjusted gross income have negative net business income, as well.
Executive Summary

5. Increasing the income tax rates on business owners will likely have a significant impact on employment in, wages paid by, and investment made by, S corporations, partnerships, and sole proprietorships.

Because income taxes alter the after-tax return on investment and the amount of available capital for business owners, changes to the top income tax rate will affect current business owners’ hiring and investment decisions. There is limited research on this topic, but the research that is available suggests that there is a significant impact of changes in taxation on entrepreneurs’ investment decisions and use of labor.

ABOUT ANDERSON ECONOMIC GROUP

Anderson Economic Group, LLC offers research and consulting in economics, finance, market analysis, and public policy. Since AEG’s founding in 1996, the company has helped the public and clients such as universities, state and local governments, non-profit organizations, and private and public companies, to better understand important policy questions. For more information on the report’s authors, please see “About Anderson Economic Group” on page 32.
Businesses and Business Owners

In 2010, there were 10.4 million corporations and partnerships in the United States, as well as 22.8 million sole proprietors. Of the 144 million individual income tax returns filed in 2010, over 28 million included at least some income from a business or proprietorship. In addition, 28 million taxpayers declared income through dividends from a corporation. In this section, we look closely at businesses and business owners in the United States, including the number of businesses of various types, how many of those businesses are likely to be employers, and the distribution of net income from businesses to taxpayers.

TYPES OF BUSINESS ENTITIES

Businesses in the United States fit into four distinct categories:

- **C corporations** have shareholders as owners, and are required to issue financial statements to the federal government. C corporations distribute their profits in the form of dividends, and are taxed as separate entities. They are subject to corporate income taxes. There are no restrictions on who can enter into ownership of a C corporation other than those related to anti-trust laws. All businesses that are publicly traded on stock exchanges are C corporations.

- **S corporations** are incorporated businesses, but with more restrictions on size and ownership. S corporations must be owned by no more than one hundred shareholders, and they must all be residents or citizens of the United States.

- **Partnerships** are unincorporated businesses owned by two or more people, each of whom contribute capital and/or labor, and share in the profits and losses of the business. Many small businesses, such as law firms, doctors’ offices, and restaurants, are partnerships.

- **Sole proprietorships** are businesses that are not incorporated and are owned by one sole proprietor. Many sole proprietors are “self-employed” workers. Others are private contractors or artists. Some sole proprietorships are side businesses for employees of other firms.

Of the entities shown here, only C corporations are taxed as corporate entities. In other words, only the net income of C corporations is subject to state or federal corporate income tax. The revenues and expenses of S corporations, partnerships, and sole proprietorships, on the other hand, are reported to the IRS at the company level, and then imputed to their owners as individual income. For this reason, these businesses are sometimes referred to as “flow-through entities” or “pass-through entities.” In this report, we are concerned with the distribution of net income from S corporations, partnerships, and sole proprietorships, because this income will be subject to the individual income tax.

Though the income from these entities is often referred to as “business income,” many of them are not engaged in business activity, as one might conventionally define it. For example, many “sole proprietors” in fact engage in activities that resemble that of any other employee. They are treated as “independent contractors” by the tax code because of how they file, but they receive a wage from only one

3. The total number of businesses includes C corporations, S corporations, and partnerships.
Businesses and Business Owners

employer. Their situation is often no different than other employees at the firm which contracts them.

These entities also might not be considered “businesses” when they are passive investment vehicles. Owners sometimes use a partnership as a holding company for multiple investments or multiple other businesses to distribute earnings, dividends, or capital gains. Property owners might use a sole proprietorship to collect rental income from a property, even if they are not in the real estate business. Passive investment vehicles do not actually operate as a business, as one might conventionally define it.

A final situation where business income does not represent business activity is the presentation of a hobby, such as woodworking or musical performance, as a business. The tax code does not allow hobbyists to claim expenses for hobbies as a business loss for tax purposes. However, the distinction between a hobby and a business is blurred enough, and the rules complicated enough, that some hobby expenses are deducted as business losses.

BUSINESS OWNERS BY TYPE OF BUSINESS

Over 28 million tax filers declared some amount of business income from an S corporation, partnership, or sole proprietorship in 2010. According to our estimates, 14% of tax filers were sole proprietors, 2% were part owners of a partnership, 2% were shareholders in an S corporation, and over 2% received income from a combination of these various types of businesses (excluding C corporations). The remaining 80% of taxpayers received individual income exclusively from other sources, such as salary and wages, capital gains, and dividends. See Figure 1 below for the share of income tax filers receiving business income from each type of entity.

FIGURE 1. Income Tax Filers by Ownership of Business Entity, 2010

Business losses are included in taxpayers’ adjusted gross income. Also, many business owners receive income from multiple sources, including salary and wages.
Because of this, the share of total income represented by these entities was considerably lower than the share of filers that are owners. Total business income from S corporations, partnerships, and sole proprietorships represented just over 8% of total net income in the country. See Figure 2 for a summary of net income by type of entity.

**FIGURE 2. Total Net Income by Source, 2010 (billions)**

As outlined in the previous section, not all owners who declare business income from an S corporation, partnership, or sole proprietor are necessarily an owner of a business engaged in what we would typically define as business activity. To glean the true number of business owners, we estimate the number of filers who have some sort of business income from a pass-through entity that actually engages in business activity. Furthermore, we estimate the number of business owners whose businesses are employers. To define an employer and define business activity, we rely on the definitions and analysis contained in the Treasury report, “Methodology to Identify Small Businesses and Their Owners,” released in August 2011. Our analysis is also informed by Patrick Anderson’s 2009 paper, “The Value of Private Businesses in the United States.”

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By the definition used in the Treasury report, businesses involved in business activity must have total deductions (expenditures) that exceed $5,000 and one of the following three characteristics: total deductions that exceed $10,000, total income (revenue) that exceeds $10,000, or a sum of income and deductions exceeding $15,000. In addition, businesses are considered employers when their total labor deductions exceed $10,000.
Businesses and Business Owners

Figure 3 and Figure 4 below show sole proprietorships, partnerships, and S corporations that engaged in business activity and that were employers, by type of company. As the figure shows, less than half of sole proprietors are actually engaged in operating a business, as we conventionally define a business. Less than 10% of sole proprietors are employers. Partnerships exhibit a higher rate of business activity, as well as employment, with over 70% of partnerships engaged in business activity and nearly 20% of partnerships employing workers. Finally, nearly 90% of S corporations are engaged in business activity, with about half of those businesses employing workers.

**FIGURE 3. Share of Companies Engaged in Business Activity, Employing Workers, by Type of Company, 2010**

![Share of Companies Engaged in Business Activity Diagram]

- **Sole Proprietorship**: Not Engaged in Business Activity: 11,028,218, Engaged in Business Activity: 7,957,681
- **Partnership**: Not Engaged in Business Activity: 616,124, Engaged in Business Activity: 425,315
- **S Corporation**: Not Engaged in Business Activity: 2,576,422, Engaged in Business Activity: 1,032,475

Analysis: Anderson Economic Group, LLC
Note: Numbers represent number of filers. Totals do not include filers who declare income from more than one type of company.

**FIGURE 4. Share of Net Income at Companies Engaged in Business Activity, Employing Workers, by Type of Company, 2010**

![Share of Net Income at Companies Diagram]

- **Sole Proprietorship**: Not Engaged in Business Activity: $77.6, A Non-Employing Business: $139.5, An Employing Business: $55.5
- **S Corporation**: Not Engaged in Business Activity: $116.9, A Non-Employing Business: $132.1

Analysis: Anderson Economic Group, LLC
Note: Numbers are in billions of dollars.

Note, as shown in Figure 4 on page 9, that the net income at companies that engage in business activities and at employers is considerably higher than at non-business companies. This is particularly true at S corporations, where S corporations that did not engage in business activity accounted for less than 1% of all net income at S corporations in the year 2010. Despite the fact that less than half of sole proprietors engaged in business activity, sole proprietorships engaging in business activities accounted for about 80% of all net income for sole proprietorships in the country.

Some business owners are merely passive investors. That is, someone might be a partial owner of a restaurant, but not have direct oversight over that restaurant’s hiring or investment decisions. When we consider only filers who own businesses with employees, nearly all (87%) are active, as opposed to passive investors. That is, they directly make hiring and investment decisions for that business.\(^6\) Specifically, all sole proprietors, 51% of partnership owners, and 88% of S corporation owners play an active role in their business. This is the group of owners that we might expect will respond to a change in tax rates on their business income.

\(^6\) The share of active filers is based on AEG estimates. These estimates are derived from IRS Statistics of Income data and data from the U.S. Treasury Office of Tax Analysis.
In 2010, well over half of taxpayers had less than $50,000 in adjusted gross income. On the other hand, just under 0.2% of individual returns reflected incomes above a million dollars, and those returns accounted for over 10% of the total adjusted gross income in the country. The net income and adjusted gross incomes of various categories, by range of adjusted gross income on each return, is shown in Table 2 on page 11.

Note that the net income and number of returns for businesses tend to be more concentrated at higher incomes than the returns for all taxpayers. The exception to this is filers with no or negative income. Due to the fact that businesses can deduct business losses from their total incomes, about a third of all filers who exhibited negative incomes reported income from a partnership, S corporation, or sole proprietorship.

### TABLE 2. Total Returns Filed and Net Income, by Range of Adjusted Gross Income for Return, Source of Income, 2010 (dollar amounts are in billions)

<table>
<thead>
<tr>
<th>Adjusted Gross Income Range</th>
<th>All Individual Returns</th>
<th>Returns with Income from Partnerships, S Corps, and Sole Proprietorships</th>
<th>Individual Returns with Income from Companies Engaged in Business Activity</th>
<th>Individual Returns with Income from Employing Businesses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># of Returns</td>
<td>Total AGI</td>
<td># of Returns</td>
<td>Net Income</td>
</tr>
<tr>
<td>Less than $1</td>
<td>3,094,222</td>
<td>($187.6)</td>
<td>1,092,771</td>
<td>($74.2)</td>
</tr>
<tr>
<td>$1 to $25,000</td>
<td>57,483,150</td>
<td>$716.4</td>
<td>9,613,599</td>
<td>$59.1</td>
</tr>
<tr>
<td>$25,001 to $50,000</td>
<td>34,433,526</td>
<td>$1,241.2</td>
<td>5,020,143</td>
<td>$40.4</td>
</tr>
<tr>
<td>$50,001 to $75,000</td>
<td>18,949,573</td>
<td>$1,165.2</td>
<td>3,625,366</td>
<td>$36.4</td>
</tr>
<tr>
<td>$75,001 to $100,000</td>
<td>11,679,487</td>
<td>$1,009.5</td>
<td>2,639,725</td>
<td>$34.4</td>
</tr>
<tr>
<td>$101,000 to $200,000</td>
<td>14,063,026</td>
<td>$1,876.7</td>
<td>4,027,809</td>
<td>$101.5</td>
</tr>
<tr>
<td>$201,000 to $500,000</td>
<td>3,465,856</td>
<td>$983.4</td>
<td>1,634,744</td>
<td>$143.0</td>
</tr>
<tr>
<td>$501,000 to $1,000,000</td>
<td>551,158</td>
<td>$372.0</td>
<td>367,419</td>
<td>$93.0</td>
</tr>
<tr>
<td>More than $1,000,001</td>
<td>282,311</td>
<td>$919.0</td>
<td>214,676</td>
<td>$236.8</td>
</tr>
<tr>
<td>TOTAL</td>
<td>144,002,309</td>
<td>$8,095.7</td>
<td>28,236,252</td>
<td>$670.3</td>
</tr>
</tbody>
</table>

**Analysis:** Anderson Economic Group, LLC

**Note:** Companies engaged in business activity and employing businesses are defined as described in “Separating Businesses from Non-Businesses and Employers from Non-Employers” on page 8, following a similar methodology as that used in the Treasury report, “Methodology to Identify Small Businesses and Their Owners.”

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7. Adjusted gross income (AGI) is defined by the IRS as total income minus half of your self-employment taxes, alimony payments, contributions to certain types of retirement accounts, tuition, and various fees, among other adjustments. Note that AGI includes net business income, which is business income after adjusting for business losses.
Business Income and Individual Income Taxes

Nearly half (47%) of all returns containing business income from businesses with employees had an adjusted gross income of $100,000 or more. Furthermore, nearly a quarter (24.6%) of all income on returns with an adjusted gross income of $1 million or more is from entities which meet our definition of a business. Similarly, 15% of all income on returns with an adjusted gross income of $1 million or more comes from an entity which engages in business activities and employs workers.

We see a similar pattern when we look at returns by top marginal tax rate. Over half of the returns in the top two marginal tax brackets have at least some business income from a proprietorship, S corporation, or partnership, as shown in Table 3 below. Net business income at entities that are engaged in business activities accounts for over 23% of the total AGI of the top income tax bracket. In addition, over 14% of total AGI in the top income tax bracket is net business income from businesses that employ workers. On a related note, net income from employing businesses represents just over 10% of the total adjusted gross income that is subject to the alternative minimum tax (AMT) rate.

TABLE 3. Total Returns Filed and Net Income, by Top Marginal Tax Rate, Source of Income, 2010 (dollar amounts are in billions)

<table>
<thead>
<tr>
<th>Top Marginal Tax Rate</th>
<th>All Individual Returns</th>
<th>Returns with Income from Partnerships, S Corps, and Sole Proprietorships</th>
<th>Individual Returns with Income from Companies Engaged in Business Activity</th>
<th>Individual Returns with Income from Employing Businesses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># of Returns</td>
<td>Total AGI</td>
<td># of Returns</td>
<td>Net Income</td>
</tr>
<tr>
<td>No Income Taxes Paid</td>
<td>33,770,634</td>
<td>$185.7</td>
<td>7,840,542</td>
<td>($32.7)</td>
</tr>
<tr>
<td>10%</td>
<td>27,467,920</td>
<td>$572.3</td>
<td>4,094,016</td>
<td>$28.8</td>
</tr>
<tr>
<td>15%</td>
<td>50,113,735</td>
<td>$1,899.1</td>
<td>8,218,214</td>
<td>$74.9</td>
</tr>
<tr>
<td>25%</td>
<td>23,666,926</td>
<td>$2,471.5</td>
<td>4,586,449</td>
<td>$86.6</td>
</tr>
<tr>
<td>28%</td>
<td>3,844,553</td>
<td>$582.6</td>
<td>1,078,371</td>
<td>$35.4</td>
</tr>
<tr>
<td>33%</td>
<td>518,520</td>
<td>$98.5</td>
<td>238,353</td>
<td>$14.1</td>
</tr>
<tr>
<td>35%</td>
<td>611,007</td>
<td>$572.8</td>
<td>388,345</td>
<td>$139.2</td>
</tr>
<tr>
<td>AMT 26%</td>
<td>1,176,743</td>
<td>$233.9</td>
<td>374,131</td>
<td>$20.4</td>
</tr>
<tr>
<td>AMT 28%</td>
<td>2,832,270</td>
<td>$1,479.5</td>
<td>1,417,830</td>
<td>$303.6</td>
</tr>
<tr>
<td>TOTAL</td>
<td>144,002,309</td>
<td>$8,095.7</td>
<td>28,236,252</td>
<td>$670.3</td>
</tr>
</tbody>
</table>

Analysis: Anderson Economic Group, LLC
Note: Companies engaged in business activity and employing businesses are defined as described in “Identifying Businesses from Non-Businesses and Employers from Non-Employers” on page 8, following a similar methodology as that used in the Treasury report, “Methodology to Identify Small Businesses and Their Owners.”

Over 600,000 taxpayers pay the top marginal federal income tax rate. Over half, or 317,000, of those taxpayers get at least some portion of their income from a partnership, S corporation, or sole proprietorship engaged in business activity. Over one-third, or 219,000, have business income from a partnership, S corporation, or sole proprietorship that employs workers.

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To further glean the impact of increased taxes on owners of businesses, we estimated the amount of employment at companies by the marginal tax rate faced by their owners. According to the Bureau of Labor Statistics, there were 107.4 million employees in the non-farm private sector in the United States in the year 2010. We estimate that total salaries and wages for these workers in that year were $3.0 trillion. Figure 5 below shows our estimate for how these employees were divided among S corporations, sole proprietorships, partnerships, and C corporations.

FIGURE 5. Employment and Wage/Salary Payments by Type of Company, 2010 (dollar amounts are in billions)

Only those employers whose business owners are the highest earners will be affected by the tax changes implemented in the new year. Table 4 on page 14 shows how employment is distributed among companies owned by business owners at various income levels, and subject to various marginal income tax rates.

According to our estimates, approximately 22 million employees work at S corporations, sole proprietorships, or partnerships whose owners have an adjusted gross income of $200,000 or more. That represents 20% of the national private-sector workforce. Furthermore, we estimate that over 16 million employees work at firms whose owners paid the alternative minimum tax (AMT), while 8 million employees work at firms whose owners paid the top income tax rate but did not pay the alternative minimum tax.

8. This salary and wage estimate excludes payments to officers, bonuses, pension and health care benefits, and payments for contract labor.
TABLE 4. Estimated Employment at and Number of S Corporations, Sole Proprietors, and Partnerships with Employees, by Adjusted Gross Income and Top Marginal Tax Rate of Owner, 2010

<table>
<thead>
<tr>
<th>Adjusted Gross Income (AGI)</th>
<th># of Filers</th>
<th>Companies</th>
<th>Employees</th>
<th>Top Marginal Tax Rate</th>
<th># of Filers</th>
<th>Companies</th>
<th>Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $1</td>
<td>213,763</td>
<td>289,424</td>
<td>2,586,903</td>
<td>0%</td>
<td>595,811</td>
<td>806,697</td>
<td>3,476,671</td>
</tr>
<tr>
<td>$1 to $25,000</td>
<td>554,440</td>
<td>750,683</td>
<td>1,895,728</td>
<td>10%</td>
<td>289,830</td>
<td>392,414</td>
<td>1,062,361</td>
</tr>
<tr>
<td>$25,001 to $50,000</td>
<td>289,524</td>
<td>392,000</td>
<td>1,053,349</td>
<td>15%</td>
<td>656,044</td>
<td>888,249</td>
<td>2,987,264</td>
</tr>
<tr>
<td>$50,001 to $75,000</td>
<td>359,336</td>
<td>486,522</td>
<td>1,665,523</td>
<td>25%</td>
<td>533,581</td>
<td>722,441</td>
<td>3,433,983</td>
</tr>
<tr>
<td>$75,001 to $100,000</td>
<td>261,642</td>
<td>354,249</td>
<td>1,362,602</td>
<td>28%</td>
<td>215,359</td>
<td>291,584</td>
<td>1,814,980</td>
</tr>
<tr>
<td>$101,000 to $200,000</td>
<td>638,873</td>
<td>865,000</td>
<td>4,652,912</td>
<td>33%</td>
<td>84,034</td>
<td>113,777</td>
<td>897,262</td>
</tr>
<tr>
<td>$201,000 to $500,000</td>
<td>558,092</td>
<td>755,627</td>
<td>7,445,025</td>
<td>35%</td>
<td>218,659</td>
<td>296,053</td>
<td>8,135,863</td>
</tr>
<tr>
<td>$501,000 to $1,000,000</td>
<td>176,636</td>
<td>239,156</td>
<td>5,015,427</td>
<td>AMT 26%</td>
<td>83,559</td>
<td>113,134</td>
<td>954,166</td>
</tr>
<tr>
<td>More than $1,000,001</td>
<td>121,986</td>
<td>165,163</td>
<td>12,573,695</td>
<td>AMT 28%</td>
<td>497,416</td>
<td>673,475</td>
<td>15,488,614</td>
</tr>
<tr>
<td>TOTAL</td>
<td>3,174,293</td>
<td>4,297,824</td>
<td>38,251,165</td>
<td>TOTAL</td>
<td>3,174,293</td>
<td>4,297,824</td>
<td>38,251,165</td>
</tr>
</tbody>
</table>

Analysis: Anderson Economic Group, LLC
Note: Number of companies and employment only include S corporations, partnerships, and sole proprietorships. Number of filers includes only those who are owners of these types of companies that employ workers.
The impact of changes to the individual income tax on particular states will vary because income levels and entrepreneurship levels vary among states. In the following section, we take a closer look at the amount of businesses and business owners that will be affected by the change in rates in the states of Michigan and Illinois, in particular.

Approximately 3% of individual taxpayers in the United States report adjusted gross income above $200,000. That share is 2.1% in Michigan and 3.3% in Illinois. Of these, we estimate that most would be affected by the increases in marginal tax rates arising from the implicit tax increases from phasing out exemptions and deductions, the direct tax increase from raising the stated marginal tax rates, or both. We estimate that approximately 86,000 tax filers in Michigan and 180,000 tax filers in Illinois (including both single and joint filers) would see an increase in marginal rates on the same reported income. Because many of these are joint filers (over a third of filers in Illinois, and over half in Michigan), this implies approximately 370,000 individual taxpayers will see tax increases due to these provisions.9

Over 1.1 million tax filers in Illinois and 835,000 filers in Michigan declared some amount of business income from an S corporation, partnership, or sole proprietorship in 2010. The share of taxpayers who own each type of entity are similar between the two states, though S corporations are considerably more common in Illinois than in Michigan. See Figure 6 on page 16 for a comparison of the share of income tax filers receiving business income from each type of entity.

9. These estimates include a significant share of taxpayers who pay the alternative minimum tax (AMT) in addition to the regular income tax rate on their income. The share of people who pay the AMT under the new law will likely go down due to the individual income tax reforms, because many taxpayers will pay higher income taxes under the regular income tax system. We do not estimate the share of taxpayers to whom this status applies. The interaction between the AMT and the regular income tax is notoriously complex, and therefore it is virtually impossible to disentangle how changes in one affect the other, especially in conjunction with the effects of other changes in the tax law that affect the individual preference items that are included in the AMT calculation (such as the itemized deduction phase-out).
FIGURE 6. Income Tax Filers by Ownership of Business Entity in Michigan and Illinois, 2010

Analysis: Anderson Economic Group, LLC

Business losses are included in taxpayers’ adjusted gross income. Also, many business owners receive income from multiple sources, including salary and wages. Because of this, the share of total income represented by these entities was considerably lower than the share of filers that were owners. Total business income from S corporations, partnerships, and sole proprietorships represented 6.6% of total net income in Michigan and 7.7% of total net income in Illinois in 2010. See Figure 7 below for a comparison of net income by type of entity in Michigan and Illinois.

FIGURE 7. Total Net Income by Source in Michigan and Illinois, 2010 (billions)

Analysis: Anderson Economic Group, LLC
The net income and adjusted gross incomes of all individuals, as well as owners of businesses who employ workers, by range of adjusted gross income on each return, is shown in Table 2 on page 11. Note that, as with the national numbers, at the state level the net income and number of returns for businesses tend to be more concentrated at higher incomes than the returns for all taxpayers. Half of all returns containing business income from Illinois businesses with employees had an adjusted gross income of $100,000 or more, while that only applied to 42% of returns containing business income from Michigan businesses with employees. Furthermore, 15% of all income on Illinois returns with an adjusted gross income of $1 million or more comes from an entity which engages in business activities and employs workers. Similarly, that applies to 16% of income earned by those with over $1 million in earnings in Michigan.

We see a similar pattern when we look at returns by top marginal tax rate. As shown in Table 6 on page 18, net business income at Michigan companies employing workers accounts for nearly 17% of the total AGI of the top income tax bracket in the state. In Illinois, that share is 14%. On a related note, net income from employing businesses represents just over 10% of the total adjusted gross income that is subject to the higher alternative minimum tax (AMT) rate in both states, much like at the national level.
Nearly 29,000 taxpayers in Illinois and over 13,000 taxpayers in Michigan pay the top marginal federal income tax rate. Over 15,000 of these taxpayers get at least some of their income from a partnership, S corporation, or sole proprietorship that employs workers.

To further glean the impact of increased taxes on owners of businesses and their employees, we estimated the amount of employment at companies by the marginal tax rate faced by those companies’ owners. According to the Bureau of Labor Statistics, there were 4.8 million employees in the non-farm private sector in Illinois and 3.2 million employees in the non-farm private sector in Michigan in the year 2010. We estimate that total salaries and wages for these workers in that year were $137 billion in Illinois and $87 billion in Michigan. Figure 8 on page 19 shows our estimate for how employees were divided among S corporations, sole proprietorships, partnerships, and C corporations in Michigan and Illinois.

10. This salary and wage estimate excludes payments to officers, bonuses, pension and health care benefits, and payments for contract labor.
Only those employers whose business owners are the highest earners will be affected by the tax changes implemented in the new year. Table 7 below and Table 8 on page 20 show our estimates for how employment is distributed among companies owned by business owners at various income levels, and subject to various marginal income tax rates, in Illinois and Michigan.

**TABLE 7. Employment at and Number of S Corporations, Sole Proprietors, and Partnerships with Employees, by Adjusted Gross Income, in Michigan and Illinois, 2010**

<table>
<thead>
<tr>
<th>Adjusted Gross Income (AGI)</th>
<th><strong>ILLINOIS</strong></th>
<th><strong>MICHIGAN</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># of Filers</td>
<td>Companies</td>
</tr>
<tr>
<td>Less than $1</td>
<td>7,604</td>
<td>10,286</td>
</tr>
<tr>
<td>$1 to $25,000</td>
<td>23,782</td>
<td>32,170</td>
</tr>
<tr>
<td>$25,001 to $50,000</td>
<td>11,805</td>
<td>15,968</td>
</tr>
<tr>
<td>$50,001 to $75,000</td>
<td>15,091</td>
<td>20,413</td>
</tr>
<tr>
<td>$75,001 to $100,000</td>
<td>11,500</td>
<td>15,556</td>
</tr>
<tr>
<td>$101,000 to $200,000</td>
<td>28,923</td>
<td>39,125</td>
</tr>
<tr>
<td>$201,000 to $500,000</td>
<td>25,634</td>
<td>34,675</td>
</tr>
<tr>
<td>$501,000 to $1,000,000</td>
<td>8,722</td>
<td>11,799</td>
</tr>
<tr>
<td>More than $1,000,001</td>
<td>6,412</td>
<td>8,674</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>139,471</td>
<td>188,666</td>
</tr>
</tbody>
</table>

Analysis: Anderson Economic Group, LLC

Note: Number of companies and employment only include S corporations, partnerships, and sole proprietorships. Number of filers includes only those who are owners of these types of companies that employ workers.
Between the two states, over 1.2 million employees work at firms whose owners paid the alternative minimum tax (AMT). Rate increases will likely fall on at least a portion of these business owners. Also, we estimate that 377,000 employees in Illinois and 227,000 employees in Michigan work at firms whose owners paid the top income tax rate and did not pay the AMT.

Given these values, we estimate that, in all, over 600,000 workers in Michigan and over 1.0 million workers in Illinois are employed by firms whose owners paid the top income tax rate and did not pay the AMT.

Table 8: Employment at and Number of S Corporations, Sole Proprietors, and Partnerships with Employees, by Top Marginal Tax Rate of Owner, in Michigan and Illinois, 2010

<table>
<thead>
<tr>
<th>Top Marginal Tax Rate</th>
<th>ILLINOIS</th>
<th></th>
<th>MICHIGAN</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># of Filers</td>
<td>Companies</td>
<td>Employees</td>
<td># of Filers</td>
<td>Companies</td>
</tr>
<tr>
<td>No Income Taxes Paid</td>
<td>23,713</td>
<td>32,077</td>
<td>136,882</td>
<td>18,069</td>
<td>24,710</td>
</tr>
<tr>
<td>10%</td>
<td>12,221</td>
<td>16,531</td>
<td>43,604</td>
<td>9,376</td>
<td>12,821</td>
</tr>
<tr>
<td>15%</td>
<td>27,979</td>
<td>37,848</td>
<td>118,584</td>
<td>21,616</td>
<td>29,560</td>
</tr>
<tr>
<td>25%</td>
<td>23,835</td>
<td>32,243</td>
<td>143,924</td>
<td>15,945</td>
<td>21,805</td>
</tr>
<tr>
<td>28%</td>
<td>9,750</td>
<td>13,189</td>
<td>75,770</td>
<td>6,206</td>
<td>8,487</td>
</tr>
<tr>
<td>33%</td>
<td>3,859</td>
<td>5,220</td>
<td>38,506</td>
<td>2,099</td>
<td>2,871</td>
</tr>
<tr>
<td>35%</td>
<td>10,489</td>
<td>14,188</td>
<td>377,024</td>
<td>5,105</td>
<td>6,981</td>
</tr>
<tr>
<td>AMT 26%</td>
<td>3,806</td>
<td>5,148</td>
<td>41,384</td>
<td>2,207</td>
<td>3,019</td>
</tr>
<tr>
<td>AMT 28%</td>
<td>23,820</td>
<td>32,221</td>
<td>723,198</td>
<td>11,757</td>
<td>16,078</td>
</tr>
<tr>
<td>TOTAL</td>
<td>139,471</td>
<td>188,666</td>
<td>1,698,876</td>
<td>92,382</td>
<td>126,331</td>
</tr>
</tbody>
</table>

Analysis: Anderson Economic Group, LLC
Note: Number of companies and employment only include S corporations, partnerships, and sole proprietorships. Number of filers includes only those who are owners of these types of companies that employ workers.

Table 9: Number of Businesses and Employees Potentially Impacted by Federal Income Tax Changes

<table>
<thead>
<tr>
<th></th>
<th>Number of Businesses that Employ Workers</th>
<th>Number of Employing Businesses Impacted</th>
<th>Number of Employees at Impacted Businesses</th>
<th>Share of Total Non-Farm Private Sector Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nation</td>
<td>4,297,824</td>
<td>1,043,952</td>
<td>22,530,733</td>
<td>21%</td>
</tr>
<tr>
<td>Illinois</td>
<td>188,666</td>
<td>49,633</td>
<td>1,041,162</td>
<td>22%</td>
</tr>
<tr>
<td>Michigan</td>
<td>126,331</td>
<td>25,064</td>
<td>629,139</td>
<td>19%</td>
</tr>
</tbody>
</table>

Analysis: Anderson Economic Group, LLC
Note: Estimates are based on 2010 figures. Businesses include only sole proprietorship, S corporations, and partnerships.
Impact of Higher Rates on Businesses

Impact of Higher Rates on Businesses

There are at least three plausible ways in which changes in individual tax rates can affect the choices of business owners to invest or hire:

- **Business owners will have less capital for investment after taxes.** Ideally, business owners are able to borrow money if they can exhibit a strong return from investing further in their business. However, business owners are often liquidity-constrained, and can only invest and hire by using their own funds. Similarly, entrepreneurs are often only able to start up their own companies through personal funds or funds from friends and family. Particularly in recent years, it has been difficult for small businesses to get a loan.

- **Investment in business will yield a lower after-tax return.** When investors make investment decisions, they tend to distribute their capital so as to increase their after-tax returns. If a certain type of investment is taxed relatively higher than other investments, this will marginally shift investment toward the lower-cost option. As the rates for multiple taxes have shifted under the recent compromise passed by Congress, it is unclear what the relative change in taxation will be for top earners. The impact is also ambiguous because certain business expenditures count as losses and lower an individual’s adjusted gross income. This could cause those who want to lower their short-term tax bill to spend more now.

- **Incentives to start a business or remain a conventional employee change.** Given the fact that individual income taxes fall on wages and business income alike, there are some ways in which higher tax rates in fact encourage entrepreneurship. First, business owners and the self-employed can count certain expenses as losses, lowering their taxable income, insofar as those expenses are business-related. Also, higher tax rates cushion the impact of profits as well as losses. When tax rates are higher, owners of businesses with volatile earnings will have less-volatile after-tax income. Insofar as volatile earnings are a disincentive to become self-employed, higher taxes reduce this disincentive. On the other hand, progressivity of the tax code might decrease the incentive for entrepreneurship because high profits are taxed at a higher level, yielding lower benefits to success.

We can divide these impacts into two general types. The first, which applies to the top two impacts described above, is the response of current business owners and the self-employed to changes in taxation. That is, for those who already operate a business, to what extent will a change in taxes affect their investment and hiring behavior? There is little research on the extent to which current entrepreneurs alter their behavior in response to changes in taxation. In this section, we rely on a series of papers by Robert Carroll, Douglas Holtz-Eakin, Mark Rider, and Harvey S. Rosen, that investigate the effect of the 1986 tax reforms on sole proprietorships.

The second category, applying mainly to the third impact described above, captures the extent to which potential owners decide to start a business or current owners decide to close a business. There has been extensive research on how the ranks of

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11. This effect was first postulated in a seminal paper by Evsey Domar and Richard Musgrave in 1944.

Impact of Higher Rates on Businesses

the self-employed and entrepreneurs increase or decrease in response to a tax change. In the remainder of this section, we investigate each of these two types of impacts.

Changes in Hiring and Investment by Current Business Owners

Because income taxes alter the after-tax return on investment and the amount of available capital for business owners, it is plausible that changes to the top income tax rate will affect current business owners’ hiring and investment decisions. There is limited research on this topic, but the research that is available suggests that there is a significant impact of changes in taxation on entrepreneurs’ investment decisions and use of labor.

In two papers where they estimate the impact that changes in tax rates had for sole proprietors after the implementation of tax reform in 1986, Robert Carroll, Douglas Holtz-Eakin, Mark Rider, and Harvey S. Rosen find that lower tax rates have a positive impact on capital investment, hiring, and wages paid by sole proprietors.

Employment. The researchers found that, for every ten percent increase in the tax price (tax price is one minus the marginal tax rate), there was a 12 percent increase in the likelihood that a firm employed workers. In other words, as the marginal tax rate goes down, there will be a significant increase in the share of firms that employ workers. If this is accurate, then the increase in the top tax rate will result in an 8.5% decrease in the number of employing firms in the top tax brackets, or a 1.3% decrease in the number of S corporations, partnerships, and sole proprietorships that hire workers in the nation. In other words, 55,000 out of the approximately 4.3 million firms of this type would no longer employ workers.

Wages. The researchers also found that, for every ten percent increase in the tax price (tax price is one minus the marginal tax rate), there was a 3.7% increase in wages at firms that continued to employ workers. The increase in the top tax rate would result in a 2.6% decrease in wages at employing firms under these conditions.

Capital Investment. Without further information, it is difficult to discern the magnitude of the impact of a change in tax rates on capital investment. In the sample that Carroll, et. al., use, they find that a 5-percentage point increase in marginal tax rates would reduce investment expenditures by nearly 10 percent. We do not have enough information to apply their results to the current tax changes, but their results suggest unambiguously that an increase in top rates would discourage capital investment at S corporations, partnerships, and sole proprietorships.

We should note that all of these results are based on only two studies, which investigate the impacts of tax changes on sole proprietorships following the 1986 tax reforms. Though the methodology in these studies is rigorous, the result from one

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paper that studies a particular time period cannot necessarily be applied to all similar scenarios. Also, skepticism may be warranted due to the fact that the response of business owners to changes in taxation in these studies is considerably higher than elasticities found in broader studies.\footnote{A comprehensive literature review on the impact of income tax rate changes can be found in: J.G. Gravelle, “Issues in Dynamic Revenue Estimating,” Government and Finance Division, Congressional Research Service, CRS Report RL31949 (May 2007).}

**EXIT AND ENTRY INTO SELF-EMPLOYMENT AND ENTREPRENEURSHIP**

A change in tax rates can alter the incentives to start or close a business. The ability to lower your adjusted gross income through business-related expenses can make opening a business more attractive when income tax rates are higher. Also, higher tax rates reduce volatility in after-tax income. Unpredictability of income is a deterrent for many potential entrepreneurs, and higher tax rates can mitigate this issue.

While higher average tax rates might encourage entrepreneurship, \textit{more progressive} tax rates might discourage it. When the tax rate on those with considerable success are higher, this reduces the expected returns to entrepreneurship. On the other hand, in years where a company realizes net losses, unless an entrepreneur is able to stretch those losses over several years (which they often are able to do), the owners of that company are not compensated through negative taxation. Once all these factors are considered together, the effects on entrepreneurship of increasing only the top tax rate is ambiguous, because it both increases tax rates and makes the tax code more progressive.

A robust field of research on this topic yields ambiguous results.\footnote{Herbert Schuetze and Donald Bruce perform a comprehensive review and rigorous meta-analysis in the following article: H.J. Schuetze and D. Bruce, “Tax Policy and Entrepreneurship,” \textit{Swedish Economic Policy Review}, vol. 11 (2004), pp. 233-265.} Until recently, nearly all research into the subject suggested that higher tax rates yielded greater entry into entrepreneurship activities, evidenced by more start-up businesses or people entering self-employment. However, more recent studies that have used more sophisticated methods have challenged those findings. These studies have sometimes found slightly negative, but often insignificant impacts of individual income tax rates on self-employment. Other studies have corroborated the theory that higher average tax rates increase self-employment, while \textit{more progressive} tax rates discourage it. The most one can say of these studies is that, in aggregate, they are inconclusive.

Intuition suggests, and at least one rigorous empirical study confirms, that the impact of payroll tax rates is considerably greater than that of individual income tax rates on the decision to be self-employed or start a business.\footnote{D. Bruce and M. Mohsin, “Tax Policy and Entrepreneurship: New Time Series Evidence,” \textit{Small Business Economics}, vol. 26 (2006), pp. 409-425.} The burden of payroll taxes falls on employees or on sole proprietors’ labor income. It does not fall on net business income, so business owners are subject to lower effective tax rates if they receive compensation in the form of business income, as opposed to wages.
Another notable result of the fiscal cliff negotiation was the expiration of a two percentage point reduction in the payroll tax. Even if there is some effect due to the changes on individual income tax rates, it may be dwarfed by other changes to the tax code, such as the change to the payroll tax.
**Methodology**

We relied primarily on three sources to perform the analyses contained in this report: a 2009 article by Patrick Anderson on the value of private businesses in the United States, the Internal Revenue Service’s Statistics of Income, and the Treasury Department’s 2011 study, “Methodology to Identify Small Businesses and Their Owners.”

**ESTIMATING NUMBER OF BUSINESS OWNERS**

The Internal Revenue Service provides individual income and tax data, by state and adjusted gross income, for the year 2010, through its Statistics on Income database. This data includes two categories of interest for determining the number of owners of S corporations, sole proprietorships, and partnerships, respectively. It contains a category called “Business or profession net income,” which includes all sole proprietorship income, as well as a category called “S Corp/Partnership net income.”

We divided these values into four categories: owners of only sole proprietorships, owners of partnerships, owners of S corps, and owners of multiple types of companies. Due to a lack of available data on the overlap between certain entities, we made the assumption that one-third of all S corp and partnership owners also had income from a sole proprietorship. When we subtracted this amount from the number of returns containing “Business or profession net income,” we were left with the number of filers who own only a sole proprietorship.

For the remainder, we used Treasury data from the 2011 study to determine the extent to which there is overlap between owners of S corporations and partnerships, and the number of owners of only partnerships compared to S corporations. For example, the Treasury report finds that, of all S corporation shareholders and partners in partnerships, there is an overlap of 12%. That is, 12% of these owners have shares in both.

In addition, there are 3.5 million partnerships and 4.5 million S corps in the nation. This implies, using a combination of Treasury data and IRS data to estimate the average number of filers per company, a total of 4.22 million owners of partnerships and 4.15 million owners of S corporations. After removing the 12% of owners who own more than one company, the remaining owners are distributed using a ratio of 4.22 to 4.15 for partnerships to S corporations.

Once the number of owners of each type of entity were estimated, we applied ratios from Treasury findings to each category of owner to estimate the number of owners who owned a company engaged in business activity, as well as the number of owners who owned a company that employed workers. For example, 84% of S corporation shareholders own a company that engages in business activity, according to Treasury data, while only 23% own an S corporation that employs workers. These ratios were applied to our estimate for the total number of tax filers who own only S corporations to estimate the number of filers who own only S corporations that are engaged in business activity, as well as only S corporations that employ workers.

The same method was applied to all categories of business owners, including those with ownership in multiple types of entity. We had, separately, the share of business owners who owned more than one type of business that owned a company engaged in business activity, as well as the share that owned more than one type of company engaged in business activity, as well as the share that owned more than one type of company that employed workers.

We used a similar method as outlined in the section above to impute business income to various types of entities. We did not have to worry about the overlap between businesses because income is additive (we were not “double-counting” income if the same owner received money from both an S corporation and a partnership).

Estimating sole proprietorship net income was straightforward. IRS data provides sole proprietorship net income for all filers directly. We then used results from the Treasury study to estimate the share of this income that would occur at sole proprietorships engaged in business activity and at sole proprietorships that employ workers, respectively.

Separating S corp from partnership net income was somewhat more complex because these categories are combined in IRS data. We used data from the Treasury study to derive the average net income from a S corporation and a partnership per filer, respectively, for three separate categories: all S corps and partnerships, S corps and partnerships that engage in business activity, and S corps and partnerships that employ workers. Using our previously derived estimates for the number of filers for each company type (S corps and partnerships), we then derived an estimate for what the “hypothetical total net income” from these combined entities would be, given this average net income per filer.

This total provided a relative estimate, which we used to normalize our estimates for how much combined S corp and partnership income was attributable to S corporations, as opposed to proprietorships. Specifically, we multiplied our estimated number of filers who owned S corporations by the average net income from an S corporation per filer derived in the paragraph above. We then multiplied this amount by the ratio of total net income for S corps and partnerships and the “hypothetical total net income” described in the paragraph above. This method was repeated for partnerships. It was then repeated for all companies that engaged in business activity, as well as all companies that employed workers, using separately derived values for average net income per filer and hypothetical total net income.
The IRS provides comprehensive data on individual income tax returns from filers by the adjusted gross income (AGI) of the filer. Total number of filers and adjusted gross income are pulled directly from these figures. Furthermore, the IRS provide number of filers and total net business income for sole proprietors and S corps/partnerships, separately, by the adjusted gross income of the filer. To get the total number of filers receiving money from pass-through entities, we simply added these together for each category of AGI, after subtracting 1/3 of total filers who received S corps/partnership income to account for assumed overlap with sole proprietor ownership. We added together the total net incomes for each category of AGI to get net business income from all entities.

Once the total number of filers receiving pass-through business income were estimated, we estimated the share of these filers that owned entities engaged in business activity and the net income from entities engaged in business activity, by adjusted gross income level. Similarly, we estimated the share of filers that owned entities that employed workers and the net income from entities that employed workers, by adjusted gross income level. To derive these numbers, we multiplied our estimates for the number of filers receiving income from a pass-through entity and net income for each AGI level by the percentages derived from the Treasury report. These percentages are shown in Table 10 below.

### Table 10. Share of Total Pass-Through Income and Number of Filers with Pass-Through Income That Receive Income from Companies Engaged in Business Activity and Companies that Employ Workers, by AGI Level

<table>
<thead>
<tr>
<th>Adjusted Gross Income</th>
<th>Share Engaged in Business Activity</th>
<th>Share of Companies that Employ Workers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># of Filers</td>
<td>Net Income</td>
</tr>
<tr>
<td>Less than $1</td>
<td>86.0%</td>
<td>86.3%</td>
</tr>
<tr>
<td>$1 to $50,000</td>
<td>51.3%</td>
<td>59.5%</td>
</tr>
<tr>
<td>$50,000 to $100,000</td>
<td>58.0%</td>
<td>85.7%</td>
</tr>
<tr>
<td>$100,000 to $200,000</td>
<td>66.3%</td>
<td>87.8%</td>
</tr>
<tr>
<td>$200,000 to $500,000</td>
<td>83.8%</td>
<td>91.9%</td>
</tr>
<tr>
<td>$500,000 to $1,000,000</td>
<td>91.0%</td>
<td>92.6%</td>
</tr>
<tr>
<td>Greater than $1 million</td>
<td>94.0%</td>
<td>91.9%</td>
</tr>
</tbody>
</table>

Analysis: Anderson Economic Group, LLC

We estimated the net business income by top marginal tax rate in order to estimate the amount of business activity impacted by changes in rates. We also use these estimates later in our analysis on the number of employees impacted by changes to the tax code.

The mapping of AGI onto the top marginal tax rate for a taxpayer is not straightforward for three reasons. Firstly, the cutoff point for marginal tax rate varies by taxpayer status (single vs. joint vs. married filing separately, etc.). Secondly, taxpayers apply deductions and credits after they have calculated AGI. Finally, many taxpay-
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er are subject to the alternative minimum tax, where they are required to pay an additional tax (called the AMT) above their normal income tax payment in order to ensure that they pay at least a given rate on their income rather than the marginal rate that they would otherwise pay after deductions.

We have utilized data from the Treasury study to approximate the share of filers from each level of adjusted gross income that will be subject to a given marginal income tax rate. Essentially, we used their separate data on number of filers within different AGI groups and number of filers subject to separate marginal tax rates to assign groups of filers to AGI groups and marginal tax rates, simultaneously. An example, which reflects the share of total filers by AGI group and marginal tax rate, is shown in Table 11 on page 28. We also utilized data from the Brookings Institution’s Urban Institute on the incidence of the alternative minimum tax in the year 2011 to inform our analysis.18

This same process was performed to estimate the top marginal tax rate paid by range of adjusted gross income for tax filers that received any business income, tax filers that received business income from a company engaged in business activity, and tax filers that received business income from a company that employed workers. Once these percentages were determined, we applied them to our previously derived estimates for number of tax filers within each AGI range category to estimate the number of filers subject to each respective marginal tax rate.

To estimate the total net business income going to filers at each respective marginal tax rate, the process was more complicated. Our primary assumption was that, if

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TABLE 11. Estimated Top Marginal Tax Rate Paid by Range of Adjusted Gross Income, All Tax Filers

<table>
<thead>
<tr>
<th>Share of Filers with This Range of AGI...</th>
<th>Less than $0</th>
<th>$0 to $50,000</th>
<th>$50,000 to $100,000</th>
<th>$100,000 to $200,000</th>
<th>$200,000 to $500,000</th>
<th>$500,000 to $1 million</th>
<th>Greater than $1 million</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Income Taxes Paid</td>
<td>100%</td>
<td>33%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10%</td>
<td></td>
<td>30%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15%</td>
<td></td>
<td>37%</td>
<td>53%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25%</td>
<td></td>
<td>46%</td>
<td>68%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28%</td>
<td></td>
<td></td>
<td>27%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33%</td>
<td></td>
<td></td>
<td>2%</td>
<td>8%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>11%</td>
<td>20%</td>
<td>40%</td>
</tr>
<tr>
<td>AMT 26%</td>
<td></td>
<td>0.4%</td>
<td>4%</td>
<td>16%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AMT 28%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>64%</td>
<td>80%</td>
<td>60%</td>
</tr>
</tbody>
</table>


Methodology

taxpayers within the same range of AGI pay under separate marginal tax rates, those taxpayers at the lower end of that range will pay the lower marginal tax rate, and those at the higher end will pay the higher marginal tax rate.

Since we do not know the exact AGI for all tax filers, we estimated a distribution of AGI across tax filers using the data we have available on the number of taxpayers and total net income within each AGI range. First, consider income for all tax filers. For each range of AGI, we calculated an average AGI per tax filer. Then, we estimated a linear distribution of AGI within that range such that it would be centered around the average AGI per filer. The distribution we chose within each range had endpoints that would equal the endpoints of adjacent ranges. The resulting estimated distribution of AGI among all filers is shown in Figure 9 below.

**FIGURE 9. Estimated Distribution of AGI Among All National Tax Filers, From Lowest to Highest**

Once we had an estimate for the distribution of AGI across tax filers, we applied it to our estimates for number of tax filers subject to each marginal income tax rate in order to estimate the net income going to filers subject to that marginal income tax rate. For example, we estimate that the number of national filers that paid no income taxes (marginal rate of 0%) was 33.8 million. To find the total net income for these filers, we added up the net incomes for all of the first 33.8 million people in the distribution shown in Figure 9. In other words, we calculated the area under the curve in the figure from zero to 33.8 million. We estimated that the number of filers that were subject to the next highest rate, 10%, was 27.5 million. We calculated their total net income by adding up the net incomes from the 33.8 millionth tax filer all the way up to the 61.3 millionth tax filer (61.3 is the sum of 33.8 and 27.5). We continued this process until we had accounted for all tax brackets.

The exception to this rule was our estimate of how much net income was made by filers subject to the AMT. For these filers, we assumed that their incomes were randomly distributed across their AGI range. Therefore, to estimate the amount of net income going to a given number of people within an AGI range subject to the AMT
of 28%, we simply multiplied the share of people within that AGI range subject to the AMT of 28% by the total net income of people within that AGI range. These people were excluded from our calculation to determine the distribution of filers for the non-AMT rates, as described above.

We performed this same process for filers with business income, filers with business income from entities engaged in business activities, and filers with business income from entities that employ workers. Note that applying this method to business income requires the further assumption that a tax filer who has a higher net business income than someone else will always be in a tax bracket higher than or equal to that person’s tax bracket. This is likely not to be exactly the case since filers have many varying sources of income besides business income, but it is a reasonable estimate given that average net business income varies little among the middle range of business owners.

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Employment numbers for different types of companies, such as partnerships and S corporations, are not available from public data sources such as the U.S. Census Bureau or the Bureau of Labor Statistics. However, using IRS Statistics of Income data, we can obtain the number of returns, salaries and wages, and net income for C corporations, sole proprietorships, partnerships, and S corporations, respectively, in the year 2008. We can also glean total non-farm private sector employment and average weekly earnings in that same year and future years from the Bureau of Labor Statistics; however, this average weekly earnings figure includes total payroll, while IRS data on salaries and wages does not include payments to officers. Per-employee salaries and wages from IRS data are considerably lower than average employee earnings from BLS data.

To estimate the amount of employment by type of firm in 2010, we started with the number of companies and net income returns for S corporations, partnerships, and sole proprietorships. We also had the number of returns from C corporations, but not net income, for the year 2010. Given that the share of returns from C corporations went up from 5.7% to 7.1% from 2008 to 2010, we estimated C corporation net income by assuming it went up by nearly the same proportion, from 40.3% to 47.4%.

Again, IRS data provided the share of total business returns, net income, and salaries and wages paid by C corporations, S corporations, partnerships, and sole proprietorships, respectively, in 2008. Also, we have share of returns for each entity in the year 2010 and an estimate of share of net income, as well, in that year. We applied the average proportional change in net income and returns from 2008 to 2010 for each of these types of entities to the share of salaries and wages in 2008 to arrive at an estimate for the share of salaries and wages at each type of company in 2010.

Then, to get total salary and wages, we multiplied estimated total earnings in 2010 (2010 employment times 2010 average earnings from BLS) by the ratio of total salary and wages (IRS) to total earnings (BLS) in 2008. We then allocated these salaries and wages to the various types of business entities, using the percentages derived in the process outlined in the last paragraph.
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Finally, to estimate the share of employment at each type of entity, we assumed a given level of average wage for each type of entity. We assumed that the average salary and wage for employees of sole proprietorships was 60% of the average salary and wage at C corporations. Similarly, we assumed that the average salary and wage at partnerships and S corporations was 85% of that at C corporations. Once we had these estimates, along with an estimate for total employment, total salaries and wages, and salaries and wages by type of entity, we had enough information to estimate the total number of employees at each type of entity.

ALLOCATING EMPLOYEES TO AGI RANGES AND TAX BRACKETS OF BUSINESS OWNERS

Once we had an estimate for the amount of employees at each type of business entity, we could estimate the distribution of employees at non-C corporations to businesses owned by taxpayers of various income ranges. We also estimated how many employees work at companies whose business owners are taxed at various marginal rates.

We restricted our analysis to those tax filers who owned businesses that employed workers. The method for estimating the number of these tax filers and their net business income from employing businesses is shown in “Net Business Income by Adjusted Gross Income of Filer” on page 27 and “Net Business Income by Top Marginal Tax Rate of Filer” on page 27. We assumed that the number of companies owned by business owners within each tax bracket and AGI range was constant. That is, if there were twice as many business owners in one AGI range than another, then business owners in that AGI range would own twice as many companies as owners in the other.

Finally, to estimate total number of employees, we assumed that, beyond the first 2 employees at each company, the remainder of employees would be proportional to the absolute value of net income at companies whose owners were within a given AGI range or subject to a given top marginal tax rate. This method is motivated by the assumption that, among businesses that we know have employment, beyond some minimal base of employment, the profit of that business roughly scales with its number of employees. Regarding the use of “absolute value,” companies that declare massively negative earnings within a given year are likely to be larger companies and therefore hire more people than a company that loses only a little.

To illustrate this method, for national companies, we estimate that there were approximately 750,000 companies that employed workers and were owned by filers whose adjusted gross income was between $0 and $25,000. These companies accounted for an estimated $4.4 billion in net business income. We start by allocating two employees per company for a total of 1.5 million employees. In addition, we find that distributing the remaining employees based on net income across AGI ranges results in an additional 9 employees per $100,000 in net income. For $4.4 billion in net income, that suggests approximately an additional 400,000 employees. The total number of employees we estimate at companies owned by business owners who have AGI within this range is then approximately 1.9 million employees.
About Anderson Economic Group

Anderson Economic Group LLC is a research and consulting firm with expertise in tax analysis, economics, public policy, financial valuation, and market research. AEG’s past clients include:

- Governments, such as the states of Michigan, North Carolina, and Wisconsin; the cities of Detroit, MI, Cincinnati, OH, Norfolk, VA, and Fort Wayne, IN; counties such as Oakland County, Michigan, and Collier County, Florida; and authorities such as the Detroit-Wayne County Port Authority.
- Corporations such as GM, Ford, Delphi, Honda, Metaldyne, Taubman Centers, The Detroit Lions, PG&E Generating; SBC, Gambrinus, Labatt USA, and InBev USA; automobile dealers and dealership groups representing Toyota, Honda, Chrysler, Mercedes-Benz, and other brands.
- Nonprofit organizations, such as Michigan State University, Wayne State University, Van Andel Institute, the Michigan Manufacturers Association, International Mass Retailers Association, American Automobile Manufacturers Association, Automation Alley, and the Michigan Chamber of Commerce.


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Prior to joining AEG, Mr. Horwitz was the Coordinator of Distribution for the Community Center of St. Bernard near New Orleans, where he oversaw the distribution of donated food, clothes, and household supplies to low-income residents of St. Bernard Parish and New Orleans' Lower Ninth Ward.

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Patrick L. Anderson

Mr. Anderson founded Anderson Economic Group in 1996, and serves as a Principal and Chief Executive Officer in the company.

Mr. Anderson has taken a leading role in several major public policy initiatives in his home state; he was the author of the 1992 Term Limit Amendment to the Michigan Constitution, and also the author of the 2006 initiated law that repealed the
state's 4-decade-old Single Business Tax. His firm’s work resulted in a wage increase for Home Help workers in 2006, the creation of a Michigan EITC in 2008, and the repeal of the item pricing law in 2011.


Before founding Anderson Economic Group, Mr. Anderson was the deputy budget director for the State of Michigan under Governor John Engler, and Chief of Staff for the Michigan Department of State.

Anderson is a graduate of the University of Michigan, where he earned a Master of Public Policy degree and a Bachelor of Arts degree in political science. He is a member of the National Association for Business Economics and the National Association of Forensic Economists. The Michigan Chamber of Commerce awarded Mr. Anderson its 2006 Leadership Michigan Distinguished Alumni award for his civic and professional accomplishments.

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