

# **Effective Federal Income Tax Rates Faced By Small Businesses in the United States**

by

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for



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## INTRODUCTION

Federal, state and local taxes represent a major cost of doing business in the United States, and this is particularly true for small businesses. The array of federal taxes that small businesses face includes income taxes (individual and corporate), social security and Medicare employment taxes, excise taxes, and unemployment compensation taxes.

Under the federal income tax system, a progressive statutory rate structure applies to income of businesses and individuals. The income of corporations is taxed twice, once at the corporate level through the payment of the corporate income tax, and again at the individual owner (level) of a corporation when corporate profits are distributed in the form of dividends or capital gains. Other forms of business, such as sole proprietorships, partnerships, S corporations, and limited liability companies, are not subject to an entity level tax, and business profits are taxed only at the individual owner level.

Calculating the overall costs of federal income taxes to small business owners requires an examination of both corporate and individual income taxes to explore who bears the burden of the taxes on business income. The federal income tax system is progressive, meaning that the tax rate increases as income increases and ranges from 10 percent to 35 percent under current law. In addition, exceptions to the normal tax rules (e.g., deductions, exclusions, and credits) can have the effect of lowering the overall tax rate actually imposed to a rate that is less than the statutory rate. Thus, there is a difference between the statutory tax rate imposed on business income and the effective tax rates that the small business (and its owners) may face. Effective tax rates provide a more accurate picture of how taxes are imposed on small business owners than statutory tax rates.

This research attempts to calculate the average effective tax rates faced by small businesses as a result of federal income taxes. The research explores how these effective tax rates vary depending upon the form of doing business (e.g., sole proprietorship, partnership, corporation, etc.), industrial classification, and business size. The research also examines the impact of special provisions in the federal tax laws that apply only to small businesses.

The primary methodological approach employed for purposes of this study is a microsimulation model in which aggregate (macro) outcomes are simulated “from the bottom up” by calculating tax liabilities at the entity level. This modeling framework is supported by use of the Public Use Statistics of Income (SOI) microdata file prepared annually by the Internal Revenue Service. The SOI data files are augmented with statistical imputations to trace the ultimate tax burden with respect to pass-through entities that do not pay federal income taxes directly.

The research detailed in this paper is limited to the effective tax rates imposed on small businesses by federal income taxes, due to the complexity of the analysis required for this study. This research could be extended to explore the effect of other federal taxes, such as federal estate taxes, excise taxes, employment taxes, and state and local government taxes to provide a better picture of the overall effect of taxes on small business in the United States.

## I. EXECUTIVE SUMMARY

This study provides a comprehensive look at the effects of the federal income tax system on small businesses in the United States.<sup>1</sup> This is accomplished by combining data contained on federal income tax returns of corporations and individuals and utilizing an integrated methodological framework that allows for a comparison of the effects of these taxes across different taxpayer groups.

The study explores the effective tax rates imposed by the federal income tax system on small businesses organized as sole proprietorships, partnerships, limited liability companies (LLCs), S corporations, and C corporations. For this purpose, the study uses the following data sources from the IRS Statistics of Income Public Use Files:

- For sole proprietorships, Form 1040, Schedule C (individual income tax return, schedule of profit and loss from business);
- For partnerships, LLCs, and S corporations, Form 1040, Schedule E (individual income tax return, schedule of supplemental income and loss); and
- For C corporations, Form 1120 (corporation income tax return).

For classification purposes, the IRS defines small businesses as those entities with less than \$10 million of assets. For consistency, we use a modified threshold of \$10 million in gross receipts. Under this threshold, 26.8 million of the total 28.7 million business income tax returns filed in 2004 constituted nonfarm small business returns. Thus, for 2004, small business returns represented more than 93 percent of all business tax returns. Of these 26.8 million returns, 19.2 million were sole proprietorships, 2.3 million were partnerships (including LLCs), 3.3 million were S corporations, and 2.0 million were C corporations.

More than 50 percent of small businesses filing federal income tax returns in 2004 had gross receipts of less than \$25,000. More than 83.9 percent of the small businesses making less than \$25,000 were sole proprietorships. In fact, nonfarm sole proprietorships with gross receipts of less than \$25,000 represented 48.7 percent of all U.S. small businesses in 2004. Almost 88 percent of all small business tax returns filed in 2004 had gross receipts of no more than \$250,000.

Measuring the effect of federal income taxes on business income presents a complex task that can be approached in a variety of ways. While many people think of the statutory tax rate when they consider the effect of federal income taxes, the reality is that the statutory tax rate does not represent the best measure of the effect of taxes on a business. Instead, a better measure examines the effective tax rates that businesses face. There are two general measures of effective tax rates – average effective tax rates and marginal effective tax rates. Average effective tax rates provide a measure of the overall effect of taxes on business income, whereas

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<sup>1</sup> This study does not explore the effects of other federal taxes on small businesses, such as excise taxes, the payroll tax system, and estate and gift taxes. Theoretically, the research in this study could be expanded in the future to examine all federal taxes.

marginal effective tax rates generally measure the effect of taxes on a specific investment. This paper examines average effective tax rates.

An effective tax rate is usually calculated as the amount of tax paid by the firm as a fraction of net income or profit. Generally, the effective tax rate paid by a business will differ from the statutory rate because of the effect of the graduated rate structure and the deductions or credits that are allowed. Effective tax rates can also be affected because the statutory incidence of a tax may not reflect who ultimately bears the burden of the tax.

Average effective tax rates can provide a useful measure of whether firms in similar circumstances pay similar levels of tax. More likely, though, when otherwise similar firms face markedly different effective tax rates, it usually suggests that one firm is utilizing special provisions in the tax law – provisions that may or not be available to other firms – that can serve to reduce taxes. Thus, average effective tax rates can theoretically offer a measure of how the form of doing business, such as a corporation or sole proprietorship, affects the overall federal income tax burden. In addition, average effective tax rates can be used to examine the effects of federal income taxes in other ways, such as whether one industry faces more or less tax than another industry or how business size affects average effective tax rates.

Small businesses in the United States pay an estimated average effective tax rate of approximately 19.8 percent.<sup>2</sup> The analysis in this study found that, of the entities subject to federal income tax at the business owner level, small business sole proprietorships face the lowest average effective tax rate at 13.3 percent. Small business partnerships face an average effective tax rate of 23.6 percent, and small business S corporations face an average effective tax rate of 26.9 percent. These calculations include only those entities with positive net income for the 2004 tax year.

Small business C corporations, on the other hand, face an average effective tax rate of 17.5 percent. However, the calculations for C corporations are conceptually different than those for other entity types and, thus, are not directly comparable. First, due to data constraints, the effective tax rate calculations for C corporations do not capture the salaries paid by C corporations to their owners. Because salaries paid to C corporation owners will generally be deductible by the C corporation (to the extent they constitute reasonable compensation for services), the effective tax rate of the corporation can be reduced by these payments, but the federal income tax payments by C corporation owners on these salary amounts are not captured in the calculations.<sup>3</sup> On the other hand, income received by owners of sole proprietorships and

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<sup>2</sup> Based on the imputations from the Quantria Strategies, LLC Individual Income Tax Model using the 2004 IRS Statistics of Income Individual Income Tax Public Use File and tabulations of selected cell-based data on the net income and taxes of C corporations from the IRS 2004 Corporation Source Book. The Individual Income Tax Public Use File captures the federal income taxes attributable to business activities of sole proprietors, partnerships, and S corporations, while the Corporation Source Book permits an approximation of the federal income taxes of C corporations.

<sup>3</sup> C corporations are permitted a current deduction for amounts paid as reasonable compensation to shareholders who are also employees of the corporation.

pass-through entities generally is not deductible and is reflected in the effective tax rate calculation.

Second, the profits of C corporations are distributed to shareholders in the form of dividends and capital gains that are taxable to the individual owner. However, the existing data do not allow the tracing of C corporation dividend payments to specific owners for the purpose of calculating the effective tax rate attributable to these corporate distributions.

Some of the variation in effective tax rates by entity type can be traced to the legal form of organization of the businesses. For example, nearly 60 percent of all small business sole proprietorships have net income of less than \$10,000 and an average effective tax rate of 8.1 percent and only 3.1 percent have net income of at least \$100,000. On the other hand, 30.8 percent of S corporations have net income less than \$10,000 and more than 18 percent have net income of at least \$100,000.

Variations in effective tax rates can also occur depending upon the industry in which the business is conducted. Some of these variations will occur because of the differences in the way the businesses are conducted. For example, a manufacturing business will likely generate bigger business deductions than a service industry business. In addition, there are a variety of special tax provisions applicable to small businesses for federal income tax purposes.<sup>4</sup> These provisions often provide a special tax benefit for small businesses in a specific industry. For the affected taxpayers, these provisions can have a significant effect on effective tax rates. However, because the scope of these provisions is often quite narrow, their overall impact on the average effective tax rates of small businesses will likely be quite small. Because the Individual Income Tax Public Use File does not provide industry specific data, this study imputes the industry of the taxpayer to provide a suggestion of how effective tax rates may vary by industry group (see Section VII for more detail).

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<sup>4</sup> Appendix B provides a listing of these special tax provisions.

## II. OVERVIEW

Federal income taxes represent some of the most significant costs of doing business for most U.S. companies. In addition to these direct costs – measured by the amount of tax liability that is owed – taxes can impose indirect costs as well by altering business decisions that firms may make. These business decisions can be fundamental to the operation of the company: deciding whether to invest in new equipment, hiring new employees, and the choice of organizational structure. Small businesses often face competitive disadvantages in U.S. and world markets because they lack the economies of scale that large businesses have, and they have less access to the capital markets. Small businesses may face an additional disadvantage to the extent that the federal tax system affects small businesses differently than large businesses.

In the United States, the federal income tax is imposed on the taxable income of corporations, individuals, and trusts. Taxable income is a business' gross income minus business deductions. The federal income tax is progressive, meaning that the statutory rate of tax increases as taxable income increases.

Very little is known about the true effect of federal taxes on small businesses because the data necessary to calculate these effects is difficult to obtain in a consistent and reliable manner. In addition, because the form of doing business affects the overall federal income taxes paid, and because small businesses interact with the federal tax system in a variety of other ways (such as through the payroll tax system), the overall tax burden that small businesses face is often not transparent.

As a first step in tackling this problem, this study provides a comprehensive look at the effects of the federal income tax system on small businesses in the United States.<sup>5</sup> This is accomplished by combining data contained on federal income tax returns of corporations and individuals and utilizing an integrated methodological framework that allows for a comparison of the effects of these taxes across different taxpayer groups. We believe that this is the first empirical study of this type.

Measuring the effect of federal income taxes on business income presents a complex task that can be approached in a variety of ways. While many people think of the statutory tax rate when they consider the effect of federal income taxes, the reality is that the statutory tax rate does not represent the best measure of the effect of taxes on a business. Instead, a better measure examines the effective tax rates that businesses face. There are two general measures of effective tax rates – average effective tax rates and marginal effective tax rates. Average effective tax rates provide a measure of the overall effect of taxes on business income, whereas marginal effective tax rates generally measure the effect of taxes on a specific investment. In this paper, we examine average effective tax rates.

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<sup>5</sup> This study does not explore the effects of other federal taxes on small businesses, such as excise taxes, the payroll tax system, and estate and gift taxes. Theoretically, the research in this study could be expanded in the future to examine all federal taxes.

Effective tax rates faced by businesses are usually interpreted as the actual tax rates paid by firms. An effective tax rate is usually calculated as the amount of tax paid by the firm as a fraction of income or profit. Generally, the effective tax rate paid by a business will differ from the statutory rate because of the effect of the graduated rate structure and the deductions or credits that are allowed. Effective tax rates can also be affected because the statutory incidence of a tax may not reflect who ultimately bears the burden of the tax.

Average effective tax rates can provide a useful measure of whether firms in similar circumstances pay approximately the same level of tax. More likely, though, when otherwise similar firms face markedly different effective tax rates, it usually suggests that one firm is utilizing special provisions in the tax law – which may not be available to other firms – to reduce taxes. Thus, average effective tax rates can theoretically offer a measure of how the form of business, such as a corporation or sole proprietorship, affects the overall federal income tax burden. In addition, average effective tax rates can be used to examine the effects of federal income taxes in other ways, such as whether a particular industry faces greater or lesser federal income taxes relative to another industry or how business size affects average effective tax rates.

However, calculating the effective tax rate paid by small businesses in the United States can be difficult and imprecise for a variety of reasons. First, the effective tax rate will be calculated differently depending upon the form of business. There are five common organizational structures that a small business may choose – a C corporation, an S corporation, a partnership, a limited liability company, and a sole proprietorship. For federal income tax purposes, a C corporation is subject to two levels of federal income tax – the C corporation pays tax directly on its taxable income, and the owners of the corporation are also subject to federal income tax on the business gains that they receive in the form of dividends and capital gains. All other forms of small businesses are called “pass through” entities and are not subject to an entity-level federal income tax; instead, the income of the business is passed through to the owners of the business and taxed on their individual income tax returns. Most limited liability companies are treated as partnerships for federal income tax purposes; a very small fraction of these entities are treated as sole proprietorships.

For purposes of calculating effective tax rates, in the case of a corporation, the effective tax rate should take into account not only the federal income taxes paid directly by the corporation, but also the federal individual income taxes paid on corporate dividends distributed to shareholders and the income taxes paid by the individual owners of corporate equities when they realize their capital gains.<sup>6</sup>

Measuring effective tax rates can also be difficult because there are a variety of deductions, exclusions, and credits that potentially affect the effective tax rate paid by small businesses.

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<sup>6</sup> In addition, in the case of small corporations, the owner of the business may attempt to withdraw business profits in the form of compensation for his or her services for the business. Corporations are allowed to deduct their ordinary and necessary business expenses, which include compensation expenses, from their gross income. Thus, reasonable compensation paid by a corporation reduces the taxable income subject to the federal corporate income tax. While there are rules that are intended to prevent owners of small corporations from receiving “unreasonable compensation” as a way of avoiding corporate income taxes, the determination of what constitutes unreasonable compensation can be difficult to make and more difficult to police. This study does not attempt to measure the extent to which corporate profits are paid and taxed to a small business owner as compensation for services.

Some of these provisions are specifically intended for small businesses, whereas other provisions are available to all businesses irrespective of size. Cataloguing the numerous federal income tax provisions that may affect a business's effective tax rate and calculating the extent to which such provisions are utilized is a challenging task.

Finally, some small businesses may be involved in multinational operations, which presents unique problems because the business may be eligible for foreign tax credits. These credits will affect the U.S. federal effective tax rate and may distort the business' overall effective tax rate if the taxes paid to foreign governments are not considered. However, the vast majority of multinational business operations are conducted by large corporations and attempting to consider the effects of these operations with respect to U.S. small businesses is outside the scope of this research.

This study relies on information from several publicly available sources to calculate the effective federal income tax rate faced by small businesses by tracing income to its eventual, taxable destination. In addition, the study examines what provisions in the tax law are most effective in helping small businesses reduce their taxes.

Microsimulation is utilized as the primary methodological approach in calculating effective tax rates. In microsimulation, aggregate tax liabilities are calculated "from the bottom up," by calculating the individual tax liabilities of the constituent economic units and summing these units to arrive at an economy-wide total. To calculate these effective rates, publicly available, micro-level data on individual taxpayers is utilized together with a sophisticated software program that allows the calculation of these rates separately for the basic taxpayer entity types.

In the case of small businesses that are not subject to an entity-level tax, the pass-through nature of the small business income is explored to calculate the actual tax rates faced by the owners of the businesses. This is accomplished by examining publicly available tax return information that identifies income from partnerships and S corporations separately. The tax return data also provides information that permits the calculation of effective tax rates incurred by sole proprietorships. For small businesses that are organized as corporations (other than S corporations), detailed tabulations of corporate income, deductions and taxes made available by the Internal Revenue Service (IRS) are utilized.

The following sections provide an overview of small businesses in the United States (Section III), review the relevant literature to date on the tax burden facing small businesses (Section IV), provide an overview of the federal income tax system and its impact on small businesses and their owners (Section V), summarize the methodological approach to measuring effective tax rates of small businesses (Section VI), and present the principal findings of the research across various taxpayer groups delineated by entity type, size, and industry (Section VII). Appendix A provides a technical description of the methodology utilized in the study, and Appendix B contains a list of special provisions of the federal income tax law system that are applicable to small businesses.

### **III. SMALL BUSINESSES IN THE UNITED STATES**

Small businesses constitute an essential element of the U.S. economy. Approximately 30 million small businesses operate in the United States, making up the vast majority of employer firms in the country. Collectively, these small businesses employ nearly 80 million workers or approximately half of all private sector employees.

A balanced mix of large and small businesses contributes to the health of the U.S. economy. While large businesses can achieve economies of scale, have broader reach, and are better able to diversify risks, small businesses benefit from greater flexibility, fewer bureaucratic controls, and the ability to provide unique products and services to niche markets. Some industries tend to be dominated by small businesses, while others are more likely to be dominated by large businesses.

#### ***Identifying Small Businesses***

The standard of what constitutes a small business for data collection purposes varies depending upon the use of the data. For example, there are different definitions of small businesses for federal contracting purposes and federal tax purposes. There is no uniform and consistent definition; rather, different definitions may be based on the (1) number of employees, (2) business receipts, or (3) business assets.

For research purposes, the SBA Office of Advocacy often defines a small business as an independent business that has fewer than 500 employees. Other, more specific, small business size standards have been developed by the SBA for federal contracting purposes. These standards are based on business receipts, number of employees, or total assets. For example, many types of farming use a threshold of \$750,000 of gross receipts to define a small business. Many manufacturing businesses have a size standard of less than 500 employees. Some financial institutions, like commercial banks, have an asset threshold (\$175 million).

Special small business provisions also apply for federal tax purposes.<sup>7</sup> These provisions typically apply based either on gross receipts or number of employees. In addition, some federal tax provisions, such as the provision that permits a limited dollar amount of equipment purchases to be expensed, rather than depreciated, have the effect of providing a benefit to small businesses because of the way in which they are typically structured.

For classification purposes, the IRS generally considers a business small if it has total assets of less than \$10 million. The standard used in this study is less than \$10 million in gross receipts.

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<sup>7</sup> Appendix B contains a list of the special small business provisions contained in the Internal Revenue Code of 1986.

## ***Data on Small Businesses in the United States<sup>8</sup>***

Federal income tax returns filed by businesses provides a wealth of information about businesses operating in the United States. Some of this information is presented below. In order to assure the confidentiality of information contained on administrative tax returns, however, data items in the Public Use File are rounded and often masked or blurred to prevent identification. As such, each individual tax record is only suggestive of an actual tax return filed.

Business organization can take several forms – the choice of business form affects both the application of the federal income tax system as well as the application of state laws relating to the liability of business owners. Among the possible business forms that can be used are the following:

- **Sole Proprietorships.** A sole proprietorship is a business that has one owner and does not have stock.
- **Partnerships.** A partnership is a group of entities (e.g., individuals or businesses) that organize to do business together. Each partner contributes money, property, labor, or skill and shares in the profits of the business.
- **C Corporations.** C corporations are formed when prospective shareholders exchange money, property, or both in exchange for capital stock of the corporation. The return on a shareholder's investment in a C corporation is paid either through dividends or through the capital gains that are realized when the shareholder sells his or her stock in the corporation.<sup>9</sup>
- **S Corporations.** S corporations are small business corporations that are afforded the benefits of limited liability like C corporations, but can elect to be treated as a pass-through entity for federal income tax purposes.
- **Limited Liability Company (LLC).** Limited liability companies are relatively new business structures that are authorized under state law. Owners of an LLC, like a corporation, have limited personal liability, but other features of an LLC function more like a partnership, such as the flow-through treatment of LLC owner income. Most LLCs are treated as partnerships for federal tax purposes, although a very small percentage of

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<sup>8</sup> The most recent publicly available data on the IRS Statistics of Income website generally is 2005. However, the most recent publicly available micro (or firm or entity level) data is 2004. In order to be consistent with the micro data, the 2004 aggregate data is used in this section.

<sup>9</sup> We will point out at the outset that the rates computed for C corporations in this analysis are not comparable to those borne by other forms of organization. This is due to two key factors: first, existing data do not allow taxes on salary payments to be traced to the owners; and second, the data also do not allow the capture of taxes paid on corporate income distributed to shareholders in the forms of dividends and capital gains.

LLCs are treated as sole proprietorships.<sup>10</sup> Some separate information concerning LLCs is provided in this section. However, for purposes of the effective tax rate calculations later in this study, LLCs are included in either the sole proprietorship or partnership calculations based on whether they file as a sole proprietorship or partnership for federal income tax purposes.

The most prevalent form of business in the United States is the sole proprietorship. In 2004, 20.6 million nonfarm sole proprietorships filed with the IRS, compared to 2.0 million C corporations, 3.5 million S corporations, and 2.5 million partnerships (including returns of LLCs) for a total of 28.7 million nonfarm business returns filed.

Using the threshold of \$10 million in gross receipts, 26.8 million of the 28.7 million returns filed in 2004 constituted nonfarm small businesses; these returns represented more than 93 percent of all business tax returns. Table 1 shows the breakdown of small businesses in the United States by entity type for 2004.

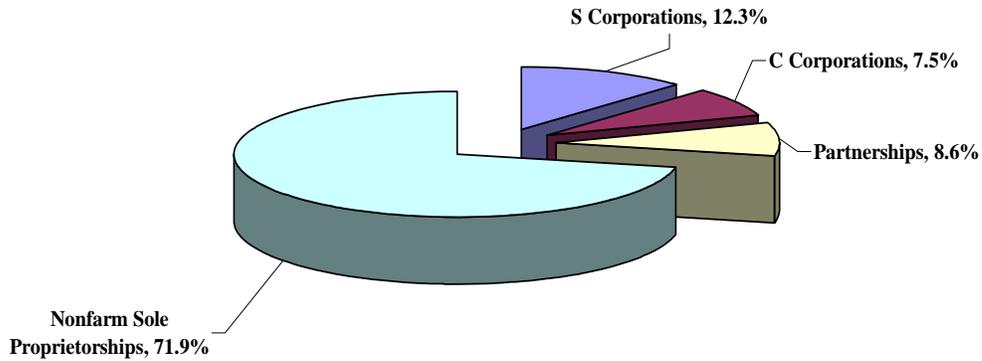
<b>Table 1 – Number of Small Businesses by Entity Type, 2004</b>	
<b>Entity Type</b>	<b>Number</b>
C Corporation	2.0 million
S Corporation	3.3 million
Partnership (including LLCs)	2.3 million
Nonfarm Sole Proprietorship	19.2 million
<b>Total Nonfarm Small Businesses</b>	<b>26.8 million</b>
Source: IRS Statistics of Income	

Graph 1 shows the percentage distribution of small businesses by entity type for 2004. Sole proprietorships account for 71.7 percent of all small businesses in the United States. While some sole proprietors can have sufficient numbers of employees or gross receipts to qualify as a large business, most sole proprietorships in the United States (19.2 million of the total 20.6 million sole proprietorships or 93.2 percent) are small businesses.

<sup>10</sup> A single person LLC whose sole owner is an individual files an individual income tax return with Schedule C, E, or F. A single person LLC whose sole owner is a corporation includes its income and expenses on the corporation's tax return.

### Graph 1 Distribution of Small Business Entities by Type, 2004

Source: IRS Statistics of Income



### *Growth of Businesses by Entity Type Over Time*

Since 1995, the number of business tax returns filed by C corporations and farms has declined. On the other hand, there has been significant growth in the number of sole proprietorships, limited liability companies, and S corporations filing business tax returns. Table 2 shows the changes in the number of businesses in the United States by entity type since 1995.

**Table 2 – Number of Businesses by Entity Type, 1995-2005  
(in thousands)**

<b>Year</b>	<b>Sole Props<sup>1</sup></b>	<b>C Corps</b>	<b>S Corps</b>	<b>Partnerships<sup>2</sup></b>	<b>LLCs<sup>3</sup></b>	<b>Farms</b>	<b>Total</b>
1995	16,424	2,321	2,153	1,462	119	2,219	24,698
1996	16,955	2,327	2,304	1,433	221	2,188	25,429
1997	17,176	2,258	2,452	1,410	349	2,161	25,806
1998	17,398	2,261	2,588	1,359	496	2,092	26,194
1999	17,576	2,210	2,726	1,306	631	2,068	26,516
2000	17,903	2,185	2,860	1,287	771	2,087	27,092
2001	18,338	2,149	2,986	1,254	878	2,007	27,613
2002	18,926	2,112	3,154	1,208	1,034	1,995	28,429
2003	19,710	2,060	3,342	1,283	1,092	1,997	29,484
2004	20,591	2,040	3,518	1,188	1,359	2,005	30,700
2005	21,468	1,987	3,684	1,199	1,565	1,981	31,884

<sup>1</sup> Some sole proprietorship returns represent single member LLCs and these returns are included in the totals for sole proprietorships. For the years 2001-2005, there were the following numbers of sole proprietorships registered as LLCs: 126,437 (2001), 146,839 (2002), 220,615 (2003), 309,665 (2004), and 455,734 (2005).

<sup>2</sup> Does not include LLCs filing partnership returns.

<sup>3</sup> Prior to 1998, domestic limited liability partnerships were not separately identified on the partnership return. Thus, the total number of LLCs is understated for 1995-1997.

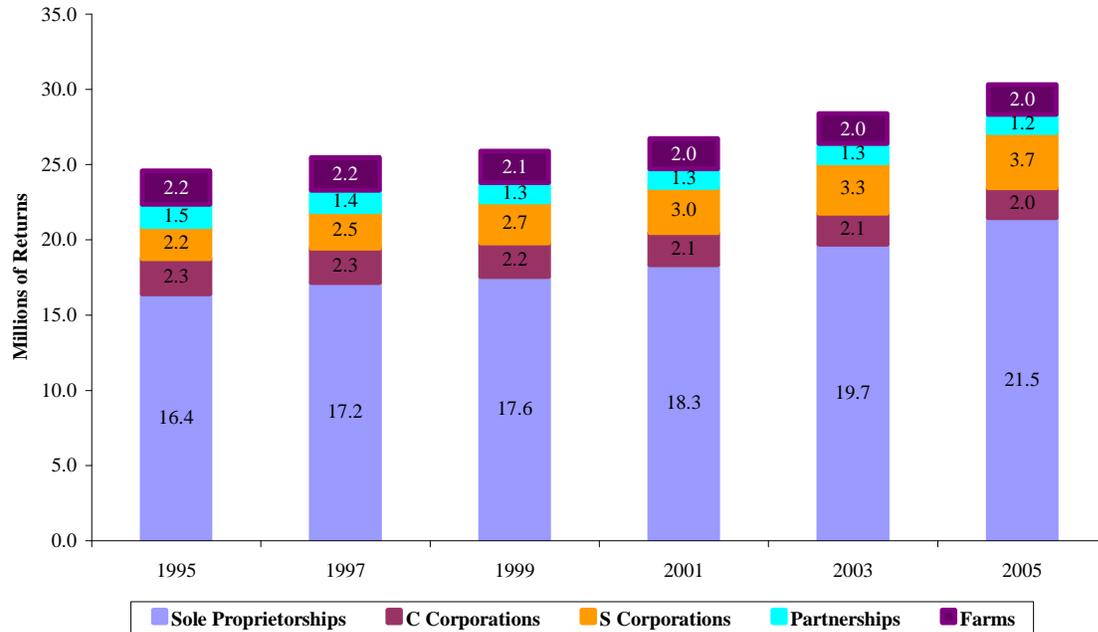
Source: IRS Statistics of Income.

Table 2 shows that, from the period 1995 to 2005, the total number of business income tax returns increased by 29.1 percent from 24.7 million to 31.9 million. The majority of the increase (5 million) represents increases in the number of sole proprietorships. In addition, LLCs and S corporations showed significant increases, from 119,000 to 1.6 million in the case of LLCs and from 2.2 million to 3.7 million in the case of S corporations. These increases are primarily attributable to changes in the law that made these forms of organization more attractive. The growth in LLCs can be attributed to changes in state laws that allowed the formation of limited liability companies and modifications to federal law to allow these entities to operate as pass-through entities like partnerships for federal income tax purposes. The increase in the number of S corporation returns is partly attributable to changes in the law that increased the number of S corporation shareholders and otherwise made it easier for corporations to qualify for S corporation status.

During the same 1995 to 2005 period, the number of C corporations declined from 2.3 million to 1.99 million, the number of returns of partnerships that were not LLCs declined from 1.5 million to 1.2 million, and the number of farm returns declined from 2.2 million to 1.98 million.

**Graph 2 Changes in Types of Business Income Tax Returns  
(Selected Years, 1995-2005)**

Source: IRS Statistics of Income



Graph 2 shows the changes in the number of business entities by business form from 1995 to 2005, for selected years. As the graph demonstrates, the upward trend in business income tax returns is substantially attributable to the increase in sole proprietorships.

### ***Small Business Gross Receipts Data***

While sole proprietorships are the dominant form of business in the United States, most sole proprietorships are very small. IRS data for 2004 shows the distribution of business entities by gross receipts (see Table 3). Of the 15.9 million small business returns with receipts less than \$25,000, 13.3 million (84 percent) were sole proprietorships. In fact, nonfarm sole proprietorships with gross receipts of less than \$25,000 represented 48.7 percent of all U.S. small businesses in 2004.

**Table 3 – Number of Small Businesses by Size of Business Receipts and Entity Type, 2004**

Size of Gross Business Receipts	All Small Businesses	Corporations		Non-Corporate Businesses	
		C Corp	S Corp	Partnerships	Nonfarm Sole Proprietorships
Less than \$25,000	15,872,235	450,597	829,112	1,284,396	13,308,130
\$25,001 to \$100,000	5,521,119	307,399	561,043	397,461	4,255,216
\$100,001 to \$250,000	2,578,962	328,012	601,851	262,423	1,386,675
\$250,001 to \$500,000	1,331,692	268,188	451,424	147,948	464,131
\$500,001 to \$1 million	932,913	247,385	375,165	110,698	199,666
\$1,000,001 to \$2.5 million	686,257	229,634	291,775	89,675	75,173
\$2,500,001 to \$5 million	263,212	103,484	107,685	36,829	15,213
\$5,000,001 to \$10 million	143,693	57,788	60,895	20,925	4,085
<b>Total</b>	<b>27,330,082</b>	<b>1,987,171</b>	<b>3,684,086</b>	<b>2,350,355</b>	<b>19,708,289</b>

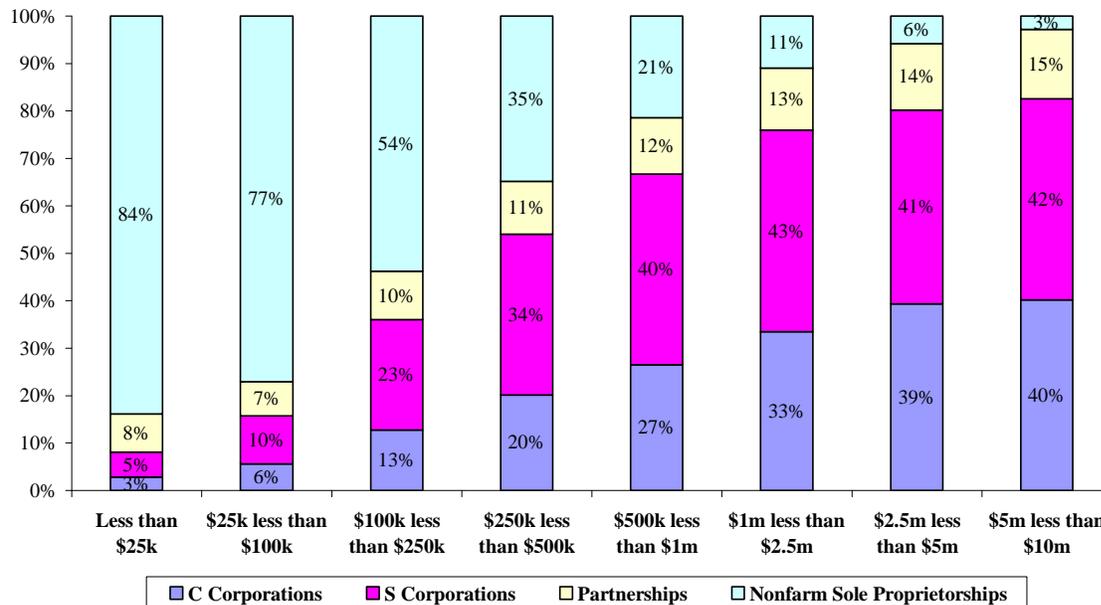
Source: IRS Statistics of Income.

Table 3 shows that about 58 percent of small businesses filing federal income tax returns in 2004 had gross receipts of less than \$25,000. Almost 88 percent of all small business tax returns filed in 2004 had gross receipts of no more than \$250,000. By contrast, only one-half of one percent of small businesses had gross receipts of more than \$5 million in 2004, and only 2.8 percent of these entities were sole proprietorships.

Another interesting aspect of these figures is that, for the smallest size class, the percentage of small businesses by entity type declines from sole proprietorship to partnership to S corporation to C corporation. The reverse is also true; C corporations and S corporations constitute a larger percentage of small businesses with gross receipts between \$5 million and \$10 million, while sole proprietorships constitute a small percentage of these businesses. Graph 3, below, shows that C corporations constitute 2.8 percent of small businesses with gross receipts under \$25,000, while they constitute 40.2 percent of small businesses with gross receipts between \$5 million and \$10 million. Sole proprietorships constitute 83.9 percent of small businesses with gross receipts of less than \$25,000 and only 2.8 percent of small businesses with gross receipts between \$5 million and \$10 million. Sole proprietorships become a consistently smaller percentage of small businesses as the gross receipts class increases and C corporations and S corporations become a consistently larger percentage of the total.

**Graph 3 Percentage Distribution of Business Firm Type by Gross Receipts, 2004**

Source: IRS Statistics of Income



A somewhat different picture emerges by examining the net income of small businesses. Table 4 shows the net income of small businesses in 2004 (excluding those with losses) by size of gross receipts and entity type.

Size of Gross Business Receipts	All Small Businesses	Corporations		Non-Corporate Businesses	
		C Corps	S Corps	Partnerships	Nonfarm Sole Proprietorships
Less than \$25,000	\$101,958	\$6,895	\$23,682	\$29,381	\$41,999
\$25,001 to \$100,000	102,216	2,196	7,578	13,033	79,410
\$100,001 to \$250,000	102,435	3,450	14,633	19,941	64,410
\$250,001 to \$500,000	76,935	3,543	17,698	18,303	37,391
\$500,001 to \$1 million	76,558	5,547	23,107	22,320	25,585
\$1,000,001 to \$2.5 million	86,431	9,620	33,836	29,996	12,979
\$2,500,001 to \$5 million	66,104	10,148	26,296	26,001	3,660
\$5,000,001 to \$10 million	70,947	15,771	22,184	31,070	1,923
<b>Total</b>	<b>\$683,585</b>	<b>\$57,169</b>	<b>\$169,015</b>	<b>\$190,045</b>	<b>\$267,356</b>

Source: IRS Statistics of Income

There is far less concentration of net income across size classes and entity types. For example, while the smallest size class (less than \$25,000 of gross receipts) represents about 58 percent of all small businesses; these businesses earn slightly less than 15 percent of net income. Likewise, in the largest size class (\$5,000,001 – \$10 million of gross receipts), the representative share of net income is 20 times the share of total small businesses. Across all size classes, the distribution of net income is much more uniform, with most size classes earning between 10 percent and 12 percent of total small business net income. More than half of small business income is earned by businesses organized either as partnerships or S corporations. This suggests that there may be benefits to a more complicated organization structure as the business grows. Interestingly, C corporations accrue only about 8 percent of total small business net income.

The distribution of small businesses varies significantly by industry. Some industries are better suited to the small business model, while other industries are better supported by larger more complex business structures. This occurs for a variety of reasons. For example, a larger business will have easier access to capital, which will be important to businesses in industries with large investments in plant and equipment. Similarly, an industry that benefits from having multiple locations may be better suited to a larger business structure. Table 5 summarizes information on the number of small businesses by entity type and industry.

Industry Classification (NAICS)	All Small Businesses	Corporations		Non-Corporate Businesses	
		C Corps	S Corps	Partnerships	Nonfarm Sole Proprietorships
Agriculture, Forestry, Fishing and Hunting	527,397	61,279	80,422	121,508	264,188
Mining	184,169	13,000	16,292	27,547	127,331
Utilities	19,774	5,308	2,908	2,029	9,528
Construction	3,289,119	221,581	438,968	137,485	2,491,084
Manufacturing	606,155	119,169	140,363	37,591	309,031
Wholesale and Retail Trade	3,793,927	385,271	538,693	165,985	2,703,978
Transportation and Warehousing	1,152,417	77,427	101,077	29,320	944,594
Information	414,601	51,178	65,733	30,788	266,901
Finance, Insurance & Real Estate	3,869,232	296,322	505,291	1,335,016	1,732,603
Professional, Scientific, Technical	3,720,574	265,667	531,765	170,370	2,752,772
Other Services	9,223,338	493,420	854,831	290,449	7,584,638
<b>Total, All Industries</b>	<b>26,800,703</b>	<b>1,989,62</b>	<b>3,276,342</b>	<b>2,348,088</b>	<b>19,186,649</b>

The largest concentration of small businesses is in the services industry (with 3.7 million in professional, scientific, technical and management services and 9.2 million in other services), which accounts for almost half of all small businesses. The service sector is generally more localized and better suited to the small business model. After services, the next largest concentrations of small businesses are in finance, insurance and real estate; wholesale and retail trade; and construction. No discernible trend appears to exist with respect to how companies are

organized across industries; however, a somewhat larger fraction of companies in the agriculture, construction, and manufacturing sectors are organized as C corporations than might be expected by their numbers.

### ***Small Businesses by Employment Levels***

While this study defines small businesses solely by reference to total receipts (i.e., total annual gross receipts of less than \$10 million), another way of looking at small businesses is by looking at employment size. Census survey data for 2005 and 2006 provide information on business size, total employment, and annual payroll, which is summarized in Table 6. This data includes businesses with at least one paid employee, but excludes self-employed individuals with no paid employees, employees of private households, railroad employees, agricultural production workers, and most government employees.

<b>Table 6 – Employment Size of Establishments, 2005 and 2006</b>						
<b>Employment Size of Establishment</b>	<b>Number of Establishments</b>		<b>Number of Employees</b>		<b>Annual payroll (\$million)</b>	
	<b>2005</b>	<b>2006</b>	<b>2005</b>	<b>2006</b>	<b>2005</b>	<b>2006</b>
All establishments	7,499,702	7,601,160	116,317,003	119,917,165	\$4,482,722	\$4,792,43
1 to 4 employees	4,119,363	4,137,018	6,880,381	6,932,206	272,716	286,987
5 to 9 employees	1,411,199	1,432,352	9,351,264	9,502,160	290,053	303,848
10 to 19 employees	937,617	964,024	12,642,173	12,994,803	407,124	429,877
20 to 49 employees	636,625	658,710	19,229,836	19,872,543	644,851	687,476
50 to 99 employees	219,324	227,125	15,072,272	15,631,618	532,558	572,096
100 to 249 employees	125,027	130,048	18,716,560	19,444,384	713,468	767,941
250 to 499 employees	31,834	32,704	10,874,791	11,171,950	462,769	495,646
500 to 999 employees	11,845	12,121	8,052,708	8,247,601	375,531	400,745
1,000 employees or more	6,868	7,058	15,497,018	16,119,900	783,653	847,812

Source: U.S. Department of Commerce, Bureau of the Census: County Business Patterns, 2005 and 2006.  
 Note: An establishment is a single physical location of a business. A single firm may have one or more establishments. The data include all operating establishments with one or more paid employees. The series excludes data on self-employed individuals, employees of private households, railroad employees, agricultural production employees, and most government employees.

The data show that there are approximately 7.5 million establishments with employees in the United States. Table 7 shows the percentage distribution of establishments in the United States for 2006, by establishment size. Nearly 90 percent of all establishments have fewer than 20 employees. Furthermore, 99.75 percent of all establishments have fewer than 500 employees. Of the approximately 120 million private sector employees in the United States in 2006, 80 percent worked for an establishment with fewer than 500 employees.

**Table 7 – Distribution of Establishments by Size, 2006**

<b>Employment Size of Establishment</b>	<b>Number of Establishments</b>	<b>Share of Total</b>	<b>Cumulative Share</b>
1 to 4 employees	4,137,018	54.4%	54.4%
5 to 9 employees	1,432,352	18.8%	73.3%
10 to 19 employees	964,024	12.7%	85.9%
20 to 49 employees	658,710	8.7%	94.6%
50 to 99 employees	227,125	3.0%	97.6%
100 to 249 employees	130,048	1.7%	99.3%
250 to 499 employees	32,704	0.4%	99.8%
500 to 999 employees	12,121	0.2%	99.9%
1,000 employees or more	7,058	0.1%	100.00%
All establishments	7,601,160	100.00%	100.00%

Source: U.S. Department of Commerce, Bureau of the Census: County Business Patterns, 2006.

In addition to the data concerning establishments by employment size, there are also a large number of U.S. businesses that are referred to as nonemployer entities; most of these entities are sole proprietorships. For 2006, approximately 21 million U.S. businesses did not have employees. These businesses had more than \$970 billion of receipts. Table 8 shows the number of establishments in the United States without employees for 2006 by business form.

**Table 8 – Nonemployer Businesses in the United States, 2006**

<b>Entity Form</b>	<b>Number of Entities</b>	<b>Receipts (\$million)</b>
All establishments	20,768,555	\$970,384
Corporations	1,353,461	166,145
Sole proprietorships	18,177,466	632,027
Partnerships	1,237,628	172,212

Source: IRS Statistics of Income.

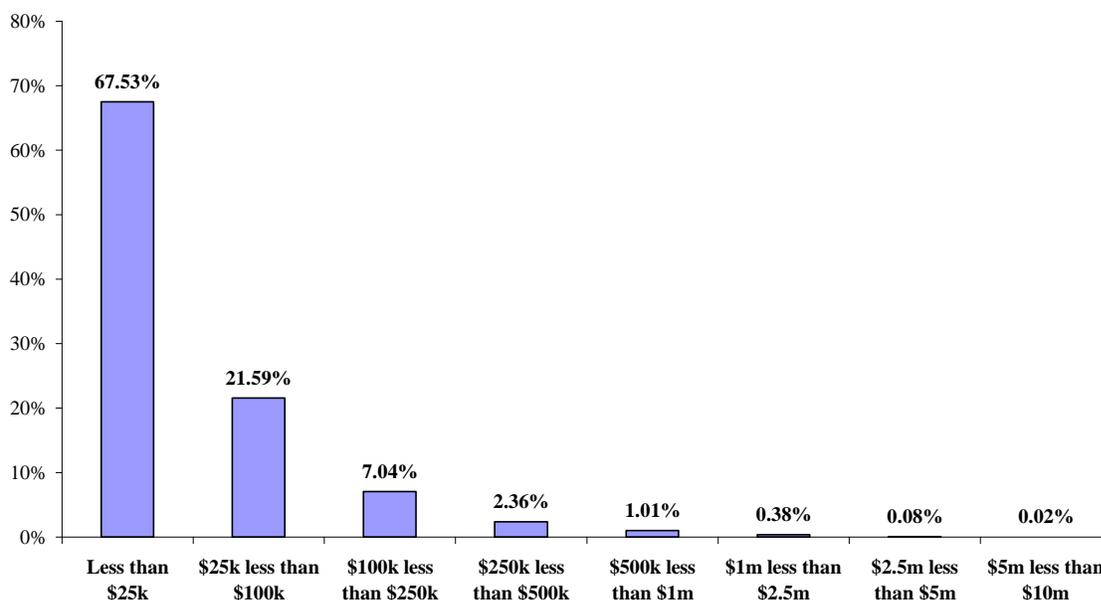
Statistics of Income data from the IRS enable a closer look at the specific types of business forms to glean additional information about businesses in the United States.

## Sole Proprietorships

For 2004, there were approximately 19.7 million individual income tax returns for nonfarm sole proprietorships in the United States, and 19.2 million of these returns were small businesses.<sup>11</sup> Graph 4 shows that 68 percent of the sole proprietorship returns filed in 2004 had gross receipts of less than \$25,000, and nearly 90 percent of these returns had gross receipts of less than \$100,000. The data confirm the commonly held view that sole proprietors are significantly more likely to be small businesses than other types of business entities.

**Graph 4 Percentage Distribution of Sole Proprietorships, by Gross Receipts, 2004**

Source: IRS Statistics of Income



Businesses in certain industries are more likely to be conducted through sole proprietorships. Businesses in the professional, scientific, and technical services industry (15 percent), construction (13 percent), retail trade (12 percent), and other services (11 percent) industries comprise over 50 percent of all businesses filing sole proprietorship returns. Table 9 summarizes 2004 sole proprietor return data by industry sector and shows the number of returns, total business receipts, total business deductions, and profits.

Sole proprietorships in some industries are more profitable than those in other industries. Among the more profitable industries, sole proprietorships in the professional, scientific, and technical services industry represented 15 percent of total returns, but had 23 percent of net income. Similarly, sole proprietorships in the real estate and rental and leasing industry had 6

<sup>11</sup> Approximately 450,000 of these returns were sole proprietorships registered as LLCs.

percent of total returns and 12 percent of net income. Sole proprietorships in the finance and insurance industry made up 3 percent of all sole proprietorship returns, but these businesses had 7 percent of total sole proprietorship net income. On the other hand, sole proprietorships in the retail trade industry represent 12 percent of all sole proprietorship returns, but these businesses had only 3 percent of all sole proprietorship net income.

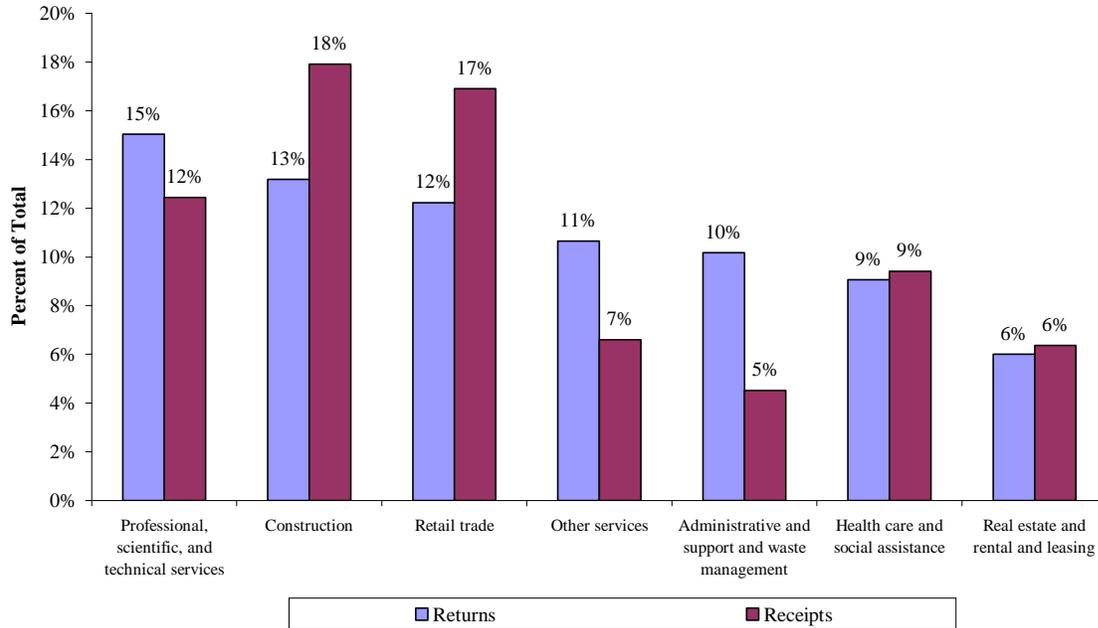
Average receipts for all sole proprietorships for 2004 were \$56,416, average deductions equaled \$44,080, and average net income equaled \$12,357.

<b>Industry Sector</b>	<b>Number of Returns (thousands)</b>	<b>Percent of Total</b>	<b>Total Business Receipts (\$million)</b>	<b>Percent of Total</b>	<b>Total Business Deductions (\$million)</b>	<b>Percent of Total</b>	<b>Profits (\$million)</b>	<b>Percent of Total</b>
<b>All nonfarm industries</b>	19,621	100%	\$1,106,934	100%	\$864,885	100%	\$242,449	100%
Construction	2,587	13%	198,364	18%	167,343	19%	31,038	13%
Manufacturing	351	2%	25,825	2%	22,901	3%	3,018	1%
Wholesale trade (merchant wholesalers)	351	2%	40,850	4%	35,735	4%	5,129	2%
Retail trade	2,399	12%	187,077	17%	179,018	21%	8,102	3%
Transportation and warehousing	983	5%	65,304	6%	56,584	7%	8,756	4%
Information	295	2%	8,044	1%	6,141	1%	1,902	1%
Finance and insurance	673	3%	73,126	7%	55,556	6%	17,599	7%
Real estate and rental and leasing	1,179	6%	70,504	6%	42,592	5%	27,907	12%
Professional, scientific, and technical services	2,951	15%	137,682	12%	80,934	9%	56,862	23%
Administrative and support and waste management	1,995	10%	49,987	5%	35,936	4%	14,075	6%
Educational services	474	2%	6,926	1%	4,471	1%	2,456	1%
Health care and social assistance	1,778	9%	104,159	9%	62,205	7%	41,963	17%
Arts, entertainment, and recreation	1,132	6%	26,359	2%	20,572	2%	5,793	2%
Accommodation & food services	384	2%	39,721	4%	38,338	4%	1,391	1%
Other services	2,089	11%	73,006	7%	56,560	7%	16,458	7%

Source: IRS Statistics of Income.

Graph 5, below, shows the 2004 business receipts for sole proprietorships for selected industry sectors. Businesses in three sectors – the construction; retail trade; and professional, scientific, and technical services fields – make up nearly 50 percent of all sole proprietorship receipts.

**Graph 5 Sole Proprietorship Returns and Receipts, as a Percentage of Totals, Selected Industries, 2004**  
 Source: IRS Statistics of Income



Data from the IRS provide information on the sources of business expenses for sole proprietorships. In 2004, sole proprietorships claimed a total of \$892.4 billion of deductions on individual income tax returns. Of these deductions, \$521 billion represented business expense deductions.

**Table 10 – Components of Nonfarm Sole Proprietorship  
Business Deductions, 2004\***

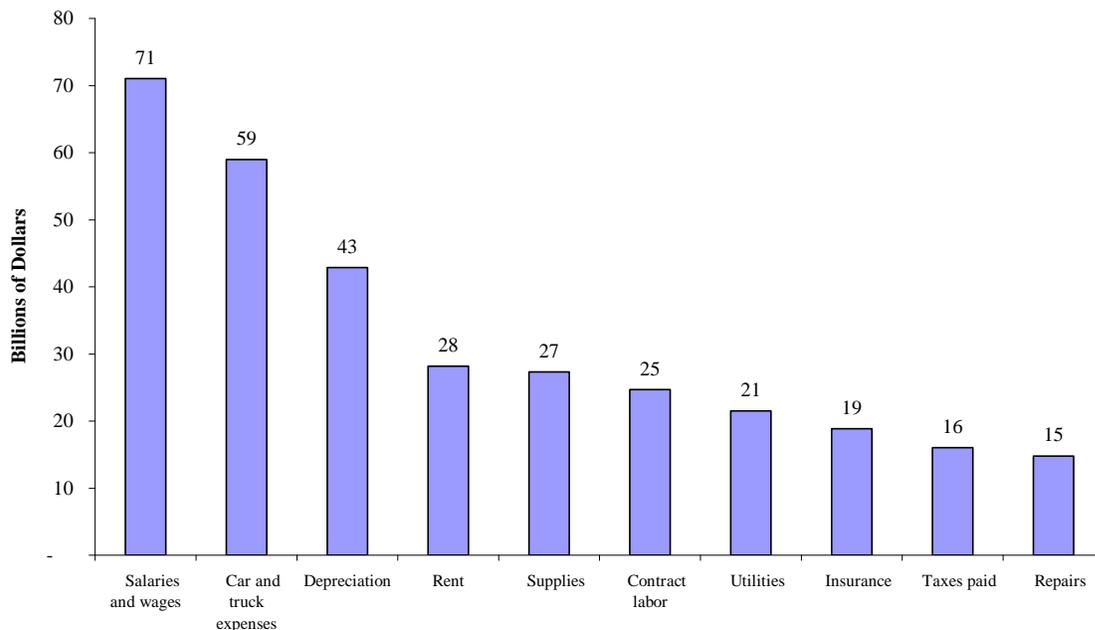
<b>Deduction Category</b>	<b>Total Amount (\$million)</b>	<b>Average Amount</b>
<b>Total Deductions</b>	\$892,402	\$43,340
Cost of Sales and Operations	370,951	18,015
Advertising expenses	12,888	626
Car and truck expenses	58,980	2,864
Commissions	13,267	644
Contract labor	24,687	1,199
Depletion	776	38
Depreciation	42,901	2,084
Employee benefit programs	2,618	127
Insurance	18,864	916
Legal and professional services	8,959	435
Meals and entertainment deducted	5,998	291
Mortgage interest	5,167	251
Other interest paid on business indebtedness	5,856	284
Office expenses	12,363	600
Pension and profit-sharing plans	1,202	58
Rent on machinery and equipment	8,728	424
Rent on other business property	28,139	1,367
Repairs	14,762	717
Supplies	27,303	1,326
Salaries and wages	71,069	3,451
Taxes paid	16,036	779
Travel	10,318	501
Utilities	21,477	1,043
Other business deductions	98,293	4,774
Home office business deductions	7,807	379

Source: IRS Statistics of Income.

\*Details in the table do not add to total deductions because the costs of sales and operations have been excluded from the table above. The costs of sales and operations include such items as inventory (beginning and end of year), cost of labor, purchases, and material supplies.

Graph 6 ranks the top business expense deductions claimed by sole proprietorships in 2004 for federal income tax purposes. Graph 6 shows that salaries and wages (\$71.1 billion for 2004) were the top business expense deduction for sole proprietorships, accounting for 13.5 percent of all sole proprietor business expense deductions, while car and truck expenses (\$59.0 billion) accounted for 11 percent of the total.<sup>12</sup> Depreciation deductions, which include amounts eligible for expensing under section 179 of the Internal Revenue Code, totaled \$42.9 billion in 2004.

**Graph 6 Top Deductions Claimed by Sole Proprietorships, 2004**  
Source: IRS Statistics of Income



### ***Partnerships and Limited Liability Companies (LLCs)***

Partnerships are unincorporated businesses organized by two or more persons (or entities, such as corporations) to carry on a trade or business. Each partner contributes money, property, skill, or labor to the partnership, and the partners share profits and expenses.

The following four primary types of entities are treated as partnerships for federal income tax purposes: (1) domestic general partnerships, (2) domestic limited partnerships, (3) domestic limited liability companies, and (4) domestic limited liability partnerships. There are a relatively small number of foreign partnerships and entities classified as other partnerships for data purposes. Table 11 summarizes the number of partnerships by type and by the net income or loss. Several years have been selected to show the change in the types of entities filing as partnerships over time.

<sup>12</sup> There was a substantial (20 percent) increase in the deductions claimed for car and truck expenses from 2004 to 2005. This increase could be partly attributable to increases in fuel costs.

**Table 11 – Number of Partnerships, by Type of Entity and Profit Status,  
Selected Years**

(Number of partnerships in thousands)

	1995	2000	2004	2005	Percent Change, 1995-2005
<b>Total Number of Partnerships<sup>1</sup></b>	1,581	2,058	2,547	2,764	74.8%
<b>Domestic General Partnerships</b>	1,167	872	725	729	-37.5%
Net Income	739	589	474	486	-34.2%
Loss	428	283	251	243	-43.2%
<b>Domestic Limited Partnerships</b>	295	349	403	414	40.3%
Net Income	157	215	245	255	62.4%
Loss	138	134	158	159	15.2%
<b>Domestic Limited Liability Companies</b>	119	720	1,270	1,465	1,131.1%
Net Income	60	385	632	746	1,143.3%
Loss	59	335	638	719	1,118.6%
<b>Domestic Limited Liability Partnerships</b>	n/a	53	89	100	n/a
Net Income	n/a	32	53	60	n/a
Loss	n/a	21	36	40	n/a

Source: IRS Statistics of Income.

<sup>1</sup>Summary data on foreign partnerships and other partnerships are excluded from the table. Therefore, the total number of partnerships exceeds the sum of the data in this table.

n/a = These types of partnerships were not separately identified on the partnership return, but their numbers are included in the total partnership returns.

Compared to the 21.5 million sole proprietorships in the United States in 2005, there were only 2.8 million partnerships (including LLCs). The data show that the growth in the total number of partnership returns is substantially related to the growth in the number of limited liability companies. From 1995 to 2005, the total number of limited liability companies grew more than 1,000 percent, from 119,000 returns in 1995 to 1.5 million returns in 2005. This growth is primarily attributable to changes in state and federal laws in the 1990s that permitted the formation of limited liability companies, allowing business owners the limited liability protection of a corporation without the burden of corporate income tax.

Partnerships tend to be more prevalent in certain industries. Table 12 shows the percentage of all domestic partnerships, percentage of total business receipts, percentage of business deductions, and percentage of net income of domestic partnerships by industry sector. This data includes domestic general partnerships and domestic limited partnerships. While partnerships in the finance and insurance sector account for approximately 11 percent of all domestic partnerships, they have 18 percent of the net income of all domestic partnerships. Real estate and rental and leasing partnerships account for 50 percent of all partnerships but only about 5 percent of the net income of such partnerships. Partnerships in the manufacturing sector account for only about 2 percent of all domestic partnerships, but have about 18 percent of the net income.

**Table 12 – Partnerships, Returns by Industry Sector, 2004**

<b>Industry Sector</b>	<b>Number of Returns (thousands)</b>	<b>Percent of Total</b>	<b>Total Business Receipts (\$million)</b>	<b>Percent of Total</b>	<b>Total Business Deductions (\$million)</b>	<b>Percent of Total</b>	<b>Profit (\$million)</b>	<b>Percent of Total</b>
All nonfarm partnerships	2,547	100%	\$2,571,776	100%	\$2,568,528	100%	\$183,158	100%
Construction	155	7%	226,165	9%	213,472	8%	18,351	10%
Manufacturing	43	2%	616,213	24%	595,370	23%	33,033	18%
Wholesale trade	43	2%	357,070	14%	352,250	14%	9,763	5%
Retail trade	136	6%	281,853	11%	286,785	11%	1,550	1%
Transportation and warehousing	34	1%	71,204	3%	70,996	3%	4,689	3%
Information	35	1%	178,121	7%	186,105	7%	1,639	1%
Finance and insurance	269	11%	149,980	6%	199,869	8%	32,741	18%
Real estate and rental and leasing	1,180	50%	117,900	5%	131,581	5%	9,254	5%
Professional, scientific, and technical services	164	7%	231,711	9%	189,299	7%	54,159	30%
Administrative and support services	52	2%	52,851	2%	51,439	2%	3,158	2%
Education services	8	0%	3,084	0%	3,003	0%	148	0%
Health care and social assistance	57	2%	119,105	5%	110,459	4%	15,685	9%
Arts, entertainment, and recreation	45	2%	34,543	1%	40,871	2%	(1,450)	-1%
Accommodation and food services	91	4%	114,480	4%	119,556	5%	(104)	0%
Other services	58	2%	17,497	1%	17,471	1%	541	0%

Source: IRS Statistics of Income.

Note: Details may not add to total due to rounding.

Table 13 provides an overview of the sources of partnership business deductions in 2004.

<b>Table 13 – Components of Partnership Business Deductions, 2004</b>		
<b>Deduction Category</b>	<b>Total Amount (\$million)</b>	<b>Average Amount</b>
<b>Total Deductions</b>	<b>\$2,815,181</b>	<b>\$1,105,346</b>
Cost of goods sold	1,666,146	654,192
Salaries and wages	268,807	105,544
Guaranteed payments to partners	32,213	12,648
Rent paid	50,403	19,790
Interest paid	64,457	25,308
Taxes and licenses	42,114	16,536
Bad debts	12,771	5,014
Repairs and maintenance	15,515	6,092
Depreciation	90,231	35,428
Depletion	695	273
Retirement plans, etc.	7,947	3,120
Employee benefit programs	19,178	7,530
Net loss from other partnerships and fiduciaries	26,003	10,210
Farm net loss	3,792	1,489
Net loss, noncapital assets	2,201	864
Other deductions	512,706	201,308

Compared to sole proprietorships, with average deductions per entity of \$44,000, partnerships have average total deductions of \$1.1 million. This suggests that partnerships tend to be much larger entities than sole proprietorships. The top three business deductions for partnerships were salaries and wages, depreciation, and interest paid.

### ***S Corporations***

There were approximately 3.4 million S corporation tax returns filed in the United States during tax year 2004. Approximately 98 percent of these returns reported receipts under \$10 million and could be classified as small businesses.<sup>13</sup>

Table 14 provides additional details on S corporation returns by industry sector, including the number of returns, business receipts and deductions, and net income for each sector. Wholesale and retail trade comprised 18 percent of all S corporation returns filed in 2004. The professional, scientific, and technical services sector followed closely with 16 percent and the construction sector with 14 percent of S corporation returns. Real estate and rental leasing sector filed the next largest share with 12 percent of all returns.

<sup>13</sup> S corporation returns with receipts under \$10 million comprised nearly 70 percent of total S corporation receipts.

**Table 14 – S Corporation Nonfarm Returns, by Industry Sector, 2004**

Industry Sector	Number of Returns (thousands)	Percent of Total	Total Business Receipts (\$million)	Percent of Total	Total Business Deductions (\$million)	Percent of Total	Profit (\$million)	Percent of Total
<b>All Nonfarm Industries</b>	3,418	100%	\$4,553,288	100%	\$4,426,553	100%	\$273,464	100%
Construction	489	14%	696,960	15%	673,273	15%	38,916	14%
Manufacturing	151	4%	591,729	13%	567,207	13%	37,332	14%
Wholesale and retail trade	599	18%	1,956,730	43%	1,932,252	44%	58,074	21%
Transportation and warehousing	107	3%	138,167	3%	136,528	3%	6,196	2%
Information	71	2%	63,489	1%	61,260	1%	8,284	3%
Finance and insurance	142	4%	97,111	2%	94,416	2%	19,611	7%
Real estate and rental and leasing	395	12%	97,638	2%	93,711	2%	14,542	5%
Professional, scientific, and technical services	538	16%	295,285	6%	273,105	6%	33,220	12%
Holding companies	25	1%	6,697	0%	12,722	0%	6,717	2%
Administrative and support services	168	5%	159,368	4%	153,743	3%	10,685	4%
Education services	28	1%	12,781	0%	11,617	0%	1,510	1%
Health care and social assistance	226	7%	158,958	3%	143,890	3%	19,656	7%
Arts, entertainment, and recreation	83	2%	37,112	1%	36,024	1%	4,942	2%
Accommodation and food services	192	6%	153,186	3%	150,802	3%	8,728	3%
Other services	204	6%	88,077	2%	86,003	2%	5,052	2%

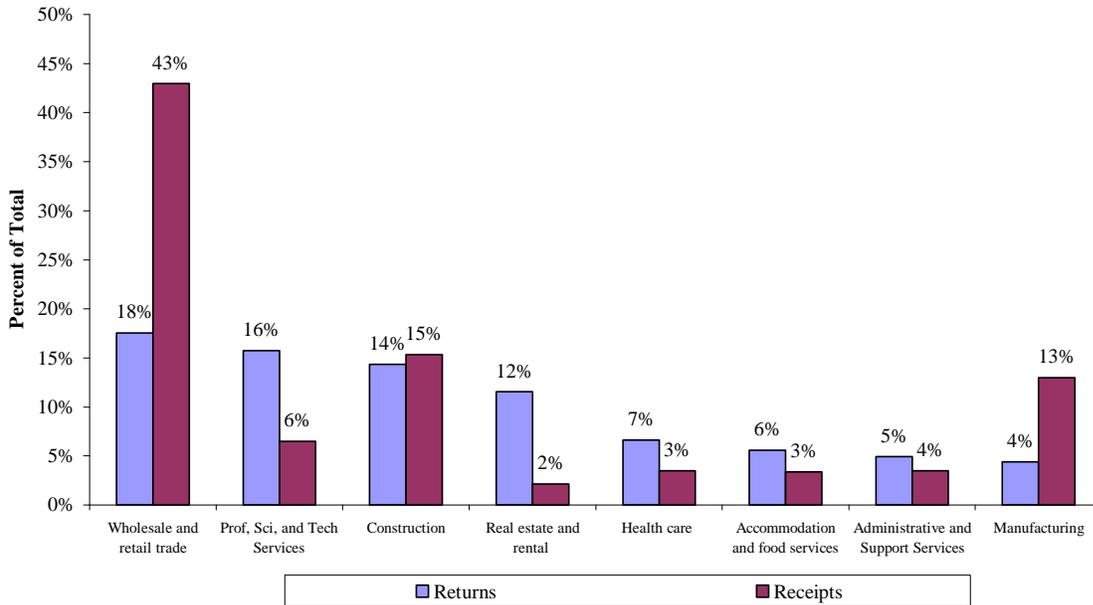
Source: IRS Statistics of Income.

As shown in Table 14, the percentage of total returns and percentage of total receipts displayed a consistent relationship across all S corporation sectors. However, there were a few noteworthy discrepancies. (Graph 7 shows S corporation receipts and returns as a percentage of total receipts and returns for selected industry sector.)

Wholesale and retail trade, while filing the greatest percentage of returns (18 percent), reported significantly more receipts with 43 percent of all S corporation receipts. Construction had 14 percent of returns and 15 of receipts. However, the professional, scientific, and technical services sector reported 16 percent of all returns and only 6 percent of receipts.

**Graph 7 S Corporations Returns and Receipts, as a Percentage of Totals, for Selected Industry Sectors, 2004**

Source: IRS Statistics of Income



The business deductions reported by S corporations varied from those reported by sole proprietors and partnerships. The average amount of deductions for sole proprietorships was approximately \$43,000 for 2004; the average for partnerships was \$650,000; and the average for S corporations was \$830,000. Overall, S corporations reported that the cost of goods sold was by far the largest business deduction, accounting for approximately 65 percent of total deductions. Compensation of officers and salaries and wages was a distant second; they comprised collectively about 15 percent of total deductions. Table 15 presents the total and average business deductions claimed by S corporations, and Graph 8 displays the top 10 deductions claimed by S corporations (other than cost of goods sold).

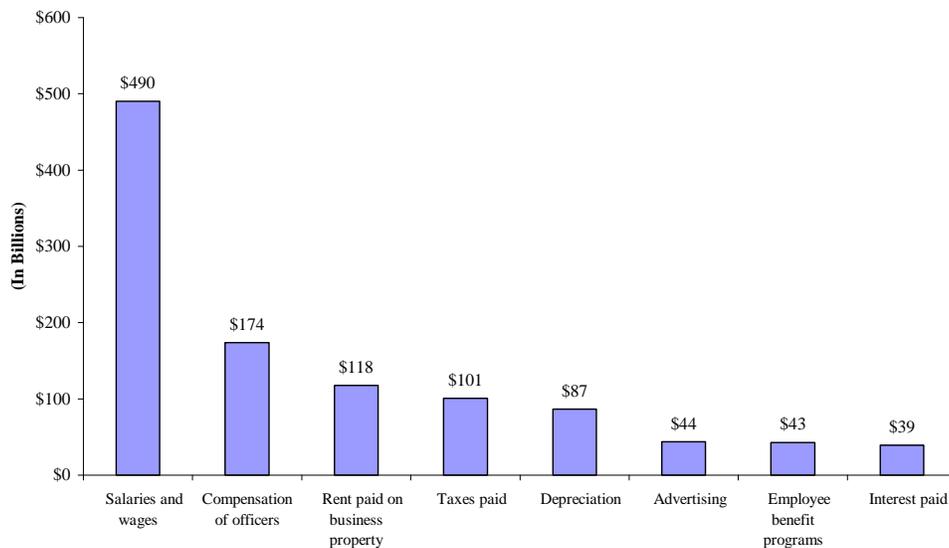
<b>Deduction Category</b>	<b>Total Amount (\$million)</b>	<b>Average Amount</b>
<b>Total deductions (all industries)</b>	\$4,518,457	\$1,284,260
Cost of goods sold	2,916,564	828,962
Compensation of officers	173,784	49,394
Salaries and wages	490,131	139,308
Repairs	28,546	8,114
Bad debts	9,654	2,744
Rent paid on business property	117,669	33,444
Taxes paid	100,563	28,583
Interest paid	39,141	11,125
Amortization	6,338	1,801
Depreciation	86,589	24,611
Depletion	504	143
Advertising	43,880	12,472
Pension, profit-sharing, stock, annuity	19,034	5,410
Employee benefit programs	42,819	12,170
Net loss, noncapital assets	1,021	290
Other deductions	442,221	125,691

Source: IRS Statistics of Income.

The remaining business deductions claimed by S corporations were smaller than those claimed for cost of goods sold and officers' and employee compensation.

**Graph 8 Top Deductions Claimed by S Corporations, 2004**

Source: IRS Statistics of Income



## C Corporations

There were approximately 2 million C corporation tax returns filed in the United States for the 2004 tax year. Approximately 97 percent of these filers reported receipts under \$10 million and could be classified as small businesses. Graph 9 shows the share of small C corporations as a percentage of all C corporations. It is important to note the dramatic difference between large and small C corporations. While the vast majority of C corporation returns were filed by small businesses, these small C corporations accounted for only 16 percent of total receipts. Consequently, using aggregate data provides more relevant information for large C corporations.

**Graph 9 Small C Corporations as a Percentage of All C Corporations, 2004**  
Source: IRS Statistics of Income

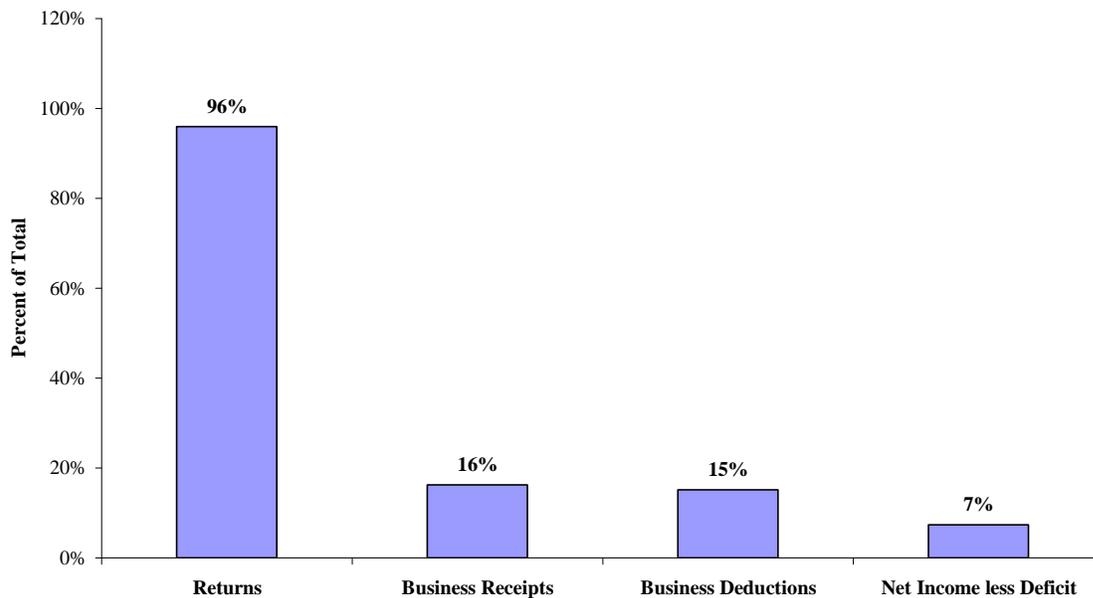


Table 16 provides additional details on C corporation returns by industry sector, showing the number of returns, business receipts and deductions, and net income for each sector. The largest concentration of C corporations were found in wholesale and retail trade (19 percent); professional, scientific, and technical services (16 percent); and construction (15 percent). The real estate (8 percent), health care (8 percent), and manufacturing (5 percent) sectors followed closely behind.

**Table 16 – C Corporation Returns by Industry Sector, 2004**

Industry Sector	Number of Returns (thousands)	Percent of Total	Total Business Receipts (\$million)	Percent of Total	Total Business Deductions (\$million)	Percent of Total	Profit (\$million)	Percent of Total
<b>All Nonfarm Industries</b>	3,021	100%	\$15,277,194	100%	\$16,288,207	100%	\$1,405,868	100%
Construction	440	15%	967,136	6%	924,628	6%	61,976	4%
Manufacturing	157	5%	4,804,013	31%	4,881,779	30%	367,100	26%
Wholesale and retail trade	584	19%	5,077,236	33%	5,003,864	31%	196,670	14%
Transportation and warehousing	100	3%	383,775	3%	377,002	2%	21,742	2%
Information	59	2%	590,366	4%	619,287	4%	75,717	5%
Finance and insurance	161	5%	1,527,842	10%	2,194,371	13%	395,631	28%
Real estate and rental and leasing	243	8%	151,837	1%	147,651	1%	27,734	2%
Professional, scientific, and technical services	472	16%	537,193	4%	507,021	3%	52,202	4%
Management of holding companies	19	1%	168,670	1%	594,217	4%	121,893	9%
Administrative and services	150	5%	282,964	2%	275,809	2%	18,432	1%
Educational services	25	1%	25,946	0%	23,645	0%	3,088	0%
Health care and social assistance	232	8%	325,953	2%	306,847	2%	29,172	2%
Arts, entertainment, and recreation	56	2%	46,053	0%	44,404	0%	6,480	0%
Accommodation and food services	143	5%	277,147	2%	281,412	2%	20,442	1%
Other services	180	6%	111,065	1%	106,269	1%	7,589	1%

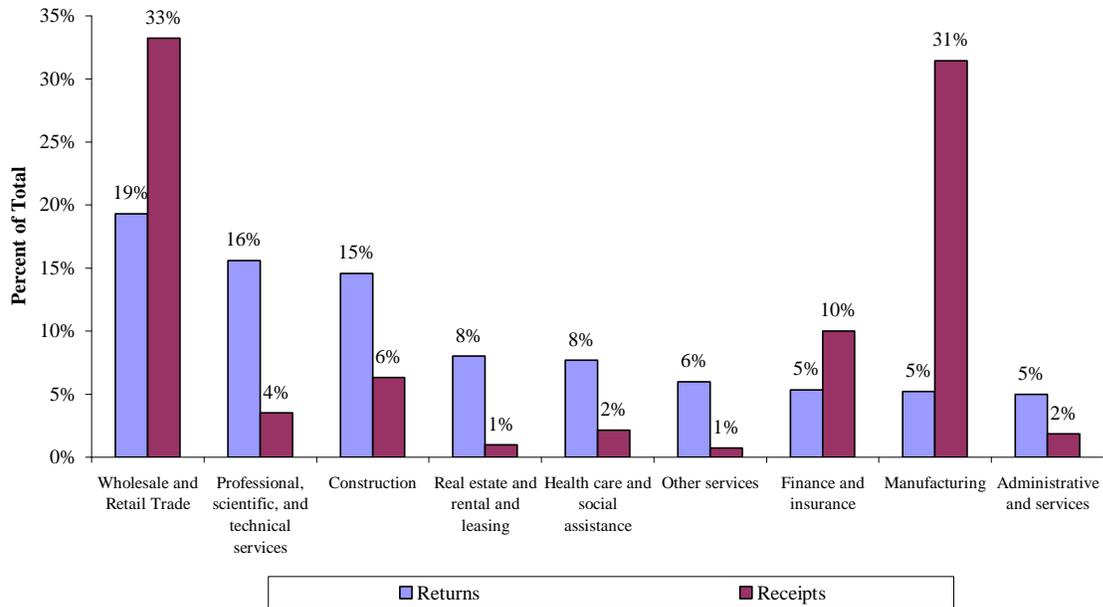
Source: IRS Statistics of Income.

Just as with S corporations, certain sectors of C corporations have an inverse relationship between returns and receipts. For instance, manufacturing reported only 5 percent of returns, but comprised 31 percent of all C corporation receipts. Refer to Graph 10 for C corporation returns and receipts distributed by industry sector.

While wholesale and retail trade comprised 19 percent of all returns, they reported 33 percent of all receipts. Conversely, the construction sector, with 15 percent of all returns, reported only 6 percent of total receipts. Similarly, the finance and insurance sector comprised only 5 percent of all returns but reported a 10 percent share of receipts.

**Graph 10 C Corporations Returns and Receipts, as a Percentage of Totals,  
for Selected Industry Sectors, 2004**

Source: IRS Statistics of Income



The business deductions reported by C corporations were similar to those reported by S corporations. Overall, the cost of goods sold was the largest business deduction for C corporations, accounting for approximately 63 percent of their total deductions. Similarly, compensation of officers and salaries and wages comprised collectively about 12 percent of total deductions as the next largest category of business deduction. However, unlike some of the other business types, one other category of business deduction – interest paid – was prominent for C corporations, comprising 5 percent of the total deductions.<sup>14</sup>

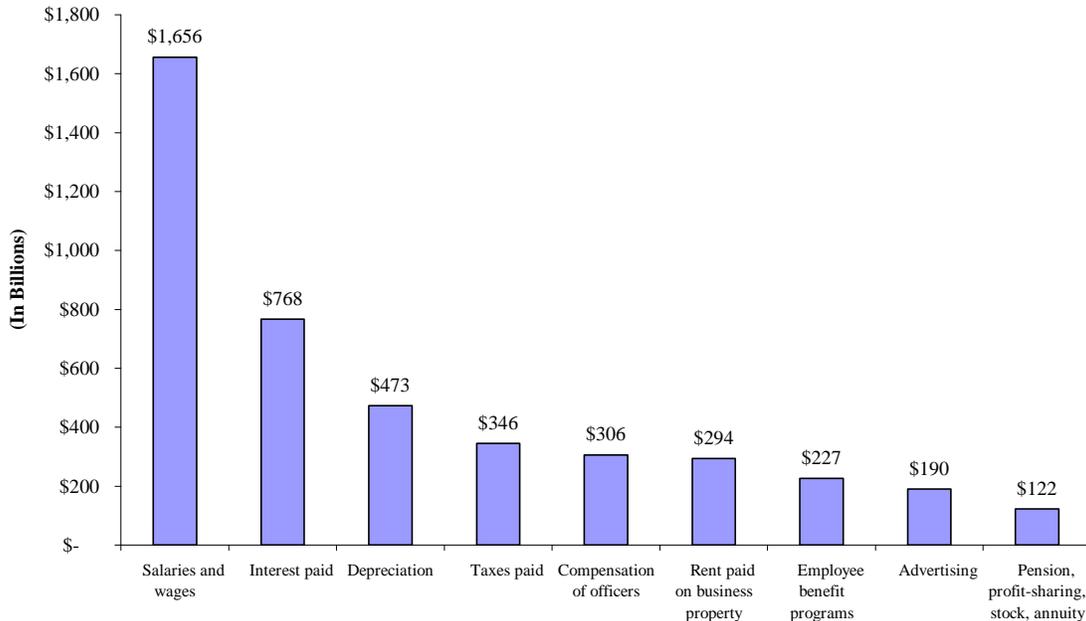
The business deductions claimed by C corporations were relatively smaller for the remaining business deduction categories. Table 17 presents the total and average business deductions claimed by C corporations and Graph 11 displays the top 10 deductions claimed by C corporations.

<sup>14</sup> The greater proportion of interest expenses for C corporations may represent the prevalence of debt financing.

<b>Deduction Category</b>	<b>Total Amount (\$million)</b>	<b>Average Amount</b>
<b>Total Deductions (all industries)</b>	\$16,861,357	\$5,410,406
Cost of goods sold	9,959,047	3,195,620
Compensation of officers	306,107	98,223
Salaries and wages	1,656,350	531,483
Repairs	100,145	32,134
Bad debts	99,739	32,004
Rent paid on business property	293,747	94,256
Taxes paid	345,525	110,871
Interest paid	767,652	246,321
Charitable contributions	11,443	3,672
Amortization	94,319	30,265
Depreciation	473,305	151,872
Depletion	9,592	3,078
Advertising	190,175	61,023
Pension, profit-sharing, stock, annuity	122,278	39,236
Employee benefit programs	227,170	72,893
Net loss, noncapital assets	14,241	4,570
Other deductions	2,190,520	702,886
Source: IRS Statistics of Income.		

**Graph 11 Top Deductions Claimed by C Corporations, 2004**

Source: IRS Statistics of Income



## IV. LITERATURE REVIEW

Effective tax rates are a useful way to summarize the federal income tax burden of both small and large businesses. Effective tax rates provide a benchmark from which to evaluate one aspect of tax equity: a tax system can be deemed fair if similarly situated firms pay roughly the same rate of tax. When there are large differences in the tax rates paid by different taxpayer segments, this may suggest that inequities or asymmetries exist in the tax system. Quite often, special provisions in the tax law give rise to these differences. These special provisions may not be available to or utilized effectively by all taxpayers.

Researchers have studied the impact of federal income taxes on businesses in the United States for many years. Most studies look at large multinational corporations; very few studies have specifically considered small businesses in a comprehensive manner. There are several reasons for this. First, there are conceptual hurdles to overcome relating to who bears the ultimate burden of the tax. Second, there are difficult measurement issues to consider in tracing out the tax payments of the business. And third, the data necessary to compute accurate measures of effective tax rates are not collected in a manner that facilitates easy calculation.

Data availability is probably the most significant obstacle to calculating the effective tax rates of small businesses. Most tax rate studies rely on micro-level (firm level) data to do firm-by-firm comparisons. For corporations, detailed, company-level data on federal income taxes paid is only available on required filings with government regulatory agencies or annual statements provided by the companies. (The IRS does not release company-level federal income tax data to the public.)

Several issues arise when relying on mandatory, corporate filings, such as Form 10-Ks, that are submitted to the Securities and Exchange Commission (SEC). First, only publicly traded corporations are required to file Form 10-K. Second, the population of corporations required to file consists predominantly of large companies. Third, the federal income tax data reported in the 10-Ks may differ in important ways from the taxes actually paid to the Treasury because of differences in financial and tax accounting methods. Fourth, income earned by businesses organized as C corporations is taxed twice, once at the company level and a second time as income is passed along to shareholders in the form of dividend payments or when corporate shares are sold and capital gains are realized. Finally, because corporations represent only a small fraction of total businesses, studies that rely on annual reports and regulatory filings give an incomplete picture of the tax burdens faced by small businesses.

Measuring the tax payments of pass-through entities such as S corporations and partnerships is also a difficult task. Because these business entities don't pay taxes directly – their income and deductions are passed along to their owners and taxed at their owners' rate – published information on the operations of these entities provides little information about the actual taxes these entities incur. Similarly, for the largest group of small businesses in the United States, nonfarm sole proprietorships, accurate and reliable micro-level, federal income tax data do exist, but separating out the actual tax payments accruing to the business from other, non-business related income is challenging.

Nevertheless, a number of studies of effective tax rates can be used as a starting point for examining the issues that face small businesses. Each study has its own strengths and weaknesses, and the studies differ according to entities covered, the calculation of income and taxes, the extent to which small businesses are represented, the data used in the study, and the methodology employed.

A recent study by the Government Accountability Office is representative of the predominant methodology employed in examining the effective tax rates faced by U.S. businesses.<sup>15</sup> The study relied on recently available data collected by the IRS on the domestic and foreign operations of U.S. corporations.<sup>16</sup> The effective tax rate was calculated as the income taxes actually paid by a corporation divided by the corporation's pre-tax, net income. No tax rates were calculated for companies that reported net losses. The study found that the average effective tax rate on domestic income was 25.2 percent. Much lower effective tax rates were found on the foreign-sourced income of U.S. corporations, suggesting that larger multinational firms may have an important advantage over smaller, U.S.-based firms in lowering their effective tax rates. However, there was considerable variation around this average and the results are dominated by large, international corporations. The measure of net income used was income reported for financial purposes (i.e., "book" income) which could differ significantly from a company's taxable income. Parenthetically, the report mentions that effective tax rates can be calculated in different ways that can be used to address different questions. Also, the decision on which measure to use will often depend on conceptual considerations and data availability. A similar version of this methodology was released in 1992 and looked at how corporate income tax rates were affected by the Tax Reform Act of 1986. This study (and a 1990 version of the same study) found that the average effective corporate income tax rate was about 28 percent in 1987, 31.3 percent in 1988, and 37.1 percent in 1989.<sup>17</sup>

Perhaps the study most closely aligned with the current report is a recent examination of how federal tax expenditures affect small businesses.<sup>18</sup> The study did not examine effective tax rates, per se, but looked at how certain tax provisions in the law helped small companies lower their tax bill. This study is important in several respects. It is the first comprehensive examination of how federal tax expenditures affect large and small businesses. The study constructs a proxy measure of a marginal effective income tax rate for these firms. While marginal tax rates can be quite different from effective rates, they are (usually) highly correlated. The study computed estimates of effective tax rates compiled from aggregate data collected by the IRS and supplemented these with case studies that relied on publicly available, company-level data (e.g., 10-K). Because of data availability, the study was limited to C corporations only and, as such,

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<sup>15</sup> *U.S. Multinational Corporations. Effective Tax Rates Are Correlated with Where Income is Reported.* United States General Accountability Office, GAO-08-950, August 2008.

<sup>16</sup> Beginning in 2004, the IRS required most large corporations to complete a new schedule (M-3) as part of its filing requirements. In addition to reconciling reported differences between financial (i.e., book) and tax accounting measures, the new schedule requires the company to show domestic and foreign-source income separately.

<sup>17</sup> *Tax Policy. 1989 and 1989 Company Effective Tax Rates Higher Than in Previous Years.* U.S. General Accounting Office, GAO.GGD-92-111, August 2002.

<sup>18</sup> *The Impact of Tax Expenditure Policies on Incorporated Small Businesses.* Innovation & Information Consultants, Inc. U.S. Small Business Administration, Office of Advocacy, 2004.  
[www.sba.gov/advo/research/rs237tot.pdf](http://www.sba.gov/advo/research/rs237tot.pdf).

not much can be inferred about the majority of small businesses in the United States. Three business size categories were examined, based on the size of business receipts. The size categories conformed to publicly available data compiled by the IRS: small corporations (less than \$5 million), medium-sized corporations (\$5 million to \$10 million), and large corporations (more than \$10 million). Effective tax rates were calculated as the actual income taxes paid divided by taxable income. As such, the income measure in the calculation represents a tax accounting concept and results may differ from those in other studies where financial accounting concepts are used. The methodology used in the study is innovative and demonstrates one important feature of calculating effective tax rates. Each tax expenditure program analyzed was examined separately and in isolation from other tax expenditure programs. As a consequence, there is no interaction assumed among the provisions or on their effect on overall effective tax rates.

Company-specific studies of effective tax rates must rely on publicly available information, and these studies almost always focus on large, publicly traded corporations. Two studies that are representative of this genre are McIntyre and Nguyen (2000, 2004).<sup>19</sup> Both studies rely on the annual reports and 10-Ks filed with the SEC to develop firm-by-firm estimates of effective tax rates. An effective tax rate for each firm in the study is calculated as current taxes paid divided by net income (i.e., profits) before taxes. Current taxes (a book concept) are calculated by eliminating deferred taxes from the company's reported total tax liability. This measure of current taxes is also reduced by certain tax credits ascertained to have been used from examining each company's tax footnotes that are contained in the annual report to shareholders. In addition, certain types of income that are not included in a company's financial reports (mostly income from employee and executive stock options) are added back in to develop a more comprehensive measure of net income before federal income taxes.<sup>20</sup> Because the focus of these studies is on publicly traded, U.S. corporations, not much can be said about the effective tax rates of small businesses, but the authors suggest that large firms pay effective tax rates that are 6 to 8 percentage points below small firms.

A quite different tack in measuring effective tax rates on businesses is taken in a series of annual studies undertaken by the Congressional Budget Office (CBO, 2007, is representative).<sup>21</sup> Here, the view is that "businesses don't pay taxes, people do," and the studies perform analysis of the incidence of the corporate income tax. In the CBO methodology, U.S. corporate income taxes are allocated to U.S. households based on their holdings of capital assets. The effective tax rate is calculated as corporate income taxes paid (as allocated to U.S. households) divided by total household income. The most recent study finds, using this methodology, that the average effective tax rate for corporations is 2.6 percent. Because the denominator in this study is conceptually different from most other studies of business taxes, the results are not directly

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<sup>19</sup> McIntyre, Robert S. and Nguyen, T.D. Co. *Corporate Income Taxes in the Bush Years*. A Joint Project of Citizens for Tax Justice and the Institute on Taxation and Economic Policy, September 2004. [www.ctj.org/corpfed04an.pdf](http://www.ctj.org/corpfed04an.pdf). McIntyre, Robert S. and Nguyen, T.D. Co. *Corporate Income Taxes in the 1990's*. Institute on Taxation and Economic Policy, October 2000. <http://www.itepnet.org/corp00an.pdf>.

<sup>20</sup> Estimates of state and local income taxes incurred are subtracted from net income.

<sup>21</sup> *Historical Effective Federal Tax Rates: 1979 to 2005*. Congressional Budget Office, December 2007.

comparable, but show how different measures of effective tax rates can be used to answer different questions.

A different measure of an effective tax rate, referred to as the effective marginal tax rate, is useful when looking at the effect of federal income taxes on the decision to invest in new plant and equipment. This measure may be the most relevant, for example, to evaluate how changes in the tax law might affect future economic growth. It is calculated as the single tax rate that would apply to the income stream derived over the life of an asset. As such, the rate is not specific to a particular company, but to a specific tax system (or to the specific tax situation of a representative company). Because the federal income system does not, in general, discriminate between large and small businesses, measures of effective marginal tax rates will, in general, be similar for both groups except to the extent that one group may be able to utilize certain provisions in the tax law not available to the other. For example, the provision that permits expensing of certain business equipment (i.e., Section 179) is phased out when total investment exceeds certain thresholds and, thus, this benefit is generally not utilized by large corporations. Two studies that explore marginal effective tax rates are Gravelle (2003) and CBO (2005).<sup>22</sup> Effective marginal tax rates are similar, conceptually, to estimates of the user cost of capital in that statutory tax rates are adjusted to reflect the timing of certain deductions (e.g., depreciation).

To date, no study has examined the overall federal income tax burden or average effective tax rates faced by small businesses in the United States. This is mostly because the data necessary to support such a study is collected and reported in ways that make it difficult to identify the true tax liabilities of these companies. As a first step to answering this question, this study relies on a methodological approach that combines the conceptual thrust of prior studies – measuring effective tax rates – with powerful simulation tools that help link businesses to owners. This is the first empirical study of its kind.

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<sup>22</sup> “Taxing Capital Income: Effective Rates and Approaches to Reform.” Congressional Budget Office, October 2005. Gravelle, Jane G. “Capital Income Tax Revisions and Effective Tax Rates.” Congressional Research Office Report for Congress, October 2, 2003.

## **V. DESCRIPTION OF FEDERAL INCOME TAX LAWS AFFECTING SMALL BUSINESSES**

### ***General***

Taxes play a critical role in many fundamental economic decisions facing small businesses, including such disparate issues as choice of business form, whether to purchase new equipment, hiring employees, and choice of business location. How a company makes these decisions influences the ultimate rate of federal income tax the business pays.

Small businesses pay a variety of federal taxes, including the following:

1. Income tax, either corporate or individual;
2. Self-employment tax, which is the social security and Medicare tax for individuals who work for themselves;
3. Employment taxes, which are the social security and Medicare taxes for the employees of the business; and
4. Excise taxes, which apply to the manufacture or sale of certain items, the operation of certain kinds of business, the use of certain kinds of equipment, facilities, or products, and the receipt of payment for certain services.

In addition, federal estate taxes can have the effect of taxing unrealized gains from a business when the business owner dies.

Federal income taxes are imposed on an individual's or a corporation's taxable income. The basic calculation for individuals to compute federal income tax is as follows:

1. Gross income minus deductions from gross income equals adjusted gross income;
2. Adjusted gross income minus itemized deductions or the standard deduction and minus exemptions equals taxable income; and
3. Federal income tax rates applied to taxable income minus credits plus AMT equals net federal income tax due.

The basic calculation for corporations to compute federal income tax is as follows:

1. Gross income minus deductions from gross income and minus special deductions equals taxable income;
2. Federal income tax rates applied to taxable income minus credits (foreign tax credit, credit for federal excise tax on gasoline and special fuels, and combined general business credits); and
3. Net federal income tax is calculated by adding any tax from recomputing prior year's investment credit and any AMT.

By design, a variety of specific federal income tax provisions provide benefits to small businesses generally or to small businesses within specific industries. A listing of these provisions is contained in Appendix B. However, most of the provisions that confer special tax benefits for small businesses apply to a relatively limited class of taxpayers and often are limited to a very narrow industry segment. For example, there is an income tax exemption for very small life insurance companies. While these special provisions may provide significant benefits

to the affected businesses, they are unlikely to have a significant effect on overall average effective tax rates for small businesses in general.

This paper examines the burden imposed by federal income taxes on small businesses. The paper does not consider the effects of self-employment taxes, employment taxes, excise taxes, or state and local taxes on small businesses.

Certain provisions of the federal income tax laws are designed to favor small businesses over large businesses. Small businesses are more likely to be structured as flow-through entities, rather than corporations, which results in a single level of federal income tax on business profits. Even if a business is organized as a corporation, the graduated rate structure for corporations provides a benefit to small corporations relative to large corporations. Certain federal tax provisions, such as the provision that allows a specified amount of investment to be expensed rather than depreciated, benefit small businesses relative to large businesses. Finally, there are specific provisions in the federal tax laws that are designed to benefit small businesses in specific industries.<sup>23</sup>

## ***Business Structure and Federal Income Taxes***

How federal income taxes apply to small business income depends upon the business structure selected by the business. Businesses may be operated in a variety of forms and each form may have different federal income tax consequences. There are three primary types of business entities for federal income tax purposes – sole proprietorships, flow-through entities, and corporations. Flow-through entities are not subject to federal income tax, but are instead allowed to “flow” the business profits through to the owners of the business. Corporations, on the other hand, are subject to federal income tax on their income. In addition, the owners of corporations may also be subject to federal income tax on business profits that they receive from the corporation. This is often referred to as the double taxation of corporate profits.

The following summarizes the federal income tax implications of the forms of business commonly utilized by small businesses:

**Sole Proprietorships** – A sole proprietor is an individual who runs an unincorporated business. Sole proprietors are the most familiar and common type of small business in the United States. Sole proprietors report income and deductions on their individual federal income tax returns (Form 1040, Schedule C [Profit or Loss from Business]) or Schedule F [Profit or Loss from Farming]). Sole proprietors can deduct wages and salaries that they pay to their employees, but may not deduct their own salaries or any business income they withdraw from the business.

**Qualified Joint Venture** – An unincorporated business that is owned jointly by a married couple is generally treated as a partnership under the federal tax laws and is required to file a partnership return (see below). Beginning in 2007, however, a married couple could elect to be treated as a “qualified joint venture” and the couple would not have to file as a partnership. The owners of a qualified joint venture report their income and deductions on their individual federal income tax

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<sup>23</sup> See Appendix B for a review of the specific small business provisions contained in the Internal Revenue Code.

returns (Form 1040, Schedule C [Profit or Loss From Business] or Schedule F [Profit or Loss From Farming]).

**Partnerships** – A partnership is a group of entities (e.g., individuals or businesses) that organize to do business together. Each partner contributes money, property, labor, or skill and shares in the profits of the business. Partnerships are referred to as pass-through entities because the partnership is not separately subject to federal income tax. Instead, income from the partnership is passed-through (allocated) to each partner according to agreed-upon rules and taxed at the partner’s tax rate. The partnership files an annual information return (Form 1065) to report the income, deduction, gains, and losses from the business. The individual partners report their partnership income on their individual income tax returns (Form 1040, Schedule E [Supplemental Income and Loss]).

**S Corporations** – S corporations are small business corporations that are afforded the benefits of limited liability (like C corporations – see below) but which can elect to be treated as a pass-through entity for federal income tax purposes. To be eligible for S corporation status, a small business corporation must (1) be a domestic corporation; (2) have no more than 100 shareholders; (3) have shareholders that are only individuals, estates, certain tax-exempt organizations, and certain trusts; (4) have no nonresident alien shareholders; (5) have only one class of stock; (6) not be a bank, insurance company, a possessions corporation, or a domestic international sales corporation; and (7) meet certain other requirements. S corporations must file Form 1120S (U.S. Income Tax Return for an S Corporation), but are exempt from federal income tax other than tax on certain capital gains and passive income.

Individual shareholders of S corporations include their share of the corporation’s separately stated items of income, deduction, loss, and credit, and their share of nonseparately stated income or loss on their individual income tax returns (Form 1040, Schedule E [Supplemental Income and Loss]), whether or not the income is distributed to them. Unlike most partnership income, S corporation income is not self-employment income for the S corporation shareholders so the S corporation shareholders are not required to pay self employment taxes with respect to their income. However, distributions and other payments by an S corporation to a corporate officer must be treated as wages to the extent the amounts are reasonable compensation for services rendered for the S corporation.

**Limited Liability Companies (LLC)** – Limited liability companies are relatively new business structures that are authorized under state law. Like owners of a corporation, owners of an LLC have limited personal liability, but other features of an LLC function more like a partnership, such as the flow-through treatment of LLC owner income.

If an LLC has only one owner (referred to as a “member”), the fact that it is an LLC is ignored for federal tax purposes. If the single member is an individual, the LLC income and expenses are reported on Form 1040, Schedule C, E, or F. If the single member is a corporation, the LLC income and expenses are reported on the corporation’s return (Form 1120 or Form 1120S). If an LLC has more than one member, most LLC’s file a partnership return (Form 1065) and flow through the income and expenses of the LLC to the members. A multiple-member LLC could also elect to be taxed as a corporation.

**C Corporations** – C corporations are formed when prospective shareholders exchange money, property, or both in exchange for capital stock of the C corporation. For federal income tax purposes, a C corporation is a separate taxable entity subject to the corporate income tax. The C corporation is required to file a corporate income tax return (Form 1120 or Form 1120A) and pay federal corporate income tax on its income. The corporate income is also taxed again to the C corporation shareholders when the income is distributed to them in the form of dividends (reported on Form 1040 and Schedule B) or capital gains (from the sale of their stock or liquidation of the corporation). The C corporation generally is not entitled to deduct the dividends that it distributes to its shareholders.

In some cases, owners of C corporations may receive business profits in the form of compensation for services (wages and salaries). Payments of compensation are generally deductible by the C corporation in computing its federal income tax, but the individual is required to include the income on his or her individual income tax return and the C corporation will be liable for employment taxes with respect to the compensation paid. However, there are rules that prevent a C corporation from paying unreasonable amounts of compensation to its owners. These rules are intended to make sure that the corporate-level tax on business profits is preserved. Thus, a C corporation can only deduct compensation paid to a business owner that is “reasonable.”<sup>24</sup>

### ***Statutory Tax Rates***

The U.S. federal income tax system (individual and corporate) uses graduated tax rates that increase as taxable income increases. The 2008 federal individual income tax rates are shown in Tables 18 and 19. These tax rates expire after 2010, when the maximum individual income tax rate will increase to 39.6 percent from the current rate of 35 percent unless the current rate structure is extended.

In addition, a separate temporary rate structure applies to capital gains and dividends, which also expires after 2010. For 2008, the maximum rate of tax on the adjusted net capital gain and certain qualified dividends of an individual is 15 percent (0 percent for individuals whose income would otherwise be taxed at a 10 or 15 percent rate).

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<sup>24</sup> A separate rule denies a deduction for certain compensation in excess of \$1 million paid to employees by publicly held corporations, but this rule is unlikely to apply to most small businesses.

<b>Table 18 – 2008 Federal Individual Income Tax Rate Schedule (for Single Individuals)</b>		
<b>If Taxable Income is Over</b>	<b>But Not Over</b>	<b>The Tax is</b>
\$0	\$8,025	10% of the amount over \$0
\$8,025	\$32,550	\$802.50 plus 15% of the amount over \$8,025
\$32,550	\$78,850	\$4,481.25 plus 25% of the amount over \$32,550
\$78,850	\$164,550	\$16,056.25 plus 28% of the amount over \$78,850
\$164,550	\$357,700	\$40,052.25 plus 33% of the amount over \$164,550
\$357,700	no limit	\$103,791.75 plus 35% of the amount over \$357,700

<b>Table 19 – 2008 Federal Individual Income Tax Rate Schedule (for Married Couples Filing a Joint Return)</b>		
<b>If Taxable Income is Over</b>	<b>But Not Over</b>	<b>The Tax is</b>
\$0	\$16,050	10% of the amount over \$0
\$16,050	\$65,100	\$1,605.00 plus 15% of the amount over \$16,050
\$65,100	\$131,450	\$8,962.50 plus 25% of the amount over \$65,100
\$131,450	\$200,300	\$25,550.50 plus 28% of the amount over \$131,450
\$200,300	\$357,700	\$44,828.00 plus 33% of the amount over \$200,300
\$357,700	no limit	\$96,770.00 plus 35% of the amount over \$357,700

Corporations face a maximum income tax rate of 35 percent. Table 20, below, shows the 2008 federal income tax rate schedule for corporations.

<b>Table 20 – 2008 Federal Income Tax Rate Structure for Corporations</b>	
<b>If Taxable Income Is:</b>	<b>Then the Income Tax Rate Is:</b>
\$0-\$50,000	15%
\$50,001-\$75,000	25%
\$75,001-\$10 million	34%
Over \$10 million	35%

The first two graduated rates described above are phased out for corporations with taxable income between \$100,000 and \$335,000. As a result, a corporation with taxable income between \$335,000 and \$10 million effectively is subject to a flat tax rate of 34 percent. Also, the application of the 34 percent rate is phased out for corporations with taxable income between \$15 million and \$18.3 million, so a corporation with taxable income of \$18.3 million or more effectively is subject to a flat rate of 35 percent.

In contrast to the treatment of capital gains in the individual income tax rate structure, no separate rate structure exists for corporate capital gains. Thus, the rate of tax applied to the net capital gains of a corporation is 35 percent.

### ***Alternative Minimum Tax***

In addition to the regular income tax rates, small businesses are also affected by the alternative minimum tax (AMT) on individuals and corporations. The tax laws give preferential treatment to certain kinds of income and allow special deductions and credits for certain kinds of expenses. The alternative minimum tax (AMT) attempts to ensure that anyone who benefits from these tax advantages pays at least a minimum amount of tax. Thus, the AMT is designed to provide a backstop to the regular income tax so that deductions and credits cannot reduce the amount of federal income tax paid below a minimum level.

The AMT is a separately figured tax that eliminates many deductions and credits, thus increasing tax liability for an individual who would otherwise pay less tax. The tentative minimum tax rates on ordinary income are percentages set by law. For individuals, the AMT tax rate is either 26 percent or 28 percent and applies in addition to the regular income tax. For capital gains and certain dividends, the rates in effect for the regular tax (0 percent and 15 percent) are used. There is an exemption amount that is designed to make sure that lower income taxpayers are not subject to the AMT. While the individual AMT was originally intended to apply primarily to high-income individuals, it increasingly is affecting middle-income individuals as well.<sup>25</sup>

<sup>25</sup> The AMT exemption amount for married couples is \$45,000, but a temporary increase in the exemption amount has been passed by the Congress each year to increase the exemption amount and reduce the number of people subject to the AMT. For 2008, the exemption amount for a married couple filing a joint return is \$69,950.

Corporations are also subject to an AMT. The AMT rate for corporations is 20 percent. Small corporations with average gross receipts of less than \$7.5 million for all three-year tax periods prior to the current year are exempt from the corporate AMT. In addition, new corporations are not subject to the AMT for their first year of existence, regardless of their receipts.

## ***Deductions***

Individuals and corporations reduce their federal income tax liability through the use of deductions and credits. The use of these deductions and credits can have a big effect on a small business's effective federal income tax rate.

All taxpayers (corporate and individual) are entitled to deduct from gross income the ordinary and necessary expenses of carrying on a trade or business. Among these ordinary and necessary business expenses are such items as salaries and wages, utilities, rent, advertising, legal and accounting expenses, and car and truck expenses.

An expense that adds to the value or useful life of property is considered a capital expense and is not deductible as an ordinary and necessary business expense. Instead, the general rule is that a capital expense must be deducted through depreciation, amortization, or depletion. Deductions for depreciable assets occur over the life of the asset under special rules.

However, a business that has limited investments in certain depreciable business assets may elect to expense the assets (i.e., deduct currently) rather than claiming depreciation deductions over the life of the asset. This expensing provision, referred to as Section 179 expensing, benefits primarily small businesses. For 2008, the maximum amount that can be expensed is \$250,000. After 2010, the maximum dollar amount of the expensing deduction reverts to \$25,000 per year unless the treatment under current law is extended. If a business purchases more than \$800,000 (for 2008) of qualified property, the special expensing deduction is reduced dollar for dollar by the businesses investment in excess of \$800,000.

Section 179 expensing reduces the cost of capital for small businesses and reduces tax compliance costs by eliminating the need for these businesses to calculate depreciation deductions and keep track of the cost basis of their assets.

In some cases, limitations on deductions may adversely affect small businesses. For example, the deduction for business-related meals and entertainment expenses is limited to 50 percent of the expense. Meals and entertainment can represent a disproportionately larger share of a small business's expenses relative to larger businesses and the limitation on the deduction limits the ability of a small business to offset federal tax liability by the amount of these expenses.

## ***Health Insurance, Retirement Plans, and Other Employee Benefits***

The federal tax system generally treats compensation provided in the form of certain employee benefits as either nontaxable (i.e., excluded from gross income) or tax deferred. Employer-provided health insurance is generally not taxed as compensation to employees. Employer-provided retirement savings is generally tax deferred; employees can defer the tax on their qualified retirement savings until they retire.

It is important to remember that these tax incentives apply to employees, rather than employers. The costs of employee benefits are generally the same as compensation costs and are deductible to the employer as ordinary and necessary business expenses. As a result, employers should generally be indifferent from a federal tax perspective as to whether to pay employees in current compensation or to provide them with health, retirement, or other employee benefits.

However, employers often prefer to provide employee benefits in lieu of compensation for a variety of reasons. Employees often prefer to receive compensation in a nontaxable or tax deferred form and providing these benefits may help employers attract and retain their workforce. The federal tax system provides the strongest incentive for retirement saving to occur through an employer-sponsored qualified retirement plan system. There is a substantially higher limit on the amount of permissible tax-qualified retirement savings if the savings occurs through an employer-sponsored plan.

Despite these incentives, small businesses are much less likely to provide health insurance and qualified retirement plans to their employees. In the case of health insurance, the costs of providing coverage for a small business may be prohibitive because small employers cannot qualify for the economies of scale and risk pooling that occur with large employers.<sup>26</sup>

Self-employed individuals are entitled to deduct 100 percent of their health insurance expenses during a year for income tax purposes, but not for social security and Medicare tax purposes. This has the effect, for federal income tax purposes, of treating self-employed individuals the same as employees who work for an employer that provides health insurance benefits.

In the case of qualified retirement plans, the costs of establishing and maintaining a plan can create a significant deterrent to small and mid-sized employers. Once established, the plan must meet standards for participation and nondiscrimination so that the benefits are generally available to all eligible employees, regardless of income or ability to save. In the case of defined benefit pension plans, the plan also must satisfy annual minimum funding requirements. The costs of complying with these minimum funding requirements are significant. Changes to the rules for qualified retirement plans occur with alarming frequency. Thus, employers are constantly facing the costs of amending their plans to comply with new laws and regulations.

In recent years, Congress has recognized that the incentives of current law may not be sufficient to induce small businesses to establish and continue qualified retirement plans. Thus, Congress

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<sup>26</sup> *Private Health Insurance. Small Employers Continue to Face Challenges in Providing Coverage.* A Report to the Ranking Minority Member, Committee on Small Business and Entrepreneurship, U.S. Senate. U.S. General Accountability Office. GAO-02-8, October 2001.

has passed additional laws to assist smaller employers, offered alternatives to defined benefit plans, and expanded existing retirement savings options. The available plans from which employers may choose each have detailed rules on participation and contributions, creating a very complex system.<sup>27</sup>

### ***Summary of Federal Income Taxes That Apply to Small Business Owners***

Table 21, below, summarizes the application of federal income taxes to small businesses based on the form of the business. Sole proprietorships are the most common form of small business, but represent a relatively small percentage of total business receipts. While the corporate form provides the advantage of limited personal liability, small businesses often avoid the corporate form of business because of the double taxation of business profits. The rise of limited liability companies provides small businesses with the best of both worlds by providing limited personal liability and flow-through tax treatment so that only one level of tax is applied to business profits.

<b>Table 21 – Summary of Application of Federal Income Taxes To Small Businesses</b>		
<b>Form of Business</b>	<b>Individual Income Tax</b>	<b>Corporate Income Tax</b>
Sole Proprietorship	Applies	Does not apply
Qualified Joint Venture (married couple)	Applies to each spouse’s share of income	Does not apply
Partnership	Applies to each partner’s share of partnership income	Does not apply
S Corporation	Applies to shareholder’s share of S corporation income	Does not apply unless S corporation elects to be taxed as a corporation
Limited Liability Company (LLC)	Applies to member’s share of LLC income	Does not apply unless LLC elects to be taxed as a corporation
C corporation	Applies to dividends paid to shareholders	Applies

<sup>27</sup> Examples of the types of retirement savings plans an employer could establish include defined benefit plans, defined contribution plans, 401(k) plans, cash balance plans, and SIMPLE plans. Defined benefit plans promise a specific benefit at retirement age; employers are required to satisfy complex funding rules and need to use the services of an actuary. Under defined contribution plans, including 401(k) plans, employees are entitled to an account balance, rather than a specific benefit. SIMPLE plans are designed to provide a simplified retirement savings arrangement for small employers.

## **VI. METHODOLOGY FOR MEASURING EFFECTIVE TAX RATES**

### ***Importance of Effective Tax Rates***

Under the federal income tax system, a progressive statutory rate structure applies to income of businesses and individuals. The income of C corporations is taxed twice, once at the corporate level through the payment of the corporate income tax and again to the individual owner of a corporation when corporate profits are distributed in the form of dividends or capital gains. Other forms of business, such as sole proprietorships, partnerships, and S corporations, are not subject to an entity level tax and business profits are taxed only to the individual owners of the business.

As a result, figuring out the overall costs of federal income taxes to small business owners requires an examination of both corporate and individual income taxes to explore who bears the burden of the taxes on business income. In addition, exceptions to the normal tax rules (e.g., deductions, exclusions, and credits) can have the effect of lowering the overall rate of tax imposed. On the other hand, the alternative minimum tax (AMT) can have the effect of increasing the overall rate of tax paid. Thus, there is a difference between the statutory rate of tax and the effective tax rates that small businesses (and small business owners) face. Effective tax rates provide a more accurate picture of how taxes are imposed on small businesses.

Most of the research done to date examines the effect of federal taxes imposed directly by the corporate income tax. Because most small businesses do not pay federal income taxes directly – their income, losses and deductions are passed through to their owners – federal income tax liabilities cannot be directly ascertained for these business types. As such, the existing research that examines the tax burden of small businesses is necessarily incomplete.

### ***Microsimulation***

This study relies on microsimulation to calculate the effective tax rates of small businesses in the U.S. For more than thirty years, microsimulation has been a workhorse of tax policy analysis. In this modeling approach, aggregate outcomes are simulated from the “bottom-up,” by focusing on the micro-level components of the tax system (e.g., individuals or businesses).

In microsimulation, federal income taxes are simulated for each taxpayer by means of a very detailed tax calculator that incorporates the parameters and features of the current tax law. Quite often, the analyst is also interested in how a change in one or more aspects of existing tax law may affect revenues or the distribution of income taxes. This counterfactual simulation is then compared with estimates of tax liabilities under the original, or baseline simulation.

### ***Data Sources***

In order to examine the effect of federal income taxes on small business owners more accurately, this paper explores corporations, pass-through entities like partnerships and S corporations, and

sole proprietorships. The challenge is tracing business income in a way that accurately captures the full effect of the federal income tax system for each type of small business entity.

The principal data source is a sample of individual federal income tax returns representative of all individual returns filed in 2004, the most recent year for which firm-level data are available. The IRS Individual Statistics of Income Public Use File (PUF) is an annual, micro-level data file constructed from a stratified, random sample of approximately 150,000 U.S. taxpayers. Stratification is done with respect to income and income sources; wealthy, high-income individuals are over-sampled. The PUF contains detailed information on the income, deductions, tax credits and tax liabilities of all individual tax filers in the United States. The incomes reported include income from sole proprietorships as well as income from partnerships (including LLCs) and S Corporations.

Small businesses interact with the federal income tax system in different ways. For the most common type of small business in the United States, nonfarm sole proprietorships, business income and deductions are reported along with other types of income on the individual income tax return (i.e., Form 1040) on Schedule C relating to business income or loss. This income is combined with other types of income that the business owner might have received (e.g., interest and dividend income) that may or may not be directly related to the business operations. The total income received by the taxpayer, after appropriate adjustments, is then taxed according to the tax laws in place for each tax year. While accurate, aggregate estimates of the amount of sole proprietor income received by individual business owners can be ascertained from published IRS sources, no estimate of the actual tax liabilities incurred by the businesses can be calculated without additional information on the taxpayers and their sources of income. Microsimulation permits the isolation of the amount of federal income tax that is attributable to the business.

For small businesses organized as partnerships or S corporations, the situation is more complicated. These businesses are required to file federal income tax returns that state the nature of the business, the income and deductions claimed, and the amount of net income that is passed along to the business owners according to their ownership stakes on Form 1065 (partnerships) or Form 1120-S (S corporations). No federal income tax liability is assessed on these tax returns.<sup>28</sup> However, the net income is reported on the income tax returns of the owners on Schedule E (Supplemental Income), relating to income from rental property, royalties, S corporations, partnerships and trusts. By identifying the income from these business sources, the federal income taxes incurred by the business can be estimated using a microsimulation model.

C corporations pay federal income taxes directly and small businesses that are organized this way report their tax liability separately on Form 1120, the primary tax form for U.S. corporations. While no publicly available, micro-level, federal income tax data exist for corporations, the IRS annually compiles detailed tabulations of corporation information in the Corporate Source Book, an annual summary of the income, deductions, credits, taxes and financial data (i.e., asset size). These tabulations can be used to estimate the federal income tax liability and effective tax rate of these entities.

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<sup>28</sup> There are some situations where S corporations may incur some federal income tax liability, but they are not germane to this study.

## ***Summary of Methodology Employed to Measure Effective Tax Rates***

Quantria Strategies' proprietary individual income tax microsimulation model is the primary tool used to calculate effective tax rates. The model uses the 2004 PUF as its principal data source with supplemental data provided by the 2004 Corporate Source Book (CSB). For non-corporate businesses and S corporations, total federal income tax liability is calculated for each tax return in the PUF sample based on a detailed specification of the tax law in place for 2004. In the microsimulation model, results for each individual tax record are then aggregated to arrive at national totals.<sup>29</sup> This specification of the tax law includes all the adjustments, exemptions, exclusions, tax credits and income phase-outs that are part of calculating total federal income tax liability. The tax calculations in the model have been tested extensively and validated; they reproduce actual tax liabilities reported by U.S. taxpayers for tax year 2004 to within approximately 1 percent.

Small businesses are identified in the model based upon whether or not they report income (or losses) from sole proprietorships (Schedule C, Profit or Loss from Business), partnerships (Schedule E, Supplemental Income or Loss, Part II) or S corporations (Schedule E, Supplemental Income or Loss, Part II).<sup>30</sup> Taxpayers who operate more than one business of a single entity type have their income aggregated over all businesses in the PUF sample. For taxpayers who report income from more than one business entity type, each source of income is treated as a unique business and separate calculations are performed in the simulations. Businesses without net income are ignored to avoid distorting the calculations.

Operationally, the effective tax rate of each small business in the sample is calculated by performing two simulations. In the first simulation (the "baseline"), the total tax liability of each small business taxpayer is calculated under the tax laws and rules in place for 2004. It is important to note that this tax liability will usually include taxes paid on other, non-business sources of income such as interest income. In the second simulation (the "alternative policy"), net income accruing to the business is isolated for each business entity type and the federal income tax liability is recalculated after subtracting this income from the taxpayer's total income. The resulting change in tax liability (which in this case will be negative, reflecting the fact that income has been reduced) is an estimate of the taxes attributable to the small business.<sup>31</sup> For taxpayers whose only source of income is small business income, this calculation gives the correct result: all federal income tax liability is assigned to the business since no federal income taxes will be due on zero net income. The estimate of the effective tax rate faced by the business is then calculated as the change in tax liability<sup>32</sup> divided by the net income (before taxes) of the business. The estimates of effective tax rates reported here are aggregate estimates, averaged across all small businesses in the reporting group. For example, when reporting an effective tax rate for a particular business entity type, the numerator is the (weighted) sum of the calculated

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<sup>29</sup> Sample weights are used to calculate aggregate, economy-wide totals.

<sup>30</sup> As explained above, any taxpayer that reports more than \$10 million in net business receipts from any business entity is excluded.

<sup>31</sup> There is an implicit "stacking order" underlying this calculation. In effect, business income is assumed to be taxed last after all other non-business sources of income have been taxed. This convention will have the effect of slightly overstating the true effective tax rate in some circumstances.

<sup>32</sup> Actually, the absolute value of the change in tax liability is used, since according to the methodology used, this would result in a reduction in total taxes when income is reduced.

tax changes attributable to the businesses while the denominator is the (weighted) sum of the net incomes of the businesses.

For nonfarm sole proprietorships, representing over 70 percent of small businesses in the United States, the information contained on Schedule C in the PUF is very detailed and includes:

- Net receipts
- Cost of goods sold
- Other income
- Depreciation
- Insurance
- Mortgage interest
- Other interest expense
- Office expenses
- Net wages
- Total deductions

For S corporation and partnerships, the information is somewhat more general but includes both active and passive income and loss amounts, as well as the Section 179 expense deduction. To calculate the effective tax rates of C corporations, tabular, or cell-based data contained in the 2004 Corporate Source Book is utilized. A more detailed description of the methodology is contained in Appendix A.

### ***Limitations on Data and Methodology***

While microsimulation is the only method available that can provide an accurate picture of the tax burden facing all small businesses in the United States, there are some important qualifications to this analysis.

First, the methodology imposes an implied “stacking order” in the calculation of small business tax liability by assuming that small business income is taxed last. Because the federal income tax rate structure is progressive, stacking business income last will reflect a higher marginal tax rate than if the business income was stacked first. Thus, this stacking will tend to slightly over-estimate the tax liability of those business owners who receive large amounts of other, non-business income.

Second and closely related to the first, is that this methodology treats as separate entities multiple businesses owned by the same taxpayer.<sup>33</sup> This approach identifies the effective tax rate associated with each business, but not necessarily the overall effective tax rate faced by the owner of the business.

Third, the effective tax rates are calculated only for U.S. business owners that are taxed as individuals. To the extent some business owners (e.g., partners or S corporation shareholders)

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<sup>33</sup> This would happen, for example, if the taxpayer operated a sole proprietorship and also was a partner in a partnership.

are non-U.S. citizens or other entity types, then the income accruing to these entities is not counted.<sup>34</sup>

Fourth, the income of C corporations is taxed twice, once at the business level and once again when income is passed along to owners and investors, either as dividend payments or capital gain realizations. While the individual income tax data does contain information on the dividends and capital gains of taxpayers, there is no reliable method to allocate these amounts to small businesses. Thus, the effective tax rate analysis does not capture the taxes paid by C corporation owners on dividends and capital gains. This will tend to understate somewhat the total effective tax rate of small businesses organized as C corporations, but this bias will tend to be small, particularly because of the fairly low rates of tax currently applicable to individual dividends and capital gains.

Fifth, to the extent small business owners receive a salary from the business – which may be the case for C corporations – then there is no reliable way to identify those payments and calculate the income taxes paid on them from existing data. Conceptually, it makes sense to ignore these payments because they are, in theory, equivalent to what the individual business owner would receive if he or she were an employee of another business. However, because salary and wage payments are deductible to C corporations, a C corporation owner may attempt to withdraw business profits in the form of a salary to avoid the corporate-level income tax. There are existing rules to prevent this by denying deductions for unreasonable compensation.

Finally, it is important to remember that there are a variety of special tax provisions applicable to small businesses for federal income tax purposes.<sup>35</sup> These provisions often provide a special tax benefit for small businesses in a specific industry. For the affected taxpayers, these provisions can have a significant effect on effective tax rates. However, because the scope of these provisions is often quite narrow, their overall impact on the average effective tax rates of small businesses will likely be quite small.

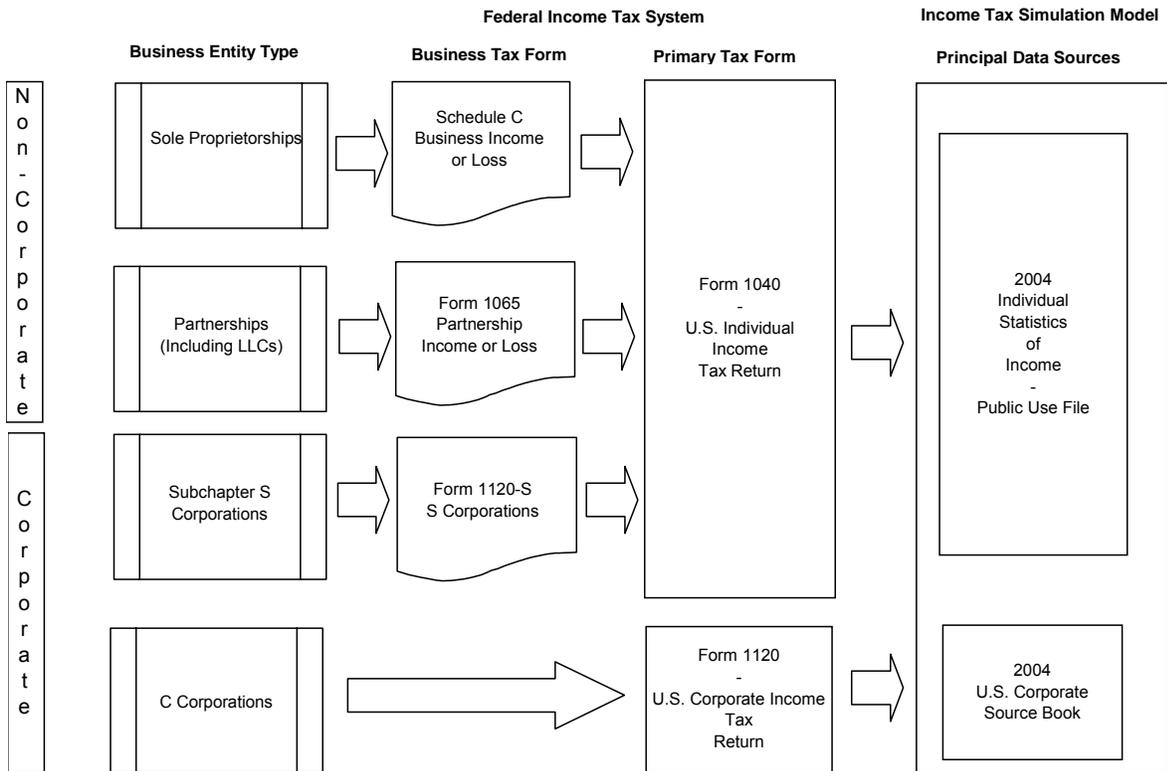
Figure 1 summarizes how small businesses interact with the federal income tax system, the forms and schedules that are filed, how the data are collected and how these data are used to calculate effective tax rates in the simulation model.

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<sup>34</sup> This is expected to have a negligible effect on the calculations. Most partnerships, for example, are comprised of individuals.

<sup>35</sup> Appendix B provides a listing of these special tax provisions.

Figure 1. Schematic of Federal Income Tax Flows and Calculation of Effective Tax Rates



## VII. RESULTS: EFFECTIVE TAX RATES FACED BY SMALL BUSINESSES

Small businesses in the United States pay an estimated average effective tax rate of approximately 19.8 percent. This figure is derived from the Quantria Strategies, LLC individual income tax microsimulation model of individual taxpayers, supplemented with selected tabular, cell-based data on the net income and taxes of C corporations. The use of microsimulation permits the accurate measurement of the tax liabilities reported on individual income tax returns by sole proprietors, partners of partnerships, and shareholders of S corporations.

A great deal of variation in effective tax rates exists across business entity types. S corporations pay the highest effective tax rate. As discussed below, the effective tax rate for C corporations is not directly comparable to the effective tax rates of other entities for a variety of reasons. Table 22 summarizes the effective tax rate calculations for small businesses by entity type.

<b>Table 22 – Effective Tax Rate Summary, by Entity Type, 2004</b>				
<b>Entity Type</b>	<b>Number of Taxpayers*</b>	<b>Net Income (\$million)</b>	<b>Change in Taxes (\$million)</b>	<b>Effective Tax Rate</b>
Non Farm Sole Proprietorships	14,910,181	\$283,307.8	\$37,737.9	13.3%
Partnerships	1,445,452	127,163.3	29,958.8	23.6%
S Corporations	2,328,104	209,183.2	56,252.9	26.9%
C Corporations	899,508	49,534.0	8,693.0	17.5%
<b>All Small Businesses</b>	<b>19,583,245</b>	<b>\$699,188.4</b>	<b>\$132,642.6</b>	<b>19.8%</b>
* Businesses with net income Source: Quantria Strategies, LLC Individual Income Tax Simulation Model, IRS Individual Income Tax Public Use File, 2004, and IRS Corporate Source Book, 2004.				

As explained in the previous section, these calculations are performed only for small businesses with positive net income.<sup>36</sup>

It is useful to examine how the overall effective tax rate varies by size of net income. This measure will indicate the relative progressivity of the tax system and give a better feel for the magnitude of the federal income tax burden by the size of the business. Table 23 breaks down the taxes paid by nonfarm sole proprietorships. It shows that, for 2004, most small businesses earned less than \$10,000 in net income and paid roughly 8.1 percent of this in income taxes. Tax burdens, generally, rise slightly with net income and the largest sole proprietors, with net income above \$200,000, pay the highest average effective rate of tax, almost 24 percent. This figure is close to what some studies estimate to be the average effective tax rate of a large U.S. corporation.

<sup>36</sup> This is consistent with most prior studies that measure effective tax rates.

**Table 23 – Estimated Effective Tax Rates for Nonfarm Sole Proprietorships,  
by Size of Net Income, 2004**

Size of Net Income	Number of Taxpayers with a Change in Federal Income Tax Liability	Net Income (\$million)	Change in Taxes (\$million)	Effective Tax Rate
Less than \$10,000	8,923,483	\$31,735.2	\$2,584.6	8.1%
\$10,001 to \$20,000	2,647,899	37,467.0	2,555.6	6.8%
\$20,001 to \$30,000	1,166,843	28,587.7	2,318.2	8.1%
\$30,001 to \$40,000	607,497	20,956.3	1,983.8	9.5%
\$40,001 to \$50,000	396,378	17,656.3	1,815.6	10.3%
\$50,001 to \$75,000	451,207	27,407.6	3,372.0	12.3%
\$75,001 to \$100,000	253,250	21,752.2	3,025.7	13.9%
\$100,001 to \$200,000	318,918	44,410.7	7,348.6	16.5%
\$200,000 or more	144,706	53,334.8	12,733.8	23.9%
<b>Total All Returns</b>	<b>14,910,181</b>	<b>\$283,307.8</b>	<b>\$37,737.9</b>	<b>13.3%</b>

Source: Quantria Strategies, LLC Individual Income Tax Simulation Model and IRS Individual Income Tax Public Use File, 2004.

Table 24 shows the same breakdown of federal income taxes for businesses that are formed as partnerships. While the tax structure is generally progressive for partnerships, there are some noticeable gaps. The lowest income group pays a tax rate that is higher than all but the two highest groups. This could be the case, for example, if partnership income were a small fraction of a taxpayer's total income. Because the microsimulation model assumes that business income is effectively taxed last, this may overstate the effective tax rate for these taxpayer groups.

**Table 24 – Estimated Effective Tax Rates for Partnerships, by Size of Net Income, 2004**

Size of Net Income	Number of Taxpayers with a Change in Federal Income Tax Liability	Net Income (\$million)	Change in Taxes (\$million)	Effective Tax Rate
Less than \$10,000	610,432	\$1,688.4	\$281.4	16.7%
\$10,001 to \$20,000	161,513	2,351.0	325.2	13.8%
\$20,001 to \$30,000	116,691	2,920.7	383.7	13.1%
\$30,001 to \$40,000	82,761	2,849.2	412.8	14.5%
\$40,001 to \$50,000	52,539	2,328.0	371.3	16.0%
\$50,001 to \$75,000	92,119	5,682.2	807.6	14.2%
\$75,001 to \$100,000	56,118	4,859.0	746.1	15.4%
\$100,001 to \$200,000	113,824	15,859.5	3,061.0	19.3%
\$200,000 or more	159,456	88,625.2	23,569.6	26.6%
<b>Total All Returns</b>	<b>1,445,453</b>	<b>\$127,163.2</b>	<b>\$29,958.7</b>	<b>23.6%</b>

Source: Quantria Strategies, LLC Individual Income Tax Simulation Model and IRS Individual Income Tax Public Use File, 2004.

Table 25 examines S corporations, the entity type that is estimated to pay the highest average effective tax rate among small businesses. A close examination of the table suggests that this may have more to do with the distribution of net income of S corporation owners, with much of the income accruing to the largest firms.

Size of Net Income	Number of Taxpayers with a Change in Federal Income Tax Liability	Net Income (\$million)	Change in Taxes (\$million)	Effective Tax Rate
Less than \$10,000	707,805	\$2,702.7	\$419.3	15.5%
\$10,001 to \$20,000	324,019	4,716.3	745.7	15.8%
\$20,001 to \$30,000	214,044	5,269.0	849.9	16.1%
\$30,001 to \$40,000	175,084	6,038.2	984.5	16.3%
\$40,001 to \$50,000	157,186	6,945.0	1,043.9	15.0%
\$50,001 to \$75,000	203,374	12,444.5	2,220.9	17.8%
\$75,001 to \$100,000	121,004	10,547.0	2,187.3	20.7%
\$100,001 to \$200,000	215,951	30,217.6	7,061.1	23.4%
\$200,000 or more	209,636	130,303.0	40,740.4	31.3%
<b>Total All Returns</b>	<b>2,328,103</b>	<b>\$209,183.3</b>	<b>\$56,252.9</b>	<b>26.9%</b>

Source: Quantria Strategies, LLC Individual Income Tax Simulation Model, IRS Individual Income Tax Public Use File, 2004, and IRS Corporate Source Book, 2004.

Contrast the somewhat high effective tax rates incurred by S corporations with the lower effective tax rates estimated for businesses organized as C corporations. There may be several reasons for this. First, it is common for the owners of small C corporations to receive a salary from the business. This salary would be deductible to the C corporation (and reduce C corporation federal income tax liability) unless the payment constituted unreasonable compensation. The salary would be subject to tax on the C corporation owner's individual income tax return and these federal income tax payments theoretically should be attributable to the business. However, existing data do not allow these payments to be traced to the owners of C corporations, so the tax on salary payments is not captured in this analysis.

Second, corporate income is also taxed when it is distributed to shareholders in the form of dividends or capital gains. Again, the existing data do not permit the tracing of C corporation owners in order to capture these federal income tax effects.

Table 26 summarizes the results for C corporations. The figures in Table 26 are not directly comparable to those presented for other tax entity types because no micro-level data on the incomes and taxes of corporations are available. As such, published data from the 2004 Corporation Source Book is used to perform the calculations. One difference in the figures

concerns the size category used to classify taxpayers. Aggregate federal income tax data for C corporations is generally only available by asset size.<sup>37</sup>

<b>Table 26 – Estimated Effective Tax Rates for C Corporations, by Size of Assets, 2004</b>				
<b>Size of Assets</b>	<b>Number of Taxpayers with a Change in Federal Income Tax Liability</b>	<b>Net Income (\$million)</b>	<b>Change in Taxes (\$million)</b>	<b>Effective Tax Rate</b>
Less than \$500,000	669,313	\$15,118.7	\$1,603.7	10.6%
\$500,001 to \$1 million	100,336	6,453.6	976.7	15.1%
\$1,000,001 to \$5 million	112,076	18,260.9	3,613.0	19.8%
\$5,000,001 to \$10 million	17,783	9,700.8	2,499.6	25.8%
<b>Total All Returns</b>	<b>899,508</b>	<b>\$49,534.0</b>	<b>\$8,693.0</b>	<b>17.5%</b>

Source: Quantria Strategies, LLC Individual Income Tax Simulation Model and IRS Corporate Source Book, 2004.

To the extent that different industries can lower their effective tax burden by utilizing special provisions in the tax law or have access to additional tax planning opportunities not available to other companies, then their effective tax rates should be lower. However, as noted earlier in this report, many of the existing special tax provisions for specific industries benefit relatively narrow classes of businesses. Further, the SOI Public Use File does not contain industry-level micro-data that can be used in the microsimulation model. An attempt is made to overcome this lack of detail by imputing the industry of the taxpayer in order to examine how taxes may be affected. As a consequence, the analysis presented in Tables 27 through 30 is only suggestive of how effective tax rates might vary by industry group and should be used with caution.

For nonfarm sole proprietors, partnerships and S corporations, little variation occurs across industries in estimated effective tax rates. The imputation methodology and lack of sufficient data to impute industries accurately may contribute to this uniformity. On the other hand, a similar effect is observed for C corporations with very little variation in the effective tax rates across industries. Clearly, more detailed micro-level data are needed to ascertain how specific industries may be affected by the federal income tax system.

<sup>37</sup> As a result, the total number of C corporations in these tables (classified by size of assets) differs somewhat from those numbers reported earlier in this report where small businesses are classified according to the size of business receipts.

<b>Table 27 – Estimated Effective Tax Rates for Nonfarm Sole Proprietorships by Industry, 2004</b>				
<b>Industry Sector</b>	<b>Number of Taxpayers with a Change in Federal Income Tax Liability</b>	<b>Net Income (\$million)</b>	<b>Change in Taxes (\$million)</b>	<b>Effective Tax Rate</b>
Agriculture	180,961	\$2,363.8	\$262.3	11.7%
Mining	103,680	1,858.4	236.0	12.7%
Utilities	7,362	95.8	3.9	4.1%
Construction	1,865,705	38,541.1	5,047.8	13.1%
Manufacturing	219,685	3,850.6	479.9	12.5%
Wholesale & Retail Trade	2,115,767	38,922.8	5,536.8	14.2%
Transportation & Warehousing	740,640	17,098.7	2,266.0	13.3%
Information	173,429	3,148.8	379.1	12.0%
Finance, Insurance & Real Estate	1,393,845	34,737.7	4,839.9	13.9%
Professional, Scientific & Technical Services	2,247,993	41,743.2	5,387.4	12.9%
Other Services	5,861,116	100,947.0	13,298.7	13.2%
<b>Total All Returns</b>	<b>14,910,183</b>	<b>\$283,307.9</b>	<b>\$37,737.8</b>	<b>13.3%</b>

Source: Quantria Strategies, LLC Individual Income Tax Simulation Model and IRS Individual Income Tax Public Use File, 2004.

<b>Table 28 – Estimated Effective Tax Rates for Partnerships, by Industry, 2004</b>				
<b>Industry Sector</b>	<b>Number of Taxpayers with a Change in Federal Income Tax Liability</b>	<b>Net Income (\$million)</b>	<b>Change in Taxes (\$million)</b>	<b>Effective Tax Rate</b>
Agriculture	79,753	\$4,063.5	\$868.8	21.4%
Mining	14,020	1,347	330.1	24.5%
Utilities	1,537	108.5	23	21.2%
Construction	79,789	7,545.2	1,834.9	24.3%
Manufacturing	31,578	2,317.5	515.9	22.3%
Wholesale & Retail Trade	102,413	9,197.6	2,221.7	24.2%
Transportation & Warehousing	14,918	1,593.8	361.8	22.7%
Information	24,828	1,735.2	430.5	24.8%
Finance, Insurance & Real Estate	819,709	74,225.4	17,448.1	23.5%
Professional, Scientific & Technical Services	101,932	9,334.8	2,293.4	24.6%
Other Services	174,973	15,694.8	3,630.5	23.1%
<b>Total All Returns</b>	<b>1,445,450</b>	<b>\$127,163.3</b>	<b>\$29,958.7</b>	<b>23.6%</b>

Source: Quantria Strategies, LLC Individual Income Tax Simulation Model and IRS Individual Income Tax Public Use File, 2004.

**Table 29 – Estimated Effective Tax Rates for S Corporations, by Industry, 2004**

Industry Sector	Number of Taxpayers with a Change in Federal Income Tax Liability	Net Income (\$million)	Change in Taxes (\$million)	Effective Tax Rate
Agriculture	79,761	\$4,470.1	\$1,119.7	25.0%
Mining	10,376	960.4	278.1	29.0%
Utilities	4,018	315.5	77.5	24.6%
Construction	300,132	28,428.1	7,759.2	27.3%
Manufacturing	82,320	8,756.8	2,342.2	26.7%
Wholesale & Retail Trade	371,564	33,203.3	8,887.2	26.8%
Transportation & Warehousing	78,801	6,509.1	1,794.3	27.6%
Information	46,546	4,048.9	1,075.5	26.6%
Finance, Insurance & Real Estate	371,290	33,786.0	8,817.3	26.1%
Professional, Scientific, & Technical Services	357,471	32,527.2	8,855.0	27.2%
Other Services	625,824	56,178.2	15,246.9	27.1%
<b>Total All Returns</b>	<b>2,328,103</b>	<b>\$209,183.6</b>	<b>\$56,252.9</b>	<b>26.9%</b>

Source: Quantria Strategies, LLC Individual Income Tax Simulation Model, IRS Individual Income Tax Public Use File, 2004, and IRS Corporate Source Book, 2004.

**Table 30 – Estimated Effective Tax Rates for C Corporations by Industry, 2004**

Industry Sector	Number of Taxpayers with a Change in Federal Income Tax Liability	Net Income (\$million)	Change in Taxes (\$million)	Effective Tax Rate
Agriculture	33,291	1,759.5	\$227.7	12.9%
Mining	6,316	657.4	132.9	20.2%
Utilities	1,538	284.6	77.1	27.1%
Construction	103,367	5,869.1	955.0	16.3%
Manufacturing	54,706	6,268.8	1,224.3	19.5%
Wholesale & Retail Trade	193,954	10,586.9	2,100.8	19.8%
Transportation & Warehousing	29,258	1,671.3	276.1	16.5%
Information	18,134	1,515.8	233.4	15.4%
Finance, Insurance & Real Estate	137,134	8,337.9	1,531.6	18.4%
Professional, Scientific & Technical Services	108,268	5,812.6	1,045.2	18.0%
Other Services	213,542	6,770.3	888.7	13.1%
<b>Total All Returns</b>	<b>899,508</b>	<b>\$49,534.0</b>	<b>\$8,693.0</b>	<b>17.5%</b>

Source: Quantria Strategies, LLC Individual Income Tax Simulation Model and IRS Corporate Source Book, 2004.

In summary, small businesses in the United States pay a significant share of federal income taxes. For most companies, those that are organized as sole proprietorships, the effective tax rate is quite low, but this is primarily because most of these businesses earn so little income.

Partnerships and S corporations pay the highest rates among small businesses – with S corporations paying the highest. This is quite likely a result of their relatively larger size. C corporations pay the lowest rate of tax according to this analysis. Caution should be used when interpreting this result because the measurement tools are somewhat imprecise when tracing the ultimate taxes paid by C corporations.

## **APPENDIX A: TECHNICAL DESCRIPTION OF THE STUDY METHODOLOGY**

This Appendix provides additional, technical details on the methodology used in this study to estimate effective tax rates for small businesses. The Appendix (1) describes Quantria Strategies' proprietary microsimulation model; (2) explains how the model identifies and simulates the federal income tax liability for different business entity types; (3) documents the assumptions used in the effective tax rate calculations; and (4) discusses the limitations that apply to the effective tax rate analysis.

### ***Individual Income Tax Microsimulation Model***

Quantria Strategies, LLC maintains a detailed microsimulation model of the U.S. individual federal income tax system. Microsimulation models have been used in tax policy analysis for more than thirty years and provide policymakers with the necessary tools and information to make informed decisions about the costs and impacts of tax law changes. By focusing on the micro units in the economy, microsimulation calculates aggregate outcomes from the “bottom-up.” In this case, the micro units are individual taxpayers and the analysis characterizes changes in their federal income tax liability under alternative policy scenarios.

While microsimulation is the primary tool in examining the effect of alternative tax policy options, it is frequently used in conjunction with other types of economic models such as large, multi-sector models of the macroeconomy and computable general equilibrium (CGE) models. Each modeling approach has its own strengths and weaknesses and the choice of one over another will usually depend on the types of questions one is trying to answer. Microsimulation is usually the preferred analytical method when the tax policy options being investigated exhibit some degree of non-linearity resulting in complex interactions among the provisions, or when distribution analysis – examining which taxpayer groups are affected disproportionately under a proposed tax change – is important.

Central to the microsimulation model is a detailed description of the tax law in place (e.g., the tax calculator). This allows the analyst to vary certain tax law parameters and examine how tax liability varies under the new regime on a taxpayer-by-taxpayer basis. Mechanically, one generally performs two simulations: a calculation of tax liability under present law (the “baseline”) and a second simulation for some proposed policy option (the “alternative”). The difference in tax liability represents the effect of the proposal, and this effect, calculated over all taxpayers, represents the aggregate effect of the law change. Because changes in tax liability are calculated at the micro level, the analyst can examine how different taxpayer segments are affected by the change. For example, it is customary to examine changes by income classes, filing types (e.g., single taxpayers versus married couples), and whether the taxpayer itemizes his or her deductions.

## ***Data Sources***

The principal data source in the present version of the Quantria microsimulation model is the 2004 Statistics of Income (SOI) Public Use File, the most recent year for which reliable (public use) income tax information is available.

The Public Use SOI is a stratified random sample of about 150,000 tax records representing the approximately 130 million federal income tax returns filed by individuals in the U.S. for tax year 2004. In order to assure the confidentiality of information contained on administrative tax returns, data items in the Public Use file are rounded and often masked, or blurred to prevent identification. As such, each individual tax record is only suggestive of an actual tax return filed. Each tax record contains detailed information of the income, deductions, exemptions, credits and tax payments of individuals and married couples. Stratification is done with respect to the size and composition of income, and high income taxpayers are over-sampled. This results in an analytical database which, though small in size, is accurate with respect to aggregate, economy-wide statistics.

For purposes of this study, the principal income items of interest in the data files are business income (and losses) received by sole proprietors and reported on Schedule C, partnership income and losses reported on Schedule E, and income or loss from Subchapter S corporations, also reported on Schedule E.<sup>38</sup> For sole proprietorships, which are the largest group of small businesses in the United States, the information available is quite detailed and includes net receipts, cost of goods sold, other income (e.g., interest received), depreciation, insurance, mortgage payments, other interest, office expenses, net wages and total deductions. For partnerships and S corporations, the information is more limited, but includes both active and passive income accruing to the business entity and the amount of the Section 179 deduction.<sup>39</sup>

The Quantria model supplements the available tax information in the Public Use File in several ways. First, because administrative tax data only become available with a significant lag due to tax filing deadlines, a proprietary extrapolation, or aging, module forecasts the microdata into future years. The extrapolation module relies on annual macroeconomic forecasts constructed by the Congressional Budget Office (CBO). CBO's forecasts of the macroeconomy are the official forecasts relied upon by congressional budget and tax analysts. Second, not all individuals or married couples are required to file federal income tax returns (e.g., their income may be below the filing threshold). The tax records in the Public Use File are therefore supplemented with additional information on non-filers identified from the Current Population Survey (CPS). The CPS is a monthly survey of labor force characteristics with an annual focus on income and demographics for the non-institutional population in the U.S.<sup>40</sup> Finally, the information on the

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<sup>38</sup> As mentioned in the body of the report, certain types of business income received by C corporations may show up on tax returns as wage income or capital gains (or losses). The source of these income payments cannot be identified in the Public Use File.

<sup>39</sup> More information on the Public Use File can be found in "General Description Booklet for the 2004 Public Use Tax File," Individual Statistics Branch, Statistics of Income Division, Internal Revenue Service, September, 2007.

<sup>40</sup> The March CPS includes questions relating to income and employment that are asked retrospectively to the prior year. For purposes of this study, the CPS information for non-filers is obtained from the March 2005 survey to align with the 2004 tax year data in the Public Use File.

input file is augmented with numerous imputations to support specialized tax policy analysis. As an example, many individuals receive their health insurance from employer-provided group insurance plans and the amount (if any) of the cost of this insurance that is paid by the employer is not taxable to the employee. Most economists argue, however, that this is a form of compensation and should be included in the taxpayers' income for purposes of classifying taxpayers. The Quantria microsimulation model includes an estimate of employer-provided health insurance premiums for each taxpayer.

### ***Identifying Small Businesses***

Small business taxpayers are identified from individual tax records according to whether income is received in the form of sole proprietor income (Schedule C), partnership income (Schedule E), or S corporation income (Schedule E). It is not uncommon for certain taxpayers to have income from more than one business or in more than one form. This will affect the effective tax rate calculations in two ways. First, for a taxpayer who operates more than one business of the same entity type, information for each business is aggregated on the tax file across all businesses so an effective tax rate can only be calculated for all business income for each entity type. It can be argued that this is the correct conceptual framework from which to calculate effective tax rates for multiple businesses. In addition, this result has little, if any, effect on the effective tax rate calculations. Second, taxpayers with business income from more than one business-entity type are treated as separate businesses for purposes of the calculations. For example, a taxpayer who reports income from a sole proprietorship along with (active) income from an S corporation would be represented twice in the analysis. It can be argued that this is also the correct conceptual framework for examining small businesses.

### ***Calculating Effective Tax Rates***

The Quantria microsimulation model calculates the effective tax rates of small business entities by running two simulations for each business entity type. In the first simulation (the "baseline" simulation), the total federal income tax liability is calculated for each taxpayer reporting net business income. In the second simulation (the "alternative scenario"), business income is removed from the calculation of tax liability, and the change in tax liability from the baseline case is measured. The net tax change (in this case, a tax reduction because income is reduced) is divided by net business income to calculate the effective tax rate. The following additional assumptions are made for each business entity type:

**Nonfarm sole proprietorships** – Small business nonfarm sole proprietorships are identified as those taxpayers who report net business receipts of less than \$10 million on Schedule C. (The model excludes any taxpayer who reports net business income but reports no net business receipts.) In the alternative scenario, net business income is set to zero and federal income tax liability is recalculated.

**Partnerships and S Corporations** – A partnership or S corporation includes any taxpayer who reports net active income from partnerships or S corporations on Schedule E. For purposes of calculating net active income, 80 percent of the Section 179 deduction claimed is added back to account for the timing of depreciation deductions and to more closely approximate financial

accounting conventions. Net non-passive income is used as a proxy for net receipts; thus, the analysis includes any taxpayer with less than \$10 million in net active income. In the alternative scenario, net active income from total income (or loss) reported on Schedule E is subtracted and the difference in federal tax liability becomes the numerator in the effective tax rate calculations.

**C corporations** – The Quantria Strategies model cannot be used to calculate the effective tax rates of C corporations for two reasons. First, C corporations are subject to an entity-level tax (the corporate income tax). Second, no publicly available, micro level, federal income tax data is available for corporations, making it impossible to match individual level income taxes attributable to C corporation dividends and capital gains to specific C corporations. However, the IRS annually compiles tabulations of corporation information in its Corporate Source Book, which is an annual summary of the income, deductions, credits, taxes, and financial data (such as asset size) for all U.S. corporations. This summary data can be used to estimate the federal income tax liability and effective tax rate of small business C corporations.

### ***Industry Assignments***

No information exists in the Public Use File that indicates the industry of the business where income is reported to have occurred. This is true of nonfarm sole proprietorships, partnerships and S corporations. This is in contrast to administrative data collected by the IRS from individual taxpayers who file Schedule C, for which NAICS industry codes are available. Industry codes are available on the primary business returns filed by small businesses (Form 1065 for partnerships; Form 1120-S for S corporations), but there is currently no publicly available information that connects tax returns filed by these pass-through entities with the owners of the business. As a result, it is not currently possible to directly link effective tax rates to specific industries through publicly available tax return data.

In order to approximate effective tax rates on an industry-by-industry basis, the Quantria Strategies Individual Income Tax Simulation Model imputes NAICS industry designation based on available, but very limited, information contained for each tax record. This imputation occurs in two steps: in the first step, an initial imputation is based on the reported net income of the business; in the second step, this imputation is calibrated based on aggregate reported income and losses reported by the IRS.

For nonfarm sole proprietorships, the initial imputation relies on the size of net business receipts to categorize businesses according to industry breakdowns contained in published IRS data. Once the size of receipts is known, businesses are randomly assigned to 11 industry groupings. A similar preliminary imputation is done for partnerships and S corporations. In the second stage of the imputation, these preliminary assignments are adjusted in an iterative manner to target IRS totals for net income and net losses by industry class.

Because of the significant data limitations, the industry-specific effective tax rate calculations contained in this study are only suggestive and are supported by very limited data. Nevertheless, the general trend of these calculations appears to align reasonably well with data reported in other studies. Refining the ability to calculate industry-specific effective tax rates should be a high priority area for future research.

## ***Limitations of This Analysis***

The effective tax rate calculations in this study represent the first rigorous examination of the effective tax rates faced by small businesses in the United States. However, due to the nature in which federal income tax information is collected for different business types, there are several distinct limitations to this analysis. Because of the pass-through nature of partnerships and S corporations, actual income taxes paid only show up on the individual income tax returns of the owners of these businesses (i.e., partners in a partnership and shareholders of an S corporation), microsimulation is the only way to calculate the effect of federal income taxes on these businesses. Similarly, for nonfarm sole proprietorships, business income is commingled with income from other non-business sources, and isolating the taxes attributable to the business is difficult. Again, microsimulation seems the most reasonable and accurate way to measure the federal income taxes paid by these businesses.

In the case of small business C corporations, the effective tax rate calculations reflect only the entity level taxes (corporate income taxes) paid by the business. Although there are similarities between the individual and corporate income taxes, it must be noted that the effective tax rate calculation for C corporations is inherently different from the methodology used for pass-through entities and sole proprietorships.

The following additional points should be considered:

- An explicit stacking order in the calculation of taxes attributable to the business is imposed by removing net business income last. This stacking order may result in a slightly higher estimate of tax liability for certain taxpayers because of the graduated rate structure.
- Any multiple businesses owned by the same taxpayer are treated as separate entities. This methodology can, in some circumstances, result in different effective tax rates attributable to the same taxpayer for different businesses.
- To the extent that some business owners (e.g., partners or S Corporation shareholders) are non-U.S. citizens or other entity types, then the income and taxes attributable to these entities is not counted.
- The income of C corporations is taxed twice, once at the business level and once again when income is passed along to owners and investors, either as dividend payments or capital gain realizations. Because it is impossible to identify the tax payments by these owners, the calculations in this study underestimate the true effective tax burden of small business C corporations.
- To the extent that small business owners receive a salary from the business – which may be the case for C Corporations – then there is no reliable way to identify those payments and calculate the income taxes paid on them from existing data. This will tend to understate the true tax liability of entities that provide compensation to their owners in this way.

## **APPENDIX B: FEDERAL INCOME TAX PROVISIONS APPLICABLE TO SMALL BUSINESSES**

While the IRS uses a \$10 million gross receipts threshold to identify small businesses for classification purposes, there is no single substantive definition of a small business that applies for federal tax purposes. Instead, the federal tax system often recognizes the unique circumstances of small businesses in specific industries by providing special rules that apply only to small businesses or to the owners of small business interests. How these special rules apply and what definition of small business is utilized depends upon the specific tax provision. In some cases, small businesses are subject to more onerous rules based on a perceived potential for abuse of the tax system.

This section provides a brief summary of the special income tax provisions identified in the federal tax code that are directly or indirectly applicable to small businesses. Because this paper explores federal income taxes only and does not examine the effects of other federal taxes, such as excise taxes, on small businesses, this section is limited to special income tax provisions affecting small businesses. It should be noted that there are also special provisions in the federal tax code that benefit small employers outside of the income tax area. For example, the special use valuation provisions (IRC sec. 2032A) applicable to farm and other real property may reduce the amount of estate taxes paid with respect to small businesses. Similarly, certain of the federal excise tax provisions have special rules for small businesses – see, for example, the exemption from federal firearms excise taxes for certain small manufacturers and the exemption from certain federal transportation excise taxes for small aircraft on nonestablished lines.

This summary generally is organized in ascending order by federal tax code provision. References to IRC sections are references to the Internal Revenue Code of 1986, as amended.

### **1. Graduated individual and corporate tax rates (IRC secs. 1 and 11)**

The graduated income tax rates for individuals and corporations have the effect of providing a lower marginal tax rate for many small businesses. Sole proprietors, partners of small partnerships, S corporation shareholders, and members of LLCs may all benefit from the graduated individual income tax rates (and the reduced rates of taxation on capital gains and dividends). Small corporations will benefit from the graduated corporate income tax rates.

### **2. Small ethanol producer credit (IRC sec. 40(b)(4))**

In addition to the alcohol fuels credits generally provided under IRC section 40, small ethanol producers are provided a small ethanol producer credit of 10 cents per gallon of ethanol produced up to 15 million gallons in a year. A small ethanol producer is defined as a producer with a production capacity of up to 60 million gallons of alcohol per year.

### **3. Small agri-biodiesel producer credit (IRC sec. 40A(b)(5))**

In addition to the credits for biodiesel and renewable diesel used as fuel generally provided under IRC section 40A, small agri-biodiesel producers are provided a small agri-biodiesel producer credit of 10 cents per gallon of qualified agri-biodiesel production up to 15 million gallons in a year. A small agri-biodiesel producer is defined as a producer with a production capacity of up to 60 million gallons of agri-biodiesel in a year.

### **4. Credit for increasing research activities (IRC sec. 41)**

Taxpayers are generally entitled to claim a federal income tax credit for increasing research activities. Qualified research expenses include in-house research expenses and 65 percent of contract research expenses. A special provision permits a taxpayer to use 100 percent of contract research expenses for amounts paid to eligible small businesses. For this purpose, an eligible small business is a business in which the average number of employees during the preceding two calendar years was 500 or less.

While this provision does not provide a direct federal tax benefit to small businesses, it provides an incentive for other taxpayers to use eligible small businesses for qualified contract research activities.

### **5. Credit for expenditures to provide access to disabled individuals (IRC sec. 44)**

Eligible small businesses are entitled to claim a credit for 50 percent of the expenditures incurred during a year to make a business accessible to the disabled. The expenditures eligible for the credit are those in excess of \$250 and less than \$10,250. Thus, the maximum credit is 50 percent of \$10,000 (\$10,250-\$250) or \$5,000.

An eligible small business for purposes of the credit is any taxpayer that either (1) had gross receipts (less returns and allowances) for the preceding taxable year that did not exceed \$1 million or (2) had no more than 30 full-time employees during the preceding taxable year.<sup>41</sup>

### **6. Credit for electricity produced from certain renewable resources (IRC sec. 45)**

The credit for electricity produced from certain renewable resources is available to qualified energy resources, which includes small irrigation power. For purposes of this credit, small irrigation power is defined as power generated without any dam or impoundment of water through an irrigation system canal or ditch and whose capacity rating is more than 149 kilowatts, but less than 5 megawatts.

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<sup>41</sup> Full-time employees are defined as those who work at least 30 hours per week for at least 20 calendar weeks during the taxable year.

**7. Credit for portion of employer social security taxes paid with respect to employee cash tips (IRC sec. 45B)**

An employer in the food and beverage industry is entitled to claim a credit against federal taxes for its portion of social security and Medicare taxes (FICA taxes) paid on employee tips. While this provision is not specifically applicable to small businesses, many food and beverage establishments qualifying for the credit are likely to be small businesses.

**8. Credit for small employer pension plan startup costs (IRC sec. 45E)**

Small employers are entitled to claim a credit for 50 percent of their qualified startup costs for establishing a retirement plan for their employees. The amount of the credit cannot exceed \$500 per year for up to three years. A small employer eligible for the credit is defined as an employer that had no more than 100 employees who received at least \$5,000 in compensation for the preceding year.

**9. Credit for production of low-sulfur diesel fuel (IRC sec. 45H)**

Qualified small business refiners are entitled to a credit for qualified expenditures for the production of low-sulfur diesel fuel. A small business refiner for this purpose is defined as a refiner of crude oil that employs no more than 1,500 individuals on any day during the year and had an average daily refinery production during the one-year period ending on December 31, 2002, which did not exceed 205,000 barrels.

**10. Alternative minimum tax (IRC sec. 55)**

Small corporations are exempt from the corporate alternative minimum tax. Small corporations are defined as those corporations that have average annual gross receipts of no more than \$7.5 million for all 3-year periods ending before the taxable year (\$5 million for the first 3-year period).

**11. Election to expense certain depreciable business assets (IRC sec. 179)**

Businesses are allowed to take a current deduction (expense) for the cost of certain property rather than take a depreciation deduction each year over the life of the property. The expensing deduction is only available for up to \$250,000 (for 2008) of qualifying expenses and is phased out dollar for dollar if the total amount of such property purchased during the year exceeds \$800,000 (for 2008). Although not specifically limited to small businesses, section 179 expensing tends to benefit small businesses.

**12. Treatment of certain qualified film and television production (IRC sec. 181)**

Expensing is allowed for the cost of any qualified film or television production if the aggregate cost does not exceed \$15 million (\$20 million in the case of production in certain areas). While not directly limited to small businesses, this provision has the effect of benefiting smaller film and television producers. The provision expires after 2008.

### **13. Start-up expenditures (IRC sec. 195) and corporation organizational expenses (IRC sec. 248)**

In general, taxpayers cannot deduct currently the start-up expenditures for a new business. Instead, these start-up expenses are amortized over a period of at least 180 months, starting with the month in which the business begins. However, taxpayers can elect to deduct up to \$5,000 for start-up expenditures for a new business (sec. 195). The \$5,000 amount is phased out for each dollar of start-up expenditures in excess of \$50,000. This provision has the effect of benefiting new small businesses. A similar provision applies with respect to the organizational expenditures for a new corporation (sec. 248).

### **14. Archer MSAs (IRC sec. 220)**

Self-employed individuals and employees of small businesses are permitted to deduct contributions to an Archer medical savings account (MSA). A small employer for this purpose means an employer with an average of 50 or fewer employees during either of the two preceding calendar years. No new deductible contributions are permitted to Archer MSAs after 2007 unless the individual previously had an MSA or works for an employer that made MSA contributions.

### **15. Golden parachute payments (IRC sec. 280G)**

No deduction is allowed for any excess parachute payment, which is a payment in the nature of a severance payment made to a former executive of a business after he or she leaves the business. There is an exception for payments made to an individual from a small business corporation which could qualify for S corporation treatment (generally has no more than 100 shareholders who are all individuals, estates, trust, and certain other entities). (See sec. 1361(b) and the discussion in Part V for a description of the requirements for S corporation treatment.)

### **16. SIMPLE retirement accounts (IRC sec. 408(p))**

Small employers are entitled to adopt a simplified qualified retirement plan for their employees, called SIMPLE retirement accounts. These plans have fewer rules and restrictions than the rules that normally apply to employer-sponsored qualified retirement plans.

For purposes of the SIMPLE retirement accounts, a small employer is defined as an employer that had no more than 100 employees who received at least \$5,000 in compensation for the preceding year.

### **17. Special rules for top-heavy plans (IRC sec. 416)**

Employer retirement plans that are top heavy are required to meet additional requirements, including providing minimum contributions on behalf of employees, which increases the cost of the retirement plan for the employer. An employer retirement plan is top heavy if more than 60 percent of the benefits or account balances under the plan benefit key employees. Key employees are certain owners and officers of the business. Although the top heavy rules do not specifically apply to small businesses, the rules are most likely to apply to such businesses.

### **18. Method of accounting for corporations engaged in farming (IRC sec. 447)**

Corporations and partnerships that have a corporate partner engaged in farming generally are required to use the accrual method of accounting. However, an exception to this rule provides that an S corporation and a C corporation with gross receipts that do not exceed \$1 million in the taxable year are not required to use the accrual method of accounting. In the case of family corporations, the gross receipts threshold is increased to \$25,000.

### **19. Limitation on use of cash method of accounting (IRC sec. 448)**

Certain taxpayers (C corporations, partnerships with a C corporation partner, and tax shelters) are not permitted to use the cash method of accounting. An exception applies for farming businesses, and qualified personal service corporations, and corporations or partnerships with average annual gross receipts of no more than \$5 million for the three taxable years prior to the current year. A qualified personal service corporation is engaged substantially in the performance of service in the fields of health, law, engineering, architecture, accounting, actuarial science, performing arts, or consulting.

### **20. Simplified dollar-value LIFO method for certain small businesses (IRC sec. 474)**

An eligible small business may elect to use a simplified dollar-value method for pricing inventories. An eligible small business for this purpose must have annual average gross receipts for the three preceding taxable years of not more than \$5 million.

### **21. Exemption from federal income tax for small life insurance companies (IRC sec. 501(c)(15))**

Certain small life insurance companies are exempt from federal income tax. A small life insurance company is a life insurance company (1) with gross receipts for the taxable year that do not exceed \$600,000 and more than 50 percent of the gross receipts consist of premiums or (2) is a mutual insurance company with gross receipts for the taxable year that do not exceed \$150,000 and more than 35 percent of the gross receipts consist of premiums.

## **22. Small life insurance company deduction (IRC sec. 806)**

A small life insurance company is permitted a deduction equal to 60 percent of the company's tentative life insurance company taxable income (LICTI) up to \$3 million. The deduction is phased out for tentative LICIT between \$3 million and \$15 million. In addition, the small life insurance company deduction is disallowed if a company has assets of \$500 million or more.

## **23. Alternative tax for certain small nonlife insurance companies (IRC sec. 831(b))**

In lieu of the normal corporate income tax rate structure, small property and casualty insurance companies are subject to tax only on their investment income. This provision applies to insurance companies other than life insurance companies if the net written premiums (or, if greater, direct written premiums) for the taxable year do not exceed \$1.2 million.

## **24. Rollover of gain from qualified small business stock to another qualified small business stock (IRC sec. 1045)**

Taxpayers can avoid paying taxes on gain from the sale of qualified small business stock (as defined by sec. 1202 (see item 25, below)) by rolling over the gain to other qualified small business stock within 60 days of the sale.

## **25. Exclusion of capital gain from small business stock (IRC sec. 1202)**

An individual taxpayer can exclude up to 50 percent (60 percent if the qualified small business stock was issued by a small business in an empowerment zone) of the gain from the sale or exchange of qualified small business stock held for more than five years. There is a cumulative limit on the exclusion of the greater of \$10 million or 10 times the taxpayer's adjusted basis of all qualified stock the issuer disposed of during the taxable year.

For purposes of this exclusion, qualified small business stock must have been issued after August 10, 1993, and the issuing corporation must be a domestic C corporation with aggregate gross assets that do not exceed \$50 million as of the date of issuance. At least 80 percent of the value of the corporation's assets must be used in the active conduct of one or more qualified trades or businesses. Qualified trades or businesses do not include health, law, engineering, architecture, hospitality, farming, insurance, financing, or mineral extraction, but SSBICs qualify. (SSBICs are discussed in the following section).

## **26. Small business investment companies (IRC secs. 243(a)(2), 1242, 1243, and 1044)**

A small business investment company (SBIC) is a private corporation operating under the Small Business Investment Act of 1958. SBICs provide capital to small businesses through the purchase of convertible debentures. An SBIC is entitled to special treatment under certain circumstances: First, an SBIC is entitled to a 100 percent dividends received deduction (rather than 70 percent) for the dividends received from taxable domestic corporations (sec. 243(a)(2)). In addition, an SBIC may treat as an ordinary (rather than capital) loss any loss from the sale or

exchange of the stock of a small business under certain conditions (sec. 1243) and any loss on the sale of SBIC stock (or if the stock becomes worthless) (sec. 1242).

In addition, individuals and C corporations can defer recognition of capital gains on the sale of publicly traded securities if they use the sale proceeds within 60 days to purchase common stock or a partnership interest in a specialized small business investment company (SSBIC). An individual can defer up to \$50,000 per year and \$500,000 total; C corporations can defer up to \$250,000 per year and \$1 million total.

### **27. Losses on small business stock (IRC sec. 1244)**

Individuals are allowed to take an ordinary loss deduction for losses on the sale, exchange, or worthlessness of small business stock. The maximum amount deductible in any year is \$50,000 for a single individual and \$100,000 for a married couple. The stock must have been issued to the individual (or a partner in a partnership) in exchange for money or property other than stock or securities.

For purposes of this provision, a small business corporation is a corporation with respect to which, at the time the stock was issued, the aggregate amount of money and other property received by the corporation as a contribution to capital and as paid-in surplus did not exceed \$1 million and for the corporation's five most recent taxable years, more than 50 percent of its gross receipts were derived from sources other than royalties, rents, dividends, interest, annuities, and gains from the sale of securities. In other words, the corporation must be conducting active, rather than passive, activities.

### **28. Averaging of farm income (IRC sec. 1301)**

Individuals engaged in a farming business can elect to average their income over three years for federal income tax purposes.

### **29. S corporations (IRC sec. 1361)**

A small business corporation (S corporation) can elect to be treated as a pass-through entity, rather than a corporation, for federal tax purposes. To be eligible for S corporation status, a small business corporation must (1) be a domestic corporation; (2) have no more than 100 shareholders; (3) have shareholders that are only individuals, estates, certain tax-exempt organizations, and certain trusts; (4) have no nonresident alien shareholders; (5) have only one class of stock; (6) not be a bank, insurance company, possessions corporation, or a domestic international sales corporation; and (7) meet certain other requirements.