

Small Business Tax Benefits: Overview and Economic Rationale

Gary GuentherAnalyst in Public Finance

March 26, 2009

Congressional Research Service

7-5700 www.crs.gov RL32254

Summary

The federal tax burden on small firms and its effects on their performance and rates of formation and growth is a policy issue that never seems to disappear from Congress's legislative agenda. Continuing congressional interest in the issue has led to the enactment of a series of legislative initiatives to reduce this burden in recent Congresses. In February 2009, the 111th Congress passed a bill (the American Recovery and Reinvestment Act of 2009, P.L. 111-5) intended to spur an economic recovery; it included several small business tax preferences.

This report describes the main federal tax benefits for small firms and examines the economic arguments for and against them. It will be updated as needed.

While a comprehensive estimate of the federal revenue cost of existing small business tax preferences cannot be made with available information, estimates by the Joint Committee on Taxation and the Treasury Department of the revenue lost because of the larger federal tax expenditures indicate that this cost will exceed \$15 billion in FY2009. The following small business tax benefits appear to have the widest reach outside the agricultural sector: the taxation of small firms as passthrough entities; the graduated rate structure for the corporate income tax; the expensing allowance for equipment under Section 179 of the Internal Revenue Code; the exemption of some small corporations from the corporate alternative minimum tax; cash-basis accounting; a tax credit for costs incurred by small firms in establishing pension funds for employees; a tax credit for costs incurred by small firms in complying with the Americans with Disabilities Act; and the exclusion from taxation of capital gains on the sale or disposition of qualified small business stock.

These and other small business tax benefits raise some significant policy issues. For economists who specialize in public finance, a key issue is whether or not preferential tax treatment for small firms can be justified on economic grounds. If such a justification cannot be found, then proposals to extend or enhance small business tax preferences arguably could create more economic problems than they solve.

Proponents of granting tax relief to small firms say such relief is justified on several grounds. First, in their view, small firms create opportunities for social and economic advancement. Second, proponents maintain that the rate of small business formation responds favorably to reductions in tax burdens. Third, they note that small firms make important contributions to economic growth and employment over time. Fourth, small firms are thought to face special constraints on their ability to raise needed capital in debt and equity markets. Finally, proponents argue that tax preferences are needed to offset the financial burden placed on small firms as a result of complying with a variety of federal regulations.

Critics of small business tax preferences find it difficult to justify them on economic grounds. They say such preferences lessen the progressivity of the federal income tax and boost the returns on small business investment in ways that distort the domestic allocation of economic resources. In addition, critics contend that many existing small business tax preferences are inappropriate or poorly designed (or in some cases, both), magnifying any efficiency losses associated with them.

Contents

Firm Size: How Small Is Small?	1
Main Federal Tax Benefits for Small Business	3
Taxation of Passthrough Entities	
Graduated Corporate Income Tax Rates	
Expensing Allowance for Certain Depreciable Business Assets	
Exemption of Certain Small Corporations From the Corporate Alternative Minimum	
Tax	8
Amortization of Business Start-Up Costs	9
Cash-Basis Accounting	
Net Operating Losses	
Tax Incentives for Private Equity Investment in Small firms	
Partial Exclusion of Capital Gains on Certain Small Business Stock	13
Losses on Small Business Investment Company Stock Treated as Ordinary	
Losses without Limitation	
Rollover of Gains into Specialized Small Business Investment Companies	
Ordinary Income Treatment of Losses on Sales of Small Business Stock	
Uniform Capitalization of Inventory Costs	
Simplified Dollar-Value LIFO Accounting Method for Small Firms	
Tax Credit for Pension Plan Start-Up Costs of Small Firms	
Tax Credit for Cost of Making A Business More Accessible to the Disabled	18
Economic Importance of Small Firms	18
Economic Arguments For and Against Small Business Tax Preferences	20
Chief Economic Arguments in Favor of the Preferences	
Special Economic Role of Small Firms	
Opportunities for the Economic Advancement of Immigrants, Women, and	20
Members of Minority Groups	22
Imperfections in Capital Markets	
Impact of Progressive Income Taxes	
Cost of Tax Compliance	
Chief Economic Arguments Against the Subsidies	
Equity Concerns	
Efficiency Concerns	
Other Concerns	
Concluding Remarks	
Concluding Remarks	20
T.1.1	
Tables	
Table 1. Estimated User Cost of Capital Under-Expensing.	7
Tuest 1. Estimated esser cost of capital chast Expensing	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Combonia	
Contacts	
Author Contact Information	29

ome policy issues never seem to disappear from Congress's legislative agenda. One such issue is the federal tax burden on small firms and its effect on their formation, performance, and growth.

It appears that many lawmakers regard small firms in general as a vital and unsurpassed source of job creation, economic opportunity, and technological innovation. Many of these same individuals are also inclined to see current federal taxation of small firms both as an obstacle to their formation and a drag on their growth, and as an effective policy tool for boosting their rates of formation and growth. Recent Congresses have passed numerous laws that have included a variety of tax preferences for small firms. The 111th Congress has already proven to be no exception. In February 2009 it passed legislation (the American Recovery and Reinvestment Act of 2009, P.L. 111-5) to stimulate the economy that included several tax benefits targeted at small firms. Numerous other bills to extend or enhance existing small business tax benefits, or create new ones, have been introduced.

Existing small business tax benefits and proposals to enhance or expand them raise several policy issues. For most economists, a key policy issue is whether the benefits can be justified on economic grounds. If such a rationale cannot be found, or if the one set forth by proponents of small business tax benefits can be shown to rest on untenable assumptions, then critics of these benefits could be right in arguing that they damage social welfare in the long run. Another policy issue tied to small business tax benefits concerns the use of preferential tax treatment to extend assistance to small firms. The benefits entail costs in the guise of foregone tax revenues and the resources required on the part of the federal government to administer the tax benefits, and on the part of eligible small firms to comply with their requirements. Some question whether tax subsidies are more cost-effective than alternative approaches to providing assistance to small firms, such as grants, loan guarantees, and exemptions from certain federal regulations.

This report explores these issues by examining the main non-agricultural small business tax preferences and the economic arguments for and against them. It begins with a brief description of existing preferences for small firms, then reviews what is known about the economic contributions of small firms, and concludes with a discussion of the principal economic arguments for and against these subsidies.

Firm Size: How Small Is Small?

When examining the ways in which the federal tax code confers benefits on small firms and what is known about the economic role of small firms, a critical analytical and policy issue is the definition of a small firm.

It turns out that there is no standard or uniform definition of a small firm underlying the host of federal laws and regulations offering assistance to small business. Instead, several criteria are used to identify the firms that qualify for the benefits. Why such variation prevails is difficult to discern from the language of these laws and regulations.

The absence of a standard definition of a small firm may reflect the lack of a consensus among economists and other analysts on what constitutes a small firm. But this absence may also have its roots in the Small Business Act (P.L. 85-536, as amended). The act defines a small firm as "one

that is independently owned and operated and which is not dominant in its field of operation. "It also notes that the definition of a small firm can vary from industry to industry to reflect important structural differences among industries. Under the act, the Small Business Administration (SBA) has the authority to establish or alter the size standards and limits for determining eligibility for federal programs to assist small business, some of which are administered by the SBA. All federal agencies administering programs that reserve a share of their procurement contracts for small firms are required to use SBA size standards and limits. For other federal programs or statutes offering support for small business, the definition of a qualified firm does not necessarily have to conform to SBA size standards and limits.

In general, three criteria are used to identify the firms eligible for federal small business support programs. Each specifies the maximum size a firm (including affiliates) can attain and still take advantage of the benefits offered by the programs.

For the most part, the SBA uses two criteria to determine eligibility for the programs it administers: (1) number of employees and (2) average annual receipts in the previous three years. Application of these criteria can vary by industry. For example, the sole criterion for most manufacturing and mining firms is employment size, and the upper limit is 500 employees; by contrast, for most retail and service firms, the sole criterion is average annual receipts, and the upper limit is \$6 million. SBA's current size limits for small firms range from \$0.75 million to \$28.5 million for average annual receipts, and from 100 to 1,500 for number of employees.³

The SBA Administrator has the authority to modify size standards for particular industries. Before a proposed change can take effect, SBA's Office of Size Standards (OSS) is required to undertake an analysis of the likely impact of the change on the performance of the affected industry or industries—focusing on the degree of competition, average firm size, start-up costs, barriers to entry, and the distribution of sales and employment by firm size—and use the results to make recommendations to SBA's Size Policy Board. If the board agrees with OSS's recommendations, then it normally advises the Administrator to approve the proposed change.

A third criterion used by federal agencies is asset size. Under this standard, eligible firms would hold assets up to a certain threshold, such as \$50 million. Among federal programs offering support to small business, use of this criterion is less frequent than number of employees or average annual receipts.

How does the federal tax code define a small firm? Again, there is no uniform or standard definition. Instead, several criteria are used to determine eligibility for current small business tax preferences. Again, it is not clear why the criterion varies from one preference to the next. Some preferences rely on asset size, receipt size, or employment size to select eligible firms. Others confer benefits on small firms not through a mandatory size standard but through the design of the preference itself. A case in point is the small business expensing allowance under Section 179

-

³ Ibid.

¹ 15 U.S.C. § 632(a)(1)

² See U.S. Small Business Administration, *FAQs: Frequently Asked Questions: Size Standards*, available at http://web.sba.gov/faqs/faqindex.

⁴ According to one source, the Internal Revenue Code contains at least 24 different definitions of a small business. See Douglas K Barney, Chris Bjornson, and Steve Wells, "Just How Small Is Your Business?," *National Public Accountant*, Aug. 2003, pp. 4-6.

of the Internal Revenue Code (IRC): although in principle allowance may be claimed by firms of all employment, receipt, or asset sizes, its design effectively confines its benefits to relatively small firms, as is discussed below.

The lack of a standard definition of a small firm in the federal tax code has its advantages and disadvantages. On the one hand, it can lead to a situation where a firm is eligible for some small business tax preferences but not for others, perhaps undercutting the incentive effect of at least some of them. On the other hand, the absence of a standard definition might give lawmakers greater flexibility in crafting tax benefits for small firms that mesh with larger policy objectives.

Main Federal Tax Benefits for Small Business

In general, all business income is subject to federal taxation, but not all business income is treated the same way under the federal tax code.

The taxation of business income depends on several considerations. One is whether or not a firm is organized for tax purposes as a corporation. Corporate net income eventually is taxed twice (once at the firm level and a second time at the shareholder level), whereas the net income of passthrough entities such as S corporations, sole proprietorships, limited liability companies, or partnerships is taxed only once (at the shareholder level).

In addition, the taxation of business income depends on whether or not a corporation or the owners of passthrough entities pay the alternative minimum tax (AMT). Corporations or business owners paying the AMT may or may not be taxed at lower marginal rates than the rates they would be subject to under the regular corporate income tax.

The tax burden on business income also can vary according to how investments are financed. Corporations may deduct interest payments from taxable income but not dividend payments. As a result, the returns to corporate investments financed solely by debt are taxed at lower marginal effective rates than the returns to investments financed solely by equity.

Firm size is another factor that can affect the tax treatment of business income. Various provisions of the federal tax code offer benefits to smaller firms that are not available, or are of lesser value, to larger firms. The code makes no explicit or formal distinction between the taxation of small and large firms in that it has no separate sections for small and large firms. Rather, there are provisions scattered throughout its many chapters that confer preferential treatment on relatively small firms only. Most of these provisions come in the form of deductions, exclusions and exemptions, credits, deferrals, and preferential tax rates. In general, tax preferences such as these lower the cost of capital for new investment by eligible firms relative to other firms. Some of the provisions benefit small firms by reducing the cost and burden of complying with tax laws, or by making tax relief contingent on providing certain fringe benefits to employees.

The federal tax subsidies targeted exclusively at smaller firms and with the widest reach outside agriculture are described below. Excluded from the list are subsidies available only to small firms in particular industries, such as life insurance, banking, and energy production or distribution. Nor does the list include subsidies from which many small firms derive significant benefits but that are also available to large firms, such as the research and work opportunity tax credits.

It is not known what the total revenue cost is for the subsidies discussed below. Nevertheless, recent estimates by the Joint Committee on Taxation (JCT) and the Treasury Department indicate that they could lower federal revenue in FY2009 by at least \$15 billion.⁵

Taxation of Passthrough Entities

Business enterprises operate in a variety of legal organizational forms. The business laws of each state determine the range of available options. For federal tax purposes, five such forms are widely used: subchapter C corporations, subchapter S corporations, sole proprietorships, partnerships, and limited liability companies (LLCs).

A firm's legal organizational form can have important implications for the taxation of its earnings. The earnings of C corporations are taxed twice: once at the corporate level and again at the individual level when the earnings are distributed to shareholders or owners as dividends or realized capital gains. By contrast, the earnings of all other business entities are taxed only once: at the individual level of their owners or shareholders. As a result, these entities are often referred to as passthrough entities: their earnings escape taxation at the entity level but are passed through to the owners. The entities' profits, losses, items of income, deduction, exclusion, deferral, and credit are attributed to the owners according to their shares of ownership, regardless of whether the profits have been distributed. Most businesses operate as sole proprietorships: in 2005, they accounted for 67% of federal business tax returns. Next in order of magnitude were S corporations (12% of business tax returns), followed by partnerships (9% of returns), C corporations (6% of returns), and farms (6% of returns).

There is no legal requirement that C corporations be relatively large in income, asset or employment size, and that passthrough firms be relatively small. Yet such a difference is the reality: in 2005, for example, the average C corporation's asset size was \$32.1 billion, compared to \$5 million for the average partnership and \$743 million for the average S corporation.⁸

Whether a business owner would be better off operating as a C corporation or as some kind of passthrough entity is a complicated decision involving many tax and non-tax considerations. Key non-tax considerations include the legal liability of shareholders, access to capital markets, and degree of shareholder control of management. Foremost among tax considerations are relative tax rates for corporate income, individual ordinary income, and long-term capital gains; the investment horizon of investors; the holding period for corporate stock; and the rate at which corporate profits are paid out as dividends.

⁵ In FY2008, the estimated combined revenue loss for six of the small business tax preferences discussed here is \$11 billion. It covers the following small business tax preferences: (1) expensing of depreciable business property; (2) reduced rates on the first \$10 million of corporate taxable income; (3) cash accounting outside agriculture; (4) the partial exclusion of capital gains on the sale of certain small business stock; (5) the amortization of business start-up costs; and (6) the ordinary income treatment of losses on the sale of small business corporation stock. See U.S. Congress, Joint Committee on Taxation, *Estimates of Federal Tax Expenditures for Fiscal Years* 2008-2012, JCS-2-08 (Washington: GPO, 2008), tables 2 and 3; and Office of Management and Budget, *Analytical Perspectives, Budget of the United States Government, Fiscal Year* 2009 (Washington: U.S. Govt. Print. Off., 2008), table 19-1.

⁶ For more details on the taxation of non-corporate businesses, see CRS Report RL31538, *Passthrough Entities Not Taxed As Corporations*, by Jack H. Taylor, available upon request from the author.

⁷ U.S. Congress, Joint Committee on Taxation, *Tax Reform: Selected Financial Tax Issues Relating to Small Business and Choice of Entity*, JCX-48-08 (Washington: June 4, 2008), table 1, p. 8.

⁸ Ibid., tables 3 to 5, pp. 14-16.

The current mix of individual and corporate tax rates favors passthrough entities by a small margin for investors in the highest income tax bracket. A few simple calculations prove this point. In 2009, the top personal tax rate is 35%; most corporate profits are taxed at 35%; and the top tax rate on long-term capital gains is 15%. Assuming an investment horizon of one year—after which the firm's assets are liquidated—tax considerations alone would dictate that a high-income individual would be better off owning a business enterprise operated as a partnership than as a C corporation. Under such a scenario, after-tax returns to a partnership would be \$0.65 for every dollar invested, whereas they would be \$0.55 for every dollar invested in a C corporation. Extending the investment horizon to five years does not alter the result. Assuming all after-tax income earned during that period is reinvested in the business, the firm's assets are liquidated after five years, and individuals in the top tax bracket can earn a pre-tax rate of return of 20% whether the business is operated as a partnership or a corporation, a partnership would earn a higher after-tax rate of return than a C corporation: 13.0% versus 11.3%.

Still, it would be incorrect to view the taxation of passthrough entities as a small business tax benefit. This is because a firm's size has no bearing on its ability to operate as a passthrough entity. Some firms that are relatively large in employment, revenue, or asset size are organized as S corporations or partnerships, while some firms that are relatively small in those measures of size operate as C corporations. In 2005, 17% of S corporations and 7% of partnerships filing federal income tax returns reported total receipts of more than \$1 million, while 38% of C corporations filing federal income tax returns reported total receipts of \$100,000 or less. 12

Any tax advantage presently held by passthrough entities has proven to be ephemeral in the recent past. For instance, their present advantage would evaporate if legislation were enacted that substantially reduces the top corporate and long-term capital gains tax rates relative to the maximum individual income tax rate. In fact, current tax law could diminish or even extinguish the current appeal of passthrough entities. The individual tax cuts enacted under the Bush Administration are due to expire at the end of 2010. Assuming current law is not changed, beginning in 2011, the maximum individual income tax rate would rise from 35% to 39.6%, and the maximum long-term capital gains rate would increase from 15% to 20%.

Graduated Corporate Income Tax Rates

Corporations with less than \$10 million in taxable income are subject to a set of graduated tax rates. The rate is 15% on the first \$50,000 of income, 25% on the next \$25,000, and 34% on

-

⁹ Under the Jobs and Growth Tax Relief Reconciliation Act of 2003 (JGTRRA, P.L. 108-27), in 2003, the top individual income tax rate is 35% and is scheduled to remain at that level through 2010, and the maximum rate on long-term capital gains is 15% for assets sold after May 6, 2003 and before January 1, 2009.

¹⁰ These tax rates are derived from the following formula: (1-tp) is less than or equal to (1-tc) x (1-tcg), where tp is the highest personal tax rate, tc is the highest corporate tax rate, and tcg is the maximum tax rate on long-term capital gains. See Myron S. Scholes, et. al., *Taxes and Business Strategy: A Planning Approach*, 2nd edition (Upper Saddle River, NJ: Prentice-Hall, Inc., 2001), p. 67.

¹¹ The after-tax rate of return for a partnership is derived from the following formula: $\$1[1 + R \times (1 - tp)]^n$, where R is the expected pre-tax rate of return, tp is the highest personal tax rate, and n is the investment horizon. And the after-tax rate of return for a corporation is derived from the following formula: $\$1[1 + R \times (1 - tc)]^n (1 - tcg) + (tcg \times \$1)$, where R and n are the same as the previous formula, tc is the highest corporate tax rate, and tcg is the maximum tax rate on long-term capital gains. See Scholes, Taxes and Taxes

¹² Joint Committee on Taxation, *Tax Reform: Selected Federal Tax Issues Relating to Small Business and Choice of Entity*, tables 3 to 5, pp. 14-16.

amounts between \$75,000 and \$100,000 and between \$335,000 and \$10 million. Corporations with taxable incomes ranging from \$10 million to \$15 million pay a marginal rate of 35%. In two income ranges, corporations face marginal tax rates greater than 35%: a corporation with taxable income between \$100,000 and \$335,000 pays a marginal rate of 39%; if its taxable income falls between \$15 million and \$18.3 million, the firm pays a marginal rate of 38%. These higher rates are intended to offset the tax savings that firms realized when their tax rates were below 35%. All corporate taxable income above \$18.3 million is taxed at a rate of 35%. As a result, the tax savings from the rates of 15% to 34% are limited to corporations with taxable incomes under \$335,000.

This rate structure mainly benefits corporations that are relatively small in employment or asset size. It also gives owners of closely held small firms an added incentive to incorporate in order to shield any profits from higher individual tax rates. But not all small corporations are allowed to take advantage of the reduced rates. Specifically, regardless of the amount, the taxable income of corporations providing services in the fields of health care, law, engineering, architecture, accounting, actuarial science, the performing arts, and consulting is taxed at a fixed rate of 35%.

The graduated rate structure has at least one unavoidable drawback: it gives small corporations a disincentive to grow to the point where their net incomes are taxed at marginal rates above 34%. It could be argued that rates above 34% serve as a tax on growth.

The revenue loss arising from the reduced rates on the first \$10 million of corporate taxable income could total an estimated \$3.3 billion in FY2009.¹³

Expensing Allowance for Certain Depreciable Business Assets

Expensing is the most accelerated form of depreciation for tax purposes. It entails treating the cost of a depreciable asset such as a machine or building as a current expense rather than as a capital expenditure. Current costs are deducted in the year in which they are incurred, whereas capital costs normally are recovered over longer periods by applying the depreciation methods and schedules allowed in the federal tax code.

Under Section 179 of the Internal Revenue Code (IRC), firms may expense (or deduct) up to \$250,000 of the cost of qualified business property—mainly machinery, equipment, and computer software—placed into service in 2008 and 2009, and write off the remaining basis (if any) using a temporary 50% depreciation allowance and current cost recovery rules. ¹⁴ The expensing allowance is scheduled to drop to \$125,000 in 2010, before adjustment for inflation. Starting in 2011, the maximum allowance will be fixed at \$25,000, with no adjustment for inflation.

Owing to a rule known as the dollar limitation, not all firms are able to take advantage of the expensing allowance. Under this limitation, the allowance is reduced by the amount by which the

Business Expensing Allowance: Current Status, Legislative Proposals, and Economic Effects, by Gary Guenther.

¹³ U.S. Congress, Joint Committee on Taxation, *Estimates of Federal Tax Expenditures for Fiscal Years* 2008-2012, JCS-2-08 (Washington: GPO, 2008), p. 71.

¹⁴ The Economic Stimulus Act of 2008 (P.L. 110-185) raised the maximum allowance to \$250,000 and the phase-out threshold to \$800,000 for 2008 only. The American Recovery and Reinvestment Act of 2009 (P.L. 111-5) extended both limits through the end of 2009. Those limits are higher for firms located in certain economically distressed areas. For more details on the design of the expensing allowance and its economic effects, see CRS Report RL31852, *Small*

total cost of qualified property placed in service during a year exceeds a phase-out threshold. In 2008 and 2009, this threshold is set at \$800,000. It is scheduled to drop to \$500,000 in 2010, before an adjustment for inflation. Beginning in 2011, the threshold will be fixed at \$200,000, with no adjustment for inflation. So none of a firm's spending on qualified property placed into service in 2009 may be expensed once its total spending on such property exceeds \$1,050,000: the \$250,000 expensing allowance, plus the \$800,000 phase-out threshold.

The allowance has the potential to serve as a robust investment tax subsidy. Because of the phase-out threshold, it mainly benefits firms that are relatively small in revenue, asset, or employment size. Generally, the allowance can stimulate business investment in two ways. First, it can lower the user cost of capital for investment in qualified assets. In theory, expensing produces a zero marginal effective tax rate on the returns to investment in those assets under the standard economic model for the determination of the user cost of capital. Second, the allowance can boost business investment by increasing the cash flow of firms that can take advantage of it. For some firms, the cost of internal funds is lower than the cost of external funds such as loans or equity; so their investment hinges on the availability of internal funds, their cash flow.

The impact of the allowance on the cost of capital is illustrated in a 1995 article by Douglas Holtz-Eakin. Among other things, he assessed the effect of the expensing allowance on a firm's user cost of capital. **Table 1** summarizes his findings. ¹⁶ The first column provides the assumed corporate tax rate; the second shows the required pre-tax rate of return if the entire cost of the investment is expensed; the third column gives the required pre-tax rate of return if the entire cost is recovered through the depreciation deductions allowed under federal tax law in the early 1990s; and the final column presents the effective tax subsidy from expensing, which is expressed as the difference (in percentage points) between the required rates of return shown in columns three and two.

At least two conclusions can be drawn from the results. First, expensing offered a significant investment subsidy, and the extent of the subsidy increased with a firm's marginal tax rate. For example, at a tax rate of 15%, expensing lowered the user cost of capital by about 11%; but at a rate of 35%, the reduction jumped to 28%. Second, the user cost of capital under expensing declined as the tax rate increased because tax deductions gain in dollar value at higher tax rates.

Table I. Estimated User Cost of Capital Under-Expensing

(%)

Corporate Tax Rate	Expensing	Regular Depreciation	Absolute Size of the Subsidy
15%	17.95%	20.23%	2.28a
25	17.05	21.13	4.08
35	16.15	22.40	6.25

Source: Douglas Holtz-Eakin, "Should Small Business Be Tax-Favored?" National Tax Journal, Sept. 1995.

¹⁵ See Jane G. Gravelle, "Effects of the 1981 Depreciation Revisions on the Taxation of Income From Business Capital," *National Tax Journal*, vol. 35, no. 1, March 1982, pp. 2-6. In effect, under expensing, the after-tax rate of return on an investment becomes equal to the pre-tax rate of return. This happens because expensing reduces costs and after-tax returns by the same proportion, which is determined by the tax rate.

¹⁶ Douglas Holtz-Eakin, "Should Small Businesses Be Tax-Favored?," *Tax Notes*, vol. 48, No. 3, Sept. 1995, p. 389. (In 2003, Dr. Holtz-Eakin was named the Director of the Congressional Budget Office.)

Note: The calculations assume an interest rate of 9%, an inflation rate of 3%, and a rate of economic depreciation of 13.3%. The following formula is used to compute the user cost of capital:

$$c/q = (p-+\delta/1-\tau) \xi(1-\tau \xi),$$

where c is the annual value of revenue from the investment, q is the purchase price of the capital good, p is the after-tax financial cost of capital, pi is the rate of inflation, d is the rate of geometric depreciation, t is the marginal tax rate, and t is the present value of depreciation allowances per dollar of investment. In the case of expensing, t = 1.0; and in the case of regular depreciation, t = 0.2814.

a. Percentage points, not percent.

In FY2009, the allowance could produce an estimated revenue loss of \$6.0 billion.¹⁷ The revenue effects of the expensing allowance in any year depend on the aggregate amount of business investment in qualified assets. In periods of rising investment, the allowance typically leads to a net revenue loss. But when investment falls following a period of expansion, the allowance can actually yield a net revenue gain. This shift from loss to gain is due to the timing of depreciation deductions under current tax law. Firms that can deduct the entire cost of an asset in its first year of use by claiming the Section 179 expensing allowance have no depreciation allowances to deduct from future taxable income generated by the asset.

Exemption of Certain Small Corporations From the Corporate Alternative Minimum Tax

Under current federal tax law, many corporations must compute their income tax liability under both the regular tax and the alternative minimum tax (AMT) and pay whichever is greater. Each tax has its own rates, allowable deductions, and rules for the measurement of taxable income.

In general, the AMT applies a lower marginal rate to a broader tax base. It expands the corporate tax base by adding a number of tax preferences under the regular corporate income tax to taxable income under the AMT. In addition, most tax credits allowed under the regular corporate income tax cannot be used to reduce AMT liability. The current AMT originated with the Tax Reform Act of 1986 and is mainly intended to ensure that all profitable corporations pay at least some federal income tax.

As a result of the Taxpayer Relief Act of 1997 (P.L. 105-34), certain small corporations have been exempt from the AMT since 1998. Eligibility is determined by a corporation's average annual gross receipts in the previous three tax years. All corporations formed after 1998 are exempt from the AMT in their first year with taxable income, regardless of the size of their gross receipts. They remain exempt as long as their average annual gross receipts do not exceed \$5 million in their first three tax years, and as long as their average annual gross receipts do not exceed \$7.5 million in each succeeding three-year period (e.g., 1999-2001, 2000-2002, etc.). If a corporation loses its eligibility, it becomes subject to the AMT in the first tax year when it no longer qualifies for the exemption and in every tax year thereafter, regardless of the amount of its gross receipts.

There is reason to believe that this exemption gives some eligible small corporations what amounts to a slight competitive advantage over comparable firms paying the AMT. A 1997 study estimated that firms that invested heavily in machinery and equipment and intangible assets like research and development (R&D), financed the bulk of their investments through debt, and paid

¹⁷ Joint Committee on Taxation, *Estimates of Federal Tax Expenditures for Fiscal Years* 2008-2012, p. 71.

the AMT for five or more successive years had a higher cost of capital than comparable firms that paid the regular income tax only in the same period. 18

The exemption also provides owners of small firms with an incentive to incorporate, since the taxable income of passthrough entities is subject to the individual AMT through the tax returns filed by individual owners.

A 2000 report by the Treasury Department's Inspector General for Tax Administration (TIGTA) found that the exemption from the AMT for small firms ran into some unexpected problems during the first year or two it was in effect. According to the report, more than 2,300 small corporations paid the AMT in 1998, even though an examination of their federal income tax returns indicated they qualified for the exemption. Their overpayments of the tax may have totaled more than \$25 million. The report attributed the erroneous payments to the many complex changes in the corporate AMT made by the Taxpayer Relief Act of 1997 and the "short time" available to taxpayers and tax professionals to understand the changes and apply them in filing 1998 tax returns. It recommended the IRS take certain steps to increase taxpayer awareness of the exemption, explain how it was supposed to work, and identify and contact taxpayers who erroneously paid the AMT. In a follow-up study, TIGTA found that the IRS had taken most of these steps, but that the agency had failed to notify the more than 3,600 taxpayers thought to have mistakenly paid the AMT. TIGTA came to the conclusion that the IRS had fallen short of its obligation and promise to "inform and educate tax practitioners on what they need to do on their clients' behalf." behalf."

There is no estimate of the revenue cost of exempting small corporations from the AMT, but it is probably less than \$10 million a year. While exempt firms do not have to compute their AMT liability, they do pay the regular corporate income tax if their taxable income is positive.

Amortization of Business Start-Up Costs

A key concept undergirding the federal income tax is that taxable income should exclude all the costs incurred in earning it. This implies that all ordinary and necessary costs paid or incurred in conducting a trade or business should be deducted from a firm's taxable income. The concept also implies that ordinary and necessary costs paid or incurred in connection with starting or organizing a business should not be treated as current expenses, as they were not related to the generation of income. Rather, because these expenses were incurred in an attempt to create an asset (namely, the business) with a useful life extending beyond a single tax year, it stands to reason that they should be capitalized, added to the owner's basis in the business, and recovered when the business is sold or ceases to exist.

But under IRC Section 195 (as amended by P.L. 108-357), business taxpayers who incur business start-up and organizational costs after October 22, 2004, are allowed to deduct up to \$5,000 of

¹⁸ Andrew B. Lyon, *Cracking the Code: Making Sense of the Corporate Alternative Minimum Tax* (Washington: Brookings Institution Press, 1997), pp. 77-97.

¹⁹ U.S. Department of the Treasury, Inspector General for Tax Administration, *More Small Corporate Taxpayers Can Benefit from the Alternative Minimum Tax Exemption Provision*, no. 2001-30-019 (Washington: Nov. 2000), p. 4.

²⁰ U.S. Department of the Treasury, Inspector General for Tax Administration, Significant Actions were Taken to Address Small Corporations Erroneously Paying the Alternative Minimum Tax, but Additional Actions Are Still Needed, no. 2003-30-114 (Washington: May 2003), pp. 4-5.

those costs in the year when the new trade or business begins. This maximum deduction is reduced (but not below zero) by the amount by which eligible expenditures exceed \$50,000. Any eligible expenditures that cannot be deducted may be amortized over 15 years, beginning in the month when the new trade or business begins to earn income. In order to claim the \$5,000 deduction, a taxpayer must have an equity interest in the new trade or business and actively participate in its management.

Business taxpayers who incurred or paid business start-up and organizational costs and then entered a trade or business on or before October 22, 2004, could amortize (or deduct in equal annual amounts) those expenditures over not less than five years, beginning in the month when the new trade or business commenced.

To qualify for the current deduction, the start-up and organizational costs must meet two requirements. First, they must be paid or incurred as part of an investigation into creating or acquiring an active trade or business, as part of starting a new trade or business, or as part of an activity done to produce income or profit before starting a trade or business with the aim of converting the activity into an active trade or business. Second, the costs must be the similar in kind to costs that would be deductible if they were paid or incurred in connection with the expansion of an active trade or business in the same industry entered by a new firm.

Business taxpayers who choose not to claim the deduction must capitalize all start-up expenses.

The option to deduct as much as \$5,000 in business start-up and organizational costs in the first year of operation clearly benefits small start-up firms. It permits the owner of such a firm to deduct expenses in the year when the business begins. Without such a provision, the expenses could not be recovered until the owner sells his or her interest in the business. In effect, the option accelerates the recovery of certain necessary business costs, and this acceleration can aid the growth of small start-up firms by reducing their cost of capital and increasing their cash flow at a time when their access to debt and equity markets may be limited. For firms that lose money in their first year of operation, the deduction can increase their net operating losses for tax purposes, which may be carried back up to two years or forward up to 20 years and used to offset taxes paid or owed.²¹

According to the Joint Tax Committee, the amortization or deduction of qualified business startup and organizational costs could lead to an estimated revenue loss of \$0.8 billion in FY2009.²²

Cash-Basis Accounting

IRC Section 446 requires firms to compute their taxable income using the same method of accounting they regularly employ in keeping their books, provided that method clearly reflects income. For a business taxpayer's method of accounting to clearly reflect income, it must treat items of income and deductions consistently from one tax year to the next. Permissible methods of accounting include the cash-receipts method, the accrual method, the installment method, the

-

²¹ Under the American Recovery and Reinvestment Act of 2009 (P.L. 111-5), eligible firms with net operating losses in the 2008 tax year may carry them back up to five years. Only firms with average annual gross receipts in the past three tax years of less than \$15 million may take advantage of this expanded carryback.

²² Joint Tax Committee, Estimates of Federal Tax Expenditures for Fiscal Years 2008-2012, p. 71.

long-term-contract method, the crop method, the special methods for research and development expenditures, and the method for soil and water conservation expenditures.

Two methods of financial accounting are widely used in the private sector: cash-basis and accrual-basis. Under cash-basis accounting, which is the preferred method for self-employed individuals, income generally is recorded when it is received in the form of cash or its equivalent, and expenses generally are recorded when they are paid, regardless of when the income actually is earned or the expenses actually are incurred.

Under accrual-basis accounting, income and expenses generally are recorded when the transactions giving rise to them are completed or nearly completed, regardless of when cash or its equivalent is received or paid. More specifically, a firm using accrual-basis accounting records income when its right to receive it is established, and expenses when the amounts are fixed and its liability for the expenses is established.

Each accounting method has advantages. The principal advantage of cash-basis accounting is that it is much simpler to administer. It also allows firms that use it to control the timing of items of income or deductions. In contrast, accrual-basis accounting often yields a more accurate measure of a firm's economic income because it matches income with expenses with greater precision and rigor.

In general, when an inventory is necessary to the operation of a business, a business taxpayer is required to use the accrual method in computing taxable income — unless the IRS determines that another method clearly reflects income and authorizes its use. Inventories are considered necessary when a firm earns income from the production, purchase, or sale of merchandise. In addition, C corporations, partnerships with C corporations as partners, trusts that earn unrelated business income, and authorized tax shelters generally are required to use the accrual method of accounting.

But there is an exception to this rule. Any partnership or C corporation with average annual gross receipts of \$5 million or less in the three previous tax years may use the cash method of accounting. It also may be used by individuals, S corporations, and qualifying partnerships and personal service corporations.

Moreover, even though purchases and sales of inventory items cannot be reported for tax purposes using the cash method of accounting, the IRS has made an exception for sole proprietorships, S corporations, and partnerships that reported average annual gross receipts of \$1 million or less in the three previous tax years (IRS Rev. Proc. 2001-10), regardless of the nature of their trade or business. The cash method may also be used by firms with average annual gross receipts of \$10 million or less in the three previous tax years, whose main business is providing services or fabricating products according to customer designs or specifications (IRS Rev. Proc. 2002-28).

As these rules indicate, many of the firms permitted to use the cash method are relatively small in receipt size. In effect, this method offers the same benefit to small firms as the expensing allowance under IRC Section 179: the deferral of income tax payments. The federal tax code rests in part on the notion that a firm receives income when it gains the legal right to be paid for something it has provided. But under the cash method of accounting, a firm may delay the recognition of income until cash payments are received, thereby postponing the payment of tax

on that income, or lower its tax liability in a year by accelerating payments for expenses such as supplies, repairs, interest, and taxes.

Despite the possible tax benefits to eligible small firms of using the cash method, it may not be in their self-interest to do so when they need to issue accurate and reliable financial reports. Cashbasis accounting can distort a firm's financial position in several ways. ²³ First, because it records transactions involving only cash or its equivalent, the method excludes transactions involving exchanges of assets or liabilities. Second, the determination of net income under cash-basis accounting can be manipulated by recording revenues or expenses long before or after goods and services are produced or sold. As a result, small firms seeking to raise capital in debt or equity markets may be better off using accrual-basis accounting.

The Joint Committee on Taxation estimates that the use of cash-basis accounting outside agriculture will result in a revenue loss of \$0.9 billion in FY2009.²⁴

Net Operating Losses

A firm incurs a net operating loss (NOL) for tax purposes when its deductions exceed its gross income. As a result, it has no income tax liability in an NOL year. An NOL may be used to obtain a refund of taxes paid in previous years or to reduce or offset future tax liabilities. Under IRC Section 172(b), a business taxpayer is permitted to carry an NOL back to each of the two tax years preceding the NOL year and forward to each of the 20 tax years following that year.

A provision of the American Recovery and Reinvestment Act of 2009 (ARRA, P.L. 111-5) extended the carryback period for NOLs to five years for eligible firms that incurred an NOL in 2008. Only firms with average annual gross receipts of \$15 million or less in the NOL year and the two previous tax years may take advantage of the extension. The provision is intended to bolster the cash flow of small firms that have experienced a significant loss of revenue in the current recession.

The Joint Committee on Taxation estimates that the NOL carryback expansion for qualified small firms will produce a revenue loss of \$4.7 billion in FY2009.²⁵

Tax Incentives for Private Equity Investment in Small firms

The federal tax code also contains several provisions intended to encourage the investment of equity capital in certain start-up small firms that might otherwise find it difficult to raise the funds needed to finance current operations or expansions. These provisions, which are described below, do so by increasing the potential after-tax returns or reducing the potential after-tax losses on equity investment in such firms. The same tax benefits are not available to individuals who invest in larger established firms.

²⁵ Joint Tax Committee, Estimated Budget Effects of the Revenue Provisions Contained in the Conference Agreement for H.R. 1, the "American Recovery and Reinvestment Act of 2009," JCX-19-09 (Washington: Feb. 12, 2009).

Congressional Research Service

²³ See Robert Libby, Patricia A. Libby, and Daniel G. Short, *Financial Accounting* (Chicago: Irwin, 1996), p. 111.

²⁴ Joint Tax Committee, Estimates of Federal Tax Expenditures for Fiscal Years 2008-2012, p. 71.

Partial Exclusion of Capital Gains on Certain Small Business Stock

Two important considerations in determining an individual's income tax liability are the recognition of income as ordinary or capital and the distinction between long-term and short-term capital gains or losses.

A capital gain or loss arises when a capital asset such as a stock or bond is sold or exchanged. If the selling price is greater than the acquisition or purchase price, then the transaction yields a capital gain. Conversely, a capital loss results when the selling price is less than the purchase price.

Capital assets held longer than 12 months and then sold or exchanged give rise to long-term capital gains or losses, whereas sales or exchanges of capital assets held one year or less produce short-term capital gains or losses. Short-term capital gains are considered ordinary income and thus are taxed at regular income tax rates. By contrast, long-term capital gains are considered capital income and thus are taxed in 2009 at rates of 15% for individual taxpayers subject to marginal income tax rates above 15% and 0% for individual taxpayers in the 10% and 15% income tax brackets.

Under IRC Section 1202, non-corporate taxpayers (including partnerships, LLCs, and S corporations) may exclude 50% of any gain from the sale or exchange of qualified small business stock (QSBS) that has been held for over five years. The exclusion rises to 60% if the QSBS has been issued by a qualified corporation based in an empowerment zone. And under a provision of the ARRA, it becomes 75% for QSBS acquired from February 18, 2009, through December 31, 2010, and held for five years

There is a cumulative limit on the gain from stock issued by a single qualified corporation that may be excluded: in a single tax year, the gain is limited to the greater of 10 times the taxpayer's adjusted basis of all QSBS issued by the firm and sold or exchanged during the year, or \$10 million—reduced by any gains excluded by the taxpayer in previous years. The remaining gain is taxed at a fixed rate of 28%. As a result, the marginal effective tax rate on capital gains from the sale or exchange of QSBS held longer than five years is 14%: 0.5 x 0.28.

For individuals subject to the AMT, a portion of the excluded gain is treated as an individual AMT preference item, which means that it must be included in the calculation of AMT taxable income. The portion was 42% for QSBS acquired on or before December 31, 2000 and disposed of by May 6, 2003; 28% for QSBS acquired after December 31, 2000 and disposed of by May 6, 2003; and 7% for QSBS acquired after May 6, 2003 and disposed of by December 31, 2008. ²⁶

To qualify for the partial exclusion, small business stock must satisfy certain requirements. First, it must be issued after August 10, 1993 and must be acquired by the taxpayer at its original issue, either directly or through an underwriter, in exchange for money, property, or as compensation for services rendered to the issuing corporation. Second, the stock must be issued by a domestic C corporation whose gross assets do not exceed \$50 million before and immediately after the stock is issued. Third, at least 80% of the corporation's assets must be tied to the active conduct of one or more qualified trades or businesses during "substantially all" of the requisite five-year holding period. Assets used for working capital, start-up activities, or research and development meet the

²⁶ The 7% rate stems from a provision in JGTRRA.

active business test, even if they are devoted mainly to the development of future lines of business. Specialized small business investment companies licensed under the Small Business Investment Act of 1958 also meet the active business test, making their stock eligible for the partial exclusion.

Not all small firms meeting these requirements can take advantage of the partial exclusion. Stock issued by small C corporations primarily engaged in at least one of the following commercial activities do not qualify for the partial gains exclusion: health care, law, engineering, architecture, hospitality, farming, insurance, finance, and mineral extraction. And stock issued by the following small C corporations is not eligible for the partial exclusion: current or former domestic international sales corporations (DISCs), regulated investment companies (RICs), real estate investment trusts (REITs), real estate mortgage investment conduits (REMICs), financial asset securitization investment trusts (FASITs), cooperatives, or C corporations that have claimed the possessions tax credit under IRC Section 936.

The partial exclusion for QSBS is intended to make it easier for small start-up firms in a variety of industries to raise so-called patient equity capital. It does this by increasing the potential after-tax returns an investor can earn on sales or exchanges of QSBS, relative to potential after-tax returns on similar investment opportunities, over five years. Supporters of the partial exclusion say it is needed to overcome the lack of knowledge and deep uncertainty that surrounds the growth prospects of new start-up firms in industries where sizable investments in research and development over an extended period is a key to survival and expansion.

The Jobs and Growth Tax Relief Reconciliation Act of 2003 (JGTRRA) substantially diluted the incentive effect of the partial exclusion. Before the act, the maximum tax rate on long-term capital gains was 20% on assets held for at least one year and 18% for assets acquired after December 31, 2000 and held for more than five years. By contrast, under the partial exclusion, the effective tax rate on capital gains realized on sales or exchanges of QSBS has always been 14%. Though JGTRRA unified and lowered the maximum tax rate on long-term capital gains to 15%, it made no compensatory change in the taxation of capital gains for QSBS. Thus, a potential buyer of QSBS in the highest tax bracket must evaluate whether the slight difference in rates is worth the risks associated with owning the stock of new unproven firms for a minimum of five years.

An estimated \$0.5 billion in revenue will not be collected in FY2009 because of the exclusion.²⁷

Losses on Small Business Investment Company Stock Treated as Ordinary Losses without Limitation

Generally, losses on investments in stock are treated as capital losses for tax purposes. These losses may be used to offset any capital gains in the same tax year, but individuals may also use any combination of short-term and long-term capital losses to offset up to \$3,000 in ordinary income in a single tax year.

Under IRC Section 1242, however, individuals who invest in small business investment companies (SBICs) are permitted to deduct from ordinary income all losses from the sale or

²⁷ Joint Committee on Taxation, Estimates of Federal Tax Expenditures for Fiscal Years 2008-2012, p. 71.

exchange or worthlessness of stock in these companies. This treatment is intended to foster equity investment in these companies by lowering the after-tax loss on an investment in an SBIC, relative to after-tax losses on similar investments.

SBICs are private regulated investment corporations that are licensed under the Small Business Investment Act of 1958 to provide equity capital, long-term loans, and managerial guidance to firms with a net worth of less than \$18 million and less than \$6 million in average net income over the previous two years. They use their own capital and funds borrowed at favorable rates through SBA loan guarantees to make equity and debt investments in qualified firms. For tax purposes, most SBICs are treated as C corporations.

There are no known estimates of the revenue loss associated with this small business tax benefit.

Rollover of Gains into Specialized Small Business Investment Companies

In general, gains or losses on the sale or exchange of stocks are recognized for tax purposes in the tax year when they are realized.

But under IRC Section 1044, which was created by the Omnibus Budget Reconciliation Act of 1993, individual and corporate taxpayers who satisfy certain conditions are allowed to roll over, free of tax, any capital gains on the sale of publicly traded securities. The proceeds from the sale must be used to purchase common stock or partnership interests in specialized small business investment companies (SSBICs) licensed under the Small Business Investment Act of 1958 within 60 days of the sale. SSBICs are similar to SBICs except that SSBICs are required to invest in small firms owned by individuals who are considered socially or economically disadvantaged—mainly members of minority groups.

If the proceeds from the sale exceed the cost of the SSBIC stock or partnership interest, the excess is recognized as a capital gain and taxed accordingly. The taxpayer's basis in the SSBIC stock or partnership interest is reduced by the amount of any gain from the sale of securities that are rolled over. The maximum gain an individual can roll over in a single tax year is the lesser of \$50,000 or \$500,000 less any gains previously rolled over under this provision. For corporations, the maximum deferral in a tax year is the lesser of \$250,000 or \$1 million less any previously deferred gains.

There are no known estimates of the revenue loss associated with this small business tax benefit.

Ordinary Income Treatment of Losses on Sales of Small Business Stock

IRC Section 1244 allows taxpayers to deduct any loss from the sale, exchange, or worthlessness of qualified small business stock as an ordinary loss, rather than a capital loss. For business taxpayers, ordinary losses are treated as business losses in computing a net operating loss.

To qualify for this treatment, the stock must meet four requirements. First, it must be issued by a domestic corporation after November 6, 1978. Second, the stock must be acquired by an individual investor or a partnership in exchange for money or other property, but not stock or securities. Third, the stock must be issued by a small business corporation, which the statute defines as a corporation whose total amount of money and property received as a contribution to capital and paid-in surplus totals less than \$1 million when it issues the stock. Finally, during the

five tax years before a loss on the stock is recognized, the firm must have derived more than 50% of its gross receipts from sources other than royalties, rents, dividends, interest, annuities, and stock or security transactions. The maximum amount that may be deducted as an ordinary loss in a tax year is \$50,000 (or \$100,000 for a couple filing jointly).

This special treatment is likely to lead to an estimated revenue loss of \$50 million in FY2009.²⁸

Uniform Capitalization of Inventory Costs

Firms that earn income from the production, purchase, or sale of merchandise are required to maintain inventories in order to determine the cost of goods sold during a tax year. This cost is subtracted from gross receipts in the computation of taxable income. In most cases, the cost of goods sold is determined by adding the value of a firm's inventory at the beginning of the year to purchases of inventory items made during the year and subtracting from that total the value of the firm's inventory at the end of the year.

IRC Section 263A requires business taxpayers engaged in the production of real or tangible property, or in the purchase of real or tangible and intangible property for resale, to "capitalize" (or include in the estimated value of their inventories) both the direct costs of the property included in inventory and the indirect costs that can be allocated to it. This requirement is known as the uniform capitalization rule and was added to the tax code by the Tax Reform Act of 1986. In general, direct costs are considered the material and labor costs tied to the production or acquisition of goods, and indirect costs refer to the other costs incurred through the production or acquisition of goods (e.g., repair and maintenance of equipment and facilities, utilities, insurance, rental of equipment, land, or facilities, and certain administrative costs). Taxpayers have some discretion in assigning indirect costs to production or resale activities, as long as the methods used in the allocation produce reasonable and tenable results for their trade or business.

Nonetheless, some small firms are exempt from the uniform capitalization rule. Specifically, it does not apply to tangible or intangible property acquired for resale by a business taxpayer that had average annual gross receipts of \$10 million or less in the three previous tax years.

This exemption is beneficial because eligible firms face lower administrative costs and less complexity in complying with income tax laws and have more control over the timing of business expense deductions, opening up opportunities for the deferral of income tax liabilities.²⁹

There are no known estimates of the revenue loss associated with this small business tax benefit.

Simplified Dollar-Value LIFO Accounting Method for Small Firms

Business taxpayers that maintain inventories to determine the cost of goods sold are required to estimate the value of their inventories at the beginning and end of each tax year. Because doing

-

²⁸ Office of Management and Budget, *Analytical Perspectives: Budget of the U.S. Government in Fiscal Year 2009* (Washington: GPO, 2008), table 19-2, p. 294.

²⁹ See Paul G. Schloemer, "Simplifying the Uniform Inventory Capitalization Rules," *Tax Notes*, vol. 53, no. 9, Dec. 2, 1991, pp. 1065-1069.

this item by item is time-consuming and costly, many taxpayers use methods that assume certain item or cost flows.

One such method is known as "last-in-first-out" (or LIFO). LIFO operates on the assumption that the most recently acquired goods are sold before all other goods. Consequently, LIFO assigns the newest unit costs to the cost of goods sold and the oldest unit costs to the ending inventory. The method can be advantageous when the cost of many inventory items is rising, because it yields a lower taxable income and inventory valuation than other methods. There are various ways to apply LIFO. A widely used application is known as the dollar-value method. Under this method, a taxpayer accounts for its inventories on the basis of a pool of dollars rather than specific items. Each pool includes the value of a variety of inventory items and is measured by the dollar value of the inventory items when they were first added to the inventory account; the year when the items are first added is known as the base year. Using the dollar-value method is complicated and costly for most business taxpayers.³⁰

But IRC Section 474, which was added to the tax code by the Tax Reform Act of 1986, allows eligible small firms to use a simplified dollar-value LIFO method. It differs from the regular dollar-value method in the way in which inventory items are pooled and the technique for estimating the base-year value of the pools. A firm is eligible to use the simplified method if its average annual gross receipts were \$5 million or less in the three previous tax years.

There is no known estimate of the revenue cost of this small business tax benefit.

Tax Credit for Pension Plan Start-Up Costs of Small Firms

Under IRC Section 45E, qualified small firms may claim a non-refundable tax credit for a portion of the start-up costs they incur in setting up new retirement plans for employees. The credit, which was enacted as part of the Economic Growth and Tax Relief Reconciliation Act of 2001, began in 2002 and originally was scheduled to disappear (or "sunset") after 2010. But a provision of the Pension Protection Act of 2006 permanently extended the credit. It is a component of the general business credit and thus subject to its limitations and rules for carryover.

The credit is equal to 50% of the first \$1,000 in eligible costs incurred in each of the first three years a qualified pension is operative. Eligible costs are defined as the ordinary and necessary expenses incurred in administering the plan and informing employees about the plan's benefits and requirements. Qualified plans consist of new defined benefit plans, defined contribution plans, savings incentive match plans for employees, and simplified employee pension plans. Firms with fewer than 100 employees, each of whom received at least \$5,000 in compensation in the previous year, are eligible to claim the credit. They can do so only if at least one highly compensated employee participates in the plan.

The credit gives owners of small firms an incentive to establish pension plans for employees by lowering the after-tax cost of setting up and administering these plans in their first three years. Recent surveys have indicated that these costs can serve as a formidable barrier to the creation of pension plans by small employers.

³⁰ For more details on this method, see U.S. Congress, Joint Committee on Taxation, *Impact on Small Business of Replacing the Federal Income Tax*, JCS-3-96 (Washington, Apr. 23, 1996), pp. 18-19.

There is no known estimate of the revenue cost for the credit.

Tax Credit for Cost of Making A Business More Accessible to the Disabled

Under IRC Section 44, an eligible small firm may claim a non-refundable credit for expenses it incurs to make its business more accessible to disabled individuals. The credit is equal to 50% of the amount of eligible expenditures in a tax year over \$250 but not greater than \$10,250. In the case of a partnership, this upper limit applies separately at the partnership level and at the partner or individual level; the same distinction holds in the case of a subchapter S corporation. The disabled access credit is a component of the general business credit under IRC Section 38 and thus subject to its limitations.

To qualify for the credit, a firm must satisfy one of two requirements: its gross receipts (less any returns and allowances) in the previous tax year totaled no more than \$1 million, or it employed no more than 30 persons on a full-time basis during that year. A worker is considered a full-time employee if he or she works at least 30 hours a week for 20 or more weeks in a calendar year.

Qualified expenses are defined as the amounts an eligible small firm pays or incurs to bring its business into compliance with the Americans With Disabilities Act of 1990 (ADA). They must be reasonable in amount and necessary in light of legal requirements. Eligible expenses include those related to removing architectural, communication, transportation, or physical barriers to making a business accessible to or usable by disabled individuals; providing interpreters or other effective methods of making materials understandable to hearing-impaired individuals; and supplying qualified readers, taped texts, and other effective methods of making materials understandable to visually impaired individuals.

The credit is intended to ease the financial burden on smaller firms of complying with the mandates of the ADA. There is no known estimate of the credit's revenue cost.

Economic Importance of Small Firms

Available data on small firms indicate they make significant contributions to the performance of the U.S. economy. A critical consideration in measuring and evaluating those contributions is the definition of a small firm. As one might expect, the broader the definition, the larger the economic impact of small firms. This link between the nature of small firms and their economic impact makes it likely that any discussion of the economic importance of these firms rests on an arbitrary assumption about the size of the population of small firms.

When small firms are defined as independent business enterprises with fewer than 500 employees, as the SBA does in publishing data on small business, there are indications that they play a major role in domestic economic output. In 2005, according to the SBA, firms of that size accounted for 99.7% of employers, employed more than 50% of private non-farm workers, and were responsible for 47% of private non-farm compensation (wages, salaries, and benefits). A separate study came to the conclusion that from 1998 to 2004, firms with 500 or fewer employees

accounted for about 50% of nominal gross domestic product (GDP).³¹ And it appears that small firms generate a large share of the new domestic jobs created each year. According to data reported by the Bureau of Labor Statistics, firms with less than 500 employees accounted for 65% of net new job creation in the non-farm private sector, from the third quarter of 1992 through the first quarter of 2005.³² In addition, recent research sponsored by the Center for Economic Studies at the U.S. Census Bureau found that new firms accounted for 3% of annual U.S. employment from 1987 to 2005, and that without their contribution, annual net employment growth would have been -1.2%. This finding implied that existing firms (large and small in employment size) were a drag on net job growth in that period and whatever growth happened was due to business formation or the creation of new firms.³³

Yet a more restrictive definition of a small firm can yield a different picture of the economic importance of small business. According to a recent study by some economists at the Bureau of Labor Statistics, firms with fewer than 100 employees accounted for 45.0% of average quarterly net job growth from June 1990 to September 2005, while firms with fewer than 500 employees accounted for 63.7%.³⁴

The economic importance of small firms varies by industry. In 2002, the share of an industry's contribution to GDP attributable to firms with fewer than 500 employees ranged from 20% for information services to 85% for other services.³⁵

Most firms start out small in employment size, and the likelihood is remote that a particular small start-up firm will grow into a large, stable, and mostly profitable firm. Two-thirds of start-up firms survive at least two years, and 44% last at least four years.³⁶ So while hundreds of thousands of new firms typically are formed each year, nearly as many small firms also fail. This constant churning is reflected in the fluctuating contributions of small firms to annual net job creation in the United States.

There are also some indications that small firms have made significant contributions in the past decade or so to the development of new commercial technologies, and that these contributions have varied by industry. According to a 2003 study by CHI Research, Inc., firms with fewer than 500 employees contributed 41% of all patents filed by domestic corporations from 1996 to 2000. The authors also found that firms of that size produced 13 to 14 times as many patents per employee as larger firms in the same period.³⁷ Small firms in the study filed 25% of the patents related to biotechnology, 19% of the patents related to pharmaceuticals, 11% of the patents related

³¹ Small Business Administration, Office of Advocacy, *Frequently Asked Questions* (Washington: August 2007), and Katherine Kobe, *The Small Business Share of GDP*, 1998-2004, report for the Small Business Administration (Washington: Apr. 2007), pp. 7 and 13.

³² Department of Labor, Bureau of Labor Statistics, *New Quarterly Data from BLS on Business Employment Dynamics by Size of Firm* (Washington: Dec. 2005), p. 3.

³³ John Haltiwanger, Ron Jarmin, and Javier Miranda, *Business Formation and Dynamics by Business Age: Results from the New Business Dynamics Statistics*, discussion paper, May 2008, p. 14.

³⁴ Jessica Helfand, Akbar Sadeghi, and David Talan, "Employment Dynamics: Small and Large Firms Over the Business Cycle," *Monthly Labor Review*, Mar. 2007, p. 41.

³⁵ Katherine Kobe, *The Small Business Share of GDP*, 1998-2004, p. 7.

³⁶ Small Business Administration, Frequently Asked Questions, updated Sept. 2008.

³⁷ CHI Research, Inc., *Small Serial Innovators: The Small Firm Contribution to Technical Change*, report for the Small Business Administration (Washington: 2003), p 3.

to medical equipment and electronics, and 9% of the patents related to chemicals other than pharmaceuticals.³⁸

Economic Arguments For and Against Small Business Tax Preferences

What is known about the economic importance of small firms raises the question of why the subsidies are needed if small firms normally account for substantial shares of domestic employment and output and play significant roles in the commercial development of certain new technologies.

The answer to this question is not unimportant, as small firms received perhaps more than \$11 billion in tax benefits in FY2008—in addition to the financial support they received through other federal programs targeted at small business. If the economic arguments made in favor of these tax subsidies turn out to be weak or untenable on theoretical or empirical grounds, then using these resources for other purposes (e.g., reducing the federal budget deficit or raising federal spending on infrastructure improvement or basic research) may lead to higher levels of economic output per capita in the future.

In evaluating the economic arguments made in favor of small business tax benefits, it should be recognized that persuasive non-economic arguments are also raised in support of these benefits. Some lawmakers attach considerable weight to those arguments. A case in point is the notion that small business is an effective vehicle for expanding the middle class because it can lift people out of poverty.

Nevertheless, only the economic arguments for and against small business tax benefits are discussed below.

Chief Economic Arguments in Favor of the Preferences

Proponents of small business tax subsidies generally cite four economic justifications for them: (1) the special economic role played by small firms; (2) the barriers to their formation and growth in financial markets; (3) the impact of high marginal tax rates on the formation of small entrepreneurial firms, and (4) the unique opportunities for individual economic advancement offered by small business ownership.

Special Economic Role of Small Firms

The economic contributions of small firms are sometimes cited as a reason to extend government support to small business. For example, in remarks made on the Senate floor in 2001 advocating additional tax benefits for small firms, Senator Christopher Bond stated that "small businesses represent more than 99% of all employers, employ 53% of the private work force, create about 75% of the new jobs in this country, ... contribute 47% of all sales in this country, and ... are

³⁸ Ibid., p. 17.

responsible for 51% of private gross domestic product."³⁹ By the same token, in 2003, Senator Olympia Snowe urged her colleagues in the Senate to back the creation of more tax benefits for small firms by pointing out that "they (small businesses) represent 99% of all employers, employ 51% of private-sector workforce, provide about 75% of the net new jobs, contribute 51% of the private-sector output, and represent 96% of all exporters of goods."⁴⁰

Some proponents of small business tax subsidies take this view a step further by arguing that small firms are deserving of government support because they generate special economic benefits that larger firms generally cannot replicate. These benefits can be seen in the multitude of jobs and new technologies they create over time, in their innumerable and ever-changing linkages to larger firms in the economic supply chain, and in their contributions to economic renewal and change. The net effect of the special economic benefits generated by small firms is to make the economy grow faster and become more productive.

According to proponents, the efficiency and productivity gains can be seen in evidence that small firms supply certain goods and services more efficiently than large firms. Economist Bo Carlsson has noted that this advantage is apparent in industries where large production runs and falling unit costs are dominant structural features; examples include computers, automobiles, and steel. In industries such as these, small and large firms often specialize in specific products or services. As a result, they tend to interact more as partners or suppliers than as competitors. In Carlsson's view, the dramatic rise in outsourcing among large U.S. firms in the 1990s had the effect of reinforcing and deepening this division in labor between large and small firms. Among the supposed advantages of small firms in the vast and complex supply chain undergirding the U.S. economy are greater flexibility and quickness in responding to new market opportunities and competitive threats.

The belief that small firms can serve as agents of dynamic economic change and technological advance may have its roots in the roles played by small start-up firms in the origins and growth of certain technologically advanced industries like computers and microelectronics. Two notable findings in the recent literature on firm size and technological innovation are that the contribution of small firms to innovation varies by industry, and that their contributions are likely to be most significant in relatively young industries where no firm has accumulated substantial market power. The same literature provides fresh evidence that in certain industries, small start-up firms have proven more adept than large established firms at identifying promising commercial applications for new technologies and exploiting them. During the 1980s and 1990s, many instances of small start-up firms gaining a temporary advantage this way emerged in biotechnology, microelectronics, computer software, and electronic commerce.

Findings such as these have led some economists to conclude that small entrepreneurial firms play a vital and indispensable role in the overall process of economic growth and renewal. They

-

³⁹ Sen. Christopher Bond, remarks in the Senate, *Congressional Record*, daily edition, vol. 147, Jan. 25, 2001, p. S576.

⁴⁰ Sen. Olympia Snowe, remarks in the Senate, *Congressional Record*, daily edition, vol. 149, no. 6, Jan. 14, 2003, p. S 299.

⁴¹ Bo Carlsson, "Small Business, Entrepreneurship, and Industrial Dynamics," in *Are Small Firms Important? Their Role and Impact*, Zoltan J. Acs, ed. (Boston: Kluwer Academic Publishers, 1999), p. 100.

⁴² Joshua Lerner, "Small Business, Innovation, and Public Policy," in *Are Small Firms Important? Their Role and Impact*, p. 160.

⁴³ Ibid., p. 160.

note that economic growth over time is marked by the continuous creation and destruction of jobs and firms. In their view, without the continuous entry of small entrepreneurial firms, this process would slow down to the point that the standard of living would stagnate and perhaps even decline. Carlsson has argued that in the absence of the "heterogeneity and volatility" provided by small start-up firms, "the economy eventually stagnates or even collapses."

Opportunities for the Economic Advancement of Immigrants, Women, and Members of Minority Groups

Proponents of small business tax subsidies also cite the economic benefits of small business ownership for women, minority groups, immigrants, and the communities where they live as an important justification for the subsidies. They argue that owning and managing a small business gives them the opportunities to increase their income and independence and to move into the economic mainstream of the United States.

In addition, proponents claim that women-, minority-, and immigrant-owned small firms benefit their immediate communities and society at large in ways that go beyond direct economic effects. For example, there is evidence that female small business owners are more likely than their male counterparts to encourage openness in workplace communication and decision-making, hire a diverse workforce, put into place desirable child-care programs, and pay full benefits to employees. In addition, families with self-employed women who work out of their homes seem more stable than the average family. And in the case of minority and immigrant groups, small business ownership helps to build tight-knit social networks, providing job and skills training, and creating informal capital markets.

Imperfections in Capital Markets

Yet another economic argument made in favor of small business tax subsidies is that they can ease or offset the barriers facing many small business owners and aspiring entrepreneurs in trying to raise the funds needed to start or expand a business.

If capital markets were truly efficient, then every business investment opportunity offering a pretax rate of return that exceeds the cost of capital would be funded, regardless of the profitability, cash flow, size, or age of a firm. But proponents of government support for small business say that such is not the case for small firms. In their view, many aspiring entrepreneurs are unable to borrow or attract equity capital, largely because lenders and investors lack the information needed to evaluate the profit potential of the proposed venture. As a consequence, small business owners confronted by such a constraint are often forced to finance projects out of their own resources or the resources of friends and family members, or to abandon the dream of owning their own business altogether. In addition, established small business owners facing severe liquidity constraints may have an elevated risk of failure.

⁴⁴ Bo Carlsson, "Small Business, Entrepreneurship, and Industrial Dynamics," p. 109.

⁴⁵ See Candida Brush and Robert D. Hisrich, "Women-Owned Businesses: Why Do They Matter?," in *Are Small Firms Important? Their Role and Impact*, pp. 111-127.

⁴⁶ See John Sibley Butler and Patricia Gene Greene, "Don't Call Me Small: The Contribution of Ethnic Enterprises to the Economic and Social Well-Being of America," in *Are Small Firms Important? Their Role and Impact* (Boston: Kluwer Academic Publishers, 1999), pp. 129-145.

For these reasons, proponents maintain that government support is required to enable cash-strapped small firms to gain access to the funds they need to grow.

Impact of Progressive Income Taxes

Supporters of tax relief for small firms also maintain that taxes have a significant effect on three key decisions made by any small business owner: how fast to grow the firm; whether to expand capital investment—and if so, by how much; and whether to hire more employees—and if so, how many? They cite a variety of studies suggesting that as individual or corporate tax rates rise, small firms tend to grow at a slower rate, invest less in new assets, and become less likely to expand employment.⁴⁷ In their view, these effects of higher tax burdens are sufficient reason to offer tax breaks to small firms.

Cost of Tax Compliance

Some proponents of small business tax preferences argue that they are also justified because of the inordinate costs the federal government imposes on small firms through the numerous regulations (including taxes) they must comply with. In their view, the preferences offset at least some of those costs, which can be highly regressive. In the case of tax laws and regulations, the regressivity lies in the fixed cost of compliance and the measures of size (e.g., sales, assets, or employees) over which that cost is distributed. Proponents maintain that the cost of tax compliance puts small firms at a competitive disadvantage because their cost per employee is much higher than it is for larger firms in the same industries.

Chief Economic Arguments Against the Subsidies

Not everyone agrees with the arguments made by proponents of small business tax preferences to justify them on economic grounds.

Critics of the preferences cite conventional economic analysis as a justification for eliminating most, if not all, of them. Conventional economic analysis holds that government intervention in the economy generally is warranted to correct some market failure. In general, market failures can be thought of as a set of circumstances that prevents or hinders the emergence of an economically efficient outcome. Foremost among the market failures that call for government intervention are a lack of perfect competition, the presence of public goods, positive or negative external effects (or externalities), the existence of incomplete markets, and imperfect information on the part of consumers. As Critics of small business tax subsidies say there is no evidence that any such market failure stands in the way of the formation or growth of small firms. In particular, they maintain that there is no evidence that imperfections in capital markets are leading to the formation of too few or to the failure of too many small firms, or that small firms generate external benefits that larger firms cannot replicate. According to critics, in the absence of a market failure, the use of such subsidies is likely to produce undesirable equity and efficiency effects.

-

⁴⁷ Douglas Holtz-Eakin and Harvey Rosen, *Economic Policy and the Start-up, Survival, and Growth of Entrepreneurial Ventures*, report submitted to the Small Business Administration, May 2001, pp. 43-44.

⁴⁸ For more information on market failures, see Joseph E. Stiglitz, *Economics of the Public Sector*, 3rd Edition (New York: W.W. Norton & Co., 2000), pp. 76-90.

Equity Concerns

Proponents of small business tax preferences generally do not refer to their equity effects in defending them on economic grounds.

But to critics, those equity effects provide a reason to oppose the preferences. In their view, small business tax preferences undercut the progressivity of the federal individual income tax. Under a progressive income tax, an individual's tax liability depends on his or her taxable income; so taxpayers with higher taxable incomes pay higher taxes than taxpayers with lower taxable incomes. But small business tax preferences weaken the link between tax burden and income by reducing the tax burden on the earnings of small firms.

Among public finance economists, it is widely thought that individuals, and not firms, ultimately bear the burden of business income taxes, or reap the benefits of tax subsidies. Critics argue that small business tax benefits ultimately increase the after-tax earnings of small firms, which eventually become part of the income of small business owners, whose income and wealth tend to be well above average for U.S. households.⁴⁹

Efficiency Concerns

Critics also assail small business tax subsidies on efficiency grounds. In theory, income taxes reduce social welfare by driving a wedge between the costs and benefits of the many options for consumption and production facing individual consumers and firms. As a result, conventional economic theory holds that the most desirable tax system is one that raises needed revenue without diverting economic resources from their most productive uses. A case in point is a lump-sum tax: it would impose the same tax on all individuals, regardless of income or wealth.

This doctrine of neutrality has important implications for tax policy. First, it implies that the returns to all investments should be taxed at the same rate. Second, the doctrine implies that any tax that is not uniform across firms is likely to damage social welfare.⁵⁰ Finally, it implies that taxes should not distort a firm's choice of inputs or its investment or production decisions.

Small business tax preferences, say critics, violate each of these policy prescriptions. In their view, an efficient or desirable allocation of resources can be achieved only if the tax code does not favor small firms over large firms, or unincorporated firms over incorporated firms, or interfere with the natural growth and evolution of firms, or encourage firms to attain a certain asset, employment, or revenue size and grow no further.⁵¹

⁴⁹According to a 1990 study by Charles Brown, James Hamilton, and James Medoff, the average family owning a small business had an income that was 80% greater and wealth that was five times greater than the average family. (See Charles Brown, James Hamilton, and James Medoff, *Employers Large and Small* (Cambridge, MA: Harvard University Press, 1990), pp. 15-17.) More recently, in a study of the wealth and income of U.S. small business owners from 1992 to 2001, researchers George W. Haynes and Charles Ou found that, in 2001, the mean income of households with small business owners was \$110,370, compared to \$42,108 for households with no business owners, and the mean net worth of households with small business owners was \$1,050,872, compared to \$188,535 for households with no business owners. (See George W. Haynes and Charles Ou, *How Did Small Business-Owning Households Fare During the longest U.S. Economic Expansion?*, report prepared for the Small Business Administration (Washington: June 2006) table 3, p. 26.

⁵⁰ Stiglitz, *Economics of the Public Sector*, pp. 567-569.

⁵¹ Douglas Holtz-Eakin, "Should Small Businesses be Tax-Favored?," *National Tax Journal*, vol. 48, no. 3, Sept. 1995, (continued...)

A departure from the doctrine of neutral taxation to assist small firms through tax subsidies might be warranted if there were something uniquely valuable about the economic role of such firms, and if that role can achieve its full expression only through targeted government support. Proponents of small business tax preferences claim that small firms consistently create more jobs and spawn more important technological innovations than large firms, and that government support is needed to ensure that they continue to play these roles. But critics question both the premises and policy implications of this claim.

Small Firms and Job Creation

Critics and proponents alike agree that small firms generally are a robust source of job creation. According to data from the Small Business Administration, small firms created between 60% and 80% all net new U.S. jobs from 1995 to 2005, depending on how the employment size of a small firm is specified. 52

Critics maintain, however, that for a variety of reasons these data do not necessarily prove that small firms possess a greater job-creating prowess than large firms. To begin with, they note that the data fail to address some important questions about the measurement of job creation and firm size: What does it mean to be small? When should a firm's size be measured? Is gross or net job creation a better indicator of job-creating prowess? And how long should a job last before it is counted as a net new job?

In addition, critics say there is an abundance of evidence that small firms are not consistently better at creating jobs than large firms. First, there appears to be considerable variation over time in the share of new jobs created by small firms. In a widely cited study, David Birch and James Medoff estimated that the share of total net new jobs generated by firms employing 100 or fewer workers varied from about 40% to 140%, depending on the stage of the business cycle. Second, most of the jobs created by small firms result from the formation of new firms, which typically start out small in employment or asset size. Yet many of these jobs do not last a long time, as most new firms fail within their first few years. Third, a few firms accounted for most small business job creation between the late 1980s and early 1990s—Birch and Medoff labeled these firms "gazelles"—and these firms grew swiftly from small to large, and in some cases from large back to small, suggesting that their job-creating ability was unstable at best. Finally, during the 1970s and 1980s, though large firms and plants dominated job creation and destruction in the

(...continued)

p. 390.

⁵² U.S. Small Business Administration, Office of Advocacy, *Frequently Asked Questions*, (Washington: Sept. 2008).

⁵³ See David Birch and James Medoff, "Gazelles," in *Labor Markets, Employment Policy, and Job Creation*, Lewis C. Solomon and Alec R. Levenson, eds. (Boulder, CO: Westview Press, 1994), p. 162. The share of net new jobs created by firms with 100 or fewer workers can exceed 100% in a year if these firms create more jobs than they destroy, all other firms destroy more jobs than they create, and the net job gain arising from the former exceeds the net job loss arising from the latter. For example, if firms with 100 or fewer employees account for a net job gain of 100 and all other firms generate a net job loss of 25, then the economy as a whole would realize a net job gain of 75, and the share of that gain attributable to firms with 100 or fewer employees would be 133%.

⁵⁴ Ibid., p. 8

⁵⁵ Birch and Medoff, "Gazelles," pp. 162-164.

manufacturing sector, there was no strong, systematic relationship between firm size and net job growth rates. 56

Critics also contend that even if small firms were to create more jobs than large firms over time, there is no reason to think that government support for small business would generate ever-faster employment growth. Economic analysis shows that the economy generates jobs through what can best be described as a natural process of growth, decline, and structural change; the size distribution of firms seems to be incidental, nothing more than a byproduct of this process. Therefore, the level of national employment over time is the product of a mix of factors that would overwhelm the employment effects of any government support for small business. The key factors are fiscal and monetary policy, consumer spending, business investment, and the difference between U.S. exports and imports.

Small Firms and Technological Innovation

Research and development (R&D) is the lifeblood of technological innovation, which, in turn, serves as a powerful engine of long-term economic growth and structural change. Economists generally agree that without government support, business investment in R&D would fall short of the socially optimal amount. Left to their own devices, firms are inclined to invest too little in R&D mainly for two reasons. One is that they cannot capture all the returns to R&D investment, as other firms capitalize on the results of research in spite of intellectual property protection. A second reason is that some firms (mainly small start-up firms) lack access to the financial capital needed to undertake planned R&D projects because potential lenders and investors lack the information they need to assess the profit potential of those projects.⁵⁷ This predisposition to invest less in R&D than its likely economic benefits would warrant represents a market failure. To remedy this failure, most economists advocate the use of a variety of government policies aimed at spurring increased business R&D investment.

But critics of small business tax subsidies question the notion that government R&D support should be targeted at small firms. They point to evidence demonstrating that both small and large firms develop the new technologies that drive economic growth and structural change. Critics also claim that the same evidence indicates that it is often impossible to disentangle the contributions of one group of firms from the other. According to data from the National Science Foundation (NSF), larger firms perform the vast share of business R&D: in 2005 and 2006, for example, companies with fewer than 500 employees performed 18% of the industrial R&D conducted in the United States, whereas companies with 10,000 or more employees were responsible for 52% of that R&D.⁵⁸

Nonetheless, small firms and large firms each appear to have distinct advantages as agents of technological innovation. ⁵⁹ On the one hand, small firms may be more likely than large firms to

-

⁵⁶ Steven J. Davis, John C. Haltiwanger, and Scott Schuh, *Job Creation and Destruction* (Cambridge, MA: MIT Press, 1996), pp. 169-170.

⁵⁷ Scott J. Wallsten, "Rethinking the Small Business Innovation Research Program," in *Investing in Innovation: Creating a Research and Innovation Policy That Works*, Lewis M. Branscomb and James H. Keller, eds. (Cambridge, MA: MIT Press, 1998), p. 197.

⁵⁸ National Science Foundation, *U.S. Business R&D Expenditures Increase in 2006; Companies' Own and Federal Contributions Rise*, Info Brief (NSF-08-313), August 2008, table 1, p. 2.

⁵⁹ See Wallsten, "Rethinking the Small Business Innovation Research Program," p. 197.

create or dominate a new industry through R&D, and they may be more flexible than large firms in the pursuit of research goals. On the other hand, large firms can more easily raise the funds needed to finance the substantial sunken costs involved in R&D investments and are likely to capture a larger share of the returns to R&D investments through marketing campaigns, the aggressive use of intellectual property protection, and the creation of regional, national, and international distribution, service, and repair networks.

In addition, some studies have looked at the effects of firm size and market structure on innovation. ⁶⁰ On the whole, they have found that no firm size appears to be ideal for generating new successful commercial technologies. Rather, there is evidence that in some industries, small firms were more innovative than large firms, but in other industries, large firms had a decisive edge in the generation of new technologies.

Other Concerns

Critics also assail small business tax preferences on the grounds that existing ones often poorly serve their intended purposes or are simply ineffective.

One argument made in favor of the subsidies is that the creation of new small firms is needed to prevent the development of monopoly power by large firms. But critics contend that the best way to achieve that result does not involve government support for the formation and growth of small firms. They point out that only a tiny fraction of small start-up firms survive and grow to the point where they pose a serious competitive threat to large, entrenched firms in the same industry. In the view of critics, antitrust law is a much more effective policy tool than small business tax preferences for thwarting the acquisition of monopoly power and other anti-competitive business practices.

Critics also note that if the aim of public policy is to stimulate employment growth, then it seems irrational to offer small firms tax subsidies that lower the cost of capital, and not the cost of labor. The current expensing allowance is a case in point. Such a subsidy lowers the cost of capital relative to the cost of labor, thereby implicitly encouraging small firms to substitute machinery and equipment for labor where technically feasible. In theory, a tax subsidy like the allowance could lead to lower employment than would be the case if the tax code offered no subsidies for the purchase of capital assets.

Yet another concern about small business tax preferences is that they impose an implicit or a hidden tax on business growth. This tax, which is known among public finance economists as the "notch problem," is the inevitable result of the design of many current tax preferences targeted at small firms. Under the typical small business tax preference, firms lose the tax benefit when their workforce, assets, or receipts surpass a designated limit. Such a design obviously creates a disincentive to grow beyond that limit.

The expensing allowance under IRC Section 179 illustrates this problem. In 2003, the maximum allowance was \$100,000 and the phaseout threshold \$400,000. When a firm increased its investment in assets that qualified for the allowance beyond \$400,000, the amount that could be expensed was reduced dollar for dollar—ultimately to zero when total investment reached

⁶⁰ F. M. Scherer and David Ross, *Industrial Market Structure and Economic Performance*, 3rd edition (Boston: Houghton Mifflin Co., 1990), pp. 651-657.

\$500,000. In effect, this design gave firms a significant incentive to invest no more than \$100,000 in qualified assets in a single tax year. For any investment, the cost of capital depends in part on the investor's marginal tax rate. Jane Gravelle of CRS estimated that under the expensing allowance for 2003, the marginal effective tax rate on investment in equipment was 0% on the first \$100,000, 26% on amounts above \$100,000 to \$400,000, 43% on amounts above \$400,000 to \$500,000, and 26% on amounts above \$500,000. For a small firm hoping to accelerate its growth, the design of the allowance can increase its cost of capital at a time when its growth is boosting its capital needs. 62

Concluding Remarks

Available economic data suggest that small firms make important contributions to the performance and growth of the U.S. economy. But the magnitude of the contributions depends critically on how a small firm is defined. Under the definition used by the SBA in administering its programs to support small firms, it appears that small business accounts for a majority of private-sector jobs and about half of private-sector output, generates many technological innovations, and serves as an agent of revitalization and structural change in a variety of industries. A more restrictive definition would yield a different picture of the economic importance of small firms.

These contributions arguably seem to undergird the strong support inside Congress for government policies to assist small business. A concrete manifestation of this support is the preferential tax treatment received by many small firms. The combined revenue cost of current federal small business tax subsidies may have exceeded \$11 billion in FY2008. Owing largely to the political clout of the small business community and widespread agreement among lawmakers that the federal government should take steps to stimulate the economy, the 111th Congress is likely to consider a variety of initiatives to extend or expand these subsidies.

Still, conventional economic analysis can challenge the view that small business tax preferences are justified on economic grounds. The preferences have the effect of lowering the tax burden on owners of small firms, diluting (to an extent that is difficult to measure) the progressivity of the federal individual income tax system. Furthermore, the preferences seemingly do little to promote growth in productivity and the output of goods and services. In theory, any tax other than a lump-sum tax causes efficiency losses by distorting the behavior of consumers and firms. In the case of production, the best possible outcome is an income tax system that does not distort the production arrangements within firms and taxes all returns to capital at the same rate. Most economists hold that departures from this doctrine of uniform or neutral taxation are warranted only to correct clear and harmful market failures. But in the case of small firms, there is no evidence that a market failure is affecting their formation, performance, or growth in ways that harm social welfare.

This is not to suggest that government support for small firms cannot ever be justified on purely economic grounds. If convincing evidence were to emerge that the formation and growth of small entrepreneurial firms are critical to an efficient allocation of economic resources, and that some

⁶¹ The estimate assumes a rate of inflation of 2% and a corporate tax rate of 35%. It is based on a simulation done by Gravelle with the aid of the CRS capital stock model on May 9, 2003.

⁶² Holtz-Eakin, "Should Small Businesses Be Tax-Favored?" p. 393.

market failure was unduly restraining their formation or growth, then even critics might accept that government action to correct the failure would be warranted.

One possible market failure would be imperfections in capital markets that unreasonably denied promising small start-up firms access to the financial capital they need to develop new products and services and grow their business. In theory, this problem could be resolved through a series of policy measures aimed at breaking down the barriers that were preventing these firms from gaining the funding they desired without diverting the overall flow of capital away from its most productive uses. Tax subsidies might be helpful, but to be cost-effective, they would need to address the root causes of the capital market imperfections at a lower economic cost than alternative policy responses, such as increased federal regulation of financial markets or the establishment of a federally subsidized lending facility.

Another possible market failure would involve conclusive evidence that small firms as a whole are more innovative than other firms and thus are responsible for a disproportionately large proportion of the positive externalities arising from technological innovation. It seems improbable that such a market failure would materialize, however, given that these externalities are tied to specific innovations, not to the operations of a specific class of firms.

If anything, the findings of this report suggest the need for a robust model of the process by which small firms are formed and grow and contribute to the total output of goods and services and productivity over time. As the report has suggested, considerable uncertainty still surrounds this process. As some economists have noted, the development of such a model might make it easier for policymakers to determine whether a market failure lies behind any problems facing a wide swath of small firms; identify the key factors contributing to any market failure that is detected; and devise appropriate and cost-effective remedies for the problem. ⁶³ Further research on the economic contributions of small business is needed to develop such a model.

Author Contact Information

Gary Guenther Analyst in Public Finance gguenther@crs.loc.gov, 7-7742

³ Ibid.			