

CRS Report for Congress

Small Business Tax Benefits: Overview and Economic Rationales

Updated March 3, 2008

Gary Guenther
Analyst in Public Finance
Government and Finance Division



Prepared for Members and
Committees of Congress

Small Business Tax Benefits: Overview and Economic Rationales

Summary

The federal tax burden on small firms and its implications for their performance and rates of formation and growth is one of those policy issues that never seems to vanish from Congress's legislative agenda. Continuing congressional interest in the issue has set the stage for the enactment of a string of legislative initiatives in the past decade or so to reduce this burden. The 110th Congress, like many of its predecessors, is considering various proposals to expand current small business tax preferences, or create new ones.

This report describes the principal federal tax benefits for small firms and examines the economic arguments for and against them. It will be updated when new benefits are added to the federal tax code, or current ones are modified or repealed.

While the federal revenue cost of existing small business tax preferences is not known, estimates of the revenue lost because of federal tax expenditures indicate that this cost could exceed \$11 billion in FY2007, according to the Treasury Department and Joint Committee on Taxation. The following small business tax benefits have the broadest reach outside agriculture: 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, and the exclusion from taxation of capital gains on the sale or disposition of certain small business stock.

These benefits raise numerous interesting and significant policy issues. For many economists, 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 further enhance small business tax preferences may distort the allocation of economic resources among sectors.

Proponents of targeting tax relief at small firms say such relief is justified for several reasons. First, they claim that small firms create singular opportunities for social and economic advancement. Second, proponents point to evidence that rates of small business formation are sensitive to tax rates. Third, small firms account for significant shares of national income, jobs, and technological innovations. Fourth, they can serve as powerful agents for economic renewal and structural change. And last but not least, proponents maintain that small firms face constraints on their ability to raise capital in debt and equity markets that do not apply to most large, established firms.

Critics of small business tax preferences argue that it is difficult to justify them on economic grounds. They say such preferences lessen the progressivity of the federal income tax and raise the return on small business investment in ways that undermine social welfare. In addition, critics contend that some small business tax preferences are inappropriate or poorly designed, magnifying any efficiency losses they might cause.

Contents

| | |
|---|----|
| Firm Size: How Small Is Small? | 1 |
| Main Federal Tax Benefits for Small Business | 3 |
| Taxation of Passthrough Entities | 4 |
| Graduated Corporate Income Tax Rates | 6 |
| Expensing Allowance for Certain Depreciable Business Assets | 7 |
| Exemption of Certain Small Corporations From the Corporate Alternative Minimum Tax | 8 |
| Amortization of Business Start-Up Costs | 10 |
| Cash Basis Accounting | 11 |
| Tax Incentives for Private Equity Investment in Small firms | 12 |
| Partial Exclusion of Capital Gains on Certain Small Business Stock | 12 |
| Losses on Small Business Investment Company Stock Treated as Ordinary Losses without Limitation | 14 |
| Rollover of Gains into Specialized Small Business Investment Companies | 15 |
| Ordinary Income Treatment of Losses on Sales of Small Business Stock | 15 |
| Uniform Capitalization of Inventory Costs | 16 |
| Simplified Dollar-Value LIFO Accounting Method for Small Firms | 17 |
| Tax Credit for Pension Plan Start-Up Costs of Small Firms | 17 |
| Magnitude of Small Business Tax Benefits | 18 |
| Economic Role of Small Firms | 19 |
| Economic Arguments For and Against Small Business Tax Preferences | 20 |
| Chief Economic Arguments in Favor of the Preferences | 21 |
| Special Economic Role of Small Firms | 21 |
| Opportunities for the Social and Economic Advancement of Immigrants, Women, and Members of Minority Groups | 22 |
| Imperfections in Capital Markets | 23 |
| Impact of Progressive Income Taxes | 23 |
| Chief Economic Arguments Against the Subsidies | 24 |
| Equity Concerns | 24 |
| Efficiency Concerns | 25 |
| Other Concerns | 27 |
| Conclusions | 28 |

List of Tables

| | |
|---|----|
| Table 1. Estimated User Cost of Capital Under-Expensing | 19 |
|---|----|

Small Business Tax Benefits: Overview and Economic Rationales

Some policy issues never seem to vanish from the congressional legislative agenda. One such issue is the federal tax burden on small firms and its effect on their performance and prospects for growth.

Many lawmakers view small firms as a whole as a vital and indispensable source of job creation, economic opportunity, and technological innovation. Many of these same individuals regard current federal taxation of small firms both as a barrier to their formation and a drag on their growth, and as a policy instrument for stimulating their rates of formation and growth. Such a dual perspective has facilitated the enactment of a variety of small business tax benefits in recent decades. In addition, the 110th Congress is considering a number of proposals to further reduce the tax burden on small business by enhancing some current small business tax benefits, creating new ones, or simplifying tax compliance for small firms.

Existing small business tax benefits and proposals to enhance or expand them raise several policy issues. One is the substantial resources transferred to small firms through such subsidies and the long-term economic effects of this transfer. Statements made by some lawmakers suggest that they think the long-term economic benefits of small business tax preferences outweigh their short-term revenue cost. Another key policy issue concerns whether these preferences can be justified on economic grounds. If such a rationale cannot be found, or if it appears tenuous at best, then small business tax preferences may end up harming social welfare in the long run.

This report explores these issues by examining the main small business tax preferences and the economic arguments for and against them. It begins with a brief description of current federal tax preferences for small firms, then reviews what is known about the economic role 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 considering the ways in which the federal tax code favors small firms and what is known about the economic role of small firms, it is useful to understand how small firms are defined for tax purposes.

Crafting such a definition in a manner that is widely accepted is a challenge, as there is no uniform definition of a small firm in the many federal laws and regulations offering assistance to small business. Instead, several criteria are used to

identify the firms that qualify for the benefits. It is not clear from the language of these laws and regulations why such variation exists.

The absence of a uniform definition of a small firm may have its roots in the Small Business Act (P.L. 85-536, as amended), which defines a small firm as “one that is independently owned and operated and which is not dominant in its field of operation.”¹ The act goes on to specify that the definition of a small firm may vary from industry to industry to reflect important structural differences among those industries.² Under the act, the Small Business Administration (SBA) has the authority to establish (and alter, if necessary) the size standards and limits for determining eligibility for federal programs to assist small business, many of which are administered by the SBA. All federal agencies administering programs to set aside a certain proportion of procurement contracts for small firms are required to use SBA size standards and limits. But for other small business programs, federal agencies have the choice of using SBA size standards and limits or establishing their own.

In general, three criteria are used to identify the firms eligible for federal small business programs. Each specifies the maximum size a firm (including affiliates) can attain and still participate in the programs to which the criterion applies.

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 varies 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) must undertake economic studies of the affected 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 the 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 own assets up to a certain threshold, such as \$50 million. Among federal programs granting special benefits to small business, use of this criterion is more limited than the number of employees or average annual receipts.

¹ 15 U.S.C. § 632(a)(1)

² See [<http://app1.sba.gov/faqs/>].

³ Ibid.

How does the federal tax code define a small firm? Again, there is no uniform definition. Instead, a variety of criteria are used to determine eligibility for current small business tax preferences, and there is no obvious reason why the size limit varies from one preference to the next.⁴ Some preferences rely on asset size, receipt size, or employment size to select eligible firms. Others confer benefits on small firms not through a specified size standard but through the design of the preference itself. A case in point is the small business expensing allowance under Section 179 of the Internal Revenue Code (IRC): although allowance is not limited to firms of a particular size, its design effectively confines its benefits to relatively small firms.

The lack of a uniform definition of a small firm in the federal tax code has its advantages and disadvantages. On the one hand, it can lead to a firm being eligible for some small business tax preferences but not for others. On the other hand, the absence of a uniform definition gives lawmakers flexibility in crafting tax benefits for small firms. Regardless of the practical consequences of the lack of a uniform definition, it makes firm size a flexible concept that lawmakers can reshape, almost without limit, to suit their legislative aims.

Main Federal Tax Benefits for Small Business

In general, all business income is subject to federal taxation. But not all business income is treated equally under the federal tax code. Its tax treatment can differ in several ways.

The taxation of business income depends on whether or not a firm is organized for tax purposes as a corporation. Corporate net income is taxed twice (at the firm level and then at the shareholder level), whereas the net income of passthrough entities such as S corporations, sole proprietorships, limited liability companies, or partnerships is taxed 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 be taxed at lower marginal rates than their counterparts paying the regular corporate income tax.

The tax burden on business income also depends on how investments are financed. For example, the returns to corporate investments financed solely by debt are subject to lower marginal effective tax rates than the returns to investments financed solely by equity, because corporations may deduct interest payments from taxable income but not dividend payments.

Firm size is another factor affecting the tax treatment of business income. Various provisions of the federal tax code offer benefits to smaller firms that are not available or of lesser value to larger firms. The code makes no explicit or formal

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.

distinction between the taxation of small and large firms in that it does not have separate sections for small and large firms. Rather, the code contains numerous provisions scattered throughout its many chapters that confer preferential treatment on relatively small firms but not on relatively large firms. 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 non-eligible firms. Certain other provisions benefit small firms by reducing the cost and or burden of complying with tax laws, or by making tax relief contingent on providing certain fringe benefits to employees.

The federal small business tax subsidies with the broadest reach outside agriculture are described below. Excluded from the list are subsidies targeted at small firms in specific industries, such as life insurance, banking, and energy production or distribution. 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 reduced federal revenue by over an estimated \$11 billion in FY2007.⁵

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 choices. 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 organizational form has 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 are not taxed at the entity level but pass through to the owners.⁶ The entities' profits, losses, and items of income, deduction, exclusion, deferral, and credit are attributed to the owners according to their shares of ownership, regardless

⁵ In FY2007, the estimated combined revenue loss for seven of the most important small business tax preferences is \$11.445 billion. It pertains to the following seven 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; (6) the tax credit for new retirement plan expenses of small firms; and (7) 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 2006-2010* (Washington: GPO, 2006), table 1; and Office of Management and Budget, *Analytical Perspectives, Budget of the United States Government, Fiscal Year 2008* (Washington: U.S. Govt. Print. Off., 2007), 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.

of whether the profits have been distributed. Most businesses operate as sole proprietorships: in 2004, they accounted for 69% of federal business tax returns. Next in order of importance were S corporations (12% of business tax returns), followed by partnerships (8% of returns), C corporations (7% of returns), and LLCs (4% of returns).⁷

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 distinction holds in reality. In 2004, for example, the average C corporation's asset size was over six times greater than that of the average partnership and over 41 times greater than that of the average S corporation.⁸

Whether a business owner would be better off operating as a C corporation or as a passthrough entity is often a complicated decision involving a host of 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 the tax considerations are the 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.

Setting aside non-tax considerations for the moment, one can see that the current mix of individual and corporate tax rates favors passthrough entities by a small margin for investors in the highest income tax bracket. Such a group offers an appropriate focus for this analysis because many small business owners are subject to the highest marginal income tax rate. A few simple calculations prove this point. In 2007, 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%.⁹ Assuming an investment horizon of one year — after which the firm's assets are liquidated — tax considerations alone would dictate that high-income investors would be better off owning a business enterprise that is operated as a partnership rather than a corporation. Under such a scenario, after-tax returns to a partnership would be \$.65 for every dollar invested, whereas they would be \$.55 for every dollar invested by a corporation.¹⁰ Extending the investment horizon to five years does not alter the

⁷ Internal Revenue Service, *Statistics of Income Bulletin: Spring 2007* (Washington: 2007), pp. 256-260.

⁸ In 2004, the average asset size for partnerships returns was \$4.6 billion; for S corporation returns, \$696 million; and for C corporation returns, \$28.8 billion. See Internal Revenue Service, *Statistics of Income Bulletin: Fall 2006* (Washington: 2004), pp. 107 and [<http://irs.ustreas.gov/taxstats/index>].

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 $(1 - tc) \times (1 - tcg)$, 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., (continued...)

outcome. Assuming that 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, partnerships would earn a higher after-tax rate of return than corporations: 13.0% versus 11.3%.¹¹

Nonetheless, it would be incorrect to view the taxation of passthrough entities as a small business tax benefit. The reason is that a firm's size has no bearing on its eligibility to operate as a passthrough entity. Firms that are relatively large in employment, revenue, or asset size are organized as S corporations or partnerships, while firms that are relatively small in those measures operate as C corporations. In 2003, 16% of S corporations and 7% of partnerships filing federal income tax returns reported business receipts of \$1 billion or more, while 22% of C corporations filing federal income tax returns reported business receipts of less than \$25 million.¹²

Any tax advantage presently held by small passthrough entities may prove ephemeral, as it has in the recent past. For instance, their present advantage would shift to corporations if legislation were enacted that sharply reduces the top corporate and long-term capital gains tax rates relative to the maximum individual income tax rate.

Graduated Corporate Income Tax Rates

Corporations with less than \$10 million in taxable income are subject to a set of graduated federal income tax rates. The rate is 15% on the first \$50,000 of income, 25% on the next \$25,000, and 34% on selected amounts up to \$10 million. Corporations with taxable incomes ranging from above \$10 million to \$15 million pay a marginal rate of 35%. What is more, 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%, which is five percentage points greater than the marginal rate on taxable incomes just above and below that range. And a corporation with taxable income of more than \$15 million up to \$18.3 million pays a marginal rate of 38%. These higher rates are intended to offset the tax savings firms realized when their tax rates were less than 35%. All corporate taxable income above \$18.3 million is taxed at a rate of 35%. As a result, the tax savings from the

¹⁰ (...continued)

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 Business Strategy*, pp. 66-67.

¹² Internal Revenue Service, *Statistics of Income Bulletin: Spring 2006* (Washington: 2006), pp. 144 and 324.

graduated rates of 15% to 34% are limited to corporations with taxable incomes under \$335,000.

This graduated rate structure mainly benefits corporations that are relatively small in employment or asset size, because their taxable incomes are likely to stay below the \$335,000 threshold. 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, 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%, regardless of the amount.

The graduated rate structure is not without drawbacks. Specifically, it gives smaller corporations a disincentive to grow to the extent that their incomes are taxed at rates above 34%. In this sense, the higher rates serve as a tax on growth.

The revenue loss arising from the reduced rates on the first \$10 million of corporate taxable income came to an estimated \$4.3 billion in FY2007.¹³

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 an ordinary and necessary expense rather than as a capital expenditure. Ordinary and necessary 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 and equipment and computer software — placed into service in 2008 and write off the remaining basis (if any) using a temporary 50% partial expensing allowance and current cost recovery rules.¹⁴ The allowance drops back to \$125,000 in 2009 and 2010 and is indexed for inflation in those years. Starting in 2011 (and each year thereafter), the maximum allowance is scheduled to drop to \$25,000.

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 total cost of qualified property placed in service during a year exceeds a phase-out threshold. In 2008, this threshold is set at

¹³ U.S. Congress, Joint Committee on Taxation, *Estimates of Federal Tax Expenditures for Fiscal Years 2006-2010* (Washington: GPO, 2006), p. 35.

¹⁴ For more details on the design of the expensing allowance and its economic effects, see CRS Report RL31852, *Small Business Expensing Allowance: Current Status, Legislative Proposals, and Economic Effects*, by Gary Guenther. The limitation is higher in the case of property used in certain economically distressed areas.

\$800,000. It drops back to \$500,000 in 2009 and 2010 and is indexed for inflation in those years. Beginning in 2011 (and each year thereafter), the threshold is scheduled to drop to \$200,000. As a result, none of a firm's spending on qualified property placed into service in 2008 may be expensed once its total spending on such property exceeds \$1,050,000: \$250,000 expensing allowance plus \$800,000 phase-out threshold.

The allowance serves as a robust tax subsidy for small business investment. It mainly benefits firms that are relatively small in revenue, asset, or employment size because of the phase-out threshold. In addition, the allowance stimulates investment by firms that can take advantage of it by deferring taxes on part or all of the first-year returns to investment in qualified assets. This deferral yields a zero marginal effective tax rate on the returns to this investment through the standard economic model for the determination of the user cost of capital.¹⁵

In FY2007, the allowance produced an estimated revenue loss of \$3.2 billion.¹⁶ The revenue effects of the expensing allowance in a particular year depend on the level of business investment in that year. In periods of rising business investment, the allowance typically produces a net revenue loss. But when business investment falls following a period of sustained expansion, the allowance can actually yield a net revenue gain. This shift from loss to gain reflects the timing of depreciation deductions under expensing. Some firms write off the entire cost of an asset in its first year of use by claiming the Section 179 expensing allowance, leaving no depreciation deductions to offset future income earned 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 including a number of tax preferences under the regular corporate income tax in the computation of 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 insure 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 tax year,

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.

¹⁶ Joint Committee on Taxation, *Estimates of Federal Tax Expenditures for Fiscal Years 2006-2010*, p. 34.

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, irrespective of the size of its gross receipts.

There is some evidence that this exemption may give some eligible small corporations a slight competitive advantage over comparable firms paying the AMT. A 1997 study found 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 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.¹⁷ In addition, the exemption gives owners of small firms an incentive to incorporate, since the taxable income of passthrough entities is subject to the individual AMT as well as the regular income tax.

A 2000 report by the Treasury Department's Inspector General for Tax Administration (TIGTA) suggested that the implementation of the exemption from the AMT for small firms ran into some unexpected problems during the first year or two of the exemption. According to the report, more than 2,300 small corporations paid the AMT in 1998, 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.¹⁸ 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 comprehend the changes and apply them in filing 1998 tax returns. It recommended that the IRS take a variety of steps to increase taxpayer awareness of the exemption, explain how it is intended to work, and identify and contact taxpayers who erroneously paid the AMT. In a recent follow-up report, TIGTA found that the IRS had taken many of these steps, but that it still had failed to notify the more than 3,600 taxpayers who may have mistakenly paid the AMT and fallen short of the agency's commitment to "inform and educate tax practitioners on what they need to do on their clients' behalf."¹⁹

It is not known whether there is a net revenue gain or loss from exempting small corporations from the AMT. Exempt firms do not compute their AMT liability, but they could end up paying the regular corporate income tax.

¹⁷ Andrew B. Lyon, *Cracking the Code: Making Sense of the Corporate Alternative Minimum Tax* (Washington: Brookings Institution Press, 1997), pp. 77-97.

¹⁸ Treasury Department, 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.

¹⁹ Treasury Department, 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.

Amortization of Business Start-Up Costs

One of the principles underlying the federal income tax is that taxable income should exclude all costs incurred in earning it. This implies that all ordinary and necessary costs incurred in conducting a trade or business should be deducted from a firm's taxable income. The principle also implies that ordinary and necessary costs paid or incurred in connection with starting or organizing a business should not be deducted from current income. Rather, because these expenses can be viewed as an attempt to create an asset with a useful life extending beyond one tax year, it can be argued that they should be capitalized, added to the taxpayer's basis in the business, and recovered when the business is sold or ceases to exist.

Under IRC Section 195, however, business taxpayers who incurred or paid business start-up and organizational costs and then entered the trade or business on or before October 22, 2004 may 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. But under a provision of the American Jobs Creation Act of 2004 (P.L. 108-357), business taxpayers who incur or pay business start-up and organizational costs after October 22, 2004 may be able to deduct up to \$5,000 of 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 expenditures that cannot be deducted may be amortized over a period of 180 months, beginning in the month when the new trade or business commences. In order to claim either allowance, a taxpayer must have an equity interest in the new trade or business and actively participate in its management.

To qualify for amortization or the deduction, the start-up and organizational costs must meet two criteria. 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 any activity done to produce income or profit before starting a trade or business with the intention of making such activity into an active trade or business. Second, the costs must be the similar in kind to costs that would be considered deductible if they were paid or incurred in connection with the expansion of an existing active trade or business in the same industry entered by the taxpayer.

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 clearly benefits fledgling firms with relatively small such costs. It permits the owners of such firms to deduct expenses that otherwise could not be recovered until they sell their interest in the business. In effect, the option accelerates the recovery of certain essential up-front costs for these firms, and this acceleration can aid their formation and growth by reducing the cost of capital and increasing cash flow at a time when the firms' access to capital may be severely restricted.

According to the Joint Tax Committee, the amortization or deduction of qualified business start-up and organizational costs led to an estimated revenue loss of \$0.7 billion in FY2007.²⁰

Cash Basis Accounting

Under IRC Section 446, firms must compute their taxable income according to the same method of accounting they regularly use in keeping their books. 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 is actually earned or the expenses are actually incurred. By contrast, 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 its advantages: in general, cash-basis accounting is much simpler to administer, but 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. An important requirement in selecting an accounting method for tax purposes is that it clearly reflect a business taxpayer's income.

Current federal tax law requires firms that maintain inventories to use the accrual method in computing taxable income. The following entities generally must also use the accrual method of accounting for tax purposes: C corporations, partnerships with C corporations as partners, trusts that earn unrelated business income, and authorized tax shelters.

Nonetheless, the cash method may be used by these entities provided they are not a tax shelter and fall into one or more of the following categories: (1) the entity is engaged in farm or tree raising, (2) the entity is a qualified personal service corporation, or (3) the entity is a firm (including C corporations) with \$5 million or less in average annual gross receipts during the previous three tax years. Moreover, the IRS has ruled that the cash method of accounting may be used by most sole proprietorships, S corporations, and partnerships with average annual gross receipts of \$1 million or less in the three previous tax years (IRS Rev. Proc. 2001-10), and by firms with average annual gross receipts of \$10 million or less whose main business is providing services or fabricating products according to customer designs or specifications (IRS Rev. Proc. 2002-28).

As these rules suggest, many of the firms permitted to use the cash method for tax purposes are likely to be small in receipt, asset, or employment size. Cash-basis accounting can confer the same tax benefit on small firms as the expensing allowance

²⁰ Joint Tax Committee, *Estimates of Federal Tax Expenditures for Fiscal Years 2006-2010*, p. 35.

under IRC Section 179: the deferral of income tax payments. In principle, a firm earns income when the legal right to be paid comes into existence. Under the cash method of accounting, however, a firm may delay the recognition of income until cash payments are received, thereby postponing the payment of tax on that income.

Although many small firms may be eligible to use cash-basis accounting for tax purposes, it may not always be practical or advisable for them to do so. The reason lies in the requirements of the income statements and balance sheets used in external financial reports.²¹ Cash-basis accounting can distort a firm's financial position in at least two ways. First, it records only transactions involving cash or its equivalent, thereby excluding 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. Thus, small firms with a strong need to produce reliable and accurate external financial reports may be better off eschewing cash-basis accounting altogether.

The Joint Committee on Taxation estimates that the use of cash accounting outside agriculture resulted in a revenue loss of \$0.8 billion in FY2007.²²

Tax Incentives for Private Equity Investment in Small firms

The federal tax code also contains several provisions intended to encourage the investment of private equity capital into some start-up small firms that might otherwise find it difficult raising the funds needed to finance current operations or expansions. These provisions, which are described below, do so largely 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 investors who acquire equity holdings in larger established firms.

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 an 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 at

²¹ See Robert Libby, Patricia A. Libby, and Daniel G. Short, *Financial Accounting* (Chicago: Irwin, 1996), p. 111.

²² Joint Tax Committee, *Estimates of Federal Tax Expenditures for Fiscal Years 2006-2010*, p. 35

rates of 15% for individual taxpayers in income tax brackets above 15% and 5% for individual taxpayers in the 10% and 15% income tax brackets.²³

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 more than five years. The exclusion rises to 60% if the QSBS has been issued by a corporation based in an empowerment zone. There is a cumulative limit on the gain from stock issued by a single qualified corporation that may be excluded: in a 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 disposed of 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 for over five years is 14%. 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 is 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 no later than May 6, 2003, and 7% for QSBS acquired after May 6, 2003 and by December 31, 2008.²⁴

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 issuer. 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 five-year holding period. Assets linked to working capital, start-up activities, or research and development meet the active business test even if they are devoted largely to the development of future assets or 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.

Some small firms cannot benefit from the partial exclusion. Specifically, stock issued by small C corporations primarily engaged in one of the following commercial activities does not qualify for the partial gains exclusion: health care, law,

²³ Under the Jobs and Growth Tax Relief Reconciliation Act of 2003 (JGTRRA, P.L. 108-27), the 15% rate applies to assets sold or exchanged after May 6, 2003 and before January 1, 2009; and the 5% rate to assets sold or exchanged after May 6, 2003 and before January 1, 2008. In 2008, long-term capital gains received by taxpayers in the 10% and 15% income tax brackets are exempt from taxation, making the rate 0%. Assuming no change in current tax law, beginning in 2009 and thereafter, the maximum long-term capital gains tax rates will rise to 20% for taxpayers in income tax brackets above 15% and 10% for taxpayers subject to marginal rates of 10% and 15%.

²⁴ The 7% rate stems from a provision in JGTRRA.

engineering, architecture, hospitality, farming, insurance, finance, and mineral extraction. And stock issued by the following domestic 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 equity capital, despite considerable uncertainty or skepticism among investors about their growth potential and future prospects for commercial success. 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 other investment opportunities, over five years.

JGTRRA substantially diluted the investment incentive provided by the partial exclusion. Before the act, the maximum tax rates on long-term capital gains were 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, while the effective tax rate on capital gains realized on sales or exchanges of QSBS was 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 on QSBS.

An estimated \$270 million in revenue was not be collected in FY2007 because of the exclusion.²⁵

Losses on Small Business Investment Company Stock Treated as Ordinary Losses without Limitation. Generally, losses on stock investments 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 use capital losses to offset no more than \$3,000 of 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 exchange or worthlessness of stock in these companies. This treatment is intended to foster private equity investment in these companies by lowering the potential after-tax loss on an investment in a SBIC, relative to potential after-tax losses on alternative 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 with a SBA guarantee to make equity and debt

²⁵ U.S. Office of Management and Budget, *Budget of the United States Government, Fiscal Year 2008: Analytical Perspectives* (Washington: GPO, 2007), table 19-1, p. 288.

investments in qualified firms. For tax purposes, most SBICs are treated as C corporations. In FY2002, SBICs provided \$2.5 billion in financing for 2,610 firms.²⁵

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 same year they are realized.

But under IRC Section 1044, which entered the federal tax code through 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 is rolled over. The maximum gain that 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 \$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 small business stock as an ordinary loss, rather than a capital loss. For business taxpayers, ordinary losses are treated as business losses for the sake of computing a net operating loss.

To qualify for this treatment, the stock must satisfy four criteria. First, it must be issued by a domestic corporation after November 6, 1978. Second, the stock must be acquired by an individual investor or his or her 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 does not exceed \$1 million when it issues the stock. Finally, during the five tax years before 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

²⁵ See the website for the U.S. Small Business Administration's SBIC program: [<http://www.sba.gov/INV/>].

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 produced an estimated revenue loss of \$50 million in FY2007.²⁶

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 then subtracted from gross receipts in the computation of their taxable income. In most cases, the cost of goods sold is calculated 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 the material and labor costs arising from the production or acquisition of goods, and indirect costs are 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 allocating indirect costs to production or resale activities, as long as the methods used in the allocation produce reasonable and defensible results for their trade or business.

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 with average annual gross receipts of \$10 million or less in the previous three tax years.

This exemption is advantageous 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, creating opportunities for the deferral of income tax liabilities.²⁷

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

²⁶ Office of Management and Budget, *Budget of the U.S. Government in Fiscal Year 2008*, table 19-1, p. 288.

²⁷ See Paul G. Schloemer, "Simplifying the Uniform Inventory Capitalization Rules," *Tax Notes*, vol. 53, no. 9, Dec. 2, 1991, pp. 1065-1069.

Simplified Dollar-Value LIFO Accounting Method for Small Firms

Business taxpayers that maintain inventories to determine the cost of goods sold in a tax year must estimate the value of their inventories at the beginning and end of each tax year. Because it is time-consuming and costly to do this item by item, many taxpayers use methods that assume certain item or cost flows.

One such method is known as “last-in-first-out”(or LIFO). LIFO assumes that the most recently acquired goods are sold first. Consequently, LIFO allocates the newest unit costs to the cost of goods sold and the oldest unit costs to the ending inventory. The method can be advantageous to use when the cost of many inventory items is rising, because LIFO 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 item by item. Each pool includes the value of a variety of inventory items and is measured in terms of the equivalent dollar value of the inventory items at the time they were first added to the inventory account, or the base year. Using the dollar-value method is complicated and costly for most taxpayers.²⁸

But IRC Section 474, which was established by the Tax Reform Act of 1986, allows some 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 in 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 are no known estimates 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 involved 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. Section 811 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 of a qualified pension plan’s existence. Eligible costs are defined as the ordinary and necessary expenses incurred in connection with the

²⁸ 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.

administration of the plan and the education of employees about the plan's benefits and requirements. Qualified plans include new defined benefit plans, defined contribution plans, savings incentive match plans for employees, and simplified employee pension plans. Firms with fewer than 100 employees who 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 is intended to give owners of small firms that never have offered retirement benefits to employees a robust incentive to establish pension plans for employees by reducing the after-tax cost of setting up and administering these plans in their early years. Recent surveys have indicated that these costs often constitute a formidable barrier to the creation of pension plans among small employers.

The Joint Committee on Taxation has estimated that less than \$50 million in revenues was foregone in FY2007 because of the credit.²⁹

Magnitude of Small Business Tax Benefits

By now it should be clear that the federal tax code encourages the formation of small firms and fosters their growth in a variety of ways. What is not clear is the extent to which the tax code generally favors smaller firms over larger ones. Answering this question raises difficult analytical issues that go beyond the scope of this report. Nonetheless, it is possible to illustrate the potential magnitude of specific small business tax preferences.

Consider the expensing allowance under IRC Section 179. In the minds of many, the allowance epitomizes small business tax subsidies, even though its revenue cost can be much lower than that of some other small business tax preferences and many firms outside manufacturing derive little or no benefit from it. In a 1995 study, Douglas Holtz-Eakin analyzed the effect of the expensing allowance on a firm's user cost of capital. As noted earlier, expensing stimulates business investment by reducing the user cost of capital. **Table 1** summarizes his findings.³⁰ The first column gives 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 provides the required pre-tax rate of return if the entire cost is recovered through the depreciation allowances allowed under federal tax law in the early 1990s; and the final column displays 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 constituted a significant investment subsidy, and the extent of the subsidy rose with

²⁹ Joint Committee on Taxation, *Estimates of Federal Tax Expenditures for Fiscal Years 2006-2010*, p. 40.

³⁰ 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.)

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 fell as the tax rate increased because tax deductions became increasingly valuable at higher tax rates.

Table 1. Estimated User Cost of Capital Under-Expensing
(%)

| Corporate Tax Rate | Expensing | Regular Depreciation | Size of Subsidy |
|--------------------|-----------|----------------------|-------------------|
| 15% | 17.95% | 20.23% | 2.28 ^a |
| 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.

^a Percentage points, not percent.

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:

$$c/q = (p - \pi + d/1 - t) \times (1 - tz),$$

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, π is the rate of inflation, d is the rate of geometric depreciation, t is the marginal tax rate, and z is the present value of depreciation allowances per dollar of investment. In the case of expensing, $z = 1.0$; and in the case of regular depreciation, $z = 0.2814$.

Economic Role of Small Firms

Available data on the economic role of small firms indicate they make significant contributions to the U.S. economy. A critical consideration in assessing those contributions is the definition of a small firm. When small firms are defined as independent business enterprises with fewer than 500 employees, they account for over 99% of employers, more than 50% of private non-farm employment, about 47% of private non-farm compensation (wages, salaries, and benefits), and over 50% of nominal gross domestic product (GDP) in 2004.³¹ The economic importance of small firms varies by industry. In 2002, the share of an industry's contribution to GDP accounted for by firms with fewer than 500 employees ranged from 20% for information to 85% for other services.³² In addition, small firms generate a large share of the new domestic jobs created each year. According to data reported by the

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

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 2005.³³

Most firms start out small in employment size, and their chances of eventually growing into large successful firms are less than promising. Two-thirds of new firms survive at least two years, and 44% last at least four years.³⁴ Or, looking at it from the flip side, well over one half don't survive into their fifth year. Thus, while hundreds of thousands of new firms come into existence annually, hundreds of thousands existing firms cease functioning. This constant churning is reflected in the fluctuating contributions of small firms to annual net job creation.

Small firms also make important contributions to the process of technological innovation. According to a 2003 study by CHI Research, Inc., firms with fewer than 500 employees accounted for 41% of all patents filed by U.S. corporations from 1996 to 2000, and firms of that size produced 13 to 14 times as many patents per employee as comparable large firms.³⁵ The researchers also found that small firms filed 25% of the patents related to biotechnology, 19% of the patents related to pharmaceuticals, 11% of the patents related to medical equipment and electronics, and 9% of the patents related to chemicals other than pharmaceuticals.³⁶

Economic Arguments For and Against Small Business Tax Preferences

The economic importance of small firms as a whole calls into question the underlying economic rationale for existing small business tax subsidies and proposals to enhance them or add new ones. It is fair to ask why the subsidies are needed if small firms normally account for substantial shares of domestic employment and output and play vital roles in the commercial development of new technologies.

The answer to this question has implications for U.S. social welfare, as small firms received over \$11 billion in tax benefits in FY2007 — in addition to the financial support they receive through other federal programs intended to aid small business. If the economic arguments made in favor of these tax subsidies turn out to be weak or untenable, then using these resources for other applications (e.g., reducing the federal budget deficit or raising federal spending on public education or basic research) may lead to better economic outcomes for a greater numbers of firms and individuals.

³³ 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.

³⁴ Small Business Administration, *Frequently Asked Questions*, Aug. 2007.

³⁵ CHI Research, Inc., *Small Serial Innovators: The Small Firm Contribution to Technical Change*, report for the Small Business Administration (Washington: 2003), p. 3.

³⁶ *Ibid.*, p. 17.

In evaluating the economic arguments made in favor of small business tax benefits, it should be recognized that persuasive non-economic arguments can be made in favor of these benefits. Some lawmakers may assign a greater weight to those arguments than any economic argument.

Nevertheless, the central focus of this section is the economic arguments for and against such proposals and their merits. These arguments 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 formidable barriers to their formation and growth in financial markets; (3) the impact of relatively high marginal tax rates on the formation of small firms, and (4) the unique opportunities for individual economic advancement offered by small business ownership. Each is examined in some detail here.

Special Economic Role of Small Firms. As surprising as it may seem, the economic contributions of small firms are often cited as reasons to provide federal support for small business. For example, in his 2001 Senate floor remarks calling for additional tax benefits for small firms, Senator Christopher Bond noted 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 responsible for 51% of private gross domestic product.”³⁷ Similarly, Senator Olympia Snowe asked for more tax benefits for small firms in a 2003 floor statement: “[T]hey (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.”³⁸

Proponents of small business tax subsidies also point to the gains in economic efficiency, dynamic structural changes, and important technological innovations often attributed to small firms as justifications for the subsidies.

The gains in economic efficiency are thought to lie in evidence that small firms supply certain goods and services more efficiently than large firms. As economist Bo Carlsson has noted, this advantage can be found in industries where large production runs and falling unit costs are dominant structural features; examples include computers, automobiles, and steel.³⁹ In industries such as these, small and large firms tend to specialize in different products or services. As a result, they often

³⁷ Sen. Christopher Bond, remarks in the Senate, *Congressional Record*, daily edition, vol. 147, Jan. 25, 2001, p. S576.

³⁸ Sen. Olympia Snowe, remarks in the Senate, *Congressional Record*, daily edition, vol. 149, no. 6, Jan. 14, 2003, p. S299.

³⁹ 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.

end up interacting more as close collaborators than as fierce competitors. In Carlsson's view, the dramatic rise in outsourcing among large U.S. firms in the 1990s had the effect of further hardening this division in labor between large and small firms. Among the reputed advantages of small firms in the vast and complex chain of supply undergirding the U.S. economy is greater flexibility in responding to new market opportunities and competitive threats.

The belief that small firms can serve as powerful agents of dynamic economic change and technological advance appears rooted in the critical roles played by small start-up firms in the origins and rapid growth of certain high-technology industries like computers and microelectronics. Two notable findings in the recent literature on firm size and technological innovation are the contribution of small firms to innovation seems to vary by industry, and that their contributions are likely to be most significant in relatively young industries with relatively low levels of concentration.⁴⁰ The same literature offers some fresh evidence that in certain industries small start-up firms are more adept than large established firms at identifying promising commercial applications for new technologies and exploiting these opportunities. During the 1980s and 1990s, many striking examples of this competitive advantage emerged in biotechnology, microelectronics, computer software, and electronic commerce.⁴¹

Experiences such as these have led some economists to conclude that small entrepreneurial firms collectively serve as a vital and indispensable source of economic growth and renewal. They contend that economic growth is marked by the continuous creation and destruction of jobs and firms, and that small entrepreneurial firms inject needed innovation and competition into this process. Carlsson has claimed that without the "heterogeneity and volatility" provided by small start-up firms, "the economy eventually stagnates or even collapses."⁴²

Opportunities for the Social and Economic Advancement of Immigrants, Women, and Members of Minority Groups. Proponents of small business tax subsidies also cite the benefits of small business ownership for women, minority groups, immigrants, and the communities where they reside as an important justification for the subsidies. They argue that owning and managing a small business gives them access to the social and economic mainstream in 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.

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

⁴⁰ Joshua Lerner, "Small Business, Innovation, and Public Policy," in *Are Small Firms Important? Their Role and Impact*, p. 160.

⁴¹ *Ibid.*, p. 160.

⁴² Bo Carlsson, "Small Business, Entrepreneurship, and Industrial Dynamics," p. 109.

work out of their homes are more stable than the average family.⁴³ 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.⁴⁴

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 faced by many small business owners and aspiring entrepreneurs to raising funds to start or expand a business. If capital markets were truly efficient, then every small business investment opportunity offering a rate of return above the cost of capital would obtain the needed funding, regardless of the creditworthiness of the owners. But proponents of government support for small business say that such is not the case. In their view, many potential and current entrepreneurs are unable to borrow or attract equity capital, largely because of inadequate information on the part of lenders and investors. As a consequence, small business owners facing such a constraint often are forced to finance projects out of their own resources or the resources of friends and family members, or to abandon the projects altogether. Small business owners facing severe liquidity constraints have an elevated risk of failure.

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 owners: 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 grow at a slower rate, invest less in new tangible and intangible assets, and become increasingly less likely to expand employment.⁴⁵ In their view, these effects, especially when contrasted with the economic contributions of small firms (especially those that can rightly be called entrepreneurial), offer a compelling argument in favor of granting/offering tax breaks to these firms.

Chief Economic Arguments Against the Subsidies

While acknowledging the significant economic role played by small firms, some analysts maintain it cannot serve as a justification for targeting tax subsidies at small firms. Conventional economic analysis holds that government intervention in the economy is warranted mainly to correct some kind of market failure. In general,

⁴³ 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.

⁴⁴ 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.

⁴⁵ 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.

market failures can be thought of as conditions that prevent or unduly retard the emergence of economically efficient outcomes. Foremost among these conditions 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.⁴⁶ Critics of small business tax subsidies say there is no evidence that a market failure stands in the way of the formation or growth of small firms. Moreover, by their way of thinking, such subsidies are likely to lead to undesirable equity and efficiency effects.

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

But critics maintain no such silence. 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 income so that 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. It is an axiom of public finance that individuals, and not firms, ultimately bear the burden of business income taxes. While all owners of capital can be expected to benefit from small business tax preferences, most of those benefits presumably end up in the hands of small business owners, whose income and wealth tend to be well above average for U.S. households.⁴⁷

Efficiency Concerns. Critics also criticize small business tax subsidies on efficiency grounds. In theory, income taxes reduce social welfare by distorting the behavior of consumers and firms. As a result, the most desirable income taxes are those that raise the needed revenue without preventing economic resources from flowing to their most productive uses.

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 may cause social

⁴⁶ 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.

⁴⁷ According 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-Owners Fare During the longest U.S. Economic Expansion?*, report prepared for the Small Business Administration (Washington: June 2006) table 3, p. 26.

welfare to be less than optimal.⁴⁸ 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 particular asset, employment, or revenue size and remain there.⁴⁹

A departure from the doctrine of neutral taxation to assist small firms might be warranted if there were something uniquely valuable about the economic role of such firms that can flourish 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 in the guise of tax subsidies is needed to ensure that they continue to play these roles. But critics question both the premises and policy recommendation of this argument.

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 half and three-quarters of all new jobs from 1990 to 1997, depending on how the employment size of a small firm is specified.⁵⁰

Critics maintain, however, that for a variety of reasons these data do not necessarily prove that small firms have a greater job-creating prowess than large firms. To begin with, they note that the data raise more questions than they answer: 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 new job?

In addition, critics say there is an abundance of evidence that small firms are not demonstrably and 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.⁵¹

⁴⁸ Stiglitz, *Economics of the Public Sector*, pp. 567-569.

⁴⁹ Douglas Holtz-Eakin, "Should Small Businesses be Tax-Favored?," *National Tax Journal*, vol. 48, no. 3, Sept. 1995, p. 390.

⁵⁰ U.S. Small Business Administration, Office of Advocacy, *Small Business FAQ*, (Washington: Dec. 2000).

⁵¹ 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

(continued...)

Second, most jobs created by small firms are created by new firms, which typically start out small in employment or asset size. Yet many of these jobs do not last a long time because most new firms fail within their first few years.⁵² 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.⁵³ Finally, during the 1970s and 1980s, large firms and plants dominated job creation and destruction in the manufacturing sector, and there was no strong, systematic relationship between firm size and net job growth rates.⁵⁴

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 lead to faster employment growth. Economic analysis indicates that the economy generates jobs through what can be described as a natural process of growth, decline, and structural change; the size distribution of firms seems irrelevant to this process. From this perspective, the level of national employment results from a mix of factors that would swamp 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.

Research and development (R&D) is the lifeblood of technological innovation, which, in turn, serves as a primary engine of long-term economic growth. 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 likely to invest too little in R&D for two reasons. One is that they cannot capture all the returns to R&D investment, mainly because other firms are able to capitalize on the results of research in spite of available intellectual property protection. A second reason is that some firms lack access to sufficient capital to invest in R&D because they are unwilling or unable to provide investors with the information they require to evaluate the potential returns on planned R&D investments.⁵⁵ This tendency to invest too little in R&D represents a market failure in that too few resources are allocated to R&D in light of its potential economic

⁵¹ (...continued)

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%.

⁵² Ibid., p. 8.

⁵³ Birch and Medoff, “Gazelles,” pp. 162-164.

⁵⁴ Steven J. Davis, John C. Haltiwanger, and Scott Schuh, *Job Creation and Destruction* (Cambridge, MA: MIT Press, 1996), pp. 169-170.

⁵⁵ 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.

benefits. To remedy this failure, many economists recommend government intervention to encourage business R&D investment.

But critics of small business tax subsidies maintain that it is far from clear that government support for this investment should be targeted at small firms. They point to abundant evidence suggesting that both small and large firms launch the innovations that help propel the processes of economic growth and structural change, and that it is impossible to disentangle the contributions of one group from the other. According to data reported by the National Science Foundation (NSF), larger firms perform the vast share of business R&D: from 1992 to 1997, for example, companies with fewer than 500 employees accounted for 14% of total business R&D spending, whereas companies with 10,000 or more employees were responsible for 59% of these expenditures.⁵⁶

Nonetheless, small firms and large firms each appear to have distinct advantages as agents of technological innovation.⁵⁷ In addition, numerous studies have looked at the effects of firm size and market structure on innovation.⁵⁸ On the whole, they have found that no firm size is 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 question the suitability and effectiveness of some current or proposed small business tax subsidies.

One argument made in favor of these 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 such a policy goal does not involve government support for the formation and growth of small firms. They point out that only a tiny share of small start-up firms survive and grow large enough to pose a serious competitive threat to large entrenched firms in the same industry. In the view of critics, antitrust law is a more effective policy tool than small business tax subsidies for preventing the rise of monopoly power and other anti-competitive business practices.

⁵⁶ National Science Board, *Science & Engineering Indicators — 2000*, Vol. 1 (Arlington, VA: 2000), appendix table 2-54, pp. A-97 and A-98.

⁵⁷ On the one hand, small firms may have a greater potential than large firms to create or dominate a new industry through R&D and may be more flexible than large firms in the pursuit of promising R&D projects. On the other hand, large firms can more easily cover the substantial sunken costs involved in conducting R&D and are more likely to capture a large share of the returns to R&D investments through marketing campaigns, the protection of intellectual property rights, and the creation of regional, national, and international distribution and service and repair networks. See Wallsten, “Rethinking the Small Business Innovation Research Program,” p. 197.

⁵⁸ F. M. Scherer and David Ross, *Industrial Market Structure and Economic Performance*, 3rd edition (Boston: Houghton Mifflin Co., 1990), pp. 651-657.

Critics also note that if the aim of public policy is to stimulate employment growth, then it makes little sense to offer small firms tax subsidies that lower the cost of capital. The current expensing allowance is a case in point. Such a subsidy lowers the cost of capital relative to labor, thereby encouraging small firms to substitute machinery and equipment for labor. In theory, a tax subsidy like the allowance leads to fewer workers being employed than would be the case in the absence of the allowance.

Finally, critics argue that small business tax preferences should be avoided or minimized because they impose an implicit or a hidden tax on business growth. This tax has been described as the “notch problem,” and it is an 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 certain limit specified by law. Such a design creates a disincentive to grow beyond that limit.

The expensing allowance under IRC Section 179 illustrates this pitfall. In 2003, the maximum allowance was \$100,000 and the phaseout threshold was \$400,000. When a firm increased its investment that year 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 \$500,000. In effect, this design gave firms an 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 has 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 over \$100,000 to \$400,000, 43% on amounts over \$400,000 to \$500,000, and 26% on amounts above \$500,000.⁵⁹ Douglas Holtz-Eakin has pointed out that the design of the allowance effectively raises a firm’s cost of capital at a time when its growth is boosting its capital needs.⁶⁰

Conclusions

There is no question that small firms make important contributions to the performance and growth of the U.S. economy. Of course, the magnitude of the contributions depends on how a small firm is defined. Under the definition used by the SBA in administering its programs, it is fair to say that small business accounts for a majority of private-sector jobs and private-sector output, generates many key technological innovations, and serves as a potent agent of revitalization and structural change in a variety of industries.

⁵⁹ 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.

⁶⁰ Holtz-Eakin, “Should Small Businesses Be Tax-Favored?,” p. 393.

These contributions may explain much of the strong backing inside and outside Congress for government policies to assist small business. A prominent example of such a policy is the preferential tax treatment received by many small firms. The combined revenue cost of current federal small business tax subsidies, excluding the tax treatment of passthrough entities, exceeded \$11 billion in FY2007. A variety of initiatives to expand these subsidies are being considered in the 110th Congress.

Mainstream economic analysis suggests that it is difficult to justify an expansion of small business tax subsidies on equity or efficiency grounds. Small business tax preferences reduce the tax burden on owners of small firms, diluting (to an unknown extent) the progressivity of the federal individual income tax system. In addition, it appears that small business tax preferences do little to advance social welfare. Economic theory holds that the efficiency losses inevitably caused by income taxes are minimized when taxes do not distort the production arrangements within firms and all returns to capital are taxed at the same rate. Deviations from this theory of uniform taxation are warranted to correct clear and obvious market failures. In the case of small firms as a whole, there is no convincing evidence that some kind of market failure is linked to their rates of formation and growth or to their performance in a wide range of industries.

This is not to suggest that government support for small firms would never be justified on economic grounds. If a market failure were to emerge that retards the formation and growth of small entrepreneurial firms, government action to eradicate the source of the failure would be warranted. One such market failure would be imperfections in capital markets that impede the entry of new small entrepreneurial firms or greatly diminish the chances of survival of existing small entrepreneurial firms. Such a problem could be corrected through policy measures aimed at expanding the flow of capital to small start-up firms but without greatly distorting the allocation of capital within the economy at large. Tax subsidies might be useful in this case, but to be effective, they would need to address the root causes of the capital market imperfections. A continuing challenge for policymakers is to identify market failures that disproportionately harm small firms and devise appropriate policy responses.

The discussion presented here underscores the need for the development of a robust model of the formation of small firms and their contributions to the economy. As it now stands, considerable uncertainty surrounds these issues. Holtz-Eakin has noted that the development of such a model would enable policymakers to determine whether any market failures are interfering with the formation and growth of small firms, identify the factors driving these failures, and develop policies that address these factors.⁶¹

⁶¹ Ibid.