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The Jobs and Growth Tax Relief Reconciliation Act of 2003 and Business Investment

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Summary

During the congressional debate leading up to the enactment of the Jobs and Growth Tax Relief Reconciliation Act of 2003 (JGTRRA, P.L. 108-27) in late May, one of the arguments made on its behalf was that it would stimulate the economy in part by encouraging firms to invest more than they otherwise would over the next few years. The Act seeks to enhance the incentive to invest by accelerating the tax treatment of depreciation for certain tangible business assets.

This report describes the provisions of the Act intended to accomplish this and explains how they are expected to work in practice. It concludes with a discussion of the implications of JGTRRA for business investment in the next year or two. It will not be updated.

The notion that faster economic growth can arise through a sustained revival of business investment finds support in recent trends in the performance of the U.S. economy. Business spending on structures, equipment, and software accounted for 12.5% of real gross domestic product (GDP) in 2002, down from shares of 13.6% in 2001 and 14.4% in 2000. This decrease reflects the critical role played by a drastic weakening of business investment to the onset of the recession in 2001 and the economy's mostly sluggish and uneven growth since then.

JGTRRA contains two provisions expressly intended to speed up the tax treatment of depreciation for certain tangible assets. One is a temporary increase in the expensing allowance under section 179 of the tax code. The Act raises the amount that a firm may expense in a tax year from \$25,000 to \$100,000 and the threshold at which the allowance phases out from \$200,000 to \$400,000 between 2003 and 2005. It also adds packaged software to the group of new and used assets eligible for expensing in the same period. The second provision is a temporary expansion of a 30% first-year depreciation deduction to 50% for certain new assets purchased between May 6, 2003 and December 31, 2004. It is equivalent to a 50% expensing allowance. Depending on how much a firm spends on qualified assets in a tax year, a firm may claim both allowances in 2003 or 2004.

Accelerated depreciation can stimulate business investment by lowering the user cost of capital and by increasing the cash flow of firms with limited access to debt and equity markets. Proponents of JGTRRA say that it will deliver a significant stimulus to business investment in the short run by greatly accelerating the tax treatment of depreciation for equipment and software from 2003 to 2005. But not all analysts agree that the Act will ignite a sharp and sustained rebound in business investment. They point out that certain other factors affecting the domestic climate for this investment may dampen or even overwhelm any stimulus arising from JGTRRA. Of particular concern, in their view, are excess capacity in a wide range of industries, persistently high unemployment levels, and dim expectations among business executives and owners about the profitability of new investment and shortterm growth in GDP.

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The Jobs and Growth Tax Relief Reconciliation Act of 2003 and Business Investment

In the congressional debate leading up to the enactment of the Jobs and Growth Tax Relief Reconciliation Act of 2003 (JGTRRA, P.L. 108-27), one of the arguments made on its behalf was that it would stimulate the economy in part by encouraging firms to invest more than they otherwise would over the next few years. The Act includes two measures expressly intended to boost business investment by accelerating the tax treatment of depreciation for certain tangible assets. This report describes these measures and provides a hypothetical example of how they are intended to work in practice. In addition, it examines the links between accelerated depreciation and business investment and discusses their implications for domestic business investment in the short run.

Business Investment and the Recent Performance of the U.S. Economy

The notion that faster U.S. economic growth can be achieved by spurring increased business investment finds some support in recent economic trends. Business spending on structures, equipment, and software is an important component of gross domestic product (GDP), which is the market value of all final goods and services produced within a country in a year. In 2002, this spending accounted for 12.5% of real GDP, down from shares of 13.6% in 2001 and 14.4% in 2000.

This decrease reflects the important and unusual role played by business investment in the downturn in the economy in 2001 and its sluggish, uneven recovery since then. Much of the decline in real GDP in the first three quarters of 2001 can be attributed to a fall in nonresidential fixed investment that commenced in the fourth quarter of 2000 and has persisted (with one exception) through the first quarter of 2003.¹ In the post-World War II period, most recessions have originated in a significant downturn in consumer spending on durable goods and housing. But the one that began in March 2001 and seemingly ended in fourth quarter of 2001 was distinctive in that it was driven initially by steep cutbacks in business spending on capital goods, especially computer and telecommunications equipment and software.²

¹According to figures reported by the Bureau of Economic Analysis at the Commerce Department, real nonresidential fixed investment declined in eight of the nine quarters between the fourth quarter of 2000 and the first quarter of 2003.

²Ben S. Bernanke, "Will Business Investment Bounce Back?," Federal Reserve Board, April (continued...)

Substantial increases in this spending underpinned the rapid economic growth of the late 1990s.³ Some analysts maintain that a resumption of robust economic growth hinges in part on a strong, sustained recovery in business investment.

JGTRRA and Accelerated Depreciation

How might JGTRRA spur an increase in business spending on capital goods? The answer lies in two provisions of the Act intended to speed up the depreciation of certain business assets for tax purposes. One provision of JGTRRA temporarily expands the expensing allowance under section 179 of the Internal Revenue Code (IRC). The other expands a temporary 30% first-year depreciation deduction established by the Job Creation and Worker Assistance Act of 2002 (JCWAA, P.L. 107-147) to 50% and extends it through the end of 2004.

Economic depreciation is the decline in the market value of an asset, such as a commercial building or machine tool, as it is used over time. The decline typically stems from wear and tear or obsolescence. As such, it represents a cost that should be deducted in determining a business taxpayer's taxable income. Because it is difficult to measure accurately the actual reduction in the value of an asset, the federal tax code specifies depreciation allowances for all tangible depreciable assets which in many cases are thought to be more generous than they would be under a system based on true economic depreciation.⁴ An acceleration of the rate at which an asset is depreciated for tax purposes shrinks the tax burden on the returns generated by the asset over its useful life. Such an acceleration can be achieved by reducing the recovery period for an asset or increasing the share of its cost written off in the early years of its use.

 $^{^{2}(\}dots \text{continued})$

^{24, 2003,} available at [http://www.federalreserve.gov/boarddocs/speeches/2003], visited on Aug. 12, 2003.

³According to data released by the Bureau of Economic Analysis at the Commerce Department, from 1995 to 2000, real GDP increased at an average annual rate of 4.0%. The main components of GDP recorded the following growth rates: personal consumption expenditures, 4.2%; non-residential fixed investment (equivalent to business investment), 10.1%; residential fixed investment, 5.0%; change in private inventories, 16.4%; government expenditures, 2.4%; and net exports, -38.4%. This comparison implies that gross private domestic investment as a whole and business investment in particular increased their contributions to GDP in that period.

⁴In a 2000 report, the Treasury Department found that "at current rates of inflation, depreciation allowances under current law generally are accelerated relative to those implied by economic depreciation, but that this relationship would reverse at a high rate of inflation." The report went on to note that the relationship between economic and tax depreciation varies by major asset, and that "current law favors investments in equipment over nonresidential structures, and favors intangibles (e.g., goodwill or intellectual property) over depreciable property." See Department of the Treasury, *Report to The Congress on Depreciation Recovery Periods and Methods* (Washington: July 2000), p. 27, available at [http://www.ustreas.gov/offices/tax-policy/library/depreci8.pdf], visited on Aug. 12, 2003.

Temporary Expansion of the Expensing Allowance

Under IRC section 179, business taxpayers (both corporate and non-corporate) are allowed to deduct (or expense) a certain amount of the cost of qualified assets placed in service in a tax year. The alternative to expensing is to recover this cost at slower rates using the regular depreciation schedules under the Modified Accelerated Cost Recovery System (MACRS).⁵ Qualified assets are defined as certain new and used depreciable assets acquired for use in the active conduct of a trade or business. Historically, they have consisted mostly of motor vehicles weighing more than 6,000 pounds (including SUVs) and machinery and equipment used in production, extraction, transportation, communications, electricity generation, gas and water production and distribution, and sewage disposal. Most structures are ineligible for expensing.

The amount of the cost of qualified assets that a firm can expense in a given tax year is subject to two important limitations. First, that amount is reduced dollar for dollar (but not below zero) when the total cost of qualified assets placed in service in a tax year exceeds a phase-out threshold. Historically, the threshold has been set so low that most of the firms claiming the expensing allowance have been small in asset size. Second, the expensing allowance claimed by a taxpayer may not exceed his or her taxable income from the active conduct of the trade or business in which the qualified assets are used. Business taxpayers may not carry forward expensing allowances denied under the dollar limitation, but they may carry forward allowances denied under the income limitation.

JGTRRA makes several important (though temporary) changes in the expensing allowance.⁶ It increases the maximum amount that may be expensed from \$25,000 to \$100,000 in 2003 through 2005. The Act also raises the phase-out threshold for the allowance from \$200,000 to \$400,000 in the same period. Both the maximum expensing allowance and the phase-out threshold are indexed for inflation in 2004 and 2005. As a result, a business taxpayer acquiring and placing in service in 2003 assets eligible for expensing may write off \$100,000 of their total cost on its federal income tax return, provided the cost is less than \$400,000. Lesser amounts may be expensed if the total cost falls between \$400,000 and \$500,000. But once the total cost reaches \$500,000 or more, no amount may be expensed. In addition, the Act adds packaged or off-the-shelf software to the list of assets eligible for expensing

⁵The regular depreciation schedules derive from what is known as the Modified Accelerated Cost Recovery System (or MACRS). MACRS applies to most tangible depreciable business property placed in service after December 31, 1986. Under MACRS, depreciation deductions are not determined by measuring the actual or expected change in the market value of an asset as it is used over time. Instead, they are specified by statute and are calculated on the basis of an asset's useful life for tax purposes and permissible depreciation methods. Depreciation deductions reflect the historical cost of an asset and are not indexed for inflation.

⁶For more information on how JGTRRA alters the expensing allowance under IRC section 179, see CRS Report RL31852, *Small Business Expensing Allowance Under the Jobs and Growth Tax Relief Reconciliation Act of 2003: Changes and Likely Economic Effects*, by Gary Guenther.

from 2003 through 2005. This addition has the potential to expand greatly total deductions for the expensing allowance, as business purchases of software totaled \$182.8 billion (current dollars) in 2002, or 16% of nonresidential fixed investment and 27% of business spending on equipment. Assuming Congress leaves current tax law intact, in 2006, the expensing allowance reverts to its status in 2003 before the enactment of JGTRRA.

Temporary 50% First-Year Depreciation Deduction

JGTRRA also expands a temporary 30% first-year depreciation deduction created by JCWAA for certain new depreciable tangible assets purchased after May 5, 2003, and placed in service before January 1, 2005. An asset does not qualify for the 50% depreciation deduction if a binding sales contract for its purchase was in effect before May 6, 2003. In practice, the deduction is equivalent to a 50% expensing allowance for these assets. It is important to keep in mind that this new allowance does not abolish the temporary 30% first-year depreciation deduction, which applies to qualified assets bought between September 11, 2001 and September 10, 2004 and placed in service by January 1, 2005. Business taxpayers may claim one deduction or the other for qualified assets acquired between May 6, 2003 to September 10, 2004, when the 30% expensing allowance is due to expire.

So under current law, business taxpayers may write off 50% of the cost (or adjusted basis) of qualified assets. Generally, the assets eligible for this partial expensing allowance are also eligible for the 30% expensing allowance under JCWAA. To qualify, an asset must belong to one of the following categories: (1) it has a recovery period under MACRS of 20 years or less; (2) it is used in a water utility; (3) it is computer software that was not acquired as part of the purchase of a business or is readily available for purchase by the general public, is not subject to a non-exclusive license, and has not been greatly modified; or (4) it is an improvement by a lessor or lessee to the interior of a non-residential building that is at least three-years old. Most residential rental and non-residential buildings do not qualify for this treatment.

JGTRRA also raises the limitation on the maximum depreciation deduction for certain automobiles in their first year of use. The limitation is intended to deter excessive spending on luxurious passenger cars purchased mainly for business use. JCWAA raised the maximum first-year depreciation deduction by \$4,600 for cars used solely in business and placed in service between September 10, 2001 and May 5, 2003. But JGTRRA increases that additional deduction to \$7,650 for cars bought and placed in service between May 6, 2003 and January 1, 2005.⁷ Automobiles eligible for this treatment are defined as four-wheeled vehicles with a gross unloaded weight of 6,000 pounds or less that are manufactured for use on public streets, roads, and highways and bought primarily for use in business.

⁷As a result, under JGTRRA, the maximum first-year depreciation deduction for eligible cars is \$10,710, up from \$7,660 under previous law. This includes any expensing allowance under IRC section 179.

Hypothetical Example of Accelerated Depreciation Under JGTRRA

Under current tax law, a firm may claim both the enhanced IRC section 179 expensing allowance and the 50% first-year depreciation deduction for the same depreciable asset or assets in 2003 to 2005. In fact, if the cost of an asset qualified for both allowances is sufficiently large, a firm may recover this cost using the full expensing allowance, the 50% expending allowance, and the MACRS in the asset's first year of use. To do so, the firm first must determine whether it may expense any of the cost under IRC section 179. Any such allowance reduces the taxpayer's basis in the asset. The next step is to determine whether it may apply the 50% depreciation deduction. Any such deduction further reduces the firm's basis in the asset. Finally, assuming the asset's adjusted basis is greater than zero after claiming an expensing allowance and the deduction, the firm is entitled to a depreciation deduction under the MACRS. This procedure is illustrated by the following hypothetical example.

Table 1. Hypothetical Example of Depreciation Allowances andAssociated Tax Savings in 2003 Under the Jobs and Growth TaxRelief Reconciliation Act of 2003 and Previous Tax Law

	Previous Law	Current Law
Original Cost (or Basis) of the Computer System	\$300,000	\$300,000
IRC Section 179 Expensing Allowance	\$0	\$100,000
Adjusted Basis of Computer System	\$300,000	\$200,000
Temporary First-Year Depreciation Deduction	\$90,000ª	\$100,000 ^b
Adjusted Basis	\$210,000	\$100,000
Normal MACRS First-Year Depreciation Allowance ^c	\$42,000	\$20,000
Adjusted Basis as of 01/01/04	\$168,000	\$80,000
Total Depreciation Deduction in 2003	\$132,000	\$220,000
Tax Savings in 2003	\$46,200	\$77,000

Source: Congressional Research Service

^a Under previous law, the temporary first-year depreciation deduction was (and still is) 30%.

^b Under current law, the maximum temporary first-year depreciation deduction is 50%.

^c Under the Modified Accelerated Cost Recovery System in place since 1987, computer systems are depreciated over five years, and 20% of the original cost is written off in the first year, applying the double declining balance method and the half-year convention.

Suppose that in August 2003, the XYZ Corporation buys and places in service only one tangible depreciable asset: a new computer system valued at \$300,000. What is the maximum depreciation deduction it may claim for the computer system in 2003 under JGTRRA? How does that compare with the maximum first-year depreciation deduction under previous law? And how much greater is the tax savings from depreciation in 2003 under JGTRRA? The answers can be found in the table on the previous page.

It is clear from the table that the XYZ Corporation faces a lower tax burden in 2003 under current law than under previous law. Because of JGTRRA, the firm would be able to recover 73% of the original cost of the computer system in its first year of use. By contrast, under previous law, the firm would be able to recover only 44% of that cost. Although under both current and previous law the firm could deduct no more than the original cost of the asset (i.e., \$300,000) over its five-year recovery period, there is an important benefit from deducting a larger share of that cost in the first year of the asset's use. As that share expands, the present discounted value of depreciation deductions over an asset's tax life rises. This is because a dollar received today is more valuable than a dollar received in a future year. Increases in the present discounted value of depreciation allowances translate into decreases in the effective cost of an asset to buyers.⁸

JGTRRA and Business Investment in the Short Run

How might JGTRRA directly affect business investment in the short run? The answer is complicated and marked by some uncertainty. Nonetheless, the key considerations in assessing the Act's likely impact on investment are the implications of accelerated depreciation for investment, the timing and duration of the tax subsidy, and the interplay among the other forces influencing investment in the current economic environment. Accelerated depreciation is thought to boost business investment through two channels: the user cost of capital and business cash flow. This stimulus can be magnified or muted by a number of other factors influencing the decision to invest, most notably the amount of excess capacity in the economy, current and expected business profits, current and expected demand for domestic business output, the inflation rate, and current and expected long-term interest rates.

Most economists agree that a key factor in a firm's decision to invest is the user cost of capital. This cost embraces some composite of the pre-tax rates of return on alternative investments (as measured by the cost of funds in debt and equity markets), as well as economic depreciation and the effective tax rate on the stream of income generated by use of the asset. Basically, the user cost of capital determines the aftertax rate of return a project must earn in order to be profitable. In general, as this cost rises (or falls), the number of investments that can be undertaken profitably and the desired capital stock of most firms decrease (or increase).

⁸For a concrete example of this effect, see Harvey S. Rosen, *Public Finance*, 6th edition (New York: McGraw-Hill Irwin, 2002), p. 402.

A change in the tax treatment of depreciation can raise or lower the user cost of capital by modifying the tax burden on the returns to investment. A widely used measure of this burden is the marginal effective tax rate on assets acquired through business investment. This rate is the share of the internal rate of return on investment that is taxed; it varies according to statutory tax rates, depreciation rules, and any explicit investment subsidies such as an investment tax credit. As the rate of depreciation is accelerated, the user cost of capital falls, all other things being equal.⁹ There is some evidence that declines in the user cost of capital in turn spur increases in business investment, though considerable uncertainty surrounds the likely magnitude of the increase.¹⁰ A recent CRS analysis found that JGTRRA not only reduces the tax burden on investment in equipment but amplifies the extent to which the tax code favors investment in equipment over investment in non-residential structures. Given a real discount rate of 5%, and inflation rate of 2%, and a tax rate of 35%, it estimates that the marginal effective tax rate on equipment is 15% when 50% of the cost may be expensed in the first year (as under JGTRRA); 20% when 30% of the cost may be expensed (as under previous tax law); and 26% when none of the cost may be expensed.¹¹ By contrast, under current and previous law, the marginal effective tax rate for non-residential structures (which, for the most part, do not qualify for accelerated depreciation) is 32%. Supporters of JGTRRA contend that much of its stimulative effect on business investment will result from reductions in the user cost of capital.

Some analysts maintain that accelerated depreciation also stimulates business investment by boosting the cash flow of firms, especially those that rely heavily on internal funds to finance new investment. The meaning of cash flow can vary,

⁹In a recent study, two economists estimated the declines in the user cost of capital associated with the temporary 30% first-year depreciation deduction created by the Job Creation and Worker Assistance Act of 2002. The estimates covered assets with 3-, 5-, and 7-year tax lives and reflected different assumptions about the rate of inflation, the expected duration of the stimulus, and the cost faced by firms in adjusting their stock of capital to desired levels. Not surprisingly, they found that the decline in user cost varied with the tax life of an asset, the degree of adjustment cost, and annual inflation rate. The declines were the greatest for investment in 7-year assets in the presence of low adjustment costs, a low inflation rate, and a 1-year partial expensing allowance. See Darrel S. Cohen, Dorthe-Pernille Hansen, and Kevin A. Hassett, "The Effects of Temporary Partial Expensing on Investment Incentives in the United States," *National Tax Journal*, vol. 60, no. 3, pp. 457-466.

¹⁰Recent studies have found that a 1% decline in the user cost of capital is associated with a rise in business spending on equipment of 0.25% to 1% in the short run. Most economists argue that firms are likely to be less responsive to changes in tax policy reducing the user cost of capital when aggregate output is falling or stagnant and a broad range of industries have substantial excess capacity than when the opposite conditions prevail. This implies that firms may have a smaller response to the accelerated depreciation offered by JGTRRA under current economic conditions than they would if the economy were growing at a robust pace. See CRS Report RL31134, *Using Business Tax Cuts to Stimulate the Economy*, by Jane G. Gravelle, p. 4; and Kevin A. Hassett and R. Glenn Hubbard, *Tax Policy and Investment*, Working Paper 5683 (Cambridge, MA: National Bureau of Economic Research, July 1996), p 32.

¹¹Jane Gravelle of CRS generated these estimates in early June 2003.

depending on the context. In this context, it can be thought of as the difference between a firm's revenue and cash payments for operating, investing, and financing activities in a specific period. There is reason to believe that cash flow can play an important role in the investment decisions of firms with limited or no access to debt and equity markets. A major cause of their difficulty in raising funds is inadequate information about their prospects for future growth and profits on the part of lenders or investors. Firms in such a position face a lower cost for internal funds than external funds. Some studies have found a significant positive correlation between changes in a firm's net worth or supply of internal funds and its investment spending.¹² The correlation was strongest for firms having trouble raising funds in debt and equity markets. It would be a mistake, however, to view these findings as conclusive evidence that firms with relatively high cash flows spend more on new capital goods than firms with relatively low or negative cash flows. Cash flow is correlated with productivity growth, and it may be this growth that drives added investment. Correlations disclose nothing meaningful about possible causal links between cash flow and investment. Proponents of JGTRRA say that by expanding the cash flow of small- and medium-sized firms in the short run, it will further stimulate new business investment.

Another consideration in analyzing the implications of JGTRRA for business investment in the next year or two is the timing and duration of its provisions accelerating the tax treatment of depreciation. Proponents of the Act have argued that because these provisions are temporary and taking effect when the domestic climate for business investment is relatively weak, they should exert a significant stimulus in the short run. Few economists would dispute the notion that temporary investment tax incentives are more effective as a tool of economic stimulus than permanent ones, for the simple reason that a temporary incentive would be likely to convince more firms to advance the timing of planned investments to take advantage of the tax benefit. But a similar consensus appears not to have formed around the question of the timing of investment tax incentives and their efficacy. Some analysts hold that it is reasonable to expect most firms to be more responsive to reductions in the user cost of capital when economic growth is proceeding at a relatively brisk pace than when it is relatively slack.¹³

Not all analysts, however, are convinced that JGTRRA will deliver a significant boost to business investment in the next year or two. These skeptics say that any boost from the temporary accelerated depreciation it offers is likely to be dampened or overwhelmed by certain other factors likely to affect business investment in coming months. One factor, in their view, is the existence of excess capacity in a range of industries. According to figures released by the Board of Governors of the Federal Reserve, the industrial sector operated at 74.3% of capacity in the second quarter of 2003; by contrast, during the height of the business investment boom of the 1990s, the operating rate averaged 83.1% from 1995 through 1998. Skeptics also note that many economists do not foresee a resumption of robust growth in real GDP

¹²For a review of the recent literature on this topic, see R. Glenn Hubbard, "Capital Market Imperfections and Investment," *Journal of Economic Literature*, vol. 36, March 1998, pp. 193-225.

¹³Gravelle, Using Business Tax Cuts to Stimulate the Economy, p. 4.

in the next year or so, as continuing concerns about job security, stagnant incomes, and rising levels of household debt restrain consumer spending.¹⁴ Another factor working against a resurgence in business investment anytime soon, in the view of some, is the surprising number of analysts and business managers who remain pessimistic about the expected profitability of new investment in structures and equipment 18 months into the recovery from the last recession.¹⁵ In addition, JGTRRA's impact on business investment in the short run could be weaker than proponents have argued if enough business executives and owners come to believe that Congress will extend the business tax cuts included in the Act before they expire.¹⁶ Some maintain that these factors make it likely that many of the firms able to take advantage of the accelerated depreciation provided by JGTRRA will be more inclined to use the tax savings for purposes other than expanding spending on new plant and equipment, such as increasing dividends payments to shareholders, retiring debt, investing in research and development, acquiring other firms, or hiring new employees.

To provide some empirical support for their view of the likely stimulative effect of JGTRRA, skeptics point out that despite low interest rates and the enactment of the temporary 30% first-year depreciation deduction in March 2002, real nonresidential fixed investment in the first quarter of 2003 was 0.8% lower than in the second quarter of 2002.

¹⁴According to a group of economic forecasters polled monthly by Blue Chip Economic Indicators, the latest average forecast calls for real GDP to grow 2.3% in 2003 and 3.7% in 2004. Given existing trends in productivity growth, these projected rates of growth would appear to be insufficient to generate substantial gains in new job creation. See CRS Report RL30329, *Current Economic Conditions and Selected Forecasts*, by Gail Makinen and Anne Vorce, pp. 13-14.

¹⁵See Bernanke, "Will Business Investment Bounce Back?," p. 9; David Leonhardt, "Executives More Optimistic but Still Expect Weak Growth," *New York Times*, July 17, 2003, p. C12.

¹⁶See William G. Gale, *Short-Term Stimulus, Long-Term Growth and JGTRRA*, testimony to Senate Democratic Policy Committee, June 9, 2003, available at [http://www.taxpolicycenter.org], visited on June 24, 2003; and Gravelle, *Using Business Tax Cuts to Stimulate the Economy*, pp. 6-7.