JOINT ECONOMIC COMMITTEE

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BRING BACK BONUS DEPRECIATION

Tax policy should work with monetary policy to prevent or cushion the adverse effects of a recession on the U.S. economy. Dollar-for-dollar, one of the most cost-effective ways to stimulate economic growth through tax policy would be to accelerate the depreciation deductions for business investment.

Investment drives the business cycle. Investment is the most volatile component of GDP through time. Fluctuations in investment rates contribute to recessions. Prior to the March 2001 to November 2001 recession, for example, real private investment peaked in the second quarter of 2000. It then contracted for the next six quarters. Private investment is subdivided into residential investment (i.e., owner-occupied housing, rental units, and equipment in rental units); business investment in nonresidential structures, equipment, and software; and changes in business inventories.

During the last recession, residential investment remained strong due to the strong demand for housing associated with a speculative price bubble, while business investment in nonresidential structures, equipment, and software was weak. The annualized growth rate for real residential investment was negative for only one quarter in 2001. In contrast, the annualized growth rate for real business investment in nonresidential structures, equipment, and software was negative from the first quarter of 2001 through the first quarter of 2003.

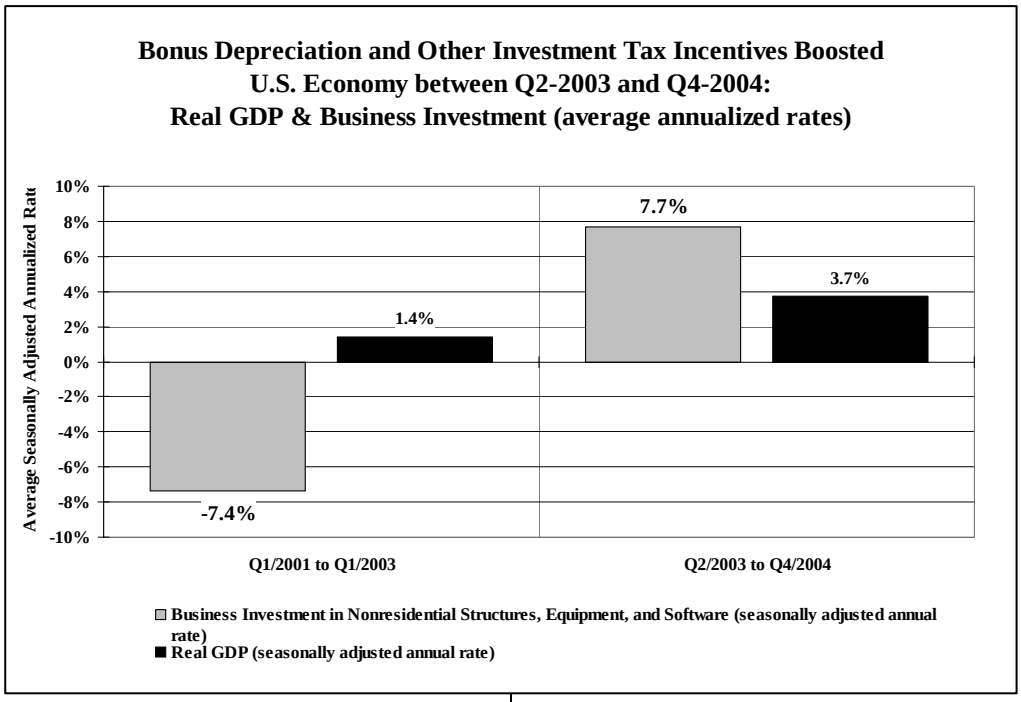
Business investment in nonresidential structures, equipment, and software is sensitive to costs. Economists summarize the costs that affect business investment decisions into a single formula known as the user cost of capital. Policymakers can affect some of the components of the user cost of capital. For example, monetary policy influences the discount rate in the cost of capital formula by affecting interest rates and inflationary expectations. Tax policy influences the cost of capital through marginal federal tax rates on both individual and corporate income, investment tax credits, schedules for depreciation deductions, and differential tax rates on capital gains and dividends.

Gilchrist and Zakrajsek (2007) attempted to quantify the effect of changes in the cost of capital on the investment rate and capital stock. They found: "[A] 1 percentage point increase in the user cost of capital implies a reduction in the investment rate of 50 to 75 basis points and, in the long run, a 1 percent reduction in the stock of capital."[1]

Neutral tax system. A neutral tax system (i.e., one that is not biased against any economic activity) is desirable because it minimize distortions and thus maximizes economic welfare at a given level of tax collections. Under a neutral tax system, a business making an investment in nonresidential structures, equipment, or software would be able to deduct the entire cost of purchasing such assets from the income stream such assets produce.

Under the existing federal tax code, many businesses cannot expense their investments (i.e., deduct an asset's purchase price in the same year as such asset is put into service).[2] Instead, many firms must take depreciation deductions that nominally equal the purchase price over a number of years. However, the real present value of these deductions is actually less than the purchase price of an asset. This difference between the nominal and real value of depreciation deductions occurs because depreciation deductions in the out years are not adjusted for either inflation or the real interest rate. Higher inflationary expectations, a higher real interest rate, or longer depreciation schedules increase the user cost of capital by reducing the present value of depreciation deductions.

Bonus depreciation. The user cost of capital falls when depreciation schedules are accelerated by either increasing the size of the depreciation deduction in the first year or by shortening the schedule length. The *Job Creation and Worker Assistance Act* (JCWAA), which was signed on



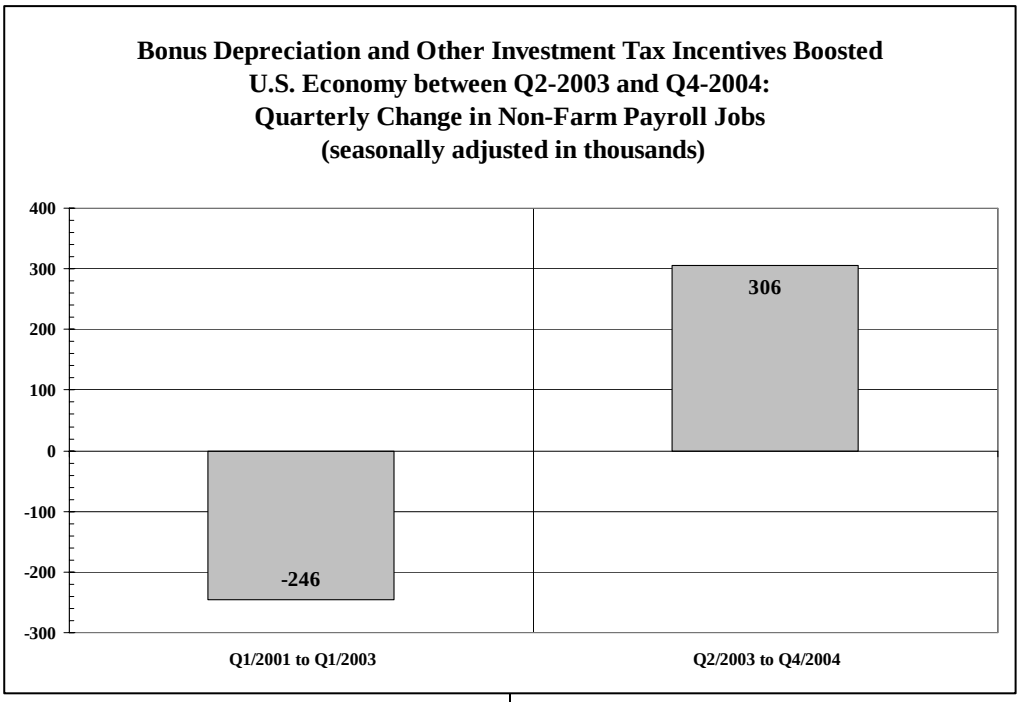
March 9, 2002, introduced the bonus depreciation provision. Under this provision, firms were allowed to deduct 30 percent of the cost of their investment in equipment placed in service before September 10, 2004, from their taxable income in the first year of the cost recovery period. The remaining 70 percent could be deducted over the standard recovery period in accordance with the Modified Accelerated Cost Recovery Schedule (MACRS).

The *Jobs and Growth Tax Relief Reconciliation Act* (JGTRRA), signed on May 28, 2003, increased bonus depreciation to 50 percent and extended the deadline before which equipment had to be placed in service to December 31, 2004. Unlike JCWAA, JGTRRA contained a number of other pro-growth tax changes that worked with bonus depreciation to stimulate business investment, including a reduction in the maximum tax rate on capital gains and dividends to 15 percent and an immediate implementation of the phased reductions in the individual income tax rates that had been enacted in 2001.

Economic effects. JGTRRA had a more powerful effect on business investment than JCWAA. From the first quarter of 2001 through the first quarter of 2003, real business investment in structures, equipment, and software declined by an average annualized rate of 7.4 percent. During the seven subsequent quarters that bonus depreciation was fully in effect, real business investment in nonresidential structures, equipment, and software surged by an average annualized rate of 7.7 percent.

Not surprisingly, the strongest response was in business investment in equipment and software. The average annualized rate of business investment in equipment and software rose from minus 5.5 percent from the first quarter of 2001 through the first quarter of 2003 to 9.5 percent during the seven subsequent quarters that bonus depreciation was fully in effect. However, bonus depreciation also had significant indirect effects on business investment in nonresidential structures because firms often need to build new buildings to house their new equipment and software. Business investment in nonresidential structures declined by an annualized rate of 11.7 percent from the first quarter of 2001 through the first quarter of 2003. During the seven subsequent quarters that bonus depreciation was fully in effect, this rate increased to 2.3 percent.

This turnaround in business investment had positive effects on the broader economy. From the first quarter of 2001 through first quarter of 2003, the annualized real GDP growth rate averaged 1.4 percent. From the second quarter of 2003 to the fourth quarter of 2004 when bonus depreciation was fully in effect, the annualized real GDP growth rate averaged 3.7 percent. The unemployment rate rose



from 4.2 percent in January 2001 to a peak of 6.3 percent in June 2003, one month after bonus depreciation was fully effective, and then fell to 5.4 percent in December 2004 when bonus depreciation expired.

House and Shapiro (2006) disaggregated the effects of bonus depreciation from other pro-growth tax changes. House and Shapiro found the bonus depreciation alone "may have increased output by roughly 0.1 percent to 0.2 percent and increased employment by roughly 100,000 to 200,000 jobs" in 2003.[3]

Minimal budget cost. As powerful and beneficial as the effects of bonus depreciation were for business investment and the overall economy, bonus depreciation was one of the least costly tax provisions in terms of the federal budget deficit. Even on the basis of static scoring, the Joint Tax Committee estimated the ten-year cost of bonus depreciation for fiscal years 2002 to 2012 was $26.5 billion.

Conclusion. Most economists now expect the real price of housing to fall through at least 2009. Consequently, real residential investment is likely to continue declining over the next several quarters before bottoming out. To offset the negative effects of this continuing housing contraction on real GDP growth and employment, policymakers should consider options to increase business investment in nonresidential structures, equipment, and software by reducing the user cost of capital. Restoring bonus depreciation would provide the U.S. economy with a cost-effective and timely stimulus.

[1] Simon Gilchrist and Egon Zakrajsek, "Investment and the Cost of Capital: New Evidence from the Corporate Bond Market," NBER Working Paper No. 13174 (June 2007).

[2] Under Section 179, businesses may expense the purchase of most equipment and software, but not structures up to a limit of $128,000 in 2008 and indexed for inflation for years 2009 and 2010. This limit reverts to $25,000 in 2011. For businesses that put into service investments eligible for Section 179 exceeding a threshold amount ($510,000 for 2008 and indexed for inflation for years 2009 and 2010), the expensing limit is reduced dollar-for-dollar by the amount of investments eligible for Section 179 put into service in excess of the threshold amount.

[3] Christopher House and Matthew D. Shapiro, "Temporary Investment Tax Incentives: Theory with Evidence from Bonus Depreciation," NBER Working Paper No. 12514 (September 2006).