White Paper

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Encouraging Research: Taking Politics out of R&D by Solveig Singleton and Stephen Slivinski

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This paper assesses the strategy and efficacy of giving corporations direct grants to support innovative research. Federal payments to these corporations are commonly referred to as "corporate welfare." This method of financing innovation is unsuccessful because

- An offer of grants creates a "moral hazard" for the industry
- Government should not pick winners and losers, because the premise that they can is questionable
- The projects supported by federal grants are those likely to find private investors

Defining Corporate Welfare

We define corporate welfare as the use of taxpayer dollars to provide benefits to specific firms or industries. This usually means direct subsidies, payments, grants, and the like to specific corporations. We estimate that taxpayers spend $75 billion a year on these types of subsides. Our definition does not include generally available tax deductions (often called "loopholes") for two reasons:

- These tax deductions are not benefits to specific corporations. Any company can take advantage of many of the deductions currently available in the tax code.
- A corporation has a right to the profits it makes in the marketplace. Tax deductions simply let corporations keep more of their profits. Therefore, they are not benefits that cost taxpayers any money, and not included in our definition of corporate welfare.
- We strongly endorse lower taxes, generally and in the context of the debate on how to further innovation. Realistically, closing a tax loophole without a corresponding decrease in the corporate tax rate would amount to a tax hike.

Federal Subsidies to High-Tech Industries

There are many federal programs that give money directly to large corporations (many of them on the

Fortune 500 list). Most of the programs, however, have yielded no results, or results counter to those intended by the federal government when they awarded the money. The availability of government funding creates perverse incentives for hi-tech companies.

- They have strong incentives to either refuse to pay for undertaking their own research, or claim that "no one" would fund research except the government, all for the sake of getting free money.
- Any company that does not dip into the federal trough is disadvantaged compared to its competitors who do. This creates an environment where numerous companies have no rational choice but to remain competitive by devoting more of their time and money to competing for more federal money, instead of competing for customers or private capital. Thus the programs threaten to grow massively for reason's unrelated to the actual need for research.

Government funding of research creates a paradox. There is no point in funding research that would be undertaken by the private sector. But the government must not hand out public money to hand out to every mad scientist who comes along. Result: The government funds those projects with the most likely prospects of success--projects likely to be good candidates for private funding. When it ventures into the more risky projects, it's more likely than private investors to make bad calls. No one spends taxpayer's money nearly as carefully as they spend his own.

Case Study: The Advanced Technology Program

The Advanced Technology Program is a good case study. The ATP is a program within the Commerce Department's National Institute of Standards and Technology. The purpose of the program is to provide support on a cost-sharing basis for significant R&D projects that have a potential to stimulate economic growth. The rationale for the program is that the federal government has the wherewithal (taxpayer funding) and the perceived capital "security" (insured by the stream of tax revenue) to be able to do so. The ATP administrators claim that private venture capital will not fund the "risky" projects that could yield great technological progress. Therefore the government has to step in to provide much-needed funding to make these potentially "pre-competitive" and life-changing discoveries. Without the government picking the winners, the economy would experience some kind of loss due to the absence of technological innovation.

The possibility of receiving government money sets up all the wrong incentives for the corporation. A recent GAO report on the ATP supports this observation. Among the findings of GAO are that most companies (63%) that applied for ATP grants never looked for private capital or other sources of investment before they apply for government money. Thus, the government is not the grantor of last resort, as the ATP proponents claim it should be. This raises serious questions about whether the research that the government has been funding was a product of entrepreneurial initiative, or of a corporation looking for easy government money.

Also, the GAO found that of the ATP grant recipients, 40% said they would have continued with the project even if they had not received funding. Forty-four percent said they would not or would "probably not," and 16% were undecided. Also, 50% of the "near winners" of ATP grants continued their projects even after being declined a grant. Taken as a whole, about 42% of ATP recipients would have surely continued projects without government funding. Bear in mind that this percentage does not include the "undecided" portion of recipients. Even if half of that 16% would have undertaken the project anyway in the absence of federal funding, that proves at least 50% of what ATP funded did not need ATP funding to begin with

In any case, there are better ways for the government to encourage innovation? The money that goes to ATP would be better used to pay for tax cuts that would allow companies to keep more of their profits and invest more of those profits in research. Lower taxes would also lower the barrier to entry for small technology firms.

If there was ever a clear example of corporate welfare, the ATP is it. From 1990-1994, the ATP provided more than a quarter of a billion dollars in grants to eight firms--Amoco Corp., AT&T, Citicorp, DuPont, General Electric, General Motors, IBM, and Motorola. There are hardly mom-and-pop lemonade stands, to be sure. Through ATP, taxpayer money goes directly to companies that could obviously pay for the research themselves.

Models and Markets

What do we do if markets tend to support research that cannot easily be reconciled with our view of what "ought" to happen? The answer is that our own view of what "ought" to be is far more likely to be flawed--and less likely to be self-correcting--than the market process. Misspent dollars in the marketplace result in bankruptcy. Misspent dollars in the public sector are usually followed by more misspent dollars.

The NSTC's call for Issue Papers on Innovation notes that "Changing business models in the high tech industry are increasingly leading to an emphasis on research geared towards shorter-term objectives such as applied product development," going on to note that "the regulatory environment may inhibit the formation of consortia and partnerships that could share knowledge and risks for supporting longer-term research." Suppose, though, that for a certain period of time the market tended to support short-term objectives even in the absence of regulatory distortions. It would be unwise to second-guess this trend; if entrepreneurs believe that they need the short-run gains more than the long-run gains, they've probably got a point. And if they don't, a pioneer focussing on the long run can gain the advantage naturally.

Policy Proposals

The best alternative is allowing innovation to flourish by lowering taxes and slashing restrictive regulations. Use the cuts in "corporate welfare" to pay for tax cuts.

As evidenced by the list below, we estimate of $75 billion would be saved by abolishing the top 60 corporate welfare programs could pay for any number of innovation-friendly tax cuts.

Eliminate the Capital Gains Tax = $70 billion

Cut Corporate Tax from 35 percent to 25 percent = $65 billion

Cut all personal income tax rates by 10 percent = $74 billion

Establish a 20 percent flat tax = $65 billion

Getting the government out of the business of subsidizing any private firm to undertake research is the most important policy statement to be made. To that end, a mechanism that can be successfully employed to rid the taxpayer of this burden would be to convene a Corporate Welfare Elimination Commission. Modeled upon the successful military-base closing commission, this commission should be allowed to recommend reforms and program terminations in a relatively objective fashion. This type of structure could have the ability to break the cycle of dependency for America's major corporations.