

## Senate Finance Committee Hearing on Expiring Tax Provisions

March 16, 2005

### Transparency and Audit Capacity for the Research and Experimentation Tax Credit

Testimony of Dr. David E. Martin

CEO, M-CAM

Fellow, Batten Institute, Darden Graduate School of Business Administration, University of Virginia

Thank you, Mr. Chairman, and distinguished Committee Members, for the opportunity to join you in your vital work in advocating for transparency and accountability in the complex area of public innovation investment in our country. It was, indeed, an honor to work side-by-side with you and your able staff in the interdiction of abusive tax shelters masquerading as innovation last year as this Committee boldly confronted members of industry and academia who had exploited patent donations with impunity.

M-CAM has worked with the Congress for close to three years and with the Internal Revenue Service for the past one and one-half years in the enforcement of legitimate collections in the area of patent donations. In the midst of this effort, we were struck by the fact that the IRS did not have, nor yet has, a mechanism to formally audit a topic of far larger economic consequence than the donation abuse – namely, the use, and possible misuse, of research and experimentation tax credits. It is imperative to open my remarks with a disclaimer. Considerable ambiguity exists in this topic because explicit transparency of activities, allegedly making justifiable the application of the credit, is not readily surfaced to the IRS or to the public. Accounting firms, and the corporations they represent, may apply the credit without any independent review of its appropriateness. Given the absence of adequate reporting, no mechanism exists today to insure that the U.S. taxpayer receives any of the intended benefit afforded this considerable public investment. In light of this, my remarks are drawn from what we can see through the glass of somewhat opaque disclosure in public company records. At present, this is the only window.

Enacted as part of the Economic Recovery Tax Act of 1981, the Research and Experimentation Tax Credit was established by Congress to encourage operating businesses to continue and to expand their own private research. In the wake of abuse concerns, the credit has undergone a number of clarifications in its twenty-four year history ever circling around the tension between stimulation of economy-building discovery of information and the unintended use as a tax accountant's tool to lower tax liabilities *ex post facto*.

Reciting the fundamental assumptions and mechanics of the credit is outside the scope of my testimony today. Rather, it is my intent to focus on two direct concerns. First, I would like to address the accretive value of the credit as evidenced in an independent review conducted by M-CAM. Second, I would like to consider the competency concerns faced by the IRS in the oversight of this important national investment.

## Credit Utilization – A New Perspective

The R&E Tax Credit has been lauded as a significant weapon in the arsenal of business competitiveness in America. Job creation and economic development are frequently used to justify its existence together with recent calls for the establishment of a permanent and expanded credit. While numerous studies have supported the general economic premise that research expenditures have a positive effect on the growth of the economy, few have carefully considered the precise impact of a public investment in the form of a tax credit. In a 1995 report to the Congressional Office of Technology Assessment, Professor Bronwyn Hall highlighted the challenge of documenting, with precision, the value of a tax credit on the stimulation of research and reported a reliance on statistical models that attempt to estimate the impact of a credit using a number of tenuous assumptions<sup>1</sup>. Implicit in this report was the assumption that the “social return to industrial R&D in the United States exceeds the social cost at the current level of tax subsidy.”<sup>2</sup>

The Joint Committee on Taxation reported that the majority (84.94%) of the claimed R&E credit was taken by corporations with assets greater than \$50 million. While the predominant beneficiaries of the credit are extremely large corporations, during the past several years it was the private equity venture capital backed companies that saw employment growth of 6.5% between 2000 and 2003 compared to the national private sector employment which shrank 2.3% during the same period<sup>3</sup>. Between 1984 and 2003, firms with fewer than 500 employees saw an increase of their share of U.S. R&D rise from 5.9% to 20.7%. During the same period, small company R&D rose from an estimated \$4.4 billion to \$40.1 billion<sup>4</sup>.

Given the tax credit bias toward large companies and the availability of disclosed financial data, M-CAM undertook an independent investigation of the use of the R&E tax credit among publicly traded corporations in the United States. For this study, M-CAM examined the public financial filings (quarterly and year-end) for all publicly traded firms in the U.S. between 1998 and 2003. All SEC financial filings were reviewed for explicit reference to the use of the research tax credit. Two hundred public companies were identified as self-reported users of the credit. This number under samples the probable number of actual users as many companies don't itemize the tax credits used in their tax planning (Figure 1). Approximately 20% of the companies using the tax credit also reported receiving grant or contract research support from the U.S. government or other sources during the same period – many relying on federal grants and contracts for the majority of their R&D and business. This data is presented in Figure 2. The principal funding sources for companies relying on both tax credit and contract or grant sources of R&D support include: National Institutes for Health (NIH); Defense Advanced Research Projects Agency (DARPA); National Institute of Standards and Technology (NIST); Department of Defense

---

<sup>1</sup> Bronwyn H. Hall. “Experimentation Tax Credits: Critical Literature Review and Research Design.” Report for the Office of Technology Assessment, Congress of the United States. June 15, 1995.

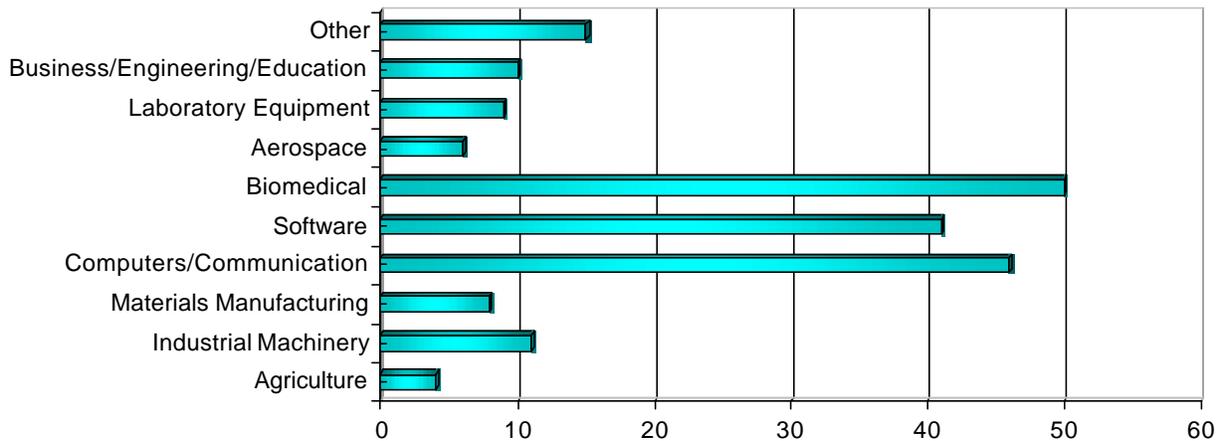
<sup>2</sup> Ibid. pg. 10.

<sup>3</sup> Global Insight. “Venture Impact 2004: Venture Capital Benefits to the U.S. Economy”.

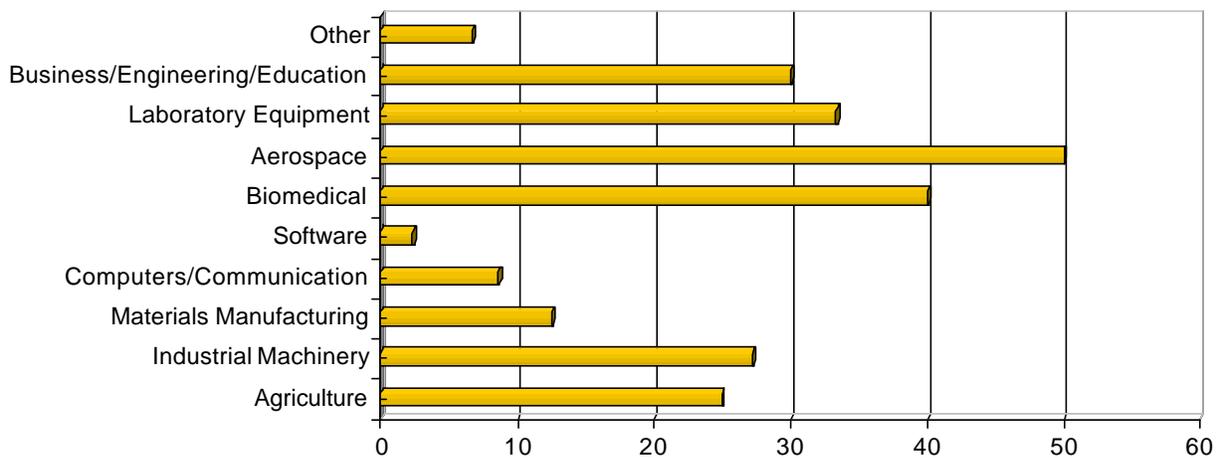
<sup>4</sup> Ibid. pg. 9.

(DOD); Department of Energy (DOE); and, National Aeronautics and Space Administration (NASA).

**Figure 1. Distribution, by industry, of the companies explicitly reporting the use of the R&E tax credit.**



**Figure 2. Percentage of companies in each sector conducting government sponsored research (contracts and grants) while simultaneously claiming the tax credit.**



While IRC § 41 (d)(4)(H) explicitly states that funded research is excluded from the definition of “qualified research,” the data presented in Figure 2 is informative – not necessarily an indictment of misuse or abuse. One can certainly appreciate the fact that a company may engage in both

eligible and non-eligible research and carefully document the bright line between the two to be in compliance with the applicability requirements for the credit. This said, in a detailed review of the disclosures of the companies represented in Figure 2, no such overt clarification was found.

I will return to this observation in the second portion of my remarks but, in the interest of highlighting additional insights into the credit and its potential applicability for stimulating the economy, it is illuminating to consider a number of financial performance metrics to apply when assessing the credit's consequence with respect to jobs and economic growth.

From 1998 to 2003, considerable volatility existed in the public markets. However, by the end of this period, the market was beginning its upward climb. M-CAM measured the stock performance of the companies using the tax credit compared to Standard & Poor's 500. At their last reporting valuation during the period, 78 companies (39%) out-performed the S&P while 87 (44%) under-performed, filed for bankruptcy, were de-listed or otherwise liquidated. When one closely examines the data, a more intriguing finding emerges. For the companies that remained operational throughout the study period, the average share price difference between a company's use of the tax credit and their last reporting valuation during the study period was +9.1% (median difference +4.3%) and -67.8% (median difference -11.9%) for the out-performers and under-performers, respectively. One wonders if the frequent beneficiaries of the research tax credit are, in fact, the accounting firms who research past tax filings for opportunities to use the credit<sup>5</sup> – research that was not intended to be underwritten by the public.

This data implies that the benefits of the tax credit are not uniform. Further, one may infer that the credit is more likely applicable in situations when companies are facing market value decrements. Our findings indicate that additional study may be warranted to test the true market impact of the R&E tax credit on the intended benefits of job creation and economic growth as the data from public companies seems to indicate that the use of the credit – many times applied in restated tax filings two or more years after the investment in R&D – may do less as a stimulus than is desired by the credit's advocates.

This leads us, however, to an even greater challenge. Until recently, the IRS had no credible means to detect or interdict innovation abuse in the form of patent donations. In point of fact, as late as January, 2003, the IRS did not have a uniform ability even to verify the existence of allegedly donated property as its form 8283 often contained either inadequate or fictitious statements made by taxpayers or their accountants. In this context, it is informative to consider the current R&E tax credit's oversight capacity of the IRS.

### *Infrastructure Enforcement Challenges*

Since its creation, the R&E tax credit has presented a considerable enforcement challenge for the IRS. Much of this comes from statutory ambiguity surrounding a taxpayer's obligation to qualify research with any documented clarity. Since 1986, what constitutes qualified research has remained fraught with controversy based on the statement that research must be to discover

---

<sup>5</sup> <http://www.bizjournals.com/sanantonio/stories/2004/09/20/story7.html> (accessed March 14, 2005)

information that is technological in nature<sup>6</sup>. A great deal of public comment and policy debate has accompanied the qualified research definitions. I wish to focus on a number of the excluded activities defined under IRC § 41 (d) (4), as it is in this arena where our experience with the IRS highlights enforcement inadequacies that serve as ideal targets for abuse.

Excluded activities...

- A. Any research conducted after the beginning of commercial production of a business component. – *It is helpful for the Committee and the IRS to recall that under U.S. Patent Law, a patent applicant is under no duty to disclose evidence supporting their assertion of invention. In instances covered under § 41 (d) (4) (A), the IRS does not have an ability to set forth a disclosure standard or practice covering continuation or divisional filings for patent applications that may evidence research conducted after the beginning of commercial production. Additionally, as the patent applicant is under no duty to disclose information from their own due diligence, the likelihood that tax credit users will voluntarily adopt a more rigorous review for tax purposes than they use for securing state-sanctioned monopolies, is low.*
  
- B. Any research related to the adaptation of an existing business component to a particular customer's requirement or need. – *In a number of industries, most, if not all of the production by a company is an adaptation for a particular customer's needs or requirements. This is particularly the case in the area of software, commercial and industrial computer technology and communications. In these areas, the IRS has no way to document and verify that the qualified research was undertaken absent a specification provided by an existing or intended customer.*
  
- C. Any research related to the reproduction of an existing business component from a physical examination of the business component itself or from plans, blueprints, detailed specifications, or publicly available information with respect to such business components. – *In our experience, we know that the IRS continues to ignore patent filings, technical disclosures, and 3<sup>rd</sup> party data on innovations when considering the innovations made by a taxpayer. In no case that M-CAM has reviewed has the existence of 3<sup>rd</sup> party innovation, technical disclosures or commercially competing offerings been factored, in any way, into valuations made for the purpose of tax valuation. More importantly, no appraisal or tax planning standards body has any explicit guidance on the review of publicly available information on specifications held by others when considering the eligibility for innovation claims made for tax purposes. Therefore, the IRS' incapacity to evaluate tax claims in the context of market data leaves it open to considerable, undetectable abuse.*
  
- D. Surveys, studies, etc. Any:

---

<sup>6</sup> R&E Tax Credit for Qualified Research....

- 1. Cost of your activity must be deductible R&E expenditures under IRS Code § 174.
- 2. Purpose must be to discover information which is technological in nature.
- 3. Application of the technological information must be intended to be useful in your new or improved business component.
- 4. Substantially all of the activities related to your research must constitute elements of a process of experimentation.

- i. Efficiency survey
  - ii. Activity relating to management function or technique
  - iii. Market research, testing, or development (including advertising and promotions)
  - iv. Routine data collection
  - v. Routine or ordinary testing or inspection for quality control.
- E. Except to the extent provided by regulations, any research with respect to computer software which is developed by you or for your benefit primarily for internal use by you other than for use in activities which constitute a) qualified research or, b) a production process which meets the requirements of IRC § 41 (d) 1.
- F. Any research conducted outside the United States.
- G. Any research in the social sciences, arts, or humanities.
- H. Any research to the extent funded by any grant, contract, or otherwise by another person or governmental entity. – *As documented above, many well-established government contract research firms take advantage of the R&E tax credit. This is the case not only in aerospace and defense though it is in these areas where the use is most prevalent as a percentage of the population. In the absence of explicit accounting for qualified research expenses related to qualified projects, neither the company seeking the credit, nor the IRS has any capacity to accurately calculate the applicable credit. M-CAM is aware that current government funding agencies – including those listed above, together with their SBA counterparts – have no formal standard for reviewing grants and contracts for existent intellectual property covering the proposed research. Given this absence, it is doubtful that careful considerations of novelty are being done at any step of the process, thereby making the auditing of this exclusion impractical, if not impossible under current paradigms.*

As was the case in the area of patent donations – in which a predisposing factor to the widespread abuse was industry’s correct assumption that the IRS had neither the knowledge nor technical infrastructure to detect illegitimate reporting – even more so, in the area of R&E tax credits, do these assumptions hold. While having loosely formed guidance for oversight, the IRS currently has no formal process to verify essential prerequisites to the application of the credit.

Plato’s *Republic* best summarizes the paradox facing this Committee – in whose presence throngs will laud the innovative imperative of our country’s great past and glorious future – all the while casting a blind eye to the fact that it is only in transparent systems that we truly can know whether we are as innovative as we claim to be. As was the case with patent donations, the loudest advocacy supporting unfettered use wrapped economic self-interest devoid of accountability in the public interest. So too, in the R&E tax credit, rather than embracing transparency and considered due diligence, the credit is simply heralded as a necessity to stimulate investment in the face of data indicating that it is often used after the investment in research has been made – an election often informed by those seeking to support sagging economic performance.

*“Consider... [the] highest form of injustice in which the criminal is the happiest of men, and the sufferers or those who refuse to do injustice are the most miserable – that is to say tyranny, which by fraud and force takes away the property of others, not little by little but wholesale; comprehending in one, things sacred as well as profane, private and public; for which acts of wrong, if he were detected perpetrating any one of them singly, he would be punished and incur great disgrace - they who do such wrong in particular cases are called robbers of temples, and man-stealers and burglars and swindlers and thieves. But when a man besides taking away the money of the citizens has made slaves of them, then, instead of these names of reproach, he is termed happy and blessed, not only by the citizens but by all who hear of his having achieved the consummation of injustice.”*

Remember, this – accountability is neither anti-business nor anti-American. We the People pride ourselves on holding truths self-evident. If we have no visibility, we can have no accountability. While public investment in research has served the country, our current lack of transparency in validating the uniqueness of our innovation has led us to support antiquated models without consideration for their fitness in current market conditions. It is time to support the R&E tax credit by insuring that it is used when true innovative business is supported.

Effective immediately, this Committee could:

- 1) Establish affirmative duty to disclose the research for which the credit is being applied; given that the public is paying for it, the public could reasonably expect a general idea about the quality of it’s investment;
- 2) Require credit users to have documented internal processes whereby either internal management panels, or external 3<sup>rd</sup> party interests, would be required to audit the use of the credit by confirming that the research did not overlap disclosed research or commercial offerings made by others. At a minimum, this review should include efforts undertaken by others within the industry sector and research conducted at academic institutions;
- 3) Authorize the IRS to conduct a complete investigation into historical use of the tax credit to assess the economic performance and R&E activities of the users of the credit compared to industry constituents who do not claim the credit;
- 4) Provide the IRS with specific documentation collection requirements so that the Service can conduct audits in a timely fashion; and,
- 5) Advise the IRS that, when it encounters cases of overt abuse or taxpayer obfuscation based on either inadequate or non-existent documentation justifying the use of a credit, settlement is not in the public interest any more than it would be if one were to negotiate a partial restitution with a bank robber – giving him some reward for his initiative. We have seen, in the case of patent donations, a considerable incentive for the IRS to settle claims – using vehicles such as the Fast Track system – without confronting the overt evidence that

taxpayers knew that the information provided to justify deductions was inaccurate and incompatible with their own due diligence standards. As long as the IRS rewards the rapid closure of cases more than the eradication of abuse, abusers will simply up the ante in a reverse auction on tax benefit.

In the long term, the Committee may wish to consider balancing the use of the credit with national research and experimentation industrial priorities. In this model, the credit would be claimed based on *a priori* statements made by companies indicating both the field in which they intend to conduct research and their expectation of the attendant cost for which they wish to claim the credit. While corporations have protested documentation requirements as onerous, opting into qualified research with the foreknowledge that certain minimal record-keeping would be required, would place no substantial burden on the corporation and would enhance the transparency of the credit's use by those in the IRS who must review its applicability when claimed.

As the economy continues to draw more of its output from increasingly intangible models, the need for accountability and transparency grows in direct proportion. Irrational exuberance serves short-term exploitative interests but does not advance our long-term economic imperatives. We look forward to working with this Committee as it appropriately seeks to balance the revenue mandates of our country with the public investments it can encourage to fuel the growth of our corporate innovative future.