

## The Semiconductor Industry Association's Comments to the President's Economic Recovery Advisory Board's Tax Reform Subcommittee

October 15, 2009

**Summary:** American chipmakers do the majority of our high-wage, high-value added work here in the U.S., yet we face a serious challenge as foreign governments around the world use tax and other policies to attract semiconductor facilities and research. Semiconductors are America's second largest export, so U.S. companies and workers will lose out unless policy makers develop a response to this challenge.

The underlying principle that should guide the any changes to tax law is **whether or not the change will promote U.S. competitiveness in world markets**. A second, related principle is to recognize the complex nature of our current international tax system and **refrain from changes outside of comprehensive tax reform**.

To maintain American competitiveness in world markets and create long-term employment opportunities in the U.S., the SIA recommends that:

- With the exception of increasing enforcement against evasion, **changes to the complex international tax code should only occur in the context of an overhaul of our international tax system** to make it more competitive with our trading partners;
- Congress pass a permanent and enhanced **R&D tax credit** before the R&D tax credit's scheduled expiration at the end of this year.
- In the context of tax reform, rethink **international corporate taxation rules** and consider alternatives to the current rules on taxing foreign source income to allow U.S. firms to compete against firms that operate in nations with territorial tax systems, or otherwise more favorable foreign income treatment.
- Also in the context of tax reform, consider a significant corporate income tax **rate reduction** to help manufacturing and research and development to remain in the U.S. and allow U.S. workers to compete with operations in Europe and Asia that have lower tax rates.
- Companies should be allowed to **expense high technology equipment**, and thereby improving their cash flow and their ability to invest in new high technology equipment.
- Companies with **net operating losses** should be allowed to **"monetize"** their **unused Alternative Minimum Tax (AMT)** payment credits.

## **American chip makers are largely in the U.S., but competitive trends of concern**

While 85 % of the global semiconductor market is outside the U.S., U.S. semiconductor companies are predominately in the United States. Three-quarters of U.S. semiconductor industry R&D spending, 77 % of U.S.-owned production capacity, 51 % of U.S. industry world-wide employment, and 74 % of the compensation and benefits paid by the U.S. industry occur in the United States. Even taking into account the increased use of offshore foundries, over half of U.S. industry revenues come from products fabricated in the U.S. As a result, semiconductors are America's second largest export.

While these numbers are impressive, they nonetheless represent a decline relative to the past. For example, in the late 1990's R&D was 83% of U.S. R&D spending was in the U.S., 8 percentage points higher than today. While there are a number of reasons for the decline, including the need to serve growing overseas markets, U.S. immigration quotas affecting the majority of students at U.S. university graduate engineering programs, and relative cost factors; foreign and U.S. government tax policies play a major role – and in some cases a predominate role -- in shaping competitive outcomes around the world.

Leadership in semiconductors matters. The U.S. semiconductor industry leads the world with \$120 billion in sales (in 2008), nearly half the world market. Semiconductor-enabled productivity gains across the entire U.S. economy accelerate growth and help hold inflation in check. The industry directly employs about 200,000 people in the U.S. Increasingly semiconductors enable gains in energy efficiency and renewable energy and thereby increase America's energy security and reduce global warming gases.<sup>1</sup>

## **Principles to guide tax policy changes**

The underlying principle that should guide the President's Economic Recovery Advisory Board in recommending changes to tax law is **whether or not the change will promote U.S. competitiveness in world markets.**

A second, related principle is to recognize the complex nature of our current international tax system and **refrain from making piecemeal changes outside of comprehensive tax reform.**

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<sup>1</sup> A study by the Washington DC-based American Council for an Energy-Efficient Economy (ACEEE) commissioned by SIA, "*Semiconductor Technologies: The Potential to Revolutionize U.S. Energy Productivity*," (May 2009) found that selected increased use of semiconductor enabled technologies could decrease the amount of U.S. electricity used annually by 1.2 trillion kilowatt-hours by 2030, an amount 11% less than today, even though the economy will be about 70% larger, resulting in 733 million metric tons less CO<sub>2</sub> emitted in 2030.

### **Weakening deferral will make the U.S. less competitive**

The Obama Administration May 4 budget proposals to repeal “check the box” rules and to impose new limitations on the foreign tax credit fail to meet both of the principles set forth above. Such proposals will have the effect of increasing costs, undermining the competitiveness of U.S. companies, and create unintended market distortions and consequences. For many semiconductor companies, the repeal of “check the box” does result in the end of deferral.

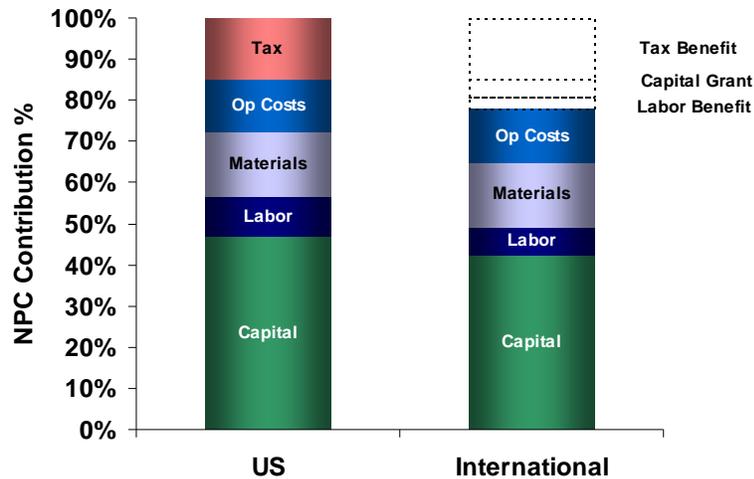
To understand the impact of weakening deferral, consider that eliminating deferral would add a \$2.1 billion annual tax burden for the U.S. semiconductor industry. Intense global competition prevents passing these costs to customers through increased prices. These costs have the potential to wipe out an estimated \$50 billion of the industry's market capitalization, an 18% reduction that would drive a decline in eventual capital gains taxes of \$10 billion. Alternatively the industry could look for cost savings, potentially eliminating 27,500 high-paying jobs and decreasing personal and payroll tax by \$1.1 billion.

The hypothesized net tax revenues that flow from weakening deferral are illusory. **Weakening deferral costs would potentially cost U.S. jobs and destroys market capitalization along with related declines in tax revenues.**

Semiconductor firms have an additional concern. To remain competitive, semiconductor companies continually integrate greater functionality in their products as seen in the evolution of the cell phone, from yesterday's brick-sized boxes that made calls to today's slim models that also handle photos, email, the internet, and music. Companies supplement internal R&D programs by acquiring other businesses that have expertise in a new area. A foreign semiconductor company from a country with a more favorable tax treatment of overseas income will be able to outbid for smaller innovative companies because the after-tax income of the target company will be more valuable in the hands of the foreign firm. The net result is that the President's proposal or other harmful proposals affecting the U.S. tax treatment of international income will have the unintended consequence of **promoting foreign acquisition of innovative businesses.**

**\$1 Billion cost difference in 10 years:** Companies that have factories in the U.S. have found that the cost to build and operate a 300mm wafer fabrication facility over a ten year period would cost from \$6.7B to \$6.8B in the U.S., compared to \$5.6B to \$6.1B outside the U.S. – a difference of up to \$1.1 billion (this is a conservative estimate as future cash flows are discounted using a Net Present Cost (NPC) analysis - without discounting, the differential is from \$2.4 to \$3.1 billion over 10 years, or about \$1 billion over 4 years). The cost model assumes that production starts in year three, and a ramp with “current generation” technology products with a transition to next-generation products after five years.

About 70 percent of the cost difference is due to tax benefits, 20 percent due to capital grants, and only 10 percent due to lower labor and other operating costs such as lower utility costs or cheaper logistics.



Because taxes represent 70 percent of cost differential, it is useful to compare tax rates in specific countries. In the U.S., the Federal income tax rate is 35 percent, and state and local taxes typically equate to an additional 6 percent rate (after adjusting for the Federal deduction). In contrast, other countries have offered five-year income tax holidays (and an additional five years at half the tax rate) or have tax rates that areas low as a third of the U.S. rate. One region’s tax holiday and accumulated tax credits resulted in their chip firms reporting higher net profitability *after* rather than *before* taxes.

It is important to recognize that these tax benefits often also apply for research, development, and design centers.

### Competitive Federal Tax Policies

To maintain American competitiveness in world markets and create long-term employment opportunities in the U.S. the SIA recommends that:

- With the exception of increasing enforcement against abuse, **changes to the complex international tax code should only occur in the context of an overhaul of our international tax system** to make it more competitive with our trading partners; the current international tax system has been cobbled together over time to keep American companies competitive.
- Congress enact a **permanent R&D tax credit, and increase its effectiveness** with enhancements such as the increased Alternative Simplified Research Credit rate in H.R. 422, introduced by Representatives Meek and Brady, and S. 1203, introduced by Senators Baucus and Hatch. R&D is the lifeblood of our knowledge economy, yet the credit has been temporarily extended the credit 12 times and allowed to expire three times since 1981,

creating a stop-and-start approach to R&D tax credit policy that makes the credit far less effective than it could be. Furthermore, America has dropped from having the most robust R&D tax credit among developed nations in the late 1980s, to 23rd according to the OECD Science, Technology and Industry Scorecard 2007. The credit is scheduled to again expire at the end of 2009.

- **International taxation rules** should be reviewed with consideration of alternatives to the current rules on taxing foreign source income. Many of the companies that compete against the U.S. operate under territorial tax systems that generally exempt foreign income from taxation, or that otherwise more favorably treat foreign income. The U.S. is one of only five remaining OECD nations that have a worldwide system of taxation including deferral; while 25 only tax domestic income and generally exempt overseas income. The vast majority of countries have adopted a territorial tax system to help their global companies better compete and to help repatriation of cash to invest in the home country. The U.S. should consider a territorial tax approach that is typical of the rest of the world. This year Japan and the U.K. moved away from worldwide tax systems and embraced dividend exemption systems. The move toward contract manufacturing, a result of the escalating cost of chip factories, puts an additional burden on U.S. companies because their offshore income may be treated under Subpart F rather than as deferred income. Taxes on repatriated funds make it more likely that these funds will be reinvested overseas.
- **Corporate Tax Rate should be more competitive** to allow semiconductor firms to remain in the U.S. and to repatriate funds for use here. U.S. corporate tax rates are the second highest amongst OECD countries, second only to Japan, with the U.S. combined average rate of 39% vs. the average OECD rate at 26%.
- Companies should be allowed to **expense high technology equipment** and thereby improve their cash flow and their ability to invest in new high technology equipment.
- Companies with net operating losses should be allowed to “monetize” their **unused Alternative Minimum Tax (AMT) payment credits**. The assumption in the AMT is that corporations were economically profitable and were utilizing preferences in order to reduce their regular income taxes, but when corporations are in a Net Operating Loss position then these tax preferences have not given them any advantages. Not allowing a return of prior AMT tax paid when these corporations have suffered economic losses put additional distortion into the corporate income tax system.

This list is not exclusive – any option, or combination of options, that address the cost differential created by foreign government tax and incentives policies should be considered.