

# nature biotechnology

## Vive la différence?

**The Obama administration's \$1 billion tax program at the very least signals a continued commitment to innovative biotech. The same cannot be said of plans afoot by the French government.**

At the beginning of November, the US Therapeutic Discovery Project Program (TDPP) handed out a billion dollars in tax credits/grants to small- to medium-sized (SME) companies in the life sciences. The program was overseen by the federal tax authorities and was a direct result of input by BIO, the Biotechnology Industry Organization. Although the amounts handed out to each company were rather small, the Obama administration should be congratulated on providing decisive support to the US biotech sector. But perhaps most important, this latest initiative continues decades of fiscal policy under different US administrations that has consistently supported the entrepreneurial life science sector.

There is little doubt that the US biotech sector (and that in most other countries) is in need of a shot in the arm. BIO estimates that since 2007, more than 100 public biotech companies have closed their doors and countless more private companies have ceased operations. The percentage of companies with less than one year's cash remains 25% (down only slightly from 29% in 2007).

TDPP was a one-off program, approved as part of the 2010 Patient Protection and Affordable Care Act, designed specifically for companies with fewer than 250 employees. The credits cover up to 50% of eligible R&D expenses in tax years 2009 or 2010. Applications were accepted from companies for one month from June 21 and the submissions reviewed by the US National Institutes of Health (NIH).

The program was a roaring success—almost too successful. The US Internal Revenue Service had expected ~1,500 applications; it was deluged with over 5,600. To cope with this onslaught, a decision was made to turn the \$1 billion cake into 4,606 crumbs, each worth a maximum of \$244,479. Although some companies applied for and were granted multiple project awards (28% of total), 2,923 organizations in 47 states got a piece of the action.

Project reviewers for TDPP were asked to assess, among a very few other criteria, whether a project was 'likely' to result in new therapies, or reduce long-term healthcare costs or contribute to the goal of curing cancer. The fact that 4,000 projects got the thumbs-up on this criterion at the very least severely stretches the meaning of 'likely'. The best that can realistically be claimed is that it is likely that a handful of the projects will succeed, and that the chances of success in every project will be marginally enhanced by an extra couple of hundred thousand dollars.

That said, by casting a wide net, the US authorities have ensured that their biotech sector retains more shots on the goal—a wise investment in the future.

The same cannot be said for policy proposals under discussion in France.

Back in September, the government of Nicolas Sarkozy introduced its 2011 finance bill in the French parliament. Amongst the cost-cut-

ting measures and edicts designed to cut back on government spending was a small section, Article 78, which will result in an estimated annual saving to the French exchequer of \$57 million.

Article 78 alters radically the conditions attached to the Jeune Entreprise Innovante (JEI; Young Innovative Company) status in France. Currently, any research-based independent SME under 8 years old is, in effect, excused from paying social taxes for any of its researcher employees. Because the social taxes represent 30–40% of salary costs, this represents a significant saving and an incentive to life science venture investment in the country (*Nat. Biotechnol.* 23, 1187, 2005). Article 78 proposes to cap the savings at €103,680 per year per company and to tail off the benefit between years 4 and 8 of a company's lifetime.

A vote in the French Senate on the 2011 Finance Bill is expected early this month, with implementation in January. Meanwhile, the French industry association, France Biotech is furiously lobbying ministers, senators and senior figures in the civil administration in a desperate bid to axe Article 78. They fear, with justification, that it will discourage entrepreneurs and investors, and worse, that it will be a disincentive to innovate.

What is most disingenuous about the French policy shift, though, is that the government is saying the benefit will actually provide SMEs with a 'softer landing' before returning to full taxation. In other words, they are claiming to understand the long-term effects of this *volte face* in policy. And when it comes to stargazing, the French government doesn't have a good track record in biotech. Twenty years ago, the 'BioAvenir' initiative invested a billion francs in academic life science projects, but elected to make one (French) company—Rhone-Poulenc—the sole beneficiary of any commercialization. We don't know what happened to the hundreds of BioAvenir projects, but Rhone Poulenc didn't turn into the biotech driver the government envisaged—it is now known as Sanofi-aventis.

As the BioAvenir experience illustrates, if there is one thing that can be guaranteed about the future, it is that it will not look like the present. That is something the US government seems to have grasped with TDPP, arguably to a fault: its \$1 billion has been flung into any company that is both innovative and not established, into any company that might be the future simply by virtue of its not being a big part of the present.

The French government, conversely, still clings to the idea that it can extrapolate the future from the present: each year, it gives an estimated €1 billion in R&D tax credits to Sanofi-aventis. There are worse places to spend a €1 billion, no doubt, but providing such largesse to one of the world's biggest pharmaceutical companies while begrudging a fraction (\$57 million) of it to innovative biotech doesn't look like a government investing in the future. **LB**