

## VI. Bayh-Dole Abroad: International Efforts to Emulate the Statute, and Recommendations for Future Success

Numerous developed countries have enacted or are considering enacting Bayh-Dole-like provisions.<sup>257</sup> Most notably, the Japanese Government in 1999 enacted a simple provision referred to as the "Japanese Bayh-Dole."<sup>258</sup> Several European countries have also enacted provisions to change the ownership presumptions of government funded technology transfer in the past decade.<sup>259</sup> With respect to developing countries, India is currently debating whether to enact its own version of a Bayh-Dole Act. The conflicting opinions in India and Europe underlie two major questions that countries around the world are attempting to solve: has Bayh-Dole truly worked in the United States, and if so, what are its chances of working in a given country?

### A. Japan

The Japanese BDA, though very limited in scope, makes it possible for "private-sector corporations entrusted with R&D by the government to own the IP."<sup>260</sup> Thus, the Japanese Act includes a similar change in presumption of ownership to the US BDA.

Studies have shown that the shift in ownership has lead to increased commercialization in Japan, despite the lack of explicit provisions and policy goals similar to the United States Act.<sup>261</sup> A case study involving a research and development project in Japan notes that private contracts help support the Japanese provision, rendering the need for explicit provisions with regards to commercialization and duties moot.<sup>262</sup> While some critics of moving Bayh-Dole abroad point to the differences in structures of university systems between the U.S. and abroad, it is still noted that Japan is focused on encouraging technology transfer and benefits that

257 See Mireles, *supra* note 75, at 260.

258 See Ryoichi Namikawa, *Intellectual property in R&D project under Japanese Bayh-Dole system*, 9-1/2 Int. J. Technology Transfer and Commercialisation 9, 11 (2010).

259 See Mireles, *supra* note 75, at 270.

260 Namikawa, *supra* note 258 , at 11. Prior to this provision, all patent rights on inventions made with government funding were transferred to the government.

261 See *id.* "The Japanese Bayh-Dole Act is not supported by detailed rules, etc. but it has worked frequently and successfully." *Id.*

262 *Id.*

flow from the universities in its country.<sup>263</sup> A study in the nanotechnology field has noted that over the past ten years, the model for public to private transfer of technology has changed to a Bayh-Dole fostered scheme of universities to industry.<sup>264</sup> The success of this Act has shown that a Bayh-Dole-type statute can succeed to an extent in other developed countries, even if the university structure is not identical to that of the U.S.

### B. Europe

European countries wishing to emulate the success of United States technology transfer have attempted to adapt statutes mimicking Bayh-Dole. Currently, Germany, the UK, France, Denmark, Austria, Norway Portugal, Spain and Finland either have or are considering legislation similar to the U.S. BDA.<sup>265</sup> Further, the Council of the European Union has noted that "the overall innovation environment of the EU remains weak in a number of key respects," especially with respect to R&D.<sup>266</sup> While some commentators wish to see a pan-European BDA,<sup>267</sup> others believe that substantive differences between the U.S. and Europe would render a European BDA ineffective.<sup>268</sup> Thomas Siepmann notes substantive differences between the U.S. and European university systems, notably that European researchers are not as interested in the exploitation of their research in the private sector.<sup>269</sup> Also notable is the difficulty in harmonizing the technology transfer sys-

263 See Mireles, *supra* note 75 , at 273. For an analysis of major differences in the university structure of the United States versus other countries, see Chapter I, *supra*.

264 See J. Steven Rutt and Stephen B. Maebium, *Technology Transfer Under Japan's Bayh-Dole: Boom or Bust Nanotechnology Opportunities?* 1 Nanotechnology Law and Business (Issue 3, Art. 8), at page 9. Though benefits of this scheme are yet to be conclusively studied, the shift in technology transfer from the former scheme of Government to industry (which focused on a very small number of companies) has much potential for success.

265 See Mireles, *supra* note 75, at 260.

266 *CEU Report on Research and Development*, at 42-46, CEU 5402/1/02 REV 1, (22 January, 2002) **A81** While the CEU falls short of stating that a Bayh-Dole Act should be passed throughout the EU, it seems to recommend similar actions to be taken to increase research and development across the union. Specifically, "the appropriate framework conditions" should be in place, and the "effectiveness of public research" should be improved. *See id* at pages 42 and 46.

267 See University Inventions – Europe Needs a Bayh-Dole Act, <http://www.ipeg.eu/?p=1567> (August 7th, 2010). The writers note that "stronger protection for the results of publicly funded R&D would accelerate their commercialization and the realization of these economic benefits." The authors note that a full European Bayh-Dole Act would better encourage "more effective exploitation of university inventions."

268 See Thomas J. Siepmann, *The Global Exportation of the U.S. Bayh-Dole Act*, 30 DAYTON L. REV 209, at 218 (2004).

269 *See id*. Other differences between the systems are noted in Chapter I-B, *supra*.