2. Increase in Patents. Cooperative Ventures, and Commercial Products

One of the major issues inherent in successful technology transfer is that private industry requires that government funded inventions be patented to justify the expenditure of resources to develop an invention into commercial applicability.[75] Proponents of Bayh-Dole maintain that there has been a substantial increase in both the number of patents and cooperative ventures between universities and other companies pursuant to the Act. In 1980, fewer than 250 patents were issued to US universities annually; in 2003, there were 3933.[76]

Congress noted in their 2006 report that the Act has "resulted in new cooperative ventures and the emergence of sophisticated high-technology businesses, which provide a major catalyst for innovation and entrepreneurial activity."[77] Since 1980, it has been estimated that the licensing of inventions has added $40 billion to the domestic economy and has been responsible for creating 260,000 new jobs.[78] These numbers are in stark contrast to the pre-Bayh-Dole scheme, where only a small percentage of the estimated 28,000-30,000 Government owned patents had been successfully licensed and exploited.[79]

3. The Emergence of the Biotechnology Field

Another perceived success of the Bayh-Dole Act is apparent from the emergence of the biotechnology field over the past quarter-century. Research indicates that the major share of university patents is related to biomedical research.[80] The Association of University Technology Managers (hereinafter AUTM) has found that 70%

75 *See* Michael S. Mireles, *Adoption of the Bayh-Dole Act in Developed Countries: Added Pressure for a Broad Research Exemption in the United States?*, 59 Me. L. Rev. 259, 263 (2007). The requirement of a contractor electing rights to file a patent application helps achieve this goal. 35 U.S.C. § 202(c)(3) (2009).

76 *See* Bayh Dole at 25, *supra* note 30 , at page 23. Also, a much higher percentage of patents are being successfully commercialized, and licensing has increased dramatically. Critics take issue with such direct comparison of the pre and post-Bayh-Dole numbers; their views regarding the numbers will be discussed later in this chapter, and an analysis of the true effect Bayh-Dole has had on the increase will be discussed in Chapter IV, *infra.*

77 *See* House Resolution, *supra* note 74 , at 9. At least 4081 university start-up companies have been created since the Bayh-Dole Act's conception. *See* Bayh-Dole Act at 25, *supra* note 30 , at 23; *See* Chester G. Moore, *Killing the Bayh-Dole Act's Golden Goose,* 8 Tul. L. J. Tech. & Intell. Prop. 151, 155 (2006);.

78 *See* Moore, supra note 77, at 156.

79 *See* Rebecca S. Eisenberg, *Symposium on Regulating Medical Innovation: Public Research and Private Development: Patents and Technology Transfer in Government-Sponsored Research*, 82 Va. L. Rev. 1663, 1702 (1996). Eisenberg notes, however, that these numbers may be attributed to a "selection bias" of sorts and that many of these inventions were commercially irrelevant, period. *See id*. at 1703.

80 *See* Rai and Eisenberg, *supra* note 73, at 292.