

pean universities tended to appoint their own graduates to faculty positions, and rarely recruited from outside. Conversely, American universities recruited faculty from numerous sources and maintained a competitive marketplace.²¹ This increased mobility motivated researchers to seek commercial applications for inventions and allowed for the diffusion of new ideas and novel research approaches.²²

2. The Growth of Federal Funding on Academic Research

The priorities of the federal government with respect to general R&D shifted once the U.S. entered into World War II, and these expenditures increased fifteen-fold between 1940 and 1945.²³

The renewed interest in R&D during the war incentivized the government to augment its focus on university grants, since university researchers included some of the brightest and most innovative minds in the country. Between 1935 and 1960, the overall academic research enterprise increased nearly six-fold.²⁴ The federal grant money was used to support broad explorations of uncertain technologies and growth areas, which ultimately led to major breakthroughs in previously under-researched areas, including biomedical and aeronautical engineering.²⁵

3. University Patenting and Patent Policy Trends Prior to Bayh-Dole

While some universities began to patent faculty inventions as early as the 1920s, formal patent policies were mostly a product of the post World War II era.²⁶ Considerable and steady growth of patenting by universities was seen in the 1970s and in the years leading to the passing of Bayh-Dole.

A sea change in invention management occurred in the two decades leading to Bayh-Dole.²⁷ Pursuant to this transformation, many U.S. universities began not only to seek patents for faculty inventions, but also to manage their patent and licensing activities.²⁸ Since the government retained title to federally-funded in-

21 See Hugh Davis Graham and Nancy Diamond, *THE RISE OF AMERICAN RESEARCH UNIVERSITIES*, (Baltimore: Johns Hopkins University Press, 1997) at 20.

22 See Mowery, *supra* note 5 at 13.

23 See *id.* at 22.

24 *Id.* at 23.

25 *Id.* at 26.

26 *Id.* at 35.

27 *Id.* at 44. This change was led by the creation of the Research Corporation, which administered inventions for over 200 institutions in 1970. The corporation encouraged and assisted universities in managing early stage technology transfer. See *id.*

28 *Id.*, citing C. Weiner, *Universities, Professors and Patents: A Continuing Controversy*, *TECH. REV.* 83 at 33-43.