Japan's University-Industry Collaboration and Patents

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Outline

- Chronological overview of University Industry Collaboration(UIC) in Japan

- Current Status of UIC in Japan
  - Collaborative research
  - Sponsored research
  - Patent applications
  - License activities

- Findings from interviews with university TLOs

Table.1 Recent developments in the university-Industry collaboration in Japan

	Important measures
1998	**Technology licensing office(TLO) act**
1999	**Japanese “Bayh-Dole “ act**
2000	Relaxing business on the side for faculty members at national universities
2001	Reorganization of governmental agencies
2002	
2003	
2004	**Incorporation of national universities**
2005	
2006	**Redefinition of the role of universities**
2007	Education　Research　Social contribution
2008	
2009	
2010	
2011	
2012	

Subsidies for TLO

Subsidies for IP management at universities

Subsidies for university-Industry collaboration at universities

In 1970 Sponsored research scheme at national univ.

In 1983 collaborative research scheme at national univ.

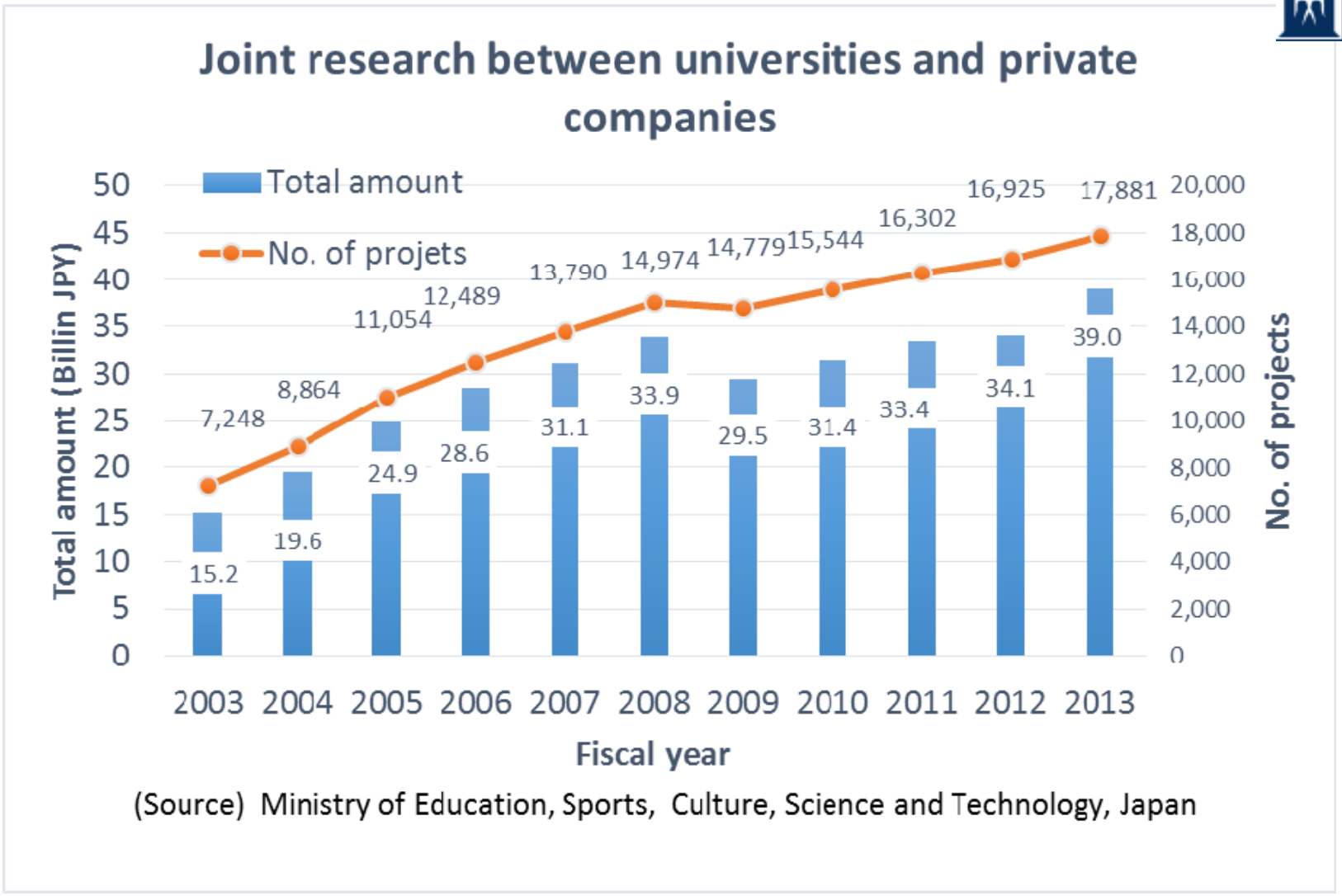


Fig.1 Joint research between universities and private companies

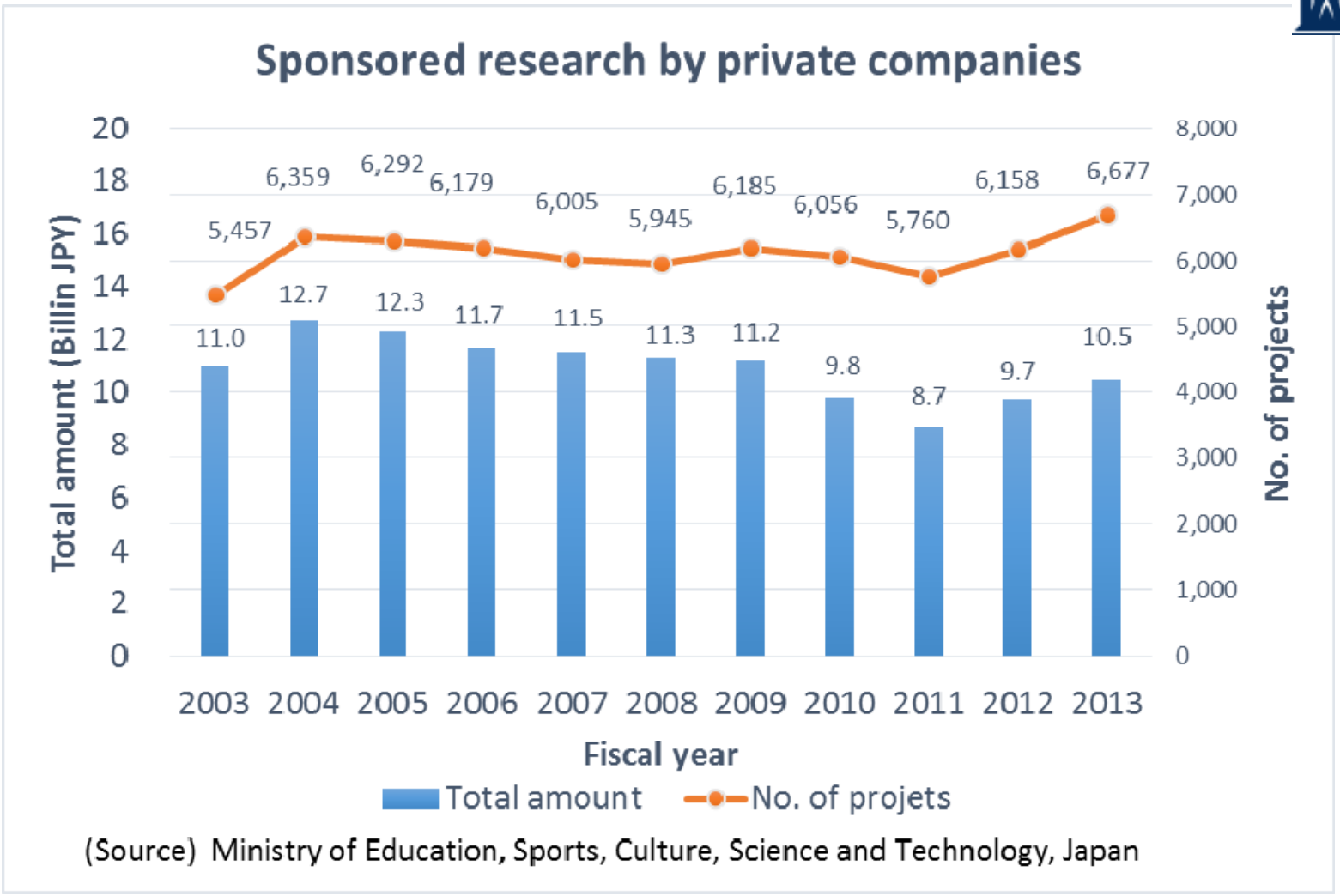


Fig.2 Sponsored research in universities by private companies

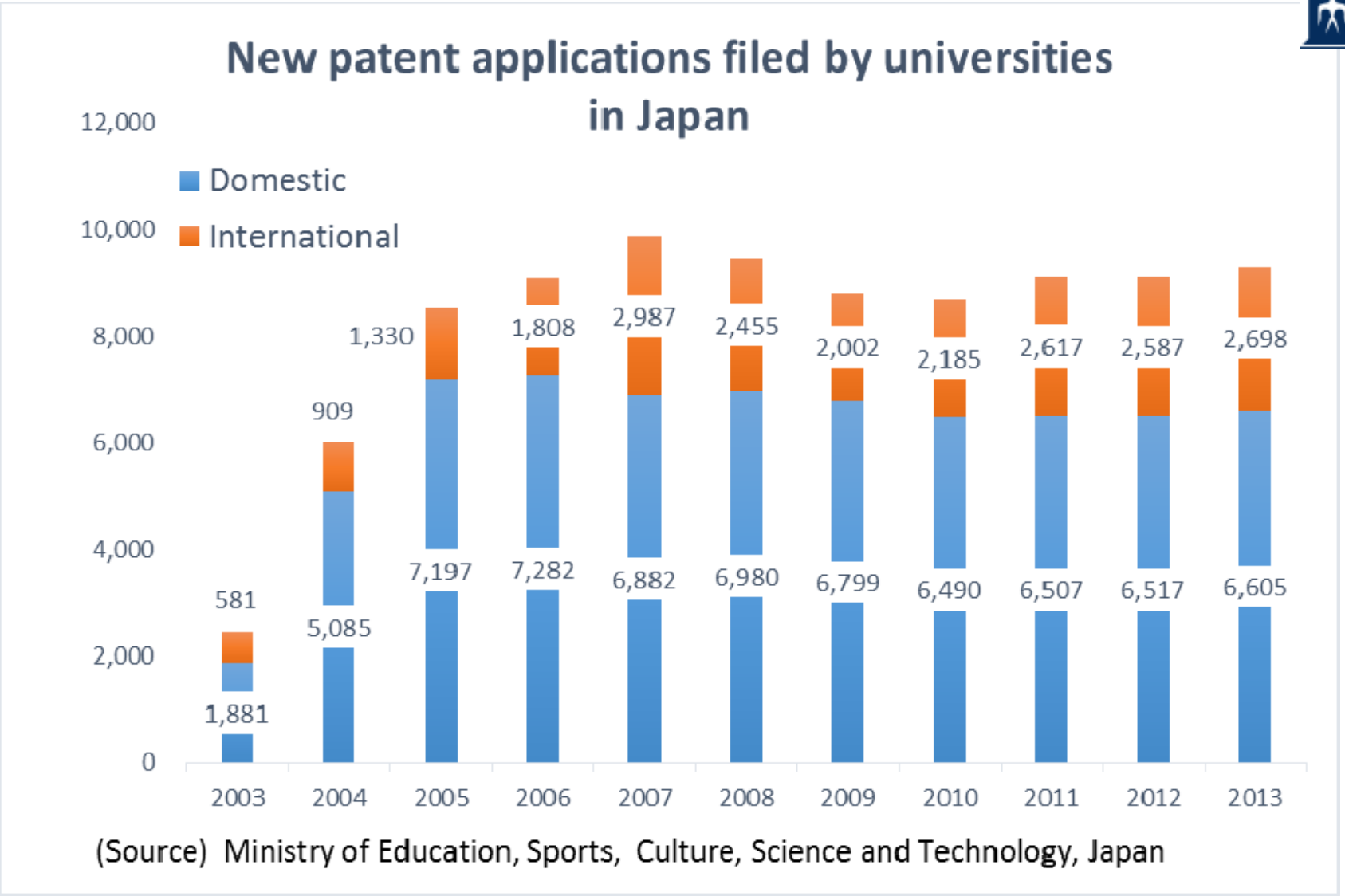
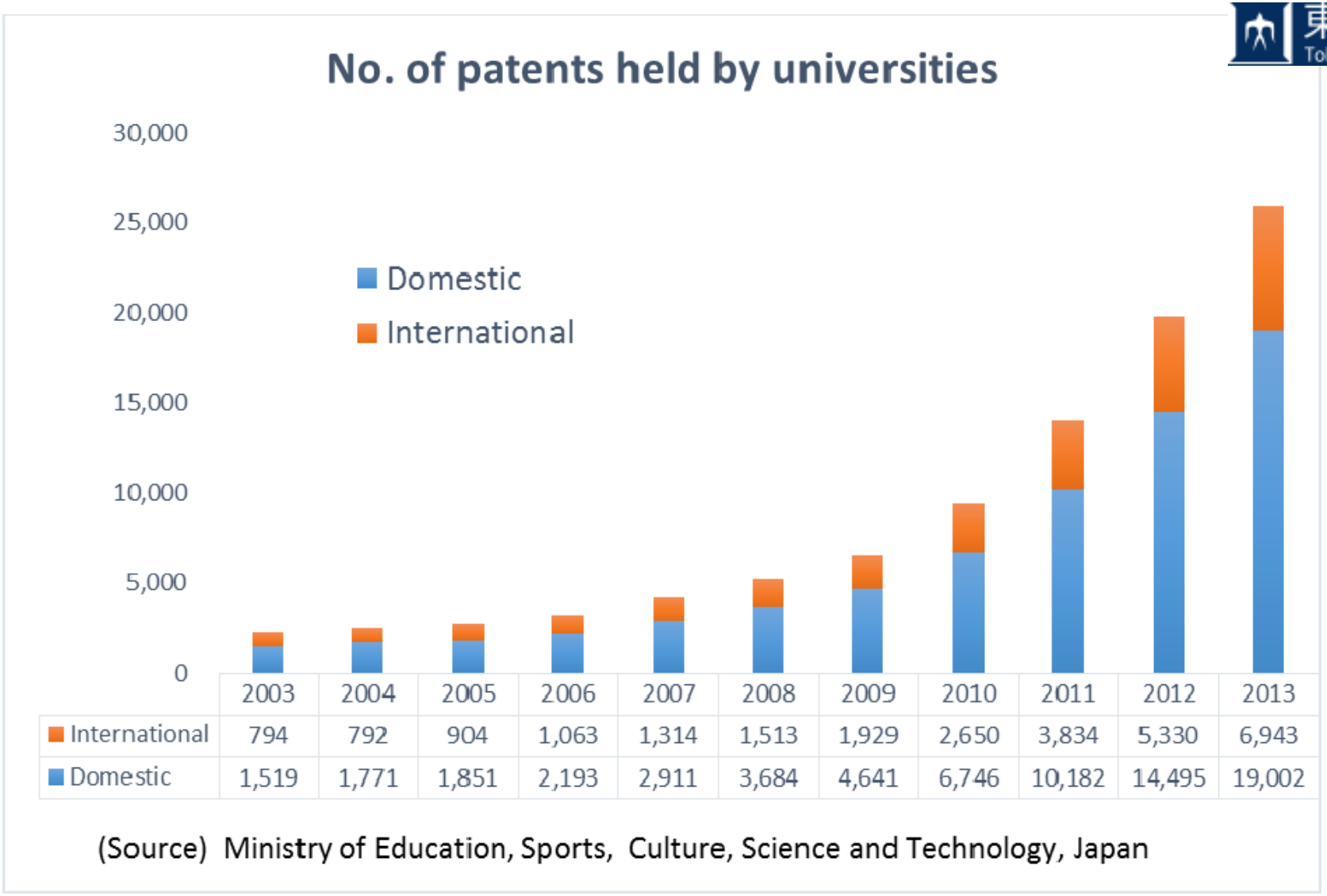


Fig.3 New patent applications filed by universities



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
International	794	792	904	1,063	1,314	1,513	1,929	2,650	3,834	5,330	6,943
Domestic	1,519	1,771	1,851	2,193	2,911	3,684	4,641	6,746	10,182	14,495	19,002

(Source) Ministry of Education, Sports, Culture, Science and Technology, Japan

Fig.4 Number of patents held by universities

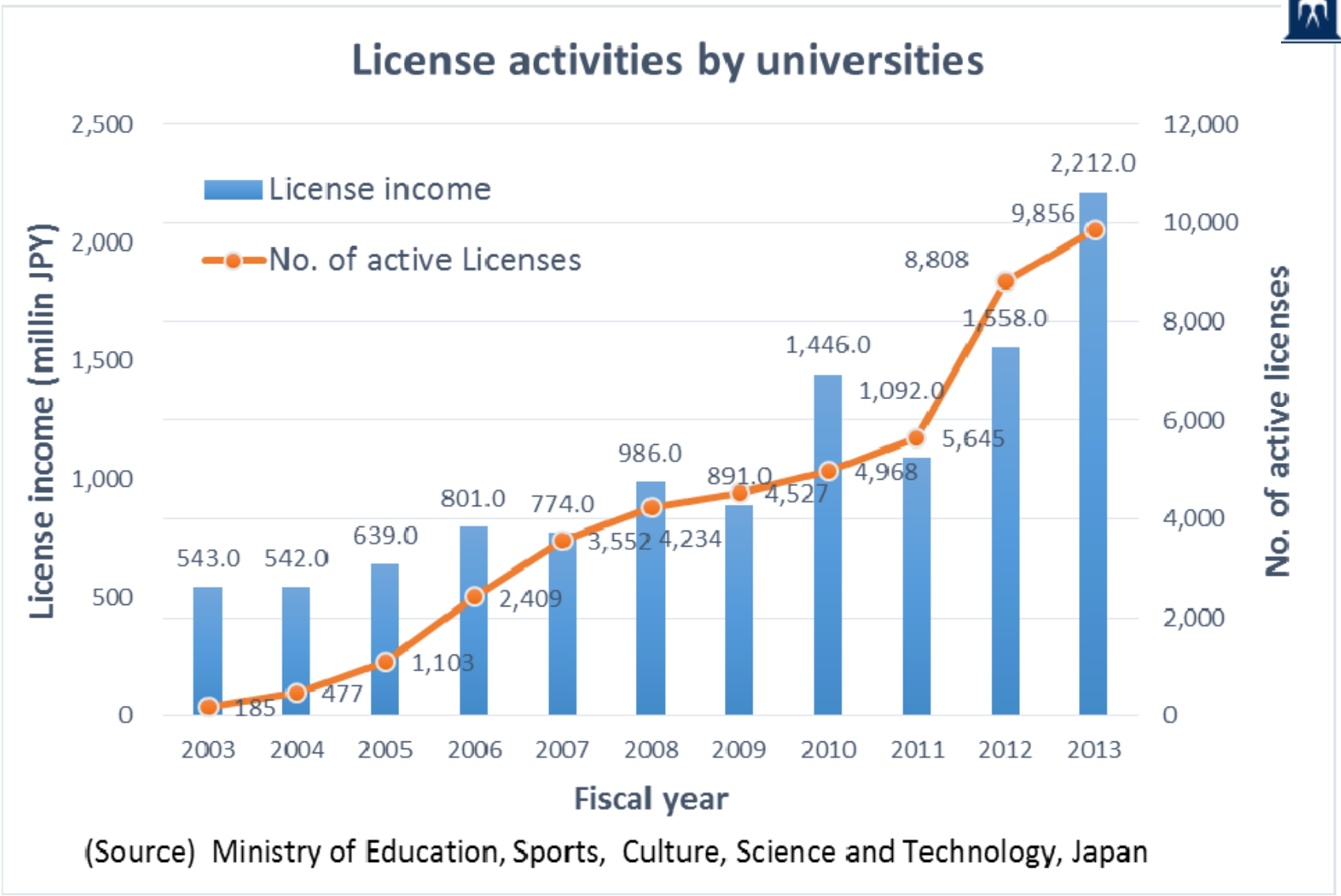
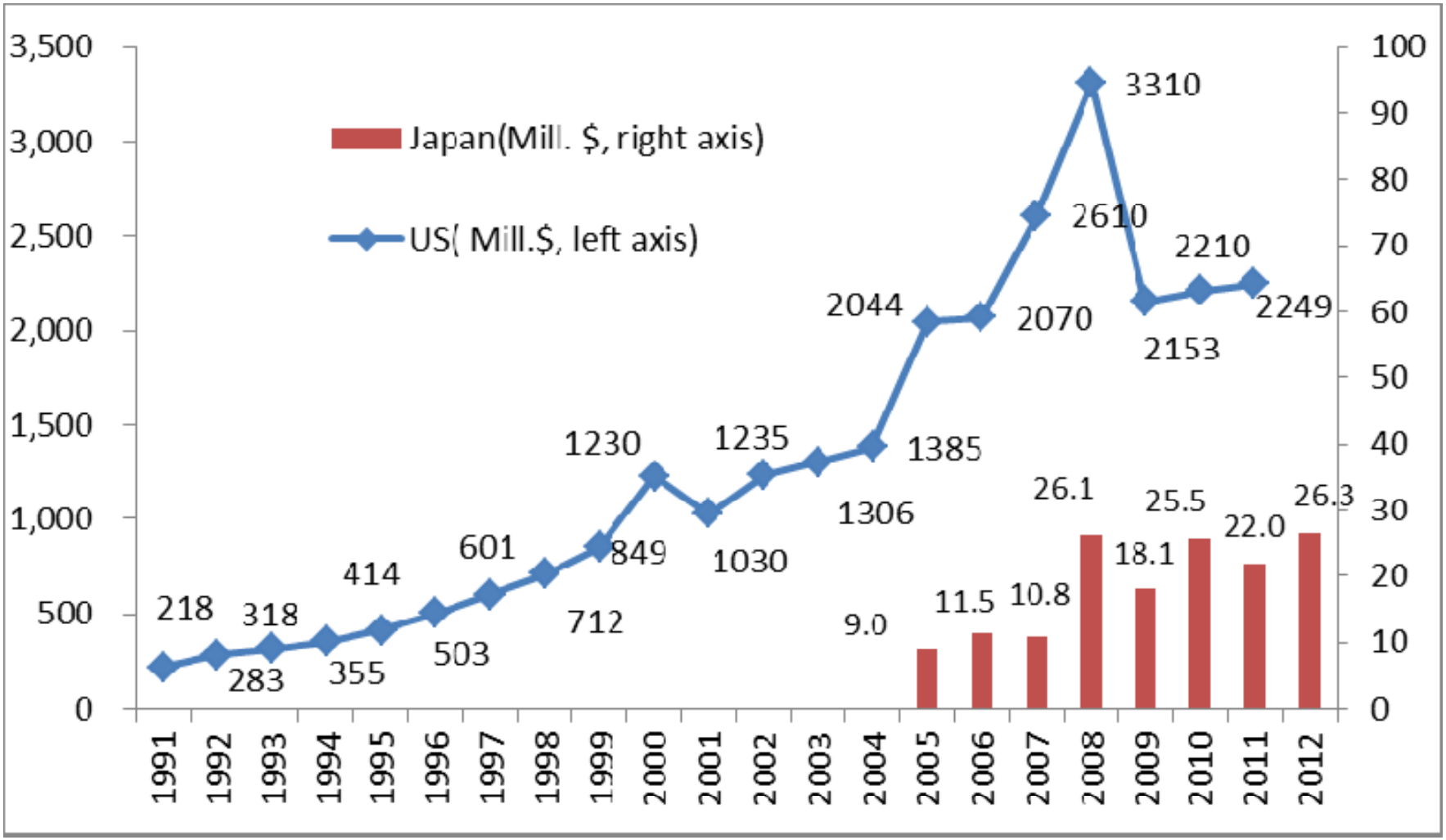


Figure. 5 License activities by universities

Fig. 6　US-Japan Comparison of license income received by universities



Source AUTM Licensing Survey, UNITT Survey of University Technology Transfer in Japan.

Findings from interviews with university TLOs

- 70% of university-own patents are co-owned by private companies.
- The proportion of running royalties to the total license fees was around 40% while the proportion is around 70% in U.S.
- In Japan around 60 % of licenses fees come from upfront payments when a contract is signed.
- Companies tend to do collaborative research with universities in the near field where they have strong patents, aiming at defensive patent applications.