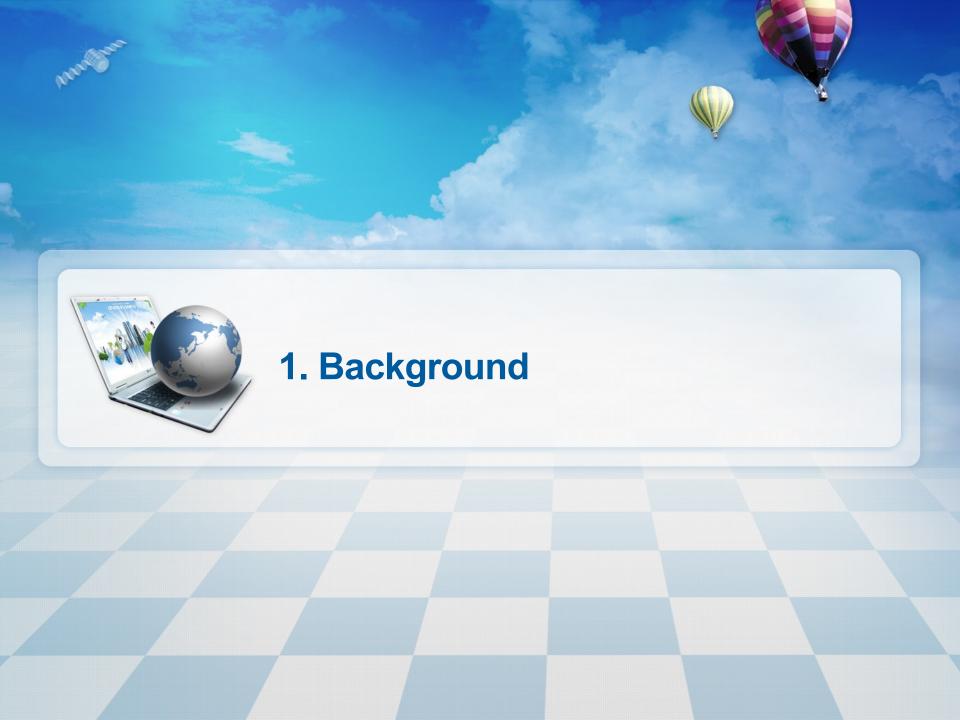
IP Finance Support Policy

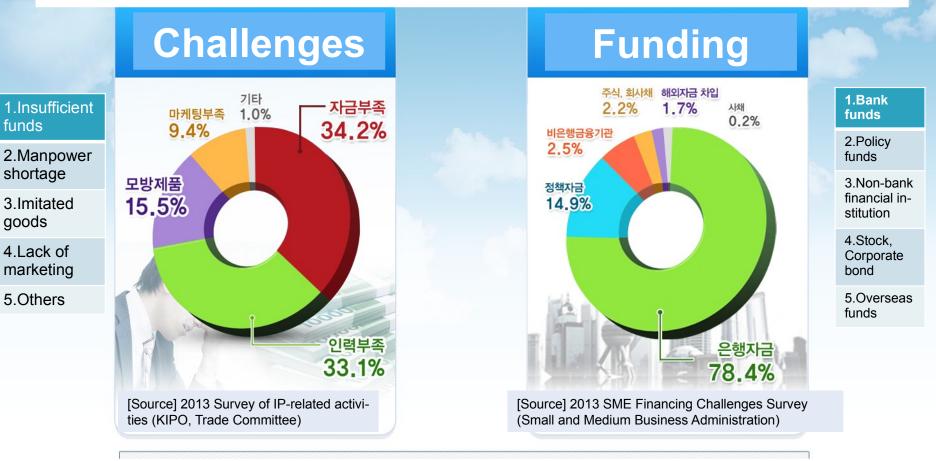
Seonwoong Jeong, Senior Deputy Director, IP Utilization Division

Contents

- 1. Background
- 2. IP Finance Status
- 3. Key Achievements & Cases



Challenges Facing SMEs in Technology Commercialization



SMEs heavily relying on banks in financing technology commercialization

1. Real estate

3. Credit War-

4. Joint Surety

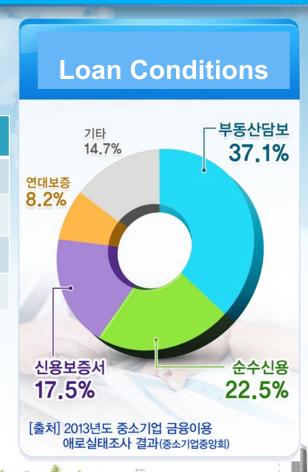
ranty letter

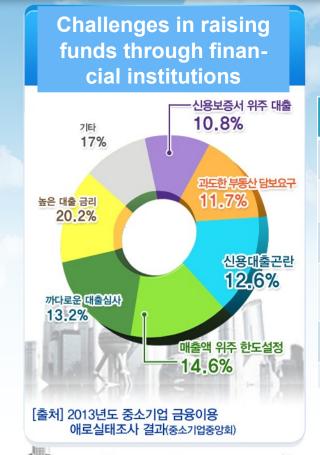
5. Others

mortgage

2. Credit

SMEs even with competitive technologies face challenges in raising funds due to weak credit and collateral.





1. High interest rate

- 2. Profits-oriented loan limit
- 3. Complicated examination
- 4. Limited credit loan
- 5. Excessive real estate collateral
- 6. Credit warranty letter
- 7. Others

Death Valley: a phase where ventures/SMEs with competent technologies easily go bankrupt due to lack of capital for tech commercialization

Inconsistency between demand and supply as policy funds are available in early R&D phase and private funds are available in growth & maturity phase.



시장실패 발생

시장성숙 단계

구 분	2009	2010	2011
신생 기업수	759,996	773,226	809,426
소멸 기업수	662,045	650,197	683,099

Average Survival Rate of Startups



[출처] 2012년 기업생멸행정통계 (통계청)

Significance of IP Finance

To ensure that companies with strong IPRs and weak physical security receive financial support based on IP value evaluation

Support startups and SMEs in technology commercialization

Promote economic growth spurred by technological innovation

Obstacles to Activating IP Finance

Lack of Information

Insufficient information for financial institutions on companies with strong IPRs

Weak Confidence in IP Value Evaluation

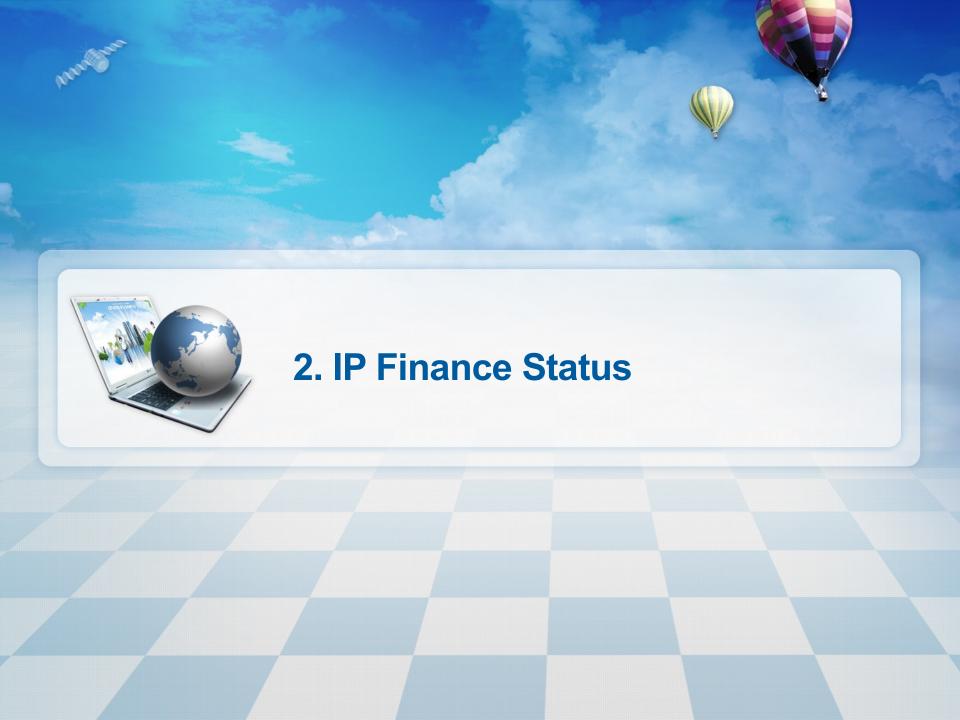
Reluctant to refer to IP valuation results in loan examination

Insufficient Market for IP Transaction

Difficult to reclaim funds by disposing of IP in case of insolvency

Necessity for creating a well-structured IP finance ecosystem backed by IP utilization infrastructure, IP value evaluation and IP transaction market





Types of IP Finance

- □ The value of IPs owned by SMEs or venture startups is evaluated, and the results are furnished to financial institutions so that the companies can raise funds based on their IPRs. (KIPO supports evaluation costs, while financial institutions decide whether to provide financial supports.)
- (Guarantee) To obtain a loan from a bank using a warranty letter issued by a warranty institution, such as Technology Credit Guarantee Fund and Credit Guarantee Fund, on the IP as collateral
- IP guarantee institutions: Technology Credit Guarantee Fund ('06~), Credit Guarantee Fund ('13~)
- (Collateral Loan) To use an IP as collateral for loans and pay the loan by disposing of the IP in the event of insolvency
- * IP collateral loan institutions : Korea Development Bank ('13~), Industrial Bank of Korea ('14~), Kookmin Bank ('15~)
- (Investment) Venture capitals recognize IP as asset, and invest directly in the IP or provide

IP Value Evaluation Support

- (Necessity) Financial institutions ask for a reliable IP valuation to ensure that IP can be leveraged for guarantee, loan and investment
- * IP valuation is used not only for IP finance but also for equity investment, trading, and business feasibility analysis.
- (Details) KIPO financially supports part of the evaluation cost (50-90%) of corporate IP so as for SMEs to be funded based on the evaluated IP value.
- * The project is implemented by Korea Association for the Promotion of Innovation, and the actual financial support is independently decided by financial institutions and investment institutions.
- (Areas and Targets) SMEs that have and are using registered patent rights (as of the date of application)
- **(Value Evaluation Institute)** The institutes are designated, when satisfying certain requirements prescribed by the Invention Promotion Act to deliver reliability to financial institutions on evaluation results.

Evaluation Institutes (15 in total)

	Evaluation Institutes	Date of Designaiton
Public (10)	Korea Conformity Laboratories, Korea Testing Certification, Korea Testing & Research Institute, Korea Testing Laboratory, Korea Institute of Science and Technology Information, Korea Institute for Advancement of Technology, Technology Guaranteed Fund, Korea Development Bank, Korea Innovation Promotion Association	Feb., '07
	Foundation of Agri. Technology Commercialization and Transfer	Aug., '12
	DARAE Law & IP Firm, WIPS	Jun., '15
Private (5)	DANA Law & IP Firm	Oct., '16
	Ecredible, Nice Information Service	Sept., '17

Requirements for Designation of Institutes for Evaluation of Inventions

Based on Invention Promotion Act, the Commissioner of KIPO may designate an institute as inventionevaluating institute, and may grant a full or partial subsidy of evaluation fees to a person whose invention has successfully passed the evaluation conducted by an evaluation institute.

- Institutes are required to regularly recruit experts as follows.
 - ① 3 or more experts who are patent agent, accountant, technical engineer, Ph.D. holder, specialist or have equivalent qualification to evaluate a technology
 - ② 7 or more experts with 5 years or more work experience in the area of invention evaluation
- Institutes should have dedicated departments to evaluate inventions
- ◆ Institutes should have necessary facilities and equipment for invention evaluation
- Institutes should establish an information network to collect, analyze and distribute necessary information for invention evaluation.
- Evaluation institutes specialized in test and performance analysis should have propredictions and equipment for the task.
- Institutes should have proper guidelines on such as evaluation fee calculation, evaluation methods, and necessary infrastructure for the evaluation task.

Budget for IP Value Valuation

Year	'13	'14	'15	'16	'17
Budget for IP finance- related valuation (unit: 100 million won)	16.5	23.1	35.7	32.7	32.7

Cost of IP Value Valuation

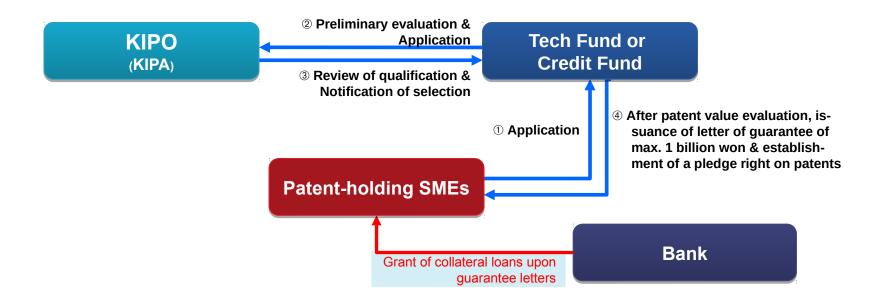
Evaluation model	Purpose	Cost	Cost Subsidy	
Entry-level	Collateral loan	\5 million	50%	3 weeks
Standard	Guarantee loan	\6.5 million	77%	3 weeks
Intensive	Investment	\15 million	90%	6 weeks

IP Investment (investment in patent account of 'Korea Fund-of-Funds')

- (Necessity) Commercialization of patents owned by businesses, universities and public research institutes; Prevention of outflow of high-quality IP rights overseas; and Effective measures against the act of technology theft by large companies
- Case: MPMAN created the first MP3 player and obtained an original patent on it. As it went through a liquidity crisis, its patents obtained overseas were acquired by a patent troll in the U.S., and consequently, domestic companies now pay licensing fees to the US firm.
- In addition, a payback support fund will be established to purchase the IP rights used as collateral, in the event of insolvency, easing the risk burden of a bank.
- (Details) Raising fund that invests in patent account of Korea Fund-of-Funds in order to make investments to politically important investment targets such as patent technologies to be commercialized
- (Investment targets) SMEs or venture businesses that own competitive IP rights after IP value evaluation or projects run by universities or public research institutes for IP creation and utilization.
- (Achievements) 43 investment funds were formed using government budget of 160 billion won and returned 199.7 billion won, and 602 businesses received investment of a total of 877,4 billion won (from 2006 to 2017).

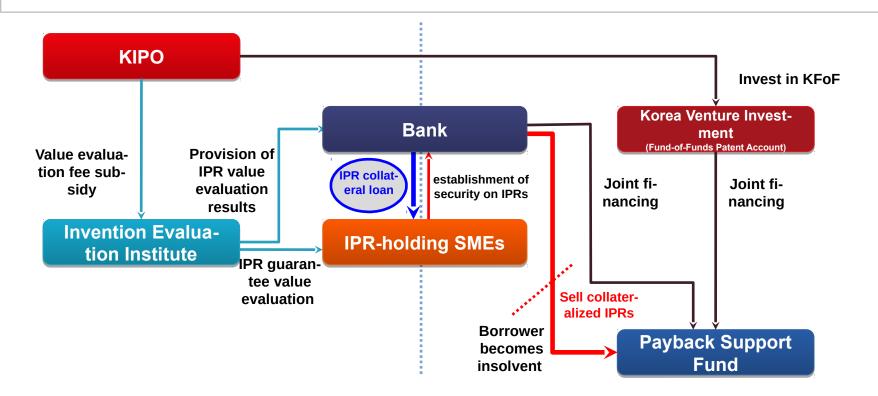
1. IP Guarantee

□ (**Technology Credit Guarantee Fund, Credit Guarantee Fund**) Less than the evaluated amount of patent rights (guarantee is maximum 1 billion won per enterprise.)



2. IP Collateral Loan

- □ (Korea Development Bank, Industrial Bank of Korea, Kookmin Bank) Less than the evaluated amount of patent rights
 - Max. \20 bn per business by KDB, and max. \1 bn per business by IBK and Kookmin Bank

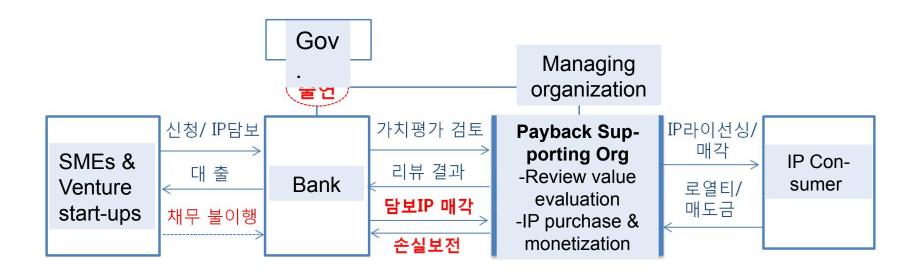


* Payback Support Fund: to purchase the IP rights used as collateral, in the event of insolvency, easing the risk burden of a bank

^{*} KDB \2 bn in Sep 2013/ IBK \5 bn in July 2014 and Oct 2016/ Kookmin Bank \3bn in Feb 2015

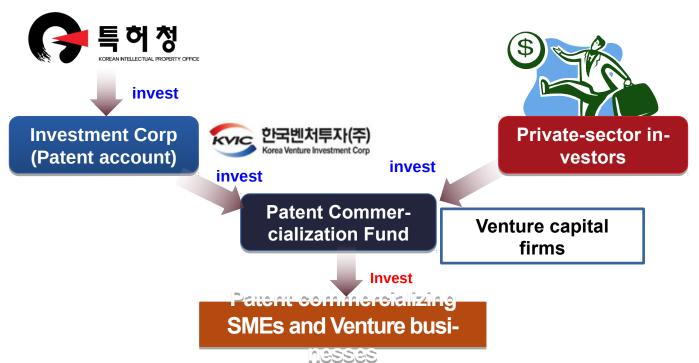
2. Improvement to IP Collateral Loans

□ (Establishment of Payback Supporting Organization in 2019)
In the event that an borrower becomes insolvent, a payback supporting organization purchases the IP rights used as collateral from the bank, and monetizes the IP rights.



3. IP Investment

- □ (**Investors**) Venture capital firms, financial institutions, enterprises, angel clubs, overseas investors, etc.
 - Investors determine whether to invest referring to IP value valuation results.



Investment made in companies that are to commercialize patented technologies or provide IP services or in IP projects



	2013	2014	2015	2016	2017
Size of IP finance (billion won)	759	1,658	2,009	3,035	3,670
IP finance-related value evaluation subsidy (number of cases)	235	318	396	378	429

Korea Development Bank's IP Based Loans

- □ IP Purchase Fund Loan
 - o (Purpose) To support enterprise to raise funds for sales or licensing of issued IP
 - o (Target) All enterprises except for one-man business
 - (*Possibly allowable if an internal IP commercialization assessment result is a certain grade or higher.)
 - o (Limit) Less than 80% of IP purchase costs to be supported
- □ IP Collateral Loan
 - o (Purpose) To finance companies with IP rights on profitable products as collateral
 - o (Target) All enterprises except for one-man business, and establish a pledge right on IP rights
 - o (Limit) The less between IP value evaluation amount and support limit per enterprise*
 - * Depending on a credit rating of companies and IP commercialization assessment results
- □ Technology/IP Commercialization Financing
 - o (Purpose) To financially support IP-driven businesses' commercialization efforts
 - o (Target) All enterprises except for one-man business
 - o (Limit) No limits



3. Key Achievements and Cases

쉬프트정보통신㈜

- 기업개요
 - ▶ SW developing company for governments and businesses
- 대출신청 배경
 - ► Exported its products to 27 countries through large companies since mid-2000s, but its performance was poor.
 - Changed it direction to export on its own, and needed to secure funds to develop overseas market
- Loans granted: \2 bn (technology value evaluation: \5.4 bn by KDB)
- 대출금 용도
 - ▶ 해외 마케팅 및 R&D자금으로 활용





성 과

- In July 2014, it landed a contract with 2 Chinese companies to supply its web graphic development software, expecting \2.7 bn and \30 bn in 2014 and 2015, respectively.
- In 2013, it succeeded in attracting additional investments in 15% of the stake from KDB, and in 5% of the stake from IBK in 2014, respectively.

3. Key Achievements and Cases

Support Achievement

(Achievement) IP-financed recipient companies experienced an increase both in employment and sales.

- (Employment) 57.5% of the companies have hired new employees once financed. (6.5 recruits on average per enterprise)
- (Sales) Average sales increased by
 16.5% compared to before
- (IP guarantee) 23% up from \3.6 bn
- (IP collateral) 12% up from \21.8 bn to \
 24.3 bn
- (IP investment) 42% up from \16.6 bn to \23.6 bn



Thank you!