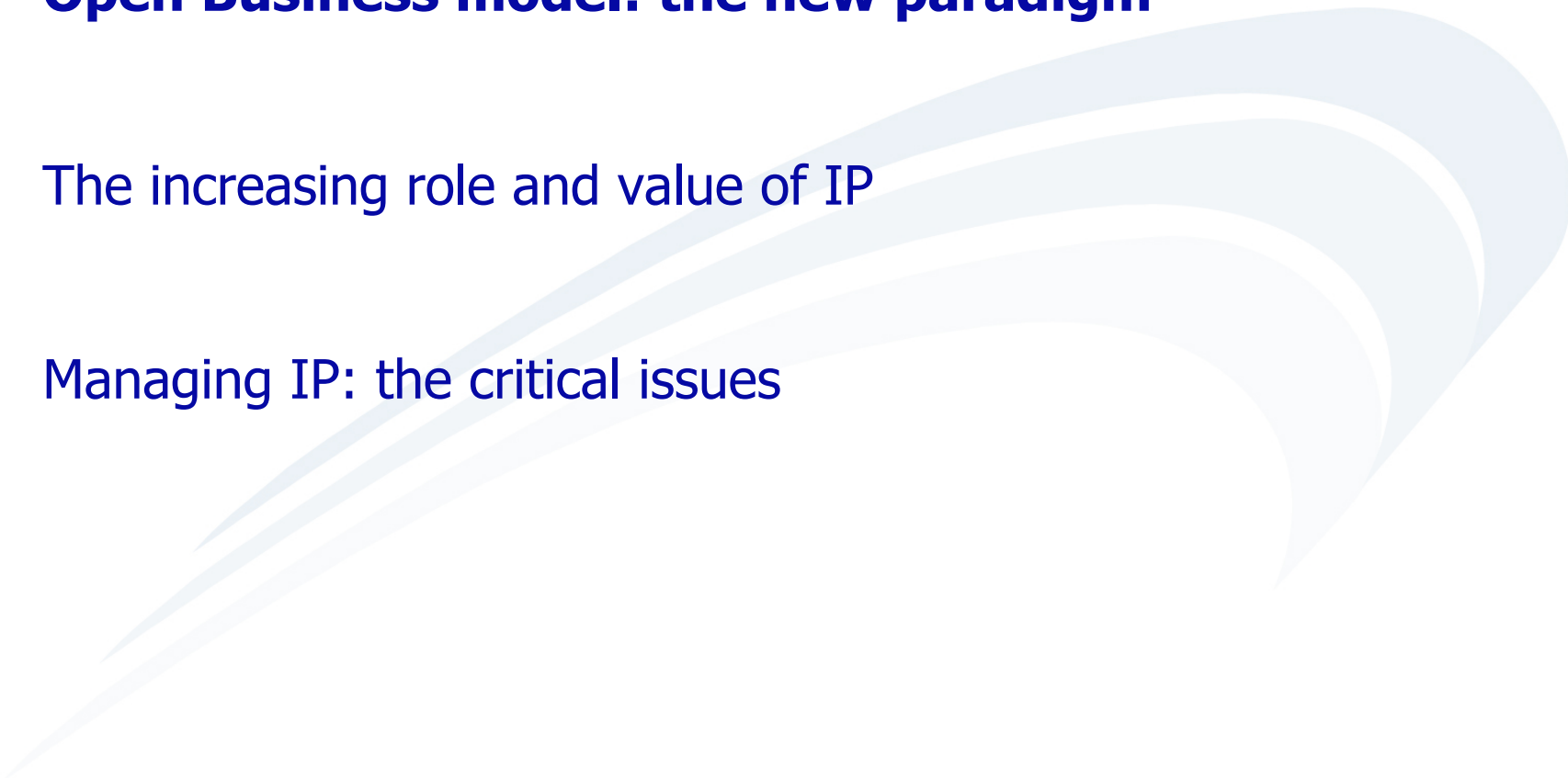


# **The economic and strategic value of IP**

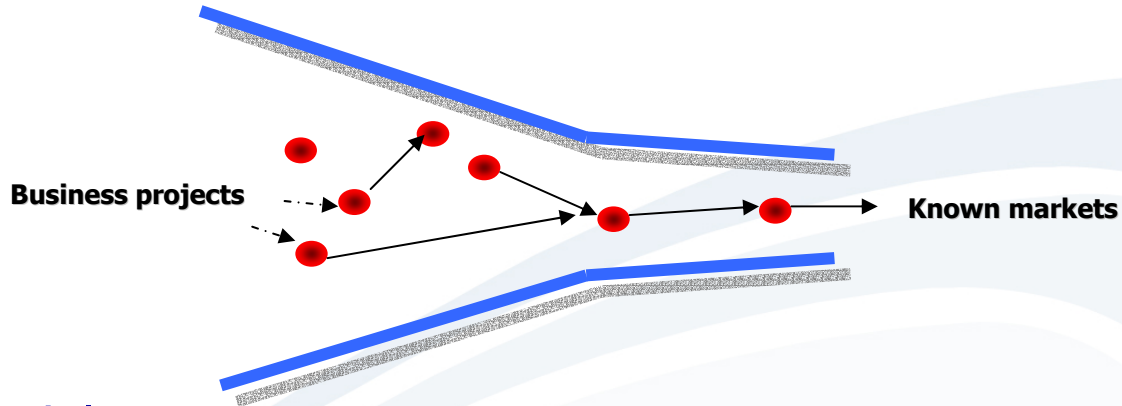
Vittorio Chiesa

*Politecnico di Milano*

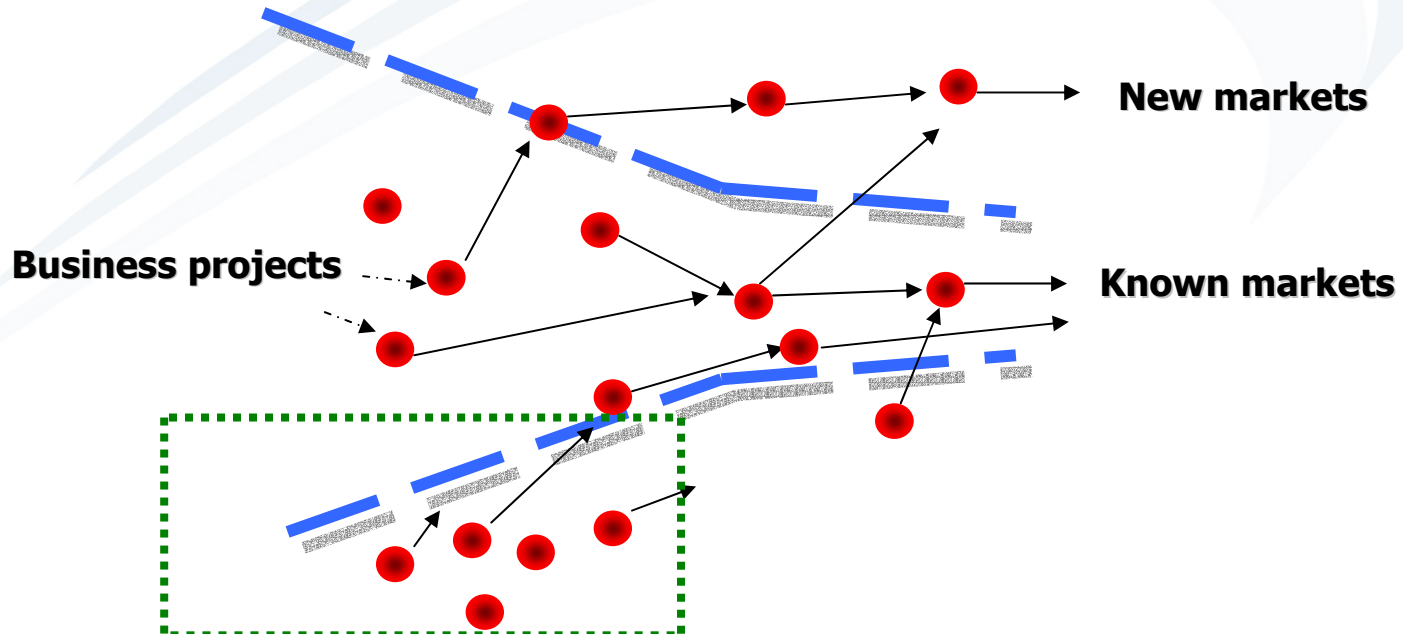
- **Open Business model: the new paradigm**
  - The increasing role and value of IP
  - Managing IP: the critical issues
- 

# The business process is changing

. from a closed model



. to an open model

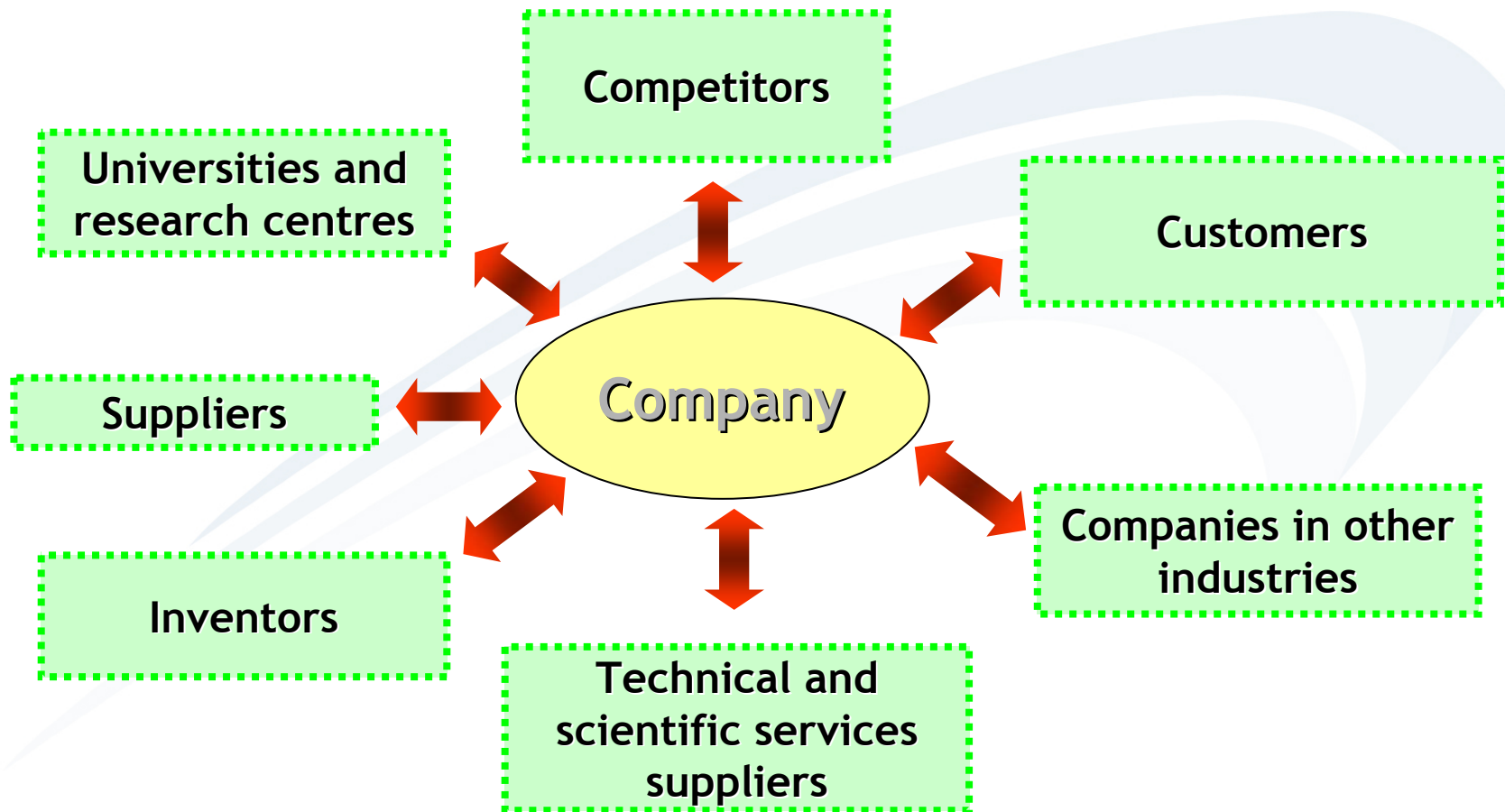


The reasons for the opening of the business process in the upstream activity are:

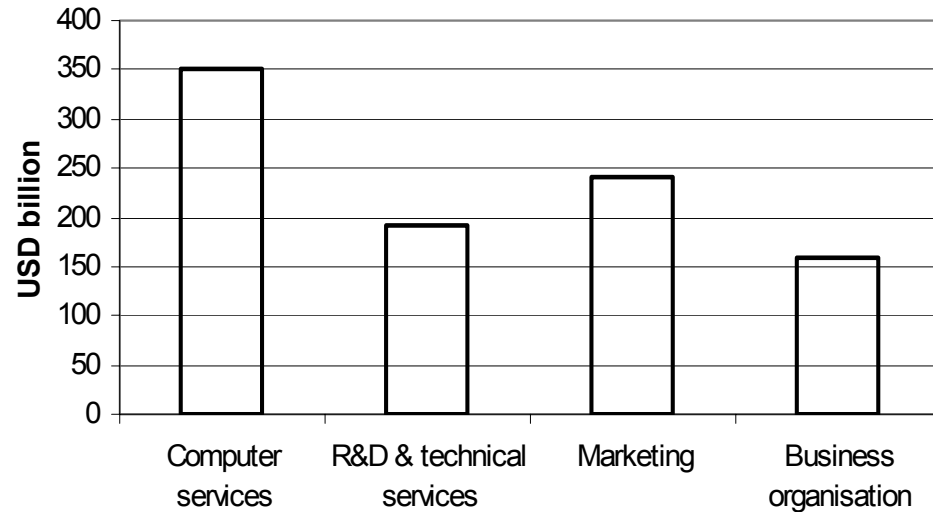
- to **access the wider portfolio of skills and technologies needed for innovation**
- to **increase speed in introducing innovation**
- to **reduce costs**
- to **reduce risk**

# Open model: a new paradigm

The **number and typology of actors** involved increases



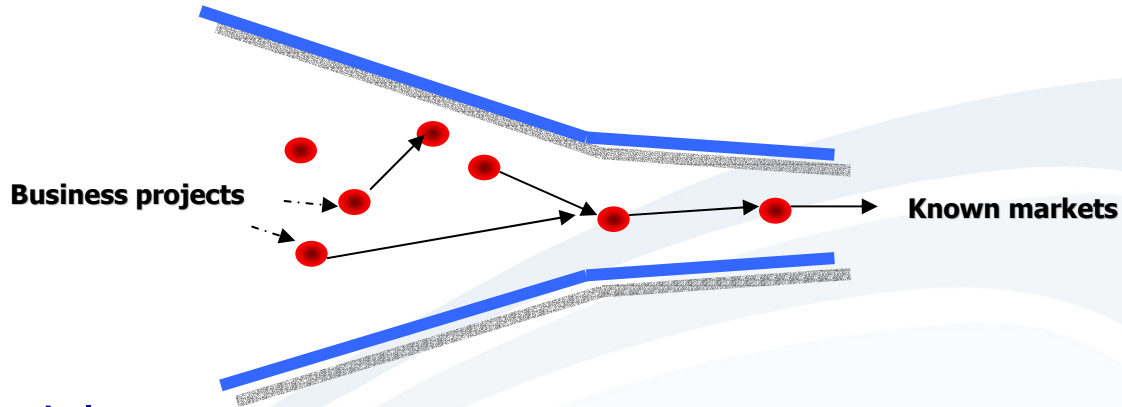
- A market for **Technical and Scientific Services (TSS)** has grown
- The most diffused **types of TSS**:
  - **Product design**, engineering, testing, rapid and virtual prototyping, process design
  - **Contract Research & Development**
  - **Software instruments** to support product development process (e.g. 3D rapid prototyping, Electronic Design Automation, High Throughput Screening)
  - **Technological consulting, brokering and training**



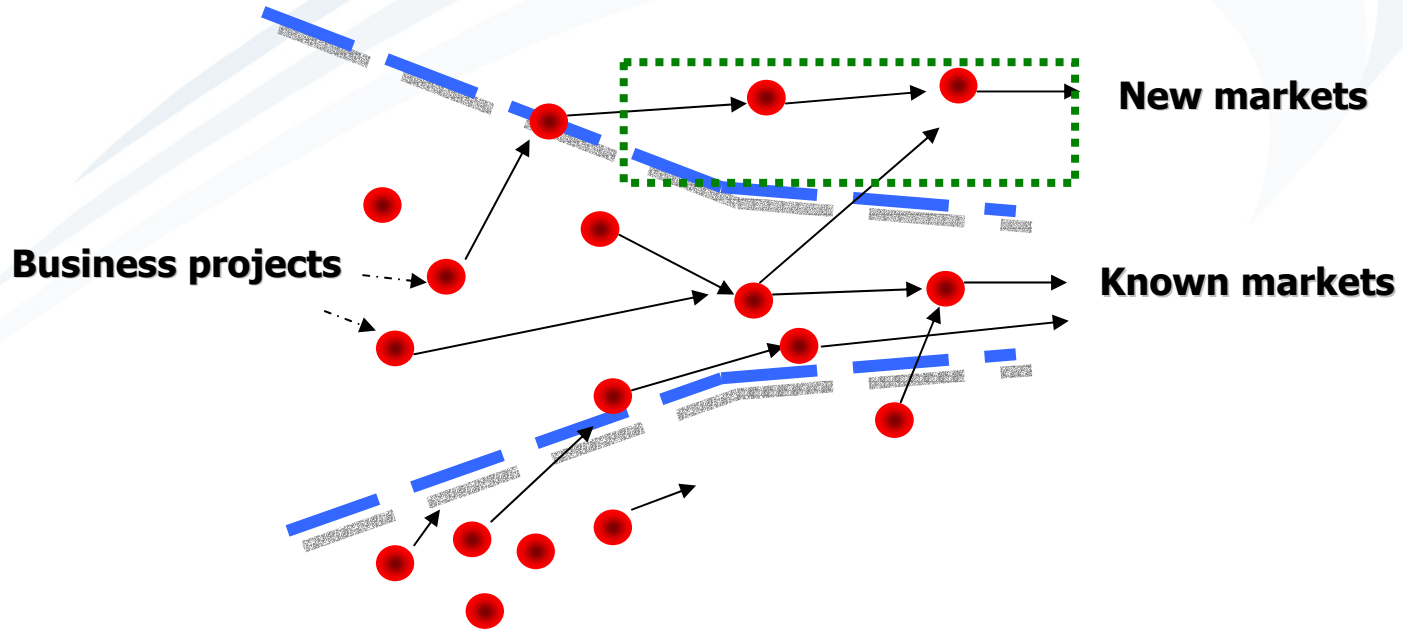
**Source: OECD, 1999**

# The business process is changing

. from a closed model



. to an open model

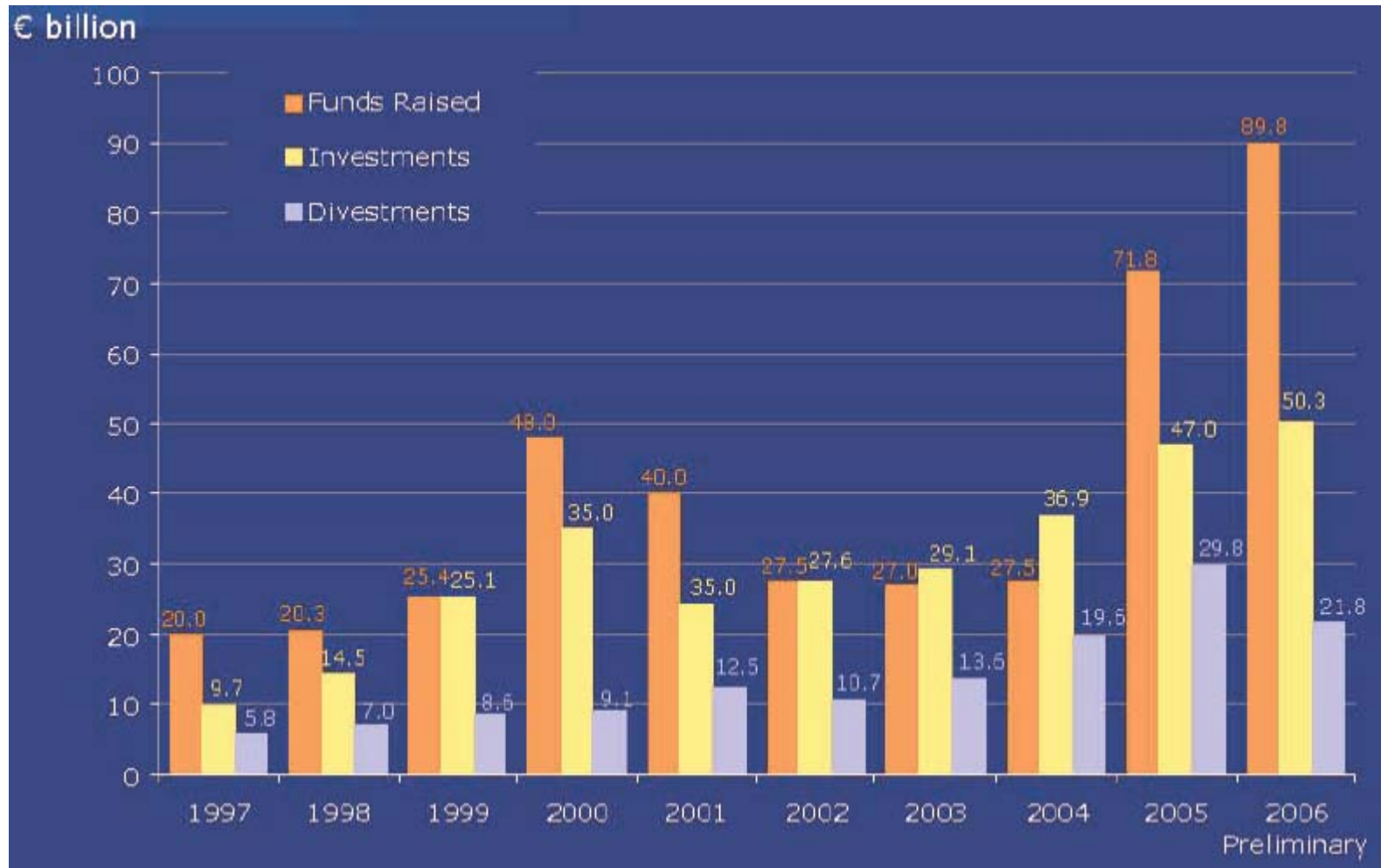


The reasons for the opening of the business process in the downstream activity are:

- to **access new markets/businesses unknown to the firm**
- to increase the **internationalisation** of the company, accessing **new geographical markets**
- to **sell technologies and brands** related to non core products
- to generate **new ventures** in completely new business arenas



# *An enabling factor: the increasing presence of private venture capital*



**2006 European Private Equity Survey**  
Conducted by Thomson Financial and PricewaterhouseCoopers

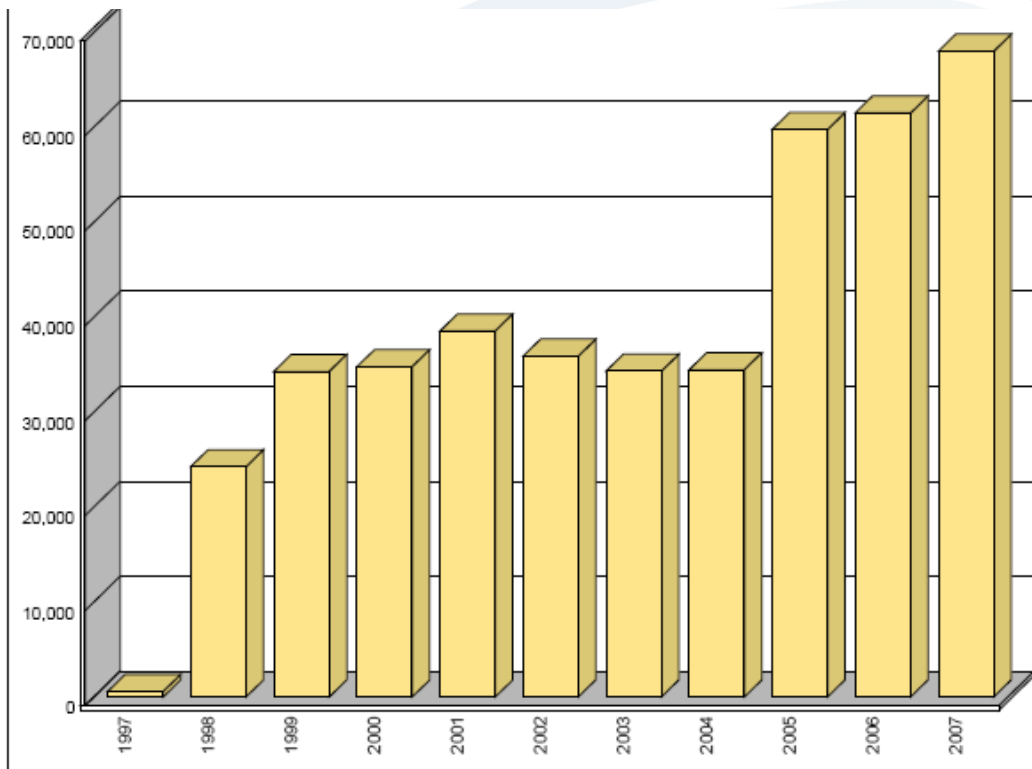
- Open Business model: the new paradigm
- **The increasing role and economic value of IP**
- Managing IP: the critical issues

# A growing trend for IP "creation"

- The number of new **trademarks registrations** has significantly increased in last years

Trademarks registered at EPO

	CTMs	+
1997	577	577
1998	24,249	24,826
1999	34,270	59,096
2000	34,761	93,857
2001	38,535	132,392
2002	35,892	168,284
2003	34,308	202,592
2004	34,442	237,034
2005	59,749	296,783
2006	61,495	358,278
2007	67,991	426,269



# A growing trend in IP value

## Top 10 global brands by value

RANK 2007 / 2006	2007 BRAND VALUE \$MILLIONS	2006 BRAND VALUE \$MILLIONS	PERCENT CHANGE	COUNTRY OF OWNERSHIP	DESCRIPTION
<b>1</b> 1 <b>COCA-COLA</b>	65,324	67,000	-3%	U.S.	Still No.1, but consumers' shift from soda in the West has hurt Coke. Success with Coke Zero hasn't made up for Coca-Cola Classic's continued loss of share.
<b>2</b> 2 <b>MICROSOFT</b>	58,709	56,926	3%	U.S.	The launch of its Windows Vista operating system, coupled with its Xbox game console, keeps the software giant's latest technology in front of consumers.
<b>3</b> 3 <b>IBM</b>	57,091	56,201	2%	U.S.	Big Blue's ads promise to make customers feel "special." With powerful software, servers, and sophisticated services, it's delivering.
<b>4</b> 4 <b>GE</b>	51,569	48,907	5%	U.S.	With big bets in China and an accelerating push to go green, GE aims to be the earth-friendly global brand.
<b>5</b> 6 <b>NOKIA</b>	33,696	30,131	12%	Finland	Nokia built its brand at both ends of the market, with high-end multimedia handsets for upscale buyers and low-priced phones for emerging countries.
<b>6</b> 7 <b>TOYOTA</b>	32,070	27,941	15%	Japan	Quality concerns have increased overall, but Toyota's reliability and its hybrid strategy are leaving auto rivals trailing.
<b>7</b> 5 <b>INTEL</b>	30,954	32,319	-4%	U.S.	Intel shored up its position as the world's leading chipmaker, but sub-brands such as the Viiv entertainment PC and Core processors failed to resonate.
<b>8</b> 9 <b>MCDONALD'S</b>	29,398	27,501	7%	U.S.	McDonald's continues to move beyond its burgers-and-fries image with a growing selection of healthy foods and stylishly remodeled restaurants.
<b>9</b> 8 <b>DISNEY</b>	29,210	27,848	5%	U.S.	Disney picks franchises it can sell throughout the Magic Kingdom, from movies to theme park rides. The strategy has paid off handsomely.
<b>10</b> 10 <b>MERCEDES-BENZ</b>	23,568	21,795	8%	Germany	New models have helped repair a badly dented reputation for quality, but sales are up only 1.8% for the first half of the year, trailing gains by rivals BMW and Audi.

Source: Business Week, 2008

# A growing trend in IP value

(Financial Times del 22.12.2007 "**Ashley delivers Umbro to Nike**")

**Nike** has closed in on the "crown jewel" that is the England football shirt after Sports Direct dropped its objection to the **US sportswear company's Pounds 285m acquisition of Umbro.**

[...]

We are pleased to have acquired this strategic stake in Umbro, which gives us a strong platform from which to proceed **with our acquisition of this iconic football brand,**" said Mark Parker, chief executive of Nike.

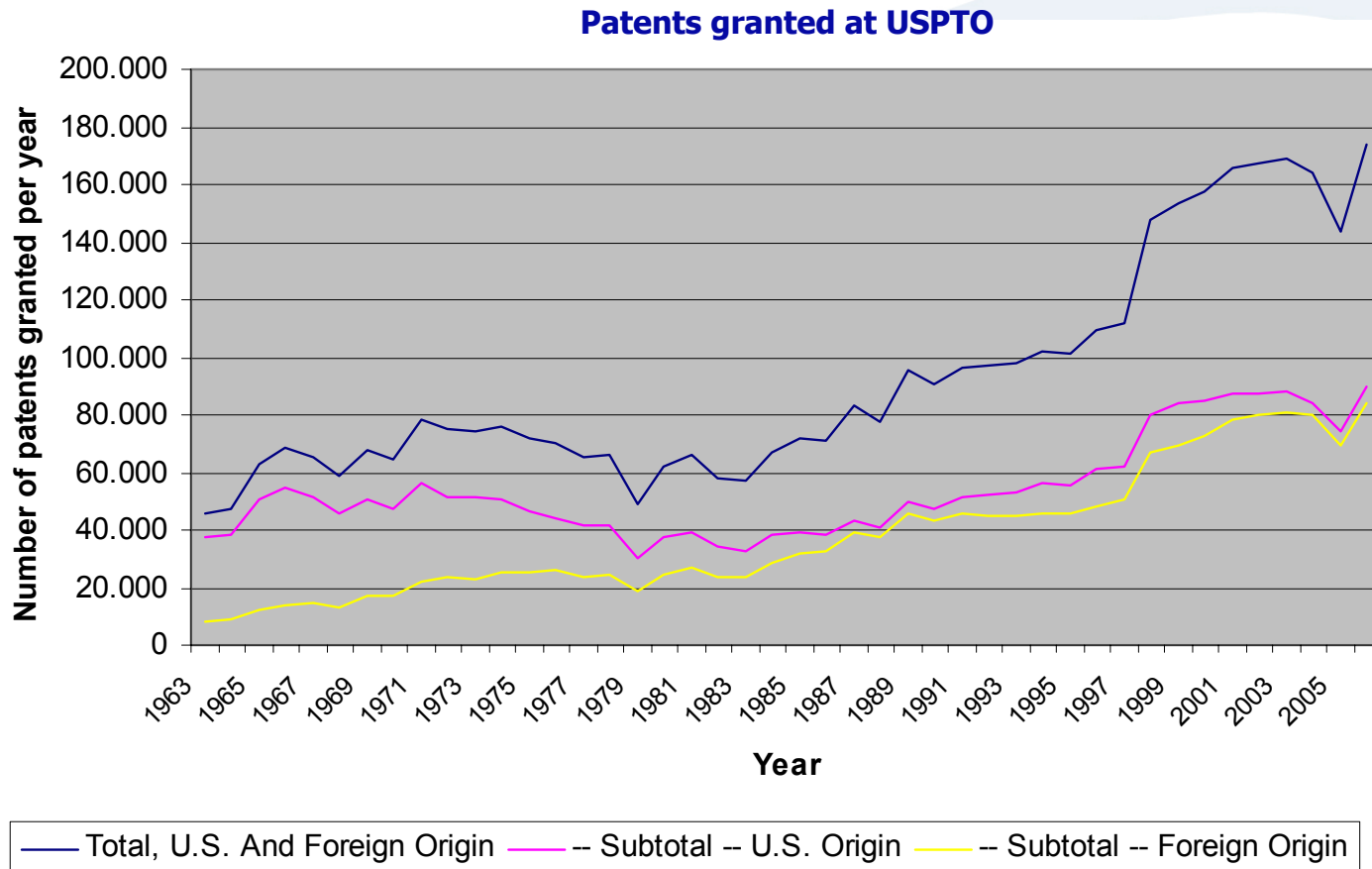
# A growing trend in IP value

(Financial Times del 11.1.2008 “**A bid for brands India and China move up the value chain**”)

As the economies of emerging markets boom and their biggest conglomerates grow into multinationals, **more and more of the new corporate giants in countries ranging from India to China, Russia and Brazil are looking to wring greater profits out of their respective industries. The quickest way to do that is to buy a global brand, particularly a premium or luxury one.** In the latest and probably most ambitious such move yet, the **Tata group has taken the lead in bidding for Ford's elite Jaguar and Land Rover marques.**

# A growing trend for IP "creation"

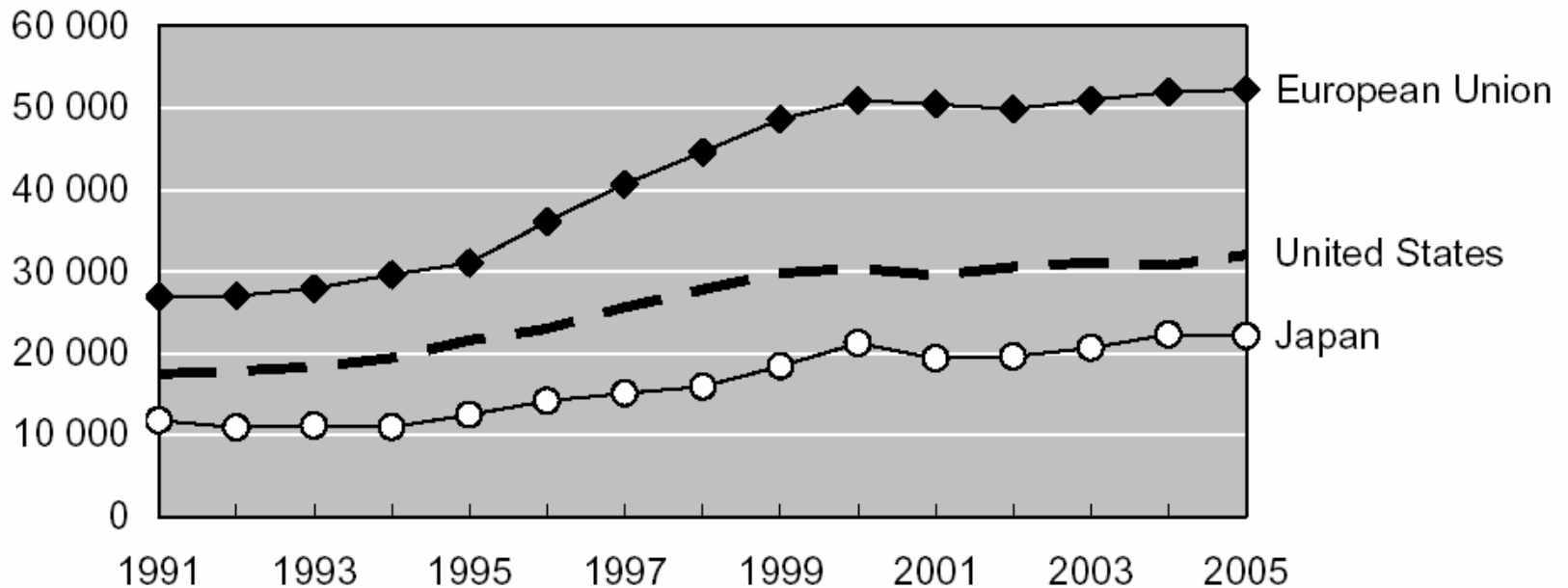
- The number of **new patents issued per year** experimented a significant growth in the last decade in the US



# A growing trend for IP "creation"

... as well as in Europe

Patents granted at EPO

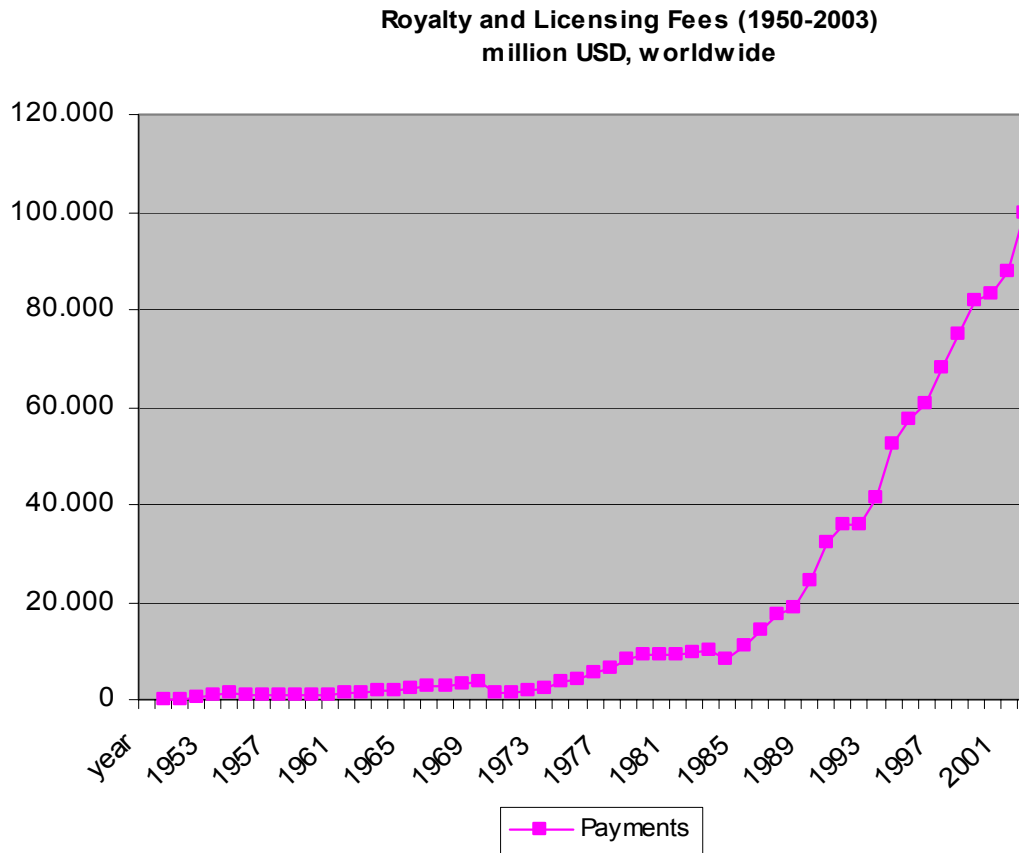


Source: OECD, 2008



# A growing trend in IP value

- The **number and value of transactions** involving IP also **experimented an exponential growth**



Source: Athreye and Cantwell (2005)

# The value of IP

**Distribution of patent value by patent use**

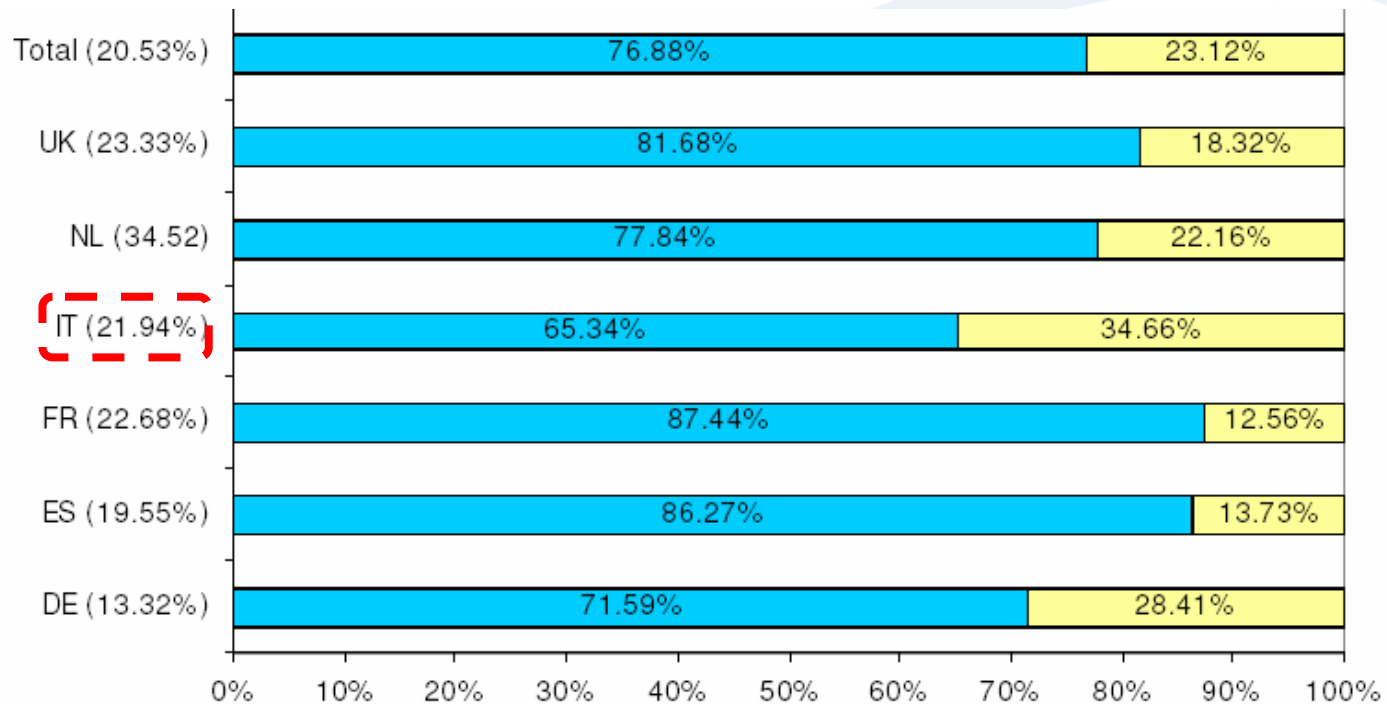
Patvalue	Internal use	Licensing	Cross-licensing	Licensing & Use	Blocking Competitors	Sleeping Patents	Total
<30k	5.71%	2.70%	5.19%	1.39%	10.44%	11.70%	7.23%
30k-100k	17.03%	13.93%	11.79%	10.80%	16.68%	20.71%	16.98%
100k-300k	21.04%	15.96%	16.98%	19.86%	19.72%	22.47%	20.54%
300k-1m	22.31%	24.72%	21.23%	27.87%	21.43%	20.79%	22.24%
1m-3m	15.34%	20.67%	20.28%	17.07%	17.15%	12.54%	15.76%
3m-10m	10.84%	12.81%	14.62%	13.59%	7.33%	6.90%	9.87%
10m-30m	4.04%	4.72%	4.72%	5.23%	3.35%	2.69%	3.80%
30m-100m	2.29%	1.57%	2.83%	3.48%	1.79%	1.35%	2.06%
100m-300m	0.60%	1.57%	0.94%	0.70%	0.70%	0.42%	0.67%
>300m	0.80%	1.35%	1.42%	0.00%	1.40%	0.42%	0.87%
<b>Total</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>

**Distribution of patent use by type of inventors**

	Internal use	Licensing	Cross-licensing	Licensing & Use	Blocking Competitors	Sleeping Patents	Total
Large companies	49.93%	3.03%	3.03%	3.22%	21.72%	19.06%	100.00%
Medium sized companies	65.62%	5.38%	1.20%	3.59%	13.90%	10.31%	100.00%
Small companies	55.78%	14.97%	3.89%	6.90%	9.62%	8.84%	100.00%
Private Research Institutions	16.67%	35.42%	0.00%	6.25%	18.75%	22.92%	100.00%
Public Research Institutions	21.74%	23.19%	4.35%	5.80%	10.87%	34.06%	100.00%
Universities	26.25%	22.50%	5.00%	5.00%	13.75%	27.50%	100.00%
Other Governm. Institutions	41.67%	16.67%	0.00%	8.33%	8.33%	25.00%	100.00%
Other	34.04%	17.02%	4.26%	8.51%	12.77%	23.40%	100.00%
<b>Total</b>	<b>50.53%</b>	<b>6.17%</b>	<b>3.06%</b>	<b>3.92%</b>	<b>18.83%</b>	<b>17.50%</b>	<b>100.00%</b>

# The value of IP

## Formal vs. informal collaborations among institutions. Distribution by country

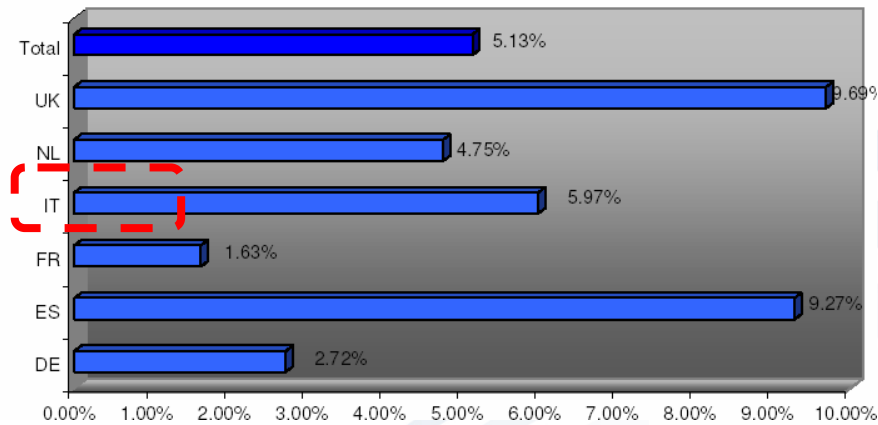


Share of formal and informal collaborations over the total number of "collaborative" patents

■ % Formal collaborations ■ % Informal collaborations

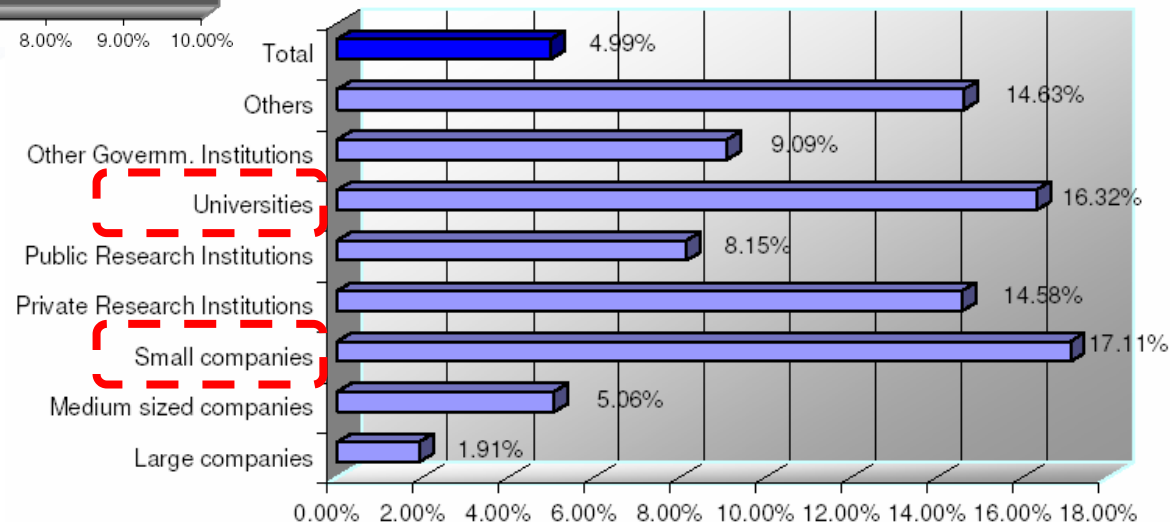
# The value of IP

- The process of **creation of new companies** from IP is increasing



Share of new firms from patented inventions by EU country

Share of new firms from patented inventions by type of inventors' employer



- Open Business model : the new paradigm
- The increasing role and value of IP
- **Managing IP: the critical issues**

# Managing IP: the critical issues

- Mastering of the IP process within firms
- IP evaluation
  - Techniques and methods
  - IAS
- Negotiation skills (collaborative champions, gatekeepers, etc.)
- Legal issues



In a global context

- Research and consultancy activities in the evaluation of IP assets
- Four editions of the Intellectual Property Management Master Course
- Training course for patent attorneys (next year trademarks)
- MIP ICE Course IDEA CINA