



# *Session 1: Technology, Innovation and IPRs*

## India Global Summit on MSMEs, 2012

Dr. Sacha Wunsch-Vincent, Senior Economist, WIPO

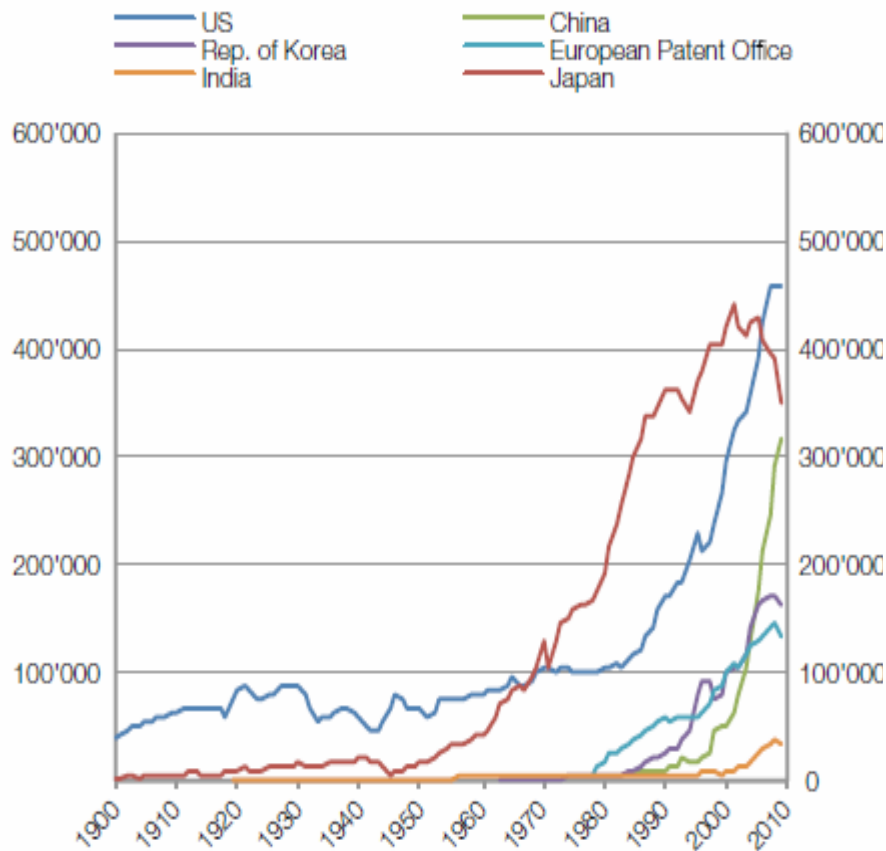
**New Delhi  
October 30, 2012**

# Outline of the talk

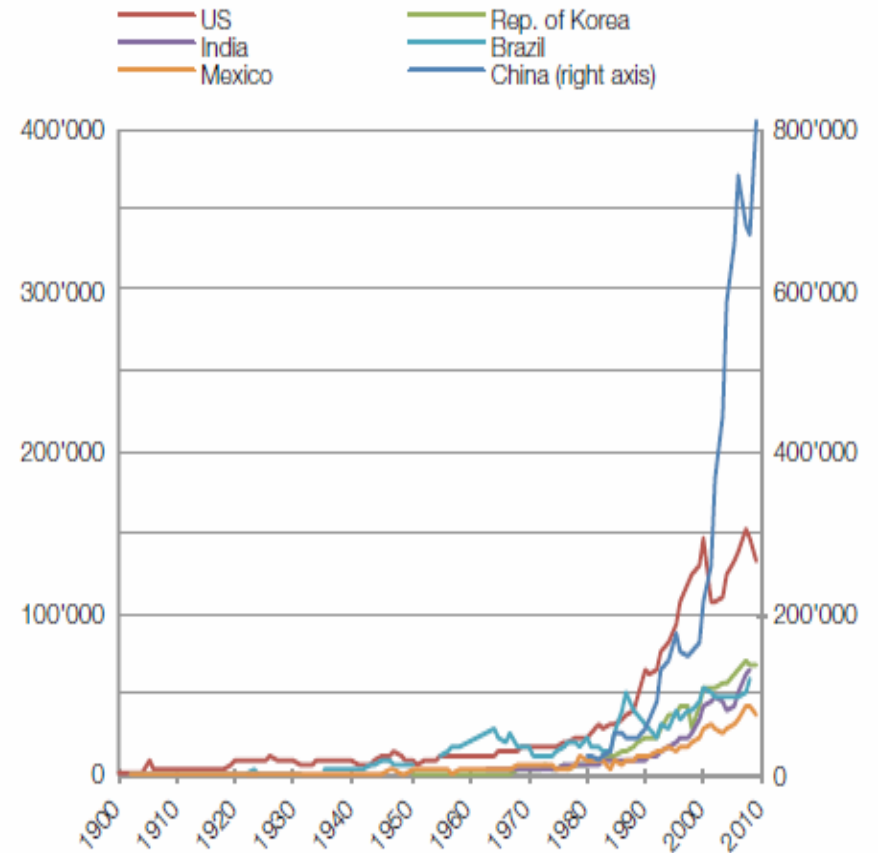
1. IP in evolution – global view
2. India in perspective
3. Knowledge gaps as they relate to India

# 1. IP in evolution - The increase in the demand for IP

Patent applications at selected offices, 1900-2010



Trademark applications at selected offices, 1900-2010



Source: WIPO Statistics Database, October 2011 [http://wipo.int/pressroom/fr/articles/2011/article\\_0028.html](http://wipo.int/pressroom/fr/articles/2011/article_0028.html)

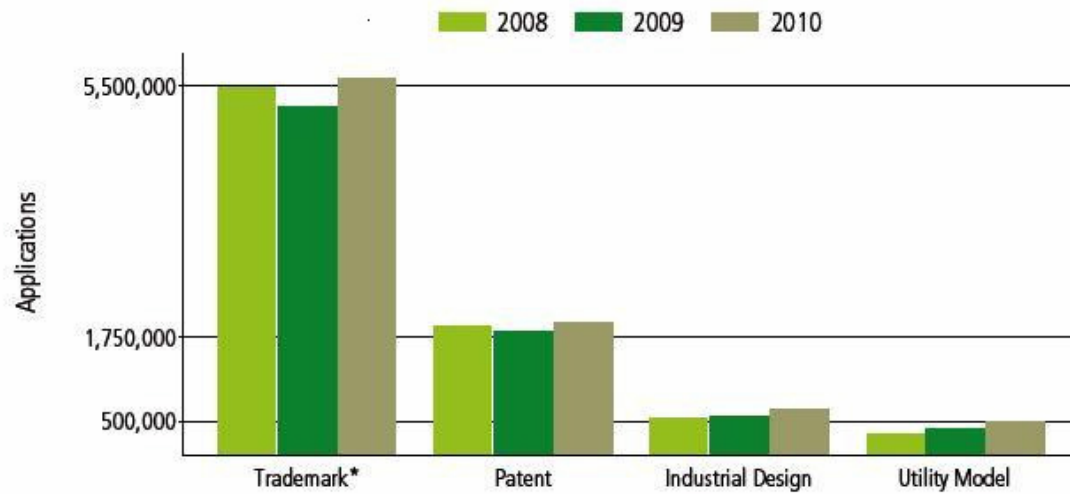
# In 2010, turnaround in the demand for IP despite economic turmoil and continued strong growth in 2011

- IP filings worldwide rebounded in 2010 after experiencing a considerable drop in 2009
- 2011 sustained continued growth
  
- Nearly 2 million patents applied for
  - In 2010, the Chinese Patent Office became the second most important office in the world
  
- About 3,5 million trademark applications filed

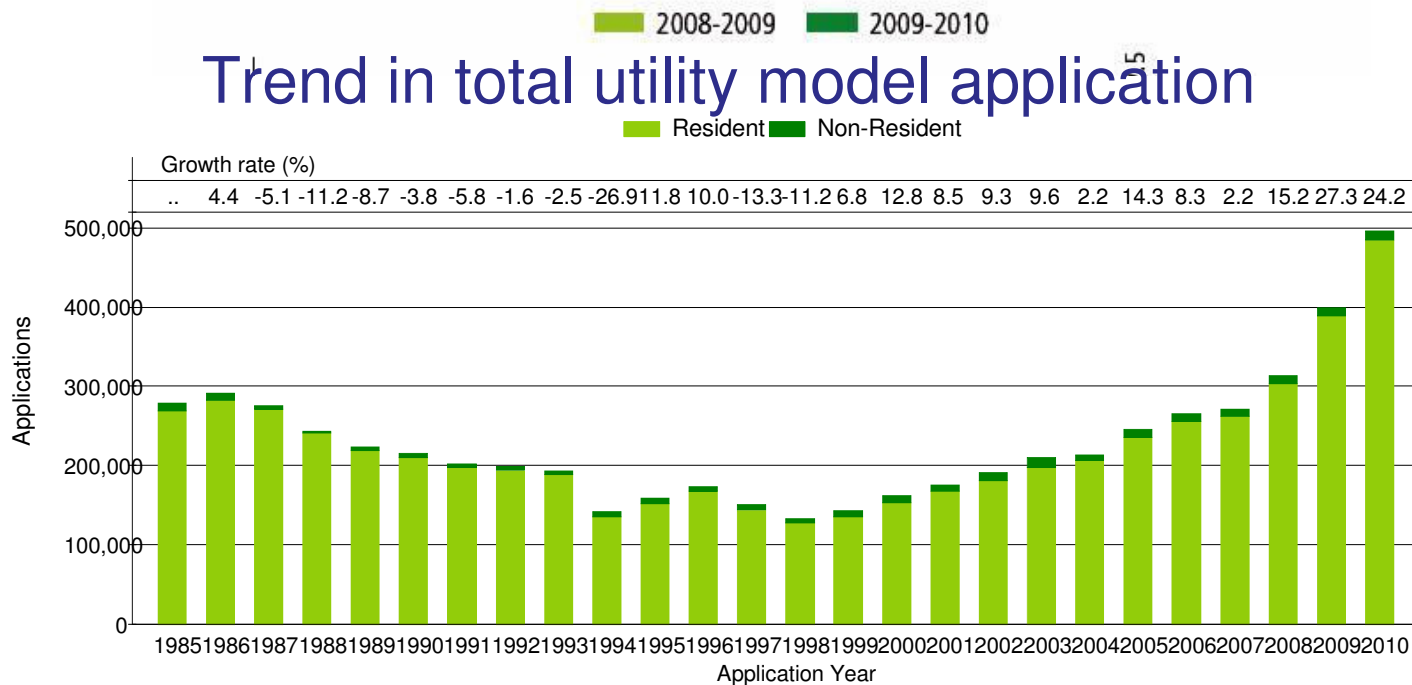
# Drivers of the patent surge

- Growing R&D and growing privatisation of R&D
- IPRs holders seeking broader geographical coverage, leading to 'duplication'
- Greater propensity to apply for protection?
- Increasingly, universities seek patents for inventions arising from publicly funded research
- New actors such as Rep. of Korea, China, and to some extent India [from 3 to 5 countries?]

## A.1. TRENDS IN APPLICATIONS

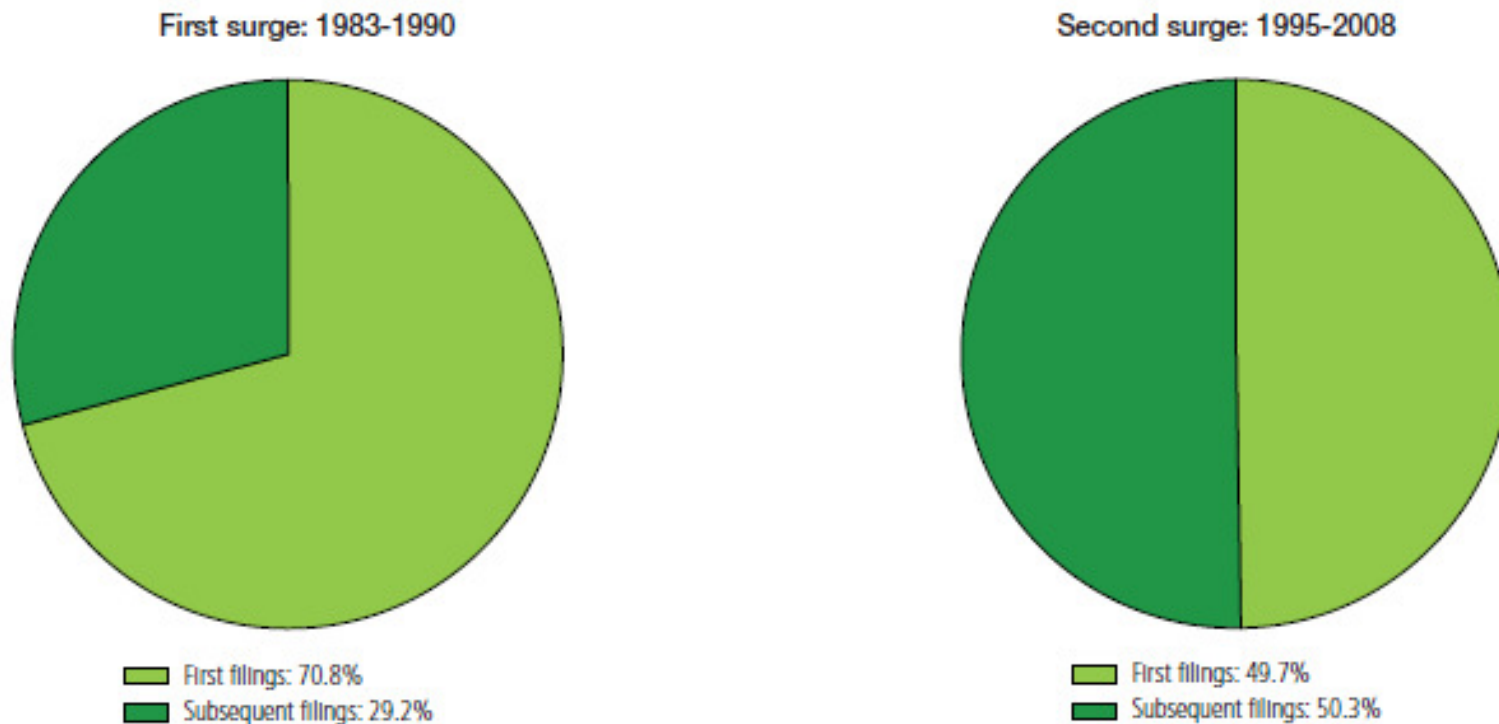


## Trend in total utility model application



# The demand for IP has internationalised: Multiple protection of one and the same across globe

Figure 5 Contribution of first and subsequent filings to total growth



Source: WIPO Statistics Database, October 2011

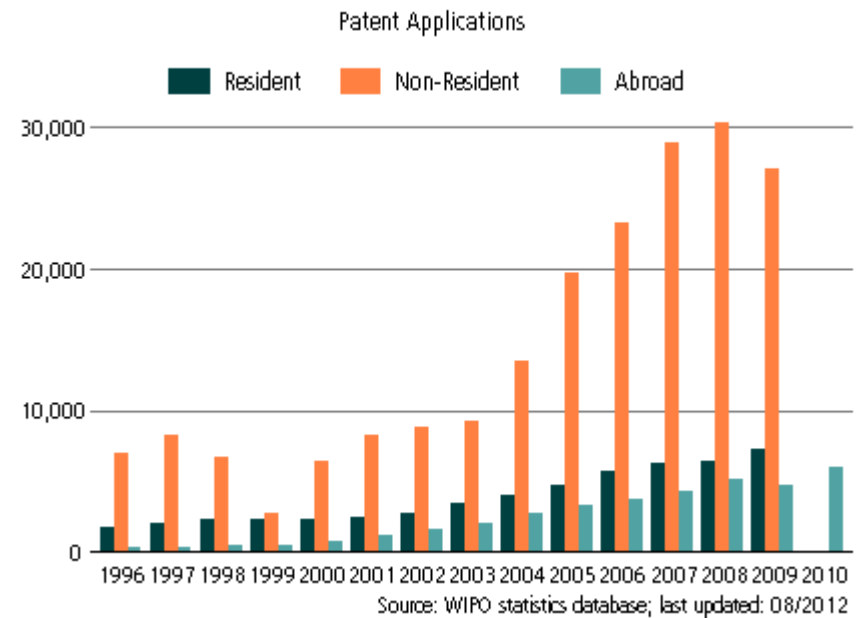
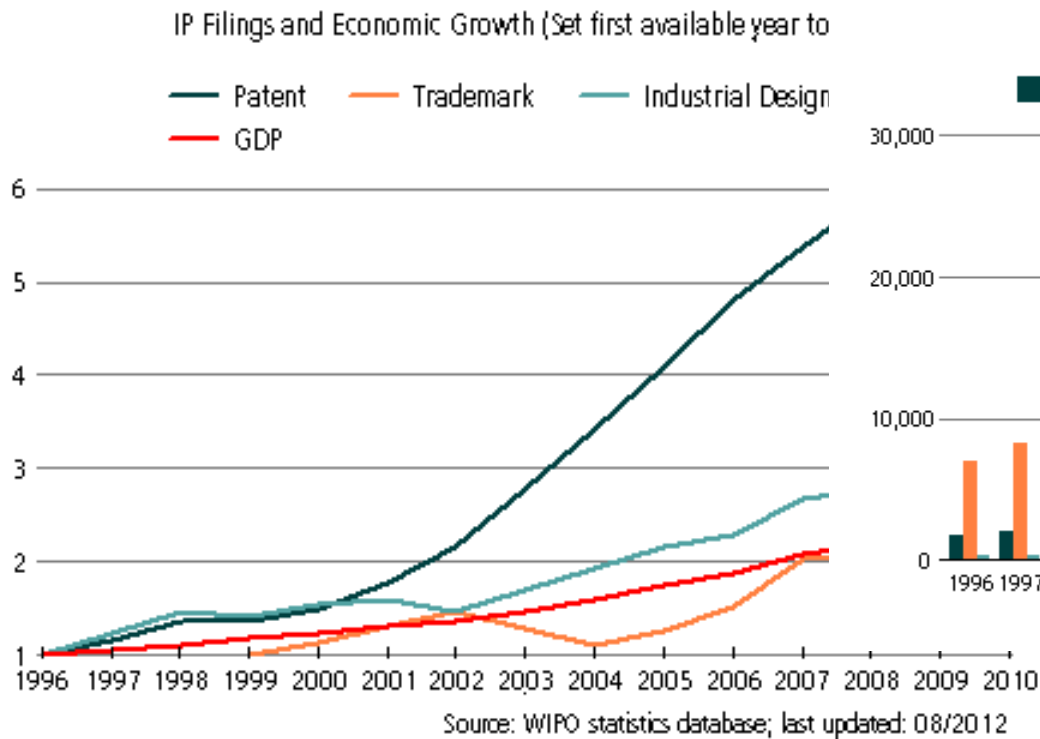
Source: WIPO (2011)

# Different structure of IP use depending on developing country in question

- High share of foreign patent filings relative to national
- Reliance on **utility models, when available**
- Mostly **national IP filings**
- More reliant on **trademarks, collective marks and geographical indications**
- **At times important contribution of the copyright sector**



## 2. India in perspective

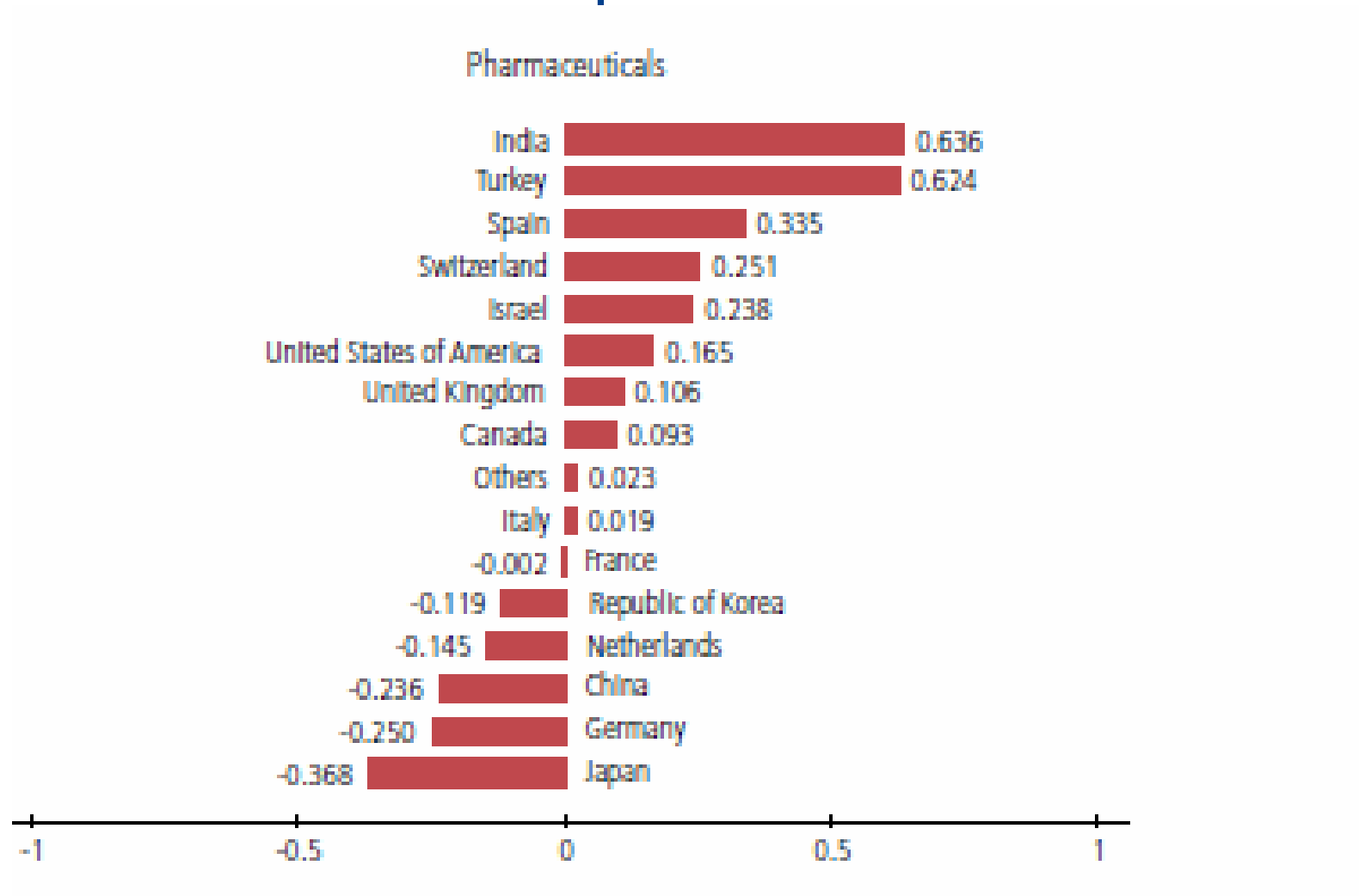


# Patent applications by office

Office	Application Year		
	2009	2010/ 2011	Share of total (%): 2010
<b>Total</b>	<b>1'846'000</b>	<b>1'979'000</b>	<b>100.0</b>
United States of America	456'106	490'226	24.8
China	314'604	391'177	19.8
Japan	348'596	344'598	17.4
Republic of Korea	163'523	170'101	8.6
European Patent Office	134'580	150'961	7.6
Germany	59'583	59'245	3.0
Russian Federation	38'564	42'500	2.1
India*	34'287	42000 (2011) 20% resid.	1.9
Brazil	21'944	22'686	1.1

Indian Resident filings: 2009: 7262 and 2011: 8400

# India and Turkey show an above average concentration in pharma / biotech



# 3. Knowledge gaps: How to make IP more relevant ?

- Innovation is an intrinsic part of the Indian DNA
  
- Evidence needed to design smart IP policies

# Who could be filing more?

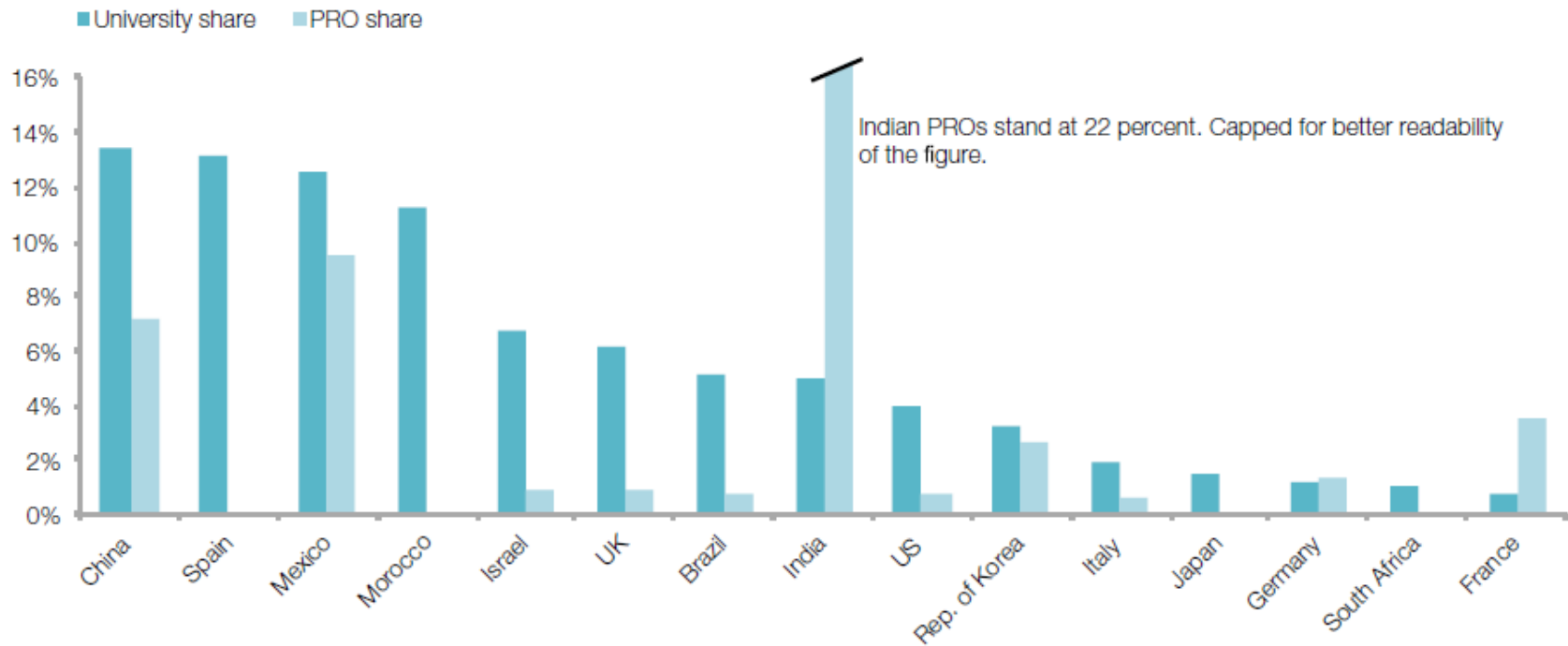
- Largely we lack precision in understanding existing and potential IP use
- We know of highly dynamic Indian IT services and pharma firms with active behavior (including abroad)
  - Are they using the system to the fullest?
  - IT services firms in particular- what is role of IP?
- Who are others? What is the issue with small or medium sized enterprises? Are they more prone to file for trademarks or designs?

# How to approach limited industry-science linkages?

- Around two-thirds of total R&D in India is publicly funded.
- We know of public organisations with heavy filing profile.
- High share of public research organizations in total patenting of around 22 percent – one of the highest shares in the world
  - How can private investments into R&D be mobilized?
  - How can public research be harnessed for innovation? In particular, how can the institutional framework for transferring university and PRO patents for further commercial development and societal benefit be improved

# University and PRO patenting is prominent in China and India

University and PRO patent applications as a share of total national applications for selected countries (percent), for different time spans



Source: WIPO Statistics Database, June 2011

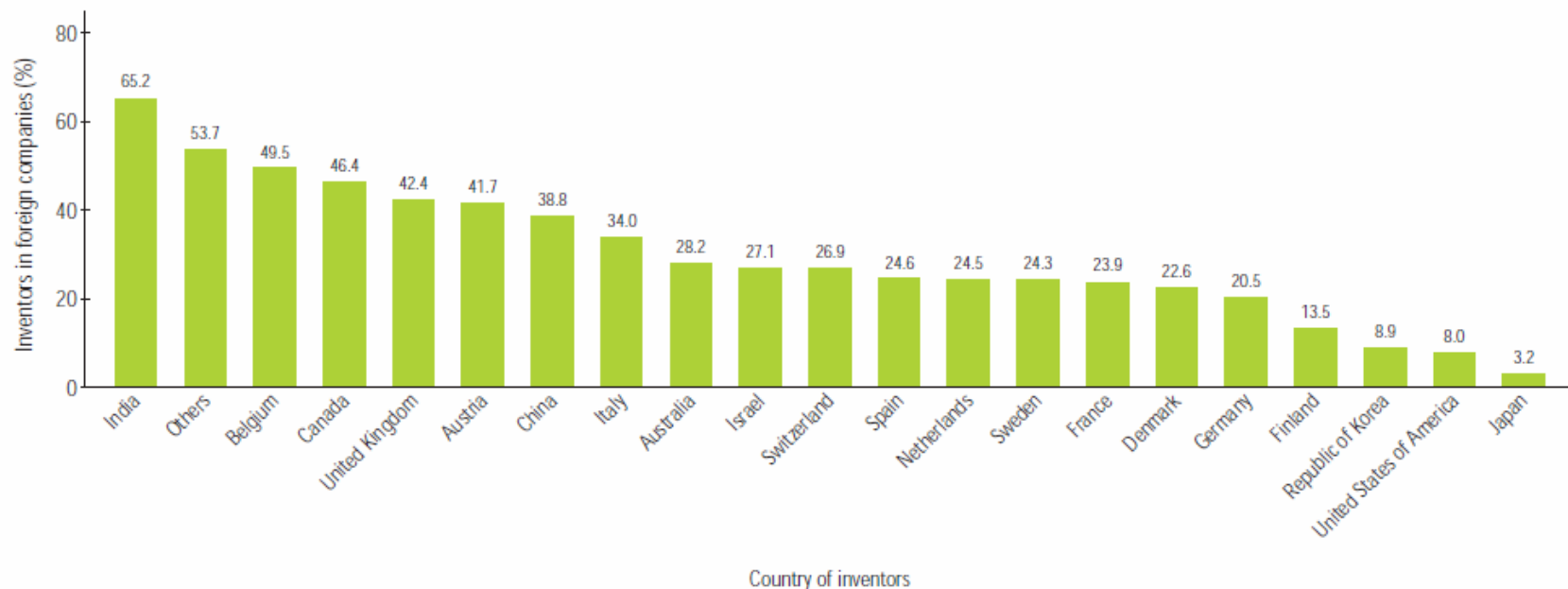
# We need a better understanding of Indian filing behavior abroad

- Complicated by lack of data on patent families at WIPO level
- We know of low level of patent filing abroad
- When Indians use the PCT, then with one of the highest average national phase entries among emerging economies
- We know of low trademark filing abroad [WIPO Madrid system and its putting in place might help]

# We need a better understanding of Indian inventor profiles and mobility

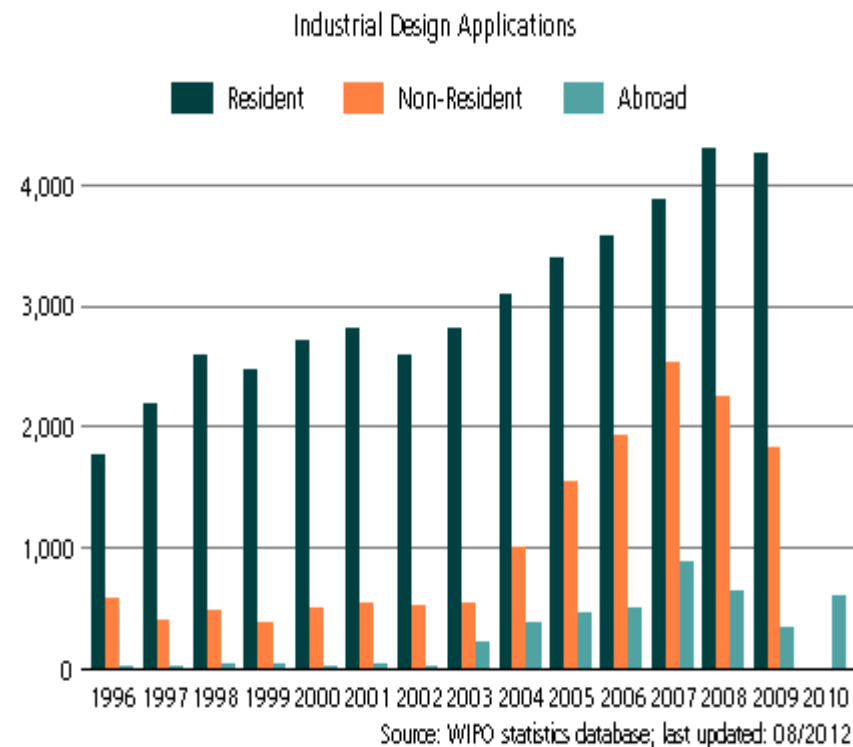
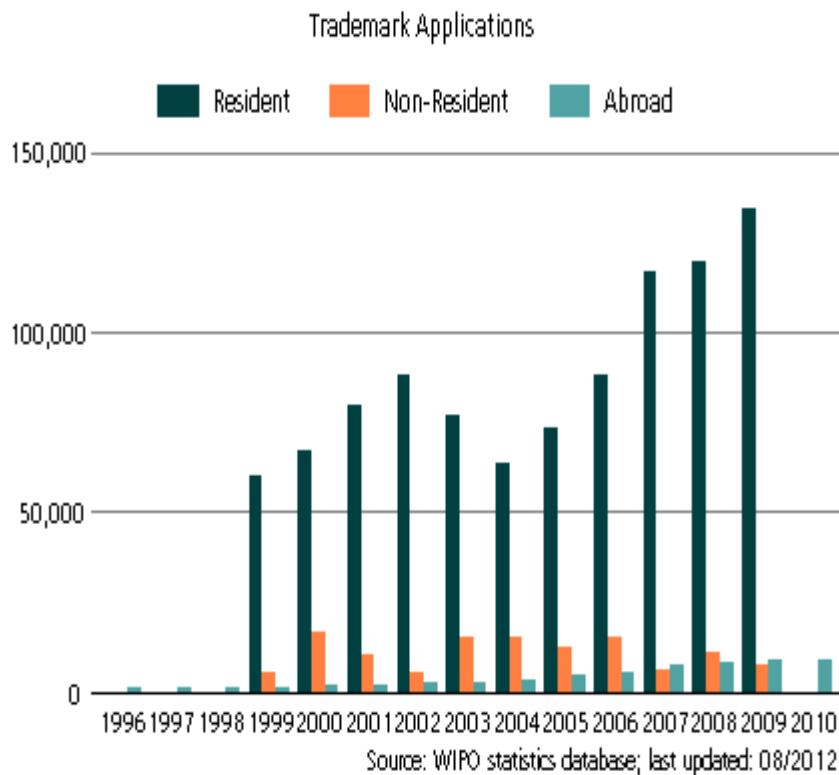
- A majority of Indian (65%) inventors named in PCT applications were associated with foreign PCT applicants .

Figure A.6.2 Inventors in foreign-owned PCT applications (%), 2010



Note: The data refer to the international phase of the PCT procedure and are based on publication date.  
Source: WIPO Statistics Database, October 2011

# We need a better understanding of design & branding potential and its impacts



# How to make reconcile IP and grassroots innovation?

- Little systematic evidence of what drives innovation, creativity and creates knowledge among the poor, grassroots innovators, the informal economy or within certain sectors
- Available measures do not capture its scope and breadth (what are inputs and outputs? What are impacts?).
- What are effective forms of IPRs to encourage incremental innovation, adaptation, creativity?

**Indian leadership is key to putting this issue on policy and measurement agenda**

**Thank you!**

[Sacha.wunschvincent@wipo.int](mailto:Sacha.wunschvincent@wipo.int)

Reports

[www.globalinnovationindex.org](http://www.globalinnovationindex.org)

[http://www.wipo.int/econ\\_stat/en/economics/wipr/](http://www.wipo.int/econ_stat/en/economics/wipr/)