



# **Economic Considerations for Utility Models Protection**

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# Presentation outline

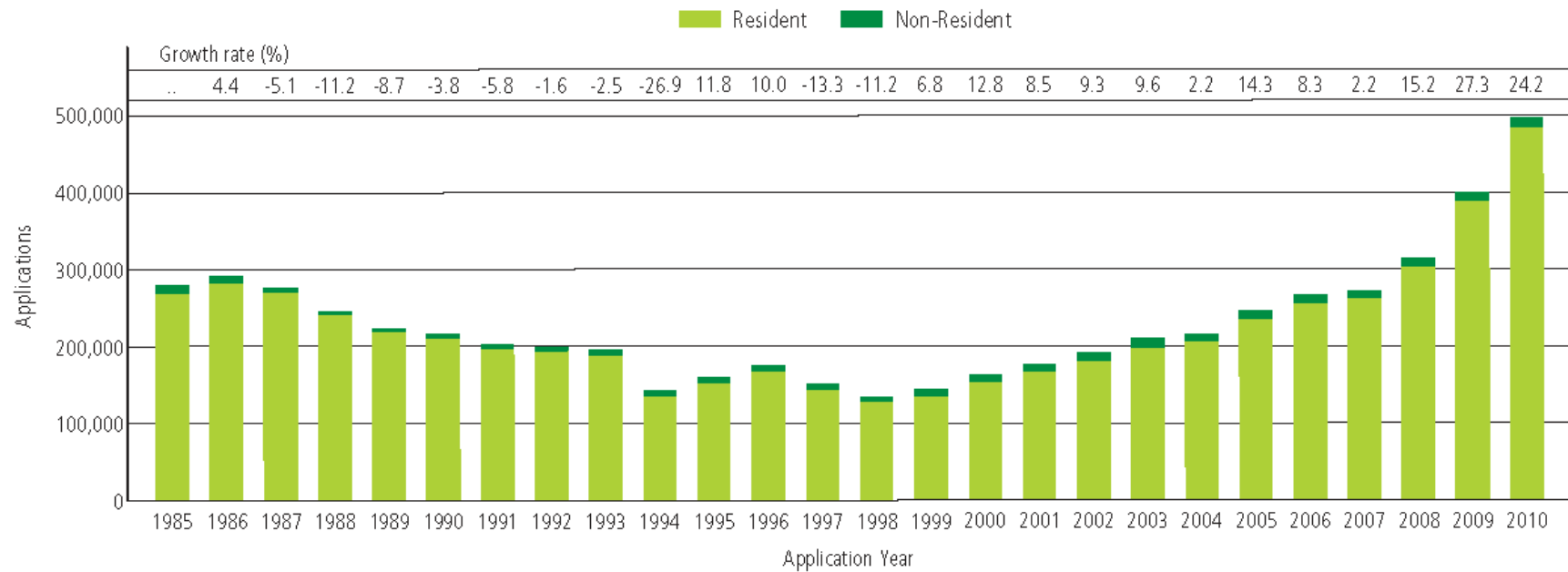
- What are the important questions to ask?
- 3 key points to consider:
  - IP protection is a policy to innovate
  - Link between IP protection and development
  - Design of utility model matters
- Where do we go from here?

# Important economic questions

- Does the government need to intervene?
- How would this policy affect the economy?
  - Firm performance
  - Competition issues
  - Economic growth: short and long term
- What is the counterfactual?

# Increasing use of utility model protection

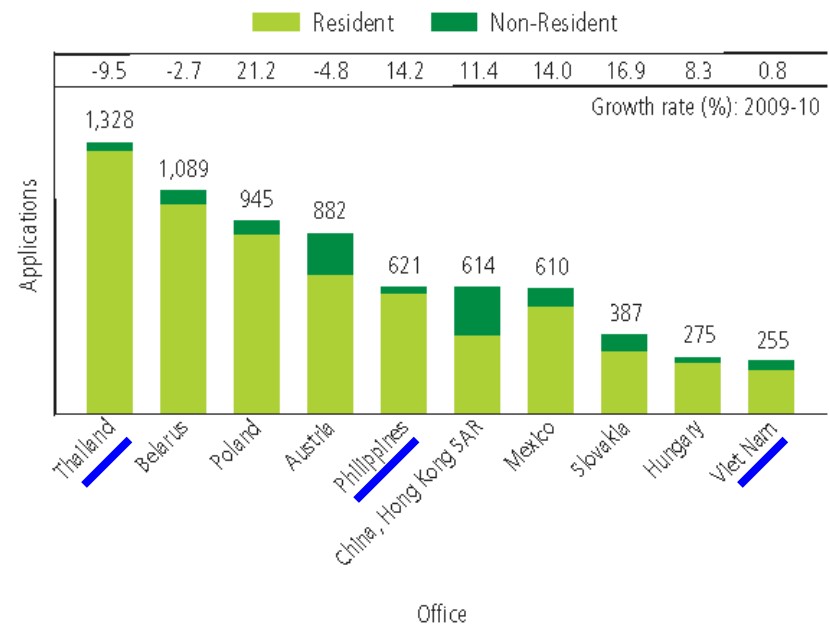
Figure A.14.1.1 Trend in total utility model applications



Note: The world total is a WIPO estimate covering around 60 patent offices (see Data Description).  
 Source: WIPO Statistics Database, October 2011

# Top 20 Offices

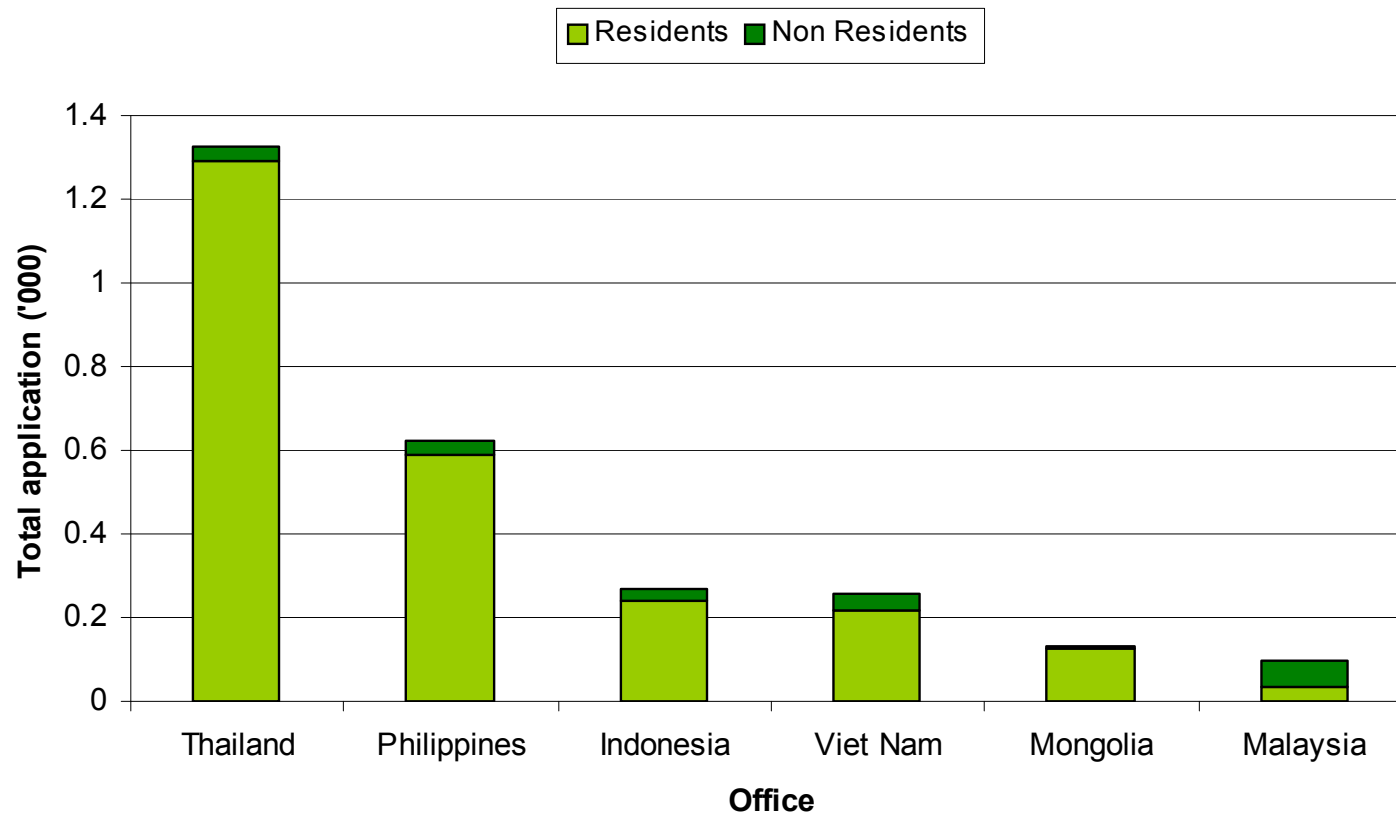
Figure A.14.2.1 Utility model applications by office: top 20 offices, 2010



Source: WIPO Statistics Database, October 2011

# Utility model applications in six offices

Utility model applications in selected offices, 2010\*



Note: Data for Indonesia and Malaysia are based on latest year available, 2006 and 2008 respectively.

Source: WIPO Statistical Database, 2011.

## 3 key points to consider

- IP protection is one of several government policies to encourage innovation
- The impact of IP protection on innovation varies according to several factors
  - At country level
  - At firm level
- Design of IP protection shapes the innovation incentive in the country

## Key consideration #1

IP protection is one of several government policies to encourage innovation



# Why provide IP protection?

- Market failures identified:
  - Insufficient production of inventive and creative activities
  - Asymmetry of information
  
- Information (and knowledge) goods have traits of *public good*:
  - Non-rivalry
  - Non-excludability, to a certain extent

# A policy to promote innovation

- Can distinguish between 3 general types:
  - Publicly funded innovation carried out by public institutions
    - *Examples: universities, public research organizations*
  - Publicly funded innovation carried out by private agents
    - *Examples: R&D subsidies or tax credits, government procurements, prizes*
  - IP system
    - *Examples: patent, utility models, industrial design, etc.*
  
- All things considered: IP policy leaves the decision of who, what, where and how R&D investments are spent to the market

## Key consideration #2

The impact of IP protection on innovation varies according to several country-specific factors

# IP and economic growth: theory

- Study of economic growth process suggests that technological progress is key for long-term growth
- But: cross-country comparison suggests that countries respond differently to IP protection
- Basic incentive effects of IP protection should work everywhere,
  - Market failure exists;
  - But initial conditions across countries vary

# Important set of conditions

- Absorptive capacities
  - Set of conditions that enable firms to learn about existing innovation from external sources
  
- Capacities to innovate
  - Set of conditions that enable firms to generate innovation themselves
  
- Economies that are able to build sufficient absorptive capacity are more likely to benefit from exposure to foreign technologies and may, eventually, develop their abilities to generate new technologies on their own.

# IP and economic growth

- Some influential factors:
  - Country-level:
    - Countries have different innovative capacities
    - Difficult to establish causality
      - Isolating the impact of IP protection difficult
  - Firm-level:
    - Industry and sector-specific differences
    - Competition intensity
    - Product life cycle

# Country-specific factors

- Basic factors:
  - Macroeconomic stability
  - Quality of infrastructure
  - Pro-business and investment climate
  
- Specific to innovation
  - Presence of universities that do research
  - Abundance of high skilled labor
  - Culture of innovation

# Firm-specific factors

- Firms rely on several methods to protect their innovation, IP is one of them
  - Not every industry/sector would benefit from utility model protection
- IP protection affects firms performance and behavior
  - IP rights encourages firms to invest in innovative activities
  - But: IP rights can curtail innovation by making it difficult for future follow-on innovation



## Key consideration #3

Design of IP protection shapes the innovation incentive in the country

# Tradeoffs when using IP policy

- IP protection provides exclusive rights to IP holders for a limited time period
  
- Tradeoff for public:
  - Privatize information at the expense of limiting public's use of that information;
  - But: IP holder can benefit from commercialization of invention, helps recoup initial investment and likely to promote further innovative activities
  
- Tradeoff for IP holder:
  - Disclosure of information related to invention;
  - But: public can learn from the disclosed invention; reduces duplicative R&D activities and perhaps improve on disclosed activity

# IP instruments are not discrete

- Different types of IP instruments, and their use may overlap

**Table 2.1: Main forms of IP rights available to innovators**

IP right	Subject matter	Acquisition of right	Nature of right: prevent others from...
Patents and utility models	Inventions that are new, non-obvious and industrially applicable	Granted by government authority, typically following substantive examination	... making, using, selling, offering for sale or importing
Industrial designs	Industrial designs that are new and/or original	Granted by government authority upon registration, with or without substantive examination	... making, selling or importing
Copyright	Creative expressions	Automatically, upon creation	... reproducing and related acts
Plant variety rights	Plant varieties that are new, distinct, uniform and stable	Granted by government authority following substantive examination	... using and multiplying propagating materials
Trade secrets	Any valuable confidential business information	Automatically, upon creation	... unlawfully disclosing

Note: This table offers an intuitive overview of the main forms of IP and, only incompletely, describes the legal character of these rights, as established through national laws and international treaties. For a detailed legal introduction, see Abbott *et al.* (2007). Trademarks are not included here, as explained in the text.

# Designing the IP instrument

- Government's design the of the IP instrument needs to balance the interest between the public and the private
  
- Some means include:
  - Design of what can be protected by different IP instruments, rights conferred and applicable exceptions;
  - Fee structure of IP instrument;
  - Quality of granted IP rights

# Refresher: 3 key points to consider

- IP protection is one of several government policies to encourage innovation
- The impact of IP protection on innovation varies according to several factors
  - At country level
  - At firm level
- Design of IP protection shapes the innovation incentive in the country

# Where do we go from here?

- Questions remain relevant:
  - Does the government need to intervene?
  - How does this policy affect economic activities?
  - What is the counterfactual?
  
- Need: more research work on utility model protection would be useful
  - Make IP statistics available
  - Encourage studies on the effect of utility model protection



**Thank you!**

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