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Realities of Global IP Policy

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The Information Technology and Innovation Foundation (ITIF) is a Washington, D.C.-based think tank at the cutting edge of designing innovation policies and exploring how innovation will create new opportunities to boost economic growth and improve quality of life. ITIF focuses on:

- Innovation “verticals”: energy, life sciences, telecom, manufacturing, and Internet and IT transformation
- Innovation “horizontal”: trade, tax, talent, and tech policy
- “Innovation economics” as an alternative to mainstream economics

■ Positions on Global IP Policy Depends on Values and Goals

- Is the goal to:
 - help people in developing nations regardless of impacts on rest of world?
 - maximize U.S. welfare?
 - maximize global welfare?
- Advocates have different goals, but seldom do they make them public.

■ Positions on Global IP Policy Depends on Values and Goals

- As economist Richard Lipsey notes, “There is nothing in neoclassical welfare economics... to tell us the optimum position on this trade-off” (between IP protection and future innovation and weak IP protection and current consumption).

■ What's Missing in the Debate?

- Neoclassical economics for trade is based on maximizing allocation efficiency by letting comparative advantage reveal itself (e.g., coffee, oil, low wage industries).
- Innovation Economics support for trade is based on maximizing innovation through competition and attaining scale in low marginal cost, high fixed cost industries.

■ Most Policymakers Do Not Rely on “Rational Analysis”

- Predominant view in the development literature is that nations achieve growth through moving up the value chain.
- In fact, growth comes from productivity and innovation across the board in all industries, not just selected export industries.

■ The Evidence on IP and Innovation in Developing Nations

- Perceptions of strong IPR abroad have a positive effect on incentives to transfer technologies abroad.
- At least 25 percent of American and Japanese high-tech firms refused to direct invest or joint venture in developing countries with weak intellectual property rights. (World Bank's International Finance Corporation)

■ The Evidence on IP and Innovation in Developing Nations

- Strengthening IPR protection has been connected with increased inflows of FDI. (Cavazos, Cepeda, Lippoldt and Senft)
- Stronger patent rights in developing countries give enterprises from developed countries a greater incentive to research and introduce technologies appropriate to developing countries.
- Diwan and Rodrik have demonstrated that weak patent rights in developing countries lead enterprises from developed countries to introduce less-than-best IPR practice technologies to developing countries.

■ The Evidence on IP and Innovation in Developing Nations

- While IP theft may help countries in the short-run, it stifles incentives to embark on home-grown technology development. Retarding countries' abilities to develop their long-term capability.
- Countries in which “uncertainties in the IP environment persist” are “likely to fall short of their innovation potential.” (Grossman and Helpman)

■ **Developed Nations Drive Global Innovation**

- The reality is that developed nations drive innovation, produce the most patents and invest the most in R&D. Developing nations benefit from a strong innovation system in developed nations.
- We see this in patents for clean energy with the leaders being developed nations.

■ Clean Energy Patents per Million Residents

Rank	Country	Clean Energy Patents Per Million Residents
1	Denmark	27.04
2	Japan	26.52
3	Sweden	24.45
4	Germany	23.24
5	Norway	21.52
6	Switzerland	19.05
7	Finland	17.70
8	Austria	16.99
9	South Korea	15.37
10	Netherlands	14.78
11	Israel	12.92
12	Singapore	11.00
13	France	10.95
14	United States	8.88
15	Australia	8.49
16	Canada	7.90
17	Iceland	7.43
18	Belgium	7.09
19	United Kingdom	6.06
20	New Zealand	5.21
21	Ireland	4.64
22	Italy	4.26
23	Slovenia	4.23
24	Spain	3.83
25	Luxembourg	3.35

■ Clean Energy Patents per Million Residents, Cont'd

Rank	Country	Clean Energy Patents Per Million Residents
26	Hungary	1.63
27	Estonia	1.49
28	Czech Republic	1.44
29	Latvia	1.33
30	Slovak Republic	1.11
31	Greece	1.03
32	Poland	0.68
33	Malaysia	0.82
34	Bulgaria	0.75
35	Portugal	0.68
36	Croatia	0.68
37	Romania	0.62
38	Russia	0.48
39	United Arab Emirates	0.43
40	South Africa	0.41
41	China	0.36
42	Chile	0.35
43	Kazakhstan	0.32
44	Chinese Taipei	0.31
45	Ukraine	0.31
46	Tunisia	0.28
47	Turkey	0.26
48	Saudi Arabia	0.22
49	Moldova	0.21
50	Brazil	0.20

Source: Calculated using data from the OECD Patent Database (accessed on June 4, 2012)

■ Weak IP is an Intentional Strategy

- Unfortunately, many developing nations use weak IP as a core economic development strategy. This includes:
 - Forced technology transfer
 - weak patent systems
 - cyber-theft
 - industrial espionage

■ Intellectual Property Rights Indicators

Section Weight	Indicator	Data Type	Source	Indicator Weight
40%	Protection			
	2005 Park Index	Rating	Walter G. Park	25%
	IP Protection Rating	Rating	WEF	15%
30%	Enforcement			
	Legal and Political Environment	Rating	Property Rights Alliance	15%
	Integrity of the Legal System	Rating	PRS Group	15%
30%	IP Theft			
	Software Piracy Rate	Unlicensed Software % of Total Installed	Business Software Alliance/IDC Corporation	15%
	USTR 301 Watch List	Priority Watch List/ Watch List/ Not Listed	United States Trade Representative	15%

Source: *The Global Innovation Policy Index*, ITIF and the Kauffman Foundation, 2012

■ Country Ranks for Intellectual Property Rights Protections

Upper Tier	Upper-Mid Tier	Lower-Mid Tier	Lower Tier
Australia	Chile	Bulgaria	Argentina
Austria	Chinese Taipei	China	Brazil
Belgium	Cyprus	Greece	Indonesia
Canada	Czech Republic	India	Peru
Denmark	Estonia	Lithuania	Philippines
France	Hong Kong	Malaysia	Russia
Finland	Hungary	Mexico	Thailand
Germany	Iceland	Romania	Vietnam
Japan	Israel	Turkey	
Ireland	Italy		
Luxembourg	Latvia		
Netherlands	Malta		
New Zealand	Poland		
Norway	Portugal		
Singapore	Slovak Republic		
Sweden	Slovenia		
Switzerland	Spain		
United Kingdom	South Africa		
United States	South Korea		

Source: *The Global Innovation Policy Index*, ITIF and the Kauffman Foundation, 2012

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