



# IP Protection, Innovation & Jobs

How IP Helps Individuals

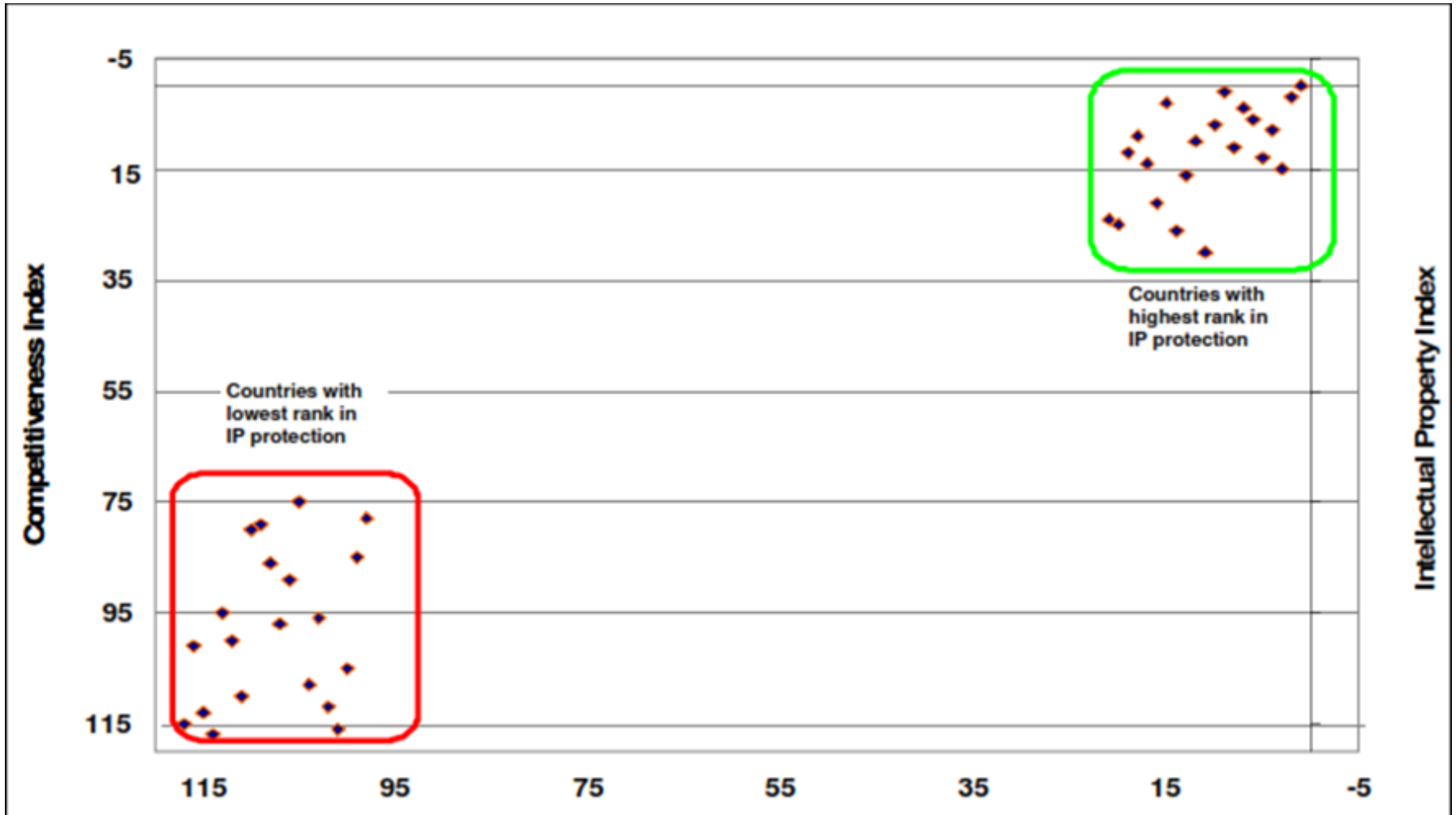
Dr. Kristina M. Lybecker  
The Colorado College  
6 October 2016

# IP Protection, Innovation & Jobs

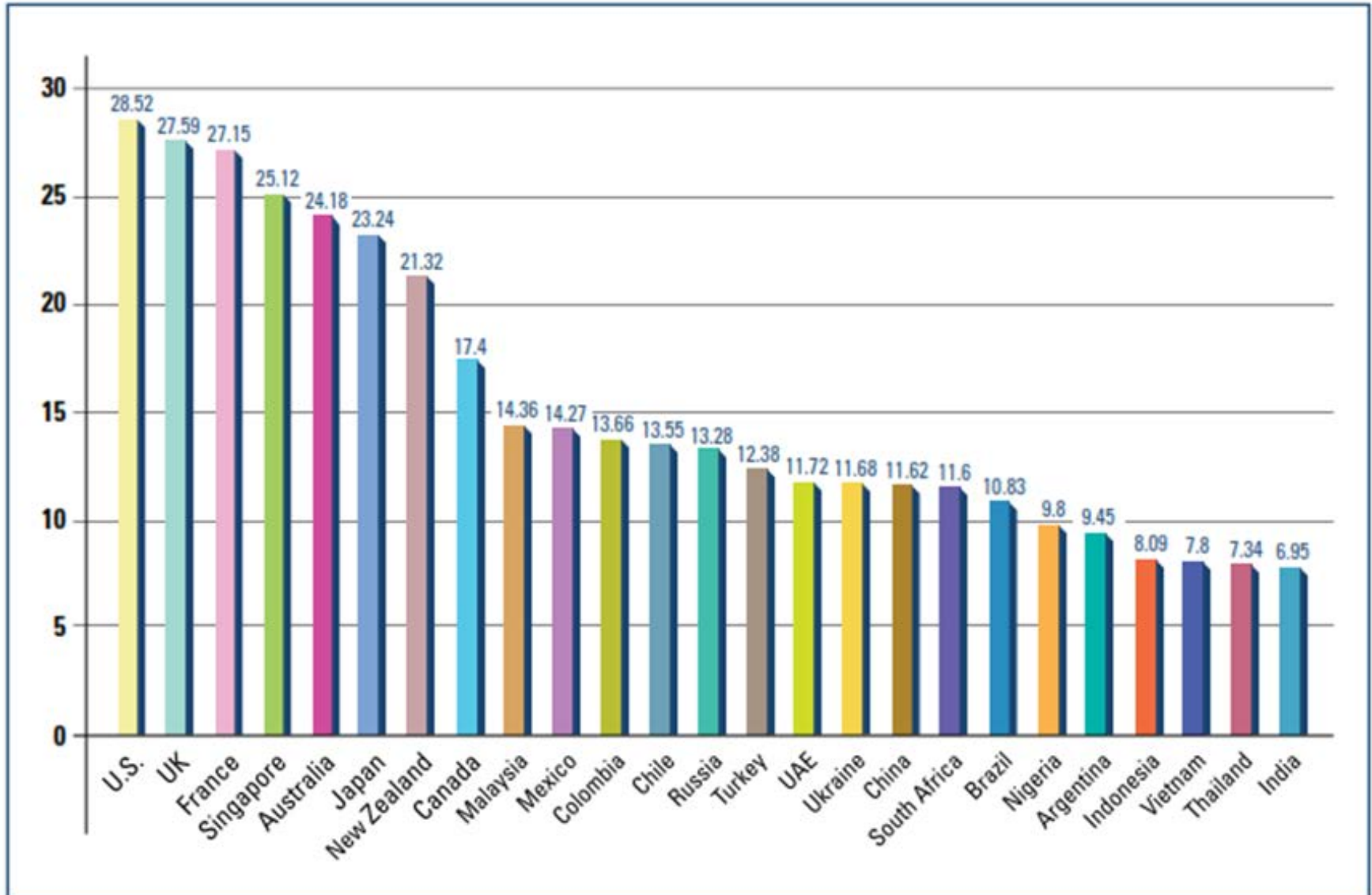
- Innovation
- Job Creation
  - Direct & Indirect
- Higher wages
- Larger exports
- Pharmaceutical Industry specifics
  - Increased drug availability
  - Increased longevity
  - Increased quality of life
  - Faster launch times
  - Incremental Innovation



# IP Protection & Int'l Competitiveness



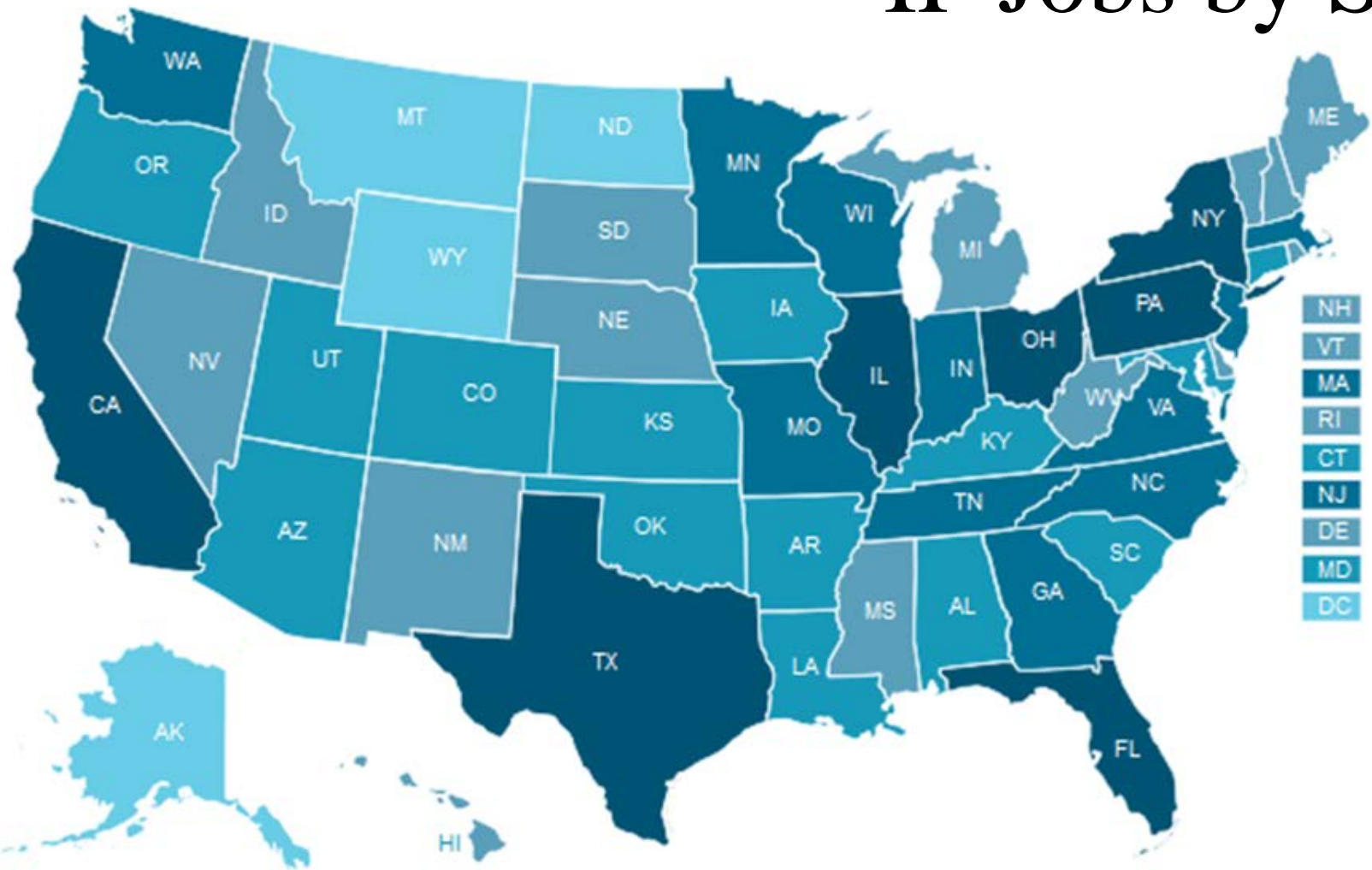
# Overall IP Score by Country



# IP Protection & Innovation

	<b>GIPC</b>	<b>Innovation Rank</b>		<b>GIPC</b>	<b>Innovation Rank</b>
US	28.52	3	US	28.52	3
UK	27.59	16	Japan	23.24	4
France	27.15	12	Singapore	25.12	7
Singapore	25.12	7	Canada	17.40	11
Australia	24.18	13	France	27.15	12
Japan	23.24	4	Australia	24.18	13
New Zealand	21.32	20	UK	27.59	16
Canada	17.40	11	Russia	13.28	18
Malaysia	14.36	34	New Zealand	21.32	20
Mexico	14.27	n/a	China	11.62	25
Colombia	13.66	n/a	Malaysia	14.36	34
Chile	13.55	n/a	Turkey	12.38	36
Russia	13.28	18	South Africa	11.60	40
Turkey	12.38	36	Brazil	10.83	45
UAE	11.72	n/a	Argentina	9.45	48
Ukraine	11.68	49	Ukraine	11.68	49
China	11.62	25	Thailand	7.34	51
South Africa	11.60	40	Indonesia	8.09	67
Brazil	10.83	45	Mexico	14.27	n/a
Nigeria	9.80	n/a	Colombia	13.66	n/a
Argentina	9.45	48	Chile	13.55	n/a
Indonesia	8.09	67	UAE	11.72	n/a
Vietnam	7.80	n/a	Nigeria	9.80	n/a
Thailand	7.34	51	Vietnam	7.80	n/a

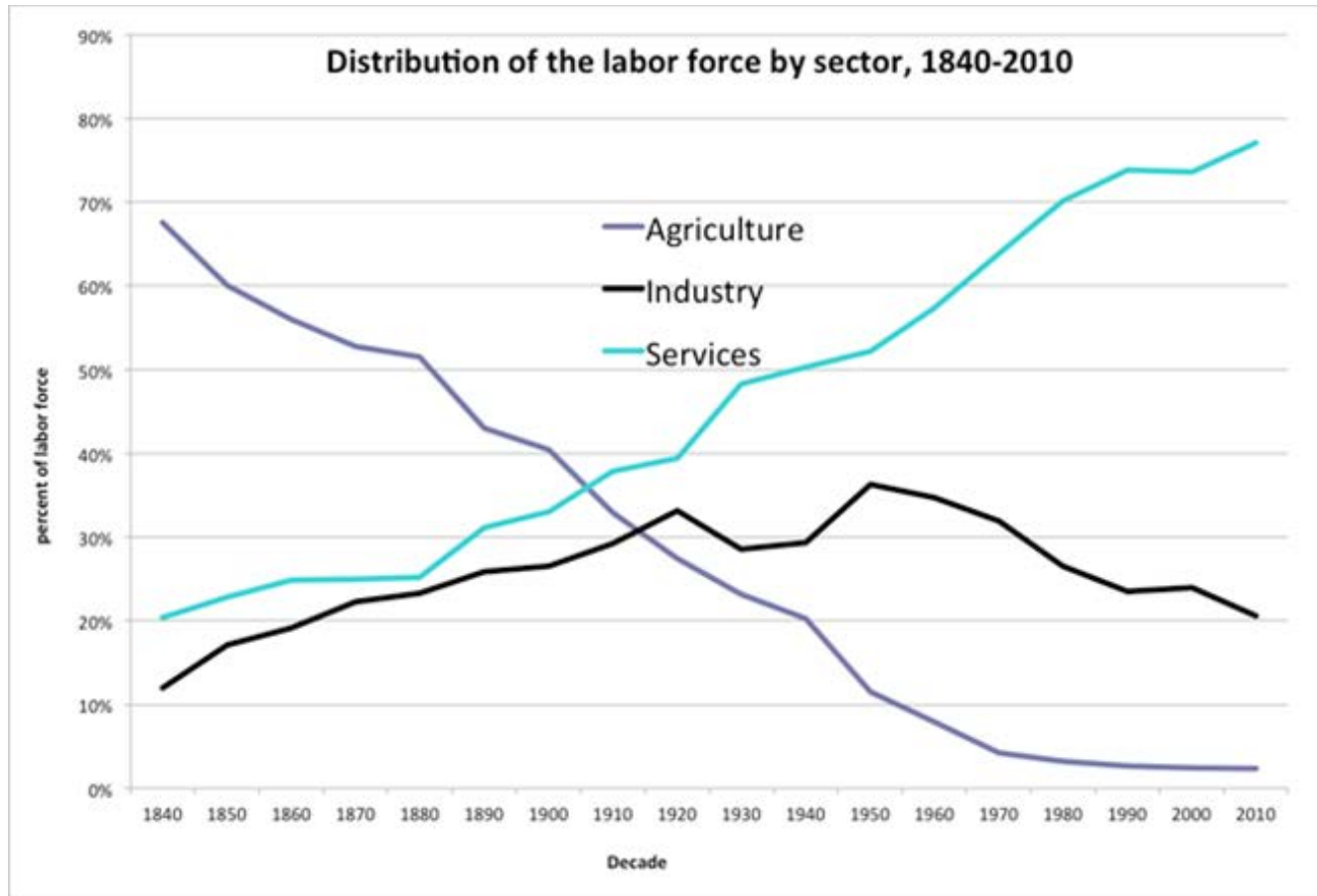
# IP Jobs by State



Jobs Created by State (thousands)



# 1840 – 2010 Labor Force by Sector



# Economic Performance per Employee, 2000-2007

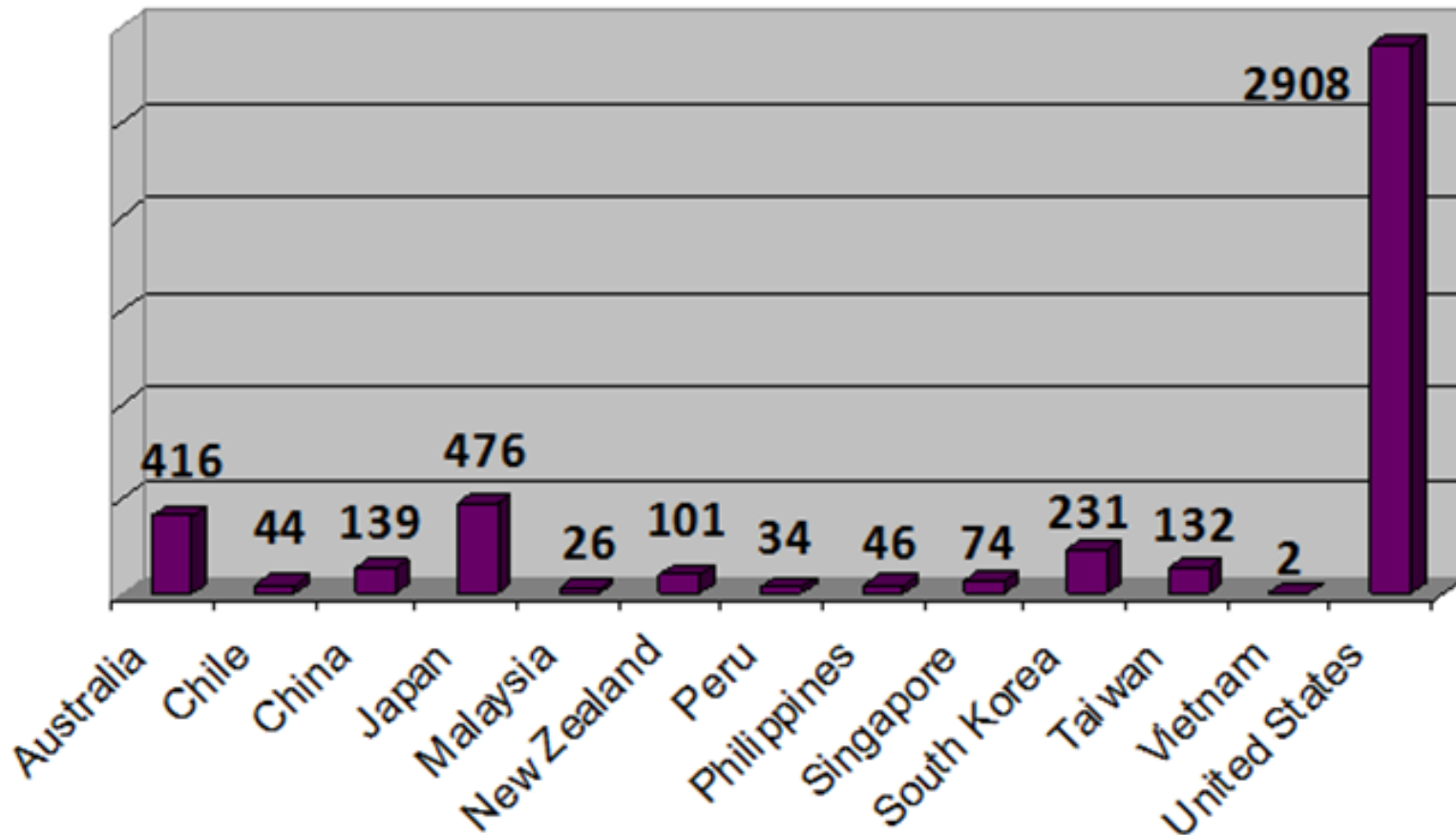
	<b>Wages</b>	<b>Sales</b>	<b>Value-Added</b>	<b>Exports</b>	<b>R&amp;D Spending</b>	<b>Capital Spending</b>
IP-Intensive	\$59,041	\$485,678	\$218,373	\$91,607	\$27,839	\$15,078
Non-IP-Intensive	\$37,202	\$235,438	\$115,239	\$27,369	\$2,164	\$6,831
Difference	\$21,839	\$250,240	\$103,134	\$64,238	\$25,676	\$8,246
(multiple)	1.6	2.1	1.9	3.4	12.9	2.2



# Trade & FDI

- Stronger IP regimes → greater R&D spending
- Benefits of FDI
  - technologies & business methods
  - new skills
  - domestic spillovers
- FDI in India
  - IP Protection equivalent to China: **↑33% annually**
  - IP Protection equivalent to the U.S.: **↑83% annually**

# Medicines in Development by Country



# Correlation between Drug Availability & IP Protection

	Available Targeted Cancer Therapies (of 27 possible)	GIPC Overall Score 2015
<b>India</b>	4	7.23
<b>Brazil</b>	6	10.86
<b>China</b>	8	12.40
<b>Russia</b>	9	13.54
<b>Mexico</b>	13	14.55

# Incremental Innovation For the Developing World

- AIDS
- Diabetes
- Congestive Heart Failure
- Hepatitis C Virus
- Malaria
- Type 2 Diabetes
- Chagas Disease



# Non-Communicable Diseases

- 63% of all deaths
- currently the world's main killer
  - Eighty percent of these deaths now occur in low- and middle-income countries. Half of those who die of chronic non-communicable diseases are in the prime of their productive years.
- Over the next 20 years, NCDs will cost more than US\$ 30 trillion, representing 48% of global GDP in 2010, and pushing millions of people below the poverty line.



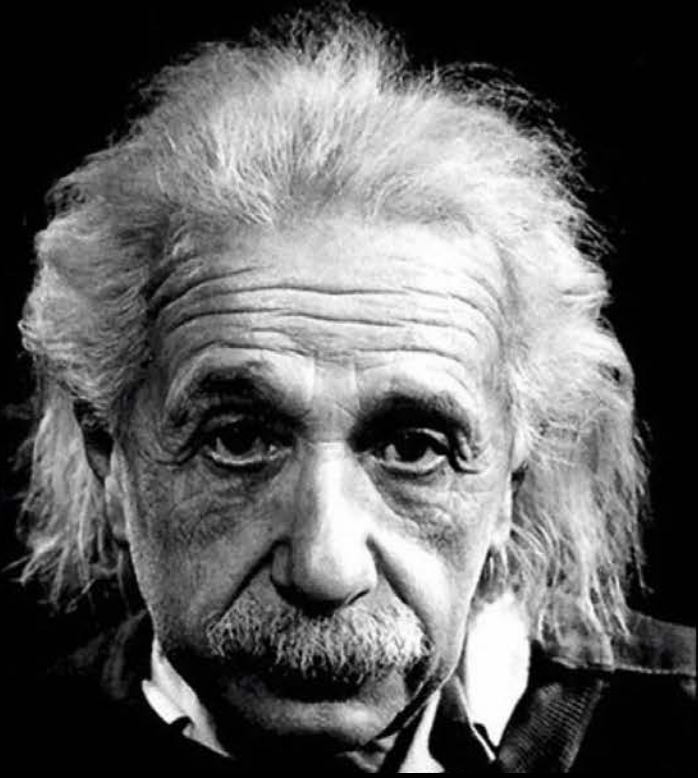
# Dr. Peter H. Diamandis

Founder & Chairman of the X Prize Foundation

“You get what you incentivize. If something in your life is not working, it's because you incentivize that behavior. Of course the opposite is true as well. . . Incentives are a powerful way to get the smartest people in the planet to help solve your problems.”

Microsoft  
Windows

We can't solve problems  
by using the same kind  
of thinking we used  
when we created them.





Thank you for your time & attention.