

THE EFFECT OF INTELLECTUAL PROPERTY REGIMES ON FOREIGN INVESTMENTS IN DEVELOPING ECONOMIES

David Hindman*

I. INTRODUCTION

Foreign investment is an important catalyst in improving a nation's economy. Investments from abroad of technology and money are used to improve the skills of the local workforce and provide a basis for continued innovation and development. Developing and developed countries alike go to great lengths to attract foreign capital, often developing policies and strategic plans for attracting investments from foreign multinational corporations.¹

Consequently, nations compete with one another to be the destination for multinational investments.² Developing states in particular allocate significant resources to create incentives to encourage and protect foreign investment.³ These measures often include tax incentives, upgraded infrastructures, and/or streamlined bureaucracies to handle investment regulations.⁴ Laws are often amended to make the situation more amenable to the investing company, by means such as easing restrictions on foreign ownership and repatriation of capital, profits, and dividends.⁵ These incentives are used to attract new foreign investment to a developing country, as well as to encourage existing investors to

* J.D., May 2006, University of Arizona, James E. Rogers College of Law; Masters in Business Administration, May 2006, University of Arizona; B.S., Mechanical Engineering, 2002, Brigham Young University. I would like to thank my family for their support.

1. See generally George Thomas Ellinidis, *Foreign Direct Investment in Developing and Newly Liberalized Nations*, 4 J. INT'L L. & PRAC. 299 (1995).

2. Note, *Protection of Foreign Direct Investment in a New World Order: Vietnam – A Case Study*, 107 HARV. L. REV. 1995, 1995 (1994).

3. Glen Kelley, Note, *Multilateral Investment Treaties: A Balanced Approach to Multinational Corporations*, 39 COLUM. J. TRANSNAT'L L. 483, 500 (2001).

4. See Lyuba Zarsky, *The Asia-Pacific Economic Cooperation Forum and the Environment: Regional Environmental Governance in the Age of Economic Globalization*, 8 COLO. J. INT'L ENVTL. L. & POL'Y 323, 353 (1997) (foreign investment promoted by free-trade principles such as national treatment, transparency, and most-favored-nation status); Terence P. Stewart & Margaret L. H. Png, *The Growth Triangle of Singapore, Malaysia, and Indonesia*, 23 GA. J. INT'L & COMP. L. 1, 13-14 (1993) (tax exempt status or special concession tax rates available in Singapore for investments in certain approved areas, and products with high technological content are favored).

5. Ellinidis, *supra* note 1, at 311-12. Despite Mexican laws limiting foreign ownership or control of an investment to forty-nine percent, the Mexican government allowed IBM to retain 100% ownership in its investments in recognition of the other benefits brought to Mexico, such as jobs, capital, and technology. See *id.*

become more competitive through updating the technology and processes used.⁶ Developing countries seeking foreign investments even tout investment opportunities in those countries through advertisements placed in major business publications around the world.⁷

One strategy often overlooked by developing countries is the effect that intellectual property (IP) protections⁸ have on potential investors.⁹ IP assets account for more than one-third of the net value of corporations in the United States and Europe, making protection of valuable IP critical for many would-be investing companies.¹⁰ Instead of touting IP protection as a means to attract foreign direct investment (FDI), developing nations tend to compete and focus on providing benefits to investors in three main areas: (1) access to specific natural resources available in the host country; (2) a beneficial labor situation; or (3) reduced costs of capital.¹¹ Thus, while developing countries market their unique advantages and the lower costs of production in that nation, they often do not include the costs associated with protecting an investor's IP. This failure could be detrimental, however, because as pressure mounts to decrease costs, multinational corporations (MNCs) will take into account factors besides labor costs and manufacturing capacity, and countries with strong IP protection systems will attract more foreign investment than those countries without IP protections.¹²

This Note attempts to show that a developing country can gain a competitive advantage over other developing nations in attracting FDI through strengthening the protection of IP. Part II discusses the importance of FDI in promoting economic growth and the common approaches used to attract FDI. Part III discusses the effect of IP protection and predictability on decisions by multinational corporations about where to invest. Part IV discusses international agreements aimed at creating a minimum level of IP protection throughout the world. Part V takes a closer look at three countries, China, India, and Singapore, and their respective abilities to attract FDI in relation to their level of IP protection. Finally, Part VI examines the viability of using increased IP protection

6. Stewart & Png, *supra* note 4, at 13. The focus of Singapore's incentive program has changed as Singapore has advanced through different stages of development. *Id.*

7. Kelley, *supra* note 3, at 500.

8. In this Note, "strong IP protections" refers to having both comprehensive IP laws and strict enforcement of those laws. "Weak" or "poor" IP protection can mean either having a non-comprehensive set of IP laws or not enforcing those laws, or both.

9. See generally Robert E. Evenson, Comment, Intellectual Property Rights and Economic Development, by Keith Maskus, 33 CASE W. RES. J. INT'L L. 187 (2001).

10. Jean Raymond Homere, *Intellectual Property Rights Can Help Stimulate the Economic Development of Least Developed Countries*, 27 COLUM. J.L. & ARTS 277, 280-81 (2004).

11. Ellinidis, *supra* note 1, at 309.

12. See Keith E. Maskus, *Intellectual Property Challenges for Developing Countries: An Economic Perspective*, 2001 U. ILL. L. REV. 457, 459 (2001).

by an individual developing nation as a stimulus for economic growth and development.

II. THE IMPORTANCE OF FOREIGN DIRECT INVESTMENT IN PROMOTING ECONOMIC GROWTH

A. Benefits of FDI

Developing countries have gradually shifted their perception of foreign investment, from a distrust of multinational companies and a call for “a ‘new economic order’ in the 1960s and 1970s,” to a generally pro-foreign investment stance today.¹³ They see investment by foreign companies as a means to stimulate domestic industries, grow the domestic economy, and, most importantly, provide a technological basis for the domestic production of IP.¹⁴ Developing countries expect that these advances will lead to increased exports and a more significant role in the global economy. In addition, the flow of FDI can be an indicator of “the relative attractiveness of the business climate of competing economies.”¹⁵ Developing countries provide a barometer for additional investors who may be seeking assurances that their investment decision is appropriate and will provide sufficient returns.

FDI involves not only the purchase of capital assets, including mergers and acquisitions, joint ventures, buying property, and investing in plants and equipment, but, perhaps more important to developing countries, FDI can include the transfer of managerial expertise, technological skills, and access to the investing company’s global network.¹⁶ Technology transfers from developed to developing nations are one of the most important forces behind economic development.¹⁷ Experts argue that FDI is “the most important . . . channel through which advanced technology is transferred to developing countries.”¹⁸

The investment of foreign capital assists developing economies in many ways, including the creation of jobs, transfer of new technologies and advanced management strategies, and boosting exports.¹⁹ In addition, foreign investment is a conduit to increased social development, providing the resources for

13. Kelley, *supra* note 3, at 499.

14. Mikhaelle Schiappacasse, *Intellectual Property Rights in China: Technology Transfers and Economic Development*, 2 BUFF. INTELL. PROP. L.J. 164, 167 (2004).

15. Michael R. Sesit, *China Overtakes U.S. as Magnet for Foreign Direct Investment*, WALL ST. J., June 28, 2004, at A2.

16. *Id.*; Schiappacasse, *supra* note 14, at 174.

17. Schiappacasse, *supra* note 14, at 167.

18. Press Release, WTO, Trade and Foreign Direct Investment (Oct. 9, 1996), available at http://www.wto.org/english/news_e/pres96_e/pr057_e.htm.

19. *Taming Labor for Investments*, KOREA HERALD, Sept. 6, 2003.

infrastructure improvement and job training, among other things.²⁰ Investment from developed economies facilitates access to modern technologies, which, in turn, benefits the standard of living and enhances the skill of the local labor force.²¹ The flow of ideas, methods, and inventions is the impetus for increased productivity and improved processes and result in better products reaching the marketplace.²² It is these technological innovations that create a base for a strong economy and drive long-term economic growth.²³

In the past twenty years, foreign investment has shifted from primarily official programs sponsored by foreign countries, to mainly privately funded sources.²⁴ The World Bank estimates that while official development assistance decreased from 1990 to 1999, private FDI inflows increased eight-fold to \$192 billion during the same time frame.²⁵ This increased FDI consists of both capital and technological investments. FDI is the most expedient and the most efficient method to further a growing economy.²⁶ In a communication to the World Trade Organization (WTO), the Organization for Economic Cooperation and Development (OECD) noted:

Direct investment by MNEs [multinational enterprises] has the potential rapidly to restructure industries at a regional or global level and to transform host economies into prodigious exporters of manufactured goods or services to the world market. In so doing, FDI can serve to integrate national markets into the world economy far more effectively than could have been achieved by traditional trade flows alone. As with private sector investment more generally, the benefits from FDI are enhanced in an environment characterized by an open trade and investment regime, an active competition policy, macroeconomic stability

20. Ellinidis, *supra* note 1, at 306-07. *But see* Kelley, *supra* note 3, at 503 (stating that corporate FDI may create a negative net economic impact on developing states, “including a reduction in healthy competition, the creation of an ‘oligarchy of indigenous partners and suppliers,’ and increased wage gaps”).

21. Ellinidis, *supra* note 1, at 306.

22. Michael P. Ryan, *Knowledge-Economy Elites, the International Law of Intellectual Property and Trade, and Economic Development*, 10 *CARDOZO J. INT’L & COMP. L.* 271, 297 (2002).

23. *Id.*

24. Legislative Development, *Implementation of EC Investment Partners Financial Instrument*, 2 *COLUM. J. EUR. L.* 387, 389-90 (1996) (“In 1986, official development assistance from advanced industrial countries constituted 56.4% of net resource flows to the developing world. By 1994, however, private flows, of which FDI was the second most important component after bond lending, accounted for 55% of the total amount.”).

25. Official development assistance, made up of loans and grants, decreased from \$56 billion in 1990 to \$52 billion in 1999, while FDI grew from \$24 billion to \$192 billion during the same time period. Kelley, *supra* note 3, at 498-99.

26. Ellinidis, *supra* note 1, at 306.

and privatization and deregulation. In this environment, FDI can play a key role in improving the capacity of the host country to respond to the opportunities offered by global economic integration, a goal increasingly recognized as one of the key aims of any development strategy.²⁷

In conclusion, it is important for developing countries to attract both the money necessary to build facilities and employ the populace and also the technological know-how and training incidental to research and development (R&D) and high-technology manufacturing investments.

B. Competition for FDI

There is real pressure on MNCs to invest in foreign countries. Many manufacturers in developed economies are either already outsourcing production to low-cost developing countries or are contemplating such moves, spurred on by the aggressive pricing push of competitors who have already moved production overseas.²⁸ Investors, however, quickly realize that there are differences between destination countries, with distinct advantages for their companies depending on where they choose to invest.²⁹

All nations of the world, developed and developing, compete against one another to attract the same investment capital.³⁰ In some cases, attracting FDI is so important that it is a matter of national survival.³¹ Recognizing the benefits of including cutting-edge technology as one form of investment from abroad, developing countries structure their investment laws to encourage the transfer of technologies and require that their nationals receive new training.³² Establishing a

27. WTO Working Group on the Relationship Between Trade and Investment, *Foreign Direct Investment and Economic Development*, WT/WGTI/W/26, at 4 (Mar. 23, 1998).

28. Sharon Barner & Harold Wegner, *China Outsourcing*, MONDAQ BUS. BRIEFING, Sept. 20, 2004, available at 2004 WLNR 12301650.

29. Cf. David Pilling, *Canon to Cut Procurement Cost 10%*, FIN. TIMES (London), May 27, 2004, at 18, 18; Daisuke Wakabayashi & Nathan Layne, *Japan Turning to Patents to Keep Competitive Edge*, TAIPEI TIMES, July 8, 2004, at 9.

30. *Taming Labor for Investment*, *supra* note 19.

31. Former South Korean President Kim Dae Jung stated that attracting FDI was the only way for Korea to recover from its economic difficulties, and he regarded FDI as a matter of Korean national survival. See Eun Sup Lee, *Foreign Trade Regulation of Korea in the WTO World*, 8 J. TRANSNAT'L L. & POL'Y, 231, 252 n.140 (1999); *Pres. Kim Wages Lonely Campaign to Attract Foreign Investment*, KOREA HERALD, May 6, 1998.

32. Ellinidis, *supra* note 1, at 306-07. A similar situation can be seen within the United States where the states actively grant tax breaks and other enticements to attract capital. See generally Peter D. Enrich, *Saving the States from Themselves: Commerce Clause Constraints on State Tax Incentives for Business*, 110 HARV. L. REV. 377 (1996).

strong legal framework sufficient to secure a stable investment environment and assure investors has become essential to attracting FDI.³³

During the past two decades, developing countries have increasingly endeavored to compete for FDI.³⁴ The economic strategies of many of these developing countries include active efforts to attract such investments.³⁵ In the hopes of achieving these benefits, many organizations have been formed to promote and support FDI in developing countries.³⁶ These include both state-specific organizations³⁷ and international organizations.³⁸

Few developing countries improve their IP rights protections before a critical mass of domestic businesses calls for it.³⁹ However, in this increasingly competitive global marketplace, multinational corporations are looking beyond low labor and materials costs as a means to increase their competitiveness. Likewise, developing countries may be able to cater to foreign investors seeking to reduce the risks to their IP position, and, through increased protection of IP rights, attract FDI.⁴⁰ Countries that increase IP protections can stimulate economic and technological development faster than comparative countries without strong IP regimes.⁴¹

III. INTELLECTUAL PROPERTY AND ITS EFFECT ON FOREIGN DIRECT INVESTMENT IN DEVELOPING COUNTRIES

A. The Effect of the Rule of Law and Predictability on Foreign Investment Decisions

33. Note, *supra* note 2, at 1995.

34. *Id.*

35. Kelley, *supra* note 3, at 499.

36. *See* Ellinidis, *supra* note 1, at 306-07.

37. For example, Laos established the Foreign Investment Management Committee to promote and manage foreign investment within Laos. James D. Nolan, *A Comparative Analysis of the Laotian Law on Foreign Investment, the World Bank Guidelines on the Treatment of Foreign Direct Investment, and Normative Rules of International Law on Foreign Direct Investment*, 15 ARIZ. J. INT'L & COMP. LAW 659, 679 (1998).

38. In addition to WTO and World Bank initiatives, less well-known groups are also promoting FDI. The Multilateral Investment Guarantee Agency (MIGA) actively promotes FDI in developing countries in order to "support economic growth, reduce poverty, and improve people's lives." Multilateral Investment Guarantee Agency, About MIGA, <http://www.miga.org/sitelevel2/level2.cfm?id=1069>. The Organization for Economic Cooperation and Development (OECD) produces standards and recommendations in order to assist local government policy-makers in adopting strategies that will improve economic and social issues. Org. for Econ. Cooperation & Dev., About, <http://www.oecd.org/home>.

39. Keith E. Maskus, *Intellectual Property Rights and Economic Development*, 32 CASE W. RES. J. INT'L L. 471, 477-78 (2000).

40. Maskus, *supra* note 12, at 462.

41. *See id.* at 459-66.

Major developing countries recognize that the rule of law is essential to becoming a part of the advanced global economy.⁴² The attraction of sizable capital investment necessary for economic growth requires confidence that there will be predictable answers to key legal questions and that business disputes will be resolved promptly and fairly.⁴³ Developing countries generally see legal institutions that characterize developed market economies as essential to growth and efficiency, with the noted exception of IP rights.⁴⁴ While actively striving to improve their legal infrastructure to facilitate trade and investment, developing countries often oppose improving IP protection, viewing it as an impediment to their economic goals.⁴⁵

There are many examples of multinational companies factoring IP protections into their foreign investment decisions. Microsoft did not move major capital resources into Brazil until Brazil enacted a new copyright and software protection law in 1998.⁴⁶ Once a leader in outsourcing manufacturing, the Japanese electronics industry is now taking a cautious view of its “technological crown jewels,” preferring to produce these in domestic manufacturing facilities to avoid loss of its trade secrets.⁴⁷ Surveys have shown that eighty percent of chemical companies would not invest in India due to the lack of IP protection, and nearly all foreign managers are reluctant to invest in certain industrial sectors in China for the same reason.⁴⁸

Some companies that have FDIs in developing countries are reconsidering certain investments because of IP protection concerns. For example, Canon recently announced that in order to combat IP theft in China, it will move production of its key components to in-house facilities in Japan.⁴⁹ Similarly, Sony, despite adding manufacturing capacity in China, is moving production of key Playstation 2 videogame consoles back to Japan in an attempt to keep key IP secure.⁵⁰ This lack of protection for IP means that developing countries will not receive the training or experience that could have been leveraged in creating the next generation of IP and furthering their economic growth.

Many companies that choose not to withhold their IP from those developing countries that do not provide adequate enforcement mitigate risk by investing heavily in providing education and expertise to judges and

42. David F. Clossey & Jere R. Thomson, *A Global Law Firm Operating in a Global Market: Jones Day*, METROPOLITAN CORP. COUNS., May 2004, at 9, 9.

43. *Id.*

44. Evenson, *supra* note 9, at 187-88.

45. *Id.* at 187; Maskus, *supra* note 39, at 478.

46. Owen Lippert, *Brazil's Evolving Legal System: Judicial Reform, Predictability Are Key to Foreign Investment*, CORP. LEGAL TIMES, Sept. 2001, at BWB16.

47. Barner & Wegner, *supra* note 28.

48. Homere, *supra* note 10, at 287.

49. Pilling, *supra* note 29, at 18.

50. Wakabayashi & Layne, *supra* note 29.

administrators in hopes of increasing enforcement of the laws in the future.⁵¹ Still other companies find their only recourse, once infringement occurs, is to attempt to strike a licensing deal with the infringer, thereby at least recouping some of the lost profits and gaining some control over product quality and quantity.⁵²

Foreign investment entrepreneurs struggle with valuing the risk of investing in a developing country with poor IP enforcement.⁵³ The difficulty in valuing this risk may lead some companies to invest in countries with weak IP protections if other costs are low. For example, Intel recently passed on investing in Latin America, instead looking to expand semiconductor production facilities in either China, India, or Russia thanks to those countries' lower labor rates,⁵⁴ even though they have unreliable IP regimes. Research conducted for the World Bank found that where there is higher technological activity in direct investment, joint venture or licensing decisions, a greater importance will be placed by investors on the reliability of IP protection.⁵⁵ This research found that IP protection had a statistically significant effect on FDI.⁵⁶

In addition to the quality of the transferred technology, the manner of technology transfer is also dependent on the level of IP protection available in the host country.⁵⁷ Studies have shown that the quality of transferred technologies increases as IP protection becomes stronger.⁵⁸ For example, an MNC is likely to require wholly-owned subsidiaries when IP protection is weak, but as that protection strengthens, joint ventures and eventually licensing to domestic businesses become more palatable.⁵⁹ A wholly-owned subsidiary is preferred because it allows the MNC to retain exclusive control over the IP.⁶⁰ Meanwhile, licensing becomes more desirable where the technology is basic and transaction

51. *The China Game: The Obstacles, Challenges and Rewards of Doing Business in the People's Republic of China*, CORP. LEGAL TIMES, Oct. 2004, at 51, 55.

52. See Joseph Scott Miller, Essay, *This Bitter Has Some Sweet: Potential Antitrust Enforcement Benefits from Patent Law's Protectionist Rules*, 70 ANTITRUST L.J. 875, 891 (2003).

53. See Robert Bejesky, *Investing the Dragon: Managing the Patent Verses Trade Secret Protection Decision for the Multinational Corporation in China*, 11 TULSA J. COMP. & INT'L L. 437, 440 (2004).

54. Greg Levine, *Barrett: Intel Nixes Brazil; Prefers China, India Labor Costs*, FORBES.COM: FACES IN THE CROWD, Sept. 16, 2004, available at <http://forbes.com/2004/09/16/0916autofacescan09.html>.

55. Robert M. Sherwood, *Intellectual Property in the Western Hemisphere*, 28 U. MIAMI INTER-AM. L. REV. 565, 576-77 (1997).

56. *Id.*

57. Schiappacasse, *supra* note 14, at 173.

58. Homere, *supra* note 10, at 286. See also *Gujarat, TN Becoming Less Attractive for Foreign Investors*, PRESS TR. OF INDIA, Oct. 24, 2004 (stating that 14.2% of senior management time in India is spent dealing with regulatory officials, compared to 8.1% in China).

59. Schiappacasse, *supra* note 14, at 173.

60. *Id.*

costs are low.⁶¹ Joint ventures fall in between because they allow the transferring company to retain some control over proprietary technology.⁶²

The manner in which technology is transferred to a developing nation can be very important. To maximize the benefit received, the developing country must be able to absorb the technology, and not in a way that the developing country becomes dependent on the transferor, but rather in a way that develops the country's own technological capabilities.⁶³ Because of these needs, developing countries tend to prefer joint ventures with MNCs, since they are more likely to get access to new and improved technologies over the life of the joint venture, providing sufficient time to adopt and integrate the technology.⁶⁴ Furthermore, joint ventures generally are sufficiently limited in scope so that domestic businesses do not become completely dependent on foreign partners.⁶⁵

It is important to note that not all FDI is directly related to the level of IP protection in a developing country.⁶⁶ Other factors such as government regulations, tax policies, and land and labor costs are also considered when MNCs make investment decisions.⁶⁷ Some developing countries in Sub-Saharan Africa and Eastern Europe have had difficulty attracting FDI despite implementing strong IP protections, while countries such as China, Brazil, Argentina, and Thailand have attracted significant amounts of FDI despite weak IP systems.⁶⁸

B. The Importance of Strong Intellectual Property Protection

Generally, the problems associated with weak IP protections are thought to be limited to consumer risks due to substandard products and services, and decreased profits for large MNCs.⁶⁹ In addition to those problems, however, developing nations face the real risk of investment capital moving to other countries where IP rights will be enforced. For example, companies may invest heavily in marketing and distribution in China to build brand recognition only to find their trademarks widely used on counterfeit goods.⁷⁰ The counterfeit goods tend to be low quality and result in damaging the image of the trademark owner, possibly forcing it to shut down operations or abandon the trademark.⁷¹ In

61. *Id.*

62. *Id.*

63. *Id.* at 175.

64. *Id.*

65. Schiappacasse, *supra* note 14, at 175.

66. *See id.* at 167; Maskus, *supra* note 12, at 465-66.

67. *See Taming Labor for Investment*, *supra* note 19.

68. Homere, *supra* note 10, at 288.

69. Larry Pfeil, *Piracy in the Information Age: Effective Protection of Intellectual Property Rights*, 8 CURRENTS: INT'L TRADE L.J. 17, 17 (1999).

70. Maskus, *supra* note 12, at 461.

71. *Id.*

addition, while robust IP protections are helpful in attracting capital and technology transfers, they are also essential for encouraging R&D investments.⁷²

A government that promotes IP rights provides a strong signal to potential investors that there is a decreased risk of IP loss.⁷³ As IP rights become more robustly enforced in a developing country, foreign companies increase their R&D investments in the country.⁷⁴ Until a company can rely on the developing country's IP laws, it must rely on alternative means to minimize losses.⁷⁵ By looking outside the IP legal framework for protection, companies increase their costs, wastes, and inefficiencies such that it decreases their competitiveness.⁷⁶ These added costs are increasingly being factored into the analysis MNCs make in deciding where to invest their resources.

It is widely assumed that over time the risks to an IP portfolio in a given country will slowly decrease as protections are established.⁷⁷ However, a government in a developing country may be able to quickly accelerate the level of foreign investment by decreasing the risk of loss to an IP portfolio.⁷⁸ By focusing on establishing a strong IP rights regime, a country should attract more FDI relative to those countries that do not consider IP rights protection as important. Modern economists are increasingly inclined to recognize that even the least-developed countries can stimulate economic growth by promoting IP rights.⁷⁹

Strong IP rights encourage economic development in several ways: (1) by promoting domestic innovation through protecting nascent technology; (2) by preventing "brain drain" (the loss of human resources) through ensuring that innovators are rewarded for their efforts; and (3) by fostering technology transfers such as FDI.⁸⁰ In addition, beneficial side effects of FDI include job creation and increased tax revenues from the intellectual property rights themselves, related investment activity, and the development of domestic industries.⁸¹

For example, robust IP protection helps to prevent "brain drain" from a developing country. Bright, educated individuals will be encouraged or discouraged from engaging in the innovation which promotes economic growth in proportion to a nation's policy for protecting new technology.⁸² Human capital

72. Schiappacasse, *supra* note 14, at 167.

73. Bejesky, *supra* note 53, at 439.

74. See DION WIGGINS, CHINA, INTELLECTUAL PROPERTY PROTECTION AND THE BIG PICTURE 5, 7-9 (Gartner 2004).

75. Sherwood, *supra* note 55, at 574. Companies may seek to protect their IP by using more robust contracts or by increasing the levels of oversight used in foreign-based factories. *See id.*

76. *Id.*

77. See Bejesky, *supra* note 53, at 472-75.

78. See Maskus, *supra* note 12, at 462.

79. See generally Homere, *supra* note 10.

80. Schiappacasse, *supra* note 14, at 167.

81. *Id.*

82. Sherwood, *supra* note 55, at 569.

capable of innovating will instead turn to other endeavors or to opportunities outside their home country when there is little or no reward for inventing or marketing the invention at home. This leaves the developing country unable to gain traction on the road to development.⁸³

The level of IP protection within a country influences foreign investment. Protection of proprietary information through robust IP protection can act to promote investment in employee development, in turn leading to a more educated populace capable of creating home-grown technologies.⁸⁴ It is through ready access to cutting edge technology that a populace can become sufficiently educated to then make the next technological breakthrough.⁸⁵

Countries become “developed” by developing the skills and knowledge necessary to create home-grown innovations and sustain economic growth.⁸⁶ Developed economies also rely heavily on the acquisition of foreign technologies to stimulate their own economic growth.⁸⁷ Nobel Laureate economist Robert Solow found that above all else, the introduction of new technology is paramount to furthering economic growth.⁸⁸ An economy’s competitiveness is stimulated by innovation.⁸⁹ Foreign companies are attracted by low labor costs and easy access to new markets within the developing country, but they must balance these benefits with less than adequate protection of what may be the foreign investor’s greatest asset: its IP.⁹⁰ IP assets account for forty percent of the net value of corporations in the United States and over thirty-three percent in Europe.⁹¹ This is why utilizing and protecting IP often dictates corporate strategy.

C. Challenges Faced by Least-Developed Countries

83. *Id.*

84. *Id.* at 581.

85. *See* Ryan, *supra* note 22, at 297-98.

86. *See id.*

87. *See id.*

88. Sherwood, *supra* note 55, at 569. “Solow recognized that technical progress acts as an ‘enlarger’ of the number of hours worked. For example, four working hours in the nineteenth century is equivalent to one hour or less in the twentieth century due to technology.” Evelyn Su, *The Winners and the Losers: The Agreement on Trade-Related Aspects of Intellectual Property Rights and Its Effects on Developing Countries*, 23 *HOUS. J. INT’L L.* 169, 198 (2000).

89. Richard J. Ansson, Jr., *International Intellectual Property Rights, the United States, and the People’s Republic of China*, 13 *TEMP. INT’L & COMP. L.J.* 1, 2 (1999).

90. *See* Sameer Kumar et al., *Moving U.S. Manufacturing Offshore: Is Mexico a Viable Choice?*, 6 *L. & BUS. REV. AM.* 537, 540 (2000); Irene Ribeiro Dubowy, *Subsidies Code, TRIPS Agreement, and Technological Development: Some Considerations for Developing Countries*, 8 *J. TECH. L. & POL’Y* 33, 36 (2003).

91. Homere, *supra* note 10, at 281.

Many developing countries initially view IP pirating as fuel for technological and economic development.⁹² There are often immediate and tangible economic benefits from piracy of IP, as domestic producers gain the ability to produce in-demand products and services while avoiding the burdensome R&D costs.⁹³ This is especially true with certain types of technology that are becoming easier to copy.⁹⁴ Later, when the country reaches a point in development where IP protection becomes advantageous, there will be an increased emphasis on the promotion and enforcement of IP rights.⁹⁵

Developing countries have a number of rationales for why protection of IP is less beneficial to them than allowing free use of technology.⁹⁶ For one, because developed countries, such as the United States, own the majority of IP, having strict IP rights in developing countries is often seen as a kind of tax forced upon the developing country.⁹⁷ This results in money that could be used for development instead being spent acquiring technology from abroad.⁹⁸ For example, one 1995 study found that if strong patent rights were applied worldwide, the United States would gain an additional \$5.8 billion per year.⁹⁹ Furthermore, strong IP protection fosters monopolies in developing markets which are less competitive to begin with, thus hampering domestic innovations.¹⁰⁰ Finally, the implementation and enforcement of strong IP laws can be extremely costly for less-developed nations.¹⁰¹

The path followed by developing countries is no different than that followed by many developing countries in the past.¹⁰² Most developed countries,

92. Schiappacasse, *supra* note 14, at 167-69.

93. Pfeil, *supra* note 69, at 18-19.

94. Schiappacasse, *supra* note 14, at 167-68.

95. Maskus, *supra* note 39, at 478.

96. Bases for these arguments range from sovereignty to anti-globalization to more efficient markets. For more in-depth discussions of why developing nations should not choose to implement or enforce IP laws, see Schiappacasse, *supra* note 14, at 168-69, and Maskus, *supra* note 12, at 466-71.

97. Schiappacasse, *supra* note 14, at 168.

98. *Id.*

99. Maskus, *supra* note 12, at 468. In contrast, Brazil, a still developing country, would have a net outflow of \$1.2 billion per year in rents for the same IP that they were then using. *Id.*

100. Schiappacasse, *supra* note 14, at 168.

101. *Id.* at 168-69; Maskus, *supra* note 12, at 466 (noting that annualized costs for implementing the Trade Related Aspects of Intellectual Property Rights (TRIPS) in Egypt and Bangladesh are estimated to be around \$1 million in each country, but also noting that these estimates may be low due to the scarcity of professional administrators and judges in each country). Also, because of the high fixed costs, demand for IP rights must be large to permit a country to achieve economies of scale and recover these fees. See Maskus, *supra* note 12, at 466.

102. See generally WIGGINS, *supra* note 74; see also Schiappacasse, *supra* note 14, at 168.

including the United States, Japan, and South Korea, have followed this pattern of pirating foreign IP as a means of making domestic industries more competitive with their more advanced competitors in foreign countries.¹⁰³ Historically, as domestic industries grow and produce their own IP, IP rights enforcement becomes a higher priority and implementation of laws quickly takes place.¹⁰⁴

Countries that pursue this path to technological development fail to recognize that, though this free-ridership may provide benefits to the pirating nation in the short-term, it fails in the long-term for a variety of reasons.¹⁰⁵ For one, piracy may not facilitate the absorption of technology, leaving the pirate less able and willing to innovate further.¹⁰⁶ In addition, developing countries with poor IP protection risk losing control over domestic products which can be patented by foreign companies, freezing domestic businesses out of the international market for products they originally developed or traditionally produced.¹⁰⁷ Finally, access to new technology will become increasingly limited because the cost of technology transfers to such a country will increase as the transferor seeks to compensate for the expected losses due to piracy.¹⁰⁸ Thus, though short-term benefits may accrue due to piracy, it could result in long-term losses through decreased transfers of advanced technology and the inability to innovate further on the basis of technology obtained through piracy.¹⁰⁹

Technology transfers most readily occur along the paths where IP is the best protected and less readily occur where it is the least protected.¹¹⁰ Some argue that a less-developed country should simply “steal” technology from other countries in order to develop a base for economic growth.¹¹¹ However, this may consign that country to a perpetually low level of technology by always acting as a barrier to new technology flows.¹¹² Weak IP protections act as a barrier, isolating a country from outside technology and forcing it to rely on its own limited

103. WIGGINS, *supra* note 74, at 5.

104. Bejesky, *supra* note 53, at 439; Maskus, *supra* note 39, at 478 (“as economies mature to higher levels of technological capacity and demands shift toward higher-quality products, domestic firms come to favor protective [IP laws] Not only do legislated [IP protections] become stronger as economies develop, but enforcement and compliance also rise . . .”).

105. Schiappacasse, *supra* note 14, at 168.

106. *Id.*

107. Ansson, *supra* note 89, at 2.

108. Schiappacasse, *supra* note 14, at 168.

109. *Id.*

110. Sherwood, *supra* note 55, at 568.

111. *Id.* It is often argued that most, if not all, developed countries today were once voracious thieves of intellectual property. The theory goes that it was through the free access to the intellectual property of other countries that the United States, Japan, and others were able to build up their technological base. Only after one of these countries began exporting home-grown technologies did they seriously look to intellectual property protection as a beneficial tool. See WIGGINS, *supra* note 74, at 5.

112. Sherwood, *supra* note 55, at 568-69.

resources to develop technological knowledge.¹¹³ In many cases the economic benefits derived from an effective IP protection system are far greater than any benefits gained by not protecting new technology.¹¹⁴

D. Attempts to Protect Intellectual Property

Since the 1980s, changes in IP rights protection within developing countries have generally been spurred from outside the country.¹¹⁵ The United States and other developed countries successfully introduced IP protection as a requirement under the General Agreement on Tariffs and Trade (GATT) and its successor, the WTO.¹¹⁶ This pressure has been moderately successful; developing countries seeking membership in the WTO do change their IP laws to become compliant with the international standards.¹¹⁷ However, actual implementation of the laws is often lacking.¹¹⁸ The changes in the law typically amount to little more than lip-service to placate Western trading partners while buying more time for domestic industries to grow, unhampered by restrictions on available technology.¹¹⁹

Where a developing country does make some effort to increase IP protections, lack of judicial and administrative training as well as local officials' susceptibility to corruption can mean that enforcement of existing laws is lacking.¹²⁰ In addition, another deterrent for would-be investors in some foreign countries is that, although IP rights are protected and laws are enforced, criminal punishments are too light to deter infringers, and civil penalties are too small to compensate the rights holder.¹²¹ With no real deterrents to keep piracy from occurring, multinational companies must look to alternatives to keep their IP protected.¹²²

113. Homere, *supra* note 10, at 287.

114. Sherwood, *supra* note 55, at 568.

115. Ansson, *supra* note 89, at 8-10. See generally Jonathan C. Spierer, *Intellectual Property in China: Prospectus for New Market Entrants*, 3 HARV. ASIA Q. 46 (1999), available at <http://www.asiaquarterly.com/content/view/44/40/>.

116. Ansson, *supra* note 89, at 8-10.

117. *Id.*

118. See Spierer, *supra* note 115, at 46-51; see also Ryan, *supra* note 22, at 271-72.

119. See Ansson, *supra* note 89, at 10-11.

120. Amanda S. Reid, Comment, *Enforcement of Intellectual Property Rights in Developing Countries: China as a Case Study*, 13 DEPAUL-LCA J. ART & ENT. L. & POL'Y 63, 92-93 (2003); see also Andrea Morgan, Comment, *TRIPs to Thailand: The Act for the Establishment of and Procedure for Intellectual Property and International Trade Court*, 23 FORDHAM INT'L L.J. 795, 797-98 (2000) (regarding Thailand's problem with enforcing its newly improved intellectual property legal system).

121. Bejesky, *supra* note 53, at 440.

122. Sherwood, *supra* note 55, at 574.

Before supplying sensitive technology, foreign companies are increasingly seeking assurances that the technology they would provide in a joint investment or research-development deal will be adequately protected.¹²³ The protection sought often includes the adoption and enforcement of IP laws modeled after U.S. or European systems.¹²⁴ Various studies conducted over the past twenty years by several international governmental bodies all concluded that technology-intensive, knowledge-rich FDI, license, and trade was influenced by the level of IP protection, regardless of the level of economic development of the host country.¹²⁵

IV. INTERNATIONAL TREATIES TO ENFORCE INTELLECTUAL PROPERTY RIGHTS

A. Establishing the Trade Related Aspects of Intellectual Property Rights as an International Standard for IP Protection

International attempts to normalize IP protection have taken many forms over the past century.¹²⁶ These have included attempts to require adherents to grant identical levels of protection to foreign and domestic owners of IP, establish minimum substantive levels of protection, and, more recently, establish minimum procedural levels of enforcement.¹²⁷ Early attempts to bring countries to international agreement involved using the moral high ground as a sufficient reason to accept the treaty. Now, however, a more coercive strategy has been employed, making acceptance of an international standard a prerequisite to joining the WTO.¹²⁸

Though earlier attempts to create international IP norms existed, the Uruguay Round of GATT negotiations was one of the first to link IP with an international treaty primarily concerned with a subject other than IP.¹²⁹ For a

123. Doris Estelle Long, *The Impact of Foreign Investment in Indigenous Culture: An Intellectual Property Perspective*, 23 N.C.J. INT'L L. & COM. REG. 229, 235 (1998).

124. *Id.*

125. Ryan, *supra* note 22, at 300-01.

126. INTERNATIONAL INTELLECTUAL PROPERTY ANTHOLOGY 8-9 (Anthony D'Amato & Doris Estelle Long eds., Anderson Publishing Co. 1996).

127. *Id.* at 9.

128. *Id.* at 240.

129. *Id.* at 230-36. International agreements and agencies established prior to the Uruguay Round of GATT that deal solely with IP include the Berne Convention (focused mainly on copyright), which was first established in 1889, the Paris Convention (in the areas of patent, trademark and industrial designs), which was established in 1883, and the World Intellectual Property Organization (WIPO) (a United Nations agency established to promote IP protection worldwide and to administer the Berne Convention, Paris Convention, and other international IP unions). *See Id.*

country that felt it was being unduly burdened in trade due to the absence of IP protection in a foreign country, there was no way to challenge the substantive IP law of that foreign country under GATT without the additional IP provisions.¹³⁰ The only recourse available was through unilateral measures such as Section 301 of the 1974 Trade Act¹³¹ in the United States.¹³² The Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS agreement) was intended to solve some of these problems by harmonizing to some extent IP protection in WTO member countries.¹³³

IP protection has been linked to international trade through the TRIPS agreement.¹³⁴ Led by the United States, many nations sought to include IP protection in international trade negotiations because of the way that trade is distorted by IP rights violations.¹³⁵ In addition, because admission into the WTO is a high priority for nearly every developing country, linking TRIPS to admission to the WTO has removed much of the hesitation to accept the international norms for IP protections.¹³⁶

Abiding by the TRIPS agreement has become a mandatory condition for entry into the WTO.¹³⁷ By linking IP to international trade, a failure to live up to the TRIPS requirements can result in trade sanctions under the WTO.¹³⁸ The TRIPS agreement establishes a minimum level of acceptable IP protection by which all member nations must abide.¹³⁹ The threat of WTO trade sanctions should ensure that this minimum level is the floor for protection for all WTO member states.¹⁴⁰ Before TRIPS, there was no international agreement that contained detailed enforcement obligations with respect to IP rights.¹⁴¹

B. Developing Countries' Concerns Regarding Strict IP Enforcement

130. Dubowy, *supra* note 90, at 46.

131. Pub. L. 93-618, 93 Stat. 295 (1974) (codified as amended at 19 U.S.C. § 2411 (2000)).

132. Dubowy, *supra* note 90, at 46.

133. *Id.* at 47.

134. Zheng Chengsi, *The TRIPS Agreement and Intellectual Property Protection in China*, 9 DUKE J. COMP. & INT'L L. 219, 219 (1998).

135. Morgan, *supra* note 120, at 812.

136. INTERNATIONAL INTELLECTUAL PROPERTY ANTHOLOGY, *supra* note 126, at 9-10.

137. Homere, *supra* note 10, at 282.

138. Long, *supra* note 123, at 262.

139. Dubowy, *supra* note 90, at 47.

140. Long, *supra* note 123, at 262-63.

141. Chengsi, *supra* note 134, at 226.

Developing countries were concerned about overprotection of IP under TRIPS.¹⁴² They felt that it was unfair to hold them to the same standards as fully developed nations.¹⁴³ They feared that TRIPS could impede a country's ability to effectively use available technology to promote public health and retard the technological basis needed for economic prosperity.¹⁴⁴ They feared that TRIPS would act as a barrier to the transfer of technology, as foreign companies would seek high returns before bringing technologies to a less-developed nation.¹⁴⁵ They feared IP protection would impede economic growth by increasing the cost of accessing technology, making domestic companies unable to compete, and driving them out of business.¹⁴⁶ In addition, in developing countries with prevalent infringement problems, enforcing IP rights would likely lead to an initial drop in economic productivity.¹⁴⁷

To alleviate some of these fears, TRIPS allows a transitional period of five years for developing country members and members transitioning from a centrally-planned economy, and a ten-year transition period for least-developed member countries.¹⁴⁸ These transition periods were meant to give developing countries sufficient time to implement IP protections and phase out any reliance on trade in counterfeit goods.¹⁴⁹

V. A CLOSER LOOK AT IP PROTECTION AND FDI IN CHINA, INDIA, AND SINGAPORE

Experts projected similar levels of growth in the economies of China and India due to similar characteristics, such as potentially massive domestic markets, low labor rates, and large, skilled labor forces.¹⁵⁰ Labor rates are similar in both countries and help make the cost of production in either country substantially less

142. Dubowy, *supra* note 90, at 47. *See also* Evenson, *supra* note 9, at 189 (stating that facing the need to implement TRIPS provisions under the WTO and, at the same time, a piracy penalty while FDI becomes more important, should lead a developing nation to "shift from grudging resistance toward internationally designed IPRS [intellectual property rights] to a policy of aggressive implementation of domestically designed IPRS (subject to accepted international rules). It would be a shift from 'fear of exploitation by foreigners' to a policy of 'exploiting foreigners.'").

143. *See generally* Dubowy, *supra* note 90, at 34-40.

144. *See id.* at 50.

145. Homere, *supra* note 10, at 285.

146. *Id.*

147. *See id.* at 285-86.

148. Pfeil, *supra* note 69, at 18.

149. *Id.*

150. Clossey & Thomson, *supra* note 42, at 9. One major difference that is often cited is the fact that China's infrastructure is more advanced than that of India. *See id.*

than in markets such as Latin America.¹⁵¹ Not all countries have the natural resources that give China and India a head-start in our global economy, yet even a country as small as Singapore can become an economic power. Compared to their larger neighbors, smaller economies may have to play catch-up, but by taking advantage of opportunities as they are presented and creating an environment conducive to economic growth, they can compete for foreign investment and improve their economies.¹⁵²

Starting from different positions and having different economic goals, China, India, and Singapore have all had success in growing economies while maintaining varying degrees of IP protection. China has been largely successful in attracting heavy investment by MNCs,¹⁵³ especially in manufacturing.¹⁵⁴ India, however, relies more on vibrant, domestically-owned private enterprises¹⁵⁵ but has focused on creating expertise in service industries and pharmaceuticals.¹⁵⁶ Singapore has become a high-technology manufacturing and R&D center.¹⁵⁷

Both India and China are accused of having sub-par IP protection systems.¹⁵⁸ China has had to build its IP system from scratch, beginning in the 1980s.¹⁵⁹ In contrast, India had the historic advantage of the rule of law.¹⁶⁰ Meanwhile, Singapore, with few natural resources to attract FDI, has had to fully leverage IP protection in order to attract investments and create a successful economy.¹⁶¹

151. *See, e.g.*, Levine, *supra* note 54.

152. *See* Homere, *supra* note 10, at 284.

153. Enric Joan Ricart et al., *New Frontiers in International Strategy; Perspective*, 35 J. INT'L BUS. STUD. 175, 188 (2004).

154. *See* Barner & Wegner, *supra* note 28.

155. Ricart et al., *supra* note 153, at 188.

156. *See generally* Srividhya Ragavan, *Can't We All Get Along? The Case for a Workable Patent Model*, 35 ARIZ. ST. L.J. 117, 130-35 (2003); *see also* *Engineering Services Outsourcing in India Can Grow to \$10 bn'*, FIN. EXPRESS, Feb. 16, 2006, available at 2006 WLNR 2714278.

157. *See* Stewart & Png, *supra* note 4, at 9-10.

158. *See* OFFICE OF THE U.S. TRADE REPRESENTATIVE, 2004 SPECIAL 301 REPORT 11-13, 16, (2004), available at http://www.ustr.gov/assets/Document_Library/Reports_Publications/2004/2004_Special_301/asset_upload_file16_5995.pdf [hereinafter SPECIAL 301 REPORT]. The United States Trade Representative (USTR) is charged with identifying those countries whose IP regimes are insufficient to protect U.S. interests there, and the USTR has the authority to unilaterally impose trade sanctions based on a country's lack of IP protection. *Id.* at 10; *see also* 19 U.S.C. § 2411(a) & (c) (2000).

159. Ansson, *supra* note 89, at 8-10.

160. Clossey & Thomson, *supra* note 42, at 9.

161. *Id.*

A. The Special Case of China

1. Intellectual Property Rights Enforcement in China

Though China has made significant advances in its legal system, it still cannot be said—in Western business terms—to have an effective rule of law.¹⁶² On their face, China's laws appear to meet or exceed the standards set by international IP rights treaties, including TRIPS.¹⁶³ Enforcement of China's IP laws, however, is sporadic at best, and IP theft remains rampant.¹⁶⁴ For example, the recent launch of a brand new Chevrolet model was predated by a counterfeit model produced by a Chinese partner of GM itself.¹⁶⁵

China was placed on the first United States Trade Representative (USTR) Priority Watch List in 1989.¹⁶⁶ As a result of pressure from the United States and other Western governments, China has steadily increased protections of IP rights through new legislation.¹⁶⁷ These changes in law often resulted in China being removed from U.S. watch lists. However, because improved enforcement of IP rights lagged far behind the laws on the books, China has each time been returned to some type of USTR scrutiny.¹⁶⁸ Companies recognize that until new IP laws are tested in the courts and become predictable, there will be an increased need to act cautiously in investing in a developing country like China.¹⁶⁹ In its 2004 Special 301 Report, the USTR designated China for "Section 306" monitoring, meaning that if enforcement of IP rights in China slips significantly, trade sanctions could be unilaterally imposed.¹⁷⁰

Under U.S. law, a company can wait until infringement occurs and then bring suit, which will ultimately compensate the rights holder for any damage and restore the exclusive IP-based position to the status-quo. Under Chinese law, however, a company will not be fully compensated after an infringement

162. *Id.*

163. *See* Spierer, *supra* note 115, at 46-47.

164. Maskus, *supra* note 12, at 461.

165. Barner & Wegner, *supra* note 28.

166. Ansson, *supra* note 89, at 8. Each year since 1989, the USTR has published a list of countries whose IP protections were found to be inadequate. *See id.*

167. *See* Konrad L. Trope, *To Battle Piracy in China, IP Companies May Turn to Self-Help*, IP WORLDWIDE, July-Aug. 1997.

168. Ansson, *supra* note 89, at 8-11.

169. *See* Lippert, *supra* note 46.

170. SPECIAL 301 REPORT, *supra* note 158, at 11-13. The Omnibus Trade and Competitiveness Act of 1988 included the "Special 301" provision creating an annual requirement for the USTR to identify countries that deny adequate protection for intellectual property rights. Ansson, *supra* note 89, at 9-10.

occurs.¹⁷¹ In fact, a company must recognize that caps on infringement damages mean that a rights holder will not even be compensated sufficiently to cover attorney's fees and ancillary enforcement costs.¹⁷² For instance, when a court in the People's Republic of China found that the IP rights of Microsoft, Autodesk, and WordPerfect had been infringed by a Chinese software pirate, the pirate was fined only \$53,600.¹⁷³ Another Chinese court awarded Walt Disney only \$27,360 for unauthorized use of some of its more famous animated characters.¹⁷⁴

To have any hope of clamping down on infringement of products in China, a company must develop a reputation for vigilance and a willingness to immediately sue.¹⁷⁵ Companies must employ public relations to educate the public, as well as employees, on the importance of preserving trade secrets.¹⁷⁶ It should be assumed that someone with access to the factory floor will seek to take proprietary information to use against the interests of the employer. It is also important to maintain a public affairs presence in Washington, D.C. to encourage U.S. government agencies to present arguments to the Chinese government in the course of WTO and TRIPS negotiations.¹⁷⁷

Chinese domestic firms are also increasingly pressuring the Chinese government to increase IP protections.¹⁷⁸ These firms are beginning to create their own technological innovations or are licensing IP from foreign companies, but without a strong enforcement regime they are unable to fully exploit their IP portfolio.¹⁷⁹ In addition, many foreign MNCs are still reluctant to license their IP to Chinese companies because of weak IP protections.¹⁸⁰

2. FDI and Economic Growth in China

China has made some progress in strengthening the rule of law and making it more transparent.¹⁸¹ This has given MNCs the perception that it is becoming safer to invest in China and has encouraged the flow of much-needed foreign investment.¹⁸² Instead of acting as they would in countries with better IP

171. See Glenn R. Butterson, *Pirates, Dragons and U.S. Intellectual Property Rights in China: Problems and Prospects of Chinese Enforcement*, 38 ARIZ. L. REV. 1081, 1104 (1996).

172. Barner & Wegner, *supra* note 28; Trope, *supra* note 167.

173. Trope, *supra* note 167.

174. *Id.*

175. Barner & Wegner, *supra* note 28.

176. *Id.*

177. *Id.*

178. Bejesky, *supra* note 53, at 450.

179. *See id.*

180. *Id.* at 466.

181. *Id.* at 449.

182. *Id.*

protection, doing business in China requires increased transaction costs and participation in developing safeguards for a company's IP.¹⁸³ This may include added contractual safeguards, more oversight at factories, technological protections, or even drastic measures such as under-cutting the prices at which goods are sold by pirates.¹⁸⁴

Despite these issues, China may not need to change its IP regime in order to compete for foreign investment. China's real gross domestic product (GDP) has grown 700% since 1978, an annual average increase of nine percent per year.¹⁸⁵ Many companies feel that this large growing market cannot be ignored, and if they wait until IP is protected before they invest, they will be too late. Some additional IP risk now is balanced by a burgeoning economy with increased discretionary spending and a very cheap labor force ready, willing, and capable of making products for Chinese and foreign markets. China's growing domestic economy has been an attractive target for foreign companies, and after showing a willingness to strengthen IP rights in the late 1980s and early 1990s, FDI increased by a factor of ten between 1990 and 1995, resulting in \$36 billion of new investments in 1995.¹⁸⁶ China has been able to attract significant FDI while providing poor protection of IP, becoming the first country in two decades to attract more FDI than the United States, totaling \$52.3 billion in 2002.¹⁸⁷

Further evidence of China's growing economy is its ascension to being the world's third largest trading nation, surpassed only by the United States and Germany.¹⁸⁸ Exports in China's information technology sector alone grew fifty percent during 2004, with continuing fierce competition in the sector leading to expectations of increased numbers of foreign manufactures moving facilities to China.¹⁸⁹ However, as one Chinese official put it, "China may be a large trading nation, [but] it has yet to become a robust trading nation."¹⁹⁰ Despite all the investments by foreign companies in China, China's exports remain rather low-technology.¹⁹¹ Advanced high-technology products account for a very small part of China's overall trade.¹⁹² According to one expert from the University of International Business and Economics, this will not change until core IP rights that deal with technology are strengthened.¹⁹³ As a result, despite vast resources,

183. *Id.* at 466-69.

184. Trope, *supra* note 167.

185. WIGGINS, *supra* note 74, at 3.

186. Homere, *supra* note 10, at 287.

187. WIGGINS, *supra* note 74, at 3.

188. *China Becomes World's 3rd Biggest Trading Nation*, ASIA PULSE, Jan. 11, 2005.

189. *Id.*

190. *Id.*

191. *Id.*; Gareth Leather, *Pharmaceutical Companies in South Korea Remain Concerned Following IP Protection Survey*, WORLD MARKETS ANALYSIS, June 26, 2003.

192. *China Becomes World's 3rd Biggest Trading Nation*, *supra* note 188.

193. *Id.*

this could leave China at a disadvantage in many high-tech fields because foreign investors will be more likely to seek out countries with greater protection for IP.¹⁹⁴

B. IP Rights and FDI in India

1. IP Rights Enforcement in India

In the past, India has taken strong positions against multilateral agreements aimed at promoting and regulating foreign investment.¹⁹⁵ For example, India helped lead the opposition to adding TRIPS within GATT.¹⁹⁶ When first enacted, beginning during the colonial period, Indian IP laws provided strong protections.¹⁹⁷ However, largely for social policy reasons, much of the IP protections were gradually eroded.¹⁹⁸ With poverty rates exceeding fifty percent, the only way that the foreign medicines needed for combating rampant epidemic diseases could become accessible to the masses was by weakening IP protections in order to foster an indigenous pharmaceutical industry.¹⁹⁹ India has not actively promoted itself as a center for manufacturing, but recent improvements have increased its attractiveness as a location for production facilities.²⁰⁰ However, India has more recently changed its stance, attempting to attract significantly increased FDI.²⁰¹

India has not actively marketed itself as a location for manufacturing, but recent improvements have made it easier for companies to move production to India.²⁰² Electronics manufacturers are moving manufacturing facilities to India, not just to produce for the domestic market, but also to export products made in India to foreign markets.²⁰³

In its 2004 Special 301 Report, the USTR placed India on the “priority watch list,” meaning that if enforcement of IP rights do not improve, trade

194. For example, South Korea, which can no longer compete based on low wage rates and is seeing China establishing itself as the “workshop to the world,” is turning to higher-technology sectors, such as Biotech. However, investors will still look to China and its low resource costs unless South Korea can provide a significant advantage in another way—particularly through strong IP protections. *See* Leather, *supra* note 191.

195. Kelley, *supra* note 3, at 500.

196. Ryan, *supra* note 22, at 273.

197. Ragavan, *supra* note 156, at 129-30.

198. *Id.* at 130-33.

199. *Id.* at 131.

200. *See id.* at 137-43.

201. Kelley, *supra* note 3, at 500.

202. James Carbone, *Is India the Next China?*, PURCHASING, Jan. 15, 2004, at 41, 41, available at <http://www.manufacturing.net/pur/article/CA372739.html?display=reader'sChoice>.

203. *Id.* at 42.

sanctions could be unilaterally imposed.²⁰⁴ This is not the first time India has been threatened with trade sanctions due to inadequate IP protection. In fact, India has been on the USTR priority watch list every year since 1989, and was a priority foreign country from 1991 to 1993.²⁰⁵ The USTR reserves “priority foreign country” status for those countries with “the most onerous and egregious acts, policies and practices which have the greatest adverse impact . . . on the relevant U.S. products.”²⁰⁶ Countries with “priority foreign country” status are subject to more frequent investigations.²⁰⁷

2. FDI and Economic Growth in India

In India, foreign investment may be delayed, not just by the lack of IP rights protections, but, initially at least, more by the lack of infrastructure needed to get raw materials to the factories and finished product out to the world’s markets.²⁰⁸ FDI varies greatly between the states within India, focusing almost entirely on the few states with the best physical infrastructure, particularly those states with a reliable power supply.²⁰⁹ Supply chain problems may be just as daunting to would-be foreign investors as India’s poor IP record.²¹⁰ India is actively working to improve the supply-chain and infrastructure issues by working on many road building projects.²¹¹ This, coupled with an expanded supply base, would likely put India on equal footing with China.²¹² If India had a stronger IP regime than China, this could provide a competitive advantage and enable India to attract foreign investments that would otherwise end up in China.

India is developing economically in a way that is attracting FDI, and this is helping to accelerate growth in India.²¹³ India’s legal practice and court system has been established for generations, yet dispute resolution can be extremely time consuming.²¹⁴ The country’s established rule of law provides some of the transparency that foreign investors desire. However, because significant decisions may be decades in the making, most foreign businesses do not view the Indian

204. SPECIAL 301 REPORT, *supra* note 158, at 14, 16.

205. INT’L INTELLECTUAL PROP. ALLIANCE, 2004 SPECIAL 301 REPORT ON GLOBAL COPYRIGHT PROTECTION AND ENFORCEMENT app. D, at 1 (2004), *available at* <http://www.iipa.com/pdf/2004SPEC301USTRHISTORY.pdf>.

206. SPECIAL 301 REPORT, *supra* note 158, at 10.

207. *See id.*

208. Carbone, *supra* note 202, at 41-42.

209. *See Gujarat, TN Becoming Less Attractive for Foreign Investors*, *supra* note 58.

210. *See Carbone*, *supra* note 202, at 42.

211. *Id.*

212. *Id.*

213. Clossey & Thomson, *supra* note 42, at 9.

214. *Id.*

courts as a reliable source of protection.²¹⁵ In 2004, FDI in India reached \$5 billion for the first time, a seventy percent increase over the previous year, but still only one tenth the level of FDI China attracts.²¹⁶

C. The Case of Singapore

Unlike China or India, Singapore lacks the vast resources and huge new markets that are magnets for foreign investors. However, Singapore has been able to position itself as an economic power.²¹⁷ Singapore is the United States' eleventh largest trading partner, and Singapore has become a base from which MNCs can export products throughout the world.²¹⁸

Singapore strictly enforces its many laws, providing a counterexample to the historical theme of enforcement coming only after development has been accomplished.²¹⁹ In fact, in a recent survey of twelve Asian countries, Singapore was rated to have the best protection of IP rights, slightly ahead of Japan, and well ahead of South Korea and China.²²⁰ In Singapore's case, it was the adoption of a strong IP rights regime before development which helped attract foreign investment and spur economic growth.²²¹ And now, by maintaining some of the most advanced IP laws in the region, Singapore has been able to continue to attract significant FDIs sufficient to selectively cultivate and advance new technology-driven industries and emphasize R&D.²²² Strong IP laws have given Singapore a competitive advantage in attracting technology transfers that will be the basis for continued economic growth.²²³

215. *Id.*

216. Edward Luce, *Big Leap in Foreign Investment in India FDI Flows*, FIN. TIMES, Nov. 26, 2004, at 9, 9. Some of this may be attributable to differences in the ways that each country reported investments, since this report favored manufacturing investments when calculating FDI, downplaying the significance of India's burgeoning services sector that attracts significant foreign investment. *See id.*

217. Joseph C. Rodriguez, Recent Development, *A Comparative Study of Internet Content Regulations in the United States and Singapore: The Invincibility of Cyberporn*, 1 ASIAN-PAC. L. & POL'Y J. 9, 18 (2000).

218. Sherrilyn S. Lim, Comment, *The U.S.-Singapore Free Trade Agreement: Fostering Confidence and Commitment in Asia*, 34 CAL. W. INT'L L.J. 301, 311 (2004).

219. Clossey & Thomson, *supra* note 42, at 9.

220. Leather, *supra* note 191.

221. Clossey & Thomson, *supra* note 42, at 9.

222. Stewart & Png, *supra* note 4, at 9-10. Foreign investment from 1983 to 1992 accounted for seventy-seven percent of total manufacturing investment. *Id.* at 8.

223. *See id.* at 10.

VI. A STRATEGY FOR MANIPULATING INTELLECTUAL PROPERTY PROTECTIONS TO ENCOURAGE INVESTMENT

Countries like Singapore, which implemented stringent IP protection systems, experienced a rising influx of foreign investment shortly after improving their IP enforcement.²²⁴ In addition to Singapore, Malaysia and Indonesia also leveraged IP protection in order to attract foreign investment and promote economic growth.²²⁵ However, similarly-situated countries such as Vietnam and Thailand, that opted to resist pressures from the West to fully reform their IP regimes, have become havens for piracy and have not attracted similar economic opportunities.²²⁶ In Singapore, the implementation of a stronger IP system has led to joint ventures with foreign computer companies that had refused to do business there before these stricter laws were enforced.²²⁷

While other factors such as infrastructure, tax incentives, and government regulations are extremely important and are often manipulated by developing countries seeking FDI, developing countries rarely attempt to use their IP protection systems as an attractive incentive. Because IP protection is becoming increasingly important to foreign investors, a developing country that invests in establishing an effective IP enforcement system will be noticed by potential investors.²²⁸

As a result, a developing country should be able to gain an advantage in attracting foreign investments over similarly-situated countries by actively enforcing IP rights. In addition, increasing protections for IP may be the only way for smaller countries with limited resources to compete with larger nations with an abundance of natural riches.²²⁹ For example, when looking for an advantage in order to respond to the competitive threat of China, countries are beginning to realize that improving IP protection may be the key.²³⁰ Many developing countries can no longer compete with China on the basis of low labor costs, but can lower the total costs to investors by decreasing the risk of loss of control over IP.²³¹ It can be much easier to change IP enforcement laws and practices than to change the level of wages or availability of natural resources in a country.

Therefore, in creating a strategy for attracting foreign investment, developing countries would do well to look to increasing their IP protection systems along with the more conventional approaches of improving infrastructure, tax breaks, and reducing government regulation. Though, as evidenced by China's recent economic growth, development can occur with very poor IP

224. Homere, *supra* note 10, at 284.

225. *Id.*

226. *Id.*

227. *Id.* at 287.

228. See generally Evenson, *supra* note 9.

229. Leather, *supra* note 191.

230. *Id.*

231. *Id.*

protections in place, it is becoming increasingly difficult to accomplish, even for China.²³²

IP protection is often one area in which a country can differentiate itself from competing countries which lack the initiative to enact similar protections. In addition, IP protections, along with factors such as improvements to infrastructure and decreased regulations, can help to protect and stimulate home-grown businesses and technologies.²³³ Enacting strong IP protections may initially slow a growing economy, but over the long run it can produce a stronger, more robust economy.²³⁴

VII. CONCLUSION

Thanks to typically low labor rates and favorable treatment from governments looking to raise their international presence, developing countries will likely attract some level of foreign investment no matter how weak their IP protections are. However, even for a country with the robust economies and large markets of China or India, poor enforcement of IP will always be a deterrent to FDI. Increased IP protection will not only attract more FDI, but it can also enhance domestic innovation.²³⁵

A country seeking to become a larger player in the global economy and to bring foreign investment and the access to technologies and training that accompanies it, can gain a competitive advantage over similarly-situated countries by greatly reducing the risk to a foreign company's IP. Intellectual property rights are becoming a more and more significant asset for many MNCs, and as the total value of intellectual property continues to rise, investing companies will place more emphasis on the protection of those rights when deciding in which countries to invest. Though the lack of IP protection historically has not always prevented FDI, the growing importance of IP protection is likely to influence investment in the future.²³⁶



232. *China Becomes World's 3rd Biggest Trading Nation*, *supra* note 188.

233. *See* Maskus, *supra* note 12, at 459.

234. *See generally* *China Becomes World's 3rd Biggest Trading Nation*, *supra* note 188.

235. *See* Homere, *supra* note 10, at 288-89.

236. Pfeil, *supra* note 69, at 20.