POLITICAL AND ECONOMIC CHANAGES IN YUGOSLAVIA

BY
IVAN CRNILOVIC

FACULTY ADVISOR
WILLIAM HENNESEY

FRANKLIN PIERCE
LAW CENTER LIBRARY
CONCORD. N. H.
JUL 18 1997

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTERS OF INTELLECTUAL PROPERTY TO THE FACULTY WITHIN FRANKLIN PIERCE LAW CENTER, CONCORD, NH 03301

NOVENBER 30, 1994

Acknowledgments

I would like to acknowledge and give my special thanks to my faculty advisor William Hennesey for the help he was given me in the competition of the MIP thesis.

I especially want to thank Professor Gretchen M. Ziegler at Franklin Pierce College and Carole and Jerry Brecher for their guidance and support during MIP program.

Dedication

This work is dedicated to my family, and my girlfriend Kimberly. Without their help and support my five years in USA would not have been possible.

Abstract

The principal aim of this thesis is to undertake a examination of Yugoslavia's needs for foreign capital and the effect that the quality of intellectual property protection may have on its ability to obtain capital.

What the researcher intends to demonstrate is how the enforcement of intellectual property laws in Yugoslavia may significantly influence the amount of foreign capital brought in, which would affect the survival of the unstable economy.

Table of Contents

Page

Acknowledgments....i
Dedication....ii
Abstract....iii
Table of Contents....iv

I. INTRODUCTION....1

II. REGIONAL DEVELOPMENT AND CHANGES IN YUGOSLAVIA....2

III. YUGOSLAVIA'S NEED FOR FOREIGN CAPITAL....6

IV. TRANSFER OF TECHNOLOGY....9

V. INTELLECTUAL PROPERTY LAW....11
1. Intellectual Property....11
2. Intellectual Property Protection in Yugoslavia....13

VI. ECONOMIC CONSEQUENCES OF INTERNATIONAL PROTECTION OF INTELLECTUAL PROPERTY....15
1. Pirated Products....21
2. The Loss to Intellectual Property Owners and Industrialized Nations....24
3. Yugoslavia's Involvement in Pirating Goods....25

VII. US EFFORTS TO RESTRICT INTERNATIONAL PIRACY....27
1. The GATT and Intellectual Property....27

2. Sectiion 337 - Protection of Intellectual Property Rights Under the Tariff Act of 1930....28
3. Investment Treaties as a Remedy Against the Piracy 28
4. Special Section 301 of the Tarde Act....29

VIII. CONCLUSION....31

APPENDIX A....33

APPENDIX B....34

REFERENCES....35

I. Introduction

The main objective of this study is to investigate the contribution, if any, of the intellectual property protection on foreign investment in Yugoslavia. Human creativity, the development and use of new technologies, is now recognized as a primary element in the growth of modern economies. Notwithstanding differences in the availability and cost of capital and labor, the ability to create and make use of new ideas and new technologies is increasingly becoming the factor which distinguishes the successful from the unsuccessful. The ideas and technologies which are the fruits of this creativity are intellectual property.

II. Regional Development and Changes in Yugoslavia

This country had a population of 23 million and lies in the heart of the Balkans. For centuries the Balkan area has been a meeting place of powerful religions: the Catholic West, the Greek Orthodox East, and the Muslim South. In the contemporary era, these cultures are associated with three types of economic organization - capitalism in the West, central planning in the East, and under-development in the South.

The present generation of Yugoslavia has experienced all three known economic systems: capitalism before the war, centrally planned economy after the war, and self-governing socialism in more recent years. The last mentioned system was Yugoslavia's own innovation, and so far is the only one of its kind in existence. Former Yugoslavia may be described as one country with two alphabets, three religions, four languages, five nations, six federal states called republics, seven neighbors, and eight national states.

Post war Yugoslavia (WWII) was dominated for 35 years by Josip Broz, better known as Marshal Tito. Under his leadership the Yugoslav partisans took control in 1945, and a Social federal state emerged consisting of six republics and two autonomous provinces. The title Socialist Federated Republic of Yugoslavia was formally adopted in 1953.

Partisans accepted the fact that there was a multi-ethnic society and proceeded to organize the postwar federation on that basis. The major Yugoslav national groups each had their own republics: Slovenia, Croatia, Macedonia, Bosnia and Hercegovina, Montenegro and Serbia. In addition to six republics there are two autonomous provinces within the republic of Serbia - Vojvodina in the North with a Hungarian minority of some 25 percent, and Kosovo in the South with Albanian Majority of close to 85 percent. The provinces were, in most political respects equal to the republics. Extensive efforts were made to maintain an equality of the languages. The top federal positions of the state and the Legion of Communists of Yugoslavia were filled through rotation among the republics and provinces. This system represented the federal units, not the citizens as individuals. The only genuine federal institution was the Yugoslav army.

The history of self-government in Yugoslavia began in the early 1950s, when the break with the Soviet Union forced Yugoslavia to find a distinct road to Socialism [FN 1]. In 1948 Stalin accused Yugoslavia of

antisovietism. By 1949 all trade between Yugoslavia and other communist countries had been halted, and an economic boycott was imposed. Pressed by events, Yugoslavia began a highly original construction - a decentralized socialist economy featuring worker self-management of factories. Yugoslav Communists were in a position to start creating Marx's free association of producers. The factories should be left in their hands, with the sole proviso that they should pay a tax for military and other state taxes. The most important part of Communism was that this would be the beginning of democracy -- something that socialism had not yet achieved. Further, it could be plainly seen by the world and the international worker's movement as a radical departure from Stalinism.

Soskic has found that in the forty years since 1949, both theory and the practice of self-management have changed radically. In the first decade, self-management was conceived of primarily as a society-wide phenomena. The system thus born (imposed top-down and without the benefit of any economic theory) for a long time gave impressive results. Between 1952 and 1960 Yugoslavia recorded the highest growth rate of any country in the world. From 1960 to 1980 Yugoslavia, among the low and middle income nations, ranked third in growth per capita [FN 2].

During the 1980s, the Yugoslav economy collapsed. For years Yugoslavia had Titoism, and was given some kind of identity by reference to the world around it. It was non-aligned between NATO and Warsaw Pact; it developed its own kind of Communism [FN 3]. Since may 1980 Yugoslavia has been without Tito. Initially, the system designed by Tito in 1974 of an annual rotating presidency and four-year election for the sole political party, the League of Yugoslav Communists, seemed to work satisfactorily. In reality, however, even in Tito's lifetime a lot of problems had been in existence.

In the six years following Tito's death in 1980, two central issues defined the growing crisis within the country: 1. geographic and demographic problems within the autonomous province of Kosovo, and 2. problems within the Yugoslavia domestic economy, because during the 1970s the Yugoslavs paid themselves more then their enterprises actually earned. The results have been high and escalating rates of inflation through the 1980s, leading to a rising level of unemployment [FN 4]. Both issues were the result of Tito's decentralized management

system, whose weaknesses and contradictions had only been superficially glossed over by Tito's immense personal authority. Once the leader was gone, the system fault lines become clear [FN 5].

The principal cause of failure was the unwillingness of the Yugoslav party and government to implement a policy of macroscopic restriction, especially restriction of the money supply, in combination with a microeconomic policy designed to expand opportunities and incentives for enterprise and efficient work. What was needed was more freedom for independent decision-making, genuinely self-managed enterprises within a free market combined with tight controls on the supply of domestic currency.

Yugoslavia's system of self-management is unique for three reasons. First, self-management is considered a social issue (as opposed to a management issue) and is mandated by law [FN 6]. The 1974 Constitution and 1976 Law on Associated Work specify both self-management and social ownership as the two basic foundations of Yugoslavia's socioeconomic system. A work organization or "Organization of Associated Labor" is a product of self-management agreement voluntarily concluded by its workers. Thus, self-management is essentially the socioeconomic foundation of Yugoslav society. Second, work organizations are collectives of social ownership [FN 7]. The Yugoslav work organization is the institution of social self-management called "social ownership". Social ownership (drustveno vlasnistvo) is not ownership in the classical meaning of proprietary rights. The resources, productive capacities, and capital goods are owned by the society at large rather than any agency or individual. Neither individual workers nor the working collective can dispose of the object held in the organization. Thus, while Yugoslav workers can vote on what to do with profits, they are technically working for the good of society. Third, their self-management system has been a formal and legally enforced way of work life in Yugoslavia since 1950 [FN 8]. By mandate, self-management consist of: (1) direct participation at meetings (zbor radnickih ljudi or zbor(s)) of all the Organization of Associated Labors, workers, who by choice may or may not take part in both the debate and decision - making procedure; (2) directly by referendum in which all workers may vote; and (3) indirectly through the worker's councils (radnicki savet).

Yugoslavia has had a loose federal structure since 1974. Two factors appeared to hold Yugoslavia together. first, Yugoslavia was party to numerous international agreements and a member of organizations such as International Monetary Fund and the World Bank. Second the central currency reserves, the centralized banking system, and other federal institution also worked to unite Yugoslavia [FN 9]. The disintegration of the Yugoslav federation in late 1980s and early 1990s clearly shows that these two factors were no longer to hold the country together.

Socialism had destimulated work and the value of work. It resulted in a low leaving standard for the population. After the death of Josip Broz Tito there were a lot of changes which took place in the country. All republics became more independent, which resulted in a weaker Socialist Federative Republic of Yugoslavia. In order to stay away from a communist framework all republics allowed some democratic principles [FN 10]. A higher party system was adopted which created an opposing party to ruling classes in all republics. In order to develop trade with foreign countries, strong movements of privatization were established. New elections were held and all republics individually presented their own constitution. People on the top had a great desire for improvement, but keeping the communist way of behavior inhibited it.

Armed conflict begun first in the republic of Slovenia, and continued in the republic of Croatia. The world recognized Slovenia, Croatia and Bosnia and Hercegovina as independent states. The result is the war in Bosnia and Hercegovina where three different nations live together. According to the latest census in 1981, the 4.3 million people of Bosnia and Hercegovina are a combustible mixture of Muslims (44%), Serbs (33%) and Croats (17%), in which people were asked to state their ethnic loyalty or origin [FN 11].

With recognition of Slovenia, Croatia and Bosnia and Hercegovina as independent states, SFR Yugoslavia as a state no longer exists. The republic of Macedonia asked for independence also, but until today this republic has not been recognized.

The republics of Serbia and Montenegro have established a new state which an aim to continue where SFR Yugoslavia left off. Serbia and Montenegro declared on April 27th 1992, that they were founding a new Yugoslavia as the legal successor to the old one. The new state of

State and Montenegro got the name Union of Republic of Yugoslavia. However, the United States and most West European countries have refused to rush into recognition of the new Yugoslavia as the legal successor to the old.

After fighting erupted in Sarajevo and other towns in Bosnia and Hercegovina, the United States and European Community were considering severing diplomatic relations with Yugoslavia to protest recent Serbia aggression against the breakaway republic of Bosnia and Hercegovina. The United Nations Security Council on May 30th, 1992 called for an immediate ceasefire in Bosnia and Hercegovina and voted to impose economic sanctions on Serbia and Hercegovina, the left-over rump of the Yugoslav federation. The sanctions started with the suspension of air links, air traffic to and from Yugoslavia will halt, diplomatic links will be broken. Next came an oil and trade embargo, the freezing of its foreign assets and the expulsion of Yugoslavia from international bodies such as World Bank, the IMF and the United Nations itself. The council also barred Yugoslavia sports teams from competing on the Olympic Games in Barcelona and European soccer Cup, as a blow directed at the Serb in the street.

III. Yugoslavia's Need for Foreign Investment and Capital

Western companies considering investing in the five independent states resulting from Yugoslavia's break-up may be heartened by the fact that the area has the longest foreign investment history of all the former socialist countries in Central and Eastern Europe. The first joint venture legislation dates back to 1967.

Table 1
Direct Foreign Investment in Former Yugoslavia (as of Dec. 31, 1991)

	Number	Foreign capital (DM m)
Bosnia & Hercegovina	382	280.3
Croatia	1,470	516
Macedonia	450	225
Montenegro	106	120
Serbia	2,096	1,873
Slovenia	1,114	1,054
Total	5,618	4,068.3

Source: Business International (June 1, 1992)

In 1992 another 741 foreign investments were added with the contracted foreign capital amounting to DM 330 million. As of the beginning of 1993 investments in Serbia-Montenegro numbered more than 3,000.

Table 2
Foreign Investment in Serbia-Montenegro (at December 31, 1992)

Type	Number	%	Foreign capital contracted (DM m)	%
All forms	3,043	100.0	2,323.5	100.0
Mixed	2.020	66.4	1,437.8	61.9
Own	683	22.4	178.3	7.7

FRANKLIN PIERCE
LAW CENTER LIBRARY
CONCORD, N.H.

Joint ventures (22 unknown)	318	10.4	707.4	30.4

Source: Federal Ministry for Foreign Economic Relations

After United Nations' sanctions were imposed in May 1992, the number of applications for foreign investment started to fall although they have never ceased altogether. This reflected some hope for a future after the sanctions. No data are available about how many foreign investments are still active. Few have discontinued activities altogether but are dormant until sanctions are lifted. The trend in sectorial composition has been towards tertiary activities and away from production. For example, 30% of the mixed forms are involved in foreign trade, 15% in transport and communications, and 14% in catering and tourism.

Firms founded with foreign capital in the Federal Republic of Yugoslavia will by the end of the 1994 have to adapt their options to the new law on foreign investment adopted by the Yugoslav parliament on May 19, 1994. The law is expected to come into effect after UN sanctions are lifted. The new law is expected to ensure greater legal security for foreign investors, grant additional facilities for those who are ready to invest in the Yugoslav economy and simplify the investment procedure. The law rules that foreigners can found firms in Yugoslavia, invest capital in domestic firms, open company branches and buy shares and concessions in the exploitation of natural resources. Foreign investors will also be able to import equipment and materials for building firms into Yugoslavia tax-free. Foreigners are only not allowed to hold more than 49% of the shares in strategically important branches of industry, such as the military industry.

The major reasons for foreigners to invest in Yugoslavia include:

(1) win a share of market of 10 million people;
(2) sources comparatively cheap, but well-skilled labor, especially in the area of research and development; and
(3) to locate in an environment better suited to the needs of Western firms than other socialist countries.

Belgrade authorities claim losses due to sanctions total as much as $50 billion with neighboring countries also affected [FN 12]. But there is little evidence of the embargo on Belgrade streets and shops. Traffic

jams are an everyday annoyance again and with smuggled petrol selling at $6.45 a gallon, there is little doubt the purchasing power of the Yugoslav has gone up. The man widely acclaimed to have rescued the economy after a year of almost total collapse with hyper-inflation reaching a staggering rate of 60 percent per day is central bank governor Dragoslav Avramovic. Since he launched his recovery program on January 24, pegged the dinar to the German mark and took over total control of the mint, prices have risen by a mere 0.8 percent, foreign currency reserves reached $185 million and output has risen.

Analysts say that Yugoslavia is now a profit-minded country and the Serbian government is coming to grips with a series of laws aimed at attracting foreign investment [FN 13]. Yugoslavia will make an effort to ensure the highest level of cooperation with the neighboring countries, as well as with Russia and Ukraine, and will also strive for closer ties with Western states [FN 14].

According to the Economy Minister Milorad Unkovic, no contract for foreign investment in or cooperation with Yugoslavia has been severed in the two years of sanctions [FN 15]. He sees it as a sign of an interest of both foreign states and foreign companies in resuming cooperation (with Yugoslavia) after the lifting of the sanctions [FN 16].

IV. Transfer of Technology to Less Developed Countries

One of the fundamental issues that subtends the demands of the less developed countries for the establishment of a new international economic order is the facilitation of the transfer of technology from the developed to the less developed countries. The less developed countries have deprecated the present frame work within which international trade and investment transactions including the transfer of technology take place, and have advocated a restricting of the framework to ensure fair and equitable transactions between the two sets of parties. A pivotal ingredient of the developed countries' hegemony over the world economic system is their control of technology and, thus, of industry. This is likely to be so far for a considerable period of time until the research and development capabilities of the less developed countries improves sufficiently to generate the technology required for industry in the latter. While some less developed countries are improving upon their technological infrastructures as a long term solution, other have been concentrating on measures that will improve their access to as much foreign technology as possible.

In fact, most less developed countries, in their naive assumptions that the transfer of technology or access to technology is a panacea for their problems of under-development, have undertaken almost every conceivable measure to gain access to foreign technology. The assumption is naive in that it ignores the need for the initial profound structural changes within the less developed countries without the prospects of choosing technology capable of remedying the under-development of any country are limited. In addition, the assumption is quite often divorced from the preliminary determination of what kinds of goods and services to be produced in order to satisfy the needs of their societies, who is to produce them, and how their production and distribution are to be organized. It is only when all these issues are duly considered and acted upon that there could be a meaningful eclectic approach by the less developed countries in their choice of technology from the many existing and adaptable technologies which are most appropriate to the goals of the social system in its battle against under-development.

The measure undertaken by the less developed countries to encourage the transfer of technology include favorable investment

incentives to multinational enterprises, joint-ventures projects between either host governments or individuals and foreign investors, and the engagement of foreign personnel under know-how and management contracts. Another measure is the protection of intellectual property.

Transfer of technology is the transfer of systematic knowledge for the manufacture of a product, for the application of a process or for the rendering of a service and does not extend to the transactions involving the mere sale or mere lease of goods.

The technology transfer process is never complete until there has been the acquisition of the necessary skills by indigenous labor to manage and utilize the technology autonomously as well as its total absorption and diffusion throughout the recipient's entire industrial and agricultural sectors. It is only when this has been realized that the recipient country may be in a position to satisfy its needs on a continuing basis without depending much on either the original supplier or others [FN 17]

Therefore, if Yugoslavia desires a permanent technological base, it must concentrate on the technology transfer which not only enables the utilization of the transferred technology to satisfy human needs, but more importantly has the potential for the further generation of technology. However, the technology transfer without the establishment of the relevant structures may not necessarily lead to any economic or development growth and the satisfaction of the needs of the importing country. It is also important that the technology acquisition is accompanied by the adoption of measures to reduce the extent of dependence on the supplier. Such measures may include upgrading the technical capabilities of the recipient country and executing its determination to generate its own domestic technology. The requisite technical competence necessary for all this exist in Yugoslavia.

Stronger intellectual property may facilitate technology transfer, since patent holders are more willing to sell technology to countries that guarantee ownership rights [FN 18]. Stronger protection also encourages local inventors to keep their technology in the country. [FN 19].

V. Intellectual Property

1. Intellectual Property

In our information age, intellectual property, generally referred as patents, copyrights, trademarks, and trade secrets, has become a major component of international trade and US competitiveness [FN 20] and is a fundamental business asset protected under three basic bodies of law: patents, copyrights and trademarks. Intellectual property rights protect new and useful products and processes, valuable and relative secret business information, original intellectual works and names and symbols utilized to identify and distinguish commercial goods [FN 21]. Over the last few years, debate has continued on a number of fronts: the discussion on Trade Related Aspects of Intellectual Property Rights (TRIPs) undertaken in the context of the Urugay Round of the General Agreement on Tariffs and Trade (GATT); the efforts of the United States Trade Representative (USTR) to make international intellectual property laws compatible to the perceived interests of the United States with respect to global trade; the continuing attempts to harmonize the world's patent law regimes; and, the constant debate between developed and developing nations relating to the protection and transfer of valuable technology and related intellectual property rights [FN 22]. The need for additional protection and more effective enforcement mechanisms for global trade in intellectual property - and the limitations of the present GATT system and other regimes - is apparent [FN 23].

Intellectual Property protection is required to encourage the emergence of important new technologies, stronger protection to continue productive investment in increasingly expensive research and development, and worldwide protection to enhance global distribution of the products of intellectual efforts. In its progressive shift to an information-based economy, the United States has become increasingly vulnerable to piracy, expropriation and otherwise inadequate protection of its intellectual property in certain foreign countries [FN 24].

Today state created legal rights in knowledge technology and innovation (IP) area focal point of debate around the world [FN 25]. The debate generally centers on how the granting of these intellectual property rights, affects the developed and developing countries. Issues of particular importance include the use of intellectual property rights

as incentives for innovative activities in both developed and developing countries and the proper set of rules to invoke to protect the often divergent interest of the technology rich and the less prosperous developing countries that typically must import technology to faciliate economic growth and development [FN 26].

The global debate regarding the protection of intellectual property rights converges in two distinct areas:

(1) the scope of protectable subject matter, which is defined by statute and case law in each country; and

(2) the enforcement of intellectual property rights established by law [FN 27].

Patent protection has increasingly become a subject of international concern for industries. With the advancement of technology and streamlined access to international markets, inventors have a vital interest in protecting the propriety of their inventions in foreign countries. Due to the varying regulation of patent law in different countries, however, an inventor who receives a patent in one country is neither assured of obtaining a patent for same invention in another country, nor of having the first patent enforced there. Such discrepancies have caused many companies to lose money mistakenly believed they had a valid patent. The foreign inventor is thus at a disadvantage [FN 28].

Developed and developing countries often do not share the same objectives. Developed countries with an existing stock of technological capabilities and a desire to penetrate new markets generally seek enhanced protection for their technical assets in foreign markets. Developing countries, recognizing the need to gain access to those new technologies to pursue economic growth, competitiveness and independence, do not always agree that stronger intellectual property law will accomplish those objectives [FN 29].

2. Protection of Intellectual Property in Yugoslavia

Yugoslavia is a member of the Paris Convention for the Protection of Individual Property, the Berne Convention for the Protection of Library and Artistic Works, the Universal Copyright Convention and the Madrid Agreement concerning the international registration of the

marks [FN 30]. Yugoslavia is a member of the World Intellectual Property Organization and the Brussels Satellite Convention.

While significant legislative improvements have been made in 1989-90, US firms still complain about certain shortcomings in intellectual property legislation and enforcement and cite this as an important disincentive to introducing US products or new investment in Yugoslavia. Because of this, Yugoslavia is on the US Trade Representative's Special 301 "watch list" under the provisions of the 1988 Omnibus Trade and Competitiveness Act.

The patent term is 20 years from the date of filling. The following inventions are excluded from patent protection:

a) inventions contrary to laws and morals;
b) surgical or diagnostic methods;
c) methods of medical treatment applied directly to live humans or animals (excluding methods of use of substances for diagnostic or treatment purposes); and
d) plant and animal species [FN 31].

The Yugoslav Federal Assembly amended the 1981 Federal Patent Law twice in 1990. Key changes are: (a) extension of the patent term to 20 years; (b) elimination of the mandatory use of domestic (Yugoslav) trademarks in conjunction with a foreign trademark; (c) introduction of patent protection for nuclear devices and food products; (d) introduction of "product" in addition to "process" protection for alloys, and certain chemical compounds. Pharmaceuticals were entitled to patent protection in 1993, and copyright protection is now provided for computer programs and literatory works [FN 32]. Problems regarding the criteria for granting compulsory licenses and the protection of trade secrets [FN 33].

The term of copyright protection is the authors lifetime plus 50 years. Sanctions for copyright infringement include fines, injunctive relief and imprisonment. Copyright protection for computer programs is available under a ministerial decree issued in 1983 and copyright protection for sound recordings has been found to be inadequate [FN 34]. In the Federal Republic of Yugoslavia trademark registration is governed by the Patent Office in Belgrade and by the preexisting Yugoslav law on trademarks [FN 35].

VI. Economic Consequences of International Intellectual Property Protection

We live today in a world in which the economic health of nations and the competitiveness of the firms is determined largely by the ability to develop, commercialize, and most importantly, to appropriate the economic benefits from scientific and technological innovations. The past thirty years have seen a remarkable growth in the attention devoted by economist and others to technological change, due in large part to studies indicating that economic growth has resulted in substantial measure from changes in technology [FN 36]. Intellectual property rights are legal instruments that have been used by governments for centuries to encourage industrial development and economic growth.

Historically, developed countries have favored strong intellectual property protection, while developing countries have chosen to protect informational goods weakly or not at all. Recently, however, developing countries have begun to strengthen their intellectual property laws as a means of attracting foreign investment and technology to spur development [FN 37].

From the developed countries' perspective, intellectual property protection provides incentives for the technological advancement necessary for economic growth and development [FN 38]. The desire for increased foreign investment as a means of achieving internal economic development has been a major impetus for developing countries' recent efforts toward providing enhanced intellectual property protection [FN 39].

The economist approaches the subject of protection of intellectual property rights, like many other issues, by trying to fit it into the generic formula for public policy decisions. [FN 40] It is generally accepted that economic growth is an important goal in our society. The desirability of a particular growth rate depends on the way it is achieved, how the extra output is distributed, how growth is measured, and many other things [FN 41]. Increased knowledge is of great importance beyond its strictly economic benefit.

The importance of protecting intellectual property, especially in the context of economic development, is not accepted universally. Some people have argued that ideas and public goods that should be available

for everyone to use at a zero price. Advocates of this view dismiss the issue of providing a proper incentive to encourage innovative effort [FN 42]. There are important and well-known differences between the industrialized countries and the developing countries in their attitudes toward intellectual property rights. Within industrial nations, there is a solid consensus in favor of strong international intellectual property protection, but this consensus has been challenged by a number of developing countries. Most developed nations, while clearly perceiving the economic importance of intellectual property protection, regard the protection of intellectual property as a fundamental right comparable to rights to physical property. In most developing nations, by contrast, the protection of intellectual property is viewed as fundamentally as an economic policy question. Questions raised by those who oppose the provision of intellectual property protection in developing nations include the following:

(1) Does intellectual property protection in a developing nation promote innovative activity within that nation, or are the potential benefits of such protection outweighed by other factors (such as the limited availability of individuals possessing the technical background to carry out innovative activities)?

(2) Can a country achieve the best of both worlds by protecting intellectual property developed by its nationals while permitting the free use of intellectual property developed by foreign nationals? (Paris Convention Article 2)

(3) Does intellectual property protection actually promote the transfer of technology into a nation? (There are those who claim that, on balance, the absence of intellectual property protection increases the flow of intellectual property into a nation by reducing or eliminating the cost of such transfer and the need to obtain the permission of the intellectual property owner for the transfer.)

(4) Do multinational companies give serious consideration to the presence or absence of intellectual property protection in a developing nation when making decisions on whether to transfer technology to and/or invest in that nation? (Some government officials in developing nations argue that they do not.)

The less developed countries tend to feel that intellectual property rights give inventors and innovators an undesirable monopoly on

advanced technology that can be used to extract unjustifiabiably high prices, as well as unwarranted restrictions on the application of the technology. In their view, the enforcement of intellectual property rights would do little to aid their own development, indeed, it would tend to hinder their developing and to prolong the period during which their per capita income falls considerably short of that in the industrialized countries. The intellectual property policies of many developing nations reflect a development strategy based on making technology available within the domestic economy at the lowest possible short term price. For these and other reasons, many developing countries have relatively weak laws to protect intellectual property and less than diligent enforcement of the laws that exist.

In view of the industrialized countries, intellectual property rights must be respected to provide a fair return to the private investors who take substantial risks involved in developing and commercializing a new technology. Unless such returns are forthcoming, the incentives for inventive and innovative activity will be impaired, to the determinant of all nations, rich or poor. Moreover, the industrialized countries sometimes argue that the establishment of stronger intellectual property rights would help to promote indigenous technological and innovative activities in the developing countries, although it is recognized that this is only one of many factors to consider.

To a far greater extent than most people realize, economic growth depends on a relatively small cadre of talented people, supported by organizations capable of amusing and managing the necessary complementary resources, who are able to extend the limits of human understanding [FN 43]. The main point is that if one considers the long-run benefits for economic growth resulting from intellectual property protection as well as the long-run costs in terms of economic stagnation when no protection exists, the case for strengthening intellectual property protection in developed and developing countries is very strong [FN 44].

The American embassy in Belgrade prepared in August 1991, the Country Marketing Plan for Yugoslavia, which analyzes the country's business and economic climate, giving emphasis to marketing and trade issues. First on US list of investment obstacles in Yugoslavia is the transfer of technology and intellectual property rules contained in law on foreign trade [FN 45]. If Yugoslavia is genuinely interested in

attracting new foreign investment, US business believes that improved protection for intellectual property protection will be helpful.

Protecting intellectual property stimulates both exports and imports. Innovators in the home country are encouraged to send their innovative output to those foreign countries that allow innovators a return for their innovative efforts (exports). Intellectual property protection in a country encourages foreign innovators to share their innovative output (imports) [FN 46]. Generally, the laws regarding patents, trademarks, copyrights, and trade secrets are the traditional tools for protecting intellectual property. However, the mere existence of these laws does not mean that intellectual property is protected, governments must enforce these laws [FN 47].

A country has two broad choices regarding intellectual property: allowing free access or providing protection. The free access solution yields short-term benefits at best while it imposes long-term costs. The protection solution enhances for economic growth to produce long-run benefits in exchange for a grant of monopoly power to the innovator.

Protecting intellectual property improves the size, quality, and efficiency of both labor force and the capital stock within the country. In other words, strong protection of intellectual property will tend to:

1. create jobs in primary industries as well as in supporting industries,
2. create a higher-quality labor force through on the job training,
3. shift jobs to higher productivity areas,
4. increase the capital stock of the country,
5. improve the quality of the capital through innovation,
6. improve the allocation of the capital stock,
7. expand those activities subject to economies of scale,
8. improve efficiency through a reduction in local monopoly elements,
9. provide lower cost methods of production for existing products, and
10. provide new products [FN 48].

Edwin Mansfield tested the effects of intellectual property rights protection on the transfer of technology via foreign direct investment by American firms. He chose a random sample of 100 major US firms in six industries. In practically all of these industries, the proportion of firms indicating intellectual property rights protection has a strong effect on their foreign direct investment depends heavily on the type of investment in question [FN 49] (See Appendix A, Table 3). The results, shown in Table 4 (Appendix B), indicate that the firms regarding

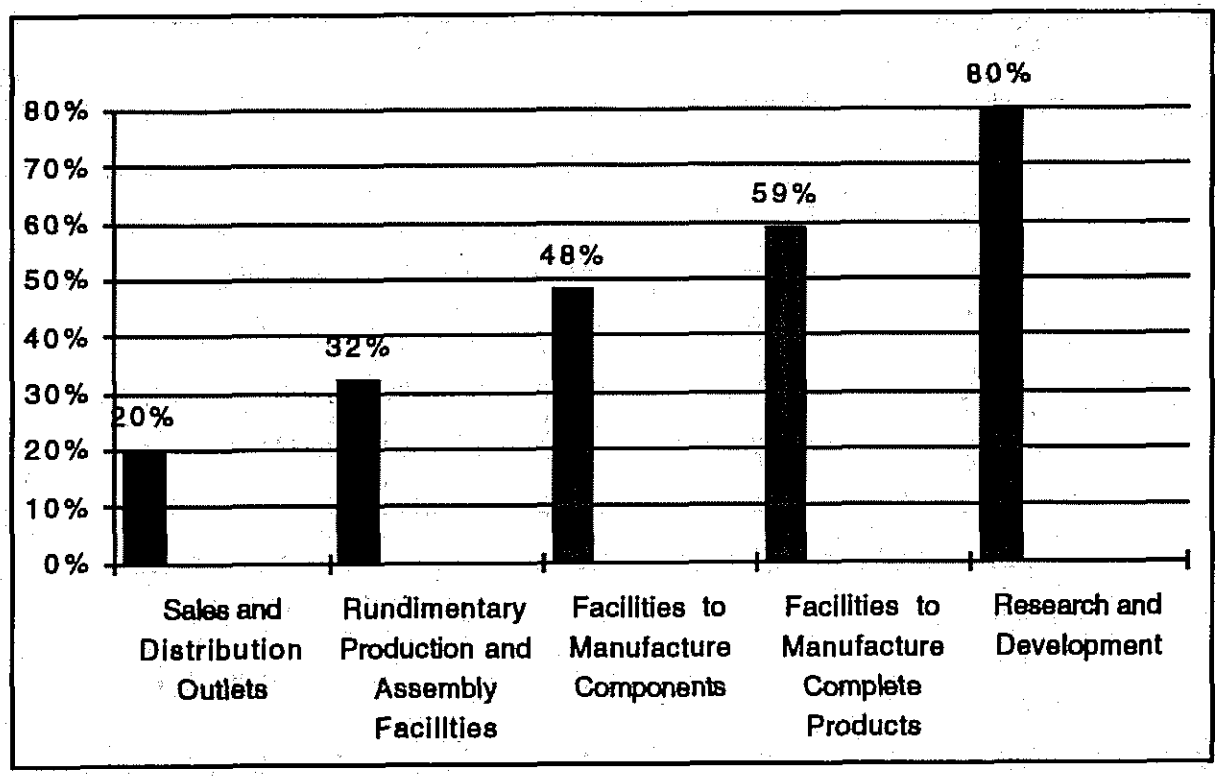
intellectual property rights protection as important in this respect tend to be larger (in terms of sales) and more research and development intensive than firms that do not. However, although this is true in all industries combined and in four of the six industries, it is not true for the remaining two industries [FN 50], as shown in Table 4.

Therefore, trade problems are arising as a result of deficiencies in the protection accorded to intellectual property, partially due to inadequacies in the scope and avability of intellectual property rights under national laws, and partially due to the lack of effective procedures and remedies for enforcement of these rights, where they exist [FN 51]. Therefore, the avability of intellectual property protection in Yugoslavia may encourage foreign firms to invest in product development specific to Yugoslavia's needs.

In an attempt to determine the perceived importance of intellectual property rights on the nature and amount of technology transferred to a country by way of direct foreign investment, Edwin Mansfield of the University of Pennsylvania conducted a study, in which he requested information from 100 major US firms as to the importance of intellectual property rights in their determination of whether to make direct foreign investment of various kinds [FN 52]. He found some industries regard intellectual property as more important than others, with food and transportation equipment industries being the lowest and chemistry (including pharmaceuticals) being the highest.

Table 5

The proportion of US firms which considered intellectual property rights important in their determination as to whether to make a particular type of foreign investment



Thus, intellectual property should be regarded as a development tool: it raises a country's local research efforts and by encouraging the introduction of growth producing new technology into the economy [FN 53].

Technological change is understood to be an engine of economic development. Economic growth, which means output growing faster than population, requires increases in productivity. Increase in productivity require technological innovations so that a country can produce more output of products as well as to develop new products that enhance the quality of life or enable society to produce yet more goods and services [FN 54]. Thus, intellectual property is an important part of a nations infrastructure.

One of the most logical and practical advantages to developing countries from enhanced intellectual property protection is the anticipated increase in the rate of inbound investment and technology transfer from foreign firms [FN 55]. The economic behavior of an individual is influenced to a large extent, by the property rights that the state grants to the individual in the fruits of his or her labor [FN 56].

1. Pirated Products

The "piracy" problem has emerged because of changing patterns of trade and technology [FN 57]. The public policies of many developing nations explicitly or implicitly permit the unauthorized use of another's intellectual property, and local companies take advantage of that policy, because piracy yields immediate benefits to pirates and the developing countries in which they operate [FN 58]. Copying provides goods and services to consumers at prices lower than those which foreign patent owners would demand. Piracy also stimulates domestic production, enhancing competitiveness and economic development and providing employment for local residents [FN 59]. Piracy, although not a legal term of art, refers primarily to unauthorized reproduction for commercial gain of literary, musical, artistic, and other copyright works, but may also be used in some cases in the context of trademarked or patented works.

Increased trade in copyright affects not only those industries directly producing copyrighted products, but also those industries that supply the raw materials or services involved in the manufacture, transportation or distribution of the ultimate products [FN 60].

Table 6
Inventory of Affected Industries

Industries whose activities are 100% copyright-related:

- Newspapers
- Periodicals
- Book publishing
- Music and Miscellaneous publishing
- Greeting cards
- Records and tapes
- Radio and television broadcasting
- Advertising
- Motion pictures
- Theatrical productions
- Bands, entertainers
- Computer software
- Semiconductor chip design

Industries whose activities are less than 100% copyright-related:

Fabric
Business forms
Apparel
House furnishings
Stationery
Computers
Precious Jewelry
Costume jewelry
Games and toys
Dolls
Railroad services
Trucking services
Water transportation
Cable TV and satellite communication
Wholesale trade
Royalties
Photographic studios
Data processing services
Equipment rental
Photo finishing labs

Pirates also sometimes counterfeit the product by duplicating the trademark, labels, graphics, and overall trade dress of the product in order to deceive consumers into believing they are buying the genuine article [FN 61]. In those cases, the pirate takes the valuable intellectual property embodied in the product and the goodwill and reputation for quality cultivated by the manufacturer of the product.

As the role of intellectual property has grown within many areas of economic activity, the economic impact of piracy has become sufficiently great that intellectual protection has emerged as a trade and investment issue of central importance. Not only does piracy cause losses in terns of revenues foregone by authors and investors on their existing intellectual property, but when adequate intellectual property protection is not provided in all nations, the incentives for creating new works and inventions are reduced. Furthermore, the problem of piracy threatens to become more severe because commercial and technological

developments have made piracy easier and more lucrative for the pirate.

First, the role of intellectual property based products in international trade has increased significantly in the post war period. Second, improved international communication is rapidly creating a single global market place. As companies increasingly seek to develop a foreign markets for their trademarked, copyrighted or patented goods, or their prevalence in world culture, inadvertently develops a market, opportunities are created for unauthorized copies to supply some of the newly generated demand. Third, relatively inexpensive and straightforward technologies have been developed for the reproduction of audio and videotapes and radio and television broadcasts. This has greatly increased the extent of piracy of these works. Fourth, the level of research and development has steadily increased, particularly in certain high technology industries. The higher the ration of research and development to the cost of manufacturing, the greater will be the incentive to shortcut the research and development process through unauthorized copying.

Unfortunately for the creators and proprietors of intellectual products, new reproductive technologies have lowered copying costs while raising the cost of legal enforcement [FN 62].

A lax attitude in protecting intellectual property offers, at least in the short run, attractive benefits for pirates and consuming nations. Pirates of intellectual property enjoy lower production costs and are in a better position than legitimate producers to satisfy demands in developing countries. Pirates can do so because they merely copy products rather than develop their own and pay royalties to the owner or creator. By copying only successful products, the pirate avoids the risk of market failure. Barring effective regulation, the piracy of intellectual property pays off because it involves little risk and provides a healthy return on investment. Pirates enrich themselves and, in the short run, the countries in which they operate. Through piracy, developing countries can procure needed goods and services at little cost, while industries that specialize in producing counterfeit goods employ thousands of workers. When compared to these tangible gains, the treat that investment from Western countries might be withdrawn is secondary to immediate development needs [FN 63].

Entertainment	2,060	0	12	12
Food and beverages	86	2	8	10
Forest products	665	0	7	7
Industrial and farm equipment	622	1	9	10
Metals and metal products	29	1	6	7
Motor vehicles and parts	2,194	0	4	4
Petroleum refining	1,295	3	6	9
Pharmaceuticals	1,909	0	10	10
Publishing & printing	128	0	11	11
Rubber products	511	1	4	5
Scientific & photographic instruments	5,090	1	6	7
Textiles and apparel	251	0	11	11
Other	151	0	8	8
Total	23,845	26	167	193

Source: International Trade Commission (1988)

The New York Times in 1993 estimates that the software industry losses up to $14 billion a year to piracy, including illegal copying by dealers corporations and individual users. The US estimate of the total annual losses for US owners of intellectual property ranges from $43 to $61 billion [FN 67].

3. Yugoslavia and Eastern Europe's Involvement in Pirating Goods

Yugoslav shortcomings in the intellectual property rights field include the failure to enforce copyright laws to curtail book, video, and audio pirating. However, pirated videos and records have limited sales on the domestic market due to poor quality. Moreover, financial problems of Yugoslav film companies and distributors, in part due to declining cinema attendance and the revenues have led to a decline in

imports of foreign films. At present, there is no defensible estimate of the value of foregone US earnings attributable to video piracy.

Yugoslavia does not provide protection for computer software under the copyright law. Presently, patent bureau officials "interpret" the patent law as conditionally protecting software, but enforcement is weak. Computer software is not addressed explicitly in either the amended patent compensation in the Yugoslav market.

Yugoslavia as countrie in which exist a piratical activity are faced with an economic choice, either to enact a regime of enhanced intellectual property rights protection or to do nothing and allow these activities to continue. A change toward enhanced intellectual property protection will impose identifiable short term economic costs. However, such a change will also promote the formation of a nation's infrastructure, which can lead to increased rates of long term economic growth. Nevertheless, it can be very difficult for a developing nation to subject itself to the loss of relatively certain current revenues in exchange for less readily quantifiable long term benefits.

The short term economic cost of introducing a system of effective intellectual property protection will come primarily in the form of the dislocation caused to piracy based industries, either through a termination of sales of products newly protected by intellectual property rights, or through payment of royalties on shipment of those products. Additional short term cost could be imposed due to dislocation of related industries within the economy.

The long term benefits associated with intellectual property rights protection for a nation will be more widely spread throughout the nation's economy, and come as result of:

(1). An increased rate of technology transfer both into the nation from abroad and within the nation itself;

(2). The creation of an infrastructure which promotes innovative activity; and

(3). The provision of incentives for increased foreign direct investment in that nation.

VII. US Efforts to Restrict International Piracy

From the US perspective, international protection of intellectual property has become an important trade issue in an era when the United States has suffered balance of trade and budget deficits [FN 68]. It has become increasingly expensive to produce intellectual products. Research and development costs require large-scale production, open international markets, and protection against free-riding imitators to recoup costs of production [FN 69].

The United States has tried to fight the problem of piracy through a three-pronged attack. First, a program of unilateral action has strengthened the protection afforded by US law and curtailed the importation of counterfaith goods into the United States. Second, the United States has tried to place direct pressure on problem countries through bilateral negotiation that direct pressure on problem countries through trade sanctions. Third, the United States has sought relief through multilateral treaties administered through international agencies. Although the most promising new approach is perceived to be the protection of intellectual property rights through the GATT, both unilateral and bilateral efforts must continue, coordinating a uniform and consistent policy to discourage piracy [FN 70].

For many decades, international business and government have worked mainly on policies related to trade and investment in physical goods. Only recently have services entered the picture. The GATT has reflected these traditional concerns.

The times have changed in a fundamental way. Countries with development ambitions now recognize that know-how and technology are the most essential ingredients to growth. The speed of technological change has forced virtually all businesses to pay more attention to research and development and to protecting their rights in the fruits of their labors. This recognition is now reflected in government policies and in the Uruguay Round negotiations of the GATT.

1. The GATT and Intellectual Property

The general Agreement on Tariffs and Trade (GATT) is a unique world agreement that has expended and flourished [FN 71]. The GATT

was born as a result of the failure to establish International Trade Organization [FN 72].

The focus on Trade Related Aspects of Intellectual Property (TRIPs) was a novel topic of discussion within the GATT [FN 73]. Intellectual property protection has become a major trade issue, and the GATT appears to offer a practical structure that prompts quicker and more effective protection for US intellectual property than is provided by the existing international conventions [FN 74].

Until the Urugay Round, the GATT approach to intellectual property had been limited. In recent decades, the intellectual property has become an essential aspect of the global trading system. It has become a top priority in top multilateral trade negotiations. Two primary reasons for this development are: (1) the proliferation of piracy and counterfeiting, and (2) the growing importance of high-technology in the scheme of international production of goods and services. For this reason, since 1979, efforts have been made to obtain protection of intellectual property rights through the GATT regime [FN 75].

2. Section 337 - Protection of Intellectual Property Right Under the Tariff Act of 1930

Section 337 prohibits unfair method of competition and unfair acts in the importation of sale of articles which damage US industries.

Congres in its wisdom found that (1) United States persons that rely on protection of intellectual property rights are among the most advanced and competitive in the world; and (2) the existing protection under section 337 of the Tariff Act of 1930 against unfair trade practices is cumbersome and costly and has not provided United States owners of intellectual property rights with adequate protection against foreign companies violating such rights [FN 76].

3. International Treaties As a Remedy Against the Piracy

US companies traditionally have looked to basic international treaties as a remedy against the piracy of their intellectual property [FN

77]. The most important conventions are the Berne Convention (seventy-six members) and the Paris Union (ninety-seven members). The Berne Convention sets minimum levels of copyright protection that member nations must provide [FN 78]. The Paris Convention for Protection of Industrial Property protects trademarks and patents [FN 79]. However, these treaties lack the power to enforce rights and therefore, fall short of providing effective protection to an owner of intellectual property. The Conventions have proven to be ineffective when countries simply do not enforce their laws [FN 80].

4. Intellectual Property - Special Section 301 of the Trade Act

The 1988 Trade Act has established a special section 301 procedure requiring the USTR to identify countries that deny adequate and effective protection of intellectual property rights, "priority" countries that are the most egregious intellectual property transgressors, and countries that fail to undertake or make progress in negotiations with the USTR [FN 81].

Special 301 of the Omnibus Trade and Competitiveness Act grants the USTR the authority to target countries that do not adequately protect intellectual property [FN 82]. Special 301 is specifically concerned with intellectual property rights. It requires that USTR to establish an annual "watch list" and "priority list" of nations with trade practices which deny adequate and effective protection of intellectual property rights or ... deny fair and equitable market access to United States persons that rely upon intellectual property protection [FN 83]. This provisions are employed when the US concludes that a particular country is not trading fairly [FN 84].

The special section 301 direct the Administration to develop an overall strategy and to state its priorities in seeking to expand adequate and effective protection of intellectual property rights.

Through the use of "Special 301" mechanism the governments of Korea, Poland, Czechoslovakia, Mexico, Saudi Arabia, Colombia, Chile, Malaysia, Indonesia, Egypt, Spain, Portugal and Yugoslavia took specific measures to enhance intellectual property protection or its enforcement [FN 85]. Among other improvements, Yugoslavia in March 1990

amended its patent law to extend the term of protection to 20 years from filing.

VIII. Conclusion

Just as trade and investment have prospered most in areas where property rights are carefully honored, technological development will favor those societies that scrupulously safeguard economic rewards to innovators.

After the embargo is lifted, in Yugoslavia's economic, political and legal environment will be new opportunities to enter into a range of business ventures and transactions. A key objective for Yugoslavia will be to obtain access to Western technology and managerial know-how. Thus, many of the transactions will involve the transfer of technology, know-how and the accompanying bundle of intellectual property as a central element of the venture.

Yugoslavia remains short of capital and will continue its efforts to attract foreign involvement as soon as political conditions warrant. With a return to any form of basic stability, foreign companies can again evaluate Yugoslavia as a base for investment. One of the region's comparative advantage will be human resources, since most emerging managers will be autonomous in terms of decision making, as well as being profit oriented and quick to adjust to changing conditions.

The degree of intellectual property protection directly affects the profitability of research and development projects and thus the resources allocated to research and development. Ultimately, the degree of protection determines the expected number of new products, processes, literary works, etc., available throughout the world [FN 86].

In order to attract foreign investment for local development, Yugoslavia has to strengthen intellectual property protection. Policymakers in Yugoslavia should consider a long term benefits associated with protecting intellectual property for economic growth. Empirical data suggest that pharmaceutical research and development is conducted most commonly in countries that protect intellectual property, and that areas where protection is increasing have been receiving shares of research and development expenditures from US pharmaceutical firms [FN 87].

United States should consider the anticipated desire of Yugoslavia to develop Western-style economic, legal and competitive infrastructure. Yugoslavia has a rich cultural and intellectual background, which promises to accelerate their ability to absorb the lessons from the West.

If the United States hopes to expand intellectual property standards and norms to include developing countries, initiatives must be implemented for: 1. creative financing for the development of intellectual property registration and enforcement; 2. investment commitments in the developing world by developed world private sector concerns; and 3. special transition rules for developing countries [FN 88].

After the sanctions are lifted, many new markets will emerge in Yugoslavia. All foreign firms that are interested in investing into these new markets will have to deal with changing rules and policies concerning foreign trade, labor conditions, licensing conditions, price control, export credit, investment incentives, and local attitudes toward foreign investment.

So, intellectual property regime, and especially the patent law regime in countries seeking to import technology can be a very important factor in the determining whether a given technology owner is willing or unwilling to transfer the technology to a recipient in the country in question [FN 89].

Once stronger intellectual property protection is enacted, it can be expected that foreign firms will increase the flow of new technologies to developing countries, either in the form of direct investment or through licensing and technical assistance arrangements [FN 90].

APPENDIX A

Table 3

Percentage of major US Firms in Six Industries Where Strength or Weakness of Intellectual Property Rights Protection Reportedly Has Strong Effect on Whether Direct Foreign Investment Will Be Made

	Types of Investment					
Industry (a)	Sales and Distribution Outlets	Rudimentary Production and Assembly Facilities	Facilities to Manufacture Complete Products	Facilities to Manufacture Complete Products	Research Development Facilities	Mean
Chemicals (b)	19	46	71	87	100	65
Transportation equipment	17	17	33	33	80	36
Electrical equipment	15	40	57	74	80	53
Food	29	29	25	43	60	37
Metals	20	40	50	50	80	48
Machinery	23	23	50	65	77	48
Mean	20	32	48	59	80	48

Source: Mansfield (1991)

(a) The number of firms in the sample of each industry is chemicals, 16; transportation equipment, 6; electrical equipment, 35; food, 8; metals, 5; machinery, 24. However, not all firms in the sample responded to all questions.

(b) The chemical industry includes pharmaceuticals.

APPENDIX B

Table 4.
Sales and Research and Development Expenditures of Firms, by Reported Effect of Intellectual Property Protection on Direct Foreign Investment in Facilities to Manufacture Complete Products

Firms Reporting That Intellectual Property Rights Protection Has	Industry (a)						
	Chemicals (b)	Transportation Equipment	Electrical Equipment	Food	Metals	Machinery	Total
Strong effect							
Mean sales (c)	656	731	349	61	10	238	150
R&D (% of sales)	19.1	4.6	5.8	2.9	1.6	5.5	8.2
No strong effect							
Mean sales (d)	100	100	100	100	100	100	100
R&D (% of sales)	2.7	4.4	9.2	0.6	1.2	6.0	5.5

Source: Mansfield (1991).

(a) See note *a*, Table 3.
(b) The chemical industry includes pharmaceuticals.
(c) Mean sales of firms in each industry reporting that intellectual property right protection has a strong effect on direct foreign investment are expressed as a percentage of the mean sales of those reporting that it does not have a strong effect.
(d) Mean sales of firms in each industry reporting that intellectual property rights protection does not have a strong effect on direct foreign investment is set equal to 100 (see note *c*).

References

1. Flaherty, D. (1992, Spring). Self-management and the future of socialism: Lessons from Yugoslavia. Science & Society, pp. 92-108.

2. Soskic, D. (1989) Professor at University of Belgrade, Yugoslavia, Belgrade Law School.

3. War in Europe. (1991, July 06). The Economist, Survey pp. 13-21.

4. See note 53.

5. GArnon, V.P. (1991, Summer). Yugoslavia: Prospects for stability. Foreign Affairs, pp. 17-35.

6. Witt, L.A. (1992, Januar). Exchange ideology as a moderator of the relationship between importance of participation in decision making and job attitides. Human Relationships, p. 75.

7. Id. at 75.

8. Id. at 75.

9. Ferfila, B. (1991, July/August). Yugoslavia: Confideration or disentegration. Problems of Communism, p. 24).

10. Cejovic, Bora, Professor at University of Kragujevac, Yugoslavia, Kragujevac Law School, 1989.

11. See note 61.

12. Jovan Kovacic, Yugoslavia: Yugoslav businessmen optimistic on economic future, Reuter Textline, June 28, 1994, p. 1.

13. Id. at 2.

14. Tanjug news agency, Belgrade, Yugoslavia: No Foreign Investment In Yugoslavia Has Been Canceled, Says Minister, Reuter Textline, July 7, 1994, p. 1.

15. Id. at 1.

16. Id. at 1.

17. UNCTAD, 1983, p.2 (UNCTAD is the UN agency which has for a considerable period of time been involved in the study of issues related to the transfer of technology particularly from the developed countries to the less developed countries.)

18. 25. Kirsten Peterson, Recent Intellectual Property Trends in Developing Countries, 33 Harv. Int'l L.J. 277 (1992), p. 277, at 279.

19. Id. at 279.

20. 76 Iowa L. Rew. 273 Protecting United States Intellectual Property Abroad: Toward a New Multilateralism, 1991, Marshall A. Leaffer, 76 Iowa L. Rev. 273, at 275 .

21. 28 Wake Forest L. Rev. 89 Business Law Symposium: "The Globalization Of Law And Business In The 1990's" The North-South Debate Regarding The Protection Of Intellectual Property Rights Spring, 1993 Alan S. Gutterman 28 WFLR 89, at 95.

22. Alan S. Gutterman, International Intellectual Property: A Summary Of recent developments and issues for the coming decade, 8 Santa Clara Computer & High Tech. L. J. 335 (1992), p. 335.

23. 25 N.Y.U. J. Int'l L. & Pol. 751 Summer, 1993 Intellectual Property In The Uruguay Round: The Dunkel Draft And A Comparison Of United States Intellectual Property Rights, Remedies, And Border Measures Al J. Daniel, Jr. 25 NYUJILP 751, at 757.

24. See note 20, at 274.

25. See note 21, at 91.

26. See note 21, at 92.

27. see note 21, at 93.

28. 15 Loy. L.A. Int'l & Comp. L.J. 453 Comment Unifying International Patent Protection: The World Intellectual Property Organization Must Coordinate Regional Patent Systems. February, 1993 Faryan Andrew Afifi 15 LYLAICLJ 453, at 453.

29. See note 21, at 111.

30. JOINTVEN s 7.8 International Joint Ventures: A Practical Guide John P. Karalis Chapter Seven: Regulation Of Joint Ventures In Socialist And Developing Countries S 7.8 Regulatory Outline-- Yugoslavia October, 1992, at 8.

31. Id. at 8.

32. See note 22, at 354.

33. See note 22, at 354.

34. See note 30, at 8.

35. 4 Fordham Intell. Prop. Media & Ent. L.J. 317 Special Issue Trademark Developments In The Former U.S.S.R. And Eastern Europe Summer, 1993 Janet L. Hoffman 4 FDMIPMELJ 317, at 332.

36. Edwin Mansfield, Intellectual Property, Technology and Economic Growth, West Special Studies in Science, Technology, and Public Policy, 1990, p. 17.

37. See note 18, at 277.

38. See note 18, at 278.

39. See note 18, at 283.

40. Paul A. David, Intellectual Property Institutions and Panda's Thumb: Patents, Copyrights, and Trade Secrets in Economic Theory Science and Technology, National Research Council, 1993, p. 24.

41. See note 36, at 17.

42. Richard P. Rozek, Protection of Intellectual Property Rights: Research and Development Decisions and Economic Growyh, West

Special Studies in Science, Technology, and Public Policy, 1990, p. 32.

43. See note 36, at 30.

44. See note 12, at 1.

45. Yugoslavia: Country Marketing Plan, 1991 National Trade data Bank Market Reports, August 1991, p. 20.

46. See note 42, at 34.

47. See note 42, at 39.

48. See note 42, at 40.

49. Edwin Mansfield, Unauthorized Use of Intellectual Property: Effects on Investment, Technology Transfer, and Innovation, West Special Studies in Science, Technology, and Public Policy, 1990, p. 112.

50. Id. at 114.

51. Milan Bulajic, Protection of Intellectual Property Rights and Foreign Trade (Urugay Round), Foreign Trade in the Present and a New International Economic Order, University Press Fribourg Switzerland, 1988, p. 292

52. 3 IDEA: J.L. & Tech. 349 International Compulsory Licensing: The Rationales And The Reality , 1993 Gianna Julian-Arnold 33 IDEA 349, at 364.

53. See note 52, at 365.

54. See note 52, at 366.

55. See note 21, at 133.

56. See note at 89.

57. See note 20, at 275.

58. See note 18, at278.

59. See note 18, at 278.

60. Jon A. Baumgarten, International Matters 222 PLI/Pat 467, 485 (1986).

61. See note 60, at 488.

62. See note 20, at 275.

63. See note 20, at 281.

64. See note 52, at 260.

65. See note 23, at 757.

66. See note 46, at 132.

67. See note 23, at 758.

68. See note 20, at 274.

69. See note 20, at 275.

70. See note 20, at 289.

71. 17 Hamline L. Rev. 77 Gatt, Agriculture, And Developing Countries, Fall, 1993 Kele Onyejekwe 17 HAMLR 77, at 83.

72. Id. at 86.

73. See note 21, at 118.

74. See note 20, at 277.

75. See note 42, at 84.

76. Section 1341, supra note 1.

77. See note 20, at 276.

78. See note 20, at 277.

79. See note 20, at 277.

80. See note 20, at 294.

81. See note 2o, at 294.

82. 1 Pac. Rim L. & Pol'y J. 281 Special 301: An Effective Tool Against Thailand's Intellectual Property Violations Summer, 1992 Preeti Sinha, 1 PACRLPJ 281, at 295.

83. See note 23, at 761.

84. See note 23, at 761.

85. See note 46, at 206.

86. See note 46, at 44.

87. See note 20, at 279.

88. Robert W. Kastenmeir and David Beier, International Trade And Intellectual Property: Promise, Risks, And Reality, 22 Vand. J. Transnat'l L. 285 (1989), p. 294.

89. See note 52, at 364.

90. See note 21, at 133.