



FOREIGN TRADE, AID AND INVESTMENT POLICIES

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TRADE- RELATED ASPECTS OF INTELLECTUAL PROPERTY RIGHTS

ABSTRACT

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The paper explores the negative and positive effects of intellectual property rights (IPR). The paper was basically to analyze the IPR deeply from an economic perspective. It discusses the role of IPR with development and growth. Also analyzes the three principal problems i.e. Restrict Entry, Limit Competition and Rising Monopoly in this paper.

INTRODUCTION

TRIPS Agreement came into existence on 1 JAN, 1995. TRIPS replaced the ineffective works of pre-existing IPR Agreement and resulted in a robust multilateral framework. TRIPS made for all WTO members to adhere to global minimum standard of IP. Intellectual Property Rights is nothing but innovations with the help of human intellect. IPR includes two types of rights: 1) Industrial Property Rights – includes Trademark, Patents, Models and Designs etc. and 2) Copyright- it contains literacy and artistic property.

Fundamental principles of TRIPS were same as the other agreements firstly, Non- Discrimination i.e. no discrimination between different countries. One must treat other country same as they treat their Most Favored Nation. Secondly, National Treatment i.e. Foreigners should be given treatment as the domestic trading partners were given.

IPR was not common till Nineteenth Century. Term IPR began to be used in late twentieth century and it was common at the time of Globalization. And gradually,

IPR became popular and important in Global Society. Mainly, IPR was to encourage the variety of goods. For the goods they produce or the innovation done by the people- law provides them right to information and intellectual goods they created but only for a limited period of time. The right to information and encouragement of intellectual goods increases the economic incentives and promote the innovation and technology progress.

Promo Baga (1998) founded that IPR depends on the amount of resources available in the place to make the intellectual goods and on the secret knowledge & information which used in to increase the production and consumption. But IPR depends on the innovation. Protection of property rights was considered as the economic policy.

TRIPS- A STEP TOWARDS GROWTH

Trips allowed the extensive legal protection of intellectual property rights. The related members were free to implement the provision within their legal

system. It gives the wider benefits to the society to impose temporary or permanent monopolies and other limitations to the society. It offered legal protection, solving the problems like piracy and counterfeiting. Disclosure of knowledge and traditional information leads to innovation and the higher cost of production can be compensated by providing the protection against the other producers. A global IPR provide the scope and reliability to not only the domestic producers but also to the other developed world patent holders which led to more of FDIs, spread of knowledge, transfer of advance technology to developing nation from developed ones. Therefore, TRIPS played an essential role in economic development and encouraging trade globally.

Under ‘transitional arrangements’ in part VI of the Agreement in which developing countries were offered kind of special treatment as per the WTO rules. It take care the position of developing countries, economic status and helping them in technological advancement. TRIPS allowed the flexibility to all members in various articles of the agreement like the Doha deceleration repeated that under article 31, the developing countries have the right to grant licenses or importing for pharmaceutical products. This was allowed only to tackle ‘national emergencies’ and public health issues- HIV/AIDS, Malaria and other epidemics. TRIPS provided the improvement in IPR agreements having power to monitor, dispute settlement and played a significant role in transforming the trade in global society. TRIPS rewards and encourages innovation in trade and thus lead to higher economic growth, technology progress, widespread of knowledge which benefits both developed and developing countries.

INTELLECTUAL PROPERTY RIGHTS (IPR) AND DEVELOPMENT

IPR and Development has a complex relation. Effectiveness of IPR in Development and Growth varies from one country to another. Protection of IPR can increase as well as decrease growth. Effects of IPR on growth and development are positively related only when competition increases.

IPR encourages the innovation by restricting the knowledge which was used by innovators. Innovators earn money in exchange of the knowledge they had and also get the high returns on investment. Investing on research and development and on innovation will improve the growth and development and reduce the gap between developed and developing countries. The gap between developed and developing countries was because of the resource gaps as well as the information gap.

IP protection has two economic goals: 1) it promotes investment in innovation and knowledge. It provides them protection and rights on a good they use. Due to absence of the protectionist system, it would lead to exploitation of technology and goods. Competitors would use techniques and knowledge for free and take benefits which discourage the innovators to invest in research and development (R&D).

2) IPR helped in broadcasting or wide spreading the information and knowledge, which increases the cost to very high level. Intellectual goods have characteristics of public goods – non rivalry and non exclusion. It means that good which is used by one doesn’t reduced the amount for other people and also means that person does not exclude the other from consuming it.

There is a tradeoff between these two goals – Gains of the society would be limited if the system is overprotected due to lack of spread of information and knowledge whereas a less protected system would reduce the returns on the investment and thus reduce the innovation.

The efficiency of the system can be studied in two ways statically and dynamically. IPR is to promote economic efficiency. From static point of view, information should be distributed freely. IPR lead to price greater than marginal cost ($P > MC$), higher returns on investment made in Research and Development and thus increases the innovation. IPR introduce inefficiency, distribution and monopoly which lead to inequalities in both consumption and distribution of resources. While dynamic efficiency improves the consumer welfare.

If IPR is rewarded with the higher cost but there was no case of monopoly i.e. no right to exclude others. The higher competition would bring price down to the marginal cost. Amount of reward did not justify the innovation. The system provides incentives as well as access together. IPR system also creates investment > cost of creation which unnecessarily increase the price and restrict the access of the product.

IPR, MARKET POWER AND MONOPOLY

IPR provides the firm a larger market power and inhibit entry in the market also limits the competition. It may also decrease the level of production and which causes higher prices for the consumer which causes monopoly through Patents, Licensing and Trademarks etc. In perfect competition, there is no concept of market power for firms as firms are price takers and industry is price maker. Market power is nothing but an ability to influence market. In monopoly market power lies with

only one firm, faces no competition and has strong market power.

Perfect competition has a market power but not same as in the case of monopoly. Monopoly has a single seller, provides differentiated product with significant barriers to entry. As it was seen that when markets have the close substitutes of goods and services, then the market is known as Pure Monopoly, if substitutes are on distant. Profits will be obtained by the monopoly firm as long as they able to maintain their significant market power.

DO PATENTS ENCOURAGE PRODUCTIVITY GROWTH?

There were number of patents granted in US, in 1983 granted patents were 59715 then amount increased to 189597 in 2003 and in 2010 it was 244341. In time period of less than thirty years patents granted were almost four times. Historically, trends and evidences showed that increase in the number of patents issued brought no increase in the innovation, research and development and factor productivity.

In decade, 1970-79 total factor productivity annual growth was about 1.2% and in decade 1990-99 & decade2000-09 the annual growth rate of TFP was below 1%. The expenditure on Research and Development in US was around 2.5% of GDP for more than 3 years. This clearly explained that larger number of patents issued hasn't caused any useful increase in innovation or any productivity.

For instance: in new industries where innovation growing successfully in the absence of patents. After introduction of patents it had no positive impact on the rate of innovation.

Many studies took place which doesn't have any evidence of strengthening the patents increases the innovation. But in their results, they found the evidence of promoting IP increases the Foreign Direct Investment (FDI) where patents play an important role. FDI can be increased through other channels like by improving infra and institutions and not on strengthening of patents. Patents don't link with the innovation according to Boldrin Levine (2008b). Similarly, FDI is not equivalent to innovation. There was no correlation between patents and innovation or productivity. But there was a relation between strengthening of patents and amount of patenting.

There was one more relationship found in the result between patents and competition, but not in the patents and productivity. At industrial level, patents were

common. As patents increased, it will result into competition with other firms. Increase in competition would result in reduction in profits. Under this competitive pressures growth of labor productivity increases. In the sector of highest level of competition, average annual growth of productivity was 2% which was greater than the sector having lowest level of competition.

There was no evidence of direct relationship between patents and productivity or innovations. Therefore, greater competition was the main reason leading to useful innovation and greater productivity. Patents had no positive impact on innovations. Patents can only increase the amount of patenting.

THEORY & PRACTICE OF PATENTS & INNOVATION

Innovators were rewarded a monopoly which created the difficulties for the people. Will monopoly increase the incentive to innovate? Granting monopoly would have adverse consequences like monopoly would encourage them in rest seeking activity and will engage in continuous expansion of its monopoly. Monopoly has positive effects too like it will definitely increase the profits while negative was that it would reduce the ability of other to compete.

DOWN STREAM INNOVATION, DEFENSIVE PATENTING AND PATENT TROLLS

Partial equilibrium that is increasing profits had positive impact on the innovation seems to be true but in reality it's not. Due to granting patents in the past and then monopoly is formed which reduces the incentives to innovate for the present innovators. From earlier patent holders the current innovators were subjected to licensing demands and constant legal actions.

Blocking effect is created by the existing monopoly, and reducing the incentives for future innovators because product in modern period is made up of different components. Therefore, in the long run the positive impact turned into negative one. Innovators could not compete in the market due to presence of blocking effect which was created by the previous innovators.

FIRST MOVER ADVANTAGE AND INCENTIVES FOR INNOVATION

In many cases, without issuing patents, an industry can derive huge profits with the help of the first mover advantage. For instance: in the case of Apple and HTC dream (Android Operating System). Apple has first mover advantage; on 29th June 2007 first iphone was released that captured the market with the sale of approx

5 million iPhone units. HTC Dream was released on 22nd October 2008. Sale of iPhone 1 was over 25 million over the subsequent year while Android based Phones had sales less than 7 million. Apple was enjoying its market share for the long period of time. Till 2012, Apple had no serious competition but fights for patents began in late 2010. Therefore, first mover advantage can cause delay in entry in the competition but later on patents would be required to maintain a long term threat on competitors.

Patents can be easily understood if the lifecycle of industries was known to you. Initially, industry faces competition from the entries of other industries. Innovators bring different products in the market and try hard to capture the market with their products. Gradually, demands for product grow and due to competition, quality of product improved. Then, price elasticity of demand was very high for the particular product. To conquer larger share of the market, a firm should realize that important thing is to innovate product at low cost of production (which is good for both buyer as well as seller) rather than to dominate the market at high cost of production. But as soon as industry matures price elasticity of demand declines as demand for the good is low. Then monopoly increases and which reduced the ability of the other product too. Therefore, innovation shrinks due to increase in monopoly. And at that stage of the industry, patent become important to restrict the entries of new firm or industry, rent seeking activity was encouraged and exit was promoted. It limits the overall useful innovation.

PHARMACEUTICALS

The cost for developing a new drug was a \$ 1 billion. So if innovator is facing such a huge cost, why he would innovate without the protection? This was the big problem rose in the pharmaceuticals. Now, the chemical formula and the effectiveness of the drugs were available to others for free. Under stage III of clinical trial, the innovation of the drug cost 80% of the total cost which has to be privately produced. There was the higher cost of monopoly pricing for the drugs.

Patents role in Pharmaceuticals

The clinical testing and disclosure of information were included in the Patents. Pharmaceuticals have first mover advantage. As according to study of Lanjauw's(1998) , India started introduction of patents in pharmaceutical industry which indicates that to bring the product in the market ,it takes almost 4 years after the originals produced. Generics would enter the market side by side with the originals, in the absence of protection, at low imitating cost. But generics required a

decade to set up the production lines after observing the product market. So, they wait for the patent to end and then enter the market.

Secondly, Development of pharmaceutical products were mostly done outside the private sector. Thirdly, at current pharmaceutical sector is not running well. No innovation in current period. These factors were possible but still the cost of manufacturing was very high.

Government should intervene and take some measures like clinical trials should be made public goods, new drugs should be available at economic cost, at least till when effectiveness of the drug is proved. Their market size should be widened because with that small market they won't spread across the nations and across countries. Protecting pharmaceutical industry would help but patenting it not. Other important steps should also be taken like to reduce the risk, to lower the cost of developing new drugs and lowering the cost of clinical trials etc.

HOW PATENTS ISSUED?

The economic point of view of Supreme Court made the Patent law more or less a property rights system. The patent act explains that "Patent shall have the attributes of personal property."

The right of alienation known as 'Assignment', they were a records of it. If particular assignment did not get recorded then it is considered as void against another purchaser or mortgagee. The Patent and Trademark Office of the Department of Commerce manages the claim for patents mentioning the invention and how to make use of it. Then, the application describes the references, information and gets assigned to a patent examiner who decides whether the invention is entitled to patent or not. Patent examiner examines the prior patents and check whether it lacks the novelty or not. If it lacks the novelty, then it doesn't meet statutory criteria for Patentability. In this case, a patent officer and applicant communicate in a formal way and public interference is allowed only through publications. But when two patent applications conflict, then special board set up to deal with their issues and checked which invention has a priority. In this issue, both the conflicting applicants get aware of each other's invention. To challenge the issue of patent is only done in court. This arises when a patentee sues the alleged infringer for breaking the law and granting patent to a non- novelty product. Because of the ex parte character of patent system i.e. one sided. The Supreme Courts started

imposing high premiums on the truthfulness applicant and on the statement of the patent examiner or prior art.

PRINCIPAL PROBLEMS

Patents created three principal secondary problems. Patents also solved the primary problem i.e. when an innovator not able to recover the cost of invention, because of information was available to all. This meant that there were a less number of innovations that we should expect. So patents solved the problem by preventing the information from others who were not involved in it. Patents indirectly promoting investments in R&D and which led to innovations. Patents solved the primary problems of the market but secondary problems may create market distortions.

The three principal secondary economic problems referred to as monopoly, rent seeking and discouraging future innovation. Monopoly was the first problem which got too much attention in the period of 1930s-70s. The primary problem was solved through patent i.e., exactly meant right to exclude which give rise to the monopoly power. But in reality right to exclude didn't gain the significant market power. Empirical evidences found that the many leading companies obtain thousands of patents but still didn't ever obtain the single monopoly in any market. Monopoly would have never gained any importance. Economic rent which was an important thing. The patentee would enjoy the economic rent; if a patent obtained by a patentee successfully reduce the cost of production. Other producers would not use the method or enjoy the benefits this was what 'right to exclude' explains, precisely granted a patent was to exclude the others from 'manufacture, use and sale.' If patents were not granted then there would be no restriction of production and hence no monopoly. Every producer would have same cost advantage and no concept of economic rent.

Second was the Economic Rent, which promotes clearer thinking than monopoly. Rent seeking problem was waste of resources and should be minimized. It did not eliminate the economic policy issues. Rent Seeking can be understood as an economic policy, which measured the cost and benefits in the patent system. Rent seeking was a general problem. For instance investment in R&D led to direct benefits to consumer, through major competition and lowering prices. So innovators had new products at low cost and also gain the ability to produce input i.e. expansion of output and reduction in price which can only be achieved from the remarkable investment in R&D and technology. Most of the investment in R&D were done to promote innovations and for higher growth.

At last, patent system was considered as efficient system as it optimizes the flow of innovation overtime. Patent law should balance the innovations that were made today against the innovations would be in tomorrow. Patent law should avoid the enrollment on future R&D in order to increase the current R&D. Many engineers and scientists work without any patented lawyer; their work should not be hampered by unexpected patents. Thus, patents system should avoid granting patents on an activity that is common and cost of production for the product is low.

CONCLUSION

Effective protection of IPR in the forms of Patents, Plant Breeder Rights, Copyright and Related Rights, Trademarks, Industrial Design, Layout Designs of Integrated Circuits, Geographical Indications and Trade Secrets. The flexibility and efficaciousness of TRIPS agreement was vulnerable to many criticisms. The countries were gained much from the agreement and the benefits accrued to the small section of the society. Therefore "the real countries from TRIPS are not advanced countries, but rather the large corporations that pressed for its adoption" (Archibugi and Fillippetti, 2010; 144). The Agreement did not function as it was planned or thought. Many crucial problems occurred in the patents which led to the failure of 'one size fits for all'. Different ways of treatment should be given to the different countries according to their developmental needs, which would be more suitable.

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