

Intellectual Property Rights, And Competition Law
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Lecture - 15
Intellectual Property v. Competition Law

Dear students this week we are going to discuss different portions altogether, i.e. first we may start with economic theories of IP and competition, then the interface between intellectual property and competition law. Then in the third part, we will discuss the US law completely. So, as you know that there are various theories on Intellectual Property protection as well as the Competition Law.

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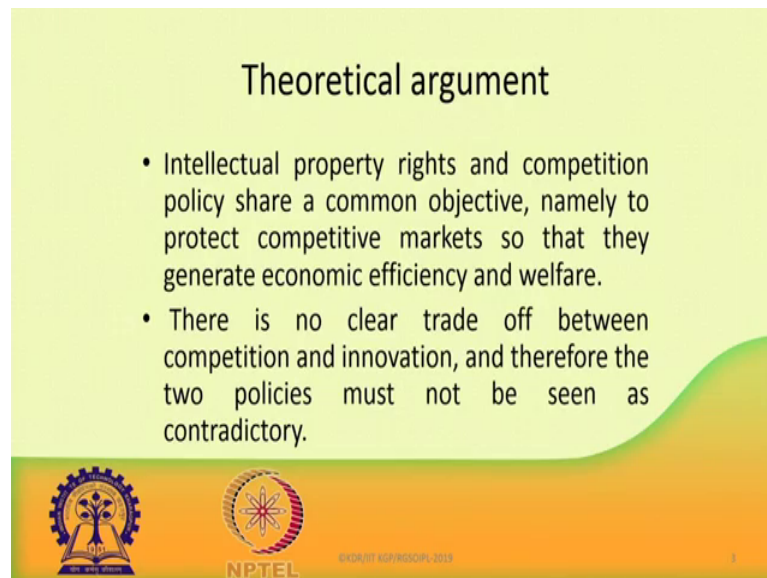


Today specifically we are going to discuss why we should protect intellectual property and what are the economic theories propounded by various people, then what are the ownership rights of intellectual property and the difference between the property rights and intellectual property rights; that means, tangible and intangible property rights.

Then what is the social value of protecting intellectual property, then the incentive theory of intellectual property, prospect theory and ultimately objective of competition law

which is consumer welfare and the innovation and competition that are going to contribute to the consumer welfare in the market.

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Theoretical argument

- Intellectual property rights and competition policy share a common objective, namely to protect competitive markets so that they generate economic efficiency and welfare.
- There is no clear trade off between competition and innovation, and therefore the two policies must not be seen as contradictory.

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And you can see that the theoretical arguments of protecting intellectual property and competition policy are one and the same; that means, it shares the common objective to protect a competitive market and the economic efficiency in the market.

There are lot of discussions on intellectual property versus competition law, whether there is any conflict between the two concepts of intellectual property protection and competition law or whether the competition law prohibits or is a hindrance to innovation in the market and if it leads to the intellectual property protection, whether these are contradictory or whether these are complementary in nature.

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Property right

- The “property right” nature of IP seems to play an important role in building an argument for a strong protection of IP rights
- Harold Demsetz was one of the first to argue that “property rights convey the right to benefit or harm oneself or others”, suggesting a close relationship between rights and externalities
- Externalities (or external effects) exist any time one party's action “influences, or may influence with a probability, the well-being of another person, in comparison to some standard of reference”



First let us come to the property rights. Each and every enterprise earlier owned properties in terms of tangible property and in the earlier times intangible property was unknown to enterprises. The property right is always considered as a private right. For bringing the property right to the intellectual property realm we have to discuss the probability and possibility of the property right into the intellectual property rights.



The private property rights into intellectual property can be seen from the day one. Economist like Harold Demsetz was of the view and argued that the property rights convey the right to benefit or harm oneself or others. So, there is a close relationship between the property rights and the externalities. That means, there is every probability or possibility in the property right of excluding others, it is a private right and it is not a public right at all.


So, the external effects always affect the protection of intellectual property law when compared with the property rights. So, the comparison between the property rights and intellectual property laws to some extent is synonymous with the protection of private property.

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Ownership

- According to Demsetz, there are three types of ownership;
 - a) “communal ownership”, which he defined as the “right which can be exercised by all members of the community”
 - b) “private ownership”, which “implies that the community recognizes the right of the owner to exclude others from exercising the owner’s private rights”
 - c) “state ownership”, which ‘implies that the state may exclude anyone from the use of a right as long as the state follows accepted political procedures for determining who may not use state-owned property

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So, here you can see that when it comes to the property rights the ownership is the core substance in protecting property. According to Demsetz: there are three types of ownership rights which we can see is the communal rights, private ownership and the state ownership. There is a lot of difference between the rights in communal ownership, private ownership and state ownership.

In a communal ownership a society or a group of people own the rights. So, the members of the society can exercise the rights in communal ownership. When we compare it with the intellectual property law, one intellectual property right which I can relate communal ownership is with the protection of geographical indications and geographical indications are not owned by a single person or a private person, it can only be owned by a group of people. So, we can relate it with the community rights, the communal ownership.

If you take patent or trademark it is mostly connected with private ownerships. I would say that all other intellectual property law are connected with private ownerships and they are not even talking about communal ownership except the protection of geographical indications. When it comes to private ownership, it implies the whole rights are with a private person excluding all other people and excluding the whole world. So, the entire rights are with the private person. So, private ownership is very strong when

we compare in any of the constitutions. And if you look into the united states the private ownerships are very much prevalent in property rights.

When it comes to the state ownership, the state may exclude others from exercising the rights for political reasons or other reasons. So, definitely the private ownership is not absolute in nature anywhere in the world.

Intellectual property protection also is not an absolute right, the state can always go for compulsory licensing after paying a reasonable royalty. So, the state exercises ownership with regard to state properties as well as there is a control of state on intellectual property rights as well.

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The slide is titled "Property rights" and features a light green background with a yellow-to-orange gradient at the bottom. It contains three bullet points:

- Property regime is generally opposed to open access
- Open access is not a problem as long as the supply of a resource is so great relative to the demand that there is no (net) gain from conserving or improving it.
- when an open access resource becomes scarce, individuals lack the incentive to conserve it "because they cannot capture the full gains from doing so."

At the bottom left, there are two logos: the Indian Institute of Technology (IIT) logo and the NPTEL logo. A small portrait of a man in a white shirt is visible in the bottom right corner of the slide. The text "© IIT KGP/2019" is also present at the bottom.

So, the property regimes actually are opposed to open access. The two groups of scholars or two schools of thought think that, one school thinks that the knowledge should be open and available to everybody and rent seeking must not be permitted. On the other side, the other school says that if there is no incentive for innovation, no incentive for invention then nothing is going to be generated because the private people do not have any incentive to innovate.

So, in the open access you can see that there is no net gain to anybody rather nobody is interested in conserving and improving on the existing technologies. Open access is

more open in nature and there is no incentive for innovation at the same time. If you look into the intellectual property protection nowadays: there are open access softwares and their further innovation is also available.

Open access softwares are not free softwares, their source code is open that's all and anybody can innovate upon it and own that particular property. So, there is a conflict of interest between open access and the proprietary intellectual property rights. So, open access intellectual property rights are open to everybody at the same time the closed doors i.e. the proprietary intellectual property rights are absolutely private rights.

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The slide is titled "Property rights" and features a light green background with a wavy orange and yellow border at the bottom. It contains three bullet points:

- A crucial point about legal protection of intellectual property is that it turns intangible assets into exclusive property rights, albeit for a limited period of time.
- IP protection makes intangible assets more tangible by turning them into valuable exclusive assets that can often be traded in the market place. ☑
- IP Rights are more worth than regular property rights.

At the bottom of the slide, there are three logos: the Indian Institute of Technology (IIT) logo on the left, the NPTEL logo in the center, and a small portrait of a man in a white shirt on the right. The text "© IIT KGP/NDG/PL-1013" is visible at the bottom center.

So, when we look into the crucial legal protection, the nature of legal protection on intellectual property it grants exclusive right to the innovator for a limited period of time. So, the incentive for the public is that it is published to the public from day one and once the protection period is over they can further innovate upon the excising invention which will be beneficial to the society at large.

So, it means that there is no trade-off between tangible property and intangible property. In the earlier enterprise's books we could only see value of tangible property, but when it comes to the present knowledge economy the value of intellectual property rights or the value of intangible property is much higher than the tangible property.

So, it is much worthy than the regular property now-a-days. For example, in the case of the famous brand Coca Cola, the value are to the extent of the brand value, the total brand value of Coca Cola is valued more than 60 billion US dollars which is nothing, but the intellectual property valuation. So, the IP rights are now more and more prominent than the property rights.

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Supply and demand

- Open access may create adverse effects on the supply and demand side of the market for the particular resource.
- The use of a resource by one person will have external effects on the welfare of others, as it will immediately reduce the amount of the resources available for consumption.
- The establishment of property rights may avoid these externalities by internalizing the benefits and the costs of the exploitation of the scarce resource, thus enhancing their more efficient use.

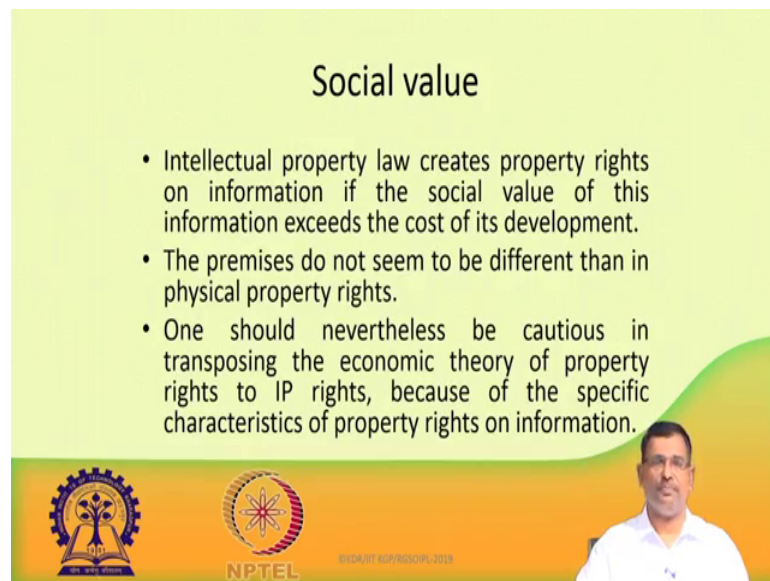
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And if you look into the market, the economist always say that the market works on supply and demand theory, if the supply is less then the demand increases. There are lot of empirical studies to prove this particular theory. So, what actually intellectual property does? The intellectual property actually limits the supply of particular product or a particular innovation to the market as a limited release.

The supply is restricted so that the proprietor can reap maximum benefit from his invention. The market always responds to the demand and the innovator can benefit out of the demand from the market. When the intellectual property which may be related with a new invention or a new technology is compared there may be high demand for a new technology. And with that particular technology and a high demand the intellectual property owner or the innovator can make benefit out of this particular higher demand from the market.

The consumption need not increase, the consumption may be stable or constant, but the new technologies can make a lot of changes in the market. The establishment of the property rights we can say is always connected with externalities. These externalities may be the demand and supply in the market or the more efficient use of the market, the more efficient use of technologies available.

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Social value

- Intellectual property law creates property rights on information if the social value of this information exceeds the cost of its development.
- The premises do not seem to be different than in physical property rights.
- One should nevertheless be cautious in transposing the economic theory of property rights to IP rights, because of the specific characteristics of property rights on information.

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People say that if there is no social value for intellectual property you need not go for innovations or that intellectual property must have a social value. What is this connectivity between the social value and intellectual property? For example, In the pharmaceutical sector the giant pharmaceutical companies always go for inventions on new diseases.

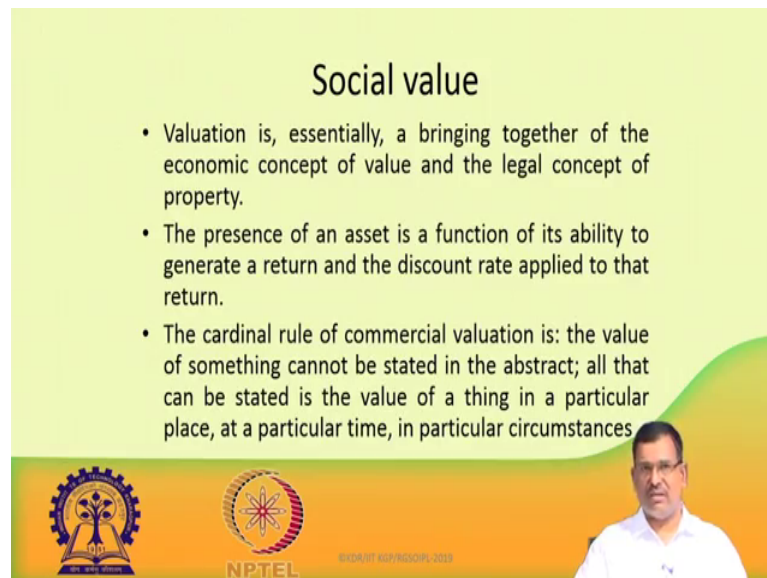
So, it is the social value, it increases the social welfare. If the companies do not have an incentive to invent new drugs then there will be no drugs in the market for diseases especially pandemics. So, the incentive or the social value of intellectual property has to be measured.

These property rights are actually nothing but informations, if these informations are kept secret. For example, one category of intellectual property law is trade secret and

trade secret is actually about keeping the information secret. The moment it is released to the people, it released to the market, released to anybody, it is no more a trade secret.

So, actually the intellectual property protection is an information which is given to the society at large from the day 1 of filing of the patents. So, it there is a difference between physical property and intellectual property. These information which is connected with intellectual property can be transferred or further more innovations can be made by the people once the term of protection is over. So, there are a lot of economic theories which finds the specific characteristics of property rights and information, and information connected with tangible property and innovation.

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Social value

- Valuation is, essentially, a bringing together of the economic concept of value and the legal concept of property.
- The presence of an asset is a function of its ability to generate a return and the discount rate applied to that return.
- The cardinal rule of commercial valuation is: the value of something cannot be stated in the abstract; all that can be stated is the value of a thing in a particular place, at a particular time, in particular circumstances

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The valuation depends upon circumstances. What circumstances the intellectual property is used, but the legal concepts of property, of intellectual property are one and the same to protect innovation, to protect intellectual property, to protect the private rights. So, the generation of intellectual property gives a return to the inventor in legal protection. So, we can see the in any commercial valuation of intellectual property, the value is based on certain theories the valuation is done on certain specific theories one of which is the social value.

So, we can say that the social value of intellectual property protection depends upon circumstances and what kind of invention it is. So, an electronic invention is different from a pharmaceutical invention, a pharmaceutical invention is different from a mechanical invention. To what extent it contributes to the social value or social welfare depends upon the circumstances of the category of intellectual property protection.

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INTELLECTUAL PROPERTY AND THE FREE RIDER ARGUMENT

- The need to allow the property owner to capture in full the returns of his/her investment and to avoid free riding is generally emphasized as one of the main justifications for instituting property rights.
- This justification is not self-evident for intellectual property rights.
- It is difficult to accept on its face the idea that overuse of the intellectual property rights by free riders will create a tragedy of the commons.

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So, the intellectual property protection school, intellectual property protection scholars argue in favour of intellectual property protection and one argument is the free riding argument. So, this group argues that if there is no protection there will be free riding in the market and no investment will come for further innovation. The justification is not actually self-evident and the empirical evidences also do not prove this exclusively.

The idea of overuse or free rider argument usually creates the *tragedy of commons* argued by the scholars. So, the free rider argument is theoretically correct sometimes and sometimes not correct at all.

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Scarcity argument

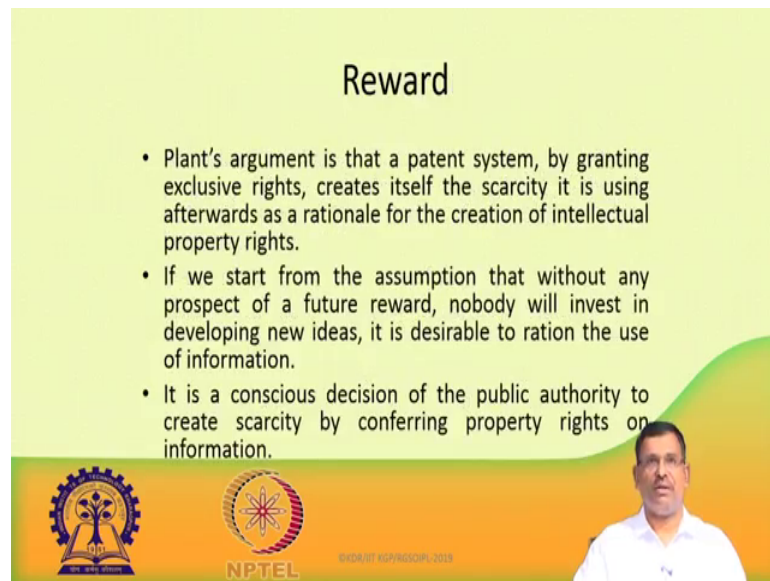
- According to Arnold Plant, “it is a peculiarity of property rights in patents (and copyrights) that they do not arise out of the scarcity of the objects which become appropriated.
- They are not a consequence of scarcity.
- They are the deliberate creation of statute law.
- property rights in patents and copyright make possible the creation of a scarcity of the products appropriated which could not otherwise be maintained.

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Second is the scarcity argument. Economist like Arnold plant says that so, “it is the peculiarity of property rights in patents or copyrights that they do not arise out of the scarcity of the objects which become appropriated”. No intellectual property rights is arising out of a scarcity, rather it is always or mostly arising out of the existing innovations. So, it is a continuation of the process of innovation.

Protecting the intellectual property creation of a statue is not connected with scarcity. You can say that this the scarcity argument is only to protect one’s own use; that means, to protect the intellectual property right owner’s interest.

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The slide is titled "Reward" and features three bullet points. At the bottom, there are logos for IIT Bombay, NPTEL, and a small portrait of a man. The text on the slide is as follows:

Reward

- Plant's argument is that a patent system, by granting exclusive rights, creates itself the scarcity it is using afterwards as a rationale for the creation of intellectual property rights.
- If we start from the assumption that without any prospect of a future reward, nobody will invest in developing new ideas, it is desirable to ration the use of information.
- It is a conscious decision of the public authority to create scarcity by conferring property rights on information.

Logos at the bottom include IIT Bombay, NPTEL, and a small portrait of a man. The text "© IIT Bombay 2015" is also visible.

The most prevalent theory is the reward theory or the incentive theory. So, the Plant's argument is on scarcity argument but the rationale of creation of intellectual property relating to the scarcity argument is not always true.

So, we can start from the assumption that if there is no future reward nobody is going to invest in ideas, nobody is going to invest in innovation and nobody is ready to further renovate and further innovate and further release the information to the public. They are going to keep their innovations with them if there is no prospect of future reward.

So we can see that it is a conscious decision of the public authority to create an *artificial scarcity* in the market through the protection of intellectual property rights or partly releasing the information to the market by protecting intellectual property law.

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The slide features a light green background with a wavy orange and yellow border at the bottom. The title 'Value of scarcity' is centered at the top. Below it are three bullet points. At the bottom left are the logos for IIT Bombay and NPTEL. At the bottom right is a portrait of a man in a white shirt. The text '© IIT Bombay 2019' is visible at the bottom center.

Value of scarcity

- The artificial scarcity will create additional value and will avoid a market failure,
- In the sense that without property rights the price mechanism would not be able to take into account the full social costs and benefits of the production and consumption of information, because of the free rider problem.
- The additional value created by innovation will be appropriated by the property right owner.

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This artificial scarcity created by the public authority is adding an additional value to the market or additional value to the intellectual property protection. Because every intellectual property protection is a controlled release of the technologies or the products to the market or if the intellectual property owner does not have the resources to manufacture that particular product he can license it to somebody who can invest in that particular product.





We can see that there is a price mechanism working along with the production of any goods or the consumption of information. So, if there is a controlled release of this information to the market this free rider problem can be solved and that is the prescription of the authority to protect innovation through intellectual property rights protection.

The intellectual property creator or the innovator can always appropriate the property by licensing or through other means of assignment etcetera He can always reap benefits, economic benefits through the protection of intellectual property.

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Incentive

- Even if one focuses only on efficiency considerations and takes for granted the assumption that this is a stand-alone innovation, it is important to recognize that property rights on information can be efficiently created only if, in their absence, the inventive effort would not have been made at the first place.







The incentive theory focuses on consideration of the standalone invent innovation, so; that means, the incentive theory is an incentive to the innovator for a limited period of time. In the absence of efficiency created through particular intellectual property law the inventors effort would not have been made in first place. So, actually this incentive is a recognition of the efforts or the intellectual effort of any individual who creates intellectual property.

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First inventor

- The benefice of a first mover advantage may be an adequate reward that may induce the firm to innovate, without enjoying the additional benefit of an intellectual property right.
- Granting a property right on information requires a trade-off between the need to encourage innovation and the protection of the interest of the consumers.
- This is an important difference with physical property rights and highlights the inherent instrumentalism of intellectual property.



This incentive is not given to everybody, but only to the first inventor. Now in most of the world the *first filing theory* is applicable in case of patents or all intellectual property rights. So, it is first come first serve. There may be thousands or lakhs of people innovating on the same product or on the same concept, but the first person who comes to the intellectual property office with his innovation is rewarded.

Why everybody doing innovation do a search of the existing innovations? For further innovation. This will help because incentive given by the authorities, by the governments is only to the first inventor.

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INTELLECTUAL PROPERTY AS BUSINESS ASSETS: AN INFORMATION COST APPROACH

- Intellectual property rights on information may also make it easier for innovators to commercialize their inventions and conclude transactions with other economic units.
- This creates a market for the transformation of the inventions into commercially viable products.
- High transaction costs of intellectual property can be considered as an important reason for adopting a more cautious approach in creating property rights on information than tangible property rights.

The slide features a light green background with a wavy orange and yellow border at the bottom. On the left, there are logos for IIT Bombay and NPTEL. On the right, there is a small portrait of a man in a white shirt. The text is centered in the upper half of the slide.

Getting property rights on information requires a tradeoff between the need to encourage innovation and the protection of interest of the consumers. So, there is a fundamental difference between these the physical property rights and the instrumentalism of intellectual property.

Because the incentive is given to only the first inventor which invents a new invention. A new inventor or new innovator is only rewarded. So, there is a cost of information, the cost of information which is related to any intellectual property protection.

So, these information can be commercialised. I would say that every invention is information. These transactions can ultimately lead to economic benefit, not only the

economic benefit to the inventor, but to the society as well and it creates larger markets; with commercially viable products, innovative products where the consumers are going to be benefitted.

A high transaction cost is related to the intellectual property protection. The creation of intellectual property requires investment, it requires a lot of allocation of resources. At the same time once the intellectual property is produced the transaction cost is added to the consumer. All intellectual properties are not going to create wealth. There is a cost allocation and the transaction cost must be adjustable and ultimately should benefit the consumer.

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PROSPECT PATENTS AND THE INNOVATION INCENTIVES THEORY

- According to the “innovation incentives” theory, the objective is not only to reward the inventor for the investments made but also to provide an economic stimulus for innovation.
- Firms are investing in order to be the first to file an application to the Patent Office or to have invented the particular product or process.
- The risk of rent-seeking behaviour is more pronounced for intellectual property rights than physical property rights.

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So, there is an asymmetry in the information as well as the cost analysis in the intellectual property assessment of intellectual property rights or valuation of intellectual property rights. So, if you look into the prospect of the incentive theory it says that it is not only an incentive to the inventor but it is an economic stimulus to the innovation which ultimately contributes to the economy, which increases the social welfare, which increases the social value of intellectual property rights. But the risk of rent seeking behaviour is more pronounced in the case of intellectual property rights than the physical property rights. This is because intellectual property creation and protection requires

more cost allocation. So, definitely there will be rent seeking behaviour more prevalent in the protection of intellectual property rights.

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Rent seeking

- Some authors go even further and argue that the risk of rent-seeking behaviour does not question the existence of intellectual property rights but, on the contrary, could be used as an argument for granting property rights on information at an earlier stage of the inventive process.
- The objective is to allow patent holders to coordinate innovative efforts within the area covered by the patent and thus develop the “prospect” of future research.

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And somehow they argue that the risk of rent seeking behaviour does not question the existence of intellectual property rights, but we can see the argument for granting property rights or information at an earlier stage of the incentive process. Definitely the objective is to allow patent holders to coordinate innovative efforts as well as the prospect of future research that means they have to further develop and innovate.

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Avoiding inefficient races

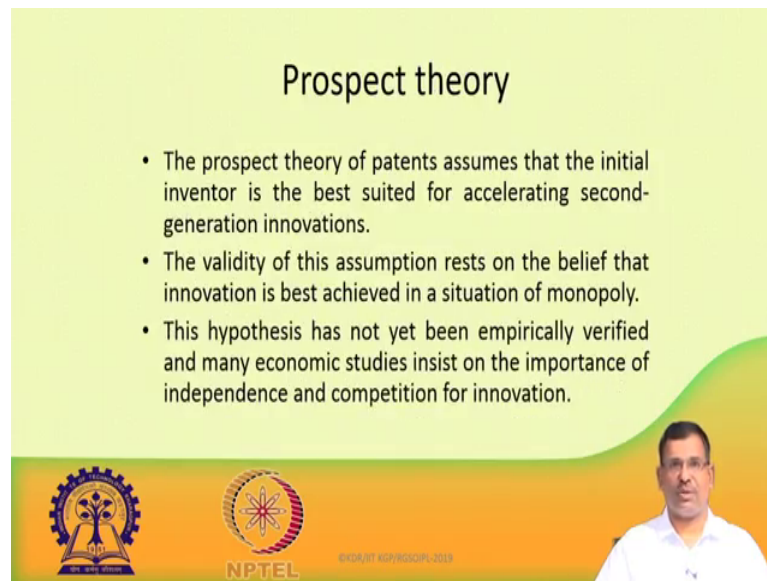
- A prospect patent places its owner in a position “to coordinate the search for technological and market enhancement of the patent’s value so that duplicative investments are not made and so that information is exchanged among the searchers”, thus avoiding inefficient races to invent.
- The initial innovator can also make the necessary investments without incurring the risk that the fruits of the investment will be appropriated by competitors.



This is for avoiding inefficiencies as well because if a new innovator comes out with a solution to the existing problem it can be considered as a further innovation.

The prospective patent owner is always under the threat of duplication; duplication of his goods and duplication of his investments. So, the information exchange to the society must be restricted through the protection of intellectual property rights. The initial inventor makes the necessary investment for incurring the risk for getting the fruits of his investment as well as the fruits of his innovation. It should not be appropriated by the competitors that is why the intellectual property protection is there.

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Prospect theory

- The prospect theory of patents assumes that the initial inventor is the best suited for accelerating second-generation innovations.
- The validity of this assumption rests on the belief that innovation is best achieved in a situation of monopoly.
- This hypothesis has not yet been empirically verified and many economic studies insist on the importance of independence and competition for innovation.

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The prospect theory of patents assumes that the initial inventor is best suited for accelerating the second generation invention as well because he has the full information on the existing innovation. So, he can go for further innovation or a second generation innovation. So, an innovator is considered to be always an innovator if he innovates further or come outs with second generation of innovations.

This hypothesis is very difficult to prove empirically unless the studies insist the independence of competition and innovation. So, innovation in the same sector or innovation in the same technology have to do proper empirical research then only we can see whether the prospect theory is empirically proved.

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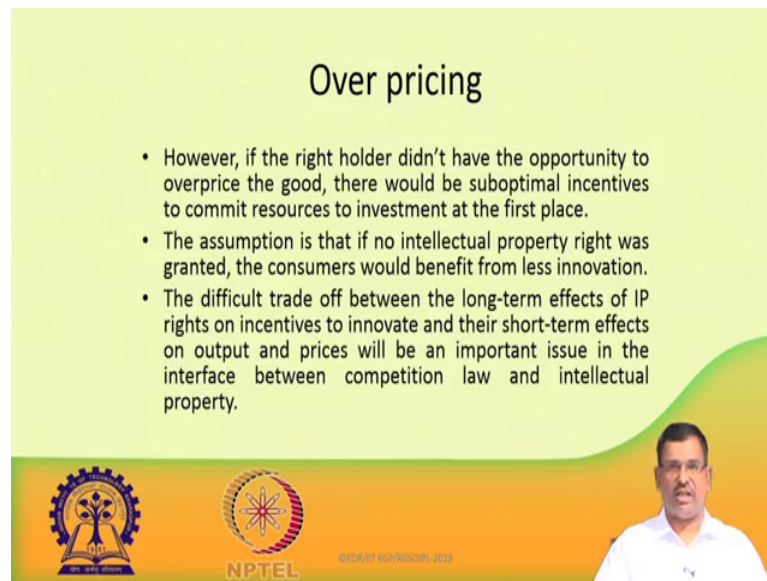
Exclusive right

- By granting an exclusive right, intellectual property offers the opportunity to the right holder to earn extra profits.
- The consumers of the particular good embodying the IP right will consequently loose because the level of output of the particular good will be lower than in the absence of an exclusive right.
- A tension between intellectual property policy and competition policy will result as the objective of the later is to maximise consumer welfare.

The exclusive right justification is nothing but an extra profit to the innovator. The consumers always bear the cost, but the consumers are always looking into the innovation, the consumer always look into the benefit of the new product. And is ready to pay an additional cost for that particular innovation, but the consumer should not be exploited, if he is the role of competition law comes into picture.

That means, for any kind of intellectual property protection which is exploiting the market, the competition law is going to step in for the consumer welfare, for example overpricing.

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Over pricing

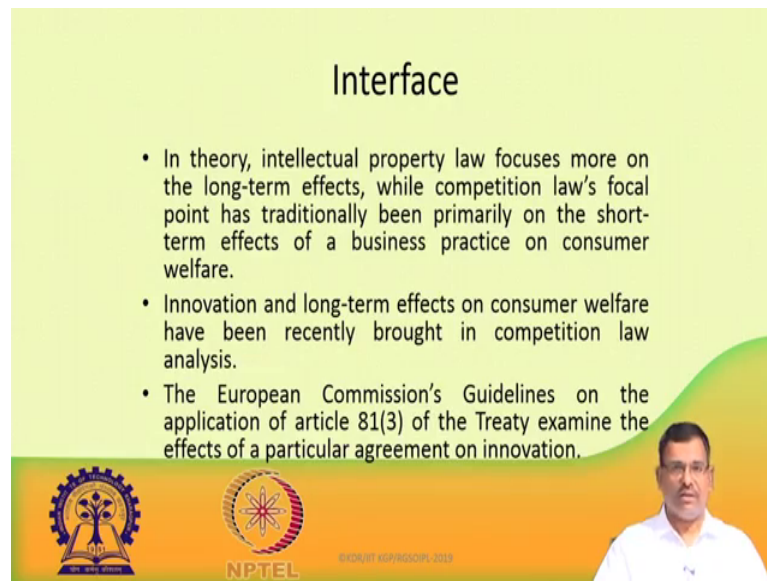
- However, if the right holder didn't have the opportunity to overprice the good, there would be suboptimal incentives to commit resources to investment at the first place.
- The assumption is that if no intellectual property right was granted, the consumers would benefit from less innovation.
- The difficult trade off between the long-term effects of IP rights on incentives to innovate and their short-term effects on output and prices will be an important issue in the interface between competition law and intellectual property.

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An innovator cannot put his price on a very higher footing and exploit the market and exploit the consumer which is not in accordance with the intellectual property protection. The philosophy of intellectual property protection does not allow over-exploitation of the market. And then comes the role of the competition law.

So, the assumption of intellectual property rights is that the consumers would be benefitted from innovation. And if the innovator is going to over-exploit the market, then the competition law is going to step in and act against the intellectual property protection. Here comes the interface between intellectual property law and competition law.

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The slide features a light green background with a white title 'Interface' at the top center. Below the title are three bullet points. At the bottom, there is a dark green banner containing three logos: the Indian Institute of Technology (IIT) logo on the left, the NPTEL logo in the center, and a portrait of a man on the right. The text '© ROHIT KUMAR, 2015' is visible in small print below the NPTEL logo.

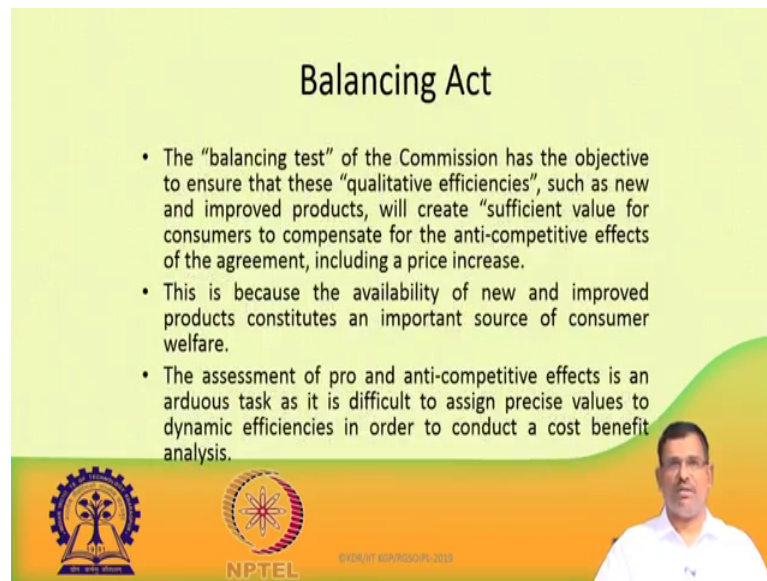
Interface

- In theory, intellectual property law focuses more on the long-term effects, while competition law's focal point has traditionally been primarily on the short-term effects of a business practice on consumer welfare.
- Innovation and long-term effects on consumer welfare have been recently brought in competition law analysis.
- The European Commission's Guidelines on the application of article 81(3) of the Treaty examine the effects of a particular agreement on innovation.

So, the theory of intellectual property focuses more on long term effects and the competition law is looking into the short term effects of business practices or consumer welfare. So, there must be a parallelism or there must be a balance between the long term effects of intellectual property protection and the short term effect of this competition law.

As I told you most of the competition law in the world whether US competition law, which we are going to see in the next classes or the European competition law examines specifically the effects of these intellectual property law protection on innovation as well as the interface with the competition law.

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Balancing Act

- The “balancing test” of the Commission has the objective to ensure that these “qualitative efficiencies”, such as new and improved products, will create “sufficient value for consumers to compensate for the anti-competitive effects of the agreement, including a price increase.
- This is because the availability of new and improved products constitutes an important source of consumer welfare.
- The assessment of pro and anti-competitive effects is an arduous task as it is difficult to assign precise values to dynamic efficiencies in order to conduct a cost benefit analysis.

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This is inevitable because there must be a balancing act between intellectual property protection and the competition, the process of competition in the market. Then only the consumers are going to be benefited or the consumers are going to be compensated. If there is no competition law, consumers are not going to be paid because of the anti-competitive practices of technology owners. So, it is necessary to look into the interface between intellectual property law and competition law.

So, the anti-competitive effects are not good for the market. It is going to affect the dynamic efficiencies of the market or the cost benefit is going to be severely affected by the anti-competitive practices of the intellectual property owners.


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Consumer welfare

- Competition law takes into account the effect of commercial practices on innovation markets.
- One could therefore conclude that intellectual property law shares with competition law a common dynamic conception of "consumer welfare."
- There are usually two understandings of this concept.
- Competition law economists generally distinguish between total welfare, sometimes also referred to as consumer welfare, and pure consumer welfare (consumer surplus or distributive consumer welfare).
- Both serve as alternative standards for evaluating the effect of business practices to competition.



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The competition law always takes into account these commercial practices of innovation markets. One may say that the ultimate goal of intellectual property protection and competition law is one and the same i.e. consumer welfare. For these concept the understandings may be different. For example, the competition law economists distinguish between the total welfare and the consumer welfare with the welfare of the society. But at the same time the alternative standard evaluating these business practices is the competition law.


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Consumer welfare

- Total welfare is a measure that aggregates the welfare or surplus of different groups in the economy (in general consumer and producer surplus).
- Producer surplus refers to the sum of all profits made by producers in the industry, while consumer surplus refers to the aggregate difference between the consumers' valuation for the good considered (or what he wants to pay) and the price that he has to pay for.



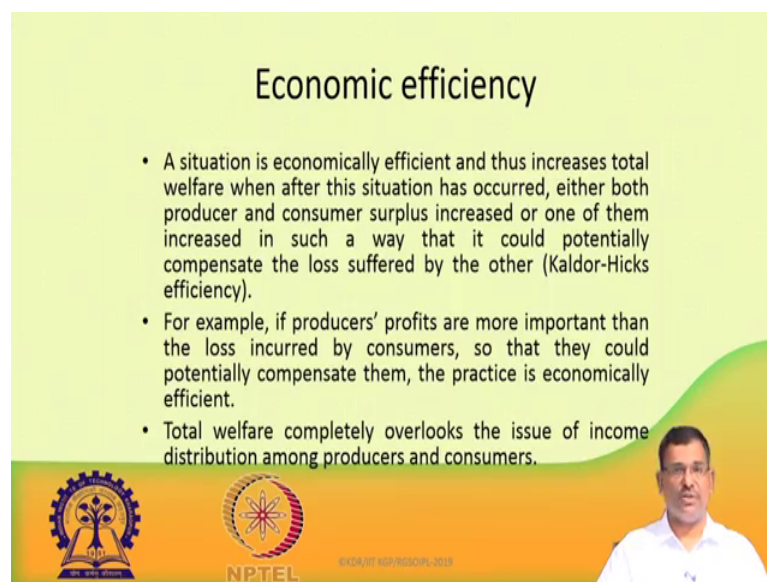
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So, the competition law always has an eye on the business practices of monopolies. Even though the intellectual property rights grants monopoly rights, the competition law has an eye on the activities, whether it is competitive practice or anti-competitive practice of these monopoly rights enterprises. So, the total welfare measure aggregates the welfare or surplus of different groups in the economy.

So the welfare of consumers increases the welfare of producers and the welfare of economy in total. So, the intellectual property adds value to the society, adds value to the economy and most importantly adds value to the society at large.

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Economic efficiency

- A situation is economically efficient and thus increases total welfare when after this situation has occurred, either both producer and consumer surplus increased or one of them increased in such a way that it could potentially compensate the loss suffered by the other (Kaldor-Hicks efficiency).
- For example, if producers' profits are more important than the loss incurred by consumers, so that they could potentially compensate them, the practice is economically efficient.
- Total welfare completely overlooks the issue of income distribution among producers and consumers.

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The economic efficiency theory very well works under intellectual property law. For example, we can see that *Kaldor and Hicks* talks about efficiency: as the situation is economically efficient it thus increases total welfare after the situation has occurred. Either both producer and consumer surplus increases or one of them increase in such a way that it could potentially compensate the loss suffered by the other.

The efficiency theory may not always work well with the intellectual property protection but if the practice is economically efficient, if the technology is a superior technology than the existing one then the consumers may like the product and ultimately this innovation would help the society to increase the efficiency of the market.

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Welfare

- By offering the possibility to the IP holder to increase prices, IP rights may decrease output and therefore total welfare.
- However the dynamic efficiencies brought by IP may largely compensate the losses.
- The effect of IP to consumer welfare will depend on the question to know if the “monopolistic” profits generated by the exclusive right of the IP holder will be passed on to the consumers in a way or another.



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The welfare theories always hang around the intellectual property protection as well as the competition law. So, the effect of consumer welfare depends upon the question of how monopolist is going to behave in a market. If he behaves in accordance with the competition law there is no interference of competition law, but if the IP owner or the intellectual property holder is going to behave monopolistically and exploit the market then the competition law is going to step in.

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Innovation

- This will not necessarily take the form of lower prices, but may simply be better quality, new products or services and enhanced consumer choice.
- A broad intellectual property protection may nevertheless harm consumers in the long run if this will have the effect to restrict cumulative innovation.
- This possibility raises two issues: the importance of cumulative innovation to economic welfare and the relation between innovation and market structure as a competitive structure may not generate more innovation than a more concentrated one.



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So, here you can see that if an innovation is going to reduce the prices, lower the prices or better the quality, then the product and services are going to enhance the choices of consumers.

So, the cumulative effect of innovation in an economy as well as on economic welfare and the relation of innovation in the market structure is correlated. There is a direct connection between innovation and the market structure. And this monopolistic interference in the market structure is also one of the criteria.

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Innovation

Two types of innovation

- a) Stand alone innovation, which refers to the situation where the IP right will not be used as an input to another innovation.
- b) Cumulative innovation, which refers to the situation where successive innovations build upon earlier innovations.

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So, we can find two types of innovation; one is standalone innovation and the other one is a cumulative innovation. In the first one IP rights will not be used as an input to another invention. Mostly standalone innovations are very much prevalent in the market. Second is the cumulative innovation which refers to the situation where successive innovations build up on earlier innovations and most of the innovations are on this cumulative innovations theory.

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Cumulative innovation

- It is widely accepted that cumulative innovation substantially increases social value
- Cumulative innovation may take three different varieties.
 - a) Either the second innovation could not be invented without the first.
 - b) Either the first innovation reduces the cost of achieving the second.
 - c) The first innovation accelerates the development of the second by providing new research tools.



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So, the cumulative innovation is widely accepted as substantially increasing the social value and we can find three different varieties: either the second innovation could not be invented without the first one or either the first innovation reduces the cost of achieving the second one or the innovation accelerates the development of the second by providing new research tools.

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Social value

- The social value of the innovation process is, in this case, unequally distributed between the first and the second innovator.
- It will therefore be important to find the right incentive mechanism in order to ensure that earlier innovators are compensated adequately for establishing the foundations for later innovators, while also making sure that cumulative innovators still have an incentive to innovate.



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So, existing innovations always contribute to the society and reduce the cost. So, again the question of social value comes: whether really the innovation is contributing to the society at large, whether it is increasing the social value. So, it is important to find out by this incentive mechanism and also look into the interface between intellectual property and competition law.

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Incentive

- The original design of intellectual property rights should take into account the need to compensate both the initial and the subsequent innovators.

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So, we can very well say that the original design or the objective of intellectual property is to enhance the social welfare and incentivise the innovator. So, in the next class we are going to see very specifically the tussle between the intellectual property protection and competition law.

What is the level of interface, whether this level of interface is good to the society or it is going to increase the economic welfare to increase the potential of the market or whether the monopolist should be controlled with intellectual property rights. These are the issues which we are going to discuss in the next class.

Thank you.