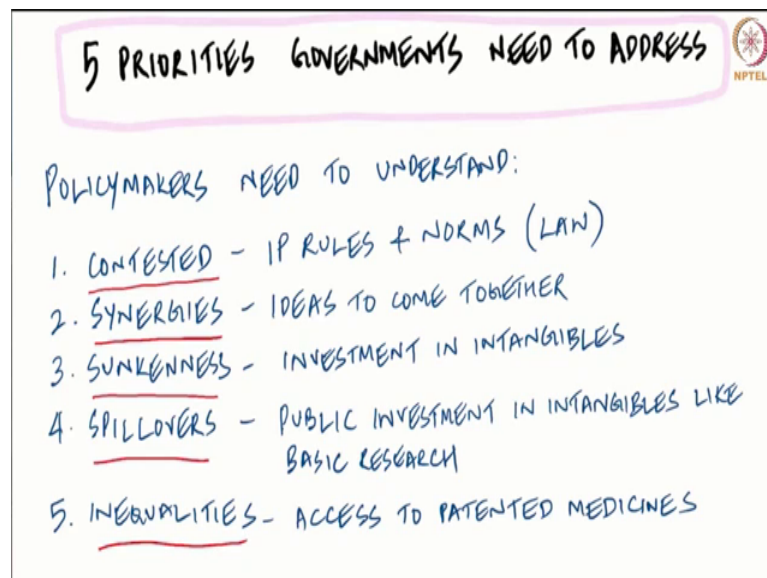


Intellectual Property
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Lecture - 16
Policy Challenges in an Intangible Economy

Let us look at the Policy Challenges in an Intangible Economy.

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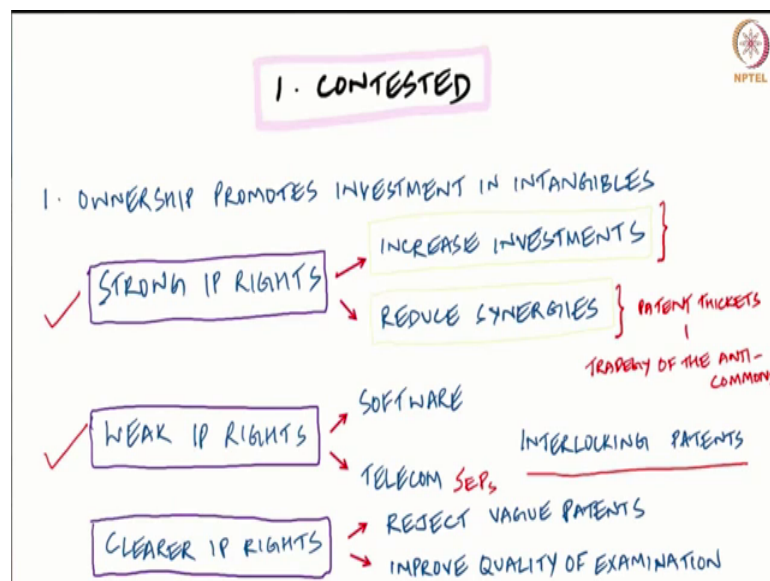
Any government would have 5 priorities that they need to address. Policymakers should understand that intangible assets are contested meaning which the intellectual property rules and norms have to be structured in such a way that the contested nature of intangible assets do not lead to lesser investments in intangible assets. Secondly, policy makers need to factor in to synergies; the fact that for new ideas to come, intangible assets have to be structured in such a way that they come together.

So, ideas to come together they should be a policy to make ideas come together. The third thing they need to factor is the sunkenness aspect of intellectual property assets that investments in intangibles happen far that investment in intangibles happens is much lesser than the investment intangibles and physical assets.

Fourth, they need to look at spillovers. This is something which had already covered that there has to be some kind of a public investment in intangible like basic research and

scientific research. Finally, they need to factor into the inequalities that intangible assets can create. Now, we have this problem in India when it comes to access to patented medicines. Two of the biggest issues related to pharmaceutical patents on life saving drugs; one is the Novartis case and the other one is the Narco license which became the subject matter of a compulsory license, the first compulsory license that was granted by the Indian patent office.

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So, now let us look at the contested nature of an intellectual property asset, one contested. Let us look at the contested nature of an intangible asset. We already covered this and we need to ensure that there has to be some kind of an ownership of these intangible. So that over ownership or private rights in intangibles is expected to promote investment in intangibles.

Now, there are two broad groups; one which advocates was strong intellectual property rights and the other which advocates for weak intellectual property rights. Now, the strong intellectual property rights, it is expected that once you have a strong regime, it would increase investments. And it would also as a consequence increased in investment would also mean it would reduce synergies in the sense that too much of private rights would lead to a situation, where the entity is that whole private rights do not cooperate.

Now, this is a problem what is called in literature as the problem of the patent tickets. Now, this is also described in literature as the tragedy of the anti-commons. The tragedy

of the anti-commons tells us that too much of private ownership may lead to a situation where the private owners will not cooperate with each other. Now, tragedy of the anti-commons is different from the tragedy of the commons. The tragedy of a commons which is another scholarly work which preceded it told us that too much of public ownership of things will lead to a point. Where, there will be abuse of public ownership or there will be abuse of things that are held in them, there will be abuse of things that are held by the public.

So, the tragedy of the commons for instance something like air and water, we find that these are the things that are commonly polluted or abused because air is held in common and there is no incentive for people to keep air for themselves or privately own air. We may soon reach that in some of the polluted cities, but right now there is no incentive for people to do that and because air is a commonly held good, a public good. It tends to be abused or the abuse of commonly held good may be different from the way in which a privately held good may be treated. The reason why the roads or the public places are not as clean and kept well as the private places say the insides of our houses and homes is another illustration of this problem that when people hold things in public. They tend to abuse it whereas, private ownership would lead to a situation where they would respect private rights and safeguard property.

So, the tragedy of the commons was in fact a push towards private ownership of property and the underlying principle was that if people had private property, they will take care of it. Too much of private ownership led to non-cooperation between the owners of the property. For instance, we have cases where a biotechnology, we have cases where drug development did not happen or drug development got stalled, because to release the drug into the market. The owner of the drug had to license many patterns from different patent owners and the cost of licensing was so high. There are drug manufacturer refused to bring the drug to the market, because it was not feasible for the drug manufacturer to pay royalty licenses to all the people who were holding patterns which were required for manufacturing this particular drug.

So, the tragedy of the anti-commons is where we see an instance where too much of private ownership could lead to a situation, where the people who own the property will not cooperate with each other. So, those strong IP rights have been recommended as a thing that can increase investments. It is also true that strong IP rights could reduce

synergies and we had already discussed that synergies is one of the things that would result in the creation of an intellectual asset.

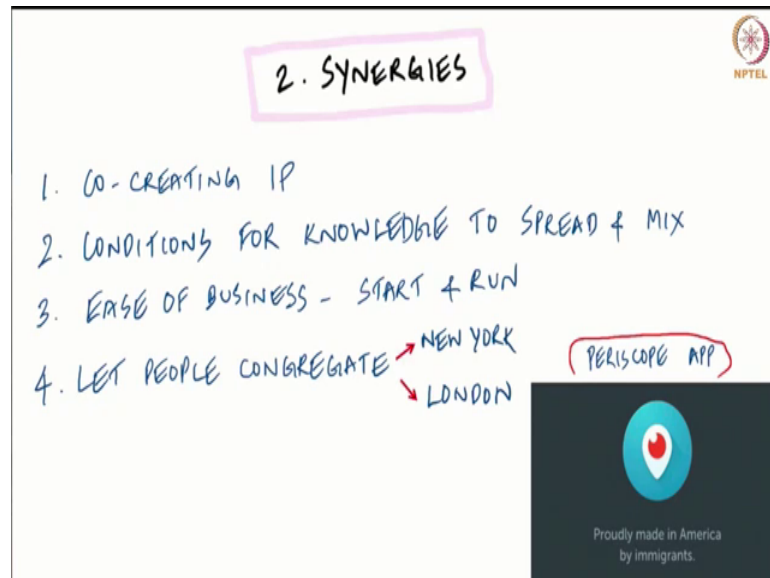
The other group which advocates for weak intellectual property rights largely look at the software industry and the telecom industry where there are quite a lot of interlocking patterns, and say that in these technologies for the technology to grow. There has to be a weaker standard of intellectual property right. That is the reason why some countries do not offer patent protection for software. And similarly for telecoms. Telecoms lastly are set by standards and in the telecom sector you have standard essential patterns what we call se peace. Now, se peace by definition because the patterns cover a particular standard, there is no way a manufacturer or a standard implementer can come up with the technology without using the patterns that fall within the standard.

So, the SCP regime has developed what we call a FRAND license, a license that has to be on fair and reasonable terms and which is non-discriminatory. It should not discriminate people who take the license. So, the FRAND licensing is a way in which you can use a technology by paying a license fee to the owner of the technology, the standard essential patent owner. So, telecom as well as software has evolved a standard of IP protection which is much lesser than what it is traditionally in fields like pharmaceuticals. And this is largely due to the interlocking patterns or the need to have interoperability which is true in software as well as telecom.

Now, whether we advocate for a stronger IP rights or for a weaker IP rights, what is manifest in this debate is that there is a need to have clearer IP rights. IP rights have to be clear, so that the contestation on IP rights do not happen see only when you have vague IP rights or ambiguous IP rights. Intellectual property rights whose borders are not clear or intangible assets whose boundaries are not clear would it lead to dispute with regard to where the boundaries are. So, intellectual property disputes arise largely because of the fact that the boundaries are not clear. They could also arise, because of the granting organization say the patent office did not do a good job while examining those applications. That is another reason why you can have intellectual property disputes. One, inherently the patent was not capable of defining the borders of the intellectual property right or when the pattern got granted, the examination that went into it was not rigorous.

Now, we will look at a study towards the end of this of this week's course which pertains to the Novartis standard. We will look at the Novartis case, then we will look at what the standard that was set by the Supreme Court. And we will also look at whether how the standard was implemented by the Indian patent office which led to various patterns which ought not to have been granted resulting in grants.

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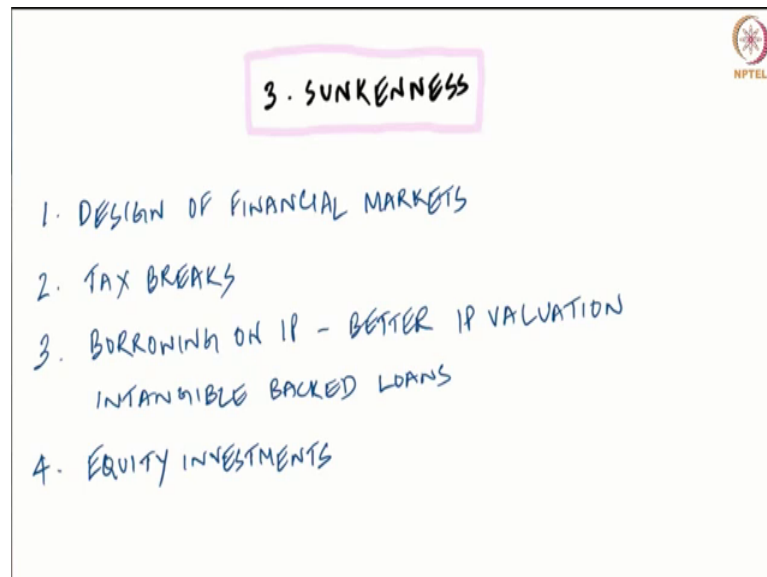
2 synergies: and this is another aspect which you have already covered. Now, there has to be some kind of policy that allows parties to co-create intellectual property. So, co-creation of intellectual property is where entities, different entities come together to create the intellectual property. The understanding is that when different entity is created, there is some kinds of a cooperation between them to bring in this energy. That is essential for an intellectual property or an intangible asset.

So, there has to be the policy also has to look at conditions for knowledge to spread and mix. And it also has to obviously create standards that are easy for businesses to start and operate. And finally, it should also look at how people can congregate and come together because if businesses have to cooperate and run successfully, there has to be a policy for people to come together and work. So, those ideas, new ideas are created and it leads to synergy between intangible assets.

Now, the periscope app I just found this quite amusing that when you start the periscope app, it just says proudly made in America by immigrants. So, it tells you that for ideas to

come into effect you have to have people either cross-barriers or cross-borders to come together. It could be people moving from rural areas and settling down in cities or it could be cases where people move from other countries to places where innovation happens.

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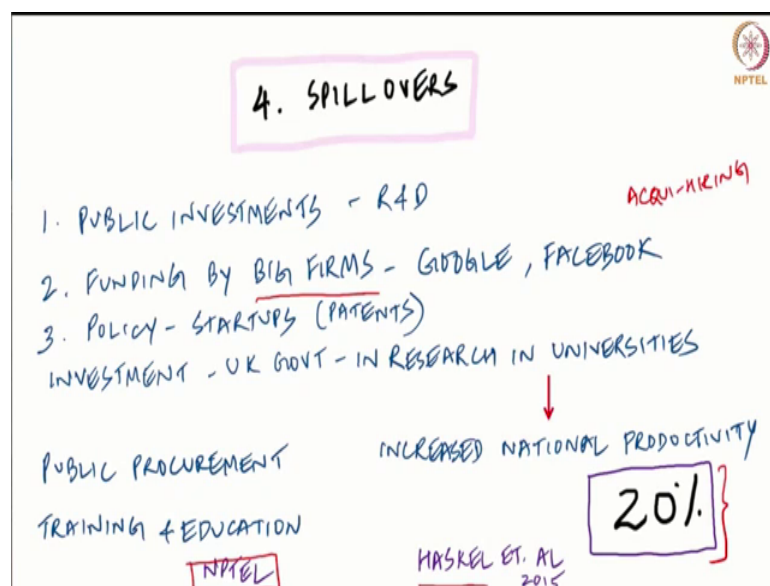
Third thing is about Sunkenness. We had already seen this as well now what the government can do to address the issue of sunkenness. The fact that intangible assets have or involve sunk cost which are hard to recover, they can look at the design of the financial markets. Financial markets today are designed in a way to facilitate funding for tangible assets.

So, the entire securitization law which allows you to take a loan based on a security that is given say mostly land, it is based on the premise that an tangible asset is easy to liquidate. Now, you do have issues with regard to non-performing assets, but when you compare an tangible and an intangible effect asset, the financial markets are designed more to have funding for the tangible assets. So, one of the things that policymakers can look at is how the financial markets are designed. They could be tax breaks given for investments into intangible assets. They could be policy which facilitates borrowing based on intellectual property or intangible assets. For that we need better intellectual property valuation and it is this is a theme that we have already discussed and we also

already saw how a loan that was offered based on the Kingfisher Airline brand led to the collapse of the company and eventually led to some default in the payment of loans.

So, intellectual property backed loans or intangible loans that are backed by intangibles is something that has been operated in some put into is something that has been put into force in some countries. And another way to fund intangible assets or to ensure that the sunken cost, the effect of the sunken cost is reduced is to look at equity investments in intangibles which is largely how intangibles in the silicon valley are funded.

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The 4th point is on Spill overs. Spill overs can be avoided by public investment in research and development. So, public investment in research and R and D is something that can ensure the creation of intangible assets where the private investors may fear us below.

Now, we have seen instances of funding by big firms like Google and Facebook. They largely do it to ensure that a new startup, they either fund a startup or they acquire a start up. Now, there is a word for this, there is a concept called Acquire Hiring. Now, acquire hiring is a concept where a bigger firm acquires a smaller firm with the objective of incorporating, incorporating the form of firms and business into the bigger firms business. So, it is acquisition with the objective of hiring. So, Google may hire or we have seen instances where Facebook may hire a smaller company with 300 odd people

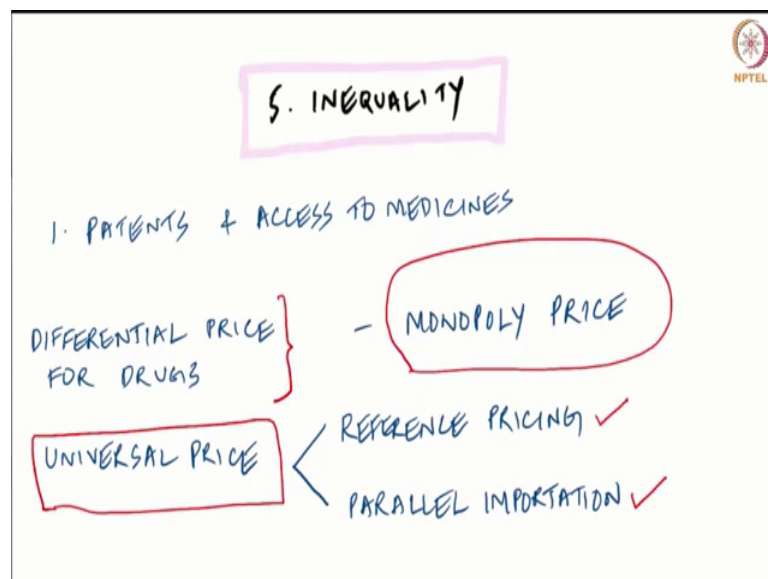
and what Facebook would do is dismantle the entire company and take the people and incorporate those people into its rules.

Now, acquire hiring has its own issues, but lastly you can see that funding by big firms into the technology in which they normally invest is a way in which you can ensure that there is some protection against below us. Now, the government can also come up with a policy for startups or startups in countries like India have various incentives for facilitating, filing of patents and we will have a small discussion on how the startups have evolved over the last 2 year.

For this week among we will have a short discussion on how startups have evolved over the last 2 years. So, investment is something which is expected to be done by the government and we have an instance where UK government which had invested in research in universities, it found that it increased the national productivity by 20 percent. Just by investing in the research in universities, the national productivity shot up by 20 percent and this is by a study by Haskel et al in 2015.

So, public procurement can ensure the spill overs are taken care of and similarly, training and education. Now, we know that NPTEL model itself is based on the fact that training and education has to be taken to a larger audience by way of a mass open online course.

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Now, what the 5th thing, the policymakers need to worry about is inequality that intangible assets can create. Now, we have seen this in the context in India specially in the context of patents and access to medicines. We had two cases as we said one pertaining to the pharmaceutical company Novartis for its anti-cancer drug Gleevec and the other was with regard to a German company by a Hoesel Patent was licensed to an Indian company Narco which again pertain to a life saving drug.

Now, what this tells us is that patents allow a pharmaceutical company to charge a monopoly price. A monopoly price is a price that is charged because there is only one product in the market. And in the case of a life saving drug, it could mean that bulk of people in the market may not be able to afford it, especially in the absence of insurance coverage; in the absence of government procurement and in the absence of a high GDP or per capita income in the country, so that the people can afford it out of pocket.

Now pharmaceutical companies do not involve in differential pricing of drugs for a particular reason. They in fact have a universal price which they use for all the countries. Now, the reason for pharmaceutical companies involving in setting a universal price is that they fear that they could be a reference pricing. Reference pricing pertains to price that is set by one government could be used as a reference by another government to bargain with the pharmaceutical companies.

So, they do not want different prices to be used as a point for bargaining and bringing down the prices. So, they cite reference pricing as one of the reasons why they follow a universal price, a price across all the countries. The second fear that promotes pharmaceutical companies for towards a universal price is the fear of parallel importation. Pharmaceutical companies fear that if the drugs are priced differently across borders, the drugs may move from the market where it is cheaply priced into the market, where it is priced at a higher rate

Now, this could have some element of truth, but the fact is that differential pricing has now become a reality. There are instances where the prices of drugs in India are differently priced, especially after Novart especially after the compulsory license was granted for buyers drug. We saw instances where companies were willing to offer the drug in India at a different price than from the global price or compared to the price in the western markets. So, inequality is something that comes when you grant intangible

assets to private entities and private entities, because there are businesses with the object of maximizing profits. They may result in an issue where bulk of the population in a particular country especially a developing country may not be able to afford the medicine which could be a matter of life and death.

So, the inequality aspect is another thing that policymakers need to worry. They could either have stronger standards set at the patent office, so that the intangible assets are granted. Only once the merit, a grant are granted. That is one way to check it or even if patents are granted. They could have mechanisms like a compulsory license by which if there is a need, the compulsory license can be issued, so that the drug is available at an affordable price in the market.