PROJECT APPRAISAL AND INVESTMENT ANALYSIS

LECTURE 5

TRADE POLICIES

SHADOW PRICE

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TRADE POLICIES

- **Trade policy**

It refers to the regulations and agreements that control imports and exports to foreign countries.

- **Market Imperfection**

An imperfect market is one in which individuals buyers and sellers can influence prices and production, where there is no full disclosure of information about products and prices.

- **Market Distortion**

Market distortion is the lack of free and open competition in a market, whether through intentional actions or prevailing market conditions. Further distortion occurs when governing bodies step in to regulate the market, for example by setting price floors or ceilings or offering tax subsidies

TRADE POLICIES

Traded Goods

Those goods whose price are set in international markets. Their prices do not vary much from one country to other (expect for factors like transportation and taxes)

Example

Imports and export and goods that are produced, commodities include grains, gold, beef, oil, and natural gas.

Note: Trade is affected not only by taxes and subsidies that affect producers and consumers of goods, but also, indirectly, taxes and subsides that affect non-traded goods or factors of production

TRADE POLICIES

Non-Traded Goods

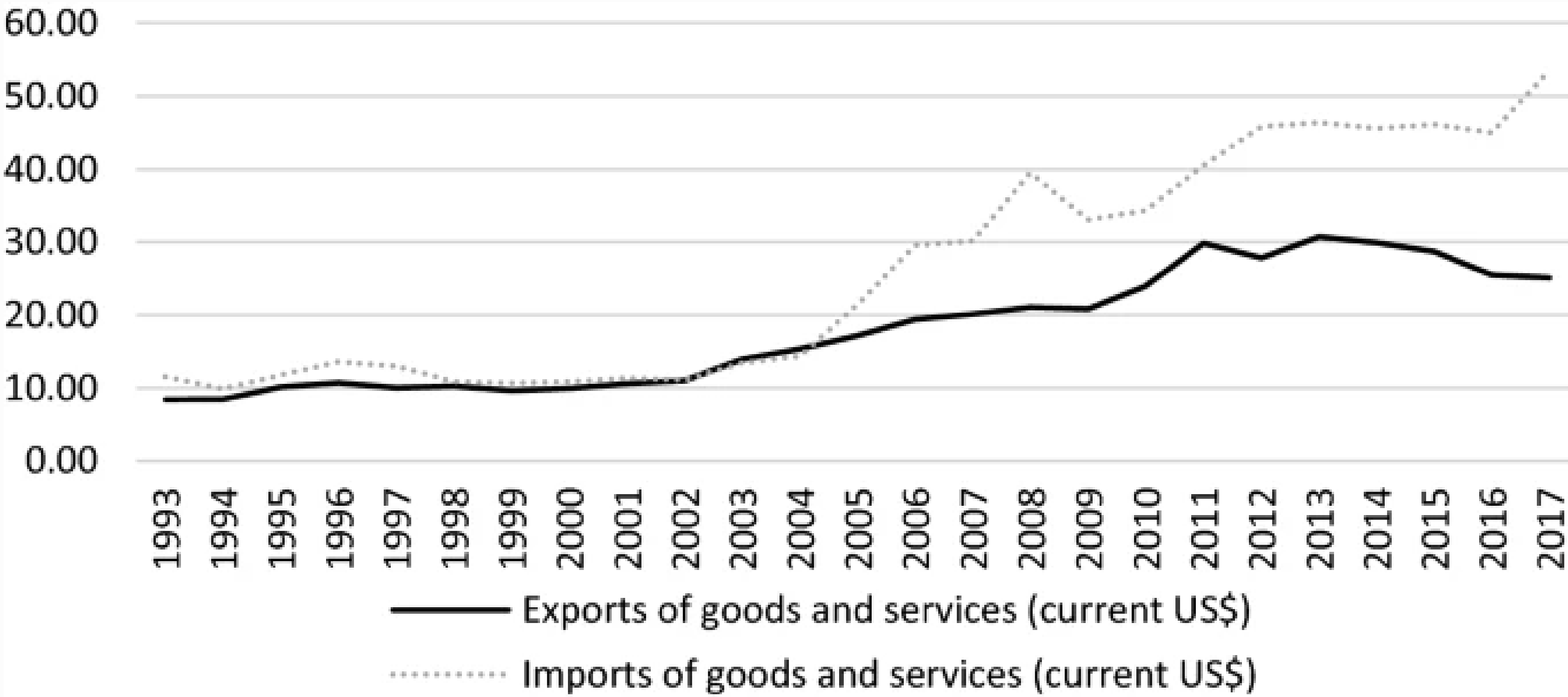
Non- traded goods are those which do not enter into trade. Price of non traded goods can vary widely from one country to an other.

Example

Non-tradable goods include such items as electricity, water supply, all public services, hotel accommodation, real estate, construction, local transportation; goods with very high transportation costs such as travel; and commodities produced to meet special customs or conditions of the country.

TRADE POLICIES

Fig. 1



(source: World Bank data)

Pakistan's trade flow

TRADE POLICIES

Imports from	2015	2016	2017
China	13	15.3	16.9
UAE	6.63	6.99	8.39
USA	5.58	5.44	6.4
Saudi Arabia	3.44	2.22	3.06
Japan	1.91	2.13	2.51
UK	2.18	2.18	2.41
Germany	2.12	2.18	2.4
India	1.98	1.99	2.03
Netherlands	1.03	1.04	1.7
Korea	0.97	0.99	1.34

TRADE POLICIES

Rank	Exports to	2015	2016	2017
1	USA	3.66	3.43	3.56
2	UK	1.57	1.56	1.63
3	China	1.93	1.59	1.51
4	Germany	1.15	1.19	1.29
5	Spain	0.79	0.84	0.91
6	UAE	0.9	0.79	0.87
7	Netherlands	0.67	0.62	0.76
8	Italy	0.62	0.67	0.7
9	Belgium	0.6	0.66	0.7
10	Korea	0.3	0.26	0.47

MARKET IMPERFECTION AND DISTORTION

- Generally market imperfection and distortion are any deviation from the assumption of perfect competition.
- When imperfection and distortion are present in a trade market, it is usually possible to identify a trade policy that can raise aggregate economic efficiency.
- In the presence of market imperfections and distortion , free trade may no longer be the best policy, even for a small open economy.
- Although trade policies can sometimes generate national welfare improvement .

MARKET IMPERFECTION-TYPES

Market Structure	No. of Sellers	Degree of Product Differentiation	Barriers to Entry	Pricing Power of Firm	Non-Price Competition
Monopolistic Market	Many	Differentiated to sell at higher price	Low	Some	Advertising and Marketing strategy
Oligopoly Market	Few big companies	Same type of product	High	some pricing power	Advertising and different products
Monopoly Market	One	Unique products	Very High	Considerable	Advertising
Monopsony Market	Single buyer many sellers	Buyer and seller of unique product	Very High	Price decided by buyers	Negotiation skills for better buy price

EXTERNALITY

Definition:

An **externality** is a cost or benefit caused by a producer that is not financially incurred or received by that producer. An **externality** can be both positive or negative and can stem from either the production or consumption of a good or service.

It can arise from Production processes (+ve,-ve) and Consumption activities (+ve,-ve).

EXTERNALITY CONT.

Positive Production Externality:

It occurs when production has a beneficial effect in other market in the economy. A farmer who grows apple trees provides a benefit to a beekeeper. The beekeeper gets a good source of nectar to help make more honey. (positive production externality)

Negative Production Externality

It occurs when production has detrimental effect in other market in the economy, felt by others firms and by consumers. E.g. pollution, environmental effects.

EXTERNALITY CONT.

Positive Consumption Externality:

It occurs when consumption has beneficial effects in other markets in the economy. When you consume education you get a private benefit. But there are also benefits to the rest of society. E.g you are able to educate other people and therefore they benefit as a result of your education. (positive consumption externality

Negative Consumption Externality:

It occurs when consumption has a detrimental effect in other markets in the economy. **example** include cigarette smoking, which can create passive smoking

TRADE POLICIES

Tariffs are taxes on trade**,** whereas **non-tariff** barriers are non-monetary restrictions of various kinds, such as documentation requirements, technical or safety standards, and packaging requirement.

A **nontariff barrier** is a way to restrict trade using trade barriers in a form other than a tariff.

A nontariff barrier is a trade restriction–such as a quota, embargo or sanction–that countries use to further their political and economic goals.

Countries usually opt for nontariff barriers (rather than traditional tariffs) in international trade.

TRADE POLICIES

Example of Nontariff Barriers

In December 2017, the United Nations adopted a round of nontariff barriers against North Korea and the Kim Jong Un regime. The nontariff barriers included agreements that cut exports of gasoline, diesel, and other refined oil products to the nation. They also prohibited the export of industrial equipment, machinery, transport vehicles, and industrial metals to North Korea. The intention of these nontariff barriers was to put economic pressure on the nation to stop its nuclear arms and military exercises.

SHADOW PRICE

A shadow price is an estimated price for something that is not normally priced in the market or sold in the market.

- Shadow pricing is defined as allotting a monetary value to a current intangible item that does not yet have a market of its own to derive an actual price. It is also defined as the maximum amount that an organization is agreeable to pay for one extra unit of a resource.
- This relates to the supposed advantage the company can derive from that extra unit. Shadow pricing is often considered a limited concept as it can be applied to particular situations during financial analysis

NEED AND DETERMINATION OF SHADOW PRICES

It is estimated to be the assumed price of services, products, activities, and tasks that have no market price. It can also be called an opportunity cost or a proxy value. Shadow pricing means the highest price that someone is willing to pay for one extra unit of something.

It is used in calculating cost-benefit analysis where some products cannot be quantified by referring it to a market cost. It is the artificial price that is given to an accounting entry or a non-priced asset. It is subjective to assumptions as there is a lack of dependable data to fall back on.

SHADOW PRICING - EXAMPLE

You can understand shadow pricing with the help of an example where overtime is offered to employees for their extra time so that they can work longer and increase the productivity of the company.

DPL Company is a transport company that sometimes has to make deliveries at odd hours to its exclusive customers. This is because these clients give them other clients, and it is a mutually beneficial arrangement.

SHADOW PRICING – EXAMPLE CONT.

The company has assigned a shadow pricing of 2,000 dollars as the benefit it derives from its deal. Hence it is willing to pay up to 2,000 dollars to the truck driver that makes the deliveries

AB Company decided to renovate its office building. It is easy to estimate all the expenses that occurred during it but what about the benefits, for instance, the happiness of employees is sitting at a better facility and the increased productivity because of a peaceful ambiance.

This benefit can be estimated only via approximate shadow pricing.

ADVANTAGES OF SHADOW PRICING

There are numerous advantages of shadow pricing, and some of them are described below-

1. It is a useful tool that is used to know the advantages associated with the cost of extra use of a resource.
2. It comes in handy when you have to convert resources into social costs.
3. Can convert assumed impacts into social benefits.
4. It is a device that is used for the optimal allocation of resources.
5. Shadow pricing avoids under-pricing.
6. The best part is that it takes into account the economic opportunity cost.

LIMITATION OF SHADOW PRICES

The limitations are as follows-

- In the case of intangible items, shadow pricing is simply guesswork without any substantial proof to back the claim
- Shadow pricing is measured as an indeterminable concept
- It is considered as a range of probabilities
- It cannot boast of reliable or even adequate data
- It is a limited perception as it applies to particular situations

LIMITATIONS CONT.

- It has certain biases attached to it that are based on sample and response
- The chance of the wrong estimate is high as it is subjective
- It is a concept that is based on assumptions
- It lacks universality
- It is a timeless and static notion
- The shadow pricing fails to reflect social opportunity cost in the long run

USES OF SHADOW PRICING

The different uses in different contexts are:

1. In project evaluation
2. In public policy
3. In programming

USES OF SHADOW PRICING

In project evaluation

It is a great tool for evaluating the effects of a task or a project on the national income of a country. It is prepared based on cost-benefit analysis or profitability criterion where you can calculate benefits and cots at accounting prices.

It is vital to remember that even if you get a rough estimate via shadow pricing, it can prove a great help.

USES OF SHADOW PRICING

In public policy

It is impossible to take on the development plans of the public sector unless you have estimate prices of foreign exchange, capital, and labor as per the shadow pricing. The success of planning is heavily dependent on intrinsic prices gained through shadow pricing.

At most times, these are rough estimates, but it is the responsibility of the country to bring the market pricing near the projected shadow prices via monetary and fiscal changes.

USES OF SHADOW PRICING

In programming

It has an important role to play in the programming as its main objective is to increase the national income with time.

SHADOW PRICING IN PROJECT MANAGEMENT

Shadow pricing is measured in social cost and benefit analysis.

Mostly used in developing Countries, China, Pakistan, India, Nepal, Sri-lanka

Benefits:

- Best and convenient tool for project
- Optimal allocation of resources
- Consider economic opportunity cost
- Avoid underpricing

REFERENCES

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