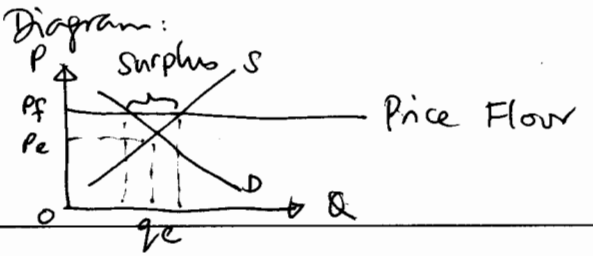
S6D

Sources of market failure	Ways to correct market failure	Evaluation
No Provision of Public Goods Non-Excludability: it is impossible to exclude anyone who is not paying from consuming the good. Non-Rivalry: consumption of the good by one will not diminish the quantity and quality available to other existing consumers. Free rider problem→ Absence of price signals→ producers will not provide	Provided by government Eg. Taxes collected to install lamp post and traffic lights, build up military defence	• Quantity provided? • How much of the country's resources should be allocated to provide public goods?
Externalities		
(i) Negative Externalities Definition: When the actions of producers or consumers negatively affect third parties and is not captured by the price mechanism <See Diagram in Notes> SMC>PMC e.g. pollution caused by industries (production)/cars (consumption), acid rain, deforestation	**Taxes** Govt introduces tax such that PMC is raised to equal SMC → EMC transferred to producer e.g. tax on polluting industries **Marketable permits**[1] Each polluting firm can choose to buy a permit which gives it permission to emit a certain amount of pollution. If not, it will have to clean up the pollution. These permits are marketable, so firms are able to buy	Continual incentive → firms will continuously seek ways to reduce the –ve externality since they can pay less tax Is it effective if the demand for the goods is price inelastic? EMC difficult to evaluate in reality → unfeasible to impose specific taxes for specific companies; one-size-fits-all tax also unfair Marketable permits give firms the incentive to find ways to cut down emissions so that they can avoid having to buy the permit or best still, sell the permit to firms who encounter difficulties cutting down their emission level. However, the firms who pay most for permits are usually the ones who find cleaning up most expensive. This may be undesirable when the permits go to these firms instead of the ones which can clean up better. These firms will then clean up as cheaply as possible and the situation is made worse if they are located at a densely populated area which causes greater damage to the environment. Quotas difficult to evaluate in reality → how much toxic stuff can a river really contain?

[1] Marketable permits are allowed to be traded. There will be a market for those with surplus to sell to those who need it. PRICE MECHANISM AND WORKS SO THAT IT IS EFFICIENT

	and sell such permits. The government will estimate the socially efficient level of emission before it decides on the number of permits to issue. The price of each permit will then be determined in the market. The higher the price of permit, the greater the incentive for the firms to reduce emission. **Regulations such as compulsory inspection and installation of catalytic converters** **Total ban** Ban factories emitting highly toxic waste into the atmosphere.	This is a drastic/last resort measure only if the Total Social Costs clearly outweigh the Total Social Benefits.
Demerit Goods Definition: Goods that are deemed socially undesirable by the political process and usually exhibit negative externality e.g. harmful drugs, cigarettes, alcohol Outcome: Overproduction	**Taxes** **Total ban**	Taxes on goods will reduce the amount of goods produced and indirectly reduce the EMC. However, usually it is the process of production that causes the negative spillover effect and not the product itself and thus tax on emission may be preferred. Cannot prevent cheap brands from entering the market (consumers will turn to these relatively cheaper brands) High taxation rates necessary since such goods usually have price inelastic demand (due to addiction) This is a drastic/last resort measure only if the Total Social Costs clearly outweigh the Total Social Benefits. Easy to negate and protects community. Problem: smuggling? Create surplus (problem created by imposition of price Floor) Each of these methods used alone may be ineffective. Campaigns, advertisements → raise awareness

	Price floor **Others**	Diagram: 
(ii) Positive Externalities Definition: When the actions of producers or consumers positively affect third parties and is not captured by the price mechanism <See Diagram in Notes> SMB > PMB E.g. Warm water discharged by a power station and received in the form of bigger fish catches by nearby commercial fisherman. Not captured by market/price mechanism **Merit Goods** Definition: Goods deemed socially desirable through the political process (decided by government) and usually exhibit positive externality Divergence of value due to external benefits Outcome: Under-consumption	**Subsidies** Goods such as vaccines, which have large benefit to society	Hard to measure EMB to decide on extent of subsidies of merit goods to achieve social optimum consumption

Market Imperfections		
(i) Market Dominance • Monopoly / oligopoly (eg. OPEC, Microsoft) • Lower prices to eliminate competition OR • Raise prices above market equilibrium • NO allocative efficiency • Price is **unequal** to M.C. •	• Establish an effective price ceiling • Introduce anti-collusion laws (regulation) • Nationalization	• High investigative and legal costs. • Government failure
(ii) Imperfect or incomplete information • Consumer misconceptions about market (eg. Purchase from NTUC instead of Cold Storage) • Wrong product / wrong brand • Producers produce more of some products & less of others •	• Carry out more market surveys/studies to understand market	• Expensive and time-consuming • Consumer preferences change over time
(iii) Immobility of factors of production • Occupational immobility (mismatch of skills) • Geographical immobility	• Education, training and re-training (eg. Learning workships, double-degrees) • Improved communications system (email, video-con) • Encourage development of places with large labour force	• Need to spot correct trends + ensure adequate time for training • Inertia to change • Possible technological gap between countries

} govt needs to develop the infrastructure and build suitable amenities in order to attract investment to create jobs in high population density areas. Areas with high labour supply but have little job opportunities result in wastages of resources when high unemployment occur.

Distribution of income and wealth		
♦ Uneven distribution of income and wealth ♦ Not due to P = MC ♦ Rich have more money to invest so they will gain more returns. The poor will have less money to invest so they will earn less returns. ♦ Therefore, rich gets richer and poor gets poorer ♦ Leads to a widening gap in living standards between affluent households and those experiencing poverty ♦ People from low income denied access to essential goods and opportunities considered 'normal' by a society	♦ Progressive direct taxation system: government redistribution by investing in infrastructures ♦ Election Budget economic restructured shares ♦ Free education and healthcare ♦ Subsidies in terms of education, healthcare, transport, housing loans. ♦ Regulation of income levels, minimum wage is imposed in other countries	♦ High corporate taxation may cause foreign companies to relocate and discourage new investors; disincentive to work ♦ One-off, short term benefits (Perhaps to reap political favour and to win votes) ♦ Worsen unemployment and retrenchment, decrease in foreign investment Imposition of min wage will increase cost of production ⇒ Not favourable to foreign investors.