

1 - Microeconomics

Supply shift right	India subsidizing gas Supply of air travel increasing in the UK as more airline companies are joining
Supply shift left	Sugary drinks - UK sugar tax shifts supply curve to the left
Supply shock - supply shift to the left	May 2018 - Supply of vanilla ice cream shift to left - Price of vanilla rose to \$600 per kilogram because of cyclone in Madagascar which damaged a lot of the plantations
Excess demand (shortage)	Iraq invasion 2003, oil prices rose \$20 to \$35 a barrel in 2004, the war disrupted extraction of crude oil, reducing world supply
Excess supply	Harvest season for crops, there is more supply than people will be willing to buy, price decreases
High PED (elastic) goods	Luxury items - Gucci clothing
Low PED (inelastic) goods (2 examples)	Cigarettes have a PED between -0.4 in USA - The price of Daraprim (cancer drug) was increased by more than 50 times but demand barely changed, because it was a necessity
Positive XED (substitutes)	Low XED (weak substitutes): tea and coffee High XED (strong substitutes): XED of Coke and pepsi has been estimated to be about + 0.7
Negative XED (complements)	Low magnitude XED (weak complements): tea and milk High magnitude XED (strong complements): smartphones and mobile apps, LV and BMW luggage
Negative YED (inferior goods)	Second-hand clothing, house-brand goods, margarine, cheap goods
Low positive YED (income inelastic) (normal good)	Most foods consumed at home have a low YED - about 0.2
High positive YED (income elastic) (luxury good)	Premium cars, boats, jewelry
High PES (elastic)	Taxi services, pens, smartphones
Low PES (inelastic)	Nuclear reactors, fresh produce, gold, housing
Indirect tax	Singapore GST: 7% on all goods and services
Subsidy	US agricultural subsidies: \$20 billion per year

	<p>Ensures steady domestic food supply, provides economic stability to farmers, increases international competitiveness</p> <p>China subsidising solar panel production, increased production by 25%</p> <p>US cotton producers subsidies</p>
Price ceiling	<p>India price ceiling on bare metal stents, implemented Feb 2017 Prior to cap, bare metal stents were selling for 650 USD, now capped at 100 USD</p> <p>Rent in San Francisco</p>
Price floor	<p>UK price floor on carbon, implemented April 2013 Part of the EU Emissions Trading System aimed to combat climate change, the current price floor is 18 pounds per tonne of CO2 (Year 2019). Promotes investment in low-carbon electricity generation</p> <p>Minimum wage in UK is 8 pounds an hour</p>
Legislation for positive externalities of consumption/merit goods	<p>Vaccinations in Australia - making it mandatory for children to get vaccine to enroll in school - done through legislation</p>
Direct provision of merit goods	<p>New Zealand national immunisation schedule, free vaccines offered to reduce diseases and illness</p>
Subsidized provision of merit goods to tackle underconsumption of merit goods	<p>SG - Low-income Families are eligible to sign their children up for the Financial Assistance Scheme (FAS). Under the FAS, students get to enjoy subsidised school fees and transportation fees, and free textbooks. This increases the affordability of education in Singapore, effectively tackling the underconsumption of pre-tertiary education in Singapore that is caused by high income inequality.</p>
Negative externalities of consumption -cigarettes (3)	<p>Malaysia - Nov 2015, 40% excise duty placed on cigarettes Legislation Jan 2019, smoking banned in all eateries</p> <p>Singapore raised age from 18 to 19</p> <p>UK - Smoking cost to NHS of about 3-6 billion pounds a year</p>
Sugar tax	<p>2017 - about 20p per litre on sugary drinks in the UK, it has worked as many companies have changed their recipes to reduce sugar content in their drinks</p> <p>Mexico sugar tax cut sales by 12% in the first year of implementation</p>
Positive externalities of production	<p>Production of hybrid car technology by Toyota, as they are providing free access to their patents and providing parts to</p>

	<p>competitors, to increase the use of lower-emission technology</p> <p>Tesla also offering free access to electric vehicle patents</p>
Negative externalities of production (2 examples)	<p>DuPont released harmful chemicals up until 2013 into the Ohio river, known to cause cancer. Currently facing lawsuit from the state of Ohio</p> <p>16 of the top 20 most cities with worst air pollution are from China - due to factories, industrialization, surge in no. of motor vehicles</p> <p>China subsidized \$9800 to buyers of electric and hydrogen vehicles to combat rising air pollution</p>
Advertising to promote consumption of merit goods	<p>5-a-day programme run in Germany in line with WHO statement to eat 400 grams of fruits and vegetables per day</p>
Common Access Resources (2 examples)	<p>Coral harvesting in the Great Barrier Reef, government quota set at 200 tonnes but it is not sustainable</p> <p>Overfishing in Virginia for striped bass, currently in discussion to ban recreational fishing. During the fishing season, a quota of 1 fish per day is already in place.</p>
Public goods	<p>National defense, street lighting, roads, public parks, sewer systems, law enforcement</p>
Legislation to combat negative externalities of consumption	<p>Singapore air pollution laws, vehicles must meet strict emission standards to be able to be used</p>
Carbon tax	<p>In 2012, Japan implemented tax on all CO2 emissions from fossil fuels at a rate of 289 yen per tonne of CO2. All tax revenue used for reducing CO2 emissions, investing in clean tech</p> <p>Last month, Canada imposed a carbon tax of \$20 per tonne of carbon emissions</p>
Cap and trade schemes	<p>EU Emissions Trading System: since 2005, EU set cap on total amount of greenhouse gas emissions, can be traded and sold, total cap is reduced over time to reduce total emissions</p>
Funding for clean technology	<p>PUB, Singapore's national water agency funded and produced NEWater, which is recycled water, treating used water</p> <p>In 2013, Windcentrale, a Dutch company, crowdfunded \$1.3 million to invest in wind turbines to place in the centre of the Netherlands</p>