

# Income Elasticity of Demand

AS Economics revision presentation on income elasticity of demand



# Income Elasticity of Demand

- Income elasticity of demand ( $Y_{ed}$ ) measures the relationship between a change in quantity demanded and a change in real income
- $Y_{ed} = \% \text{ change in demand} / \% \text{ change in income}$

# Normal and Inferior Goods

- Normal goods have a positive income elasticity of demand so as consumers' income rises, so more is demanded at each price level
- Necessities have an income elasticity of demand of between 0 and +1
- Luxuries have an income elasticity of demand  $> +1$  i.e. the demand rises more than proportionate to a change in income
- Inferior goods have a negative income elasticity of demand. Demand falls as income rises

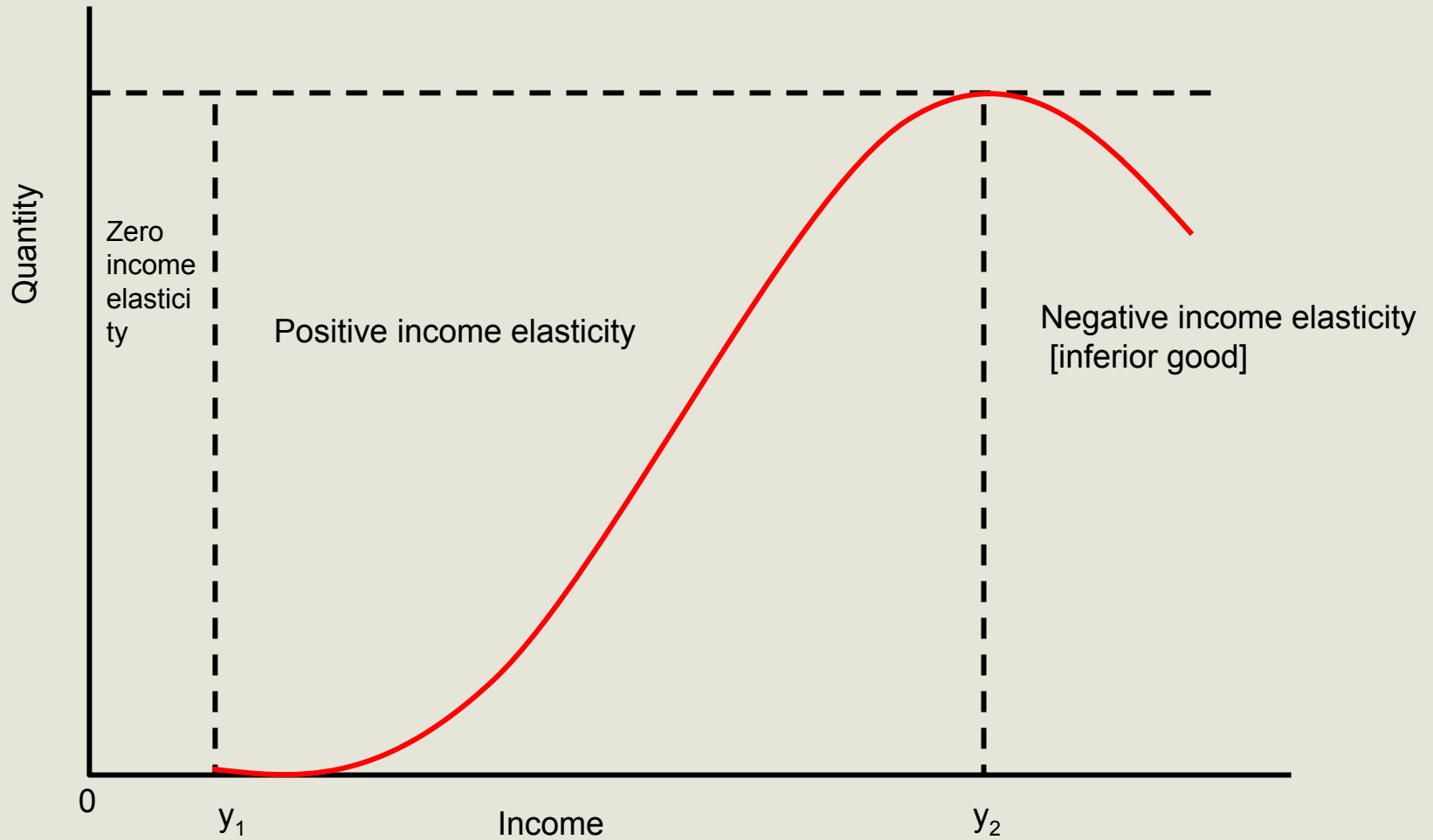
# Different Types of Goods and their Income Elasticity

<b>Normal Luxury</b>	<b>Normal Necessity</b>	<b>Inferior Good</b>

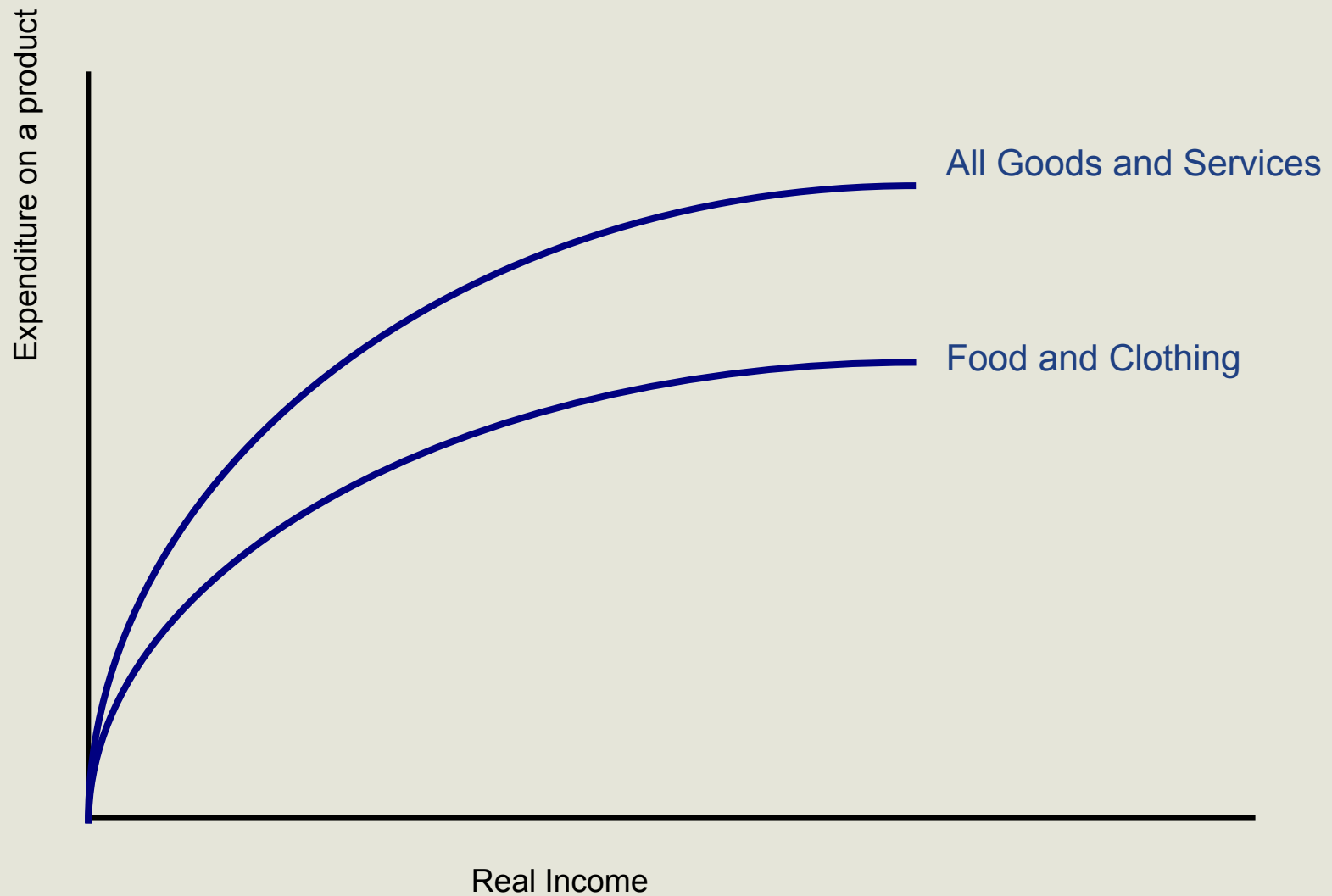
# Different Types of Goods and their Income Elasticity

<b>Normal Luxury</b>	<b>Normal Necessity</b>	<b>Inferior Good</b>
<b>International air travel</b>	<b>Fresh vegetables</b>	<b>Frozen vegetables</b>
<b>Fine wines</b>	<b>Instant coffee</b>	<b>Cigarettes</b>
<b>Luxury chocolates</b>	<b>Natural cheese</b>	<b>Processed cheese</b>
<b>Private education</b>	<b>Fruit juice</b>	<b>Margarine</b>
<b>Private health care</b>	<b>Spending on utilities</b>	<b>Tinned meat</b>
<b>Antique furniture</b>	<b>Shampoo / toothpaste / detergents</b>	<b>Value “own-brand” bread</b>
<b>Designer clothes</b>	<b>Rail travel</b>	<b>Bus travel</b>

# Relationship between Income and Quantity Demanded



# The Engels Curve



# Income Elasticity of Demand for Chocolate

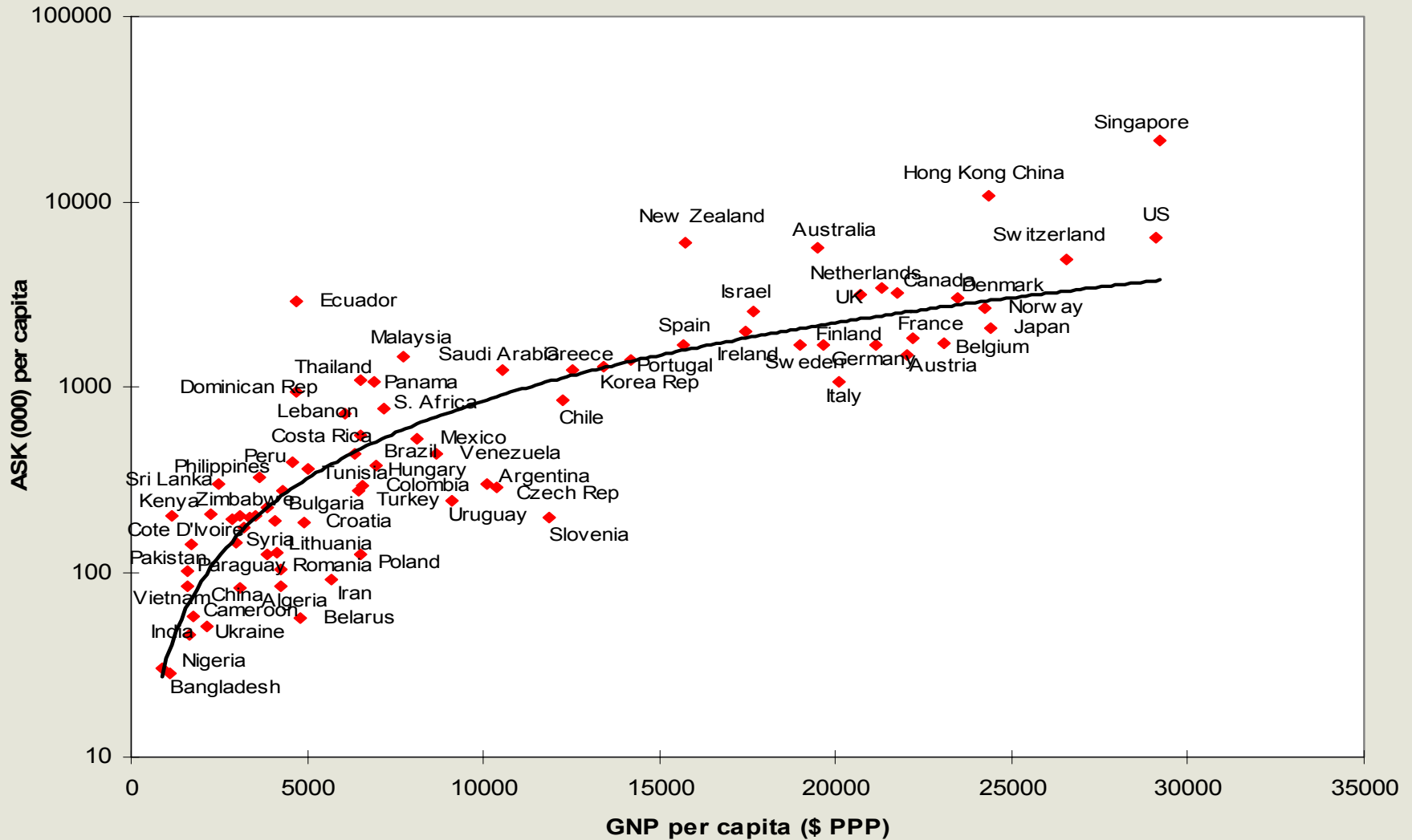
- Total consumption
- USA 0.79
- Germany 0.39
- United Kingdom 0.44
- France 0.60
- Japan 0.08
- Switzerland 1.06
- Reference: Henri Jason Trends in cocoa and chocolate consumption with particular reference to developments in the major markets. Malaysian International Cocoa Conference, Kuala Lumpur, 20-21 October 1994 (ICCO, ED(MEM) 686)



# Income Elasticity and the Demand for Airline Travel

- Demand for airline travel has a highly positive income elasticity of demand
- The industry is **cyclical**
  - During an upturn, demand rises for business and leisure travel)
  - During a recession, the demand tails away
- In the long run, there is a **positive relationship** between real GDP per capita and the demand for air travel
- Income elasticity will vary according to the **type of air travel**
  - E.g. difference between low-cost “no-frills” and higher priced scheduled services on low-haul flights

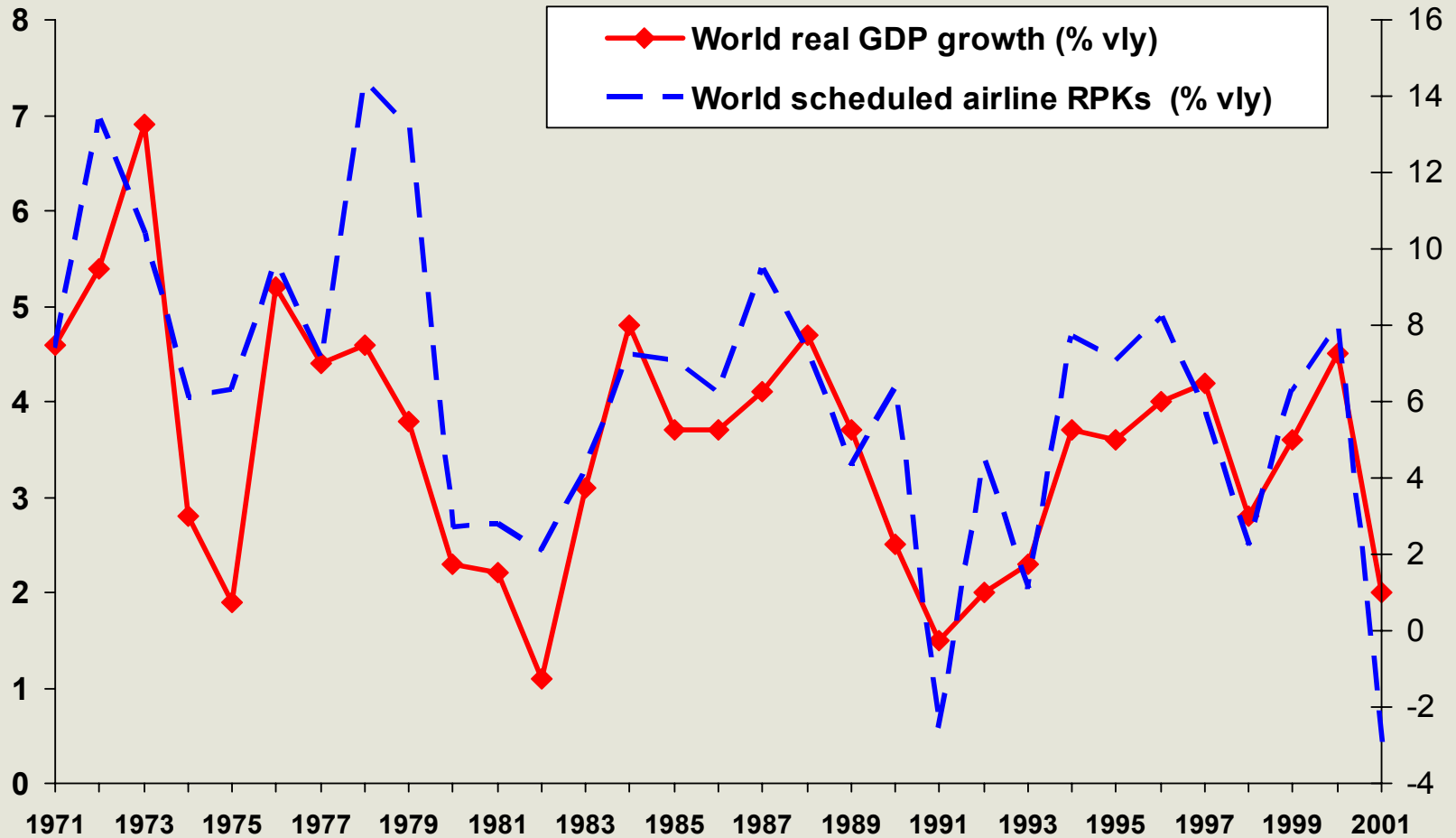
# Income Per Capita and Airline Travel by Country



# Airlines – a Highly Cyclical Industry

Real GDP growth  
% year on year

Global air traffic  
% year on year



# Significance of Income Elasticity of Demand

- High Income Elasticity
  - Demand is sensitive to changes in real incomes
  - Demand is therefore **cyclical** – in an economic expansion, demand will grow strongly. In a recession demand may fall
  - Can be difficult for businesses to accurately **forecast demand** and make **capital investment decisions**
- Low Income Elasticity
  - Demand is more stable during fluctuations in the economic cycle
  - Over time, the **share of consumer spending on inferior goods and normal necessities tends to decline**
  - Long run – businesses need to invest in / focus on products with a higher income elasticity of demand if they want to increase total profits