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for

Premium

Quality

Wool

Economic Principles of Wool Marketing

Produced for the CRC for Premium Quality Wool undergraduate program by;
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Rural Production

- **benefits**
 - efficiencies mean more income to spend
 - exports generate foreign exchange
 - adds to domestic retail activity
 - goods & services
 - source of capital investment
- **resource characteristics**
 - land usage and availability is vital
 - biological nature of product

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Marketing Characteristics

- agricultural products
- homogeneous products
- competitive
 - small production
 - free entry
 - high technology adoption
 - but cautious
 - diverse management
 - demographic
 - quality
- family farm unit
 - unlikely to change
- restricted market potential?
 - food and clothing
 - long-term demand
 - population
 - income

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Wool Comparison

- with other agricultural products
- significant export earner
- competitive land usage
- biological product for clothing
- non-homogeneous product
- small producing enterprises
- low technology adoption
- diverse management
- long-term demand trends?

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Importance of Elasticity

- **concept developed over a long time**
 - Marshall, A. (1961)
- **demand**
 - can be increased by promotional effort
- **supply**
 - costs of production can be decreased as a result of larger scale of operation
- **marketing**
 - elasticity is theoretical basis for selling, advertising and promotion

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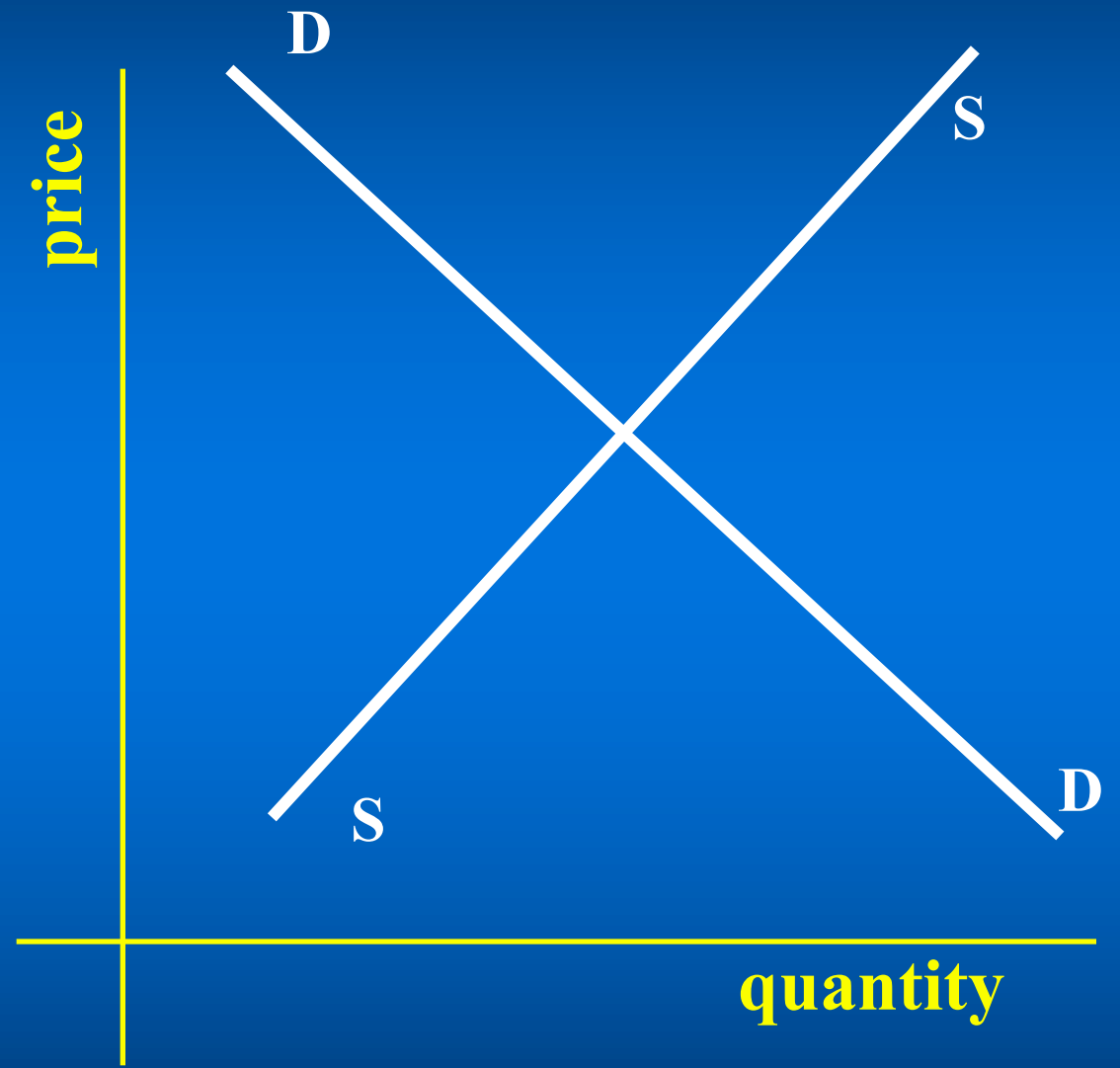
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- demand
- supply
- price

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The Market



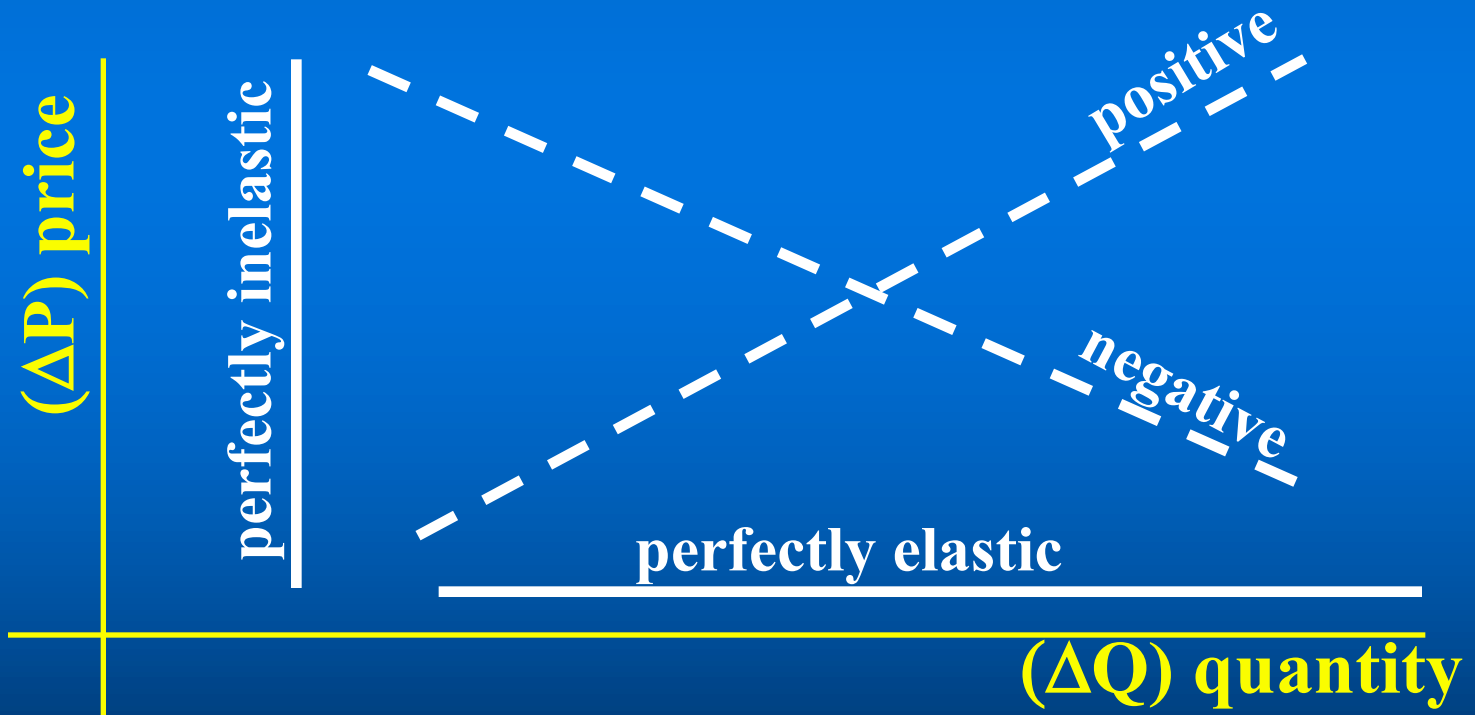


Price Elasticity

what is the quantity response to a 1% change in price?

If $\Delta Q / \Delta P$ is between 0 and 1 INELASTIC

If $\Delta Q / \Delta P$ is between 1 and ∞ ELASTIC



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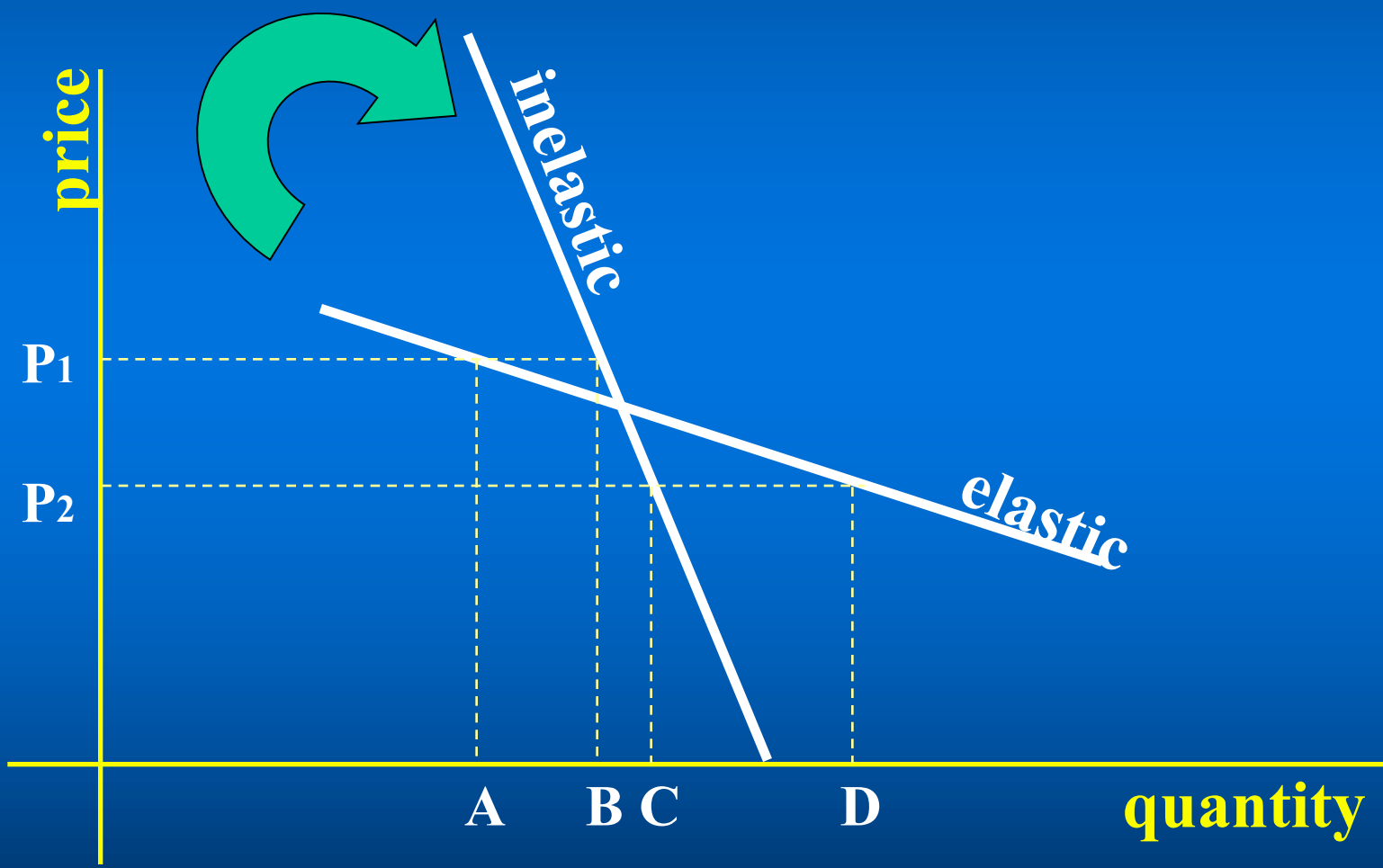
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Price Elasticity of Demand

- how does the demand for my product change with changing price? $\Delta Q / \Delta P$



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Demand Elasticity Effects

- magnitude (slope)
- **substitutes**
 - none means more inelastic
 - less choice
 - market share
- **usage**
 - multiple usage
 - may mean differing elasticities in different markets
- **time span**
 - more elastic over time
 - more responsive to price changes
 - eg. fibre substitution since 1960
- **manufacturing margins**
 - more segments
 - more inelastic

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Marketing Margins

- the difference between the retail price and the raw material price
 - applies all along production chain
- different margins for each market segment
 - risk
 - depreciation
- increase over time
 - labour inputs rise
 - marketing efficiencies difficult
 - consumer demand for more services
- short-term stability
 - raw material prices don't immediately affect retail prices
 - margins squeezed first

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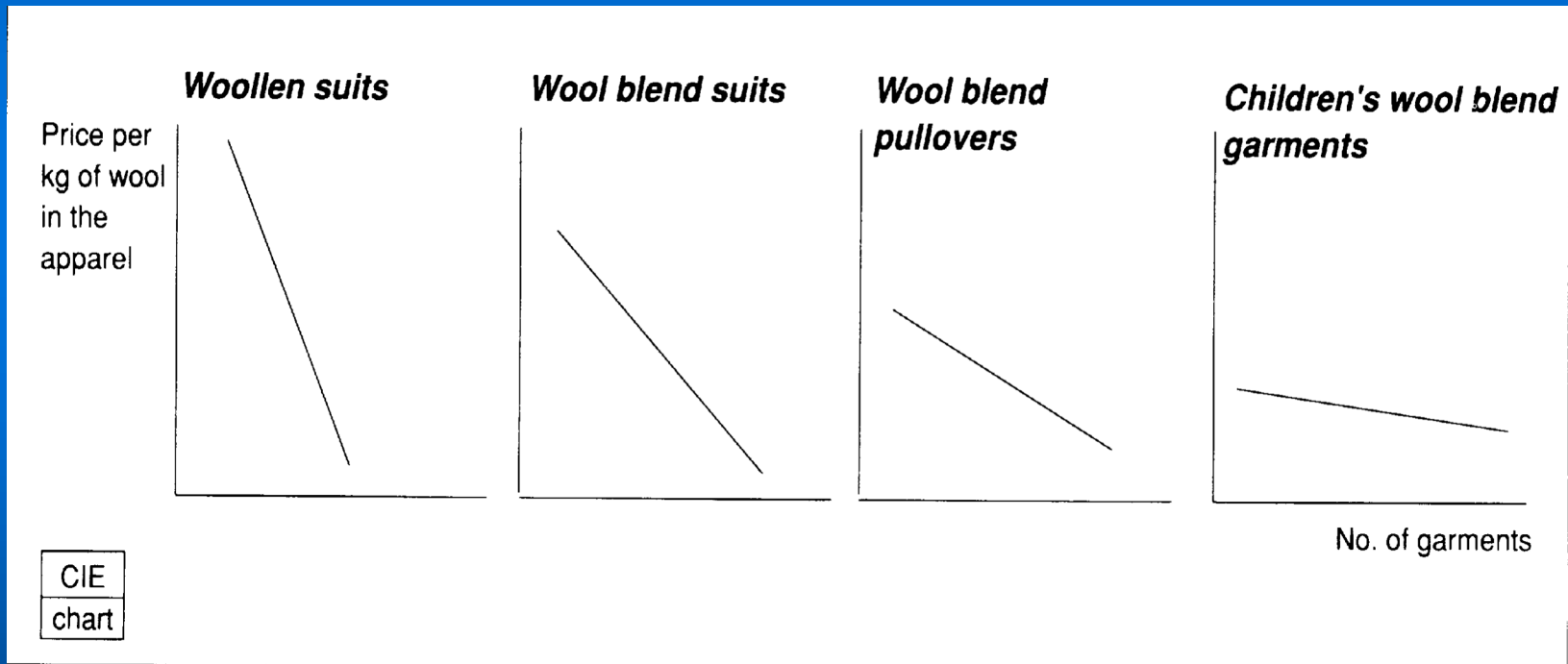
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Demand Elasticity: markets

- products

Willingness of individual consumers to pay for the wool content of various types & qualities of apparel



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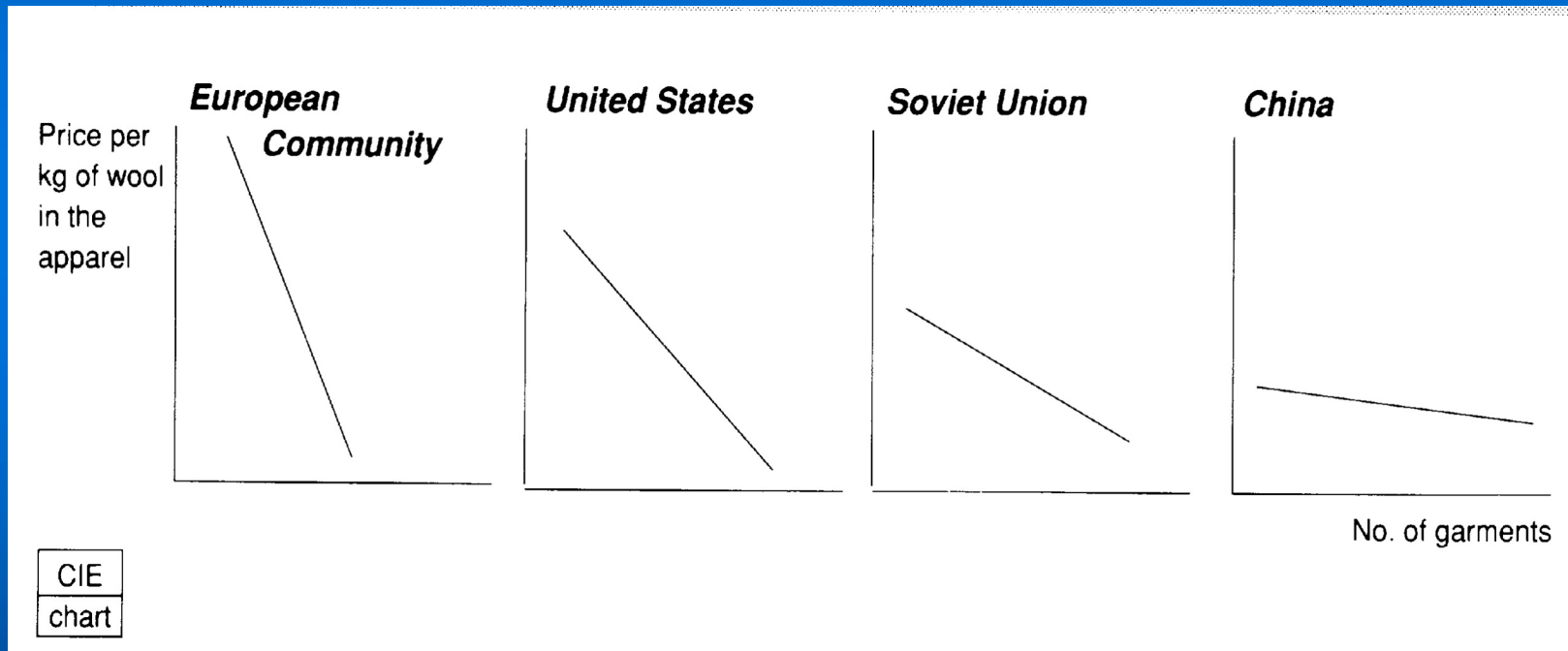
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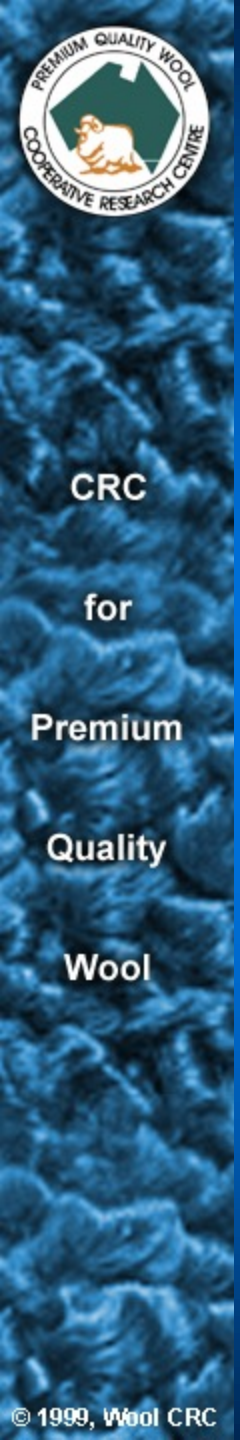
Demand Elasticity: markets

- countries

Willingness of various countries to pay for the wool content of apparel



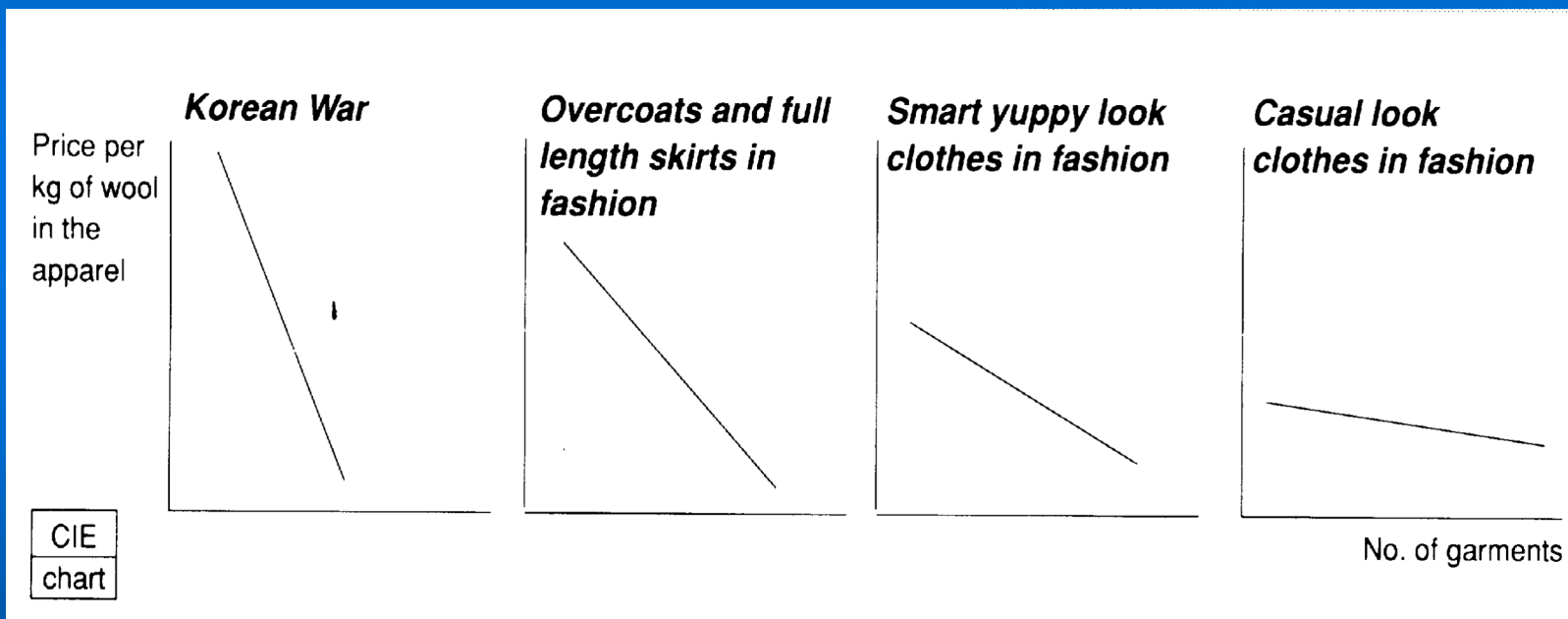
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Demand Elasticity: markets

- events / fashion

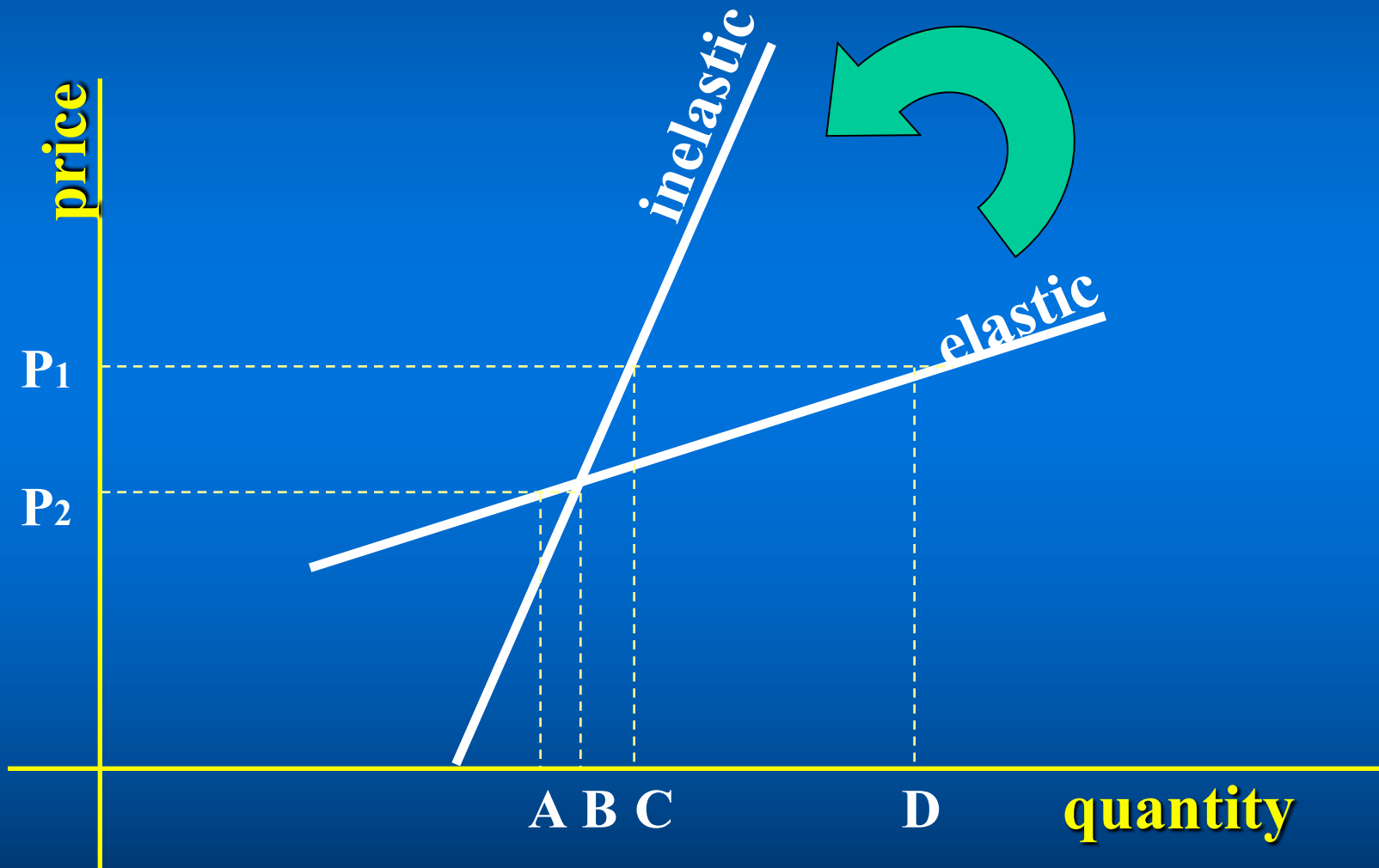
Willingness of consumers to pay for the wool content of apparel in different eras





Price Elasticity of Supply

- how does the output of my product change with changing price? $\Delta Q / \Delta P$



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Supply Elasticity Effects

- magnitude (slope)
- **decision-making environment**
 - expectations of rise or fall in prices
 - price variability (volatility)
- **production periods**
 - generally long-term
 - e.g. flock size
- **seasonal variations**
- **cost structure**
 - fixed costs
 - independent of output
 - lack of flexibility
 - eg. family labour
 - fixed assets
 - eg. dedicated machinery

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Price Volatility

- **agricultural product prices tend to be unstable**
 - wide variation, frequent variation
- **inelasticity of demand**
- **inelasticity of supply**
- **supply and demand can shift easily**
- **price volatility is inevitable**
 - price stabilisation schemes are attractive
 - price risk management is essential

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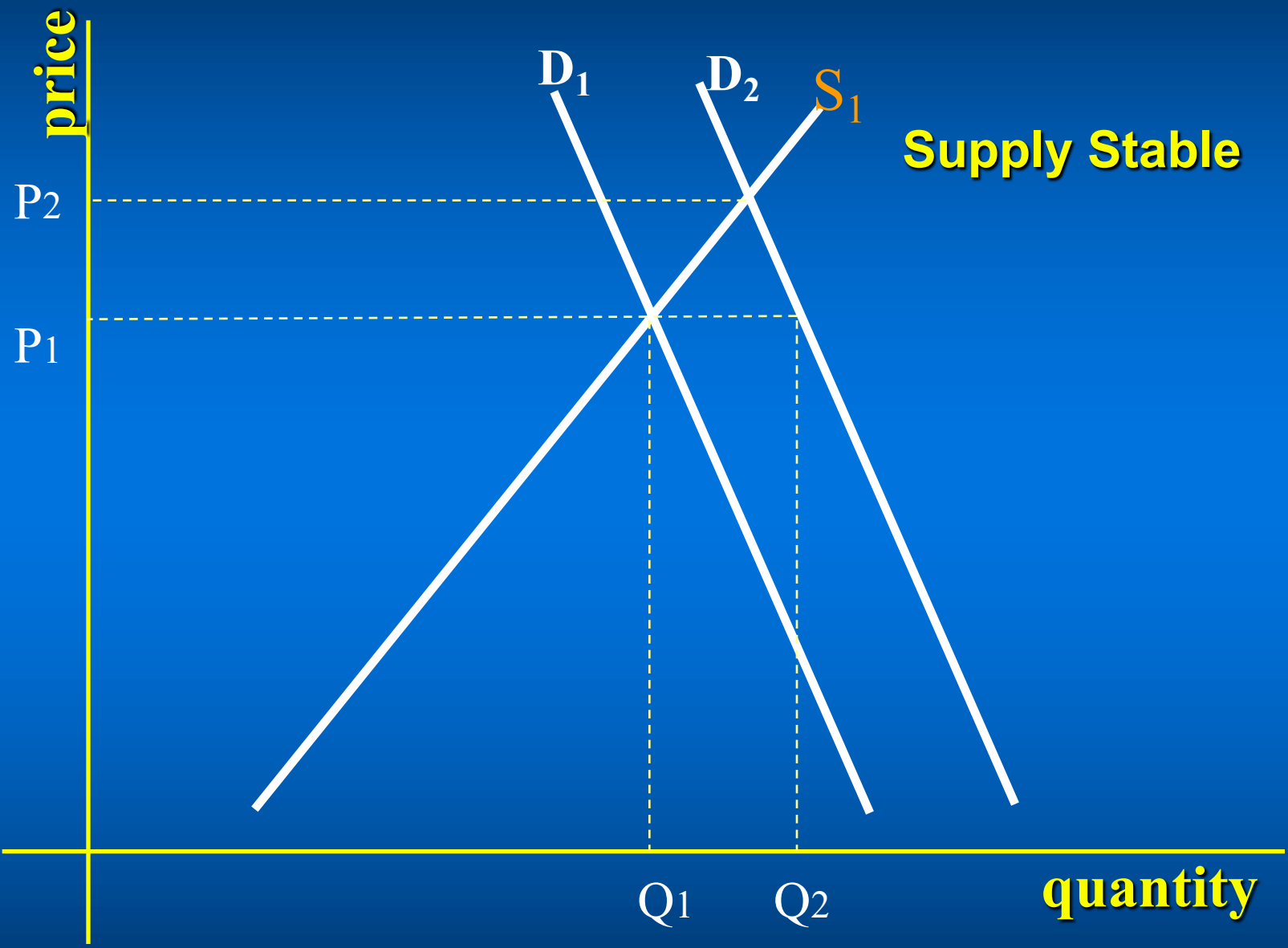
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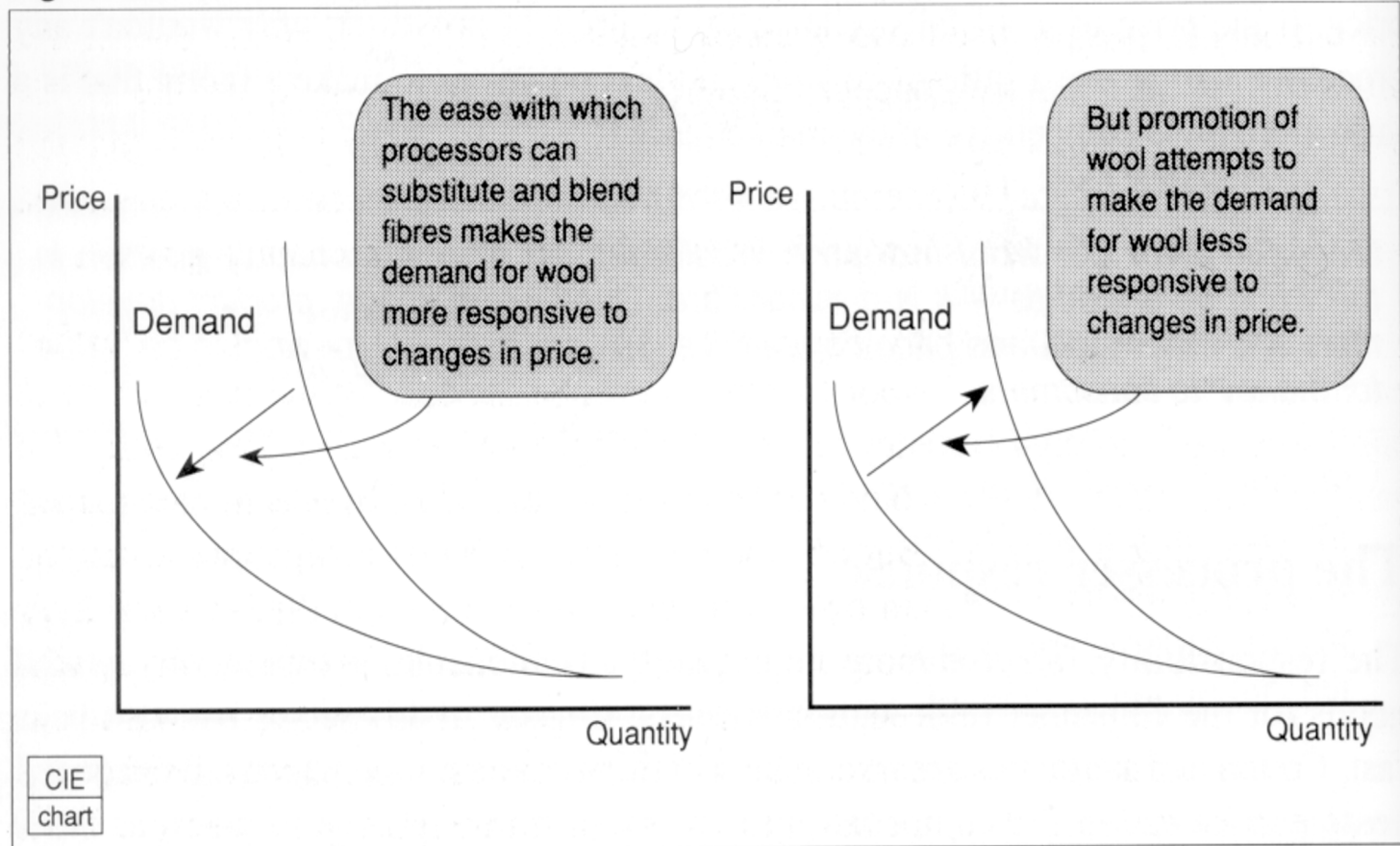
Demand Shift





Influencing Demand

Figure 2.5: How the demand for wool can be influenced



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Supply & Demand Interaction

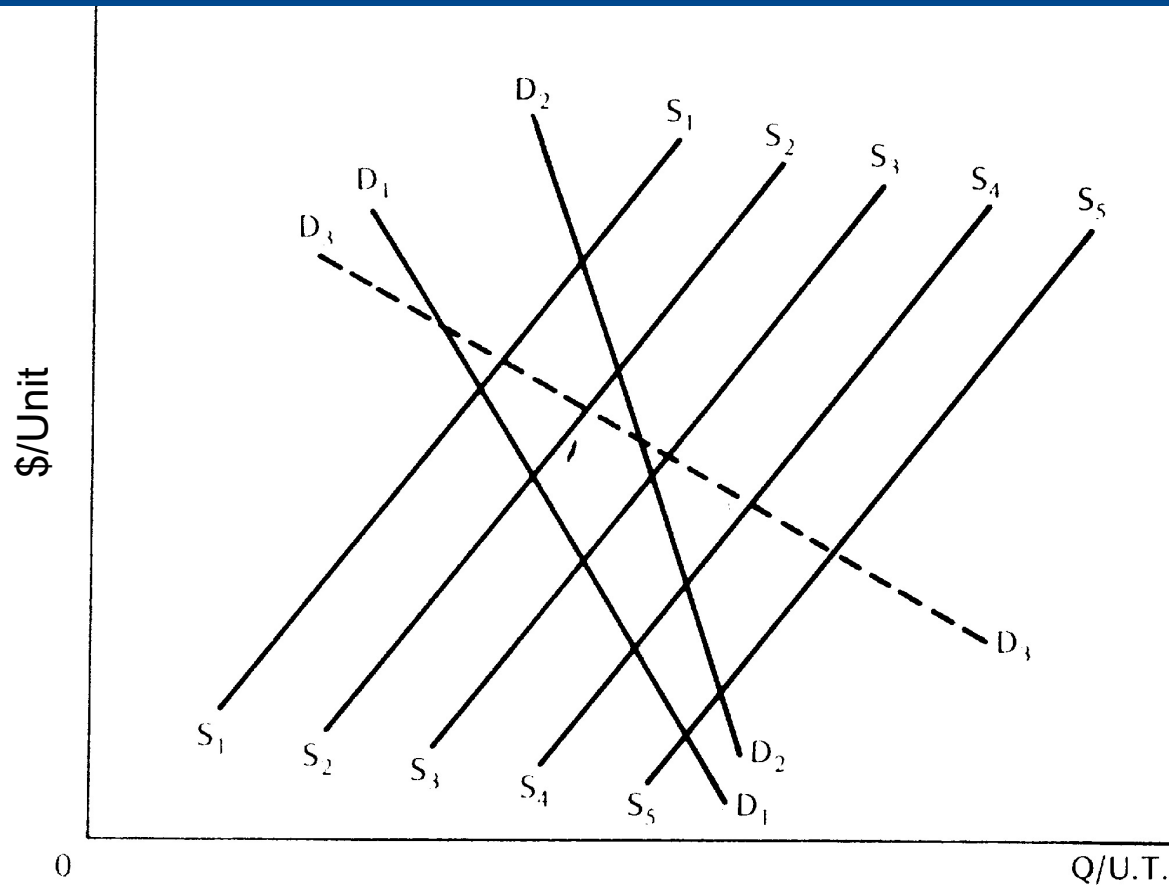


FIGURE 13.5 THE DESIRED IMPACT OF ADVERTISING IN AN ECONOMIC STRUCTURE WHERE AUTONOMOUS INCREASES IN SUPPLY ARE ANTICIPATED

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Demand Shifters

- **income**
 - basic needs
 - then luxury goods
 - long-term
- **population**
 - aggregate demand
 - long-term
- **substitutes**
 - new substitutes
 - price changes
 - sudden
 - relative
- **tastes and preferences**
 - fashion
 - ethnic, social
 - climate
 - substitutes
 - medium to long term
- **advertising and promotion**
 - short-term

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Demand Shift: Promotion

- **Successful promotion**
 - highly elastic demand
 - upward demand trend
 - high rate of turnover in buyers
 - strong emotional appeal
 - frequent changes
 - technical
 - cosmetic

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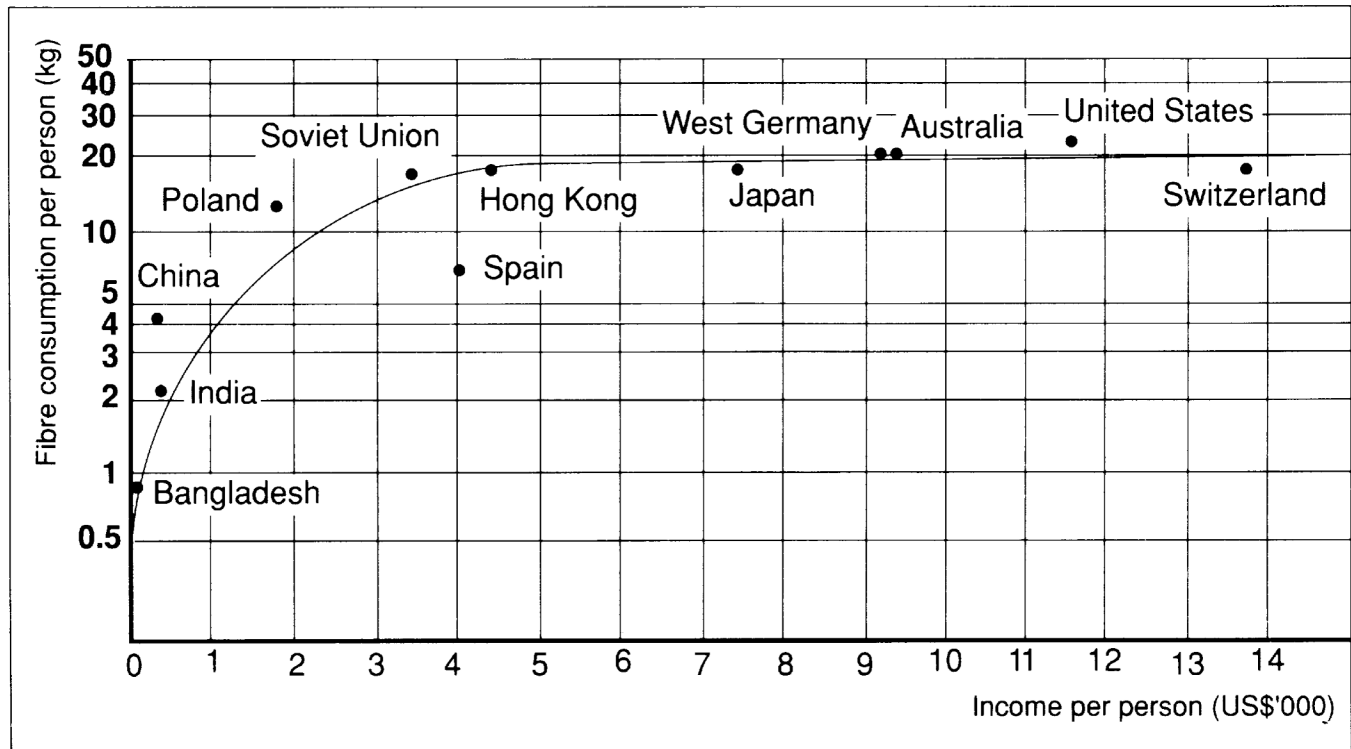
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Demand Shifters: Income

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Figure 6.4: Fibre consumption slows as incomes grow

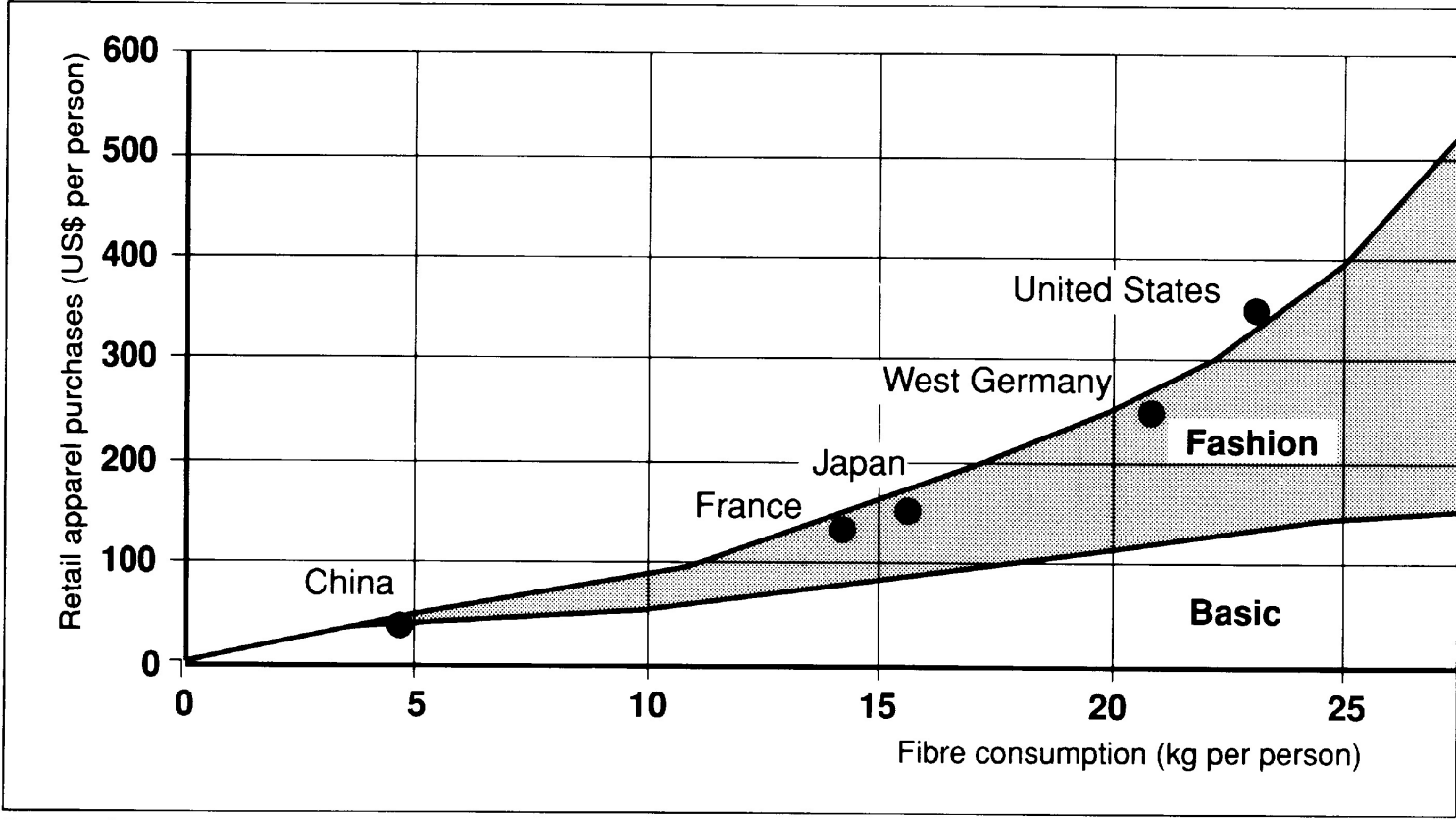


Source: McPhee (1989, p. 89).



Demand Shifters: Fashion

Figure 2.3: Basic apparel versus fashion apparel purchases

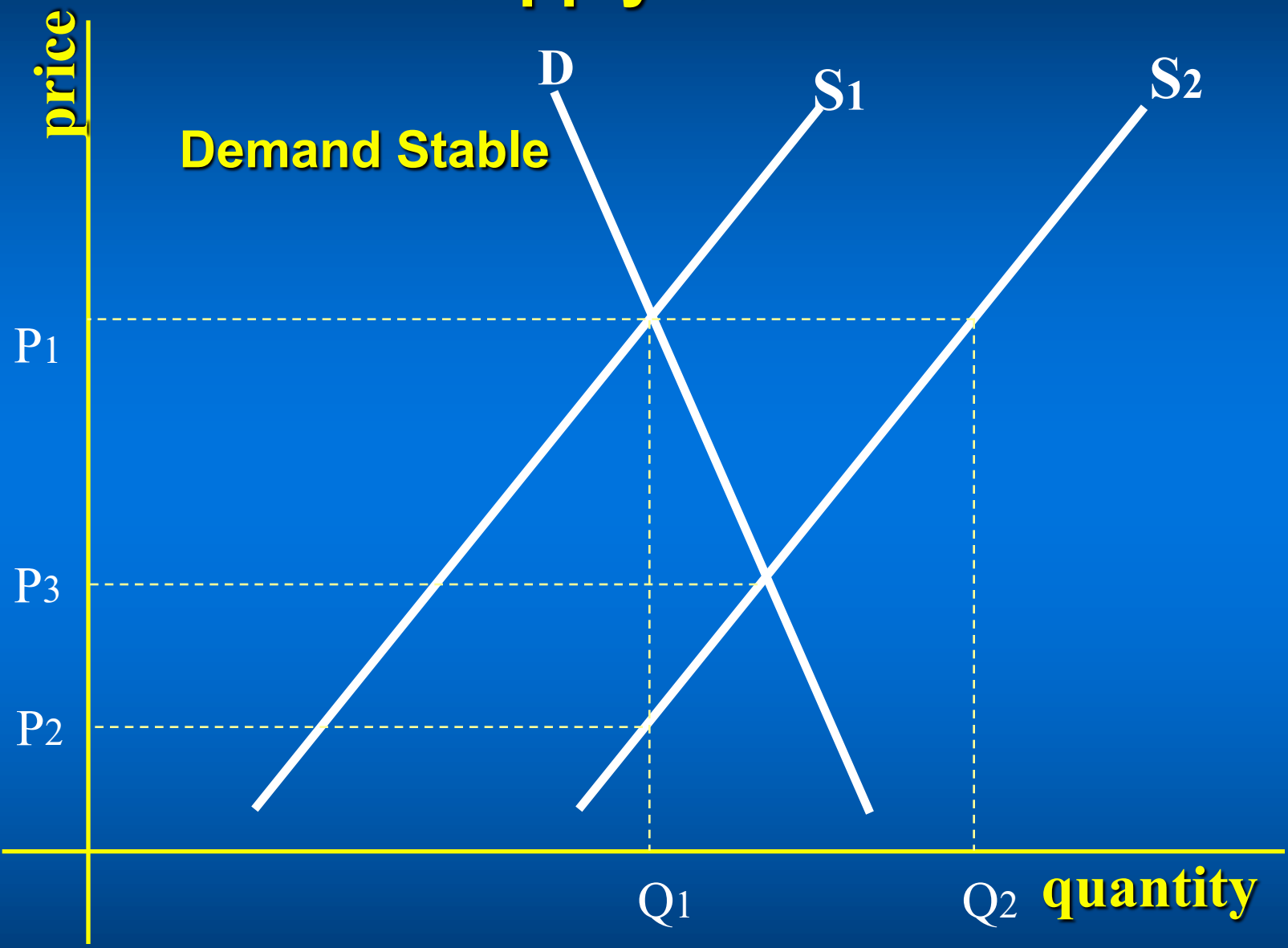


Source: McPhee (1989, p. 90).

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Supply Shift



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Supply Shifters

- **technological change**
 - generally cautious adoption
 - tend to be irreversible
 - eg. new crops, cloning, genetic engineering
- **prices of inputs**
 - increased farm size
 - reduced tariff protection on inputs
- **prices of related products**
 - competitive land usage
 - eg. role of wheat prices in mixed enterprises

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Demand & Supply: agriculture

DEMAND

- usually DERIVED
- usually INELASTIC
- many factors outside control
 - producer
- OS demand is paramount for Australia
- can shift quite easily

SUPPLY

- INELASTIC
 - short-term
- can SHIFT
 - technology
 - competing land usage
- supply tends to be stable
 - short term
- homogeneous

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Wool Demand Summary

- **DERIVED**
 - clothing
- **INELASTIC**
 - few substitutes
 - slope depends on market!!
 - single usage
 - Merino = clothing
 - segmented “pipeline”
 - margins dampen demand response
- **OUT OF CONTROL**
 - tastes / preferences
 - fashion
 - confidence
 - margins
- **OS DEMAND is paramount**
 - processors and users are OS
- **demand can SHIFT easily**
 - fibre substitution
 - slow response
 - this is increasing!!
 - import restrictions

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Wool Supply Summary

- **INELASTIC**
 - market expectations
 - price volatility
 - fixed costs and assets
 - long-term production periods
- **supply can SHIFT**
 - alternate products
 - depends on enterprise
 - prices are unsustainable for some
- **LOW technology adoption**
 - assuming technology is OK
- **supply tends to be STABLE**
 - production and stocks
 - medium-term (5 years)
- **heterogeneous**
 - quality

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Wool in the Market

- agricultural product
- inelastic demand
- inelastic supply
- volatile price
- subject to demand & supply shifts
- derived demand
- mainly OS usage
- major supplier of woollen textile market

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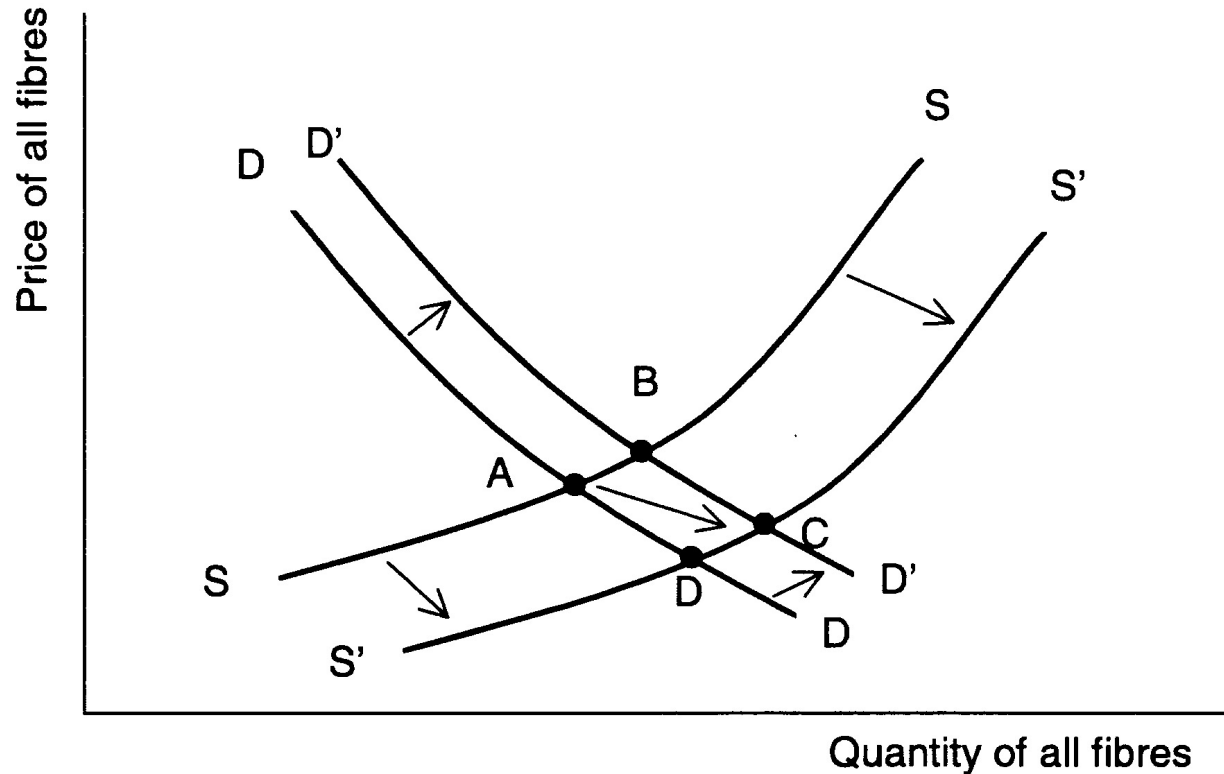
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Demand & Supply (all fibres)

Fig. 1 Demand:supply curve of all fibres (Source: J. Jackson pers. comm.)

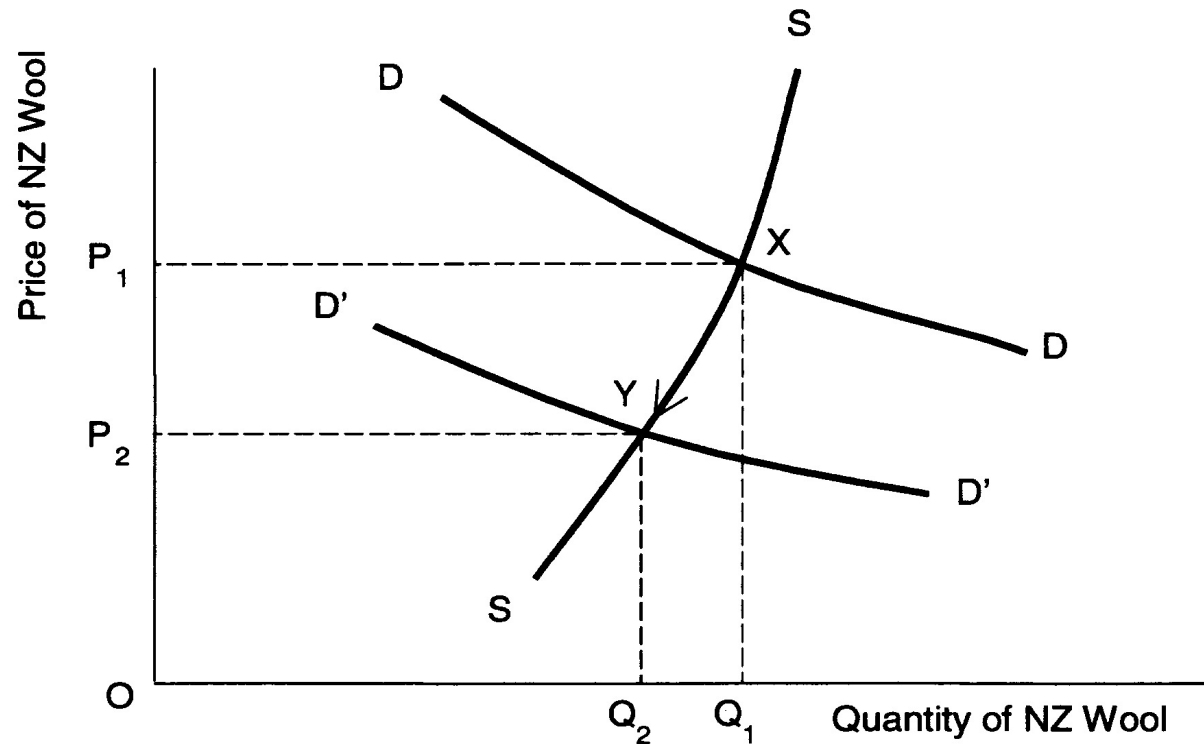


- commodity price falls over time



Demand & Supply: NZ wool

Fig. 2 Demand:supply curve of NZ wool (Source: J. Jackson pers. comm.)



- demand falls (substitute fibres)



Major References

- **Campbell, K.O. and Fisher, B.S. (1991) Agricultural Marketing & Prices, 3rd. Edition, Longman Cheshire**
- **Stoeckel, A., Borrel, B. and Quirke, D. (1990), Wool into the 21st Century, Implications for Marketing and Profitability, Centre for International Economics, Canberra**

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