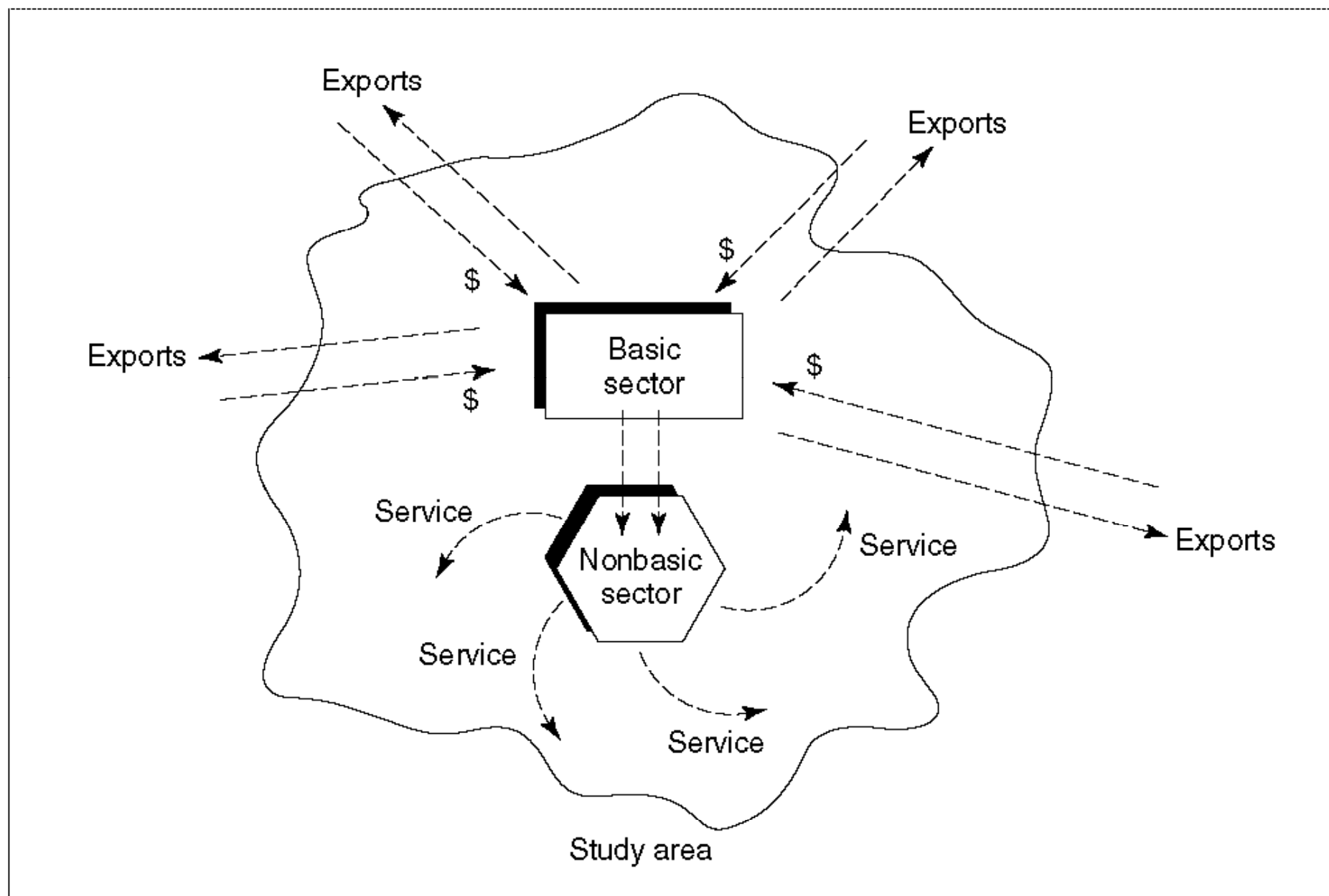


Figure 2.1 CONCEPT OF BASIC VERSUS NONBASIC ACTIVITIES



SOURCE: Adapted from Newman (1972). Reprinted with permission.

Figure 2.2 BREAK POINT MODEL

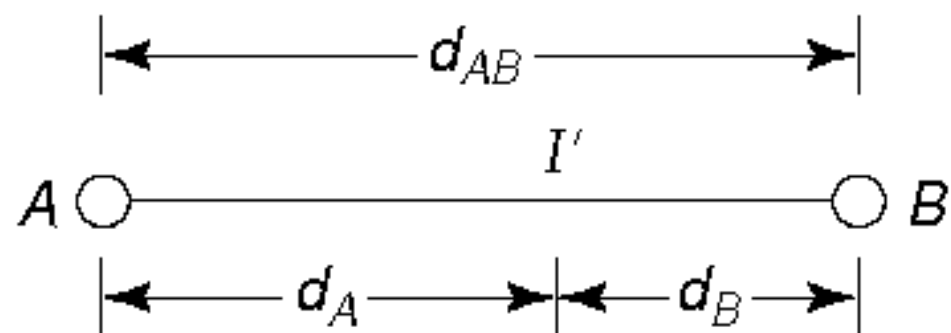


Table 2.1 EXAMPLE INPUT-OUTPUT TABLE

	Tourism sector	Retail sector	Entertainment sector	Household sector	Final demand
Tourism sector	\$30	\$20	\$30	\$25	\$105
Retail sector	60	20	80	30	190
Entertainment sector	10	40	60	50	160
Household sector	40	20	30	15	105
Charges against final demand	140	100	200	120	560

SOURCE: Chapin and Kaiser (1979). Reprinted with permission.

Table 2.2 PRODUCTION (TECHNICAL) COEFFICIENTS FOR A SINGLE REGION

	Tourism sector	Retail sector	Entertainment sector	Household sector
Tourism sector	0.21	0.20	0.15	0.21
Retail sector	0.43	0.20	0.40	0.25
Entertainment sector	0.07	0.40	0.30	0.42
Household sector	0.29	0.20	0.15	0.12

Figure 2.3 POPULATION PROJECTION BY COMPARATIVE FORECASTING

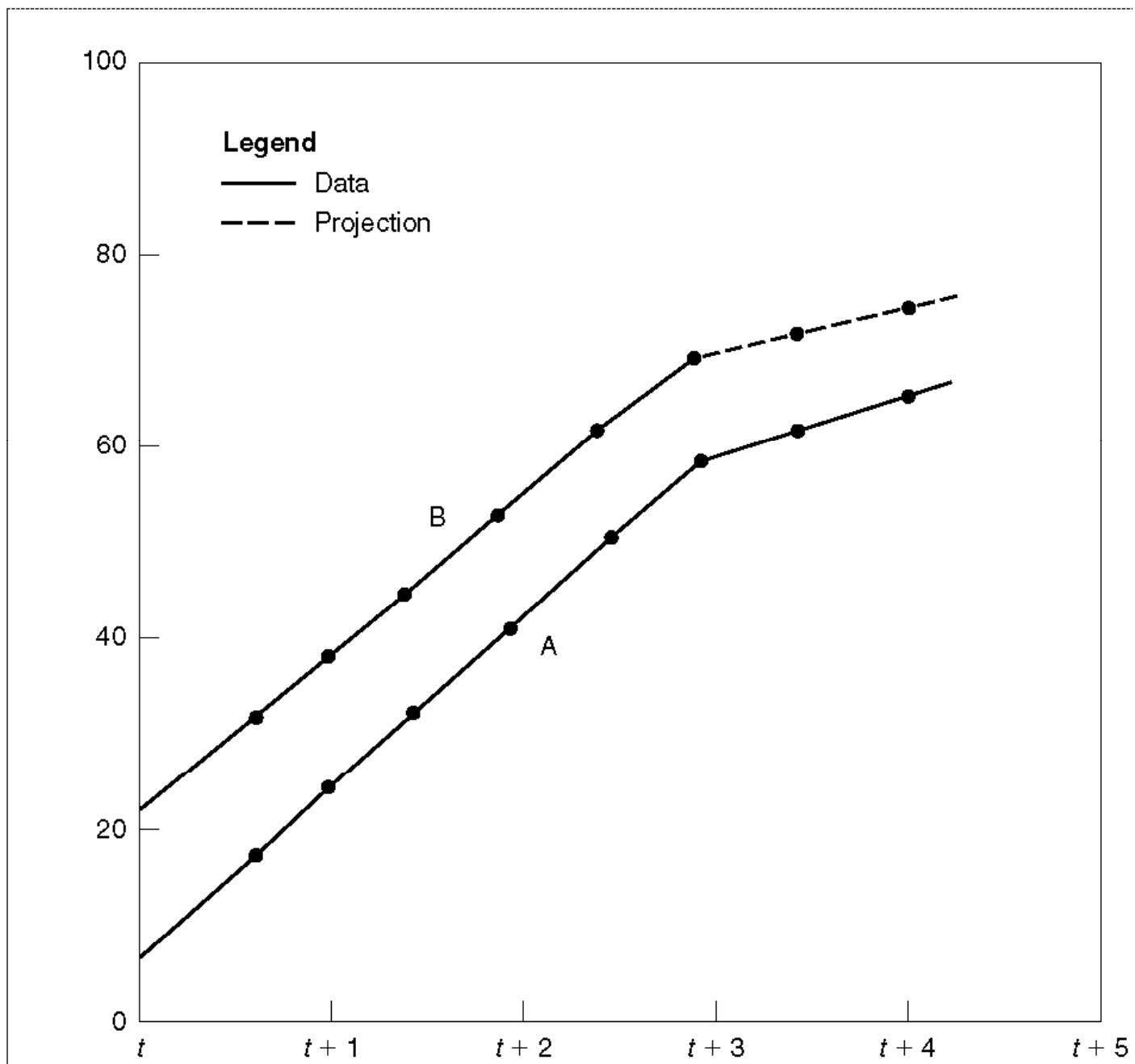


Figure 2.4 GRAPHICAL PROJECTION OF POPULATION AT REGION C

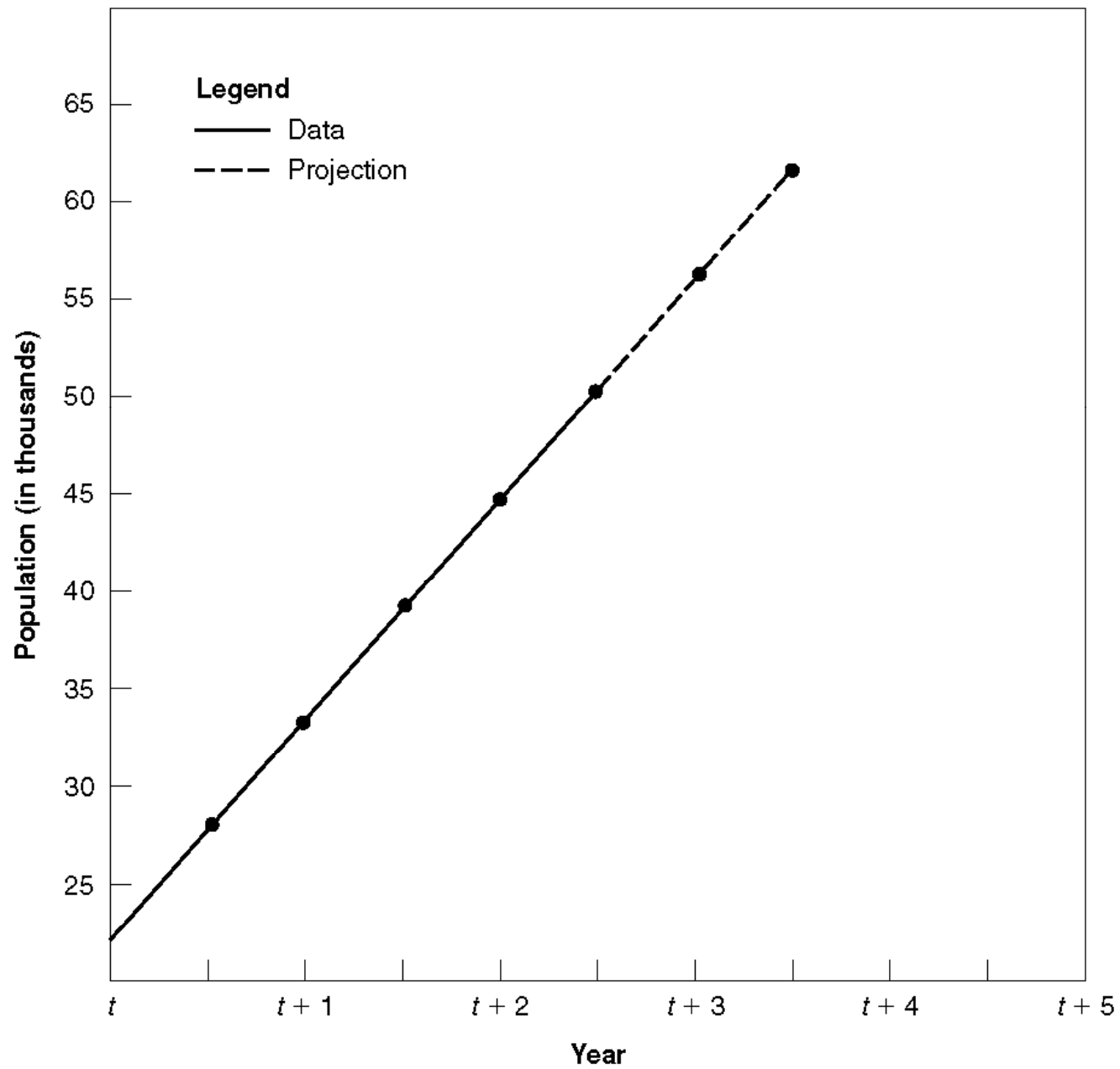


Table 2.3 CALIFORNIA AND THE REST OF THE UNITED STATES (1955–60)

Region	1955 Pop	Birthrate	Death rate	Migration rate
Calif	12,988,000	0.1315	0.0473	0.0865 (~US to Calif)
Rest of the US (~US)	152,082,000	0.1282	0.0488	–0.0074 (Calif to ~US)

Figure 2.5 EXAMPLE APPLICATION OF SHIFT-SHARE ANALYSIS

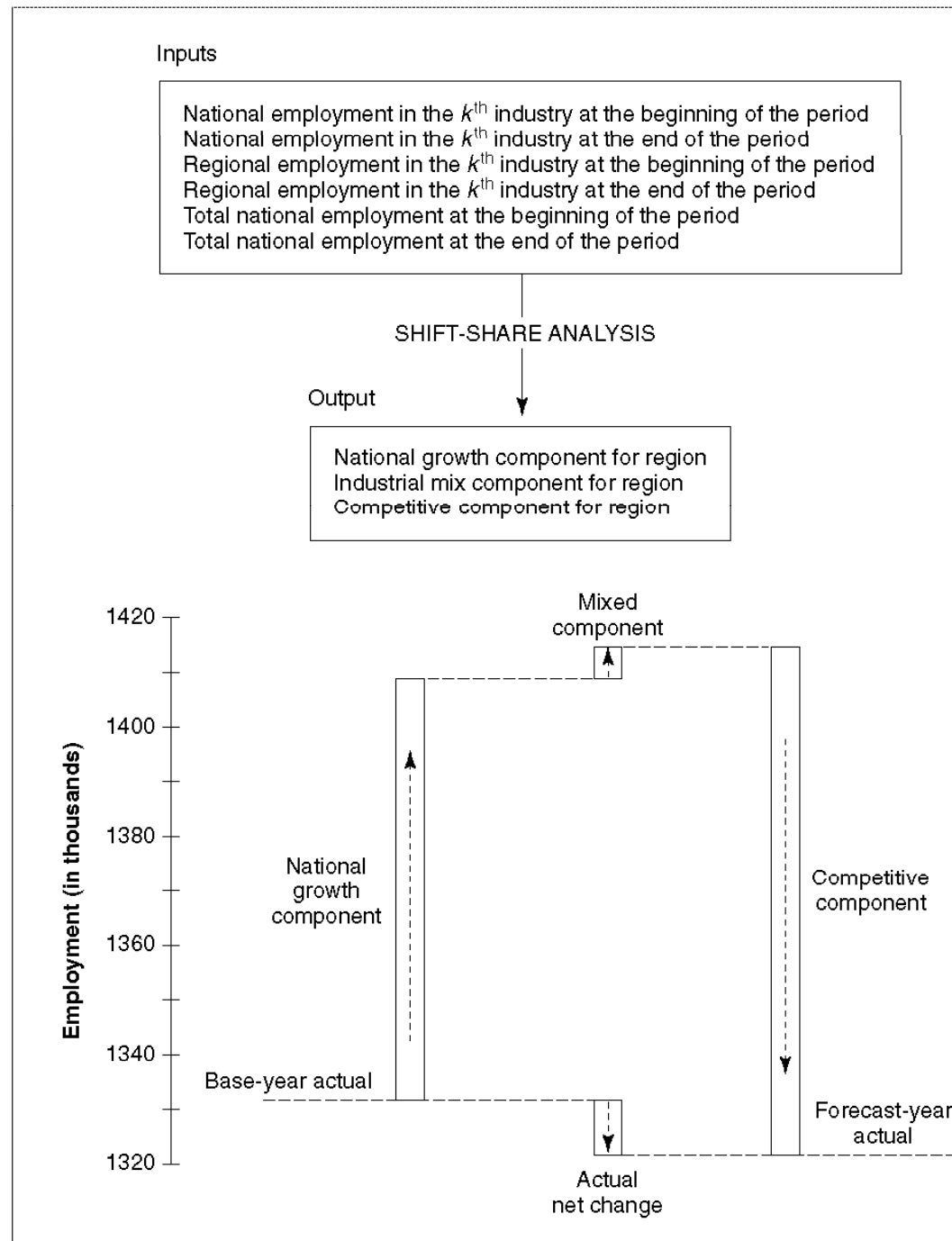


Figure 2.7 EFFECT OF TRANSPORTATION ON LAND USE

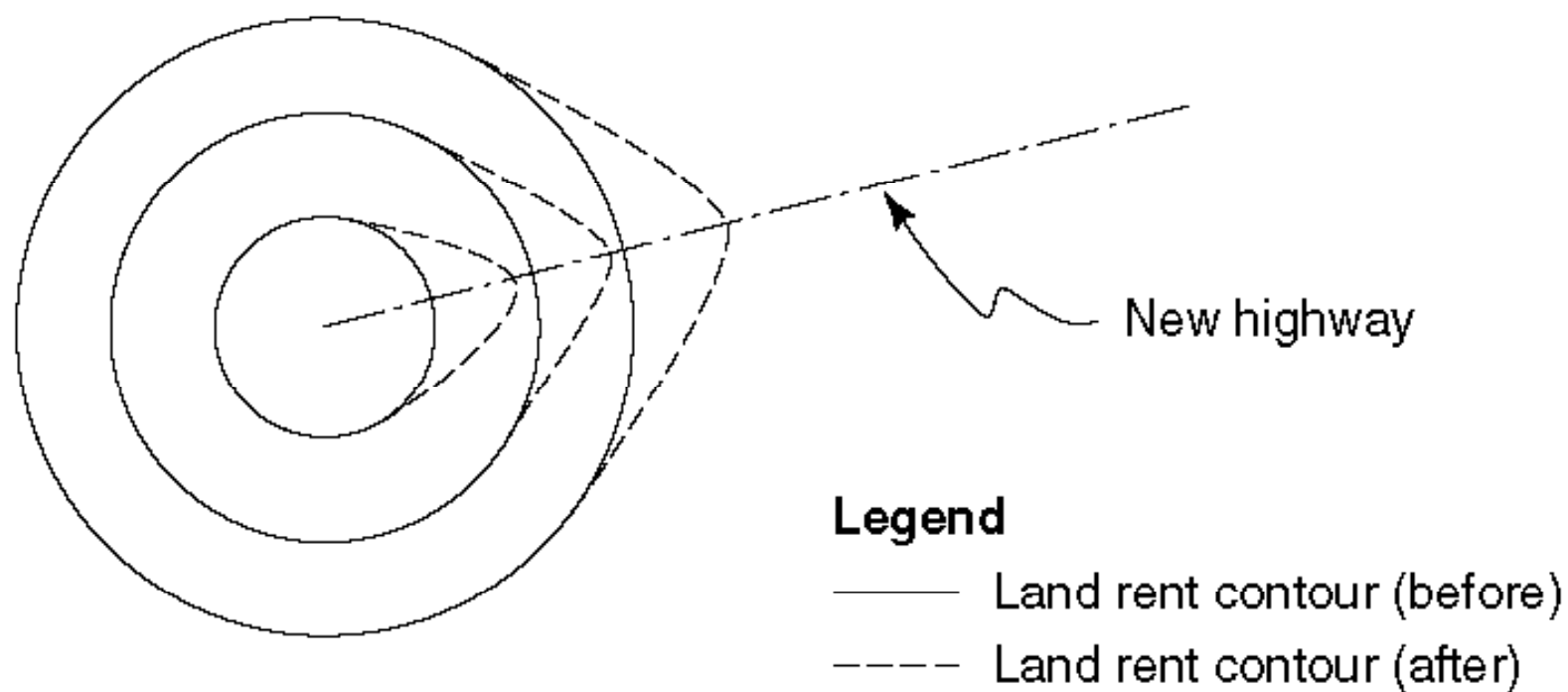


Figure 2.8 CONSUMERS' SURPLUS ILLUSTRATION

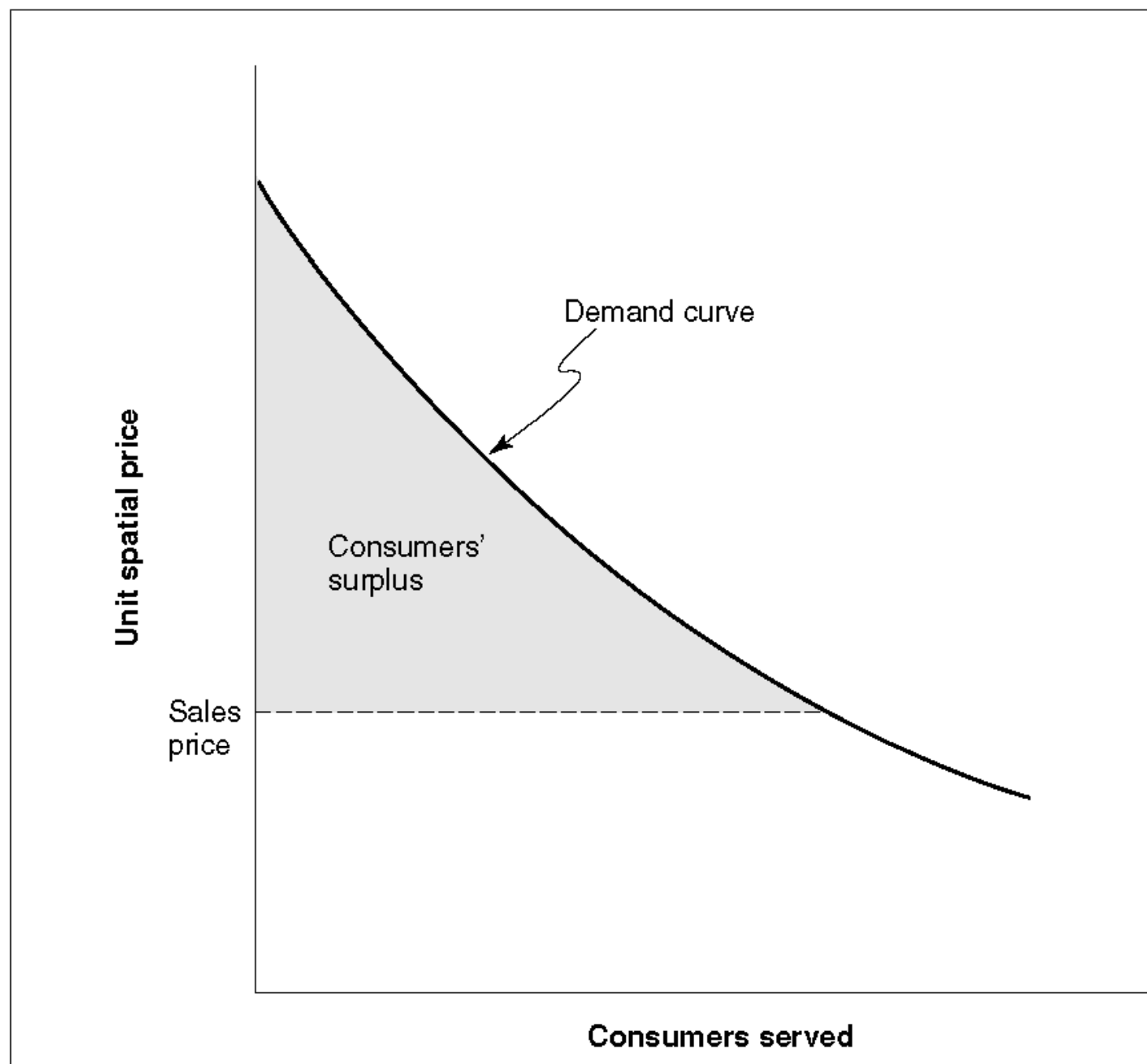


Figure 2.9 CHANGE IN CONSUMERS' SURPLUS

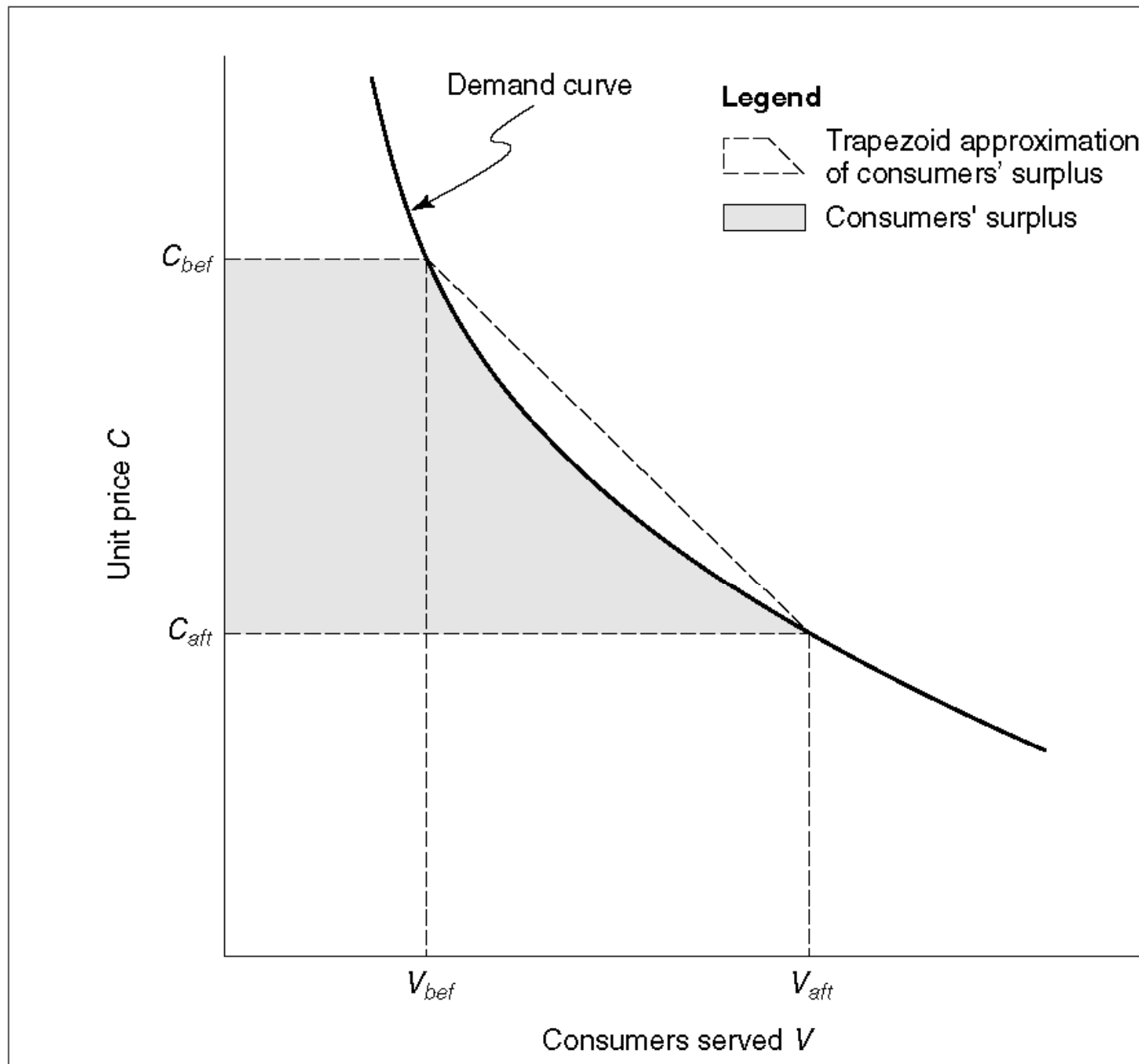


Figure 2.10 THE INCOME EFFECT

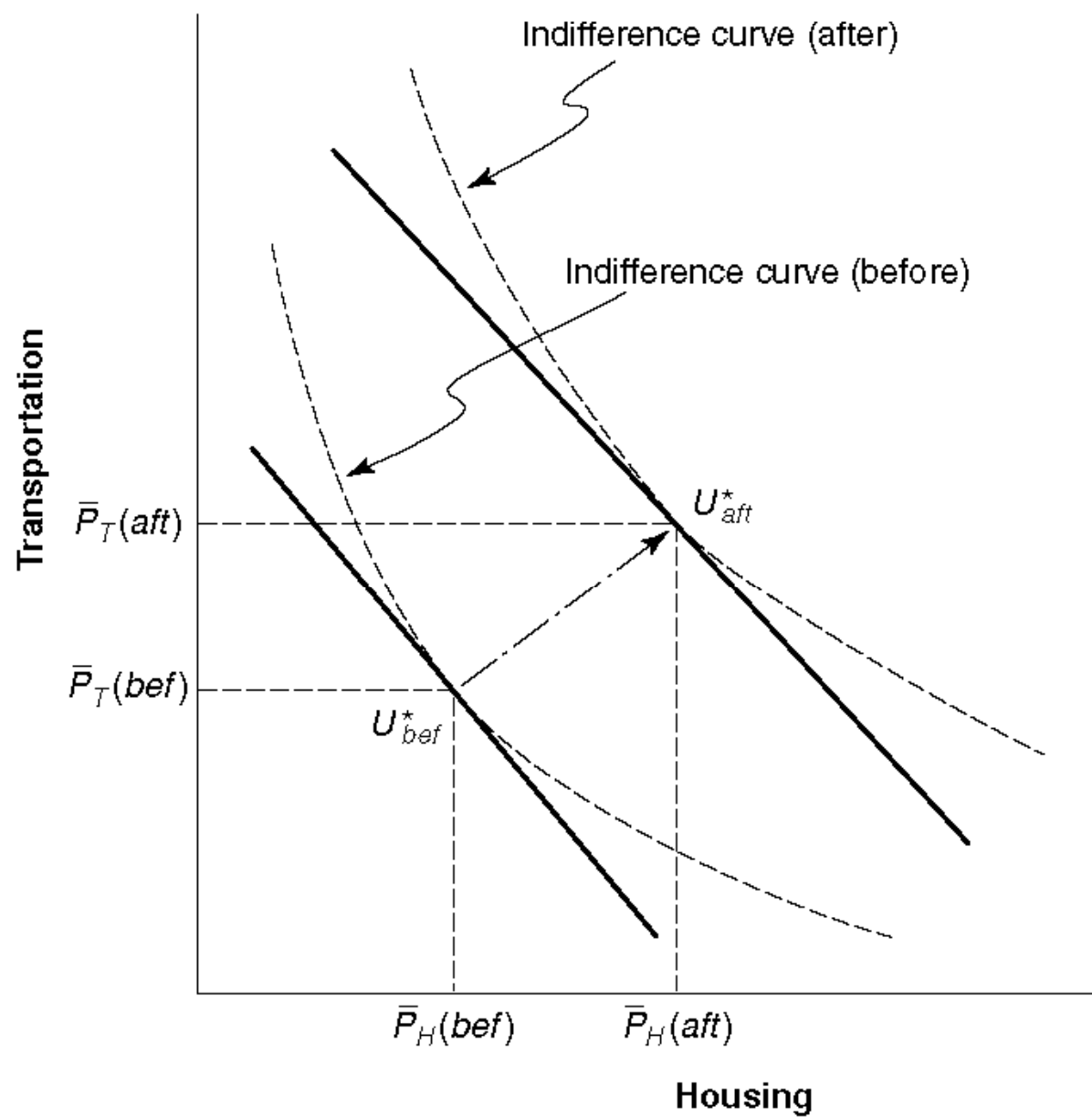


Figure 2.11 SUBSIDY AND TRANSFER PAYMENT

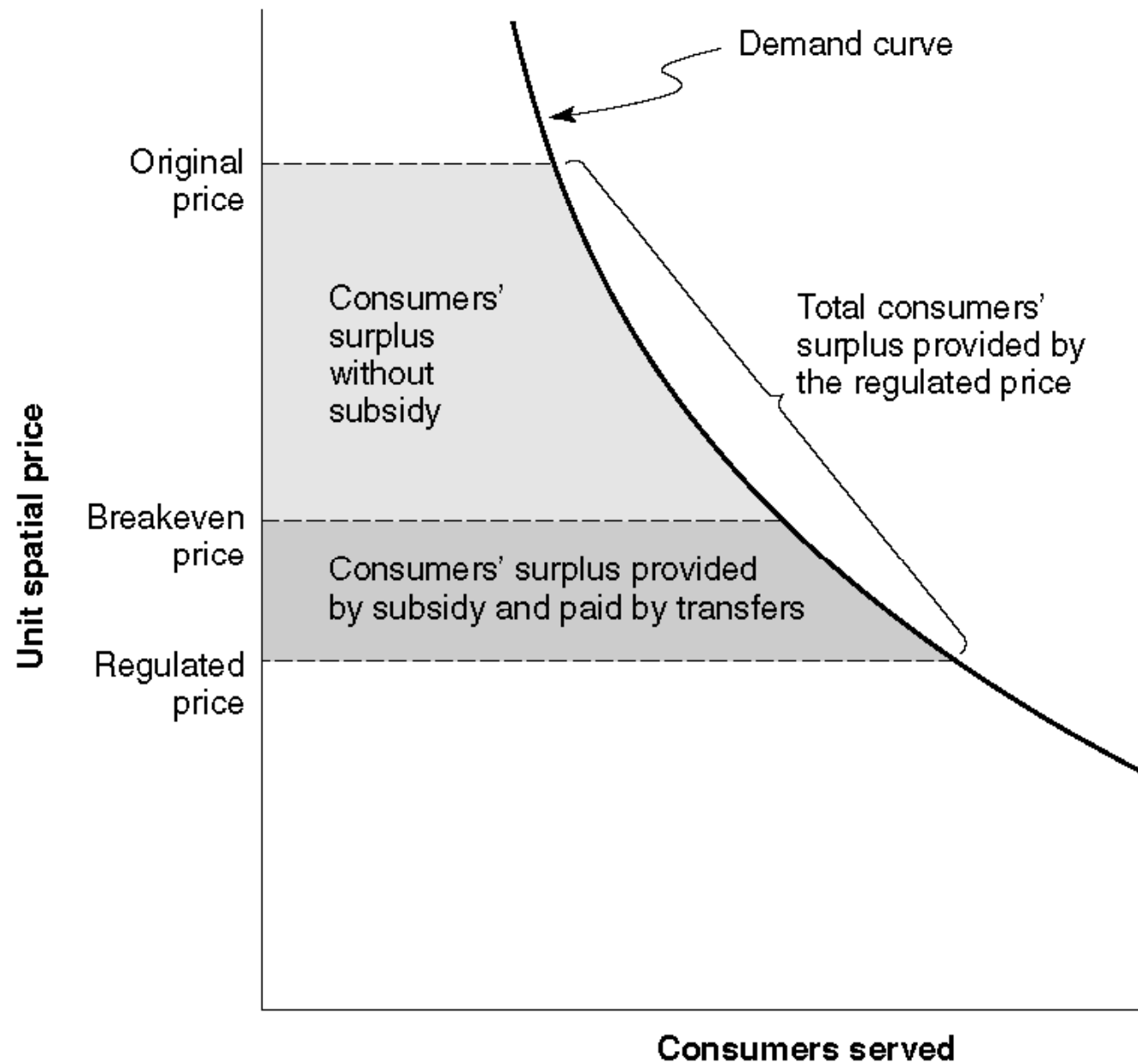


Figure 2.12(a) High income households

[decision-tree-util]

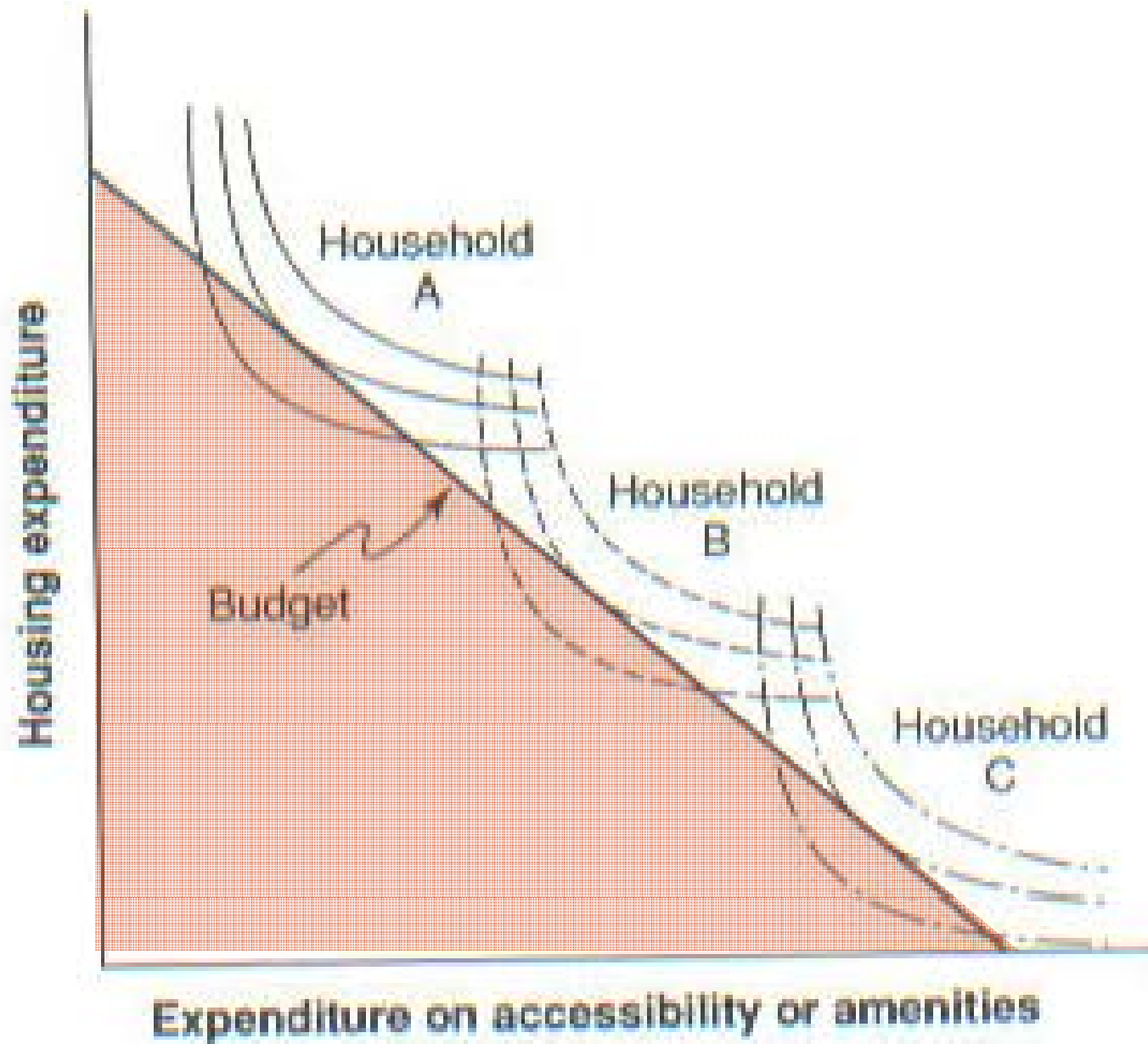


Figure 2.12(b) High & low income households

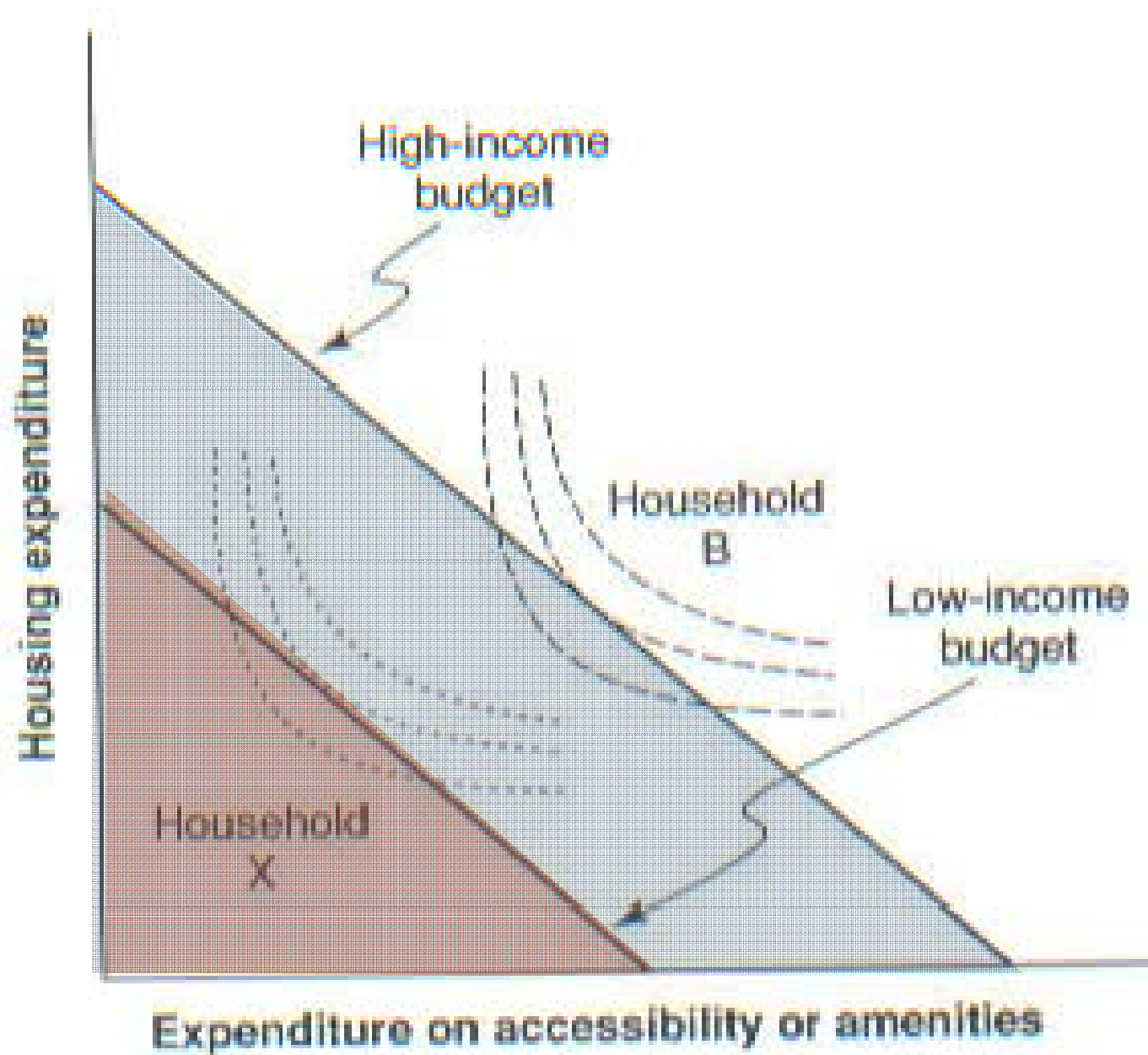
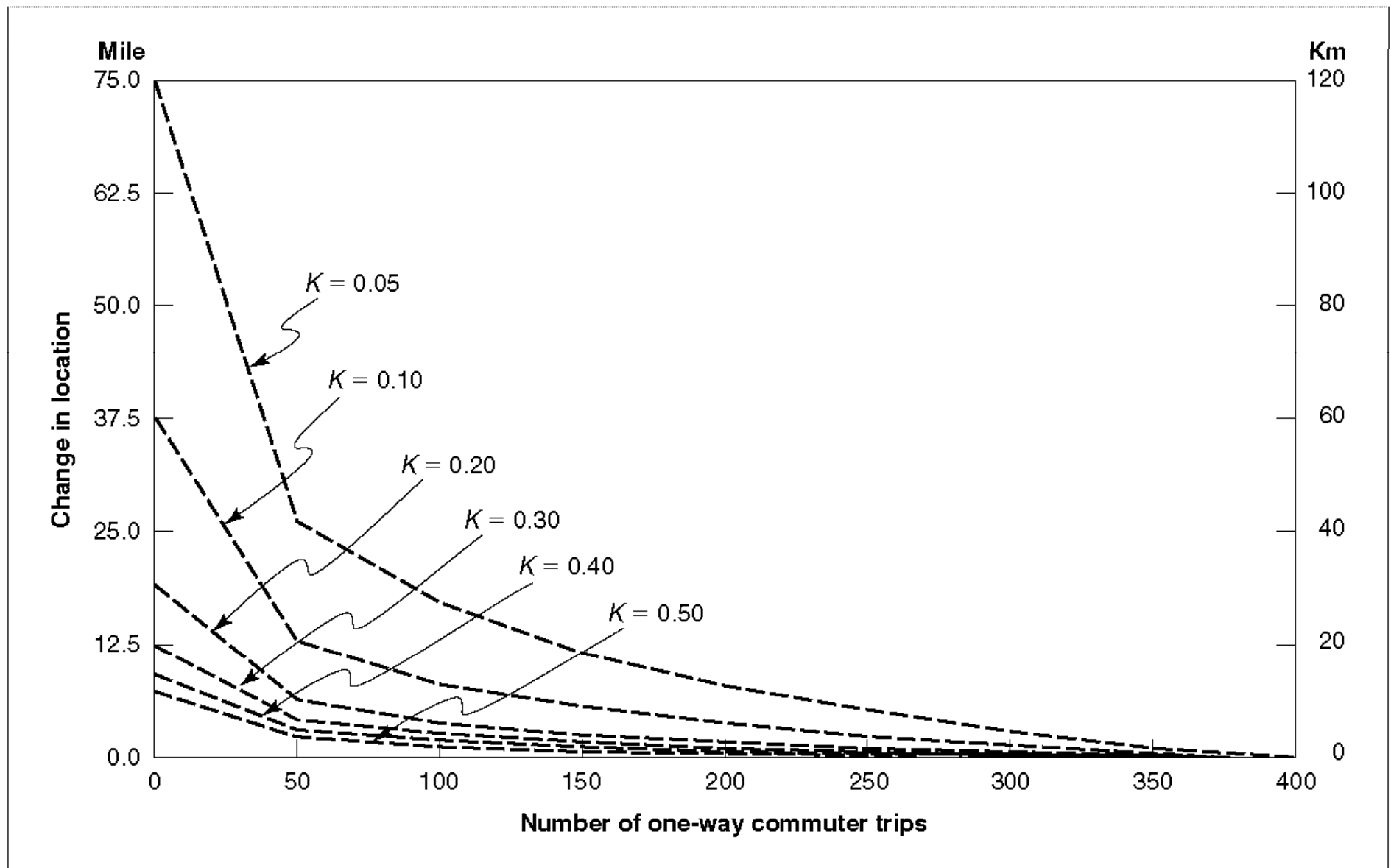


Figure 2.13 CHANGE IN RESIDENTIAL LOCATION WITH TELECOMMUTING



SOURCE: Lund and Mokhtarian (1994). Reprinted with permission.

Figure 2.14 BID-RENT CURVES

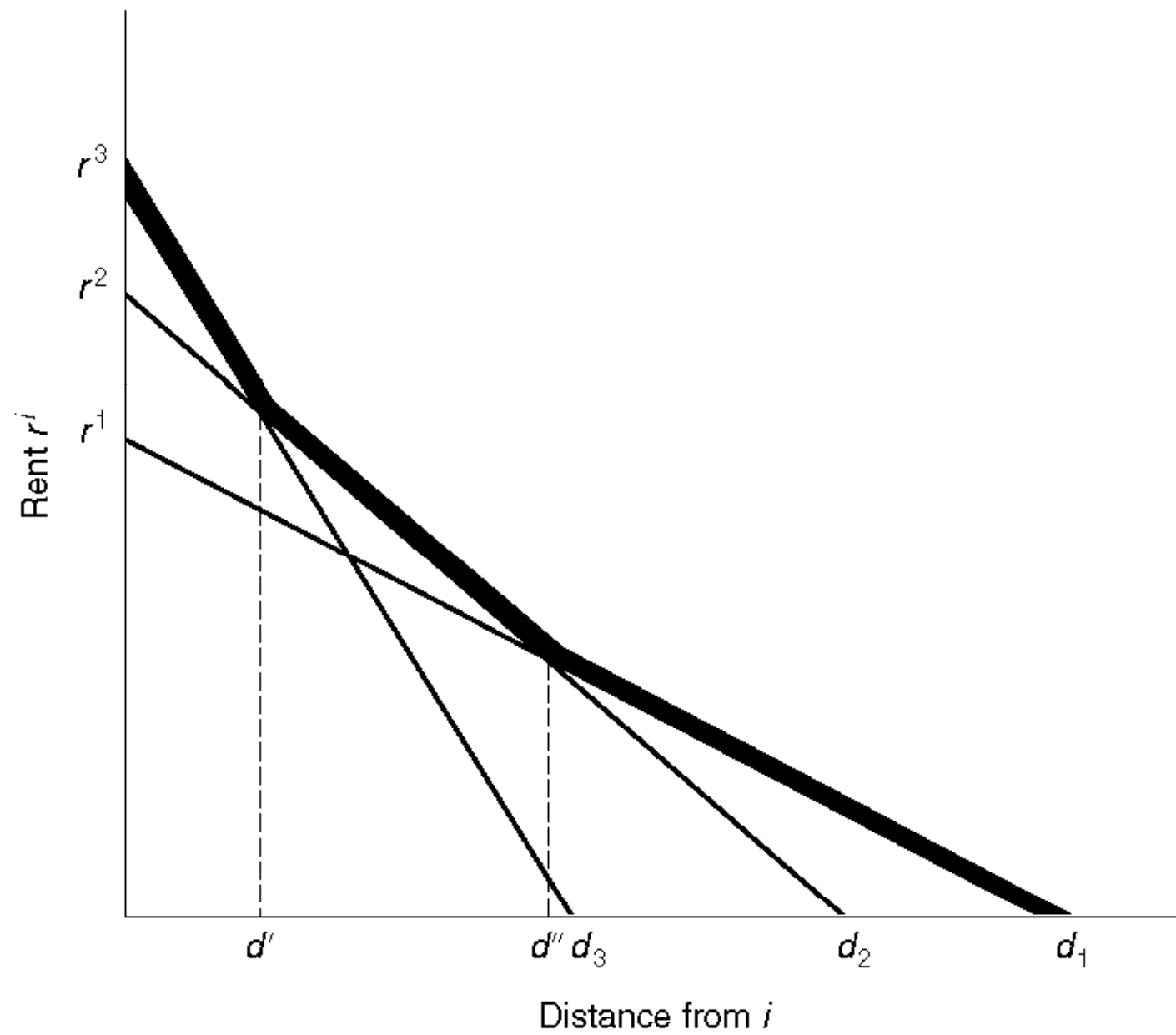


Figure 2.15 WEBER'S INDUSTRIAL LOCATION MODEL

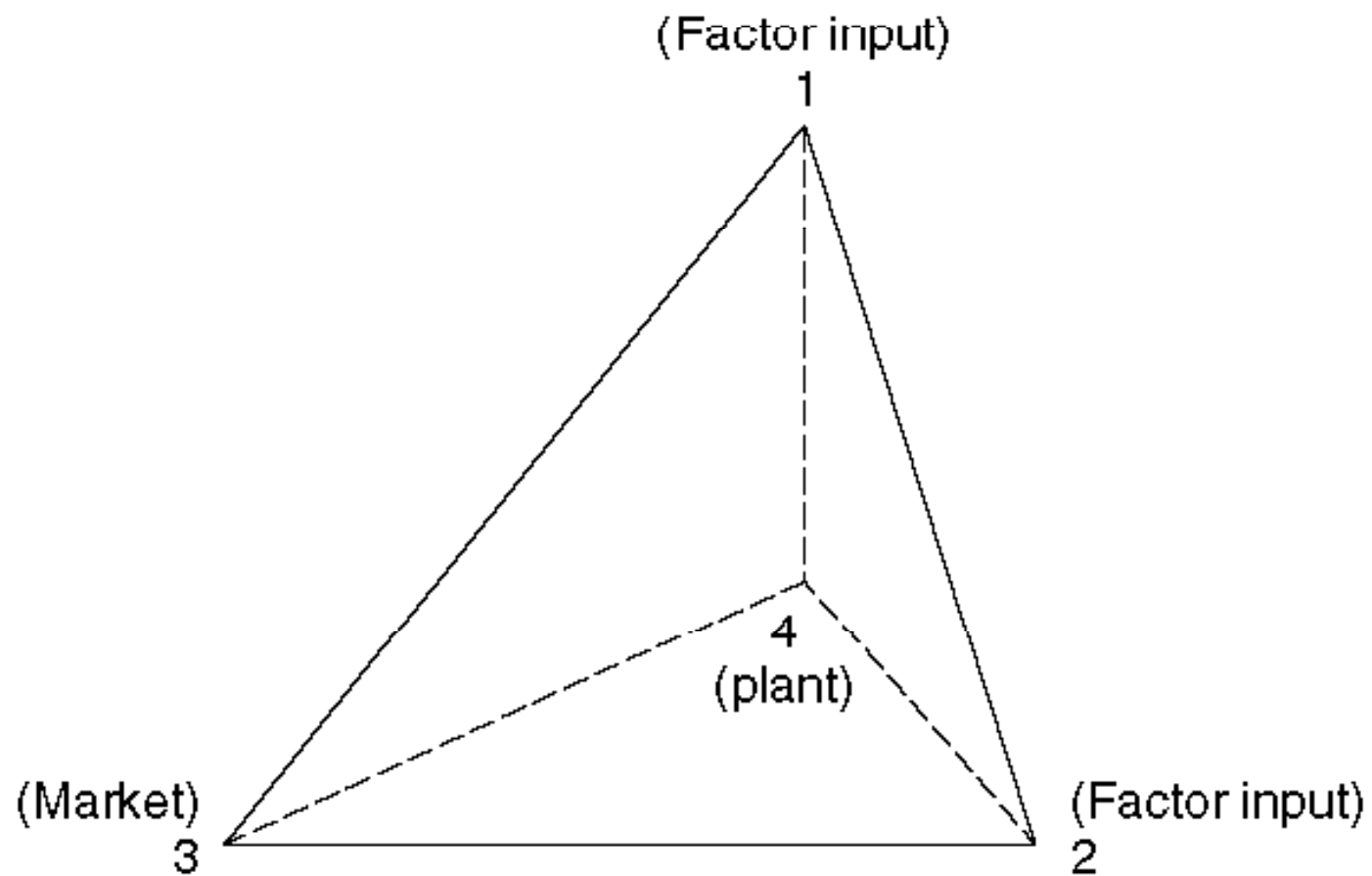


Figure 2.16 HOUSEHOLD LOCATION MODEL

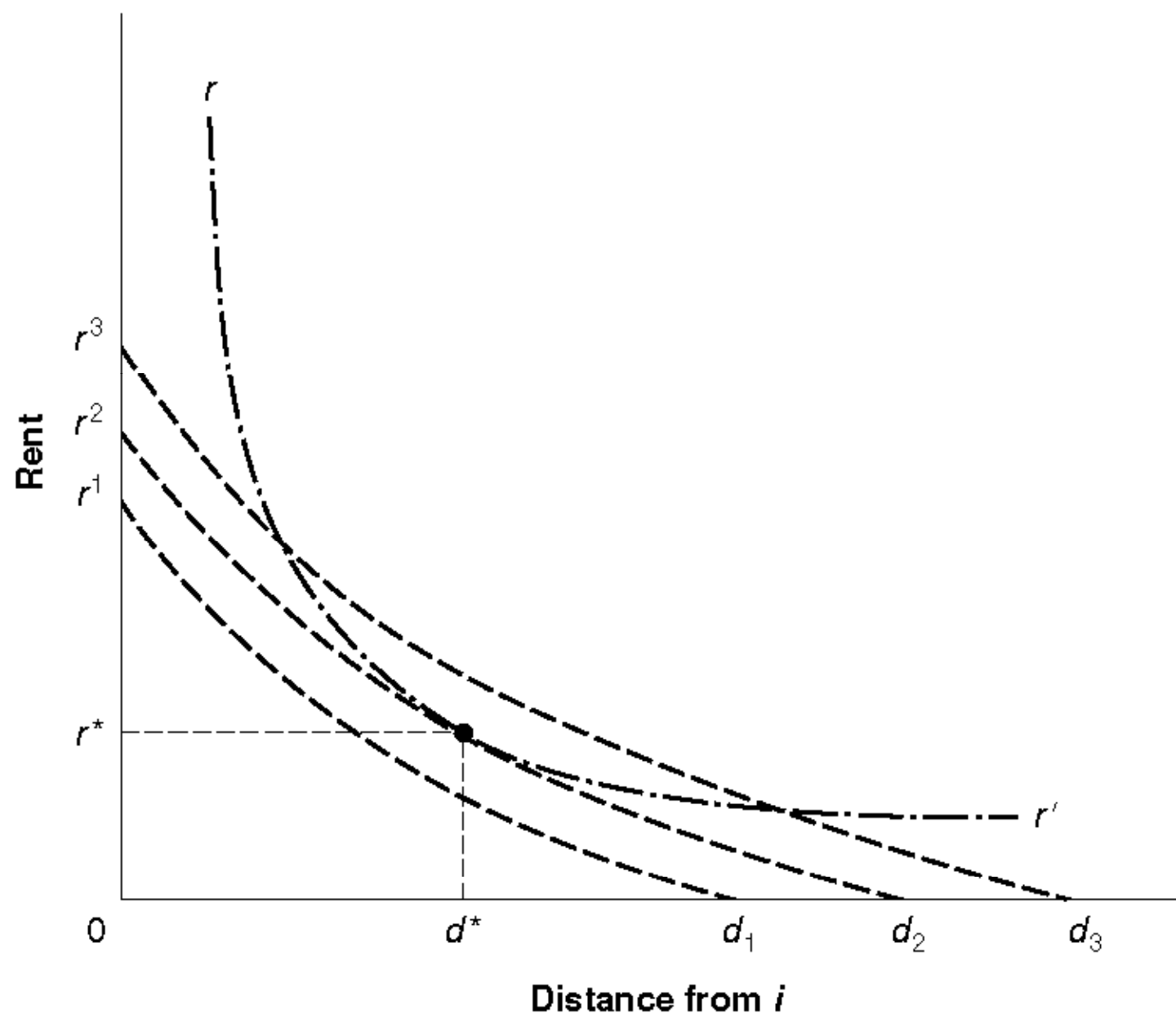


Figure 2.17 COVERAGE OF CONSUMERS

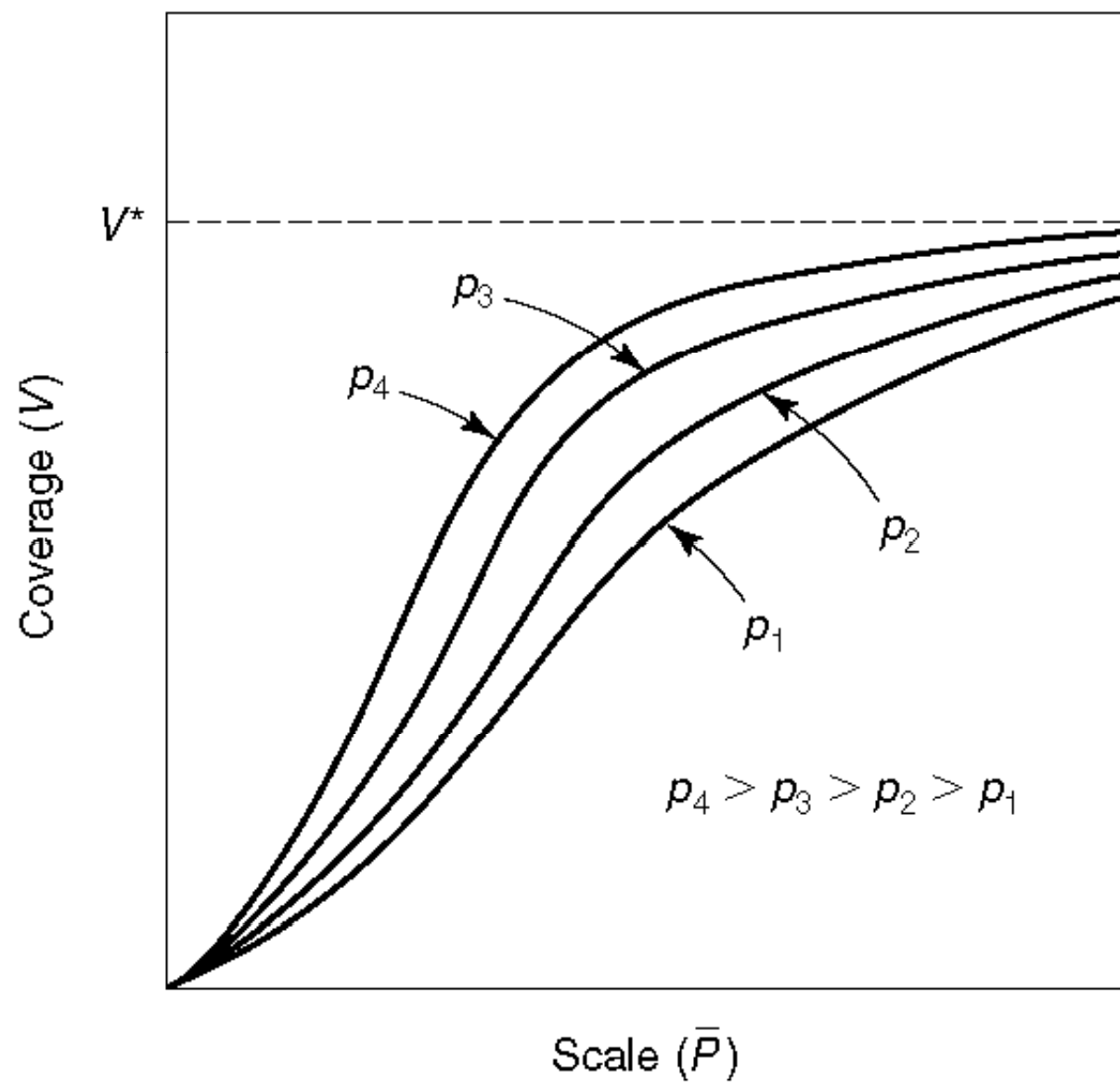


Figure 2.18 CAPITAL COSTS

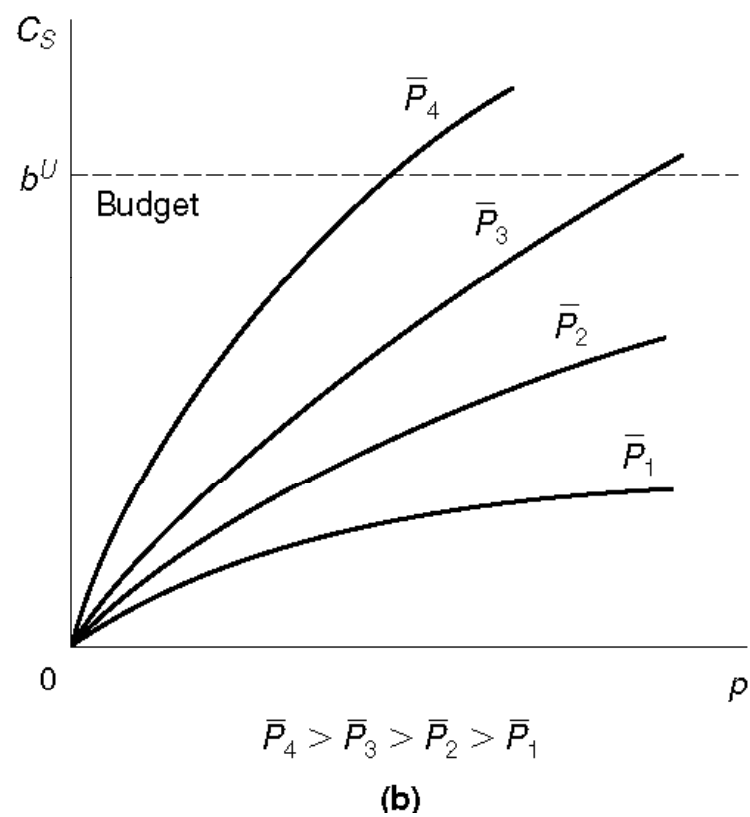
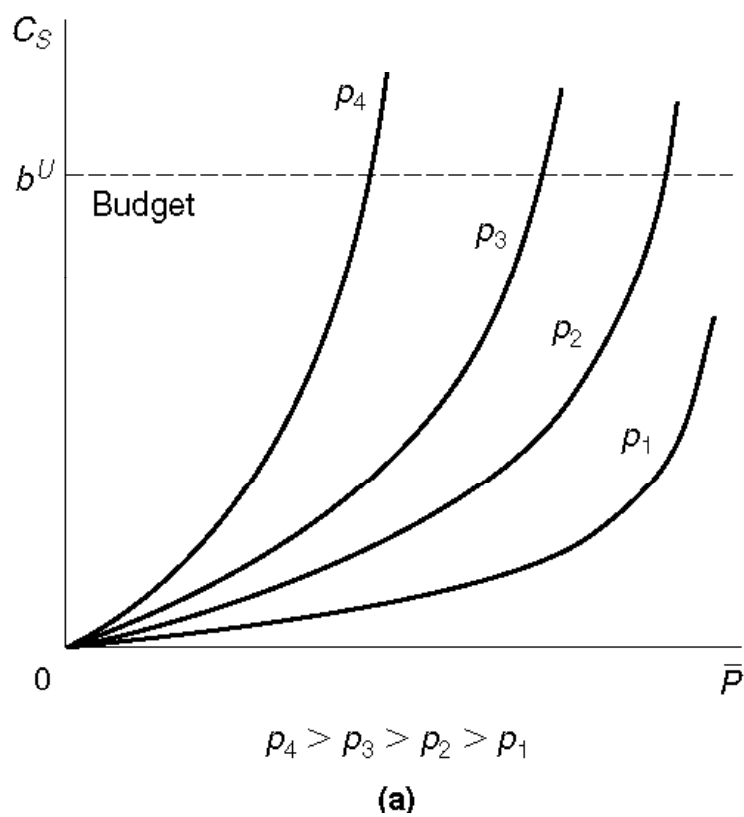


Figure 2.19 OPERATING COST

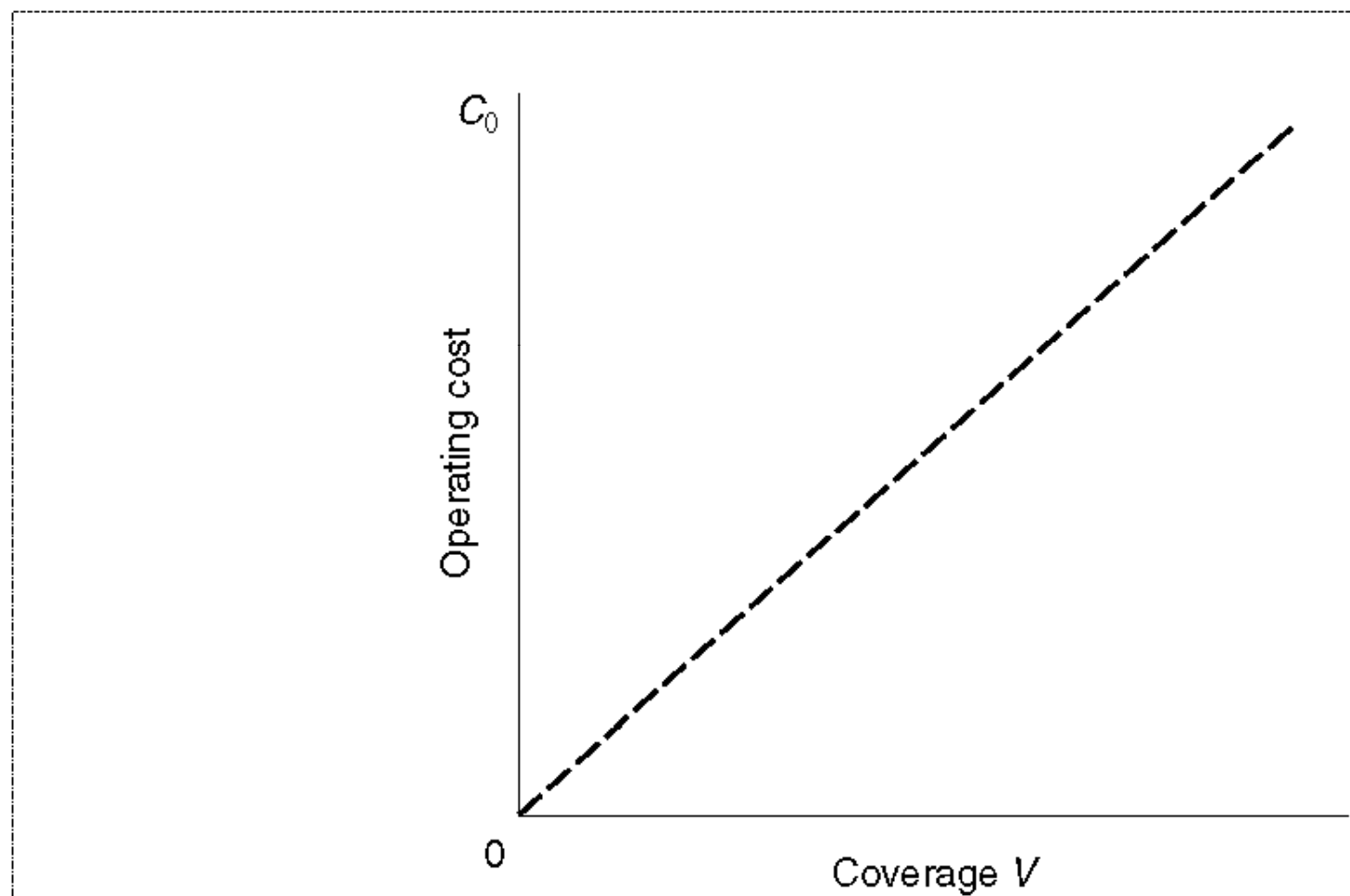


Figure 2.20 FACILITY EXPANSION IN A CIRCULAR AND SYMMETRIC CITY

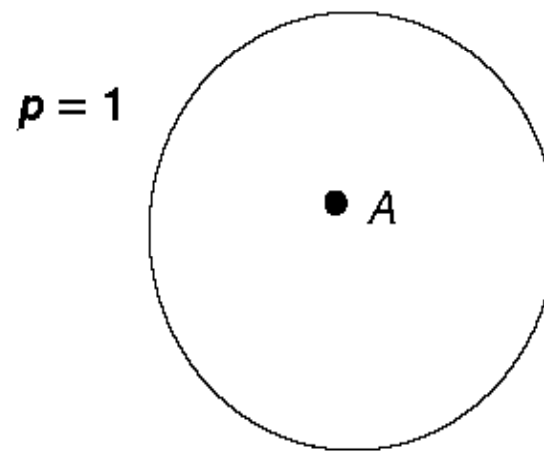


Figure 2.21 LARGER CITY WITH TWO FACILITIES

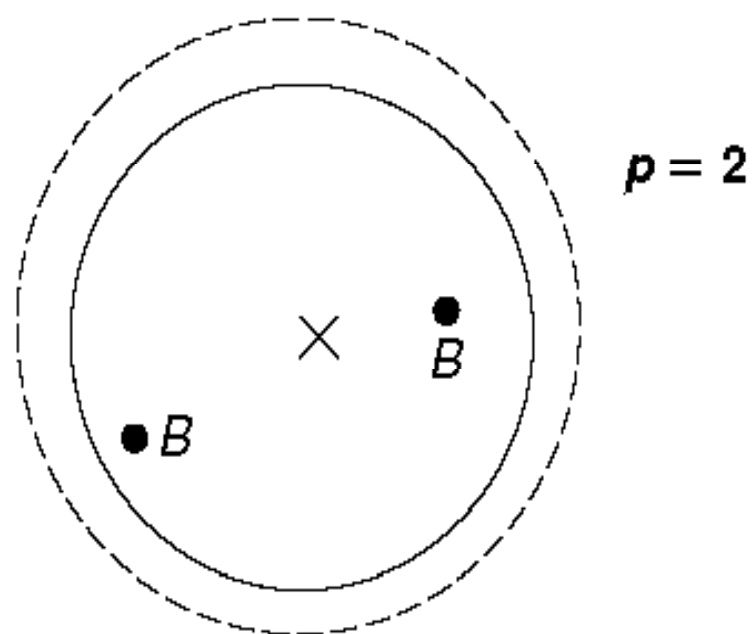


Figure 2.22 THREE FACILITIES AT UNIFORM SCALE

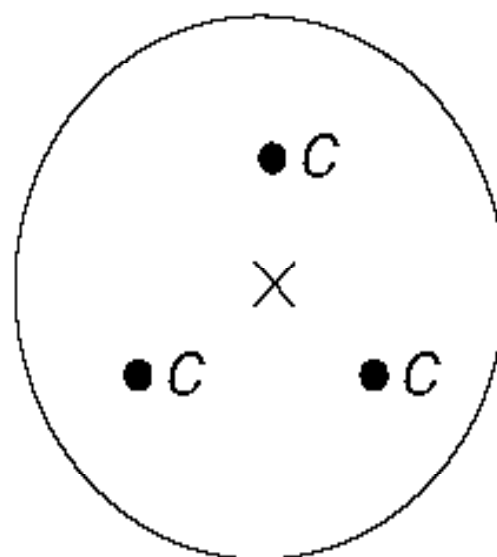


Figure 2.23 THREE FACILITIES AT VARIABLE SCALE

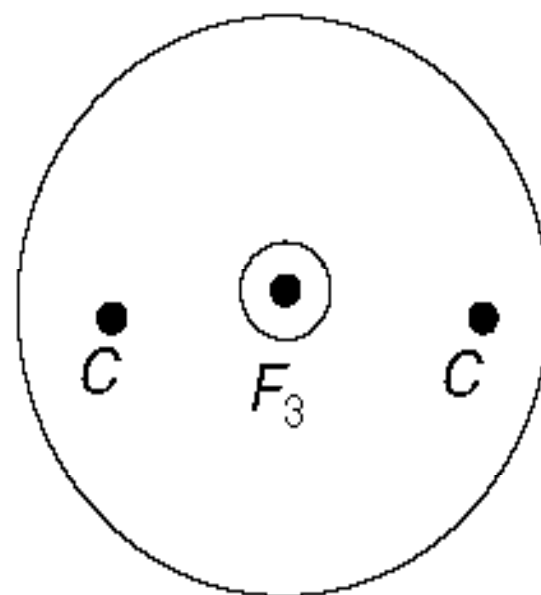


Figure 2.24 TRIANGULAR NETWORK *ABC*

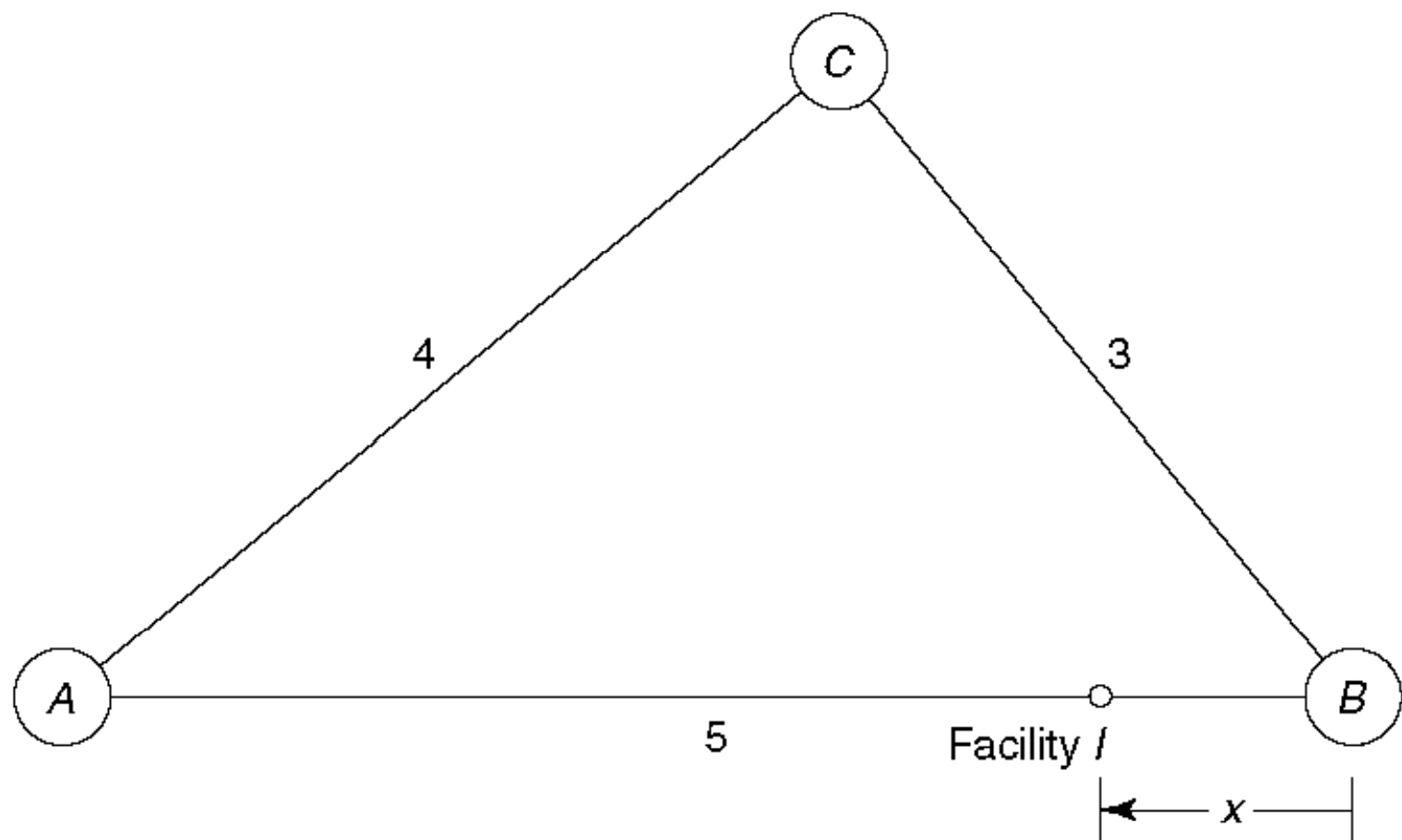
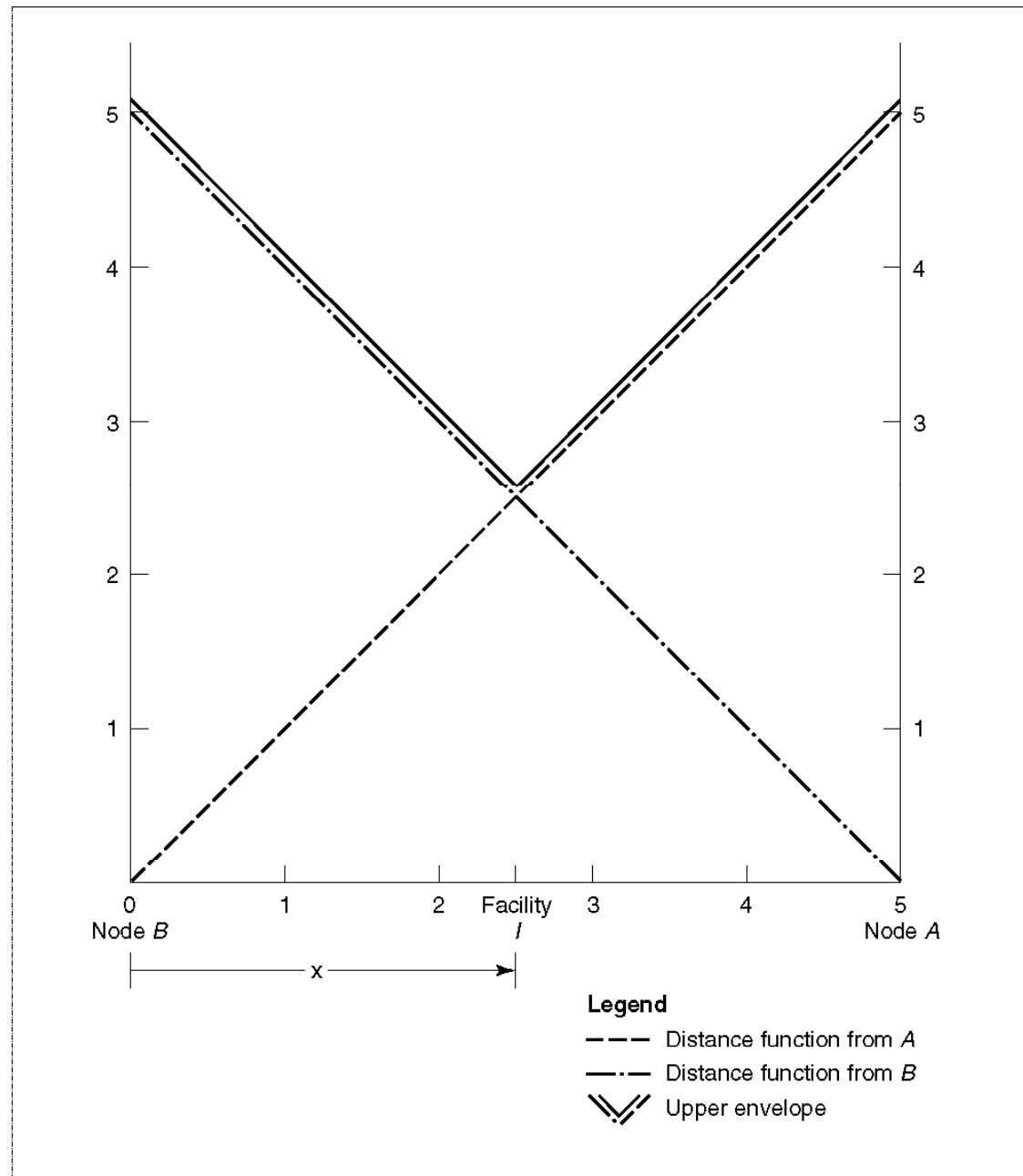
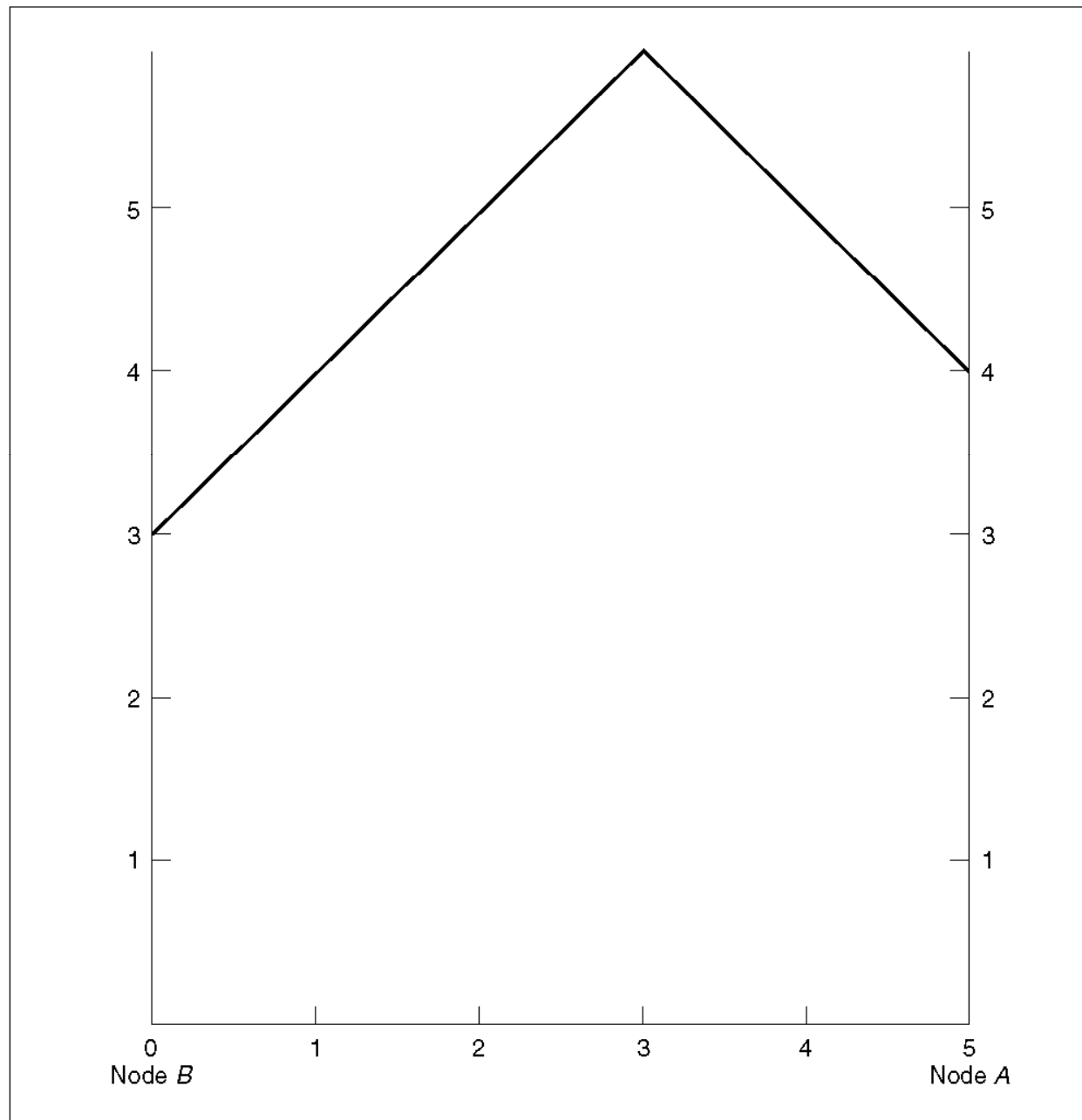


Figure 2.25 DISTANCE FUNCTIONS BETWEEN A FACILITY AND DEMANDS AT A AND B



SOURCE: Adapted from Ahituv and Berman (1988). Reprinted with permission.

Figure 2.26 CENTER DISTANCE FUNCTION FOR LOCATING FACILITY IN A NETWORK



SOURCE: Adapted from Ahituv and Berman (1988). Reprinted with permission.

Figure 2.27 COMBINED DISTANCE FUNCTION FOR FACILITY IN A NETWORK

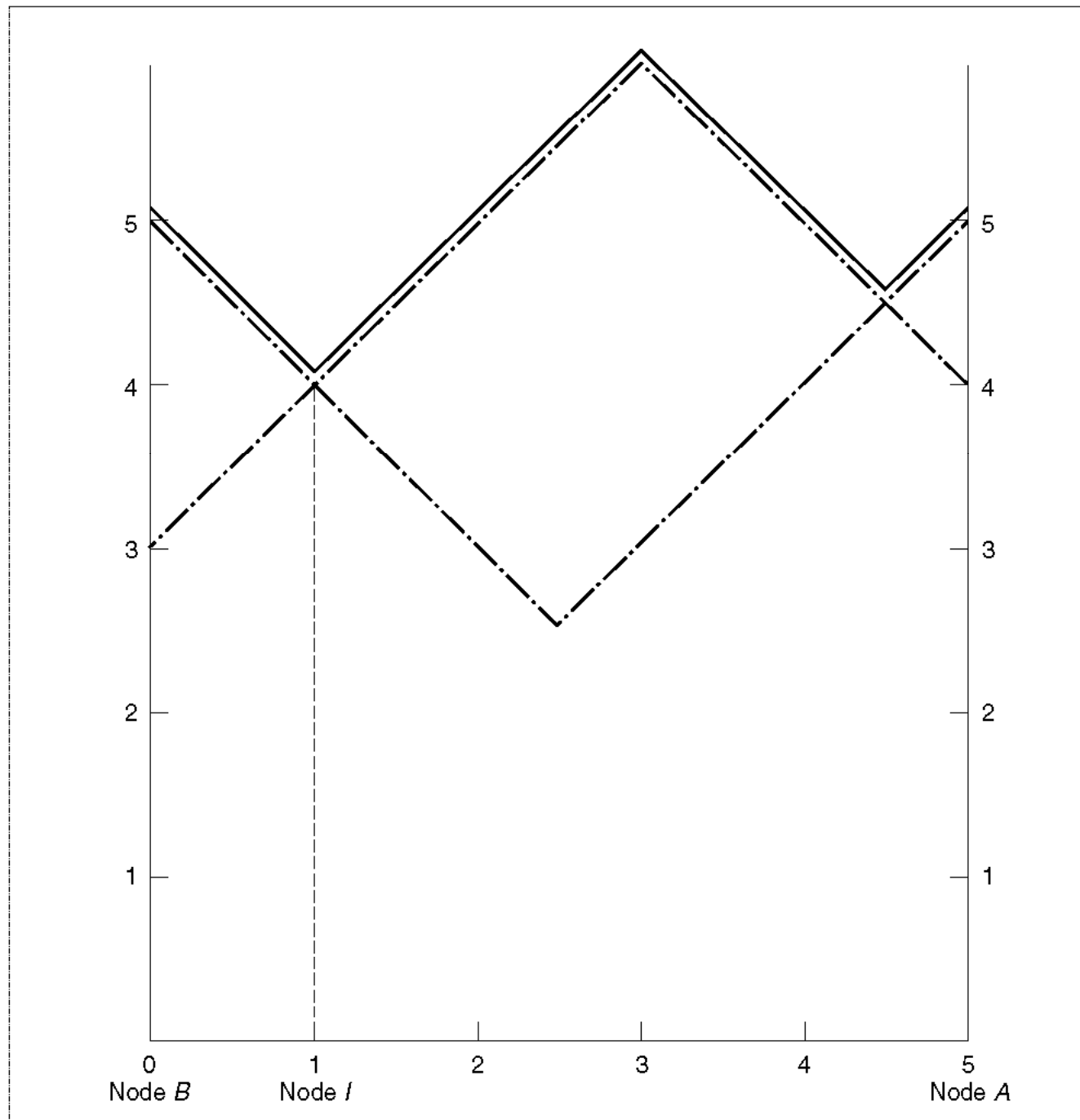
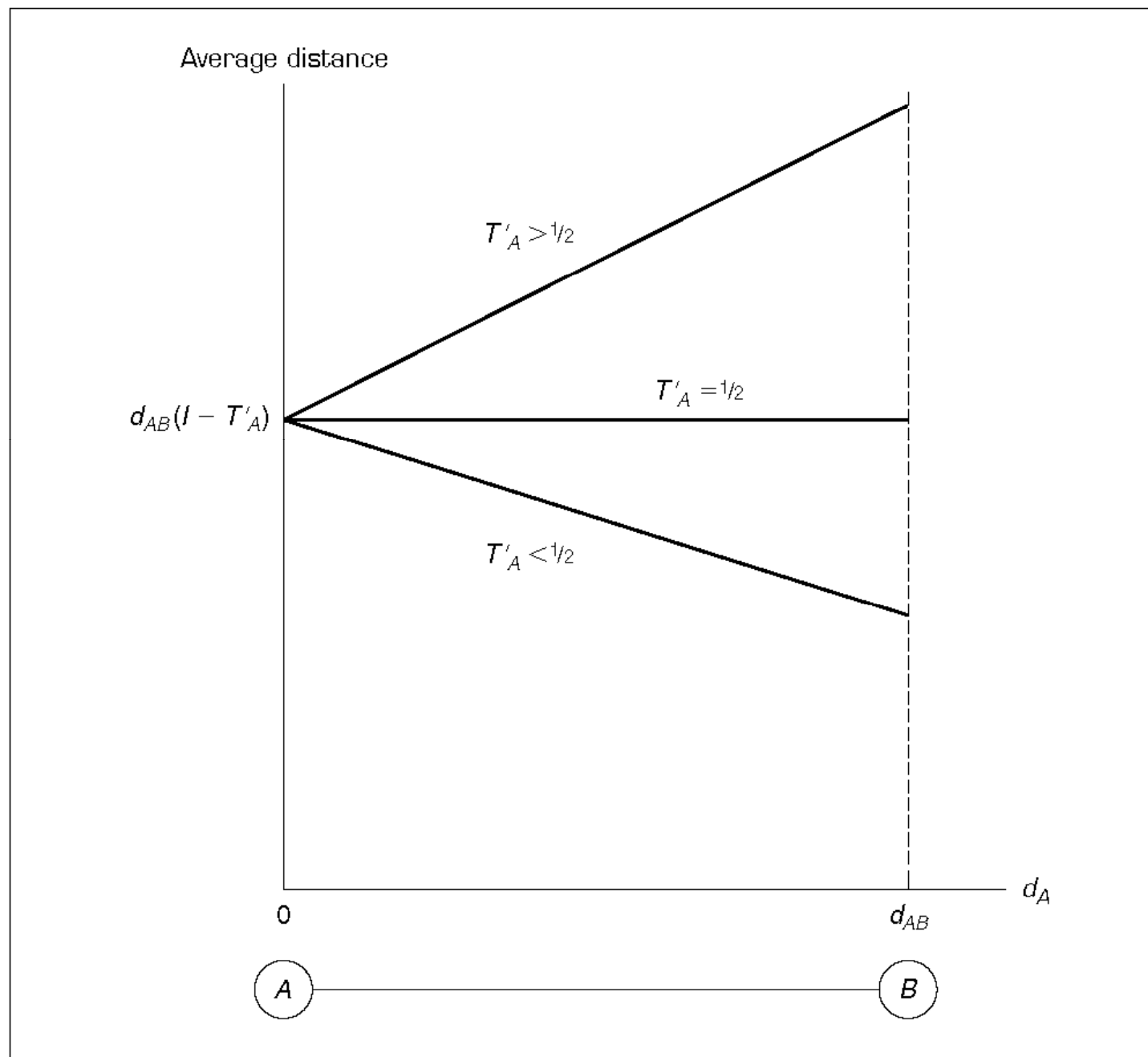
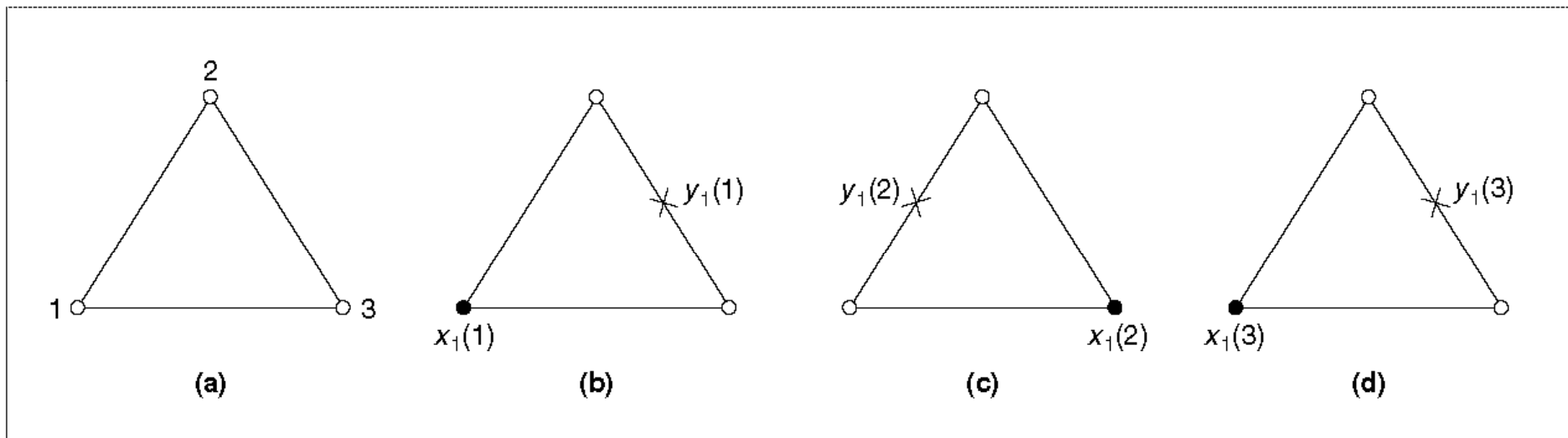


Figure 2.28 AVERAGE DISTANCE AS A FUNCTION OF MEDIAN LOCATION



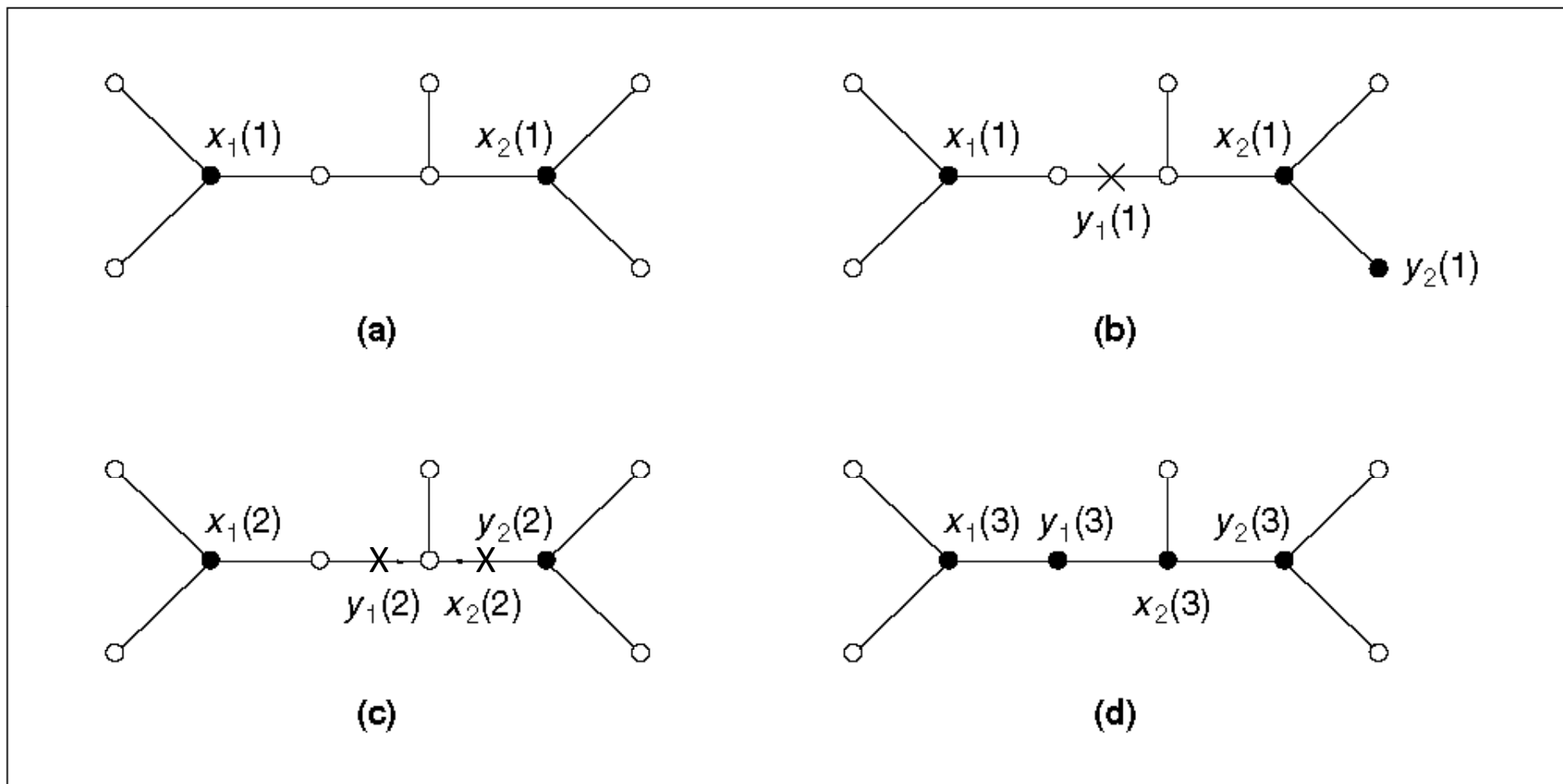
SOURCE: Ahituv and Berman (1988). Reprinted with permission.

Figure 2.29 NON-EQUILIBRIUM EXAMPLE



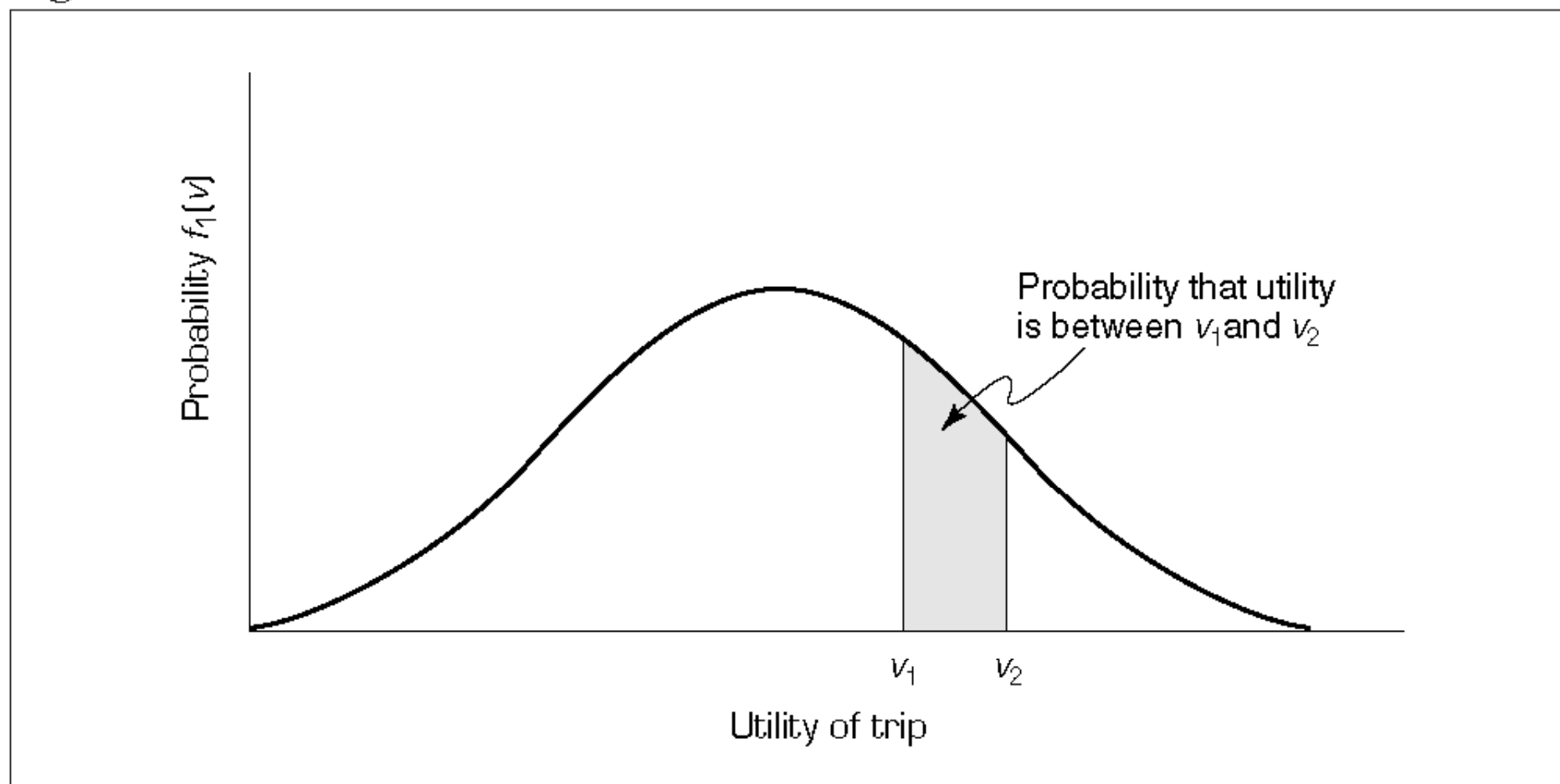
SOURCE: Hakimi (1990). Reprinted with permission.

Figure 2.30 EQUILIBRIUM EXAMPLE



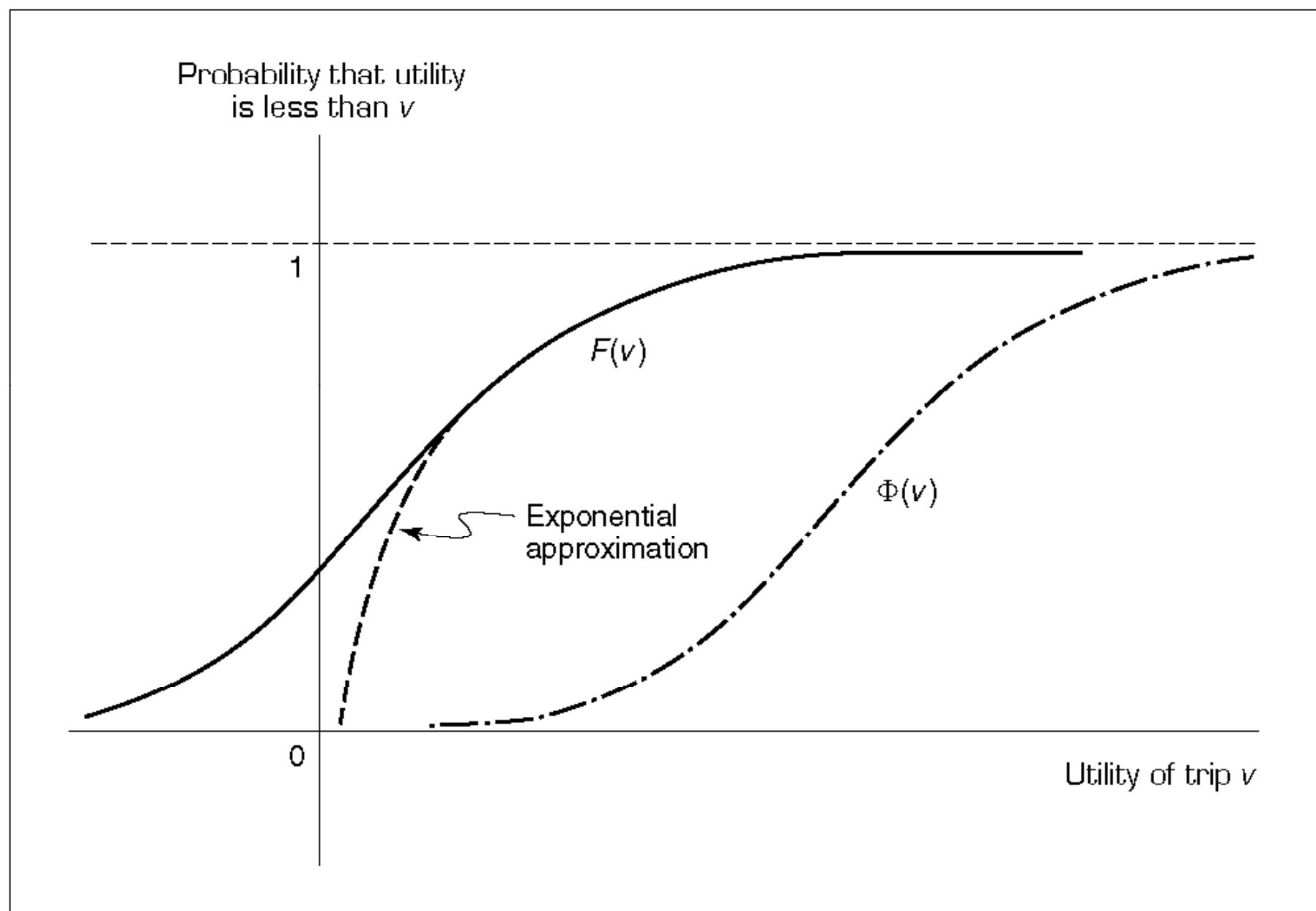
SOURCE: Hakimi (1990). Reprinted with permission.

Figure 2.31 PROBABILITY DENSITY FUNCTION OF TRIP UTILITY



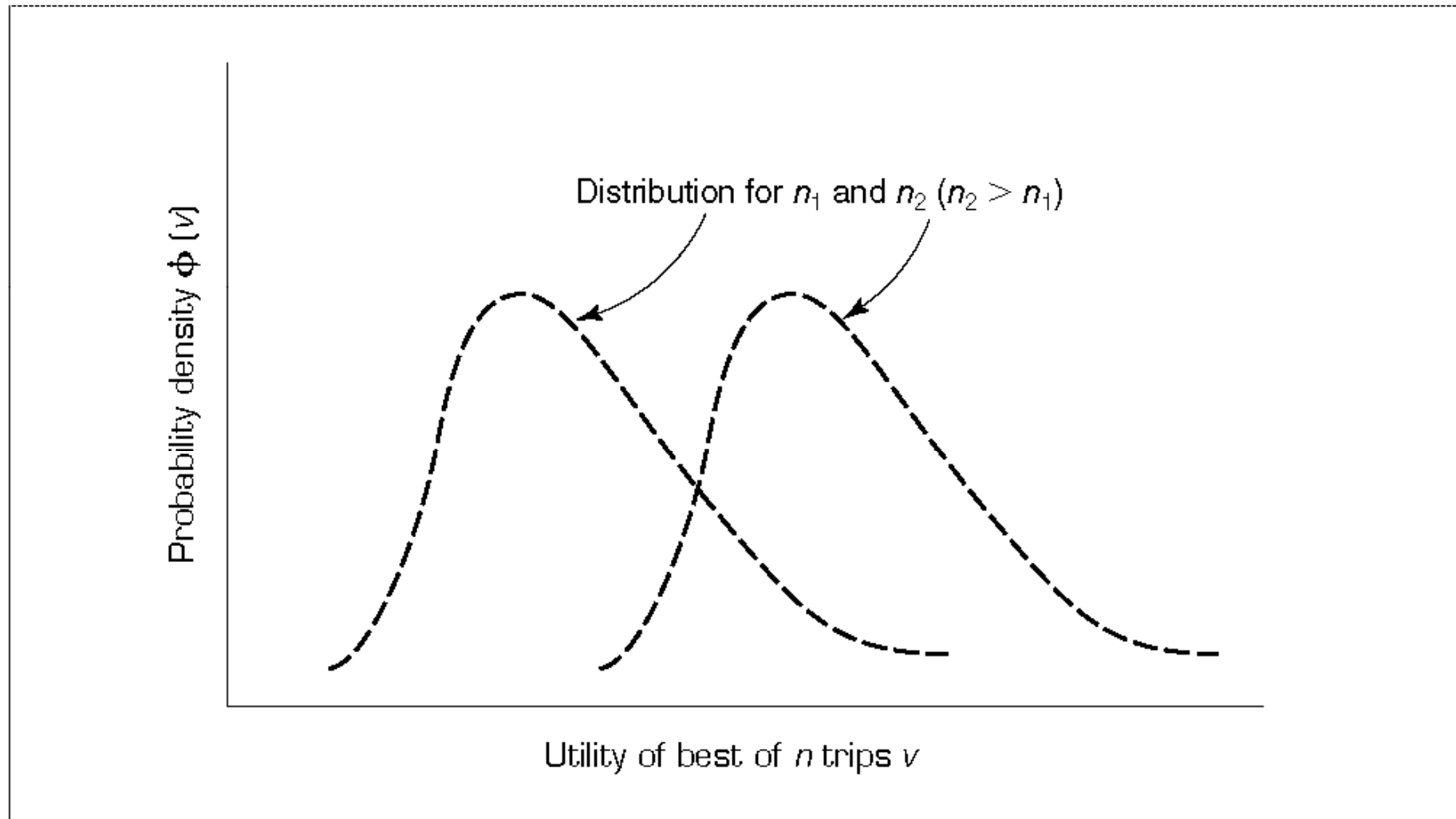
SOURCE: Cochrane (1975). Reprinted with permission.

Figure 2.32 CUMULATIVE DISTRIBUTION FUNCTIONS OF TRIP UTILITY



SOURCE: Cochrane (1975). Reprinted with permission.

Figure 2.33 PROBABILITY-DENSITY FUNCTION FOR THE UTILITY OF THE BEST TRIP



SOURCE: Cochrane (1975). Reprinted with permission.

Table 2.4 Benefit measures before accessibility improvement

C_{ij}	b	$\exp(-bC_{ij})$	θ_{ij}	$\bar{v} = \sum_{i,j} \theta_{ij} C_{ij}$
$C_{i1}=5$	0.2	0.3679	0.6457	6.0629
$C_{i2}=8$		0.2019	0.3543	
Total		0.5698	1.0000	
$C_{i1}=5$	0.6	0.0498	0.8581	5.4257
$C_{i2}=8$		0.0082	0.1419	
Total		0.0580	1.0000	

Table 2.5 Benefit measures after accessibility improvement

C_{ij}	b	$\exp(-bC_{ij})$	θ_{ij}	$\bar{v} = \sum_{i,j} \theta_{ij} C_{ij}$
$C_{i1}=5$	0.2	0.3679	0.5570	6.8772
$C_{i2}=8$		0.2019	0.3057	
$C_{i3}=12$		0.0907	0.1373	
Total		0.6605	1.0000	
$C_{i1}=5$	0.6	0.0498	0.8472	5.5092
$C_{i2}=8$		0.0082	0.1401	
$C_{i3}=12$		0.0008	0.0127	
Total		0.0588	1.0000	

Figure 2.34 DEFINITION OF OPPORTUNITIES IN THE INTERVENING OPPORTUNITY MODEL

