

Week 11 – Age and Substitution and Cohort Preferences

Household Age Preference Patterns

- Young Commodities
 - Suggest that young households with lower incomes give priority in their spending to housing and tobacco (basic commodities) and show preference to alcoholic beverages, clothing and footwear (affluence commodities)
- Senior commodities
 - Suggest that older households with lower income show preferences in basic commodities such as food, household services, domestic fuel and power, and medical and health services

Ageing and Product Substitution

- As people age, there is a shift in life style with an associated change in household consumption pattern
- After retirement, there is a decline in household income and thus require product substitution to meet changed physical, social and economic needs

Framework for Older Age Product Substitution

- People aged 65+ would have rising preferences for some products due to
 - Home orientation (Food at home, household goods and services)
 - Increasing disability (Medical and health services)
 - Alternative time use (Reading materials)

Framework for Older Age Product Substitution

- People aged 65+ would have decreasing preference for others due to
 - Work related activities (clothes, transport)
 - Capacity for some pursuit (alcohol and tobacco)
 - Ownership drive (Mortgage, vehicle, furniture)

Age Product Substitution Index (APSI)

- APSI is the ratio of
 - Age preferences for groups of products related to the rising preferences
to
 - Age preference for the group of products that is related to the decrease in preferences

Age Product Substitution Index (APSI)

$$APSI = APR^r / APR^w$$

where

APR^r = Age Preference Ratio for retirement associated products

$$= [(g_n^r / g_a^r) / (g_n^{rw} / g_a^{rw})]$$

g_n^r = Average household expenditure for *retirement-related* commodities for a given age n

g_a^r = Average household expenditure for *retirement-related* commodities for all ages

g_n^{rw} = Average household expenditure for *retirement plus work-related* commodities for a given age n

g_a^{rw} = Average household expenditure for *retirement plus work-related* commodities for all ages

APR^w = Age Preference Ratio for work and pre-retirement related products

$$= [(g_n^w / g_a^w) / (g_n^{rw} / g_a^{rw})]$$

g_n^w = Sum of the average household expenditure for *work-related* commodities for a given age n

g_a^w = Sum of the average household expenditure for *work-related* commodities for all ages

g_n^{rw} = Sum of the average household expenditure for *retirement plus work-related* commodities for a given age n

g_a^{rw} = Sum of the average household expenditure for *retirement plus work-related* commodities for all ages

- The Age preference ratio for retirement associated product (APR^r) should rise at age 65+
- The Age preference ratio for work and pre-retirement related product (APR^w) should decline at age 65+
- The Age product substitution index (APSI) should show an increase for ages 65+

Product Substitution by Older people in US, UK and Australia

Home orientation (Food at home and utilities and household services)

Table 11.1 Home orientation age preferences
– United States (2007), Australia (2003/4) and United Kingdom (2007)

Country	Age preference ratios according to the age of the household head (years)				
	<35	35–44	45–54	55–64	>64
United States	0.97	0.97	0.99	0.99	1.13
Australia	0.88	1.01	0.95	0.99	1.33
United Kingdom	0.93 ^a	0.92 ^a	1.03 ^a	– ^a	1.30

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