Abstract The purpose of this study is to clarify the driving factors in the changing structure of consumption at the macro-level caused by an aging society in Japan. To describe the macroscopic, dynamic, and structural bases of consumption, the authors used cohort analysis, which is a method of separating age, period, and cohort effects from time-series household accounts data, classified by age and period. Many items of expenditure are susceptible to the age factor. The effect of changes in the number of household members due to changing life stages and the effect of changing expenses due to aging of consumers can also be seen. Other expenditure items are susceptible to plural factors. For example, fish & shellfish, vegetables & seaweed, and fruit are all susceptible to both age and cohort factors. Eating out, private transportation, communication, and books & other reading material are susceptible to all three factors at different levels of effectiveness. Observing the profile pattern on the cohort analysis result graph, we can consider how market aging and the alternation of generations, which are viewed from a population theory perspective, affect the consumption structure.

Introduction

A number of researchers are actively involved in studying how the change in population structure with regard to age and generation due to the impact of a low birth-rate and aging population will transform the consumer market. Regarding the issue of generation in particular, quite a few reports refer to people in their 50s and older, including the Dankai (Japanese baby boomers) that are being referred to as the “New Fifties” or “Active Seniors,” and predict that youthful consumer behavior, in contrast to that of conventional stereotypes will increase as new generations enter this age bracket [7, 12]. Japanese baby boomers currently at the cusp of retirement could dramatically transform household expenditure, and eventually transform Japanese macro-structure consumption through sheer weight of numbers.
This chapter questions the ambiguity of the cause of change in consumer behavior not clarified in terms like “New Fifties” and so on. No clarification is made as to whether that change is generated by features of consumer behavior belonging to a specific generation (Dankai, Shin-Jin-Rui etc.), brought about by a change in specific period of years behind the consumption, or caused by aging (or shift in life stage).

As an example, let us consider a hypothetical consumer behavior trait and compare it in relation to a generational hypothesis and another age-related hypothesis:

H1: Dankai (Japanese baby boomers) and newer generations prefer wearing jeans.

H2: Everybody 30 or younger prefers wearing jeans.

If generation-related hypothesis (H1) is true, it might be estimated that “Japanese baby boomers and younger generations prefer wearing jeans even after having reached the age of 30.” Contrarily, if age related hypothesis (H2) is true, it implies “Anybody older than the age of 30 will not wear jeans regardless of generation.” Furthermore and as follows, an additional hypothesis in relation to period should be taken into consideration:

H3: Casual fashion is a universal trend (the casual apparel industry, for example Uniqlo, is growing every year and an increasing number of people purchase casual clothing such as jeans regardless of age or sex).

If (H3) is true, then it can be predicted that “the majority of people prefer wearing jeans regardless of age or sex as they age.” These are neither true or false propositions nor exclusive events; rather a problem of scale.

In some cases, dynamic continuous changes in the population structure due to a low birth-rate and aging population and/or unequal distribution of generations may lead to amplifying the impact people in a certain age bracket or generation can have on change prevailing throughout society in its entirety over the long run, and even further in macroscopically changing consumer trends. Clarification of changes in consumption is of substantial significance if it is pursued taking the age of the consumer, behavioral pattern specific to each generation, economic and social processes during their lifetime, and norms and technological renovations into consideration. Among others, demographic statistics are useful in making forecasts at high levels of certainty and are understood as a factor directly connected to demand for consumables and financial products. In addition, it is important to analyze just what the specific areas of household expenditure will be that will expand or shrink in the future when drawing up marketing strategies.

This chapter describes analysis that was implemented using Bayesian cohort models, based on data from the Annual Report on Family Income and Expenditure Survey (Statistics Bureau, Japan) [14, 15]. Cohort analysis can organically connect plural investigation results and divide them into the three factors of consumer age, consumer cohort, and survey year in analyzing their effects on consumer behavior from the perspective of expenditure.