情報理論に基づく事前分布自由のベイズ型統計推測法

姜 與 起

ベイズ型統計推測は多くの利点をもっているにも拘らず、事前情報への依存性から統計学界の中でもそれに対する抵抗が強いものである。そのため、各種の非報知的な事前分布によるベイズ型推測法が提案されているが、論理的整合性と適用性を兼ね備えたものがまだ少ない。その中でもBernardoに提案されたreference prior の方法が著名であり、それはLindley の情報量汎関数の最大化を基礎としたものである。本稿では、一般的な条件の下でもLindley の情報量汎関数が常にゼロであることを証明し、新しい情報量汎関数を構成することができた。そして事前分布自由の推測法の理論的基礎を構築し、それに基づく計算法を提案した。提案する方法の特徴は推論の過程及びその結果が事前分布に依存しないことであり、その概要は次のとおりである。まず、所与の初期観測データに関する密度関数をもとに推測関数を定義し、そして定義した推測関数による新しい情報量汎関数の最大化でパラメータの初期事後分布を決定する。その上、さらに後続観測データについて初期事後分布を事前分布として、ベイズの定理を用いて全部の観測データに基づくパラメータの事後分布を得る。提案する方法が論理的整合性と実用性を兼ね備え、広く応用できるものと考えられる。

The Japanese Agriculture Standard System of a Publishing Beef's Producing Information and HACCP System

Satoru Sasaki

The Japanese Agriculture Standard System of publishing beef's producing information's is a system to certify information's of the beef's producing history correct by a thrd party. That will win consumer's confidences of beef's safety. But that has following problems.

Firstly, Cattle having bought at the livestock market don't correspond to beefs that have been certified as JAS standard. Secondly, doesn't eradicate anxieties about a beef safety of consumers. Therefore, it is necessary to function HACCP system in a production and distribution process of beefs. A cattle production process is quite different from a food manufacture process. The introduction of HACCP system in a cattle production process is more difficult than in a food manufacture process.

By case study of Soya cape ranch which is introducing HACCP system, there are two main point as following that are remarkably found, compared with that in food manufacture process.

Firstly, Soya cape ranch's HACCP system is making much of cattle's health and an environmental protection. Secondly, that is differing from a food manufacture process in Hazard Analysis, Critical Control point, and Critical Limit of HACCP's 7 Principal. And, that has problems who inspect whether HACCP system functions or not enough.

Effect of Leases by Impairment Accounting Standards (1)

Katsuhiro Yoshida

The first purpose of this paper is to search the cause of off-balance by Leases Accounting Standards in Japan. In addition, the second purpose is to clear leading on-balance of the non-transfer ownership finance leases by Impairment Accounting Standards in Japan.

The criteria to divide the operating leases and the finance leases are present value 90% and useful life 75% in America. Therefore, the operating leases become off-balance, the finance leases become on-balance. Passing once criteria, the finance leases become on-balance in America.

The criteria to divide the operating leases and the finance leases are non-cancelable and full-payout in Japan. And besides, the criteria of divide the transfer ownership finance leases and the non-transfer ownership finance leases are present value 90% and useful life 75%. The non-transfer ownership finance leases exist only in Japan. Therefore, the operating leases and the non-transfer ownership finance leases become off-balance, the only transfer ownership finance leases become on-balance. Passing twice criteria, the finance leases become on-balance. These on-balance leases are abridged by the structure of Leases Accounting Standards in Japan.

Impairment Accounting Standards deal with both the on-balance lasses and the off-balance leases. The former is a treatment of decreasing assets; the latter is a treatment of increasing liabilities. The treatments of the former and the latter are different, but both treatments recognize impairment loss. Impairment Accounting Standards do not distinguish the non-transfer ownership finance leases from the transfer ownership finance leases.

Consequently, it will be no need to distinguish the non-transfer ownership finance leases from the transfer ownership finance leases in Japan.

The Role of the Tax Accountant on the System to Audit by the Outsider in the Common Local Public Body

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The right to know is drawn from "the freedom of expression" secured by Article 21 of the Constitution, and its consciousness have been shown rapidly in 1990s.

Especially, from the middle of the same time, practical use of the official information disclosure system by residents were activated, and followed on them.

According to them, a part of actual condition of budget execution of a common local public body became clear. And they turned their viewpoints for the social accusation to the unsuitable budget application.

Reorganization of constitution which strengthens the check function of a local public body immediately came to be strongly desired through the audit requests and citizens' suit by these general residents.

Since the Local Government Act constitution in 1947, the supervisory auditor inspected the common local public body.

He was the executive agent who became independent of the head of a common local public body also from the local assembly.

However, the general citizenries (including whistleblowing of police alumnus) clarified the actual conditions which were unsuitable positive, such as budget execution and inaccurate accounting of the compensation expense for criminal investigation of the police, and supervisory auditor audit resulted in exposing the malfunction unexpectedly.

Naturally, such "audit permissive to relatives" was criticized, and made to audit by the outsider with independency and specialty nature introduced immediately.

This paper aims at considering the role with which the tax accountant accomplish in the system to audit by the outsider and arranging the issue about audit by the supervisory auditor in a common local public body.