Baseball is popular in most places in the world and is undoubtedly the most popular professional sport in Taiwan. The Chinese Professional Baseball League (CPBL) grew consistently since its founding in 1990. A rapid decline in attendance occurred, however, during the late 1990s and early 2000s. Fluctuations in game attendance imply variations in ticket sales, which warrants professional franchises' attention. Understanding attendance variation has industrial and academic implications as well. From the industrial perspective, understanding the factors that drive the variations in game attendance provides valuable information for more effective decision making in terms of developing sport management/marketing plans. From the academic point of view, this is worthy of sport management/marketing researchers' efforts. Although the demand for Major League Baseball (MLB) has been investigated, few researchers have focused on the Asian professional sports market. Accordingly, the need for the present study is well-justified not only for adding literature to the domain of sport management but also for deepening sport managers' understanding why game attendance fluctuates from a macro-level economic standpoint.

Previous demand studies for MLB or Minor League Baseball include the work of Demmert (1973), Noll (1974), and Scully (1989) which focus on the economics of the sport. In recent studies associated with the demand of MLB, researchers have shifted their attention to the effects of labor strikes (e.g. Matheson, 2006; Schmidt & Berri, 2002, 2004) and new stadiums (e.g. Coates & Humphreys, 2005; Poitras & Hadley, 2006; Zygmont & Leadley, 2005). Additionally, the relationship between competitive balance and game attendance in MLB has attracted researchers' attention (e.g. Schmidt & Berri, 2001). For example, Soebbing (2008) investigate the relationship between competitive balance and regular season average attendance in MLB, using the actual to idealized standard deviation ratio, which confirms the uncertainty of outcome hypothesis. In the Korean context, Lee (2006) reveals that within-season competitive balance strongly influences the Korean Professional Baseball League (KPBL) attendance.

Some researchers have focused on the relationship between price setting and demand for MLB games. There is a consensus that spectators at all team sports are highly unresponsive to changes in ticket price, implying that the demand for team sports was price inelastic (e.g. Burdekin & Idson, 1991; Fort & Quirk, 1996). Fort (2000) even suggested that “inelastic ticket pricing for team sports has been a recurrent finding for nearly thirty years (p. 10).” Moreover, Ahn and Lee (2007) demonstrate that MLB professional team owners are likely to set ticket prices at which attendance demand is price-inelastic if the intertemporal elasticity of substitution for games is small and/or if attending games is due to habit-formation. Consistent with previous studies, Coates and Humphreys (2007) show that attendance demand is price inelastic, drawing data from the National Basketball Association (NBA), the National Football League (NFL), and MLB.

This paper includes six variables that affect CPBL market demand such as ticket price, real income, the existence of homogenous substitutes, competitive balance, MLB effect, and game-fixing scandals. More specifically, this paper presents an investigation at attendance in the CPBL using annual league data from 1990 to 2009 and a demand model with exogenous variables to longitudinally investigate the causes of variations in CPBL attendance.

Given that the annual league-level data include 20 years (from 1990 to 2009), a parsimonious regression model comprises of standard demand determinants, such as ticket price, real income, homogeneous sport substitute, competitive balance, the MLB effect, and game-fixing scandals, is developed. The dependent variable is the CPBL annual average attendance per game. The data on annual average attendance and competitive balance are obtained from the official website of the CPBL. Information regarding ticket price is provided by the ticket sales manager in CPBL. Real income was acquired from the Taiwanese government official statistical database. Data associated with the MLB effect are gained from the MLB official website. The rest of the data in the current study are obtained from Taiwanese newspapers such as United Daily Newspaper, China Times Newspaper and Apple Daily.
The results of the current empirical model estimated by ordinary least squares (OLS) along with nonlinear regression technique, Feasible Generalized Least Squares (FGLS) are reported. In this study, the market demand drawn upon economics is used to discover the causes of variation in CPBL attendance during 1990 to 2009. The empirical evidence suggests that ticket price (p<.01), a homogenous sport substitute (p<.01), the Major League Baseball (MLB) effect (p<.01), and game-fixing scandals (p<.05) in CPBL negatively influence CPBL attendance. Additionally, real income (p<.05) is found to negatively affect CPBL attendance, making CPBL games an inferior good. Moreover, competitive balance (p<.10) is a positive predictor for CPBL game attendance. Some findings in the current study are consistent with previous work while others are not. Overall, the results in the present research add to the discussion in the field of sport management.