

# 行政院國家科學委員會專題研究計畫成果報告

## 中文計畫名稱

信用卡業務成本效率及成本動因之實證研究

## 英文計畫名稱

# An Empirical Study of Cost Efficiency and Cost Drivers of Credit Card Businesses

計畫編號：

執行期限：自民國 86 年 8 月 1 日起至民國 88 年 7 月 31 日止

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## 一．中文摘要

關鍵詞：信用卡、成本動因、成本效率、銀行業、經營績效。

## Abstract

The credit card businesses have been one of the major areas that US banks have tried to explore over the past twenty years. Since the Taiwan banking industry was deregulated in 1991 and new banks were allowed to operate, credit card business has been one of the main markets that Taiwanese banks have fiercely fight for. Although the importance of the credit card market has been recognized by the banking industry, the literature that provides evidence and reference for credit card management has been very limited. To my knowledge, there has no study that employed actual operating data of credit card operations to empirically examine cost drivers of credit card operations and effects of these cost drivers on cost efficiency of

credit card operations. The goal of this study is to use actual operating data of credit card operations to empirically examine the cost drivers and their effects on cost efficiency of credit card operations.

This study will make the following contributions. First, this study will add evidence to the banking literature related to credit card businesses and help us better understand cost drivers and their effects on cost efficiency of credit card businesses. This study using actual operating data, not surveyed data (which is usually less reliable), to empirically examine the cost drivers of credit card operations also pioneers a new research area in the banking industry. Second, the results of this study can provide evidence that may help top management of credit card businesses and banks better understand cost efficiency and cost behavior of their credit card operations. These evidence may also provide some guidelines for management of credit card operations to take measures to improve their operating efficiency. Third, the results of this study

will produce useful information to help top management of Taiwanese bank firms better understand the cost efficiency of credit card operations of US banks and also provide directions for them to improve cost efficiency of their credit card operations in the Taiwan market.

Keywords: Credit Card, Banking Industry, Cost Drivers, Cost Efficiency, Transactions, Operating Performance.

## 二、計畫緣由與目的

信用卡業務是銀行新產品中最重要之業務之一，因此在國內外都有一個共同的現象：銀行爭先設立信用卡部門以搶奪信用卡的市場，信用卡的促銷活動幾乎時時在發生。信用卡業務是一個高科技且人力密集的業務，隨著資訊科技（Information Technology）的發展，信用卡業務的競爭將愈來愈激烈。在愈來愈競爭的環境中，了解銀行信用卡業務成本動因及成本效率，對銀行管理當局及學術研究者，均極為重要。

儘管信用卡業務的重要性與競爭程度，與日遽增，但有關這方面的學術性研究卻不多見，主要原因可能是有關信用卡業務的實際經營資料，常被銀行管理當局視為業務機密，研究人員很難得到足夠的實際經營資料以從事紮實的學術性研究。

要提高一項產品的獲利力，主要可從二方面著手，一是提高該產品之收入，二是降低該產品之成本。為了達到降低成本的目的，首先必須了解任何一項產品之成本動因（Cost Driver）之後，才能針對主要成本動因採取改善成本效率（Cost Efficiency）的對策。

本研究利用美國個別銀行之信用卡業務之實際經營資料做實證研究。以美國銀行為主要研究對象的原因，是因為美國銀行的家數多，因此比較

能符合統計學上對樣本量的要求（在統計學上，若樣本太少，分析結果比較不具可靠性），而在另一方面，由於美國銀行在信用卡業務的經營上比較成熟，研究結果可作為我國銀行在信用卡業務經營上的借鏡。

## 三、結果與討論

本研究計畫的主要目的即在探討美國銀行業信用卡業務的成本動因（Cost Drivers of Credit Card Operations）及其對信用卡業務成本效率之影響。

本研究根據理論探討的結果提出實證假設如下：假定其他因素不變，信用卡發卡數（Number of Accounts (NA)）、信用卡流通卡數（Number of Active Accounts (NAA)）、預支現金之信用卡數（Number of Cash Advance Accounts (NCAA)）、信用卡簽帳單數（Number of Sales Slips (NSS)）、信用卡之零售商數（Number of Dealers (ND)），及資訊科技密度（Information Technology Intensity (ITI)）均為信用卡業務之主要成本動因。

實證結果顯示信用卡發卡數、信用卡之零售商數，及資訊科技密度為信用卡業務之主要成本動因，亦即影響銀行信用卡業務經營效率之主要因素。

在敏感性分析裡，我們探討替代的成本效率衡量方式及統計估計上所可能遭遇到的問題（例如，Heteroskedasticity, Multicollinearity, 及 Normality），以確定基本統計分析的穩定性及可靠性。

## 四、計畫成果自評

研究內容與原計畫相符程度

本研究內容已完成原計畫所希望完成的目標。就銀行信用卡業務實際經營資料之蒐集、統計估計與分析、與實際假設之檢定而言，與原計畫高度相符。

#### 達成預期目標情況

本研究已達成原訂的主要目的：探討美國銀行業信用卡業務的成本動因及其對信用卡業務成本效率之影響。

本研究具體而言，完成銀行經營管理與信用卡業務等重要文獻之蒐集與探討，信用卡業務成本動因與成本效率關係之探討，研究假設與計量經濟模式之建立，實證分析及統計檢定。

#### 研究成果的學術或應用價值

第一、對學術文獻而言，有補充現有文獻不足的功用。就筆者所知，本研究是第一個以銀行信用卡業務之實際經營資料，探討信用卡業務之成本動因及成本效率之研究，因此本研究完成後，將可補強信用成本效率文獻之不足。第二、對我國銀行業的高階管理而言，本研究可幫助他們了解美國銀行在信用卡業務方面之實際經營情況（尤其是信用卡業務之成本動因及成本效率），有助我國金融機構管理者改進我國銀行信用卡業務之經營管理，提升信用卡業務之經營績效。我國銀行管理當局對美國信用卡業務多所了解，不但有助於他們改善國內信用卡業務，對銀行未來信用卡業務的國際化也將有所助益。

#### 是否適合在學術期刊發表

本研究成果適合在學術期刊發表。目前筆者計畫將研究成果先在學術性研討會發表，再送學術性期刊發表。

#### 主要發現

實證結果顯示信用卡發行人數、信用卡流通卡數、預支現金之信用卡數、信用卡簽帳單數、及信用卡之零售商數均為信用卡業務之主要成本動因。亦即這些因素均為影響銀行信用卡業務經營效率之主要因素。

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