

# 科技部補助專題研究計畫報告

從社會網絡鑲嵌觀點探討女性創業演進歷程之挑戰與機會(L01)

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計畫主持人：陳育威

計畫參與人員：碩士班研究生-兼任助理：洪筱婷  
大專生-兼任助理：謝珮怡  
大專生-兼任助理：吳惠珍

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本研究具有政策應用參考價值：否 是，建議提供機關勞動部, 經濟部

(勾選「是」者，請列舉建議可提供施政參考之業務主管機關)

本研究具影響公共利益之重大發現：否 是

中華民國 109 年 10 月 26 日

中文摘要：對於如何支援女性創業者，已有許多討論與辯論，學者認為改善女性獲得財務資本、貸款的管道，或提供訓練以協助她們培養新技能與人力資本，對於引導女性所領導的企業邁向成功，極為重要。此外，促成這些企業成功的另一個關鍵因素往往遭到忽視，那就是接觸人脈網絡的管道。本研究的目的為：(1)分析女性企業家的人格特質與創業績效關係；(2)分析這些女性企業家在創業歷程中面臨的主要挑戰或障礙，尤其在社會資本網絡方面；(3)分析外部公共商業環境是否影響女性企業家的創業績效。本研究實證研究採用網路問卷調查方式，問卷有效回收樣本29份，透過樣本資料分析、描述性統計分析、迴歸分析等統計分析方法來研究假設及進行驗證。研究結果顯示雖然社會資本在研究上對創業績效的影響未獲支持，但卻顯示外在公共商業創業環境對企業的長成非常有幫助。本研究建議女性創業家仍應積極擴建外在社會資本，不斷提升顧客滿意度、做好內部管理、外部公共關係，如此，能增加引進嫁接政府輔導的女性團體創業或是精英創業資源，或其他外部資源，就能不斷拓展公司規模與能見度，朝中小企業，甚至是大型企業前進。

中文關鍵詞：女性創業、女性創業家、社會資本、人格特質、公共商業環境

英文摘要：There have been many discussions and debates on how to support female entrepreneurs. Scholars believe that improving women's access to financial capital and loans, or providing training to help them develop new skills and human capital, will help guide women-led enterprises to succeed. The purpose of this research is to: (1) analyze the relationship between the personality traits of female entrepreneurs and entrepreneurial performance; (2) analyze the main challenges or obstacles these female entrepreneurs face in the course of entrepreneurship, especially in terms of social capital networks; (3) analyze whether the external public business environment affects the entrepreneurial performance of female entrepreneurs. The empirical research of this research adopts the online questionnaire survey method. The questionnaire effectively collects 29 samples. The hypotheses are studied and verified through statistical analysis methods such as sample data analysis, descriptive statistical analysis, and regression analysis. The research results show that although the impact of social capital on entrepreneurial performance is not supported in research, but it shows that the external public business environment is very helpful to the growth of enterprises. This research suggests that female entrepreneurs should still actively expand external social capital, continuously improve customer satisfaction, internal management, external public relations, so as to increase the interaction of government-assisted female group entrepreneurship or elite entrepreneurial resources, or other external resources.

英文關鍵詞：female entrepreneurship, female entrepreneurs, social capital, personality traits, public business environment

## 從社會網絡鑲嵌觀點探討女性創業演進歷程之挑戰與機會

### 摘要

對於如何支援女性創業者，已有許多討論與辯論，學者認為改善女性獲得財務資本、貸款的管道，或提供訓練以協助她們培養新技能與人力資本，對於引導女性所領導的企業邁向成功，極為重要。此外，促成這些企業成功的另一個關鍵因素往往遭到忽視，那就是接觸人脈網絡的管道。本研究的目的為：(1)分析女性企業家的人格特質與創業績效關係；(2)分析這些女性企業家在創業歷程中面臨的主要挑戰或障礙，尤其在社會資本網絡方面；(3)分析外部公共商業環境是否影響女性企業家的創業績效。本研究實證研究採用網路問卷調查方式，問卷有效回收樣本 29 份，透過樣本資料分析、描述性統計分析、迴歸分析等統計分析方法來研究假設及進行驗證。研究結果顯示雖然社會資本在研究上對創業績效的影響未獲支持，但卻顯示外在公共商業創業環境對企業的長成非常有幫助。本研究建議女性創業家仍應積極擴建外在社會資本，不斷提升顧客滿意度、做好內部管理、外部公共關係，如此，能增加引進嫁接政府輔導的女性團體創業或是精英創業資源，或其他外部資源，就能不斷拓展公司規模與能見度，朝中小企業，甚至是大型企業前進。

關鍵字：女性創業、女性創業家、社會資本、人格特質、公共商業環境

## Abstract:

There have been many discussions and debates on how to support female entrepreneurs. Scholars believe that improving women's access to financial capital and loans, or providing training to help them develop new skills and human capital, will help guide women-led enterprises to succeed. The purpose of this research is to: (1) analyze the relationship between the personality traits of female entrepreneurs and entrepreneurial performance; (2) analyze the main challenges or obstacles these female entrepreneurs face in the course of entrepreneurship, especially in terms of social capital networks; (3) analyze whether the external public business environment affects the entrepreneurial performance of female entrepreneurs. The empirical research of this research adopts the online questionnaire survey method. The questionnaire effectively collects 29 samples. The hypotheses are studied and verified through statistical analysis methods such as sample data analysis, descriptive statistical analysis, and regression analysis. The research results show that although the impact of social capital on entrepreneurial performance is not supported in research, but it shows that the external public business environment is very helpful to the growth of enterprises. This research suggests that female entrepreneurs should still actively expand external social capital, continuously improve customer satisfaction, internal management, external public relations, so as to increase the interaction of government-assisted female group entrepreneurship or elite entrepreneurial resources, or other external resources.

Keywords: female entrepreneurship, female entrepreneurs, social capital, personality traits, public business environment

## 一、前言

International Monetary Fund (2018)指出，基於經濟與社會需求而主張女性經濟賦權非常明確。性別平等促進經濟增長，且會帶來更好的發展成果。它不僅有助於減少收入不平等，還促進經濟多樣化，進而支持經濟復原力。性別平等是聯合國 17 個全球可持續發展目標之一，為消除貧困，保護地球和確保所有人享有和平與繁榮提供了發展路徑。而女性創業正是其中重要的議題。

波士頓顧問集團 (Boston Consulting Group, BCG) 2019 年的報告顯示，如果世界各地的男性和女性皆能平等地以創業者身分投入商界，全球國內生產毛額 (GDP) 最終可能會提高約 3% 至 6%，使全球經濟增加 2.5 兆至 5 兆美元。

全球創業觀察 (Global Entrepreneurship Monitor; 以下簡稱 GEM) 2018 全球創業精神暨發展指數 (Global Entrepreneurship Index, GEI) 報告，臺灣在 137 個受評國家中，綜合分數為 59.5，排名第 18，較去年下滑 2 名，在亞太區位居第 3；在各面向的表現上，在創業態度的評分為 54.0，全球排名第 22；創業能力評分為 54.8，排名第 24；創業企圖心評分為 69.6，排名第 11，整體表現領先主要競爭對手如韓國、新加坡、日本及中國大陸等鄰近國家 (Global Entrepreneurship Monitor, 2018)。

對於如何支援女性創業者，已有許多討論與辯論，Unnikrishnan 與 Hanna(2019)認為改善女性獲得財務資本、貸款的管道，或提供訓練以協助她們培養新技能與人力資本，對於引導女性所領導的企業邁向成功，極為重要。此外，促成這些企業成功的另一個關鍵因素往往遭到忽視，那就是接觸人脈網絡的管道。本研究的目的是：(1)分析女性企業家的人格特質與創業績效關係；(2)分析這些女性企業家在創業歷程中面臨的主要挑戰或障礙，尤其在社會資本網絡方面；(3)分析外部公共商業環境是否影響女性企業家的創業績效。

## 二、文獻探討

### (一) 女性創業

創業(Entrepreneurship)是創新活動組合的實踐過程，創新活動包括：開發新商品、推出新生產方式、將原產品推廣至新市場、獲取新供應來源以及發展新型組織型態等五項活動，此即為創業之過程(Schumpeter, 1934)；此外，Schumpeter(1934)認為創業家也同時為創新者之角色，會依據所面對環境中變動情勢做出適合的反應措施，並且在創新活動中最大化企業利潤與帶動社會經濟發展。Lumpkin & Dess (1996)認為創業是指無論現有企業或是新創公司，為使公司能夠擴張現有規模或營運範疇、技術進步以及創造利益而追求商業市場中機會的過程；Venkataraman(1997)認為過往學者對創業定義較為狹義，其提出廣義的創業定義應包含有利商機、市場缺口的發現以及辨識、衡量、開發的整體過程。Zahra & Dess(2001)認為除以上敘述外，也應包括開發商機後之結果，即為對社會經濟帶來之影響。

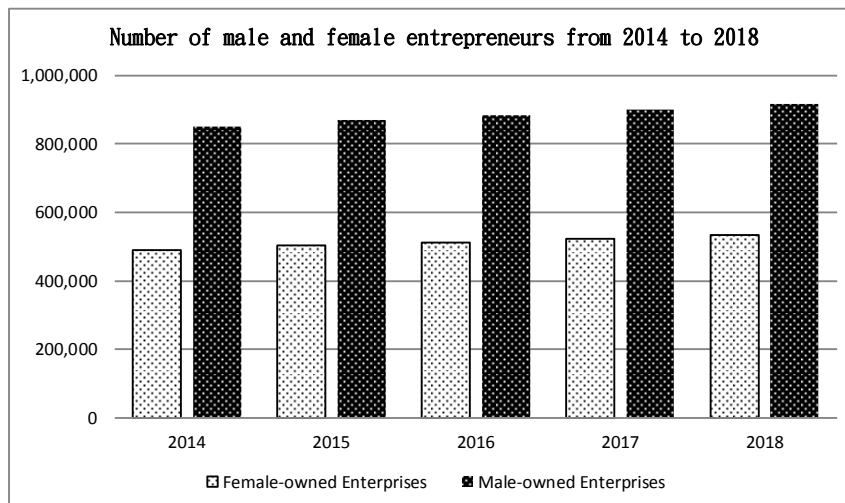
Miller, D.(1983)提出對新創企業的觀點：(1)創業者創業精神與意志力是公司成敗之關鍵；(2)不確定性高；(3)建立團隊、募集資金、產品研發與市場開拓為創業家最重要之工作；(4)面臨現金短缺、產品缺乏競爭力、無法吸引到優秀人才等風險。通常新創之中小企業在草創初期，會面臨許多困難，諸如組織制度不健全、無法招募優秀人才、缺乏行銷優勢、研發能力與資金不足與獲利不佳等問題，但透過創業家強烈企圖心與創業精神，可以克服初期困難並開創初步結果。

回顧先前學者對創業以及創業家定義，本研究定義女性創業為「女性尋求市場中能獲利或是成長的機會，透過整合資源開拓市場或推出符合需求的服務及產品，並成立組織且獲取新財富。」女性創業家則是「具有創新、願意承擔風險以及對市場變化有預先準備之特性，並且掌管及營運一間企業或組織的女性」。根據學者歸納整理女性創業家男性創業家的差異處，相較於男性創業者，女性創業

者不急於追求企業的快速擴張，而是在兼顧既有資源所能提供的品質與服務下，以穩健的腳步追求成長，這種不一樣的思考模式，勢必為傳統以男性為思考模式的商界挹注新的文化（蔡璧如，1999；Lee-Gosselin & Grise, 1990）。

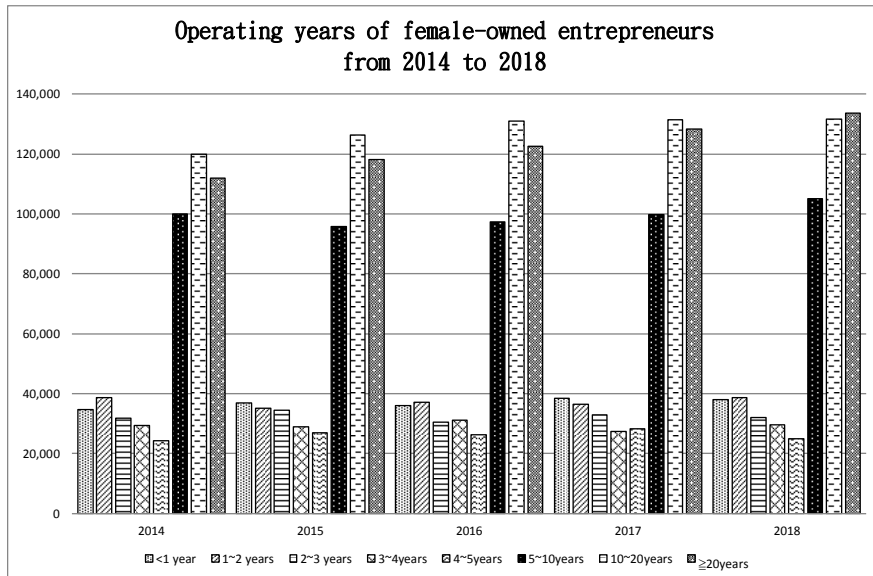
## (二)台灣女性創業現狀

根據行政院主計總處人力資源調查的臺灣經濟統計資料顯示，臺灣女性創業者的比重呈逐年上升趨勢，1996年女性雇主或自營作業 者達36.7萬人，占全體雇主或自營作業者的 18.14%；而2016年，女性雇主或自營作業者 已達41.8萬人，其占比達23.70%，可見近年來我國女性企業家人數相對全體企業家人數 之比重明顯上升。另根據2017年《經濟部中小企業白皮書》統計，我國女性企業家數總計有516,249家，約占總家數的35.83%，平均每3位企業主當中就有1位是女性。經濟部公布的中小企業家數性別統計顯示，從2014至2018年間，女性創業企業由490,688間微幅增加533,659間如圖一。在企業壽命方面，女性創業之企業超過20年逐年增加，2018年達到133,758間如圖二。在產業方面，女性為首的企業主要為批發零售業（49.49%），其次為旅宿業業如圖三（14.17%）。

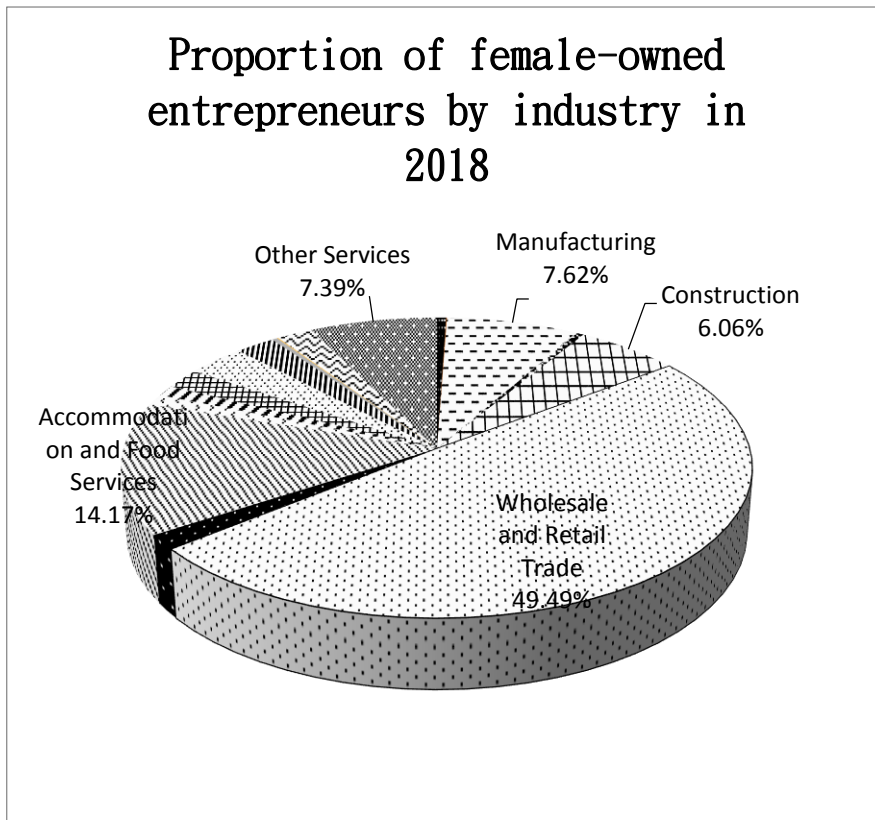


圖一 女性創業企業數





圖二 女性創業企業數企業壽命



圖三 女性創業企業產業別

在台灣，主要針對女性的創業計劃資源並不多。勞動部的微型創業鳳凰貸款是政府提供給女性創業家重要資源，它提供創業諮詢、培訓管理、就業輔導

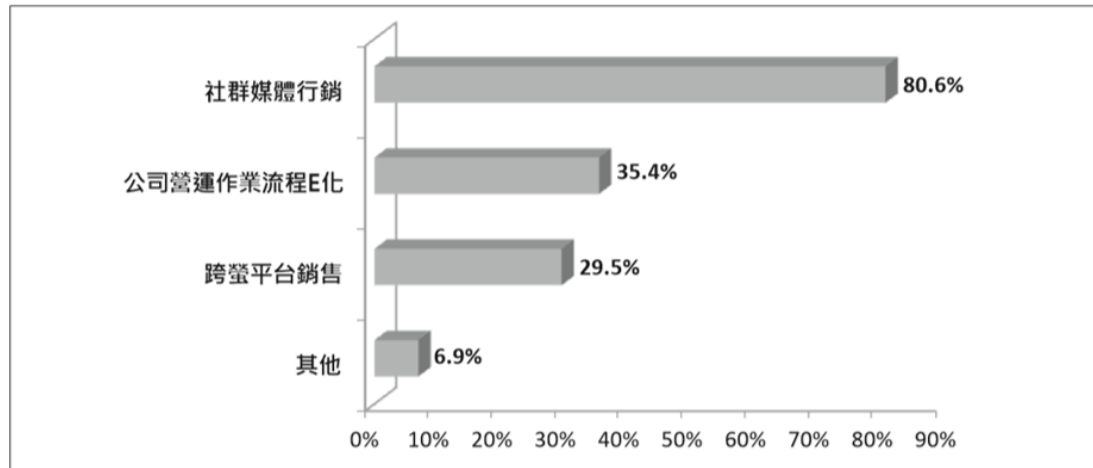
及貸款等。貸款適用於 20 至 65 歲之間的女性或 45 至 65 歲之間的長者，無需抵押。政府提供 95% 的信用擔保和特殊貸款利率（最高為新台幣 100 萬元）。

經濟部的「女性創業飛雁計畫」擁有 12 年的創業服務經驗，為處於不同創業階段的婦女提供綜合服務，且還在創業起初就建立網路線上客服詢洽，提供創業發展和傑出人才能力培訓等。

根據經濟部中小企業處 2016 年發布「1,000 名飛雁女性創業者追蹤調查現況」(圖四)指出，從創業的行業類型來看，我國女性創業者多集中在批發及零售業(占 38.8%)、住宿及餐飲業(占 14.3%)等消費服務類型之產業，原因在於女性大多在此領域內工作，且消費服務類之產業進入門檻和資金需求相對較低，女性創業較容易；但女性在科技相關領域，如資訊及通訊傳播業、專業、科學及技術服務業等，創業比率仍相對偏低。在科技應用方面，有 80.6% 的女性創業者會使用社群媒體的方式行銷，35.4% 應用於企業營運作業流程或 E 化，以跨螢平臺方式銷售者比重占 29.5%，顯示出臺灣女性能掌握科技趨勢並善加運用於創業上，以促進更多互聯商機。

2019 萬事達卡女性企業家萬事達卡指數報告顯示，在 2018 至 2019 年，台灣女性企業主的得分與排序(Women Business Ownership Rate (F%T) scores and rankings)在 58 個市場中位居第 41 位，而在萬事達卡女性企業家的得分與排序(Score & Ranking for Mastercard Index of Women Entrepreneurs)則從 15 名晉升至第 6 名。報告並顯示台灣女性企業主在知識資產和財務管道以及參

與勞動力和創業條件方面具有優勢；然而，台灣女性較為缺乏自信心和創業動力來開展自己的事業。

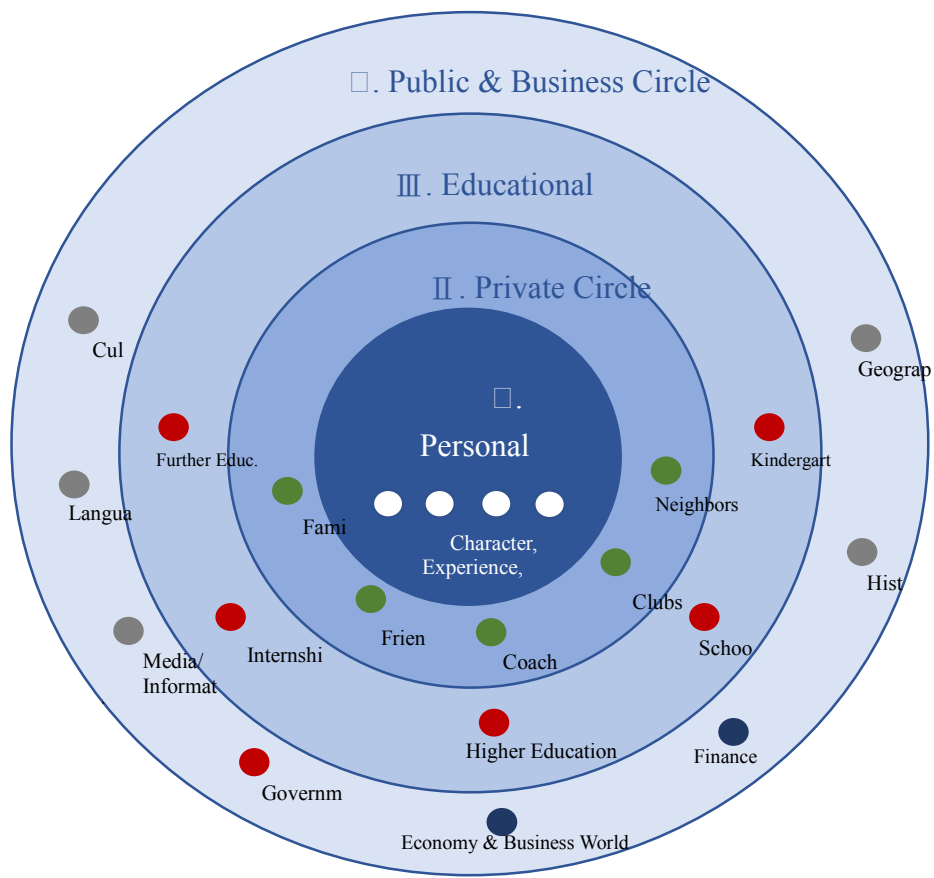


圖四 飛雁女性創業者科技應用狀況

### (三)創業資源

中小型或微型企業創業資本中最重要的就是社會資本及財務資本(Moyo, 2003)。德國學者 Schwarzkopf (2016) 嘗試藉由創業家個人角度的親疏遠近關係，將創業生態系統進行通則化，表示生態體系隨著每個創業家的主觀差異而有所不同，同時能夠讓創業者可以主動建構串接相應的資源與機會。他從創業者本身的环境觀點出發，由內而外的同心圓模型 (Concentric-Circles Model)，所構築而成的創業生態系統，他認為以創業者個人為圓心，向外拓展「個人圈」(Personal Circle)、「私人圈」(Private Circle)、「教育圈」(Education Circle) 以及「公共與商業圈」(Public & Business Circle)，並依照各圈本身的屬性特徵，深度扎根拓展相應的資源系譜(Schwarzkopf, 2016)如圖五。本研究即以此

生態系統模型來分析女性企業家在創業歷程中這些創業資源如何影響創業績效。



圖五 德國學者 Schwarzkopf (2016) 提出的創業生態系統 (Schwarzkopf, 2016)

1. 個人圈：

Akintimehin et. al., (2019)指出創業過程中是一個相當複雜的階段與實現自我為目的，看重創業者本身知識、個人特質、技能與經驗。本研究依據 Costa & McCrea(1992)之 NEO-PI 量表作為衡量人格特質指標。此量表經過長時間驗證與修訂，廣為企業及各職場單位用以人格測驗衡量。國內文獻之人格特質向度名詞，因使用術語雖有不同其意涵表達卻相近。為使研究明確並一致性，故參酌人格因素名詞，將各構面說明為：(一)敏感衝動性(neuroticism)、(二)正向積極

性 (extraversion)、(三)開朗敏捷性 (openness)、(四)和善利他性 (agreeableness)、(五)認真盡職性 (conscientiousness)。

## 2. 私人圈：

由家人、朋友、鄰居，聯合創始人和社交網絡組成，研究表明，具有企業家背景的個人更有可能成為企業家 (Janssen, 2006)。Akintimehin et. al., (2019) 指出創業要思考透過怎樣的方式進行並能成功達成目標。所以，社會資本是要有效的利用各種資本與資源，提升企業績效與永續競爭優勢。

Coleman (1988) 認為社會資源可以轉為個人所可運用的資本，即為社會資本。在社會資本中，存在一種人與人之間的信任以及互相影響的資訊傳遞，透過資源的轉換，有助於團體以及個人達到共同目標。Coleman(1990)提出社會資本所注重的是關係層面，當個人擁有的關係越多，形成的網絡可以分佈越廣，對於資訊取得以及資源支配能力就越強大，資源越豐富越有助於目標的達成。

Nahapiet and Ghoshal (1998)認為社會資本可以從四種面向項進行衡量：信任 (trust)、義務與期待 (Obligations and expectations)、規範(norms)、認同 (identification)，其中信任是最常被使用衡量的指標。Dyer and Nobeoka (2000) 則認為共同的信念、願景或目標，進行協調並相互合作也是社會資本進行衡量分類的重要變項。

Yli-Renko, Autioand, and Sapienza (2001)從結構觀點認為組織網絡內各成員間經由互動所發展出來的一種人際關係，在互動的社會結構中，一位成員

所處位置的接觸會帶給該成員特定之利益。Putnam(1995) 描述社會資本為在社會組織中的網絡、規範和社會信任等有助於相互利益合作的特色。

Briggs(1998)認為個人透過互惠的社會網絡可以取得的資源，存在著兩種型的社會資本：一、為「社會支持」(social support)：通常來自於強連結(strong ties)，也就是來自於親戚、鄰里以及好朋友的協助；二、為「社會槓桿」(social leverage)透過文獻指出，透過社會槓桿產生的連結，通常是來自於家人及朋友之外的「弱連結」(weak ties)。

Adler and Kwon (2002) 指出社會資本可以分為外部社會資本和內部社會資本。外部社會的定義是與外部機構如忠實客戶、供應商、貿易和專業協會、市場主管部門和債權人的社會聯繫，以及與這些聯繫的無形資源如信任，忠誠和推薦。內部社會資本指與朋友，家人，同事，業務夥伴和員工的社會聯繫，以及與這些聯繫的無形資源，例如信任、支持和策略建議。這兩類社會資本對企業家非常重要，因此它們能夠相互補充以確保有效的業務績效和可持續的競爭優勢。

謝正一、吳毓星(2016)指出，以女性角度來看，社會資源對創業行為相較於男性，更顯複雜與糾結。由於創業活動需要相當的冒險與勇氣，除了家人與朋友的支持，更重要的是財務上的支持，而此對創業女性來談擁有社會資源成了不可缺少的重要支柱，社會資源成了女性創業的重要支持。

廖芳麗(2009)指出，女性創業家的社會網路與男性的區別在於：男性的網路中很少有女性成員；而女性的網路中卻經常包括男性成員；女性的社會網路

中包括了更多的親朋好友，而男性的社會網路則包含更多工作上的夥伴。由於中國傳統文化的陳規限制了女性可以間接通往金錢和融資的圈子，使得女性未能和掌握關鍵資源的人頻繁交往。女性缺乏和商業關係網絡進行交換的合適社會資本，因此，女性往往更難得到相應的社會網路支援。廖芳麗(2009)指出，創業並不是年輕人的專利。特別是在企業有過管理經驗的中年女性創業者因其具備更多的知識資源、人脈資源、行業資源和物質資源。因此有更多的優勢。

### 3. 教育圈：

包括企業家在其一生中遇到的所有教育機構所提供的所有培訓和學習機會。一些研究指出，即使一些成功的企業家從大學退學，他們在教育機構中學習肯定會獲得經驗，投入和啟發，受過高等教育的企業家以及對企業家活動的真正複雜性有充分了解的企業家更有可能並且有能力創辦和管理成功的創業公司 (Davidsson&Honig，2003; Levie&Autio，2008)。

### 4. 公共與商業圈：

岸川善光(2010)指影響社會中一切企業的宏觀環境，對個別企業的影響比較間接，例如政治法律文化環境、經濟環境、金融環境、社會文化與自然環境以及技術環境。

#### (四)創業績效

績效(performance)是一個呈現企業營運活動最終結果的整體性概念，對企業目標達成度之一種衡量(Szilagyi, 1981)。Wiklund &Shepherd(2003)採用創

業績效之客觀指標為營業額成長幅度、獲利成長率、市場份額、組織成長規模、員工成長人數、研發費用提升等變數。而Cooper(1995)則認為創業家對於本身的創業成果滿意與否，亦可視為一種創業績效的衡量方式，因為創業著眼於能創造利潤之機會發掘與利用，滿足的程度會隨著創業家的初始目標和對於所認知到的績效標準而改變。

績效評估是指企業為了實現其整體目標而用量化標準或主觀判斷來度量其日常營運所表現之結果Szilagyi(1981)，Borman & Motowidlo(1993)認為工作績效是個體對於組織的行為，可以對組織目標的貢獻程度高低給予量測。創業績效不等同於一般的組織績效(Venkataraman, 1997)，除了經濟績效考量外，仍須加入個人能力的成長、實現願景目標等非經濟因素。Miller & Toulouse(1986)則認為財務績效的絕對數據受到產業關聯因素的影響。Boulton & Carland(1984)認為創業家是建立和管理企業，並企圖使企業獲利及成長的人，

Bonoma & Clark(1988)認為財務指標定義包括營業額、獲利率、銷售成長率、市場佔有率與現金流量等。非財務面指標定義，又可稱為行銷績效指標，包括顧客滿意度、顧客忠誠度與品牌權益等(Brick & Chidambaran, 2010)。本研究以獲利成長率、員工成長人數與年營業額作為績效衡量指標，且財務指標為企業是否能夠賺取利潤之重要指標，可直接了解企業之目標達成率以及整體績效表現，而員工成長人數可指出組織規模以及業務規模是否成長等指標。考量到新創中小企業的市場份額較難估計與財務數據資料較難取得等因素，因此本研究擬依據Cooper(1995)之定義 創業家對於本身的創業成果滿意與否，亦可視為創業績效的衡量方式。本研究依據Murphy, Trailer & Hill(1996)及Venkataraman(1997)之觀點，將創業績效包括經濟性與非經濟性指標：

1. 經濟性指標：以組織財務績效為主要指標。
2. 非經濟性指標：以創業者主觀滿意度，包括個人目標達成度、個人成長度。

### 三、研究設計與假說問卷發展

#### (一) 研究假說



本研究主要探討在不同階段創業歷程中，創業家的四種「個人圈」(Personal Circle)、「私人圈」(Private Circle)、「教育圈」(Education Circle) 以及「公共與商業圈」(Public & Business Circle) 創業資源是否對其創業績效有顯著影響。

Ciavarella et. al., (2004)進行創業家的人格特質對新創事業的長期成長關係之研究，以五大人格特質外向性，情緒穩定性，愉悅性，謹慎性、及對經驗的開放性作為人格特質的測量方法，發現創業家的謹慎性對新創事業的長期生存有正向的影響，開放性與創業家的長期生存有負向的影響，其餘外向性，情緒穩定性，愉悅性則與新創事業的長期生存無關，顯示創業家不同的人格特質構面確實會對創業績效構面有顯著的影響存在。本研究提出假說一 A 至一 E：

假說一 A：創業家外向性人格特質對創業績效具顯著的影響。

假說一 B：創業家友善性人格特質對創業績效具顯著的影響。

假說一 C：創業家嚴謹性人格特質對創業績效具顯著的影響。

假說一 D：創業家情緒穩定性人格特質對創業績效具顯著的影響。

假說一 E：創業家智性想像人格特質對創業績效具顯著的影響。

社會資本包括人際網絡及家庭支持系統。人際網絡係指個人所參加的社會團體；家庭支持系統則包括父母的職業背景及親友的支持行為。當個人擁有的關係越多，形成的網絡可以分佈越廣，對於資訊取得以及資源支配能力就越強大，資源越豐富越有助於目標的達成。Adler and Kwon (2002) 指出社會資本可以分為

外部社會資本和內部社會資本。本研究提出假說二 A 與二 B：

假說二 A：創業家內部社會資本對其創業績效具顯著的影響。

假說二 B：創業家外部社會資本對其創業績效具顯著的影響。

Audretsch (1995) 的創業知識溢出理論中，提及在擁有豐富的知識背景之下，會創造出更多的創業機會。創業者的知識大多是來自於過去的職涯經驗 (Evans and Leighton, 1989; Shane and Khurana, 2003)，知識已被證明為促進創業行動最好的推手。本研究提出假說三：

假說三：創業家教育背景程度對其創業績效具顯著的影響。

個別企業仍會受到社會中一切外在宏觀環境影響，從文化到企業家精神發展、以及總體經濟與財務市場皆屬於企業外在環境。本研究提出假說四：

假說四：創業家創業之外在公共商業環境對其創業績效具顯著的影響。

## (二) 操作型定義與問卷設計

茲將研究模型各個構面之衡量變數的操作型定義說明如下，本研究問卷採用李克特六點量表，分數越高代表受訪者對此問項同意度越高。

人格特質主要以五大人格特質為研究構面，採用的是 Costa(1994)之 NEO-PI 量表內的 30 個衡量因子。此量表經過長時間的衡量、驗證、及改良，已相當成熟，廣為許多職場單位所使用。本研究簡化使用其衡量指標如下

### 1. 個人特質-外向性

"1. 我和別人相處時感覺很自然。"

"2. 我會主動與別人交談。"

"3. 我在聚會上會和很多不同的人聊天。"

## 2. 個人特質-友善性

"1. 我會抽空幫助別人。"

"2. 我能感受別人的情緒。"

"3. 我讓別人在和我相處時感覺很放鬆。"

## 3. 個人特質-嚴謹性

"1. 我喜歡有條理。"

"2. 我按計畫做事。"

"3. 我對工作要求準確無誤。"

## 4. 個人特質-情緒穩定性

"1. 我很容易不高興。"

"2. 我情緒變化很大。"

"3. 我經常感到憂鬱。"

## 5. 個人特質-智性想像

"1. 我的詞彙豐富。"

"2. 我有生動的想像力。"

"3. 我總有好點子。"

Adler and Kwon (2002) 指出社會資本可以分為外部社會資本和內部社會資本。

本研究用內部與外社會資本兩大衡量指標。

#### 6. 社會資本-內部

- "1. 當我公司需要財務支持時，家人會提供協助。"
- "2. 當我公司需要財務支持時，朋友會提供低於市場利率的貸款。"
- "3. 家人會對公司經營提供相關建議。"
- "4. 家人會幫忙推銷或介紹我的公司。"
- "5. 朋友會幫忙推銷或介紹我的公司。"
- "6. 家人會盡可能購買或使用我公司的產品/服務。"
- "7. 家人會盡力為我拓展業務。"
- "8. 朋友會對我的事業給予精神支持。"
- "9. 朋友會盡可能購買或使用我公司的產品/服務。"

#### 7. 社會資本-外部

- "1. 當我公司需要財務支持時，我參加的社團或俱樂部之成員會提供低於市場利率的貸款。"
- "2. 當我公司需要財務支持時，鄉里鄰居會提供低於市場利率的貸款。"
- "3. 我參加的社團或俱樂部之成員會幫忙推銷或介紹我的公司。"
- "4. 鄉里鄰居會幫忙推銷或介紹我的公司。"
- "5. 我參加的社團或俱樂部之成員會盡可能購買或使用我公司的產品/服務。"

- "6. 鄉里鄰居會盡可能購買或使用我公司的產品/服務。"
- "7. 我參加的社團或俱樂部之成員會對我的事業給予精神支持。"
- "8. 鄉里鄰居會對我的事業給予精神支持。"
- "9. 對於公司的經營，合夥人、公司主管跟我有相同的抱負與企圖心。"
- "10. 公司員工信任我們的產品/服務。"
- "11. 公司所有的利益相關人（股東、供應商跟內部人員等）都理解，並且實踐公司的願景、任務及價值。"
- "12. 我們與客戶建立了良好的關係。"
- "13. 我們與供應商建立了良好的關係。"
- "14. 我們能夠獲得客戶的推薦。"
- "15. 客戶信任我們的產品/服務。"
- "16. 客戶會向我們提供重要的市場訊息或經營建議。"
- "17. 我們能夠享有供應商的特別折扣。"
- "18. 客戶會給予建議，使我們更能滿足客戶需求。"
- "19. 我們能從供應商獲取市場訊息。"

#### 8. 教育圈：

問卷詢問創業時的教育程度並編碼如下高中高職為 1;專科為 2;大學為 3;碩士為 4;博士為 5。

## 9. 公共商業環境

- "1. 我公司的產品/服務有被媒體正面報導過。"
- "2. 我的公司有取得政府部會在財務或非財務資源的補助。"
- "3. 創業至今，國內的總體經濟、企業環境對我的創業有利。"
- "4. 創業至今，國內金融系統的穩定性對我的創業有利。"
- "5. 我公司所在的地理位置對我的創業有利。"

## 10. 創業績效：

本研究參考 Akintimehin et. al., (2019) 文獻，簡化使用其衡量指標。

- "1. 與同業比較，我對於公司最近三年的「投資報酬率」感到滿意。"
- "2. 與同業比較，我對於公司最近三年的「市場占有率」感到滿意。"
- "3. 與同業比較，我對於公司最近三年的「稅後淨利率」感到滿意。"
- "4. 與同業比較，我對於公司最近三年的「整體財務表現」感到滿意。"
- "5. 與同業比較，我對於公司最近三年的「產品或服務質量」感到滿意。"
- "6. 與同業比較，我對於公司最近三年的「客戶滿意度」感到滿意。"
- "7. 與同業比較，我對於公司最近三年的「客戶偏好率」感到滿意。"
- "8. 與同業比較，我對於公司最近三年的「客戶忠誠度」感到滿意。"
- "9. 與同業比較，我對於公司最近三年的「產品或服務創新速度」感到滿意。"
- "10. 與同業比較，我對於公司最近三年的「營業收入」感到滿意。"
- "11. 與同業比較，我對於公司最近三年的「競爭優勢」感到滿意。"

#### 四、分析結果

由於本研究非經濟部之專案，經聯繫部會後無法接近女性微型創業者或飛雁計畫參與者，執行個案訪談法有其困難。本研究先以文獻探討來確認研究構面，其後再進行問卷發放。期望透過廣泛性數據收集，得以了解女性創業資源及人格特質對創業績效的影響。線上問卷期間自 109 年 5 月至 8 月，扣除不符資格之問卷，共計 29 份有效女性創業家問卷。

##### (一)敘述統計

	平均數	標準差	N
個人特質-外向性	4.896551724137930	1.113066150845330	29
個人特質-友善性	5.356321839080460	0.666256031169334	29
個人特質-嚴謹性	5.183908045977010	0.710388932688931	29
個人特質-情緒穩定性	2.528735632183910	1.304805651706290	29
個人特質-智性想像	5.287356321839080	0.775232366245680	29
社會資本-內部	3.888409961685820	0.996580371369595	29
社會資本-外部	4.726166328600410	0.863134664380596	29
創業時的教育程度	2.34	1.173	29
公共商業環境	3.6759	0.85091	29
創業績效	4.375402298850580	0.857989257801322	29

五項個人特質中以友善性、嚴謹性與智性想像的得分數較高。外部社會資本得分較內部社會資本為高。受訪者創業時教育程度平均在大專與大學之間。創業績效平均分數達 4.37 分。

(二)模型摘要

模型	R	R 平方	調整後 R 平方
1	.638 <sup>a</sup>	0.406	0.125

a. 解釋變數：(常數)，公共商業環境，創業時的教育程度，社會資本-外部，個人特質-情緒穩定性，個人特質-外向性，個人特質-嚴謹性，個人特質-友善性，社會資本-內部，個人特質-智性想像

R 平方=0.406，模型預測解釋力應屬尚可。

(三) 線性迴歸分析

探討人格特質、社會資本、教育程度與創業績效間是否有相關，即可採用線性迴歸分析。其 Sig 值小於 0.05，假設成立。

係數 <sup>a</sup>						
型		非標準 化係數		標 準化係 數	T	顯著 性
		B	標準 誤	$\beta$		
	(常數)	1.448	1.49 0		0.9 72	0.34 3
	創業時的教育程度	0.088	0.15 9	0.1 20	0.5 54	0.58 6
	個人特質-外向性	0.032	0.21 2	0.0 42	0.1 52	0.88 0
	個人特質-友善性	0.033	0.44 4	0.0 25	0.0 73	0.94 2
	個人特質-嚴謹性	-0.002	0.32 3	- 0.002	- 0.006	0.99 5
	個人特質-情緒穩	0.193	0.12	0.2	1.5	0.14



定性			6	94	30	2
個人特質-智性想像	-0.037	0.49	7	-	-	0.94
				0.033	0.074	2
社會資本-內部	-0.368	0.34	1	-	-	0.29
				0.427	1.076	5
社會資本-外部	0.376	0.61	2	0.3	0.6	0.54
				78	14	7
公共商業環境	0.478	0.21	1	0.4	2.2	0.03
				74	62	6
a. 應變數：創業績效						

依回歸結果，發現以下假設人格特質影響創業績效假設均不成立。

假說一 A：創業家外向性人格特質對創業績效具顯著的影響。

假說一 B：創業家友善性人格特質對創業績效具顯著的影響。

假說一 C：創業家嚴謹性人格特質對創業績效具顯著的影響。

假說一 D：創業家情緒穩定性人格特質對創業績效具顯著的影響。

假說一 E：創業家智性想像人格特質對創業績效具顯著的影響。

依回歸結果，發現以下社會資本影響創業績效假設均不成立。

假說二 A：創業家內部社會資本對其創業績效具顯著的影響。

假說二 B：創業家外部社會資本對其創業績效具顯著的影響。

依回歸結果，發現以下教育背景程度影響創業績效假設不成立。

假說三：創業家教育背景程度對其創業績效具顯著的影響。

依回歸結果，發現以下外在公共商業環境影響創業績效假設成立。

假說四：創業家創業之外在公共商業環境對其創業績效具顯著的影響。

## 五、討論與結論

過往有關人格特質之研究並未一致，究竟人格特質對於創業績效是否有直接影響亦得到證實，經由迴歸分析，本研究發現創業家人格特質對於創業績效沒有直接影響，顯示創業家人格特質如何並不會直接影響創業績效的好壞，由於本研究針對女性創業家進行調查，此一結論仍待後續深化研究調查何以女性創業家不同的人格特質面向與創業績效並無直接顯著關聯。

以往文獻多肯定創業社會資本對創業績效具有顯著影響。本研究發現內部與外部社會資本對其創業績效均不具顯著的影響。這可能是因為受訪者屬於微型或中小企業，在創業規模、管理能力、及技術需求上都不如一般企業所需之多，故不顯著。

在創業時教育程度上「博士」並未比「專科」、「大學」、「碩士」獲得較好的創業績效。由此可知，創業者教育程度較高在績效方面並未較教育程度較低的創業者好，其原因可能在於受訪者屬於微型或中小企業，創業產業行業別並不特別需要高學歷及教育程度。

本研究發現外在公共商業創業環境對創業績效具有顯著正向影響。當環境的變化會有助於創業績效的顯著影響，且競爭的環境越高，企業成長之效果越佳，更直接影響經營績效之顯著關係，本研究經證實的結果，與岸川善光(2010)、Ireland et al. (2001)等先前學者提出之論點相符。

雖然社會資本在研究上對創業績效的影響未獲支持，但卻顯示外在公共商業創業環境對企業的長成非常有幫助。本研究建議女性創業家仍應積極擴建外在社會資本，不斷提升顧客滿意度、做好內部管理、外部公共關係，如此，能增加引進嫁接政府輔導的女性團體創業或是精英創業資源，或其他外部資源，就能不斷拓展公司規模與能見度，朝中小企業，甚至是大型企業前進。

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# 科技部補助專題研究計畫出席國際學術會議心得報告

日期：2019年2月11日

計畫編號	MOST 107-2629-E-027-001 -		
計畫名稱	從社會網絡鑲嵌觀點探討女性創業演進歷程之挑戰與機會		
出國人員姓名	王育慧	服務機構及職稱	國立台北科技大學資訊與財金管理系
會議時間	2019年2月5日至 2019年2月6日	會議地點	Stockholm, Sweden
會議名稱	(中文) 2019 管理與通信技術國際會議  (英文) 2019 International Conference on Management and Information Technology (ICMIT)		
發表題目	(中文) 董事會性別平權對公司治理之影響: 實證調查  (英文) The Impact of Gender Diversity of Corporate Boards on Corporate Governance: An Empirical Investigation		

## 一、參加會議經過

2019年2月5日至2019年2月6日，計畫主持人參加2019 International Conference on Management and Information Technology (ICMIT)，口頭報告發表論文外，與發表場次各國學者與 Session chair 合照如五、攜回資料名稱及內容。

## 二、與會心得

2019 International Conference on Management and Information Technology (ICMIT)會議討論議題廣泛，包括臺大醫院 JIIANG-HUEI JENG 與長庚大學 MEI-CHI CHANG 兩位老師發表醫療臨床論文。計畫主持人聆聽多元議題，收穫豐富。在發表論文後，同場次與會業界專家詢問亞洲國家邁向董事會性別平權是否遇到困難問題？計畫主持人也給予詳細說明，雙方也交流在澳洲紐西蘭當地的董事會性別平權情形。

### 三、 發表論文全文或摘要

# The Impact of Gender Diversity of Corporate Boards on Corporate Governance: An Empirical Investigation

Yu-Hui Wang

Department of Information and Finance Management, National Taipei University of Technology, Taiwan, R.O.C

isecho@ntut.edu.tw

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**Abstract:** In recent years, increased attention has focused on the issue of gender balance in private enterprise, particularly in terms of the representation of women on corporate boards of directors. However, these increased research literatures on the relationship between gender diversity and corporate governance has produced inconclusive results. Moreover, most studies have largely failed to account for the impact of some compounding factors, such as education level, independence, concurrent posts and seniority. Therefore, this study seeks to provide a more complete assessment of the impact of gender equality in corporate boardrooms by accounting for five female director characteristics including the number, ratio, education level, independence, concurrent posts and seniority. This paper conducts empirical investigation of 2,044 Taiwan publicly held companies. The result of multiple regression analysis shows that the number of related parties in the same company of female directors (FMBINT) has negative impact on firm corporate governance performance, while the number of professional concurrent posts (FMBPART) has positive one. The empirical results produced by this paper can help companies consider related concurrent posts experiences of female director when making board appointments.

Keywords: Gender Diversity, Board of Director, Corporate Governance

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## 1. Introduction

In recent years, increased attention has focused on the issue of gender balance in private enterprise, particularly in terms of the representation of women on corporate boards of directors. The political and economic implications of issues related to gender diversity have become increasingly prominent in many countries, with many European countries taking the lead in terms of promoting gender equality on corporate boards. For example, in 2003, Norway was the first country to pass relevant legislation, requiring all listed companies to have women make up 40% of their directors, and the EU passed similar legislation with a 40% goal by 2020. Other individual EU members, including France and Italy have also passed similar laws at the national level (Ekin, 2017).

The increased representation of women on corporate boards is a distinct trend in the western business community. However, while this trend is a milestone for gender equality, does it really have any impact on corporate operations and performance? Different values, personalities and skill sets aligning with the different genders may lead to the adoption of different methods for decision making and leadership styles, which may have significant implications for board operations and function (Nielsen and Huse, 2010).

However, Konrad and Kramer (2006) found

that companies with more female directors tend to have better corporate governance and tend to show greater consideration to a broader range of stakeholders. Bernardi and Threadgill (2010) also found that companies with higher ratios of female board members tend to be more engaged in charitable activities and community activities, and provide better employee benefits. Therefore, higher ratios of female board members and high-level managers will increasingly orient corporate decisions in alignment with the interests of a broader range of stakeholders. For example, female directors might make firms more responsive to the concerns of employees and customers, and more concerned with firm reputation in terms of issues such as health, safety and environmental stewardship. Therefore, companies with more female directors might engage more resources into corporate governance. However, other studies have found negative results, in that inclusion of more female directors may exacerbate difficulties in achieving consensus and reducing team decision-making effectiveness, with Westphal and Milton (2000) finding a statistically significant reduction in team cohesion. Jehn et al. (1999) suggested that increased diversity among team members has a negative impact on decision making outcomes, organizational commitment and firm performance.

Increased research attention on the relationship between gender diversity and corporate governance performance has produced

inconclusive results. Moreover, these recent studies have largely failed to account for the impact of other compounding factors about female director, such as education level, independence, related party and seniority. This study seeks to provide a more complete assessment of the impact of gender equality in corporate boardrooms by accounting for six background considerations including number, related party, education, seniority, level of engagement and independence. The impact of these factors on corporate management and governance is statistically assessed to reflect the impact of boardroom gender diversity on company's corporate governance performance.

Narrative statistics, correlation analysis and multiple regression estimates are applied to produce an empirical analysis which not only extends the management literature on board gender diversity issues, but also helps to better understand the characteristics of female directors and their impact on a firm's corporate governance performance. In practice, this insight will have considerable practical value for further strengthening human resource management and improving corporate board systems and governance structures.

## **2. Gender diversity on corporate governance performance**

Over the past decade, an increasing number of studies has focused on the relationship between board gender diversity and company performance (Jain and Jamali, 2016; Rao and Tilt, 2016; Byron and Post, 2016). Some studies have found a negative relationship between female directors and corporate governance performance, possibly due to such diversity resulting in increased difference of opinion and difficulty achieving consensus, or due to reduced organizational commitment and performance (Jehn et al., 1999).

Some studies have shown that increased female representation on the board can promote improved corporate governance. Listed companies may recruit female directors to improve the level of corporate governance, or to use women's special social attributes, abilities and network resource to enhance the company's image and its relationships with the government and other stakeholders (Zhang et al., 2016). Adam and Ferreira (2009) found that female directors had better attendance records than their male counterparts, and typically served as committee members (audit, nominations, corporate governance, etc.). Abbott et al., (2012) showed that companies with female directors tend to be less engaged in earnings management. An empirical study by Hafsi and Turgut (2013)

found that gender diversity in the boardroom has a positive impact on the firm's social responsibility performance, but that the association is negative for ethnic diversity. Bernardi et al., (2006, 2008) pointed out that companies with a higher ratio of female board members have a higher chance of being featured in Fortune's "Best Work Environment" and "Most Valuable Companies" lists.

Zhang et al., (2016) found no statistically significant correlation between gender diversity on the board and socially responsible investment, but that firms with female CEOs tended to perform better in terms of social responsibility, suggesting that the potential supervisory and advisory impact of women directors is diluted and not significant compared to the potential impact of female executives who have mastered the company's actual operations and exercise considerable power. However, Zhang et al., (2016) assessed corporate social responsibility based on a comparison of content two business magazines in Taiwan and the results of a questionnaire, and this kind of assessment lacks of rigorous, cross-company, cross-period and verifiable quantitative indicators. Therefore, this study adopts the Taiwan Corporate Governance Index (TCGI) developed by the Taiwan Economic New Report (TEJ) in 2015, as an indicator of corporate governance performance. This index includes six facets (including equity structure, director and senior management functions, fair treatment of investors, financial reporting transparency, and corporate social responsibility) with 22 sub-item scoring indicators, to provide a more objective reflection of corporate governance performance.

## **3. Methodology**

This research expands on the assessment of the impact of board gender diversity, including number of female directors, number of related parties in the same company, education level, seniority, level of engagement, and independence. These six indicators are subjected to statistical analysis to determine how gender diversity affects governance performance.

### **(1) Variables**

#### **a. Main explanatory variable – gender diversity**

This study expands on the measurement of board gender diversity, including number of female directors, related parties in the same company, level of education, seniority, concurrent posts, and independence. These six indicators describe the degree of gender

diversity of a company's board of directors.

- b. Interpreted variable – corporate governance

This study adopts the Taiwan Corporate Governance Index (TCGI), developed by the Taiwan Economic New Report (TEJ) in 2015, as an indicator of corporate governance performance.

### (2) Measurement model

This study conducts regression analysis to explore the impact of board gender diversity on corporate governance performance.

$$CG_{i,t} = \beta_0 + \beta_1 FMBNUM_{i,t} + \beta_2 FMBRATIO_{i,t} + \beta_3 FMBEDU_{i,t} + \beta_4 FMBYEAR_{i,t} + \beta_5 FMBPART_{i,t} + \beta_6 FMBIND_{i,t} + e_{i,t}$$

where the firm's board gender diversity is The number of female directors (FMBNUM), the number of related parties in the same company of female directors (FMBINT), the number of female directors who with a master, or PhD degrees (FMBEDU), the female directors' BOD seniority (FMBYEAR), The number of concurrent posts (female directors also serving on other important positions of other companies) (FMBPART), and the number of female directors also serving on independent directors (FMBIND). CG is the corporate governance performance.

### (3) Firm sample and data sources

The research sample used in this paper includes 2,044 companies listed on the Taiwan Stock Exchange and Over-the-Counter from 2015 to 2016. Information on corporate governance variables is based on the Taiwan Corporate Governance Index (TCGI) developed by the Taiwan Economic News TEJ in 2015.

## 4. Results and Conclusions

After eliminating missing data, the data of 2,044 listed firms are used to implement the statistic process. The descriptive statistics and correlations are reported in Table 1. The regression results are displayed at Table 2. Except the number of related parties of female directors (FMBINT) and the number of concurrent posts (FMBPART), other coefficients are not statistically significant. The number of related parties in the same company of female directors (FMBINT) has negative impact on firm corporate governance performance, while the number of concurrent posts (FMBPART) has positive one.

The results demonstrate that many female directors might obtain their positions by recommendations from related parties of board members, supervisors, or high-level managers in the same company rather than their own professions or expertise. On the other hand, female directors who also serving on other important positions of other companies (FMBPART) may obtain their positions by their own special social attributes, abilities or network resource. Thus FMBPART is critical factor enhancing corporate governance performance. With reference to the characteristics of female directors, this study verifies that statement of the more gender diversity on BOD, the better performance on corporate governance is not fully supported. The empirical results produced by this paper through narrative statistics, correlation analysis and multiple regression estimations can help companies determine the impact of increasing gender diversity when making board appointments. This can help the firm improve corporate governance performance, while establishing and promoting a mechanism to ensure good governance, and also promoting the interests of a wider range of firm stakeholders and promoting an atmosphere of social harmony.

Table 1  
Descriptive Statistics: Means, Standard Deviations, and Correlations

Variable	Means	S.D.	1	2	3	4	5	6
1 FMBNUM	.9110	.98838	1					
2 FMBEDU	.0488	.08542	.560***	1				
3 FMBAGE	7.0312	8.77737	.491***	.211***	1			
4 FMBINT	.3929	.58432	.613***	.260***	.570***	1		
5 FMBIND	.0286	.06534	.460***	.481***	.036	.006	1	
6 FMBPART	2.7791	4.10203	.403***	.379***	.400***	.347***	.176***	1

N=2044

\*p < .05 , \*\*p < .01, \*\*\*p < .001

Table 2  
Multiple Regressions for Effects of Women Directors on Board Processes and Effectiveness

Variable	Coeff	S.E	T
Constant		.074	32.562
FMBNUM	.008	.088	.229
FMBEDU	-.044	.786	-1.540
FMBAGE	-.016	.008	-.554
FMBINT	-.066*	.129	-2.064
FMBIND	.016	1.012	.566
FMBPART	.177***	.015	6.951
R <sup>2</sup>	.022		
Maximum VIF	2.867		
Mean VIF	1.893		

N=2044

\*p < .05 , \*\*p < .01, \*\*\*p < .001

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#### 四、建議

計畫主持人與參與會議的 KENT INSTITUTE AUSTRALIA 的 Dr. PRIYANTHA BANDARA 學者研究領域相近，希望後續有機會能一起進行國際合作。

#### 五、攜回資料名稱及內容

會議手冊封面、發表證明、與發表場次各國學者與 Session chair 合照全文如附。





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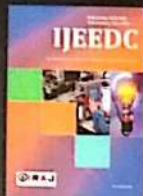


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# Certificate

*This is to certify that Yu-Hui Wang has presented a paper entitled "The Impact of Gender Diversity of Corporate Boards on Corporate Governance: An Empirical Investigation" at the International Conference on Management and Information Technology (ICMIT) held in Auckland, New Zealand on 5<sup>th</sup>-6<sup>th</sup> February, 2019.*











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