

有關成立
商業信貸資料庫建議
的諮詢文件



香港金融管理局

2000年7月

目錄

		頁
概要		
第 1 章	引言	1
第 2 章	香港成立商業信貸資料庫的適切性	3
第 3 章	資料庫的建議架構	8
第 4 章	結論與前瞻	19
附件	載於金管局網頁 http://www.info.gov.hk/hkma	20
附件 A	銀行業對設立資料庫的意見	
附件 B	全面資料交換—研究所得的實證	
附件 C	比較各國和地區的商業信貸資料庫	

概要

目的

本文件列載香港金融管理局（下稱金管局）有關成立商業信貸資料庫（下稱資料庫）建議的研究結果，以諮詢公眾。

背景

2. 1999年7月，金管局公布《就「銀行業顧問研究」的政策回應》，列出一系列政策措施。其中一項是在2000年上半年研究在香港成立資料庫的可行性，以滿足認可機構對客戶信貸資料的需要，尤其當時企業倒閉個案不斷增加，有關客戶負債水平的資料更形重要。

3. 金管局研究過成立資料庫的理據，也訪問了香港部分認可機構和信貸資料庫，以及走訪德國、馬來西亞、墨西哥和美國的主要信貸資料庫，深入了解其業務運作。此外，金管局也在2000年4月對50家認可機構進行了一項問卷調查，收集這些認可機構對成立資料庫的適切性及可行性的意見。

成立資料庫的需要

4. 金管局研究結果顯示，成立一間全面性的資料庫有助改善

認可機構的信貸風險管理，以及提高還款紀律，並因此鞏固香港銀行體系的健全和穩定。同時，企業也會因為本身的透明度提高，促使更多銀行願意向企業貸款。在某程度上，資料庫或許令貸款人減少對抵押品的倚賴，以及更加願意向中小企業提供貸款。銀行也會因為貸款機會增加而得益。因此，金管局認為資料庫對香港來說是一項適切的銀行業基礎設施。

5. 調查結果顯示，大部分認可機構認為目前香港的信貸資料庫提供的資料不夠全面。認可機構尤其覺得欠缺本港中小企業全面和最新的資料。另一方面，市場普遍認同香港成立一間全面性的資料庫。大部分認可機構均認為這類資料庫可加強信貸風險評估，以及提高它們及早發覺客戶遇到困難的能力。由此看來，市場顯然對信貸資料有所需求，但目前市場仍未能全面滿足這種需求。

6. 過去，資料保密和同業競爭等多項問題令市場無法自行發展全面性的資料庫，企業(特別是中小企業)融資也因而受到不利影響。環顧許多國家所採取的解決方法，都是由政府強制金融機構向資料庫提供借款人資料。至於資料保密和同業競爭方面的問題，解決方法是由政府直接管理資料庫，或制定監管架構針對資料庫的運作。

7. 鑑於以上所述，金管局的研究認為有足夠理據支持香港成立一間全面性的資料庫，強制所有認可機構參與提供借款人資料，並設有適當的制衡，以提高公眾對資料庫保密資料的信心。

資料庫的具體架構

8. 除了強制參與外，諮詢文件也提出了以下有關成立全面性的資料庫的各項重要問題，以及在每項問題提供不同的可行方案。金管局對各種方案持開放態度，並歡迎公眾就這些方案提出意見：

- i) **資料庫的架構模式**：本文件對成立資料庫提出了 4 大類可行方案。它們都有足夠的制衡，以確保資料保密和資料庫所提供服務的公平訂價。這 4 類方案包括：
- 由公營機構擁有資料庫（例如經金管局擁有）；
 - 由銀行業擁有，自我監管的資料庫（例如經香港銀行公會擁有）；
 - 由銀行業與政府共同擁有，自我監管的資料庫（例如經金管局與銀行公會合資擁有）及
 - 由私人機構擁有，受監管的資料庫。

金管局歡迎公眾人士對哪種形式的方案比較適合香港提出意見。

- ii) **資料庫涵蓋的範疇**：資料庫應該收集所有或是部份借款人的資料值得商討。其一方案是讓資料庫首先收集中小企業的信貸資料（包括正面和負面資料）。而中小企業可粗略定義為所有非上市公司。待資料庫奠定基礎後，所涵蓋的範疇可擴闊至其他企業（如非藍籌上市公司）。金管局歡迎公眾人士對資料庫涵蓋的範疇提出意見，尤其資料庫最初應否由收集有關中小企業和其他非上市公司的正面和負

面資料開始。

- iii) **披露客戶資料的法律安排**：這方面有兩個可行方案。如果不制定新法例，認可機構便需要在客戶申請貸款或續期時徵求同意，向資料庫提供客戶的資料。這樣，資料庫相信在大約 1 年內就能建立起相當全面的數據庫。如果制定新法例—若要制定正式的監管架構，亦可能需要制定新法例—便應考慮透過法例規定認可機構向資料庫提供借款人資料。金管局歡迎公眾人士對哪一種方案比較合適提供意見。

9. 金管局現正就上述建議諮詢公眾。任何人士均可於 2000 年 9 月 15 日前向金管局提出意見，並請將意見交予：

中環

花園道 3 號 30 樓

香港金融管理局

銀行業拓展處

(請註明「資料庫諮詢」)

傳真號碼：2878 1887

電子郵箱：ccra@hkma.gov.hk

第 1 章

引言

1.1 財政司司長在 2000 年 3 月 8 日的《財政預算案演詞》中宣布，金管局會研究香港成立資料庫的建議。本文件旨在討論金管局對有關建議的研究結果，並對成立資料庫提出具體建議，以諮詢公眾。

研究的背景

1.2 1999 年 7 月，金管局公布《就「銀行業顧問研究」的政策回應》，列出一系列政策措施，進一步鞏固銀行體系的安全和穩健。其中一項措施是在 2000 年上半年研究香港成立資料庫的可行性，以滿足認可機構對客戶信貸資料的需要，尤其當時企業倒閉個案不斷增加，有關客戶負債水平的資料更形重要。

1.3 部分國家透過設立中央信貸資料庫，向貸款機構提供企業整體負債水平的資料。這些信貸資料庫旨在向貸款機構提供有關商業機構和其他非銀行企業的借貸情況的最新資料，以及提供資料作銀行監管用途。

1.4 在目前的環境下，這個制度的好處更值得深思。因此，金管局在 2000 年初進行了詳盡的研究，以確定這類計劃的成本效益，以及若

這類計劃適合在香港推行，香港應該採用哪種形式。

研究方法

1.5 在研究過程中，金管局研究過成立資料庫的理據，也訪問了香港部分認可機構和信貸資料庫，以及走訪德國、馬來西亞、墨西哥和美國的主要信貸資料庫，深入了解其業務運作。此外，金管局也在 2000 年 4 月對 50 家認可機構進行了一項問卷調查，收集這些認可機構對成立資料庫的意見（見附件 A）。這 50 家認可機構包括 45 家持牌銀行、2 家有限制牌照銀行和 3 家接受存款公司，這些機構在商業貸款市場相當活躍，其港元和外幣總貸款額分別約佔市場的 80% 和 75%。

1.6 研究結果載於以下各章節及附件：

第 2 章： 分析香港成立資料庫的適切性

第 3 章： 研究成立資料庫的各種細節，並提出具體建議

第 4 章： 概述對推行計劃的展望

附件 A： 根據問卷調查與訪問結果，總結銀行業對香港成立資料庫的意見

附件 B： 列載海外研究全面資訊交換的成效的實證

附件 C： 比較各國和地區的商業信貸資料庫的功能與制度特色

為縮減本文件的篇幅，附件只載於金管局網頁(<http://www.info.gov.hk/hkma>)。

第 2 章

香港成立商業信貸資料庫的適切性

2.1 總括而言，金管局研究結果顯示成立一間全面性的資料庫有助改善認可機構的信貸風險管理，以及提高還款紀律，並因此鞏固香港銀行體系的健全和穩定。同時，企業也會因為本身的透明度提高，促使更多銀行願意向企業貸款。在某程度上，資料庫或許令貸款人減少對抵押品的倚賴，以及更加願意向中小企業提供貸款。認可機構也會因為貸款機會增加而得益。因此，金管局認為資料庫對香港來說是一項適切的銀行業基礎設施。但必須要強調，即使設立資料庫，認可機構仍須要繼續審慎地貸款。此外，設立資料庫尚有其他好處，例如：

- (i) 有助認可機構發展信貸評分及評級制度，從而更有效地管理信貸風險；及
- (ii) 有助監管者查核認可機構對某一界別或行業的準備金是否足夠。

2.2 學術研究的實證、海外信貸資料庫的經驗，以及市場人士在資料庫調查中表達的意見均說明成立資料庫能帶來上述好處。下文就此逐一作出闡述。

學術研究的實證

2.3 一般認為，貸借兩方之間的資訊不平衡問題會妨礙信貸的有效分配，並會因此而引發多個問題，包括：

- (i) 貸款人不諳借款人的特性，妨礙貸款人評估信貸風險，以及影響其就貸款訂價的能力；
- (ii) 某些借款人可能會盡量拖欠還款，因而產生「道德風險」問題。結果是貸款人由於預計其整體貸款組合的呆壞賬比率較資訊充裕時為高，所以會限制信貸，或訂出較高的息率；及
- (iii) 由於貸款人之間欠缺有效的溝通，客戶可能向多個來源舉債，進一步增加貸款人的信貸風險，以及影響整個銀行體系的穩定。

2.4 許多國家面對貸借兩方資訊不平衡的問題，都是透過成立信貸資料庫來解決。信貸資料庫是中介媒體，專責在信貸市場收集、整理和傳送有關資料，從而促進貸款人之間的資料溝通。

2.5 金管局在研究中審閱了多項有關的學術研究報告。一般而言，這些研究結果都顯示加強資料交換在以下各方面均能帶來莫大益處（有關各項研究的詳情，請參閱附件 B）：

- (i) **加深貸款人對借款人的認識，有助評估借貸風險。**貸款人因而可更清楚分辨良好和有問題的借款人，並據此釐定合理的貸款條件；
- (ii) **增加信貸需求。**更合理的貸款條件應可增加信貸需求，特別是有良好記錄的客戶的信貸需求。目前，這些客戶可能不大願意借款，原因是認可機構在缺乏有關資料的情況下，會開出較這些客戶認為合理的水平為高的貸款條件。另一方面，認可機構在資料充份的情況下也會更樂意向質素較高的客戶貸款。因此貸款人與借款人都能受惠；及
- (iii) **提高欠債人的還款紀律，減少拖欠還款情況。**若貸款人能定期交換資料，拖欠還款便成為借款人質素差的指標，會帶來較高利息甚或被拒絕提供貸款的懲罰。這個機制有助提高欠債人的還款紀律，以及減低道德風險和呆壞賬比率。

海外與香港經驗

2.6 除了從學術研究上實証信貸資料庫的優點外，我們也研究過海外和本地市場的經驗，以確定香港是否需要成立資料庫。

海外經驗

2.7 雖然其他國家的信貸資料庫的功能與特色各有不同（見附件 C），但到目前為止所得經驗都是正面的。以墨西哥為例，設立信貸

資料庫(Buro de Credito)的主要原因是糾正社會上拖欠還款的風氣。據我們了解，許多欠債人即使有辦法還款，仍然會盡量拖欠。基於政治因素，銀行往往難以有效地起訴這些人。現在，根據墨西哥法例規定，假如銀行沒有透過信貸資料庫核實借款人的信貸記錄，便需就批出的貸款作出等值儲備。因此，實際上所有銀行均參與墨西哥的信貸資料庫。當地的經驗引證，銀行得以加深了解借款人的特性，能更有效定出目標客戶及釐定貸款條件，亦因而可減少拖欠還款的情況。墨西哥當局指出，自 1997 年成立信貸資料庫以來，壞帳比率減少約 30%，不過這是因為信貸資料庫的功勞還是其他因素使然（如經濟普遍改善）則不大肯定。然而，從業內的積極反應來看，當地的信貸資料庫似乎是成功的。有見及此，墨西哥信貸資料庫計劃在短期內推出更多產品。

2.8 德國中央銀行的信貸資料庫在 1930 年代推出，當時銀行對借款人的整體負債情況缺乏足夠資料，而且經常因這些企業倒閉而遇到困難。設立信貸資料庫的目的，是要解決這些借款人可能會對銀行業造成的系統性風險。信貸機構需要每季向信貸資料庫匯報在該 3 個月內負債水平曾達到 300 萬馬克或以上的借款人的資料。德國中央銀行表示，信貸資料庫現已被廣泛接納為重要的銀行基礎設施，有助促進銀行體系的穩健。國家的《銀行法》亦載入規定，讓德國中央銀行在有關的歐共體指引生效後，可與其他歐盟國家的有關機構交換收集到的信貸資料。

2.9 馬來西亞方面，中央銀行在 1980 年代初成立信貸資料庫，主要是作為監管工具，以監察銀行的大額借貸和逾期貸款。信貸資料庫的資料主要限於監管人員用作查核貸款機構的準備金是否足夠，以

及進行行業壓力分析，但法例亦載有規定，讓中央銀行可與其他信貸機構交換有關資料。馬來西亞當局表示，信貸資料庫作為監管工具適切，有助了解信貸機構對某企業或行業的貸款情況。

2.10 簡而言之，各國設立資料庫的原因都有所不同，所以這些資料庫的制度和特色也各有不同。但所得的經驗是正面及值得參考。

香港的情況

2.11 過去數年香港的情況跟部份國家一樣，都暴露了企業融資市場存在某些不足之處。亞洲金融危機前，有些企業同時向多家認可機構舉債，最終卻無法支撐下去。認可機構批出這些貸款時，往往未能掌握有關借款人整體負債的資料。事後看來，若認可機構在批核貸款時能有較多資料，可能會更仔細考慮決定。

2.12 另一個問題是，許多規模較小的公司在獲取銀行融資時遇到困難，在金融危機後情況更是如此。這一點從金管局今年 6 月公布的「中小企業融資調查」的結果可見一斑。調查發現中小企業的融資供求存在差距。某些中小企業認為認可機構貸款時過分倚賴抵押品，而且儘管隨著經濟復甦，它們仍然不大願意貸款予中小企業。另一方面，認可機構指出由於中小企業貸款市場存在多項問題，所以它們對貸款予中小企業需要特別謹慎。這些不利因素包括拖欠比率相對較高、財政和其他資料披露不足、運作欠缺透明度、會計標準欠佳、對信貸融資的運用欠缺有效監督，以及貸款予中小企業的成本效益較低。

2.13 由於各種問題，中小企業的融資機制似乎有欠效率。中小企業融資調查提出了幾項措施，以提高對這個市場的效律，其中包括成立中小企業信貸資料庫。

2.14 另外，資料庫調查結果進一步證實，本港部份某些企業欠缺透明度，難以令銀行作出準確的信貸評估。尤其，絕大部分回應機構(96%)均認為中小企業缺乏可靠和貼時的資料¹。

2.15 金管局認為資料庫能改善信貸資料的質與量，在某程度上有助解決上述問題。只要市場上有較多可靠的信貸資料，認可機構大抵會更願意提供更多貸款。資料庫也能推動借款人的還款表現，從而減低拖欠，最終對認可機構有利。因此，成立資料庫似乎有助提高企業融資效率。這個觀點也得到銀行業普遍認同，資料庫調查中約 90% 的受訪機構同意一間全面性的資料庫可改善銀行信貸風險管理。同時，70% 的回應機構也同意資料庫增加借款人透明度，可加強銀行信心及信貸資源分配。

¹ 在本調查中，中小企業泛指非上市公司。

第 3 章

資料庫的建議架構

3.1 目前，香港的商業信貸資料庫的主要資料來源包括各企業自願提供、公開記錄以及與有關公司面談。只有極少數認可機構會自願提供資料予這些資料庫。因此，所涵蓋的信貸資料頗為有限。這便進一步減低其他認可機構參與資料庫的興趣。本港的認可機構在很大程度上仍然倚賴借款人提供的資料，以進行信貸評估。

3.2 資料庫調查的大部分回應機構（72%）也認為現有的信貸資料不夠全面。另一方面，受訪機構普遍認同成立全面性的資料庫有其好處。90%的回應機構認為有關措施可改善信貸風險評估，以及提高其預早察覺客戶遇到困難的能力。由此看來現時市場發展，並未能滿足認可機構對信貸資料的渴求。這樣的市場失效可能是導致認可機構未能把資金有效地轉往中小企業的其中一個原因。

3.3 根據資料庫調查以及與認可機構面談的結果，金管局認為市場失效有兩個主要原因：

- (i) 資料保密(認可機構不願意把敏感的客戶資料提供予它們不信任的機構); 及

- (ii) 同業競爭(認可機構擔心披露客戶資料會導致業務流失與競爭對手)。

3.4 因此在研究資料庫的具體架構時，需要解決上述問題，這些架構包括：

- 認可機構參與資料庫的方式；
- 資料庫的架構模式；
- 資料庫涵蓋的範疇；及
- 披露客戶資料的法律安排。

認可機構參與資料庫的方式

3.5 應該強制認可機構參與資料庫或是讓其自願參與，是其中一項主要考慮因素。

3.6 根據與認可機構面談的結果，大部分均同意資料保密與同業競爭是妨礙發展全面性的資料庫的主因。認可機構擔心其對手通過資料庫取用它們提供的資料，但它們卻無法同樣取用這些競爭對手掌握的資料。此外，若要向資料庫提供資料，認可機構必須先行徵得客戶同意。除非所有認可機構均參與，否則不參與的認可機構可能處於優勢，對參與機構不利。

3.7 這大概是解釋了即使大部分市場人士均認為全面性的資料庫有明確好處，市場仍然沒有作出回應。因此，為了能開展這項有利市場基礎設施，似乎有需要強制認可機構參與提供資料。事實上，調查結果顯示大部分回應機構（58%）均支持強制參與。另外20%贊成由金管局透過監管途徑鼓勵認可機構參與。只有22%贊成完全讓認可機構自願參與。此外，有35%的回應機構（包括部份主要銀行）表示如果不是強制參與，它們就不會參與提供資料予資料庫。這種情況會影響資料庫的成效和存在價值，因此更加說明強制參與的重要性。

3.8 金管局留意到許多外國政府都是透過立法或監管措施強制貸款機構參與資料庫。美國等部分國家並沒有強制規定貸款機構參與信貸資料庫，可能是因為其信貸文化較為成熟，企業借款的透明度也較高，例如較多公司會從股票和資本市場融資，而這些市場都有嚴格的披露資料規定。

3.9 鑑於以上所述，金管局建議強制認可機構向資料庫提供資料，以建立更為全面性的資料庫，並確保認可機構之間存在公平的競爭環境。要達致強制參與可以有不同方法。其一是立法規定認可機構向資料庫提供所需資料。另一種方法是金管局可以對機構的認可資格附加條件，規定它們要向資料庫提供資料。（根據《銀行業條例》的規定，違反附加於認可資格的條件可遭撤銷認可資格。）

資料庫的架構模式

3.10 另一個需要考慮的問題是資料庫應由哪些人士擁有。

3.11 海外國家的資料庫的架構模式各有不同。那些公營的信貸資料庫（一般是強制參與，受法例規管），通常由中央銀行或銀行監管機構擁有（如法國、德國），而斯里蘭卡的資料庫是根據法例成立，51%的已發行股本由貨幣局擁有，而商業銀行和其他貸款機構則分別持有 30%和 19%（即資料庫屬半官方擁有）。韓國方面，資料庫由 Korean Federation of Banks 於 1995 年設立（即由銀行業擁有）。墨西哥的資料庫在 1997 年成立，由各大墨西哥銀行，Dun & Bradstreet 及 Trans Union 合營（即半銀行業擁有）。美國的資料庫則為私營機構。

3.12 在資料庫調查中，58%的回應機構表示希望資料庫由公營機構擁有，20%贊成由業內公會擁有，只有 10%表示希望由私人擁有。大部分回應機構希望資料庫由政府擁有，似乎是基於資料保密的考慮。不過，在某程度上擁有權亦關乎於有關計劃是自願或強制參與。認可機構可能憂慮金管局會強制它們向 1 家私營資料庫提供客戶資料，尤其若有關機構不受監管，情況就更令人憂慮。因為，這樣的機構處於壟斷優勢，容易令人懷疑究竟有關服務的訂價是否合理。假如有超過 1 家資料庫，令提供服務方面存在競爭，便可減低這些疑慮。然而，我們未能肯定香港市場能否支持 1 家以上的資料庫，即使有能力支持，也可能會導致資料分散存放於各個資料庫中，有違建立一間全面性的資料庫的目的。

3.13 就本諮詢文件而言，我們假設香港只會成立 1 間全面性的資料庫，而認可機構只須向這 1 家資料庫提供資料。因此，在考慮資料庫的架構和擁有權形式時，必須遵守以下原則：

- (i) 鑑於資料的保密和敏感性質，應設有足夠的保障資料制度；及
- (ii) 由於資料庫有可能出現壟斷優勢(如訂價政策)，因此需要制定有效的監管架構。

3.14 根據這些原則，金管局提出以下的架構模式以作考慮：

- (i) 由公營機構擁有資料庫（例如經金管局擁有）；
- (ii) 由銀行業擁有，自我監管的資料庫（例如經香港銀行公會擁有）；
- (iii) 由銀行業與政府共同擁有，自我監管的資料庫（例如經金管局與銀行公會合資擁有）及
- (iv) 由私人機構擁有，受監管的資料庫。

(i) 公營機構擁有

3.15 這是指主要由公營機構（如金管局）擁有和控制資料庫，其他人士（如私營信貸資料庫）可以小股東形式參與。這位策略性夥伴可提供資料庫所需系統與專門知識。或者，公營資料庫可透過公開

投標，將其業務外判予私營機構。公營資料庫擁有人的作用，是監察資料庫的運作，並就資料保密和訂價等事宜提供政策性方向。

3.16 資料庫調查中的大部分認可機構均贊成以這種形式成立資料庫。這種模式也的確有多方面好處。舉例來說，公營資料庫可以令認可機構更安心提供敏感的客戶資料，而有關客戶也會對資料庫妥善處理資料的能力和決心更有信心。認可機構亦不會過於憂慮服務的訂價，原因是公營機構會盡可能在爭取合理投資回報的同時，兼顧資料庫作為銀行基礎設施的長遠發展。然而，主要的反對論據認為政府經營資料庫可能被視作政府干預市場，會被評為違反香港一貫奉行的自由市場哲學。再者，公營資料庫並非確保資料保密的唯一途徑，其他方法如一個受到適當監管的私營機構也同樣可行。

(ii) 銀行業擁有

3.17 這是指由銀行業（例如透過銀行公會）全資或大部分擁有資料庫。這個模式有先例可援，例如在 1996 年前，銀行同業結算服務便是由銀行公會擁有。自 1996 年推出即時支付結算系統後，結算所便由金管局與銀行公會共同擁有。與上文(i)一樣，其他人士也可以小股東形式參與，作為策略性夥伴。

3.18 《香港銀行公會條例》第 12 條賦予銀行公會委員會權力，在諮詢財政司司長，並在其認為適當的情況下，就經營銀行業務制定對會員有約束力的規則。過去曾有多項重要規則都是根據這條文

制定，例如《結算所規則》和《利率及存款收費規則》。由此看來，銀行公會應可制定規則，為會員銀行參與資料庫的方式制定規則²。

此外，明確規定這些規則（以及日後任何有關的修訂）前必須諮詢財政司司長，也可加強公眾對銀行披露資料與資料庫的信心。同樣，銀行公會也可成立附屬公司，提供資料庫服務，並制定規則讓這家附屬公司遵守，確保數據保密和公平訂價。

(iii) 金管局與銀行公會共同擁有

3.19 第 3 個方案是混合模式，由政府與銀行業共同擁有資料庫，可以說是集合了以上兩個方案的優點。金管局的參與或可讓銀行和公眾對監管資料保密更有信心。在某程度上，這種模式也可減輕有關政府干預的憂慮。由於資料庫董事局有業界代表，可參與決策，銀行業對有關公平訂價等商業事項會較為安心。這個方案也可如上文(i)所述，引入策略性夥伴，或把業務外判。這個模式也有先例可援，香港銀行同業結算有限公司就是由金管局與銀行公會各佔 50% 股權。

(iv) 受監管私營資料庫

3.20 這是一個較為市場主導的方案。這個方案最重要的問題

² 銀行公會規則對非銀行認可機構沒有約束力，但這些非銀行認可機構也會共用資料庫提供的資料。解決這個問題的其中一種方法是，資料庫透過合約使相同規則也適用於其他非銀行參與機構。有限牌照銀行使用香港銀行同業結算有限公司管理的即時支付結算系統，也採納這種安排。

是，若強制認可機構提供資料，便要決定是否需要監管這一間私營資料庫。若資料使用者（即認可機構）和資料當事人（即借款人）不太關心資料保障與訂價等問題，理論上私營資料庫便可以不受監管，由其自行監察，防止不當行為。然而，若市場人士認為由私營資料庫進行自我監管不足以消除其憂慮，私營資料庫便須受到具公信力的機構實施某種形式的監管。

3.21 監管私營資料庫有兩個可行方法。其一是制定有關信貸資料庫的發牌與監管制度，任何公司計劃提供商業信貸資料服務均須獲發牌照。這樣金管局便可強制認可機構向指定公司提供資料。這些公司也須遵守有關資料保密等規則和規例，這個方案須委派政府機構負責監管資料庫的運作，以及立法規定監管架構。據了解，目前印度是採用這種方法的。印度政府提出了法例草稿，把印度儲備銀行（即當地中央銀行）的權限擴展至監管信貸資料庫（商業和個人資料庫也包括在內）的運作，而可獲發牌資料庫的數目沒有限制。事實上，印度當局認為監管架構應容許成立多家資料庫，以滿足不同市場環節及印度廣闊地域的需要。這個模式適合印度，但不一定適合香港。正如上文所述，香港市場較細小，不一定能支持超過 1 家資料庫，尤其若涉及的資料範疇相對比較有限（見下節）。假如只有 1 家資料庫，單純為監管這家資料庫制定正式的監管制度，似乎有欠成本效益。

3.22 另一個方法是向私營資料庫授予專營權，該資料庫需受專

營權協議所載條款監管。專營權是政府授予私營公司，以提供重要公共服務的權利。由於涉及重要公共服務，所以專營權一般是根據特定條例授出，特許經營機構也要受公營部門監管。根據這個方法，如金管局這類公營部門可透過公開投標程序，向私營資料庫授予專營權，並可透過專營權協議對資料庫進行監管，無需如發牌方案般要透過立法監管。同時，為了能靈活應付營運和市場環境的變化，專營權賦予的權利也不必是獨有權利。這樣，有關的公營部門日後便可更換特許經營機構，或發出新的專營權。假如香港市場只需要 1 家資料庫，這個方案可能比較適合，公開投標程序也有助推動具競爭力的訂價。然而，由於金管局目前沒有發出專營權的權力，因此可能需要制定立法授權。金管局也需要撥出資源，以監管特許經營機構。因此，這個方案不一定比發牌方案更具成本效益。

3.23 雖然私營資料庫模式原則上較為可取，但市場人士可提出意見，對強制規定提供資料予私營資料庫是否感到安心。若對此有所保留，可透過發牌或專營權安排減輕有關憂慮，不過此舉涉及制定監管架構，需要一段時間才能完成。公營或半公營資料庫可能是比較簡單的方法，能解決部份監管問題，但也可能因為抵觸自由市場原則而遭反對（儘管已有金管局與銀行公會共同擁有金融基礎設施的先例）。金管局對各個方案均持開放態度，歡迎市場人士提出意見。

資料庫涵蓋的範疇

3.24 理論上，資料庫能掌握越多資料，便能向認可機構提供更全面的服務，以進行信貸評估。資料庫調查結果也顯示大部分回應機構（84%）原則上認為資料庫最好能不論公司規模，包羅所有商業客戶的資料。然而，它們也關注包羅廣泛資料可能引起的一些實際困難。例如，超過55%的回應機構擔心若大型企業也包括在資料庫內，可能引發這些機構在香港以外地方融資。此外，也有回應機構認為貸款機構可以在個別基礎上了解大型客戶的財政狀況。

3.25 假如資料庫未能涵蓋所有公司的資料(至少在初期)，便要考慮資料庫初期應集中於哪個組別的客戶資料。我們可以有多個選擇，不過，在調查中被問及若資料庫初期只收集某類客戶的資料時，大部分機構（92%）均表示希望由中小企業開始。

3.26 較早前也提過，認可機構的回應反映中小企業的問題貸款較高，及透明度較低。這些問題說明認可機構對貸款予中小企業似乎存有戒心。調查中超過80%的回應機構認為若能取得更多有關中小企業的信貸資料，它們會更樂意貸款予這些公司，並減低對抵押品的倚賴。對於貸款人與借款人來說，這是一個雙贏方案。

3.27 中小企業調查結果顯示，4個中小企業協會對資料庫的效用意見不一。兩個協會支持設立資料庫，認為若有更多資料，認可機

構會更有信心貸款予中小企業。這個資料庫也會減低認可機構貸款予質素欠佳的公司，從而把資源引導至質素較佳的公司。隨著中小企業貸款的整體風險下降，認可機構便會更樂意向中小企業提供貸款。另一方面，1個協會不贊成在短期內設立資料庫制度。這個協會認為由於過去有部分貸款可能並未披露予個別認可機構，而設立資料庫制度後，所有認可機構都會知道中小企業的貸款總額，因此會引致提供予中小企業的貸款減少。另一個協會也擔心一旦推出這個制度後，中小企業的保密資料會被公開。

3.28 我們都需要認真考慮這些反對意見。不過，以減低透明度來保護財政狀況欠佳的公司，似乎並不是促進整體中小企業貸款的上策。正如上文所述，認可機構普遍認為透過資料庫作為中介提高中小企業透明度，有助增加貸款人的信心，而至少有兩個中小企業協會也認同這個觀點。至於有關中小企業的保密資料會被公開這個問題，解決辦法是透過較早前提到的制度安排，以及有關資料披露的嚴格規則來解決。

3.29 至於中小企業的定義也是需要處理的問題。在資料庫調查中，中小企業被廣泛定義為非上市公司。假如要強制認可機構參與資料庫，便需要採納非常明確的定義，盡可能避免出現由認可機構酌情決定的情況。其中一個可能性是採納調查所用的定義，即所有非上市商業機構。其好處是簡單、清晰。另一個理由是非上市商業機構無需遵守如上市規則等披露資料規定，因此透明度較低。若採用這個定

義，部分大型公司也會包括在內，不過此舉有助建立更全面的資料庫。

3.30 部分認可機構更建議資料庫收集非藍籌上市公司的貸款資料。事實上，這類貸款的拖欠還款比率也相當高。大部分認可機構（84%）認為這些公司的最新和可靠的資料不足，不便進行信貸評估。此外，與中小企業貸款比較，這些公司的貸款附有抵押品也較少，所以一旦出現不還款情況時，認可機構所受的損失也較大。這些都是合理的論據。另一方面，我們也可以說與中小企業比較，提供予這些公司的信貸融資數額比較龐大，因此值得認可機構進行個別信貸評估。此外，我們也可以說既然這些是上市公司，它們的披露資料標準也應較中小企業為高。同時，要清楚定義非藍籌上市公司也有實際困難。總括而言，我們相信資料庫初期涵蓋的資料似乎不適宜包括這些公司在內，待資料庫奠定基礎後可再加以考慮。

3.31 至於所收集的資料內容，文件建議認可機構向資料庫提供有關其中小企業客戶的負面和正面資料。根據資料庫調查結果顯示，大部分認可機構均支持匯報正面和負面資料。正面資料可包括獲授予的信貸數額、未償還餘額、每月還款額，以及由借款人提供的任何擔保。負面資料可包括過期還款報告（如已過期 30 日、60 日、90 日的數額），以及在一段期間內拖欠還款的次數。此外，也有建議指資料庫應提供有關商業企業個別擁有人的資料（見第 3.36 段），以及法律令狀、呈請書、破產令等公開資料。

3.32 公眾人士可就資料庫所涵蓋的資料範疇提出意見，特別是資料庫應否由收集有關中小企業（及其他非上市公司）的正面和負面資料開始。

披露客戶資料的法律安排

3.33 我們也要考慮是否需要就資料庫制定法例，要求認可機構披露客戶資料。

3.34 資料庫調查中，約有 28% 的回應機構表示它們受合約約束，不能向資料庫披露其商業客戶的資料。縱使沒有明確的合約約束，一般人也認為認可機構有普通法責任，必須將客戶資料保密。在資料庫由中央銀行或監管機構經營的大部分國家，法例規定有關機構必須向資料庫提供客戶的信貸資料，法例也賦予資料庫權力向貸款機構提供這些資料，以進行信貸評估，並凌駕於任何有關披露客戶資料的合約或普通法限制之上。

3.35 根據海外經驗，立法顯然是其中一個方法。假如決定制定一套法律制度來規管資料庫，自然也應該在有關法例內對有關機構披露客戶資料提供法律支持。另一方法是，認可機構也可以在客戶申請貸款或續期時，徵求客戶同意把它們的資料提供予資料庫。這個方法的缺點是，資料庫在成立後不能隨即收集到所有現有信貸資料。但由於一般信貸都是每年續期一次（至少很多中小企業客戶是這樣），資料庫應能在大約一年左右的時間就建立起相當全面的數據庫。大部分

曾與金管局討論這個課題的認可機構均認為這是一個可行方案。

3.36 另一個需要考慮的問題是應否提供有關企業擁有人的信貸資料，這些企業擁有人在法律上是自然人。需要考慮這個問題，是因為中小企業與擁有人的信譽狀況有時是不可分割的（例如擁有人為貸款提供擔保）。個人資料私隱專員確認，為了與商業信貸有關的信貸評估而處理個人資料，如擁有人／股東的資料，無需受 1998 年 2 月發出的《個人信貸資料實務守則》的具體規定限制。然而，任何個人資料，包括與機構擁有人／股東有關的，仍須受《個人資料（私隱）條例》的一般規定限制。例如，除非獲得資料當事人同意，否則個人資料只可用於在收集資料時所述明的用途或與其直接有關的用途。因此有必要與私隱專員保持聯繫，確保資料庫的收集資料規定符合《個人資料（私隱）條例》的保障資料原則。

3.37 公眾人士可對是否需要制定有關向資料庫提供客戶資料的明確法律規定，或在批核信貸融資或續期時徵求客戶同意的方法已足夠提出意見。此外，金管局也希望公眾人士就是否應該向資料庫提供公司擁有人信貸資料的問題提出意見。

第 4 章

結論與前瞻

4.1 鑑於過去幾年經驗，金管局認為成立商業信貸資料庫可提高香港企業融資效率，特別是有關中小企業融資。商業信貸資料庫提供更多優質資料，對認可機構與企業借款人均大有裨益。認可機構可改進其信貸風險管理，企業借款人則可享更具競爭力的貸款條件。在某程度上，資料庫也可減低貸款人對抵押品的倚賴及使它們更願意貸款予中小企業。金管局認為資料庫是適切的銀行業基礎設施。但必須要強調，即使設立資料庫，認可機構仍須繼續審慎地貸款。

4.2 過去，由於資料保密以及同業競爭等問題，所以市場沒有發展全面性的資料庫。金管局認為以上問題可透過強制認可機構參與，以及制定適當制衡確保資料庫穩健運作來解決。

4.3 金管局現正就香港成立商業信貸資料庫的建議諮詢公眾。任何人士均可在 2000 年 9 月 15 日前提出意見，並請將意見交予：

中環花園道 3 號 30 樓
香港金融管理局
銀行業拓展處

(請註明「資料庫諮詢」)

(傳真號碼：2878 1887；電子郵箱：ccra@hkma.gov.hk)

4.4 視乎公開諮詢所收集到的意見，金管局將會成立由銀行業及其他有關行業的代表組成的工作小組，解決成立資料庫涉及的技術及架構問題。

附件

附件只載於金管局網頁(<http://www.info.gov.hk/hkma>)。

銀行業對設立資料庫的意見

作為研究的一部分，金管局在今年4月進行了一次調查，了解銀行業使用信貸資料服務的情況，以及其對香港成立商業信貸資料庫(以下簡稱資料庫)是否適合和可行的意見。受訪認可機構合共50家，分別約佔認可機構提供的港元和外幣商業貸款總額80%和75%。因此，調查結果大體上能反映銀行業的意見。

2. A部分概述個別認可機構使用現有信貸資料服務的情況。B部分總結認可機構對成立資料庫在策略、運作、法律和擁有權問題的意見。C部分列載認可機構向不同類別商業機構提供的貸款的拖欠比率統計資料，以及按合計貸款額分項列出商業貸款的數據。全部調查結果載於附錄1。

A部分 - 現有信貸資料服務的使用情況

3. 回應機構中，78%曾使用現有的信貸資料公司評估其商業客戶。自信貸資料公司取得的資料大部分是法庭呈請和破產令等公開記錄（佔用戶的92%），其次是逾期和拖欠付款等負面數據（佔用戶的69%）。用戶中約50%也查詢有關客

戶的業務狀況和財務記錄、抵押予其他貸款人的抵押品，以及信貸資料公司所給予的風險評級。

4. 雖然約 60% 的回應機構認為現有服務「頗為有用」，但也同時有大部分回應機構表示現有服務存在頗為嚴重的不足，例如資料不全（72%），以及收費高昂（51%）。另外有 36% 的回應機構認為資料並不夠貼時。在我們與銀行進行的訪問中，大部分銀行表示現有服務並未獲廣泛使用。

5. 絕大部分回應機構（96%）認為現時有關中小企業可靠和最新的資料不足，特別是關於經審計財務報表、對其他債權人的不還款詳情、其他債權人提供的融資、股權結構，以及董事、主要股東等的信貸記錄。

6. 84% 的回應機構也表示有關非藍籌上市公司的資料不足。在訪問中，部分銀行指出這些公司的中期報告提供的僅為基本資料，主要是損益帳數據。因此，它們希望能獲得有關這些非藍籌上市公司在刊發年報之間的財政狀況與負債情況等更新和更全面的資料。

7. 另一方面，認可機構不大在意有關藍籌上市公司（51%）和海外跨國企業（56%）的資料不足，它們關注的主要是這些公司的負債總額。在訪問中，部分銀行指出由於與這些大型公司的商業關係能帶來可觀回報，所以一般銀行都會進行個別信貸評估。

B 部分 - 資料庫的適切性與可行性

適切性

8. 總括而言，銀行普遍認同成立一間比較全面的資料庫的好處。約90%的回應機構同意資料庫可改進其信貸評估、加強其及早察覺客戶遇到困難的能力，以及改善貸款機構在香港的營運環境。認為提高透明度會改善信貸的分配和訂價，信貸記錄良好的客戶也會因此得益的回應機構數目雖然略少，但所佔比例也相當大（70%）。

9. 另一方面，也有相當比例的回應機構憂慮向資料庫提供資料，可能會引起客戶不滿（52%），以及生意會流失予競爭對手（42%）。1家回應機構指出計劃可能會對大型銀行不公平，因為它們需要提供的資料最多。

10. 部分認可機構（26%）也憂慮資料庫可能會影響希望在香港尋求資金的客戶。然而，這些關注主要集中於藍籌上市公司和跨國企業，原因可能是這些企業較有能力從海外市場集資。

可收集資料的內容與範圍

11. 大部分回應機構（84%）認為不論信貸額多寡，提供與所有商企的信貸都應該包括在資料庫內。然而，幾家大型銀行反對把藍籌上市公司和跨國企業的資料也包括在內：其中一家大型銀行指出從它們龐大的貸款額來衡量，銀行可以進行傳統的個別信貸評估。

12. 當被問及如資料庫初期僅收集某些客戶的資料，它們會選擇由哪些客戶開始，大部分回應機構都表示資料庫最初應收集有關中小企業的資料（92%），其次是非藍籌上市公司（44%）。另一方面，分別只有10%和12%回應機構支持在資料庫運作初期即開始收集藍籌公司和跨國企業的資料。部分認可機構表示，由收集中小企業和非藍籌上市公司的資料開始會比較容易。

13. 至於可收集的資料範疇，銀行業認為資料庫應向用戶傳送廣泛的資料（見表1）。82%的認可機構同意，若有關料可以以有系統和具成本效益的方法傳送，將有助加強其內部信貸評級制度。然而，有幾家認可機構指出資料的質素，如準確性、時間性和完整性等，對其內部信貸評級制度同樣重要。

表一

- 客戶的業務狀況和財務資料，例如資產負債表、損益帳
- 客戶負債情況的分類資料，例如期限、融資類別、利率
- 客戶的抵押品資料，例如抵押品類別、抵押品市值
- 負面數據，如拖欠還款、不還款
- 正面數據，如未償還信貸、融資宗數與期限、債權人數目
- 屬於同一集團的銀行客戶的相互關係
- 董事、主要股東、擔保人等的簡介和信貸記錄
- 公開記錄，如法律令狀、呈請、破產令
- 資料庫給予的評級，作為個別客戶的風險的綜合指標

14. 94% 的認可機構同意資料庫應提供客戶的資產負債表內和表外資料。超過70%回應時表示資料庫不應收集認可機構互相提供貸款的資料，因為它們都已受到監管。

對中小企業的影響

15. 56% 的回應機構表示，現時「大部分」中小企業貸款需要提供抵押品，42% 表示「部分」需要提供抵押品。整體來說，約有四分之三的回應機構認為資料庫可令它們更樂意貸款予中小企業，並會減少它們對抵押品的倚賴。然而，仍然有部分認可機構（包括幾家主要認可機構）並不認同這種觀點：它們不會僅倚賴資料庫的資料來進行信貸評估。若質素好的資料不夠，抵押品可為銀行提供額外保障。

法律與擁有權問題

16. 約有四分之一回應機構表示，它們受現有合約約束，不能向資料庫披露其商業客戶的資料。此外，部分機構表示它們有受信責任，將它們所掌握有關客戶的資料保密。幾家認可機構指出在某些情況下，合約載有特定條文，禁止披露資料，這些情況包括銀團貸款、企業的債務重組方案等。

17. 約60%的認可機構認為對資料庫的參與應屬強制性，22%表示應完全屬自願性質，20%表示金管局應發出指引

鼓勵認可機構參與。若自願參與計劃，只有65%的認可機構表示有意參與。

18. 至於擁有權問題，58%的回應機構認為資料庫應該由政府擁有。幾家認可機構提及這是確保數據安全和公平訂價的最佳方法。20%認為資料庫應該由業內公會擁有，只有10%表示希望由私人經營。

C 部分—量化評估

19. 按過期3個月以上的貸款佔未償還貸款總額的比率計算，於1999年12月31日，受訪認可機構的以下各類貸款的加權平均貸款拖欠比率約為(見註1及2)：

向以下企業提供的貸款：	貸款拖欠比率 (%)	未償還貸款佔 商業貸款總額的百分比
i) 中小企業	15.1	47.0
ii) 非藍籌上市公司	10.6	21.5
iii) 藍籌上市	0.4	20.4
iv) 海外跨國企業	6.8	11.0
v) 所有商業貸款	10.2	

20. 按提供予個別商業客戶的合計信貸總額分項列出於1999年12月31日受訪認可機構的商業信貸額(包括資產負債表內和表外項目)(見註3)：

對每位商業客戶的合計信貸總額	商業客戶數目	涉及金額 (百萬港元)
<= 100 萬港元	66,938	22,398.1
> 100 萬港元 - 250 萬港元	18,043	30,293.1
> 250 萬港元 - 500 萬港元	13,483	47,596.0
> 500 萬港元 - 1,000 萬港元	10,316	70,267.6
> 1,000 萬港元 - 5,000 萬港元	12,486	247,330.8
> 5,000 萬港元 - 1 億港元	2,031	135,443.1

> 1 億 港 元	2,466	918,392.8
總 額	125,763	1,471,721.5

商業信貸資料庫的可行性與適切性調查

調查結果

A 部分 - 現有信貸資料服務的使用情況

1. 認可機構有否使用現有的信貸資料服務以評估商業客戶？

78.0% 有
22.0% 沒有 (請轉答第 6 條)

2. 有使用信貸資料服務的認可機構通常會獲取哪些資料？

92.3% 公開記錄，如法律令狀、呈請書、破產令
69.2% 負面數據，如拖欠還款、不還款
53.9% 客戶的業務狀況和財務資料，如資產負債表、損益帳
51.3% 評級，作為個別客戶的風險的綜合指標
46.2% 客戶抵押予其他貸款人的抵押品，如抵押品類別、市值
48.7% 董事、主要股東、擔保人等的簡介和信貸記錄
25.6% 屬同集團客戶的相互關係
20.5% 正面數據，如未償還信貸、融資宗數和條款、債權人數目
15.4% 客戶對其他貸款人的負債的分項資料，如期限、融資類別、利率

3. 信貸資料服務提供的資料對協助評估商業客戶方面是否有用？

35.9% 不大有用
61.5% 頗為有用
2.6% 非常有用

4. 現有的信貸資料服務存在哪些問題？

71.8% 資料不夠全面
51.3% 服務收費過於高昂
35.9% 資料並不貼時

5. 認可機構目前有否向信貸資料服務公司提供以下資料？

32.0% 負面數據，如拖欠還款、不還款
10.0% 正面數據，如未償還信貸、融資宗數和條款
4.0% 客戶抵押予認可機構的抵押品，如抵押品類別、市值
4.0% 董事、主要股東、擔保人等的簡介和信貸記錄
2.0% 客戶對認可機構的負債的分項資料，如期限、融資類別、利率

6. 目前是否欠缺有關以下類別客戶的可靠及最新資料（見註1）？

i) 中小企業：

96.0% 是

4.0% 否

ii) 非藍籌上市公司：

83.7% 是

16.3% 否

iii) 藍籌上市公司：

51.0% 是

49.0% 否

iv) 海外跨國企業：

56.2% 是

43.8% 否

B 部分 - 資料庫的適切性和可行性

7. 認可機構原則上是否同意一個能保存相當廣泛商業信貸資料，並獲貸款機構廣泛參與的資料庫，可改善它們的信貸評估？

90.0% 同意

6.0% 不同意

4.0% 無意見

8. 認可機構是否同意以下支持資料庫的論點？

i) 可增進銀行對客戶的財務狀況與負債情況的了解：

98.0% 同意

2.0% 不同意

ii) 可提高銀行及早察覺客戶遇到困難的能力：

90.0% 同意

6.0% 不同意

4.0% 無意見

iii) 可改善銀行的信貸分配和訂價，信貸記錄良好的客戶也會因此得益：

70.0% 同意

20.0% 不同意

10.0% 無意見

iv) 可提高私營企業的透明度，從而改善貸款機構在香港的營運環境：

92.0% 同意

2.0% 不同意

6.0% 無意見

9. 認可機構是否同意以下反對資料庫的論點？

i) 向資料庫提供資料可能會引致流失客戶資料及市場佔有率予競爭對手：

42.0% 同意
42.0% 不同意
16.0% 無意見

ii) 向資料庫提供資料可能令客戶反感：

52.0% 同意
30.0% 不同意
18.0% 無意見

iii) 成立資料庫可能會令客戶不願意來港集資，特別是海外跨國企業：

26.0% 同意
50.0% 不同意
24.0% 無意見

10. 如所有認可機構均須向資料庫匯報有關其商業客戶的信貸資料，會否令以下客戶不願意來港集資？

i) 中小企業：

4.0% 會，而且影響很大
24.0% 會，會有一些影響
72.0% 不會

ii) 非藍籌上市公司：

6.0% 會，而且影響很大
32.0% 會，會有一些影響
62.0% 不會

iii) 藍籌上市公司：

8.0% 會，而且影響很大
48.0% 會，會有一些影響
44.0% 不會

iv) 海外跨國企業：

10.0% 會，而且影響很大
50.0% 會，會有一些影響
40.0% 不會

11. 若資料庫也收集身為銀行或金融機構的商業客戶的信貸資料是否適當及可行？

[舉例來說，部分機構可能會認為無須向資料庫匯報身為金融機構的客戶的信貸資料，原因是這些客戶本身已受到監管。]

26.0% 是
74.0% 否。那麼，以下哪些機構的信貸資料不應包括在提供予資料庫的資料內？
74% 銀行
30.0% 銀行以外的金融機構

12 料庫收集的資料包括所有商業客戶，不論其規模是否適當及可行（如由中小企業至上市公司）？

[部分認可機構能會認為有關中小企業的資料比較重要，因為一直以來均欠缺有關中小企業的資料。其他認可機構則可能會認為上市公司的資料較重要，因為這些公司可以向而且也經常向多家銀行借款。]

84.0% 是
16.0% 否。那麼，以下哪些機構的信貸資料不應包括在提供予資料庫的資料內？
16.0% 藍籌上市公司
12.0% 海外跨國企業
8.0% 非藍籌上市公司
2.0% 中小企業

13. 資料庫收集的資料如包括商業客戶的資產負債表內和表外項目是否適當及可行？

94.0% 是
6.0% 否

14. 資料庫應提供哪些資料？

96.0% 公開記錄，如法律令狀、呈請書、破產令
94.0% 負面數據，如拖欠還款、不還款
76.0% 正面數據，如未償還信貸、融資宗數和期限、債權人數目
74.0% 客戶負債情況的分項資料，如期限、融資類別、利率
72.0% 客戶抵押品資料，如抵押品類別、市值
72.0% 同集團客戶的相互關係
72.0% 董事、主要股東、擔保人等的簡介和信貸記錄
64.0% 客戶的業務狀況及財務資料，如資產負債表、損益帳
64.0% 資料庫給予的評級，作為個別客戶的風險的綜合指標

15. 目前認可機構有否給予內部信貸評級，作為個別商業信貸附帶的風險的綜合指標？

64.0% 有，就全部或大部分商業信貸給予內部評級
14.0% 有，就部分商業信貸給予內部評級
22.0% 沒有

16. 如果資料庫能夠以有系統和具成本效益的方法提供資料（例如第 14 題列載的項目），認可機構認為這些資料能否加強其內部評級制度？

81.6% 能
18.4% 不能

17 資料庫應否給予評級，作為對個別客戶的風險的綜合指標，讓銀行參考？

59.2% 應該
40.8% 不應該

18. 認可機構提供予中小企業的信貸是否一般均需要抵押品（與上市公司比較）？

- 56.0% 是，大部分都需要
- 42.0% 是，某部分需要
- 2.0% 否

19. 若其他因素維持不變，由於資料庫能提供更多資料，會否減輕認可機構在貸款予中小企業時對抵押品的倚賴？

- 4.0% 會，可大大減輕對抵押品的倚賴
- 76.0% 會，可略為減輕對抵押品的倚賴
- 20.0% 不會

20. 若其他因素維持不變，由於資料庫能提供更多資料，會否令認可機構更樂意貸款予中小企業（不論有否接受抵押品）？

- 12.0% 會，在很大程度上
- 72.0% 會，在某程度上
- 16.0% 不會

21. 認可機構有否保存以下有關其商業客戶的資料？

- 98.0% 個別客戶的合計信貸融資
- 94.0% 屬於同集團的個別客戶的合計信貸融資
- 90.0% 客戶的營業額
- 90.0% 客戶的資產總額
- 86.0% 客戶是上市或非上市公司的資料
- 36.0% 客戶的僱員人數

22. 若資料庫初期僅收集某些客戶的資料，以下哪些資料應首先包括在內？

- 92.0% 中小企業
- 44.0% 非藍籌上市公司
- 10.0% 藍籌上市公司
- 12.0% 海外跨國企業

23. 跟進上文第 22 題，如何可以把這些客戶的資料量化，以便向資料庫匯報？

- 70.0% 按客戶的營業額
- 58.0% 按客戶的資產總額
- 42.0% 按信貸融資額
- 28.0% 按客戶是否上市
- 8.0% 按客戶的僱員人數

24. 有否訂立任何合約，會禁止認可機構向信貸資料服務機構提供商業信貸資料？

- 28.0% 有
- 42.0% 沒有
- 30.0% 在某些情況

25. 認可機構對資料庫的法定擁有權有何意見？

- 58.0% 政府擁有（如金管局）
- 20.0% 業內擁有（如香港銀行公會）
- 10.0% 私營（如現有的信貸資料庫）
- 12.0% 無意見

26. 應否強制認可機構參與資料庫？

- 22.0% 不應該，參與應完全屬自願性質
- 20.0% 不應該，但金管局應發出指引，鼓勵認可機構參與
- 22.0% 應該，並應僅限於認可機構參與
- 36.0% 應該，並應包括其他金融機構，如本港的財務公司和證券公司

27. 假設並非強制認可機構參與資料庫，認可機構會否仍然參與這個計劃？

- 65.2% 會
- 34.8% 不會

C 部分 - 量化評估

28. 按過期 3 個月以上的貸款佔未償還貸款總額的比率計算，於 1999 年 12 月 31 日，受訪認可機構的以下各類貸款的加權平均貸款拖欠比率約為（見註 2）：

向以下企業提供的貸款 (見註 1)：	貸款拖欠比率 (%)	未償還貸款佔 商業貸款總額的百分比
i) 中小企業	15.1	47.0
ii) 非藍籌上市公司	10.6	21.5
iii) 藍籌上市	0.4	20.4
iv) 海外跨國企業	6.8	11.0
v) 所有商業貸款	10.2	

29. 按提供予個別商業客戶的合計信貸總額分項列出於 1999 年 12 月 31 日受訪認可機構的商業信貸額（包括資產負債表內和表外項目）（見註 3）：

對每位商業客戶的合計信貸融資總額	商業客戶數目	涉及金額 (百萬港元)
<= 100 萬港元	66,938	22,398.1
> 100 萬港元 - 250 萬港元	18,043	30,293.1
> 250 萬港元 - 500 萬港元	13,483	47,596.0
> 500 萬港元 - 1,000 萬港元	10,316	70,267.6
> 1,000 萬港元 - 5,000 萬港元	12,486	247,330.8
> 5,000 萬港元 - 1 億港元	2,031	135,443.1
> 1 億港元	2,466	918,392.8
總額	125,763	1,471,721.5

附註

附註 1：

調查把香港的商業企業分為 4 大類：中小企業、非藍籌上市公司、藍籌上市公司和海外跨國企業。這些用語相當廣泛，金管局認為這些企業具有以下特色：

- **中小企業**：這些企業通常是非上市公司，除了大股東的股本和銀行貸款外，資金來源有限，而且披露資料標準一般較低。根據這個定義，大型私營公司也可歸入這個類別。這個情況或許可以解釋銀行業內中小企業貸款所佔比重甚大的情況（按價值計達 47%）。
- **非藍籌上市公司**：這些企業在香港聯合交易所（聯交所）上市。它們須遵守聯交所的披露資料要求。它們從資本市場集資的機會可能有限，但能夠向多家銀行取得信貸融資。
- **藍籌上市公司**：這些企業在聯交所上市，須遵守聯交所的披露資料要求（也可能同時是恒生指數成分股）。它們可能具備外部信貸評級，很容易就能夠從資本市場集資。具備類似特點的公營機構（如地鐵、九鐵、按揭證券公司）也屬於這個類別。
- **海外跨國企業**：這個類別指總部設於香港以外，並具有國際業務的企業，包括海外企業在香港開設的附屬公司／辦事處，如 IBM 香港。這些企業或其海外母公司／總辦事處很容易就能夠從資本市場集資。

上述分類可能與個別機構本身對商業客戶的分類相同或不盡相同。

附註 2：

調查結果根據 34 家認可機構的資料編製，這些認可機構向金管局提供了有效的數據，以便進行分析。雖然有關數字應能反映整體銀行業的情況，但只屬約數，因為認可機構可能就問題中的不同類別商營企業採納了不同的定義。

附註 3：

調查結果根據 42 家認可機構的資料編製，這些認可機構向金管局提供了有效的數據，以便進行分析。

全面資料交換—研究所得的實證

在海外進行的多項研究證明有規模的信貸資料庫提供的信貸資料具有預報價值，可減低拖欠比率及增加貸款。

2. 其中一項研究是由英國 1 家主要信貸資料庫進行，比較某個信貸組合在 3 個不同情況下（即沒有運用信貸資料庫的數據、只運用信貸資料庫的負面數據，以及運用信貸資料庫的負面和正面數據）的壞帳比率。為了令 3 個情況之間的比較有效，比較是按每個信貸組合適用相同的拒絕率（reject rate）來進行，然後按每個組合的特定拒絕率評估壞帳比率。研究結果顯示若能運用信貸資料庫提供的負面和正面信貸資料，拖欠比率可能會大大降低（見表 1）。雖然研究只利用了消費信貸數據，但這個理論應可同樣應用於商業信貸。

表 1

經過 18 個月營運後，新造個人貸款、支票和信用卡戶口的資產質素	18 個月內的預期壞帳率		
	個人貸款 (拒絕率=40%)	支票戶口 (拒絕率=15%)	信用卡 (拒絕率=33%)
1. 沒有利用信貸資料庫數據的資產質素	壞帳率=7.3%	壞帳率=6.8%	壞帳率=8.4%
2. 利用信貸資料庫負面數據的資產質素	壞帳率=5.6%	壞帳率=5.0%	壞帳率=6.8%
壞帳減少幅度 (2 與 1 比較)	25.3%	27.4%	20.7%

3. 利用信貸資料庫的正面和負面數據的資產質素	壞帳率=4.7%	壞帳率=4.3%	壞帳率=5.6%
壞帳減少幅度 (3 與 1 比較)	38.0%	38.4%	35.9%
壞帳減少幅度 (3 與 2 比較)	16.9%	15.1%	19.2%

3. 另一項研究是由意大利薩勒諾大學的經濟金融研究中心在 1999 年進行，研究結果與上文所述大致相同¹。這項研究就信貸資料服務對信貸市場的影響進行跨國比較，向 49 個國家發出問券，收集到的數據加以整理後用作進行實證分析。這些國家在信貸資料的處理方面差別相當大——部分根本沒有信貸資料庫；其餘則設有不同形式的信貸資料庫（私營或公營信貸資料庫，或兩者並存）。為了測試銀行共用資料可增加貸款及減少拖欠還款情況的理論性假設，研究人員盡可能向這些國家收集多種統計資料，例如銀行對私營企業貸款、貸款虧損準備、本地生產總值、增長率及其他有關指標。結果顯示銀行貸款與拖欠還款比率因為以下原因而有顯著分別：(i)沒有信貸資料庫；(ii)只交換負面資料；或(iii)共用負面和正面資料。（見表 2）

表 2

變數	樣本總數	沒有共用資料	僅限於負面資料	共用負面 和正面資料
銀行貸款 / 本地生產總值(%)	60.53	31.10	67.57	66.42
貸款虧損準備 / 貸款總額(%)	0.88	1.31	0.86	0.81
對數本地生產總值	7.19	5.96	6.77	7.79
本地生產總值增長率(%)	3.45	4.53	2.87	3.38
法治指標	7.24	4.80	8.14	7.59
債權人權利指標	2.15	3.14	2.20	1.83
法律體制系源於法國	0.40	0.43	0.20	0.48
法律體制系源於德國	0.12	0.00	0.00	0.22
法律體制系源於北歐	0.10	0.00	0.30	0.04
法律體制系源於英國	0.37	0.57	0.50	0.26

¹ 經濟金融研究中心第 22 號工作文件，Jappelli 和 Pagano 的「共用資料、貸款與拖欠還款：跨國證據」(Information Sharing, Lending and Defaults: Cross-Country Evidence)。請按[此處](#)參看報告全文。

觀察個案宗數

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23

4. 然而，有關的相互關係需要加以說明，例如共用資料的國家的人均本地生產總值較高、法例的執行較完善，對債權人權利也有較大保障，這些因素可能與銀行貸款和拖欠還款有關係。為了控制上述變數的影響，這項研究作出了回歸分析。結論仍是信貸市場的深度與共用資料情況相關。按本地生產總值評估的銀行貸款總額較高的國家，其共用資料機制比較穩固和全面。即使經濟規模和增長率、法律制度與債權人權利的保障等其他經濟和制度變數經調整後，這種關係仍然存在。有關分析也顯示共用資料有助減低拖欠還款比率，不過這種相互關係不及銀行貸款的緊密，原因大概是研究中拖欠還款樣本受到限制。同時，私營或公營共用信貸資料安排的影響似乎沒有重大分別。



CENTRO STUDI IN ECONOMIA E FINANZA

CENTRE FOR STUDIES IN ECONOMICS AND FINANCE

WORKING PAPER no. 22

*Information Sharing, Lending and Defaults:
Cross-Country Evidence*

Tullio Jappelli, and Marco Pagano

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DIPARTIMENTO DI SCIENZE ECONOMICHE - UNIVERSITÀ DEGLI STUDI DI SALERNO

Via Ponte Don Melillo - 84084 FISCIANO (SA)

Tel. 089-96 3167/3168 - Fax 089-96 3169 – e-mail: csef@xcom.it

CSEF WORKING PAPER no. 22

Information Sharing, Lending and Defaults: Cross-Country Evidence

Tullio Jappelli* and Marco Pagano*

Abstract

Theory predicts that information sharing among lenders attenuates adverse selection and moral hazard, and can therefore increase lending and reduce default rates. To test these predictions, we construct a new international data set on private credit bureaus and public credit registers. We find that bank lending is higher and proxies for default rates are lower in countries where lenders share information, regardless of the private or public nature of the information sharing mechanism. We also find that public intervention is more likely where private arrangements have not arisen spontaneously and creditor rights are poorly protected.

JEL Classification: D82, G21, G28.

Keywords: information sharing, credit market, default rate.

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* CSEF, University of Salerno and CEPR

Table of contents

1. *Introduction*
 2. *Review of Theoretical Models*
 3. *Private Information Sharing Arrangements*
 - 3.1. Personal Loans and Small Business Loans
 - 3.2. Corporate Loans
 4. *Public Credit Registers*
 5. *The Effect of Information Sharing on Bank Lending*
 6. *The Effect of Information Sharing on Default Rates*
 7. *Substitution between Private and Public Information Sharing Arrangements*
 8. *Conclusions*
- References*
- Appendix*

1. *Introduction*

A large body of literature shows that asymmetric information between borrowers and lenders can prevent the efficient allocation of credit. Lenders are often unable to observe the characteristics of borrowers, including the riskiness of their investment projects, and this induces adverse selection problems. Lenders may also be unable to control the actions that borrowers take after receiving a loan. A borrower may relax his effort to prevent default or hide the proceeds of his investment to keep from having to repay his debts. Even a solvent borrower may try to avoid repayment if the lender cannot observe or sanction his actions. The consequence is that lenders may ration credit or charge high borrowing rates.

It is often assumed that the only way lenders can overcome these informational problems is to produce information about their customers via screening and monitoring. For instance, they can interview applicants, visit their business before and after granting the loan, and gather information from public records. If lenders operate on a large scale, these data can be used for statistical risk management to grant and price loans on the basis of past performance.

Most of the literature neglects exchange of information with other lenders as an alternative way to learn about one's own customers. This exchange can be voluntary or imposed by regulation. When it occurs spontaneously, it is effected by information brokers, known as "credit bureaus", which operate on the principle of reciprocity, collecting, filing and distributing the information supplied voluntarily by their members. In many countries a great deal of informational exchange also occurs via "public credit registers". These are generally managed by central banks, with compulsory reporting of data on borrowers which are then processed and returned to the lenders.

Previous theoretical research, summarized in Section 2, shows that information sharing between lenders can foster credit activity and increase borrowers' incentives to repay, but no empirical investigation of such effects exists to this date. To fill this gap, in this paper we use a new international database to test if the presence of credit bureaus or public credit registers increases lending activity and reduces defaults.

Sections 3 and 4 describe our data set, which we collected via questionnaires directed to private credit bureaus and central banks. We document that borrower coverage and the type of data exchanged vary

considerably over time and between countries. Lenders commonly exchange data about past defaults or arrears. Sometimes they also share data about customers' outstanding liabilities, maturities, and details about borrowers' credit history. In Section 5 we test if private and public information sharing affect bank lending, and in Section 6 whether they also affect non-performing loans and credit risk. We find that information sharing is associated with broader credit markets and lower credit risk, but not with a significantly lower fraction of non-performing loans.

The empirical analysis reveals that private and public information sharing arrangements have no differential effect on credit market performance. One way to interpret this finding is that public credit registers and private credit bureaus are substitutes. This leads us to investigate directly whether the absence of private credit bureaus prompts regulators to establish public credit registers or to widen the scope of their operation. Probit and Tobit regressions reported in Section 7 show that these hypotheses are consistent with the data. Section 8 summarizes our main findings.

2. Review of Theoretical Models

Recent theoretical research suggests a threefold effect of lenders' exchange of information about borrowers. First, credit bureaus improve banks' knowledge of applicants' characteristics and permit more accurate prediction of repayment probability. This allows lenders to target and price their loans better, easing adverse selection problems. Second, credit bureaus reduce the informational rents that banks could otherwise extract from their customers. They tend to level the informational playing field within the credit market and force lenders to price loans more competitively. Lower interest rates increase borrowers' net return and augment their incentive to perform. Third, credit bureaus work as a borrower discipline device: every borrower knows that if he defaults his reputation with all other potential lenders is ruined, cutting him off from credit or making it more expensive. This mechanism also heightens borrowers' incentive to repay, reducing moral hazard.

Here we review these three effects of information sharing. In the pure adverse selection model developed by Pagano and Jappelli (1993), information sharing improves the pool of borrowers, decreases defaults and reduces the average interest rate. In the model, each bank has private

information about the credit worthiness of local residents but no information about immigrants, who therefore face adverse selection. If banks exchange their private information about residents, they can lend safely to immigrants as well, so the default rate decreases. The effect on lending is ambiguous, however. The volume of lending may increase or decrease, because when banks exchange information about borrowers' types, the implied increase in lending to safe borrowers may fail to compensate for the reduction in lending to risky types. Banking competition tends to strengthen the positive effect of information sharing on lending: when credit markets are contestable, information sharing reduces informational rents and increases banking competition, which in turn leads to greater lending.¹

The other two effects arise in the presence of moral hazard. Information sharing can reinforce borrowers' incentives to perform, either via a reduction of banks' rents or through a disciplinary effect. The exchange of information between banks reduces the informational rents that banks can extract from their clients within lending relationships. Padilla and Pagano (1997) make this point in the context of a two-period model where banks are endowed with private information about their borrowers. This informational advantage confers to banks some market power over their customers, and thereby generates a hold-up problem: since banks are expected to charge predatory rates in the future, borrowers exert low effort to perform, leading to high default and interest rates, and possibly to the collapse of the credit market. By committing to exchange information about borrowers' types, they restrain their own future ability to extract informational rents. This reduces the probability of default of each borrower and the interest rate he is charged, and increases total lending relative to the regime without information sharing.

An effect on incentives exists even when there is no hold-up problem. This effect is present when banks, instead of exchanging information about

¹ This model also delivers predictions about lenders' incentives to create a credit bureau. Lenders have a greater incentive to share information when the mobility of credit seekers is high and when the potential demand for loans is large. Technical innovations that reduce the cost of filing, organizing and distributing information should foster credit bureaus' activity. Banking competition, by contrast, might inhibit the appearance of credit bureaus: with free entry, a bank that supplies information about its customers to a credit bureau is in effect helping other lenders to compete more aggressively. This reduces the expected gain from information sharing and could deter the creation of a credit bureau. Pagano and Jappelli (1993) bring international and historical evidence to bear on these predictions.

borrowers' types, communicate to each other data about past defaults. Padilla and Pagano (1999) show that this creates a disciplinary effect. When banks share default information, default becomes a signal of bad quality for outside banks and carries the penalty of higher interest rates. To avoid this penalty, entrepreneurs exert more effort, leading to lower default and interest rates and to more lending.²

In this model, disclosing information about borrowers' quality, instead, has no effect on default and interest rates, in contrast with the result of Padilla and Pagano (1997). Ex-ante competition is assumed to eliminate the informational rents of banks anyway, so that their customers' overall interest burden cannot be reduced further. As a result, when information about their quality is shared, borrowers have no reason to change their effort level, and equilibrium default and interest rates stay unchanged. Information sharing about borrowers' characteristics can even reduce lending. When they share information, banks lose all future informational rents and therefore require a higher probability of repayment to be willing to lend. So the credit market may collapse in situations in which it would be viable under no information sharing.

This suggests that sharing data on defaults rather than borrowers' characteristics can have quite different effects on the probability of default. The disciplinary effect arises only from the exchange of default information. To the extent that banks also share data on borrowers' characteristics, they actually reduce the disciplinary effect of information sharing: a high-quality borrower will not be concerned about his default being reported to outside banks if these are also told that he is a high-quality client. But, as discussed above, exchanging information about borrowers' characteristics may reduce adverse selection or temper hold-up problems in credit markets, and thereby reduce default rates.

On the whole, all three models agree on the prediction that information sharing (in one form or another) reduces default rates, whereas the prediction concerning its effect on lending is less clear-cut. However, even the prediction about default is unambiguous only if referred to the probability of default of an individual borrower. When one considers the

² In this model there is no holdup problem because initially banks have no private information about credit seekers, and ex ante competition dissipates any rents from information acquired in the lending relation.

average default rate, the prediction may be overturned by composition effects. Suppose that information sharing gives access to credit to lower-grade borrowers. Even though each borrower's probability of default is lower, the aggregate default rate may increase because the relative weight of lower-grade borrowers increases. Since the data used in the empirical tests in the next sections concern aggregate measures of the default rate, this composition effect may introduce a bias against the prediction of the models.

The empirical evidence on these predictions will be presented in Section 4. Before turning to the evidence, we proceed to describe the main features of private and public information sharing arrangements, and their diffusion around the world.

3. Private Information Sharing Arrangements

In a number of countries, lenders (banks, finance companies, credit card companies, retailers, suppliers extending trade credit) routinely share information on the creditworthiness of their borrowers through credit bureaus, information brokers that in some cases are set up and owned by the lenders themselves and in others operated independently for profit by a third party. Lenders supply the bureau with data about their customers. The bureau collates this information with data from other sources (courts, public registers, tax authorities, etc.) and compiles a file on each borrower. The lenders that contribute data can later obtain a return flow of consolidated data about a credit applicant by requesting a "credit report" from the bureau. Nowadays this two-way flow of data between lenders and the bureau is effected electronically.

It is the exchange of information between lenders that distinguishes a credit bureau from other agencies that collect and process valuable information from public sources and private investigators. Credit bureaus often do collect and process such data, but this is not their distinguishing characteristic.

Lenders who provide their private information to credit bureaus are granted access to the common database insofar as the data provided are timely and accurate. Credit bureaus are exposed to a potential conflict of interest, especially when they are owned by the lenders themselves: each

lender would like to exploit the information provided by other lenders without disclosing his own. This explains why sanctions are invariably threatened to any credit granter who fails to supply data or provides inaccurate information. Sanctions range from fines to loss of membership and hence denial of access to the bureau's files. In other words, credit bureaus are based on the principle of reciprocity, which is generally stated in the contractual agreement between the bureau and credit grantors.³ Most credit grantors do supply their information regularly, particularly those that have accounts receivable on tape.

Around the world, arrangements of this type are found both in the household credit market and in business lending, in varying degrees and with different institutional features. These are described and documented below.

3.1. Personal Loans and Small Business Loans

Personal and small business loans are characterized by a large number of applicants whose desired loan size is not large enough to warrant individual assessment. In these markets, screening can benefit greatly from statistical analysis of applicants' characteristics and credit histories as predictors of repayment, and such analysis is feasible precisely because of the large number of standard loans. Credit bureaus, which pool data from many lenders and for several years, own the ideal database for estimating statistical models of risk management, which explains why credit bureaus have generally originated precisely in the consumer credit market. They are now increasingly active in the small business and trade credit markets as well.

³ There are exceptions, however. At one time, American Express declined to share its information with the credit bureaus, but because it was willing to buy reports in large quantities, the bureaus kept on selling reports to that firm. This situation later changed and American Express now provides data on its own customers.

FIGURE 1. A STANDARD CREDIT REPORT ON AN INDIVIDUAL

Source: Credit Reference Association of Australia Limited

FILE NUMBER – 64610042 REF 3664-3186
 HARRISON, THOMAS, RONALD, M.M, KRISTINA
 SUBJECT BORN – 100850, LIC NO-2421PS
 SPOUSE BORN – 250164
 EMPLOYMENT – SERVICEMAN, GAZEBO WHOLESALERS PL
 ADDRESS – 35, LAND, BONNYRIGG, NSW
 PREVIOUS – 48, GERORGE, DANDENONG, VIC

DIRECTORSHIP DETAILS

DATE

130886 MRT – GEZEBO WHOLESALERS PL (IN LIQ.) CC-64608113

MEMBER DEFAULT REPORTS

DATE	NAME	AC	AMNT	DF	REF. NO.	DTR PAID
140388	STANDARD CHART LOSS REC NSW	L	5431	PD	LLR0040LS	MRT
040687	AGC FIVE DK NSW	L	7314	R	L1070515135	MRT
260186	ESANDA ADMIN SYD NSW	RM	6448	RL	241174159	T&K

JUDGEMENTS

DATE	NAME	AMNT	DF	PLAINT. NO.	DTR PAID
150487		9037	DJ	15648/86/METN	MRT

NOTE: Alleged debt(s) may have been paid since recorded, or are possibly disputed. check with creditors for confirmation.

CREDIT ENQUIRIES

DATE	NAME	AC	AMNT	DTR	REFERENCE NUMBER
140688	CITYCORP FIN HURTSVILLE NSW.	L	8727	T&K	
131287	AGC FIVE DOCKK NSW	L	8700	T&K	
231087	JAOHN’S MOTOR NSW	HM	7000	T&K	
111186	WESTPAC WESTERN NSW	CC	0	MRT	
221185	ITICORP FIN SYDNEY NSW	L	1717	MRT	
150685	PERMANENT FIN CORP NSW	HB	15300	MRT	
310784	AGC FIVE DOCK NSW	L	18000	MRT	
230484	ESANDA ADMIN VIC	RM	19000	MRT	

KEY TO THE INITIALS USED IN THE REPORT

AC	- ACCOUNT TYPE	L	- LEASE ACCOUNT
M	- MONTHLY ACCOUNT	HM	- HIRE PURCHASE MOTOR VEHICLE
T	- TERMS ACCOUNT	RM	- REAL ESTATE MORTGAGE
HB	- HIRE PURCHASE BOAT	CC	- CREDIT CARD
AMNT	- AMOUNT OWING OR APPLIED FOR	DF	- REASON FOR REPORTING
PD	- REGULAR PAYMENT DEFAULT	R	- REPOSSESSION
RL	- REPOSSESSION LOSS	DJ	- DISTRICT COURT JUDGEMENT
LA	- LEGAL ACTION	DTR	- WHO IS THE DEBTOR
MRT	- DEBTOR IS MR. T. HARRISON	T&K	- DEBTOR IS THOMAS AND KRISTINA

FIGURE 2. A STANDARD CREDIT REPORT ON A COMPANY

Source: Credit Reference Association of Australia Limited

FILE NUMBER – 6261150
 BRANDY WHOLESALERS P/L
 REG OFFICE –3, SMITH, PENRITH,NSW

INCORPORATION DETAILS

DATE INCORP	REGISTRATION NUMBER	STATE REGISTERED
180285	234322-78	NSW

CORPORATE AFFAIRS SEARCH

DATE	DATE LAS RETURN	SHARED ISSUE	PAID CAPITAL
130688	101286	1,000,000	\$840,000

DIRECTORSHIP DETAILS

DATE	NAME	FILE NUMBER
100688	THOMAS GARDNER	CN-26579545
100688	SAMUEL HARVEY	CN-88502222

NOTE: Directorship details were obtained from corporate affairs comm. records

MAJOR SHAREHOLDERS

DATE	NAME	SHARES HELD
100688	CAROLINE NOMINEES P/L	385,000
100688	THOMAS GARDNER AN ASSOCIATES P/L	422,000
100688	SAMUEL HARVEY	28,000

SECRETARY

DATE	NAME
100688	JOHN CAMPBELL

MEMBER DEFAULT REPORTS

DATE	NAME	AC	AMNT	DF	REFERENCE NO.	PAID
020787	AGC COMMERCIAL LEASE	L	6000	LA	45903	1186P

NOTE: Alleged debt(s) may have been paid since recorded, or are possibly disputed. check with creditors for confirmation.

SECURITIES

DATE	CREDITORS	TYPE	AMT	SECURITY	REFERENCE
100188	STATE BANK OF NSW	RM	387900	LAND PENRITH	323425362

CREDIT ENQUIRIES

DATE	NAME	AC	AMNT
130488	CORPORATE LEASING SERV NSW	L	185000
180787	J.B.C. IMPORT AGENCY VIC	M	20000

KEY TO THE INITIALS USED IN THE REPORT

AC	- ACCOUNT TYPE	L	- LEASE ACCOUNT
M	- MONTHLY ACCOUNT	DF	- REASON FOR REPORTING
RM	- REAL ESTATE MORTGAGE	LA	- LEGAL ACTION
AMNT	- AMOUNT OWING OR APPLIED FOR		

A credit bureau can issue several kinds of credit report, depending on the information gathered, the type of credit application (consumer credit, house mortgage, small business loan, etc.) and, most importantly, the amount of detail requested by the lender. Reports range from simple statements of past defaults or arrears – “black” or “negative” data – to detailed reports on the applicant's assets and liabilities, guarantees, debt maturity structure, pattern of repayments, employment and family history – “white” or “positive” data. Naturally the price of a credit report depends on the amount of detail. Prices for basic credit reports are currently quite low, averaging about 1 dollar in the United States and the United Kingdom, 2 dollars in Italy, and more than 3 dollars for local credit bureaus in Argentina.

Figures 1 and 2 give examples of the most basic type of credit report, reproduced from a publication of the largest credit bureau in Australia, which only collects and reports negative information. Figure 1 shows an individual credit file for a person with several credit problems: three members of the bureau reported default, there was a debt judgment, and he appears as director of a failed company. The bottom part of the report shows previous queries to the bureau by various lenders. Figure 2 refers to a small company. It shows the main shareholders and directors, with cross references to the individual files that the bureaus has recorded in their names. The company has been reported as insolvent by a bureau member and has pledged a security over its assets to a bank.

The more sophisticated credit bureaus also use statistical models to produce and sell “credit scoring” services, by which they rate borrowers according to characteristics and credit history. Such scores were initially developed by credit grantors mainly for deciding on applications. Where positive information is also available, the models are now intensively also used to promote financial instruments, price loans, and set and manage credit limits.

To gather more information about their operations around the world, we sent a questionnaire (reported in the Appendix) to credit bureaus in 49 countries.⁴

⁴ The list of countries is given in Tables 1 and 2 and is the same as in La Porta et al. (1997). This choice is dictated by the need to merge our data on information sharing with data on other institutional determinants of lending and default.

TABLE 1. PRIVATE CREDIT BUREAUS AROUND THE WORLD

Figures are based on a questionnaire sent to the main credit bureaus in each country, whose names are not reported for reasons of confidentiality. When two or more credit bureaus responded for the same country, the information was merged as follows. The starting date refers to the oldest credit bureau in the country. The type of information shared refers to the 1990s and is defined as “black” (B) if it refers to defaults and arrears, and “white” (W) if it also includes other information, such as debt exposure. Credit reports are the number of credit reports issued by all the credit bureaus in the country (if available); otherwise, by the credit bureaus responding in that country.

Country	Starting Date	Type of Information Shared	Credit Reports: Level / Percent of Population (year)
Argentina	1950	B-W	1.2 / 3.4 (1997)
Australia	1930	B	5.8 / 34.0 (1990)
Austria	1860	B-W	N/A.
Belgium	1987	B	10.6 / 104.8 (1998)
Brazil	1996	B	200.0 / 128.3 (1997)
Canada	1919	B-W	24.0 / 82.7 (1998)
Chile	1990	B-W	7.0 / 49.3 (1997)
Denmark	1971	B	2.6 / 50.3 (1996)
Finland	1900	B	3.5 / 70.2 (1990)
France	none		
Germany	1927	B-W	48.0 / 59.1 (1996)
Greece	none		
Egypt	none		
Hong Kong	1982	B	N/A.
India	N/A.	N/A.	N/A.
Ireland	1963	B-W	0.8 / 22.5 (1996)
Israel	none		
Italy	1990	B-W	2.6 / 4.6 (1996)
Japan	1965	B-W	149 / 121.5 (1990)
Jordan	none		
Kenya	none		
Mexico	1997	N.A.	N.A.
Netherlands	1965	B-W	9.8 / 64.1 (1996)
New Zealand	N/A.	B	N/A.

Country	Starting Date	Type of Information Shared	Credit Reports: Level / Percent of Population (year)
Nigeria	none		
Norway	1987	B	0.5 / 12 (1990)
Pakistan	none		
Peru	1995	B-W	N/A.
Philippines	1982	B	N/A.
Portugal	N/A.	B-W	N/A.
Singapore	1978	B	N/A.
South Africa	1901	B-W	N/A.
South Korea	1985	B-W	N/A.
Spain	1994	B	N/A.
Sri Lanka	none		
Sweden	1890	B-W	2.2 / 26.0 (1990)
Switzerland	1968	B-W	1.7 / 24.1 (1997)
Taiwan	1975	B-W	N/A.
Thailand	none		
Turkey	none		
United Kingdom	1960	B-W	60.0 / 104.8 (1989)
Uruguay	1950	B	N/A.
United States	1890	B-W	600.0 / 228.1 (1997)
Venezuela	N/A.	N/A.	N/A.
Zimbabwe	none		

We have received responses from credit bureaus in 39 countries; for 4 more, we obtained data from other sources (Internet sites, published information, etc.).⁵ The data obtained are reported in Table 1, which displays, by country, the year in which credit bureaus were first established, the type of information exchanged (black or white) and the number of credit reports issued by credit bureaus.

The table shows that in some countries lenders exchange a massive amount of negative and positive information in the consumer credit market: Canada, the United States, the United Kingdom, Japan, Germany, South Africa, Sweden and Switzerland have the highest number of credit reports

⁵ Detailed information on European countries is reported in a background paper (Jappelli and Pagano, 1999).

per person, and lenders have exchanged information for decades at least and in many cases the better part of a century. Credit bureaus have also operated for several decades in Argentina, Brazil, Finland, the Netherlands, and Australia but on a smaller scale. In Italy credit bureaus are a relatively new phenomenon, but have taken on growing importance in recent years. In some Latin American and Asian countries, credit bureaus are in their infancy, either non-existent or operating on a small scale and exchanging mainly black information.

Our questionnaires also elicit qualitative information on the structure and evolution of the credit bureau industry, that is not reported in the table. In most countries there is a strong concentration. A few countries have just one large credit bureau (Australia, Germany, Argentina, Brazil, Finland, and Ireland). In the U.S., U.K., and Japan competition is limited to two or three large vendors. This process of concentration is relatively recent. Where the industry has the longest history (e.g., in the U.S.), it began with local credit bureaus, progressively merging into larger entities. This reflects economies of scale (the larger the credit bureau, the more complete and accurate its information), as well as recent advances in information technology and the elimination of barriers between local credit markets. In the early 1990s concentration began to extend beyond national boundaries: the top three U.S. bureaus (Equifax, Experian and Trans Union) acquired national credit bureaus throughout in Latin America and in parts of Europe and Asia. The questionnaires also gather information on ownership structure. In the U.S., Brazil and Argentina the major credit bureaus are for-profit operations owned by private entrepreneurs, although there are also several local non-profit bureaus owned by chambers of commerce or merchants' associations. In Japan and in most of Europe, credit bureaus are typically incorporated as private companies owned by a consortium of lenders. In Finland and Belgium, they are operated or licensed by government agencies. With the process of cross-border acquisitions of local credit bureaus, especially by the large U.S. vendors, the industry is becoming increasingly profit-oriented.

The international differences in the presence and activity of credit bureaus have several complementary explanations. Pagano and Jappelli (1993) document that the number of credit reports per capita are largest where household mobility is highest. This accords with the idea that the benefit of establishing a credit bureau is greatest where each bank is confronted by a large number of unknown customers, which is the case in countries where borrowers are very mobile.

Fear of competition may also inhibit information sharing. When lenders agree to supply data to a credit bureau they lose the monopoly power attached to exclusive customer information, unless they are well protected by other barriers to entry. So lenders' incentives to pool information are greater when local credit markets are segmented by regulation, as in the United States, than when banks are free to compete nationwide, as in most European countries.

A further element that has historically affected the development of credit bureaus is the degree of privacy protection accorded prospective borrowers. The activities of credit bureaus are regulated almost everywhere so as to prevent violation of privacy and civil liberties. Privacy laws contemplate a wide range of consumer guarantees, such as limits on access to files by potential users, bans on white information (e.g., in Finland and Australia), compulsory elimination of individual files after a set time (7 years in the United States, 5 in Australia), bans on gathering certain kinds of information (race, religion, political views, etc.) and right to access, check and correct one's own file.⁶

A final element bearing on the development of credit bureaus is the degree of protection of creditor rights. Where the legal and judicial systems give poor protection to creditors, debtors may be tempted to default on their obligations even when they have the means to repay. As we argue in Section 2, credit bureaus can attenuate moral hazard in credit relations, by creating a private disciplinary system in place of defective public sanctions.

⁶ As far as access limits are concerned, there appear to be three levels of privacy protection. The replies to our questionnaire indicate that there are low-protection countries, such as Argentina, where anyone can access all debtors' data regardless of the purpose of investigation. In such medium-protection countries as the United States, data can be accessed only for an "admissible purpose", essentially the granting of credit. A higher level of privacy protection may be embodied in the further requirement of the borrower's explicit consent to access his file. This principle is enshrined in the legislation of several European countries and in the Directive 95/46 of the European Parliament on "the protection of individuals with regard to the processing of personal data and on the free movement of such data". In some countries (such as France, Israel and Thailand) safeguards for consumer privacy are so strong that regulation has impeded the emergence of private credit bureaus.

3.2. Corporate Loans

The information needed to assess the creditworthiness of companies is by its very nature more complex and less standardized than for households. Therefore in the case of business loans credit bureaus generally take a more active role in the production of information, collating credit market data received from lenders and suppliers together with balance sheet data and information from the company itself and from public sources about shareholders and managers. The positive component of a credit report for a company is typically much larger than for an individual, and the nature of the credit bureaus in this market segment is different. Rather than provide standard credit reports and statistical risk management, here credit bureau become rating agencies, gathering and processing information from a variety of sources, including lenders and suppliers.

This very active role in the production, processing, and marketing of information may explain why the credit agencies that treat corporate loans are typically profit-oriented businesses, not lenders' cooperative arrangements. The largest of these agencies worldwide is Dun & Bradstreet (D&B). Formed in 1933 through the merger of two credit reporting agencies (R. G. Dun & Co., formed in 1841, and the Bradstreet Company), today D&B maintains a global database that covers 48 million businesses, 10 million of them in the United States. It provides a wide range of services, from the assessment of credit risk and suppliers' reliability to the management of credit and accounts receivables. A standard D&B business information report (available online via the Internet) contains payment history, financial condition, business history, management experience, details on lines of business, parent company and subsidiaries, public records, etc.

4. Public Credit Registers

All countries have public registers for real estate collateral (mortgages) to protect the seniority rights of collateralized creditors, and bankruptcy information is publicly disseminated to alert present creditors and potential

new lenders.⁷ These can be considered as basic forms of publicly enforced information sharing. But in several countries government authorities have taken a much more active role in fostering the exchange of information between lenders, creating formal public credit registers (PCRs), which operate in many respects like credit bureaus.

The PCRs are managed by central banks (except in Chile, Costa Rica and Peru, where they are operated by the banking supervisory authorities, and in Finland, where it is contracted out to a private company). Access to the PCR is granted only to authorized central bank staff (mainly for surveillance reasons and under tight confidentiality rules) and to the reporting financial institutions.⁸ This creates a two-way flow of data between credit grantors and the PCR, much as in the case of private credit bureaus.

TABLE 2. PUBLIC CREDIT REGISTERS AROUND THE WORLD

Figures are based on a questionnaire sent to central banks. The data reported to the register are defaulted loans (D), arrears (A), total loan exposure (L), interest rates (R), and guarantees (G). The exchange rates used to convert the minimum reporting threshold into dollars are those of September 1, 1998.

Country	Starting Date	Number of Subjects Covered	Credit Reports Issued	Minimum Reporting Threshold (US\$)	Data Reported by Participating Institutions
Argentina	1991	4,000,000	N/A.	50	D, A, L, G
Australia	none				
Austria	1986	55,585 (1997)	10,267 (1997)	430,700	L, G
Belgium	1985	360,000 households (1997), 400,000 firms (1990)	3,550,000 households (1997)	223 for households, 27,950 for firms	D, A (consumer and mortgage credit only)

⁷ In some countries, public registers also exist for unpaid IOUs and tax liens.

⁸ In Argentina and Finland not only financial institutions but also the general public can access the PCR. In Chile the data are also made available to a private credit bureau. In Israel and Greece a database on large loans is collected for supervisory reasons only by the central bank, but this information is not made available externally.

Country	Starting Date	Number of Subjects Covered	Credit Reports Issued	Minimum Reporting Threshold (US\$)	Data Reported by Participating Institutions
Bolivia	1989	N/A.	1,300,000	0	D, A, L, R, G, repayments
Brazil	1997	N/A.	4,000,000 households 6,000,000 firms	0	D, A, L
Canada	none				
Chile	1975	2,200,000 households 600,000 firms (1998)	Information transferred to a private credit bureau	0	D, A, L, G, risk class, sector, type of debt, etc.
Colombia	1994	N/A.	N/A.	N/A.	N/A.
Denmark	none				
Finland	none				
France	1989 for households , 1984 for firms	370,000 (1990)	5,400,000 (1990)	118,293 (1990)	D, A for households, L, G, undrawn credit facilities for firms
Germany	1934	1,200,000	1,800,000	1,699,800	L, G
Greece	none				
Egypt	none				
Hong Kong	none				
India	none				
Ireland	none				
Israel	1975	15,000	N/A.	169,500	D,L
Italy	1964	2,200,000 (1994), 6,536,914 (1998)	1,400,000 (1994)	0 for bad loans 86,010 for other loans	D, A, L, G
Japan	none				
Jordan	1966	N/A.	14,300	42,065	A, L
Kenya	none				
Malaysia					
Mexico	1964	260,000 (1997)	129,870 (1997)	20,111	D, A, L, economic activity of debtor, type of credit
Netherlands	none				
New Zealand	none				
Nigeria	none				
Norway	none				
Peru	1968	1,920,000 (1998)	N/A.	0	D, A, L, G
Philippines	none				
Portugal	1977	2,469,120 (1998)	N/A.	286,860	D, A, L, G, undrawn credit facilities

Country	Starting Date	Number of Subjects Covered	Credit Reports Issued	Minimum Reporting Threshold (US\$)	Data Reported by Participating Institutions
Singapore	none				
South Africa	none				
South Korea	none				
Spain	1983	4,600,000 (1991)	758,000 (1997)	6,720 for residents, 336,000 for non-residents	D, A, L, G, regional, sectoral and currency risk
Sri Lanka	1990	N/A.	102,175 (1997)	1,493 for bad loans, 7,465 for other loans	D, A, G
Sweden	none				
Switzerland	none				
Taiwan	none				
Thailand	none				
Turkey	none				
United Kingdom	none				
Uruguay	1984	N/A.	8,000 (1997)	N/A.	D, A, L
United States	none				
Venezuela	1980s	N/A.	N/A.	0	D, A, L
Zimbabwe	none				

The key difference from credit bureaus is that participation in the PCR is compulsory, and its rules are not contracted, but imposed by regulation (except in Finland and Sri Lanka, where participation is voluntary). This implies a second important difference, namely that PCRs have universal coverage (all loans above a threshold amount must be reported at specified intervals), but the information consists mainly of credit data and is disseminated in consolidated form (total loan exposure of each borrower, no details on individual loans). Credit bureaus are less complete in coverage but offer details on individual loans and merge credit data with other data.

Table 2 sets forth the main characteristics of PCRs around the world, based on a questionnaire submitted to 49 central banks, of which 46 have responded (for the questionnaire, see the Appendix); 19 operate a PCR and 27 do not. PCRs are common in continental Europe and Latin America, absent in Anglo-Saxon countries. Most have been created in the last two

decades, except for Germany (1934), Italy (1964) and Mexico (1964). The newcomers are mostly located in Latin America.⁹

The table also shows that the data reported vary considerably across countries. For instance, in Argentina lenders are required to report data on defaults, arrears, loan exposure, interest rates and guarantees. In Germany, only loan exposure and guarantees are reported; in Belgium, only defaults and arrears.

PCRs invariably specify a reporting threshold, but this varies considerably. In most of Europe, PCRs effectively collect information only on relatively large loans to businesses, but in Belgium and France they also cover consumer loans. The threshold is highest in Germany and lowest in Belgium. Clearly, the higher the threshold set by regulators, the fewer the borrowers covered and the credit reports issued, as we see in Table 2. The threshold also demarcates the segment in which private credit bureaus operate without competition from the PCR: above the threshold, credit bureaus have to take into account that lenders can also turn to the public register's reports.

A major emerging problem for PCRs is posed by the growing integration of national credit markets, particularly within the European Union. As of 1998, PCRs are strongly if not exclusively oriented to their respective domestic markets. For instance, Italian banks are required to report to the Italian PCR loans made by their foreign branches. But these loans are not reported to the host-country PCRs. Similarly, Italian companies can borrow abroad without being reported to the Italian PCR. The integration of capital markets thus implies that PCRs are losing the capacity to provide full, accurate and reliable information on the overall credit situation.

Efforts made by the EC commission to set up an international credit reporting system have not met with success so far owing to the differences between systems which are already in place in the individual countries and the fact that countries without a central credit register are unwilling to set up a credit reporting system at the national level. However, European PCRs are planning to establish cooperative agreements to provide lenders with cross-border information. As the legal requirements for this exchange of information have not been met by all EU countries, and since technical and

⁹ Hong Kong is currently setting up a PCR.

organizational problems have not been solved, it is not possible to say when this cooperation will become effective. In the longer run, it is well possible that the PCRs will be gradually displaced by the growth of private, multinational credit bureaus. Since only eight EU countries have PCRs and even they find it difficult to agree on a common set of rules, the second outcome seems more likely.¹⁰

5. The Effect of Information Sharing on Bank Lending

The data described in Sections 3 and 4 can be used to relate bank lending to measures of the activity of credit bureaus and public credit registers, such as their presence, the quality of information collected, and the number of years they have been in operation. This exercise poses several data problems. First, missing values and non-responses limit the number of countries for which we have data on information sharing. Second, data on default rates are hard to collect and compare internationally. Third, one must control for other legal and institutional determinants of lending and defaults, and these variables are only available for a few countries.

There is also a causality issue. Theoretical models show that information sharing may increase lending and reduce defaults. The same models, however, also suggest that where credit is more abundant lenders have a stronger incentive to set up a credit bureau. In our empirical analysis, we attempt to overcome the econometric problems posed by the endogeneity of information sharing by relating credit market performance to lagged measures of the quality and intensity of information sharing.

The first row of Table 3 reports the ratio between bank lending to the private sector and GDP in a sample of 40 countries. Data refer to 1994-95. The countries are divided into three groups, depending on whether prior to 1994 (i) no private credit bureau existed, (ii) only black information was exchanged, or (iii) both black and white information was shared. Bank lending is about twice as large in countries where information is shared, irrespective of the type of information exchanged. However, the correlation may be spurious: information sharing is found in countries with higher GDP

¹⁰ In fact, it may be already occurring: in October 1998, the main Italian credit bureau (CRIF) announced a link-up with other European credit bureaus.

per capita, better law enforcement and poorer safeguards for creditor rights, variables that may well themselves be correlated with bank lending. To control for their effect on bank lending, we turn to regression analysis.

TABLE 3
INFORMATION SHARING AND CREDIT MARKET PERFORMANCE:
DESCRIPTIVE STATISTICS

Countries are divided according to the type of information exchanged via private credit bureaus or public credit registers, based on Tables 1 and 2. Black Information Only is 1 if prior to 1994 private credit bureaus and/or PCR's exchange black information, and 0 otherwise. Black and White Information is 1 if prior to 1994 credit bureaus or PCR's exchange black and white information. The Bank Lending - GDP ratio is the ratio of bank claims on the private sector to GDP in 1994-95. Loan Loss Provisions is the 1994-95 average of the median ratio of non-performing loans to total loans in each country and is based on the BankScope data set produced by IBCA. The Appendix reports the data for loan loss provisions and the number of banks used to construct country medians. The Credit Risk Indicator is based on the International Country Risk Guide Financial Indicator (ICRGF), and ranges from 0 to 50 (maximum risk). The total number of observations for Loan Loss Provisions and Credit Risk is 34 and 35, respectively. See the Appendix for sources and definition of other variables. Country included are: Argentina, Australia, Austria, Belgium, Brazil, Canada, Chile, Denmark, Egypt, Finland, France, Germany, Greece, Hong Kong, Ireland, Israel, Italy, Japan, Kenya, Mexico, Netherlands, New Zealand, Nigeria, Norway, Peru, Philippines, Portugal, Singapore, South Africa, South Korea, Spain, Sri Lanka, Sweden, Switzerland, Thailand, Turkey, United Kingdom, Uruguay, United States, Zimbabwe.

Variable	Total Sample	No Information Sharing	Black Information Only	Black and White Information
Bank Lending / GDP (%)	60.53	31.10	67.57	66.42
Loan Loss Provisions / Total Loans (%)	0.88	1.31	0.86	0.81
Credit Risk	7.77	15.20	5.11	7.14
Log GDP	7.19	5.96	6.77	7.79
GDP Growth Rate (%)	3.45	4.53	2.87	3.38
Rule of Law	7.24	4.80	8.14	7.59
Creditor Rights	2.15	3.14	2.20	1.83
French Origin	0.40	0.43	0.20	0.48
German Origin	0.12	0.00	0.00	0.22
Scandinavian Origin	0.10	0.00	0.30	0.04
English Origin	0.37	0.57	0.50	0.26
Number of observations	40	7	10	23

To explain international differences in bank lending, we regress the ratio of bank lending to GDP on the log of output in 1994-95, the growth rate of output in 1970-93, and indicators of rule of law, creditor rights and legal origin of the commercial code of each country (see the appendix for sources and definitions). We use a baseline specification similar to that used by La Porta et al. (1997) and by Levine (1998), who find that the breadth of the credit market is positively correlated with good law enforcement and protection of creditor rights. They also find that the historical origins of national legal systems are associated with significant differences in lending activity: French (civil law) and Scandinavian systems are associated with a lower ratio of private debt to GNP than English (common law) and German systems. La Porta et al. (1997) measure the size of the credit market by the sum of bank debt of the private sector and outstanding non-financial bonds divided by GNP, while Levine (1998) uses bank lending from 1976 to 1993. We also focus on bank lending only, because credit bureaus and PCRs can be expected to affect primarily banks' policies. Information on bond issuers is instead produced by credit rating agencies and generally publicly available.

Column 1 of Table 4 presents the estimates of the baseline specification for the 40 countries for which we have complete records. The estimates confirm previous findings that rule of law and creditor rights are important determinants of bank lending. In the specification of column 2 we add two variables intended to proxy for the quality of information sharing. The first variable equals 1 if either private credit bureaus, PCRs or both exchange only black information, and 0 otherwise. The second equals 1 if either private credit bureaus, PCRs or both exchange black as well as white information. As discussed in Section 2, black information alone may have a disciplinary effect on borrowers, but the availability of both black and white information enhances the banks' screening ability.

Both coefficients are positive and that of black and white information is statistically different from zero at the 2 percent level. The point estimates indicate that information sharing increases bank lending by more than 20 percent of GDP. In column 3 we add the legal origin dummies to the list of regressors. Due to the correlation between creditor rights and legal origin and to the fewer degrees of freedom, the coefficients of the creditor rights variable and the information sharing dummies are now less precisely estimated. We further check our results by using an estimator which is

robust to the presence of influential values, and report the results in columns 4 and 5. The two dummies for information sharing are both statistically different from zero at the 1 percent significance level.

TABLE 4. EFFECT OF INFORMATION SHARING ON BANK LENDING / GDP

Bank Lending to GDP is the ratio of bank claims on the private sector to GDP in 1994-95. Black Information Only is 1 if prior to 1994 private credit bureaus and/or PCRs exchange black information, and 0 otherwise. Black and White Information is 1 if prior to 1994 credit bureaus or PCRs exchange black and white information. See the Appendix for sources and definition of other variables. White-corrected standard errors are used in the OLS estimates. Robust regressions first calculate Huber weights based on absolute residuals and then regresses again until convergence using those weights. T-statistics are reported in parentheses. The list of countries is reported in the note to Table 3.

Variable	Ordinary Least Squares			Robust Regressions	
	(1)	(2)	(3)	(4)	(5)
GDP Growth Rate	2.61 (0.85)	2.93 (0.89)	2.17 (0.62)	-1.75 (-1.07)	-1.19 (-0.68)
Log GDP	5.30 (1.73)	4.96 (1.51)	2.23 (0.61)	6.77 (2.80)	5.34 (2.00)
Rule of Law	7.47 (3.14)	6.25 (2.46)	7.72 (3.64)	4.18 (2.83)	4.87 (2.89)
Creditor Rights	6.58 (2.12)	8.32 (2.76)	5.27 (1.07)	11.64 (4.68)	9.96 (3.23)
French Origin			-7.01 (-0.65)		2.46 (0.31)
German Origin			26.67 (1.24)		14.66 (1.42)
Scandinavian Origin			-44.46 (-3.18)		-29.22 (-2.59)
Black Information Only		24.77 (1.52)	29.38 (1.82)	34.14 (3.62)	36.46 (3.50)
Black and White Information		23.18 (2.38)	15.65 (1.43)	31.38 (3.68)	27.23 (2.92)
Constant	-54.86 (-2.71)	-67.93 (-3.03)	-42.65 (-1.22)	-67.58 (-4.29)	-60.64 (-2.96)
Adjusted R square	0.46	0.50	0.67	--	--
Number of observations	40	40	40	40	40

We also experimented with a variable counting the number of years from the establishment of the earliest bureau of which we have knowledge. This variable is based on the assumption that time in existence may correlate

with the size of the industry's data bases and the reliability of its storage and processing techniques. The coefficient of this variable is not significantly different from zero (regressions are not reported for brevity).

In principle, private credit bureaus may impact credit markets differently compared to public credit registers. As explained in Section 4, PCRs have universal coverage but provide more aggregated data compared to credit bureaus and collect data only for loans above a statutory threshold. We test for this differential impact by adding separate dummies for information exchanged by credit bureaus. The coefficients of these variables (not reported for brevity) are not significantly different from zero. This suggests that private and public information sharing arrangements are substitutes, an issue that will be further investigated in Section 7.

6. The Effect of Information Sharing on Default Rates

Testing the theoretical prediction that information sharing will lower default rates is complicated by the unavailability of internationally comparable data on defaults. Lacking direct observability, we resort to two proxies for default rates: loan loss provisions and an index of credit risk. Loan loss provisions is measured as the median ratio of loan loss provisions to total loans in each country, averaged over 1994 and 1995. It is constructed on the basis of the individual banks' balance sheets of the IBCA BankScope data set. Credit risk is a composite, equal-weighted indicator of five types of financial risk based on the International Country Risk Guide (ICRG) survey of leading international bankers. They are asked to rate the risk of loan default or restructuring, delayed payment of suppliers' credits, repudiation of contracts by governments, losses from exchange controls, and expropriation of private investments. The variable we use ranges from 0 to 50 (maximum risk). (See the Appendix for details and sources of both indicators.)

Both proxies for default rates have their own shortcomings. Measuring ex-post default rates by the proportion of loan loss provisions may be distorted by differences between national accounting procedures, prudential banking regulations, and even more by their highly discretionary nature: to a large extent, banks can decide how much to allocate to provisions in

anticipation of future losses.¹¹ The survey-based assessment of credit risk, on the other hand, is only imperfectly related to the likelihood of default on bank loans, because it also reflects other risks (such as repudiation of contracts by governments).

The descriptive evidence in the second and third rows of Table 3 reveals that countries where information is shared have lower than average loan loss provisions and credit risk. In Tables 5 and 6 we investigate if the descriptive evidence is confirmed by regression analysis.

In Table 5 the dependent variable is the ratio of loan loss provisions to total lending and the specification is the same as in Table 3. The regressions are estimated by ordinary least squares, weighted least squares and robust methods. The coefficients of the dummies for information sharing are both negative but estimated with large standard errors. The only significant predictor of loan loss provisions are the legal origin dummies. They show that French and especially Scandinavian origin countries have higher loan loss provisions, a possible reflection of the dramatic Scandinavian crisis of the early 1990s. The number of banks used to construct the country medians varies substantially in the IBCA sample. We thus repeat the estimation weighting observations by the number of banks used to compute the medians. The results reported in columns 3 are similar, and so are the coefficients of the robust regression in column 4.

In Table 6 the dependent variable is credit risk. This indicator is more promising as a proxy for defaults as it is based on ex-ante attitudes of potential lenders. The OLS estimates in columns 1 and 2 indicate that slow GDP growth rate and poor rule of law predict higher credit risk. The coefficients of the information sharing dummies are large and negative, and significantly different from zero at the 10 percent level or better. The presence of information sharing in these regressions reduces credit risk by 3 or 4 points, between one third and one half of the sample average of credit risk (7.77 from Table 3). However, the size and precision of the coefficient estimates are attenuated in the robust regressions of columns 3 and 4.

¹¹ A more appropriate measure of default rates is the frequency of non-performing loans in each country. Unfortunately, this variable is available only for a very limited number of countries in the IBCA data set. This reduces the sample size to 18 observations, only 1 of which refers to a country without any form of information sharing. This prevents any reliable inference.

TABLE 5. EFFECT OF INFORMATION SHARING ON LOAN LOSS PROVISIONS / TOTAL LOANS

Loan Loss Provisions is the 1994-95 average of the median ratio of non-performing loans to total loans in each country and is based on the BankScope data set produced by IBCA. The Appendix reports the data for loan loss provisions and the number of banks used to construct country medians. Black Information Only is 1 if prior to 1994 private credit bureaus and/or PCRs exchange only black information, and 0 otherwise. Black and White Information is 1 if prior to 1994 credit bureaus or PCRs exchange black and white information. See the Appendix for sources and definition of other variables. The regression in column 2 is weighted by the number of banks used to compute medians of the ratio of loan loss provisions to total loans in each country. T-statistics are reported in parentheses. Countries included are the same as in the note to Table 3 except: Ireland, Kenya, New Zealand, Nigeria, Singapore, Zimbabwe.

Variable	Ordinary Least Squares		Weighted Least Squares	Robust Regression
	(1)	(2)	(3)	(4)
GDP Growth Rate	-0.01 (-0.20)	0.04 (0.66)	-0.13 (-1.33)	0.05 (0.78)
Log GDP	-0.09 (-1.03)	0.02 (0.23)	0.013 (0.16)	0.00 (0.00)
Rule of Law	-0.02 (-0.25)	-0.09 (-1.33)	-0.15 (-1.55)	-0.07 (-1.29)
Creditor Rights	-0.10 (-0.85)	-0.03 (-0.27)	0.02 (0.22)	-0.02 (-0.23)
French Origin		0.64 (2.81)	0.50 (3.09)	0.53 (1.95)
German Origin		0.31 (1.22)	0.46 (2.39)	0.21 (0.69)
Scandinavian Origin		1.43 (2.11)	1.31 (2.93)	0.44 (1.21)
Black Information Only	-0.48 (-0.92)	-0.39 (-0.99)	-0.71 (-1.51)	-0.43 (-1.16)
Black and White Information	-0.46 (-1.10)	-0.25 (-0.84)	-0.39 (-1.18)	-0.11 (-0.34)
Constant	10.72 (2.47)	1.04 (1.68)	2.34 (2.05)	0.94 (1.19)
R square	0.13	0.38	0.58	-
Number of observations	34	34	34	34

TABLE 6. EFFECT OF INFORMATION SHARING ON CREDIT RISK

The Credit Risk Indicator is based on the International Country Risk Guide Financial Indicator (ICRGF), and ranges from 0 to 50 (maximum risk). Black Information Only is 1 if prior to 1994 private credit bureaus and/or PCRs exchange black information, and 0 otherwise. Black and White Information is 1 if prior to 1994 credit bureaus or PCRs exchange black and white information. See the Appendix for sources and definition of other variables. White-corrected standard errors are used in the OLS estimates. Robust regressions first calculate Huber weights based on absolute residuals and then regresses again until convergence using those weights. T-statistics are reported in parentheses. Countries included are the same as in the note to Table 3 except: Egypt, Israel, Kenya, Sri Lanka, Uruguay.

Variable	Ordinary Least Squares		Robust Regression	
	(1)	(2)	(3)	(4)
GDP Growth Rate (%)	-0.63 (-2.05)	-0.56 (-1.97)	-0.96 (-3.72)	-0.61 (-2.06)
Log GDP	-0.57 (-1.21)	-0.34 (-0.74)	-0.21 (-0.49)	-0.21 (-0.43)
Rule of Law	-1.65 (-4.31)	-1.67 (-4.74)	-2.13 (-8.24)	-1.71 (-5.45)
Creditor Rights	-0.45 (-1.07)	-0.09 (-0.17)	-0.57 (-1.38)	-0.09 (-0.17)
French Origin		0.90 (0.73)		1.04 (0.70)
German Origin		-2.76 (-2.32)		-2.46 (-1.41)
Scandinavian Origin		2.19 (1.42)		2.23 (1.18)
Black Information Only	-4.26 (-1.91)	-4.54 (-2.15)	-1.30 (-0.75)	-3.78 (-1.89)
Black and White Information	-2.99 (-1.76)	-2.40 (-1.37)	-2.42 (-1.56)	-2.22 (-1.23)
Constant	30.59 (9.67)	27.51 (8.90)	32.05 (11.61)	26.49 (7.09)
R square	0.78	0.84	--	--
Number of observations	35	35	35	35

Again, the explanatory power of the regressions is unchanged if we add separate indicators for information provided by private credit bureaus. We take this as further support for the substitutability of private and public information sharing arrangements.

Overall, the results of this section indicate that default rates are negatively correlated with information sharing indicators. The effect is economically significant, but not always precisely estimated: its statistical significance varies depending on the estimation method and on the particular proxy used for defaults. Our weakest results are for loan loss provisions, possibly due to the inadequacy of the proxy itself.

7. Substitution between Private and Public Information Sharing Arrangements

The previous two sections reveal that information sharing improves credit market performance but that private and public information sharing arrangements have no differential effects. One way to interpret this finding is that public credit registers and private credit bureaus are substitutes. If this is true, in countries where credit bureaus are already present the benefit of establishing a public credit register is negligible. Conversely, its benefit should be high where credit bureaus are absent, other things equal.

In this section we investigate whether the absence of private credit bureaus prompts regulators to establish public credit registers or to widen the scope of their operation. If PCRs are created to remedy the failure of private credit bureaus to arise, the pre-existence of a credit bureau should be negatively related to the presence of a PCR.

In testing for this relationship, one should control for the severity of moral hazard in the credit market. As discussed in Section 2, in the presence of moral hazard information sharing mechanisms increase borrowers' incentives to repay, and they can lead to a welfare gain.¹² Therefore, if credit bureaus fail to arise spontaneously (say, because of coordination problems), the case for the creation of a PCR by a regulator is particularly strong in countries in which debtors' opportunistic behavior plagues credit relations and where institutions afford a weaker protection to creditor rights. We control for these factors using the rule-of-law index and the creditor rights variable in La Porta et al. (1997).

¹² Padilla and Pagano (1999) show that, if these mechanisms are appropriately designed, borrowers' effort to perform is closer to the socially optimum level.

TABLE 7. DETERMINANTS OF THE PRESENCE OF PUBLIC CREDIT REGISTERS

Countries are divided according to the presence of public credit registers, based on Table 2. Presence of a PCR is 1 if the register is operating in 1998, 0 otherwise. Pre-existence of a Private Credit Bureau is 1 if at least one private credit bureau was in operation before the establishment of the PCR, 0 otherwise. Other data are taken from La Porta et al. (1998). See the Appendix for sources and definition of the variables. In the probit regressions the dependent variable is the presence of a PCR prior to 1998 (see Table 2). In the Tobit regression the dependent variable is the PCR minimum reporting threshold (see Table 2). The probit coefficients indicate the effect of the variable on the probability of establishment of a PCR. T-statistics are reported in parentheses. Countries included in the probit estimation are the same as in Table 3 plus Colombia, India and Taiwan. Countries included in the Tobit estimation are the same as in Table 3 plus India and Taiwan and excluding Uruguay.

Panel A. Descriptive Statistics

Variable	Total Sample	PCR Present	PCR Absent
Creditor Rights	2.14	1.59	2.50
Rule of Law	7.08	6.67	7.34
Pre-existence of a Private Credit Bureau	0.51	0.29	0.65
English Origin	0.38	0.12	0.54
French Origin	0.39	0.71	0.19
German Origin	0.14	0.11	0.15
Scandinavian Origin	0.09	0.06	0.12
Number of observations	43	17	26

Panel B. Regression results

Variable	Probit Regressions		Tobit Regressions	
	(1)	(2)	(3)	(4)
Creditor Rights	-0.16 (-2.37)	-0.07 (-0.81)	2,966.97 (2.13)	1,297.22 (0.77)
Rule of Law	-0.01 (-0.11)	-0.01 (-0.09)	-213.79 (-0.30)	10.09 (0.01)
Pre-existence of a Private Credit Bureau	-0.39 (-2.24)	-0.41 (-2.04)	9,670.32 (2.49)	10,025.44 (2.31)
French Origin		0.49 (3.35)		-9,382.13 (-1.78)
German Origin		0.566 (1.77)		- 11,689.14 (-1.79)
Scandinavian Origin		0.476 (1.16)		-4,923.32 (-0.65)
Number of observations	43	43	41	41

The correlations between these variables are displayed in Table 7. The conditional averages in Panel A show that a private credit bureau already existed in only 30 percent of the countries where there is a PCR, against 65 percent where there is none. Also, PCRs tend to be formed in countries where creditor rights are less protected (1.59 versus 2.50) and there is less respect for the law (the rule of law variable is 6.67 against 7.34). They are also more likely to be found in countries whose legal system derives from the French civil code tradition (the French-origin dummy is 0.71 against 0.19).

To test the statistical significance of these relations, we estimate Probit regressions where the presence of a PCR is the dependent variable. The results, displayed in columns 1 and 2 of Panel B, show that the probability of the presence of a PCR is significantly and negatively related to the pre-existence of a credit bureau. The coefficient indicates that pre-existence of a private credit bureau raises the probability of establishing a PCR by 40 percent. If the legal origin dummies are not introduced in the Probit regression, the creditor-rights variable also appears with a negative and significant coefficient. When the origin dummies are added as explanatory variables in column 2, the coefficient of creditor rights is still negative but not precisely estimated, whereas the French-origin dummy takes a large, positive and statistically significant coefficient. The reason is that creditor rights has a strong negative correlation with French origin; that is, the countries whose legal system is rooted in the French civil code are also those that afford the weakest legal protection to creditors. Finally, the coefficient of the rule-of-law variable is close to zero.

As we saw in Section 4, a key parameter in the design of a PCR is the threshold above which data on loans must be reported by credit institutions. The higher the threshold, the more accurate and comprehensive the account of past credit history that the PCR can provide to lenders. Therefore the threshold effectively measures the boundaries of the PCR operation.

In columns 3 and 4 we report estimates of Tobit regressions where the threshold - measured in thousands of US dollars - is related to the same set of regressors as in Probit regressions. The reason for using Tobit rather than OLS estimation is that the threshold is not defined in countries where there is no PCR. For these countries, we set the threshold at an arbitrarily large positive number. As a result, the distribution of the dependent variable features upper truncation. The pattern of results is similar to that of the Probit regressions, once one takes into account that in this case the signs are predicted to be opposite. In particular, the pre-existence of a private credit

bureau raises the threshold by about ten million U.S. dollars. Since obviously no existing PCR has such enormous threshold, the interpretation of this number is that pre-existence of a credit bureau effectively discourages the creation of a PCR.

In summary, the historical experience is consistent with the hypothesis that the establishment of PCRs has been largely motivated by the “substitution” role. First, they have often been created to make up for the lack of private credit bureaus. Where the market alone has not produced information sharing, governments have felt they had to take the initiative. Second, PCRs have been introduced to compensate, at least partly, for the weak protection that the state offered to creditors’ interests, and thus to remedy heightened moral hazard in lending.

8. Conclusions

In many countries lenders communicate data concerning their customers’ creditworthiness to one another or can access databases that help them assess credit applicants. However, the type, quality, and quantity of data available, and information-sharing mechanism, vary greatly. Often lenders agree to exchange of information spontaneously, via information brokers such as credit bureaus. In other cases they are obliged to do so by the authorities via public credit registers. The empirical literature has not contributed much to our knowledge of this phenomenon and of its relevance to credit market performance. The predictions of the theory offer some guidance as to the impact of information sharing on default rates and lending activity. However, its predictions are partly ambiguous, and therefore the verdict about the actual impact of information sharing on credit market performance rests with the data.

Here, we systematically document private and public information-sharing arrangements around the world and analyze their effects on the credit market as well as the reasons for their emergence. The empirical analysis builds upon a new, specially designed data set mainly collected via questionnaires. We find that the breadth of credit markets is associated with information sharing. Total bank lending to the private sector scaled by GNP is larger in countries where information sharing is more solidly established and intense. This relation persists even when one controls for other economic and institutional variables, such as country size and growth rate,

and variables capturing respect for law and the protection of creditor rights. We also find evidence, in accordance with the theory, that defaults are mitigated by public and private information sharing. This evidence is somewhat weaker, however, perhaps owing to the poor quality of our proxies for defaults.

Our data also show that the impact of private arrangements to share credit information is similar to that of public credit registers. In fact, where private credit registers already existed, PCRs are less likely to be established. Conversely, governments are likely to step in with forced information sharing in countries where private information-sharing arrangements have not arisen. They are also more likely to do so where creditor rights are poorly protected.

We regard this paper as a first step in the empirical analysis of the effects of information sharing on credit markets. The pervasiveness and intensity of this information exchange warrants much more thorough inquiry into its effects on the lending policies of banks and the conduct of borrowers. There is still no microeconomic evidence on this issue. We also lack accounts of the impact of these arrangements in developing countries, where in many cases they are just being established. It is ironic that private credit bureaus and public credit registers know so much about us while we still know so little about them.

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Appendix

A1. Definition of variables used in Tables 3 to 7

Bank Lending	<i>Claims of banks on private sector, 1994-95 average. Source: International Financial Statistics (line 32d).</i>
Credit Risk	The Credit Risk is based on the International Country Risk Guide Financial Indicator (ICRGF). The indicator is constructed on the basis of a survey of leading international bankers, who are asked to rate each country on a scale of 0 to 10 each of the following 5 risks: default or unfavorable loan restructuring, delayed payment of suppliers' credits, repudiation of contracts by governments, losses from exchange controls, expropriation of private investments. The original index scales from 0 to 50 (maximum creditworthiness). We define Credit Risk as 50 minus the original index, so that 50 represents maximum risk. Credit Risk refers to October 1995. Source: Erb et al. (1996), Table 4, Series ICRGF.
Creditor Rights	An index aggregating creditor rights. The index aggregates various rights that secured creditors might have in bankruptcy, liquidation and reorganization. Restrictions on the managers' ability to seek unilateral protection from creditors, mandatory dismissal of management in reorganizations, lack of automatic stay on assets, and absolute priority for secured creditors all contribute to this index. The index ranges from 0 to 4. Source: La Porta et al. (1997).
Log GDP	Logarithm of the gross domestic product in 1992-93. Gross Domestic Product is expressed in 1990 million dollars. Source: <i>International Financial Statistics</i> , line 99b for GDP and <i>aa</i> for exchange rates.
GDP growth	Average annual percent growth of per capita gross domestic product, for the period 1970-1993. . Source: <i>International Financial Statistics</i> .
Legal Origin	Identifies the legal origin (English, German, French, Scandinavian) of the company law or commercial code of each country. Source: La Porta et al. (1997).
Rule of Law	Assessment of the law-and-order tradition in the country. Average of the 1982-95 period. Scale from 0 to 10 with lower scores for less tradition of law and order. Source: La Porta et al. (1997).

A2. Loan Loss Provisions (regressions of Table 5)

Loan loss provisions is the ratio of loan loss provisions to total loans in each country. The variable is based on the BankScope bank-level data set produced by IBCA. The variable is the 1994-95 country average of the median ratio in each year. In each year we consider a total of 7,244 banks for which non-consolidated balance sheet data are available in at least one year. Banks include commercial banks, savings banks, medium and long-term credit banks, cooperative banks, real estate and mortgage banks, specialized governmental credit institutions and Islamic banks. The variables of interest are available only for a sub-sample whose size is reported in the table. We exclude countries for which fewer than 5 banks report data in the 1994-95 average.

Country	Loan loss provisions / total loans	Number of banks used to estimate provisions for loan losses
Argentina	2.29	99
Australia	0.08	35
Austria	0.92	70
Belgium	0.35	78
Brazil	0.96	92
Canada	0.51	17
Chile	0.35	35
Denmark	1.63	85
Ecuador	1.99	24
Egypt	2.39	22
Finland	3.18	7
France	0.98	354
Germany	0.90	1701
Greece	0.93	18
Hong Kong	0.29	5
Israel	0.39	16
Italy	0.80	2586
Japan	0.24	171
Mexico	1.27	25
Netherlands	0.38	23
Norway	0.26	30
Peru	1.71	14
Philippines	0.31	15
Portugal	1.58	31
South Africa	0.65	7
South Korea	0.90	25
Spain	0.94	175
Sri Lanka	0.78	7
Sweden	0.62	16
Switzerland	0.00	34
Thailand	0.51	16
Turkey	1.42	44
United Kingdom	0.13	60
Uruguay	1.06	8
United States	0.26	514

A3. Questionnaire directed to private credit bureaus

Aim of the survey

This questionnaire is part of a research project that aims at understanding the frequency, determinants and consequences of information sharing arrangements in credit markets. This questionnaire is directed to managers of credit bureaus.

Confidentiality

The researchers carrying out this project guarantee complete confidentiality in the use of the data collected in the survey. Data and results based on the survey will always be presented in tabular form and at a level of aggregation that will safeguard the confidentiality of individual banks.

PLEASE ENCLOSE ANY PUBLISHED OR OFFICIAL MATERIAL THAT YOU FEEL WOULD BE RELEVANT TO UNDERSTAND THE OPERATION OF CREDIT BUREAUS IN YOUR COUNTRY.

1. DESCRIPTION OF YOUR CREDIT BUREAU

Town where headquarters is located: _____

The credit bureau is owned by:

- a group of banks
- a group of other financial intermediaries
- individual share-holders
- foreign-owned (majority stake foreign-owned)

The credit bureau is

- a company run for profit
- a cooperative enterprise or consortium of lenders
- a semi-public institution
- other (please indicate)

Indicate who originally started the credit bureau:

- private entrepreneurs
- consortium of lenders
- government agency
- other (please indicate)

The credit bureau operates:

- at multinational level
- at national level
- at regional or provincial level

2. SCALE OF OPERATIONS

	Personal sector	Business sector
Year started operating		
Number of records in your files in 1990		
Number of records in your files in 1996		
Credit reports issued in 1990		
Credit reports issued in 1996		
Credit reports issued in 1990 as % of all those issued in your country in that year		
Credit reports issued in 1996 as % of those issued in your country in that year		

If the credit bureaus started operating **after 1990**, please supply information on credit reports and number of records in the first year of the operation of the credit bureau.

3. SOURCES OF INFORMATION

Please rank the importance of the following as sources of information for your credit reports on a 1 to 3 increasing scale: 1 = not used or rather unimportant, 2 = important; 3 = crucially important.

	Personal sector	Business sector
Banks		
Other financial institutions		
Credit card companies		
Central Credit Register		
Public records		
Tax files		
Other: (please indicate)		

4. DATA SUPPLIED BY LENDERS

Which type of data are provided by lenders to your credit bureau?

	Personal sector	Business sector
Defaulted loans		
Arrears		
Total loan exposure		
Characteristics of borrowers*		
Other: (please indicate)		

* *For households:* employment status, marital status, age, income, assets, etc.; *for firms:* line of business, balance sheet data, personal information about directors, share-ownership structure, etc.)

5. RECIPROACITY

Do you apply a principle of reciprocity with your clients (i.e., do you supply information only to those who supply it to you)?

YES NO

If yes, is there an explicit agreement between you and lenders to exchange information?

YES NO

What happens if lenders do not comply with the reciprocity agreement (i.e. supply late or incorrect information)?

6. CREDIT BUREAUS IN YOUR COUNTRY

Please list the other main credit bureaus that operate in your country:

Please describe briefly the evolution of the credit bureau industry in the last 10 years in your country (growth and problems of the industry, process of concentration, etc.)

7. PUBLIC CREDIT REGISTERS

Please indicate if a Public Credit Register exists in your country and, if so, how it affects your operations. (By a P.C.R. we mean a publicly managed database, which forcibly collects data about loans from banks to supply it under request from other banks.)

8. PRIVACY LAWS

If laws protecting consumer privacy exist in your country, what do they require?

How do these laws affect the operation of your company?

A4. Questionnaire directed to Central Banks

This questionnaire is part of a research project that aims at understanding the frequency, determinants and consequences of information sharing arrangements in credit markets. By **Public Credit Register** we mean a public database managed by the Central Bank or some other government institution, which forcibly collects information about loans from banks and makes it available under request from other banks via credit reports.

1. MANAGEMENT OF THE PUBLIC CREDIT REGISTER (PCR)

Is the PCR operated by the Central Bank or by another Government agency (please indicate)?

2. ACTIVITY

Year in which the PCR was established	
Number of subjects in the file of the PCR	
Number of credit reports issued by the PCR to banks and other lending institutions in 1997 (1996 if not available)	
Minimum reporting threshold (specify currency units)	
Lenders required to supply data (banks, finance companies, etc.)	
Is participation compulsory? (yes/no)	

3. DATA REPORTED BY PARTICIPATING INSTITUTIONS TO THE PCR

Defaulted loans	
Arrears	
Total loan exposure	
Interest rates	
Other (please indicate)	

4. ACCESS TO DATA IN THE PCR FILES

Government	
Participating financial institutions	
Private Credit Bureaus	
General public	
Other (please indicate)	

5. PRIVATE CREDIT BUREAUS

Please list the names of the **private** credit bureaus that operate in your country.

6. PRIVACY LAWS

Please mention if privacy laws exist and, if so, how they affect the operations of the PCR and of private credit bureaus (add pages if necessary).

比較各國和地區的商業信貸資料庫

	香港	德國	馬來西亞	墨西哥	美國
概覽	<p>目前香港的信貸資料庫均為私營機構，如美國鄧白氏商業資料香港有限公司 (D & B) 及香港資信有限公司 (CIS)。CIS 主要從銀行及公開備查記錄方面收集個人信貸資料。CIS 亦有收集分期付款購買及租賃交易的有限度商業信貸資料。</p>	<p>除了私營的信貸資料庫外，德國央行亦設立中央信貸資料庫，規定國內金融機構提供資料。</p>	<p>馬來西亞中央銀行設有近似信貸資料庫的綜合信貸資訊系統。央行規定國內銀行及金融機構提供資料。</p>	<p>墨西哥設有多家信貸資料庫。Buro de Credito (BC) 於 1997 年在財政部的支持下成立，主要是由墨西哥銀行、美國鄧白氏商業資料公司及 Trans Union 組成的合資商業機構。</p> <p>美國鄧白氏 (墨西哥) 公司是另一家信貸資料公司，主要業務範圍只限於非墨西哥公司。</p>	<p>所有主要信貸資料庫都由私營機構設立，如美國鄧白氏商業資料公司便是全國最大型的商業信貸資料庫之一。</p>

	香港	德國	馬來西亞	墨西哥	美國
央行 / 監管機構的角色	公營機構現時並無參與設立或管理商業信貸資料庫。	中央信貸資料庫由德國央行運作及監管。	中央信貸資料庫由馬來西亞中央銀行運作及監管。	National Banking Commission 是負責監管 BC 的機構。央行亦有權使用該所保存的資料。	美國除了由聯邦貿易委員會執行保護消費者保障及反壟斷的工作外，公營部門並無參與管理或經營任何商業信貸資料庫。
職能的性質	D & B 參與成員以自願性質向該公司提供資料，像該公司全球各地的運作方式一樣。該公司將這些資料連同來自公開記錄及訪問等其他渠道的資料組合一起，然後編制個別公司的信貸報告。	根據《銀行法》，銀行及金融機構必須向德國央行提供在申報日期前 3 個月任何時間內信貸額達到 300 萬德國馬克或以上的借款人詳細資料。德國央行把收集所得資料整理完後，再將借款人總欠款及涉及貸款機構數目的資料逐一提供予參與的銀行及金融機構。	馬來西亞中央銀行最近提高信貸資料庫制度的功能。在新制度下，銀行及金融機構必須向央行申報大額（即核准信貸額度超過 100 萬馬來西亞元）借款人及所有不履行貸款的信貸總額。這些資料主要用於銀行監管的工作。央行擬於下一階段規定所有貸款資料不分數額均	BC 運作像世界各地的商業信貸資料庫一樣。鑑於規例所限及政府當局的鼓勵，BC 獲得銀行及其他貸款機構廣泛參與，所收集的借款人資料亦較全面。BC 的運作高度自動化及有效率。現時 BC 持有接近 130 萬份商業貸款記錄，記錄內容每月更新一次。	美國大部分信貸資料庫均由參與成員自願提供資料。

	香港	德國	馬來西亞	墨西哥	美國
			須向信貸資料庫申報。		
有關法律條文	香港並無監管收集及發放商業信貸資料的法律條文。但根據普通法原則，銀行一般均將客戶資料保密視為本身的職責，因此未徵得客戶同意前通常都不會向他人發放這些資料。	《銀行法》列明所有銀行及金融機構必須提供資料予央行資料庫的條文。該法例亦載有禁止未經授權使用及發放這些資料的規定。有關條文亦適用於在央行信貸資料庫工作的職員。	《馬來西亞中央銀行法》、《銀行及金融機構法》及《伊斯蘭銀行法》授權馬來西亞中央銀行向銀行及金融機構收集資料，以供存入的信貸資料庫。	根據 National Banking Commission 的規定，銀行必先以 BC 的資料評核客戶的信貸質素，然後才批核信貸申請。在這要求下，銀行均積極參與 BC。 《銀行保密法》規定 BC 的資料必須保密及維持完整。就大部分貸款申請而言，貸款機構使用 BC 的資料前，必須首先徵得客戶同意。	在美國，商業機構並無私隱權，私隱法僅以個人的私隱權為對象。另一方面，美國的保密商業資料被視作產權，因此受有關法律條文及借貸雙方合約監管。
是否商業性質	香港所有的信貸資料庫都是以商業模	德國央行的信貸資料庫並不是以	馬來西亞央行的綜合信貸資訊系	BC 是以商業模式運作。	主要的信貸資料庫是以商業模式

	香港	德國	馬來西亞	墨西哥	美國
	式運作。	商業模式運作。	統並不是以商業 模式運作。		運作。