

貨幣政策工具 (part 2)

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十四章、Mishkin (2019)
chap.16]

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0 前言

- 中央銀行用貨幣政策工具來控管貨幣供給與利率
- 主要傳統(常備)貨幣政策工具
 - 公開市場操作(OMO)
 - 重貼現政策(discount policy)
 - 準備金政策(reserve requirements policy)
 - 準備金付息
- 其他工具：信用管制(credit controls)與道義說服
- 非傳統貨幣政策工具

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1 其他貨幣政策工具

- 針對性的銀行信用使用或創造的控管措施
 - 選擇性信用管制與直接管制
- 道義說服(moral suasion)
 - “jawboning” “open mouth operations” (口水操作)
 - 「央行穩匯，邀龍頭企業喝咖啡」(2021-01-16, 經濟日報)
 - 軟式與硬式(或軟硬兼施)
 - A famous example of the use of moral suasion is the New York Federal Reserve's intervention in the bailout of Long-Term Capital Management (LTCM) in 1998*

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1-1 選擇性信用管制

- (1)應提保證金(margin requirements)
 - 有關銀行辦理金融公司或證券商融資之規定(央行)
 - (1)對同一證券金融公司*之禁止辦理融資規定
 - 銀行融資超過淨值6倍者
 - 公司負債超過其淨值11.5倍
 - (2)對證券商**之規定
 - 禁止規定：銀行融資超過淨值2.5倍者
 - 承銷做包銷者，銀行對其融資比率以承銷價格之6成為限
 - 美國的原始保證金比率(Initial Margin Requirement)為50%

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1-1

- (2)消費者信用管制
 - 主要包括對分期付款與信用卡信用之管制
 - 如限制信用卡信用額度 (新加坡, 1996; 泰、韓、台, 2000年代初)
 - 又如從嚴訂定信用卡申請資格、持卡張數等
 - 我國央行的政策權力(銀行法39、40條與央行法29條)

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1-1

- (3)不動產信用管制
 - 針對銀行的不動產放款行為的限制
 - 不動產信用主要特質(相對於消費信用)
 - 屬長期信用，受利率變動影響較大(無論是貸方或借方從收益或成本的角度觀之)
 - 營建業或住宅產業的產業關聯較大
 - 住宅與營建業的生產期限長，成本面與供給面的影響較為重要(市場易受供方操控)，市場供需調節較難(不易達到市場合理或最適狀態)

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近期央行有關住宅房貸信用管制(修正)措施¹

貸款項目		貸款條件	
		修正前	修正後
公司法人	第1戶住宅貸款	6成，無寬限期	4成，無寬限期
	第2戶以上住宅貸款	5成，無寬限期	4成，無寬限期
	第3戶房貸	6成，無寬限期	5.5成，無寬限期
	第4戶以上房貸	(同第3戶，未另規定)	5成，無寬限期
自然人	高價住宅房貸	6成，無寬限期	無房貸或已有2戶以下：房貸5.5成，無寬限期 已有3戶以上：房貸4成，無寬限期
	購地貸款	6.5成，保留1成動工款 檢附具體興建計畫	不變
	餘屋貸款	5成	不變
	工業區閒置土地抵押貸款	銀行自律規範	5.5成*

註：如抵押土地已動工興建開發，或借款人檢附抵押土地具體興建開發計畫，並切結於一定期間內興建開發者，則不適用，修正規定2021/03/19生效。

資料來源：中央銀行

製表：呂清郎

¹取自「央行加碼打炒房 選擇性信用管制再升級」(工商時報，呂清郎，2021.03.19)

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1-1

- 採信用管制措施宜考慮的先決條件
 - 市場機制是否失靈而無法妥適的分配信用？
 - 管制措施是否真能改善不合理的信用分配？
 - 管制是否只是暫時權宜的措施？

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1-2 直接管制

- 央行對銀行信用創造加以直接干涉與管制
- (1)直接限制貸款額度(央行法31條)
- (2)對銀行特定資金來源可施以邊際法定準備率要求(央行法23條)
 - 例如，央行訂定的「新臺幣活期存款特別準備金規定」，規定...外資新台幣活期存款餘額超過...之**增加額**，按準備率**90%**計提準備金；未超過...，按**25%**計提準備金

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1-2

- (3)對於業務不當的銀行採強制性的制裁
 - 如拒絕對其貼現融通
- (4)規定各銀行的放款及投資方針，以確保健全信用的經營原則
 - 如針對銀行風險性較高的資產(例如不動產與股票投資)

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1-3 道義說服(Moral Suasion)

- 指央行藉道義的影響及說服的力量，由銀行自願性自行運作，藉以達成央行的管制目的或其他政策目標
- 「央行對六大銀行下指導棋」...央行...找六大房貸主力銀行座談(時報資訊，2020.11.14)
 - 一是銀行辦理購屋貸款...嚴審貸款條件...
 - 二是...銀行宜加強風險控管...
 - 三是銀行辦理建築貸款應...強化貸後管理...
 - 四是鑒於...整體房市健全發展及資源配置，銀行辦理餘屋貸款應強化風險控管，落實資金用途查核及貸後管理等
- Fed的例子*

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1-3.1 Moral Suasion Example

- A famous example of the use of moral suasion is the New York Federal Reserve's intervention in the bailout of Long-Term Capital Management (LTCM) in 1998
- LTCM was a highly successful hedge fund, generating a string of high-double-digit annual returns in the 1990s. It was highly leveraged, however, ...
- The Asian financial crisis sent it into a tailspin, ...and leave its creditors—the bulk of Wall Street's major **banks**—with massive unpaid loans on their books
- Rather than directly injecting public money, the New York Fed called a meeting in its offices of three banks that had lent to LTCM
 - These banks decided to cooperate on a rescue, which the Fed helped coordinate but did not fund

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1-3.1

- Eventually, a consortium of 14 banks bailed LTCM out for \$3.6 billion
- The fund was liquidated two years later and the banks earned a slight profit
- The New York Fed was criticized for creating the impression that LTCM was "too big to fail," **but** the decision to pressure banks into providing bailout funds was seen as an alternative to more heavy-handed—and potentially harmful—tactics

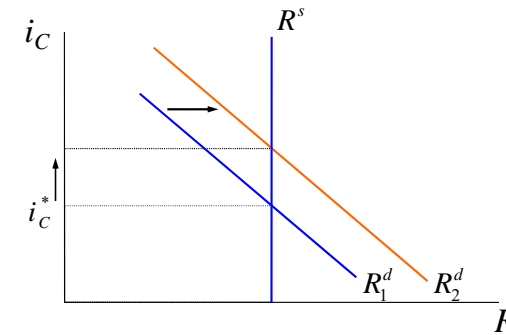
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1-4 道義說服或選擇性信用管制與準備金

- 若道義說服或選擇性信用管理措施使 $E_r \uparrow$ (如直接限制貸款額度) $\Rightarrow R^d \uparrow$ (同理，反向操作...)



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1-4

- 信用管制無論間接透過對 R^d 與 MB 或直接對銀行信用創造的影響(參見信用比對等式(11))皆可以改變 M^S
- 至於道義說服...在低利率時代，或傳統貨幣政策工具難以發揮其效用之際，央行為遂行其政策意圖，借助對外充分溝通與道義說服的手段益形重要

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2 非傳統貨幣政策工具與量化寬鬆

- 平時央行利用傳統貨幣政策工具，透過調控貨幣供給與利率即足以達成穩定經濟的目的
- 但當經濟遭遇大規模的金融危機衝擊時，傳統工具變得無從發揮，主要原因有2：
 - 信用創造過程嚴重受阻，且市場流動性來源亦變得異常匱乏
 - 市場利率極低，形成所謂「零利率極限問題」(zero-lower bound problem)，致使政策利率幾無任何有意義的調降空間

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- For both of these reasons, central banks need non-interest-rate tools, known as nonconventional monetary policy tools, to stimulate the economy.
- These nonconventional monetary policy tools take four forms: (1) liquidity provision, (2) asset purchases (即 QE), (3) forward guidance (前瞻指引), and (4) negative interest rates on bank deposits at a central bank (負利率政策)

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- The enlargement of the Fed's lending programs during the 2007–2009 financial crisis was indeed remarkable, expanding the Fed's balance sheet by over \$1 trillion by the end of 2008
- 其後又伴隨其他措施...在2015年其資產負債表持續膨脹，甚而曾達到4.5兆美元的規模，是2007年風暴前的4倍

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2-1 流動性挹注措施(Liquidity Provision)

- (1)擴大貼現窗口操作(discount window expansion)
 - 大幅調降貼現融通利率使其貼近同拆市場利率水準*
 - 但因銀行自貼現窗口融資的污名化(stigma)問題根深蒂固，致其成效不佳
- (2)定期資金標售機制(Term Auction Facility, TAF)
 - 以定期、定額、採標售方式出借中長期資金給金融機構
 - 跟貼現窗口操作的差異...

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TAF與貼現窗口操作的差異[¶]

與貼現窗口相比，TAF 有以下幾個特點：(1) 由於 Fed 的資產負債表上僅會顯示 TAF 的總餘額，無法得知個別機構的競標情形，與貼現窗口相比，TAF 的得標者不易為市場所知，大幅降低污名化之問題；(2) 貼現窗口為 Fed 消極地等待資金需求者，TAF 則為主動地提供市場資金；(3) TAF 的利率為市場決定，而非一懲罰性之利率。

[¶]取自：張志揚「美國非傳統貨幣政策之採行及其影響」中央銀行，國際金融參考資料，63

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2-1

- (3)其他新型貸款計畫(New Lending Programs)
 - Actions included **lending to investment banks** as well as **lending to promote purchases** of commercial paper, mortgage-backed securities, and other asset-backed securities
 - 援助特定金融機構*
 - 主要係對JP Morgan (協助併購 Bear Stearns)、美國國際集團(AIG)、花旗集團及美國銀行等機構提供融通

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2-2 大規模資產購買措施

- The Fed's open market operations normally involve only the purchase of government securities, particularly those that are short-term
- during the crisis, the Fed started (in 2008/12) ...new, large-scale asset purchase programs (often referred to as LSAPs) to lower interest rates for particular types of credit
- 曾採此一量化寬鬆(QE)政策者計有美國、歐元區、日本、瑞典和英國的央行

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2-2

- Fed 總計執行 3 次大規模買入美國政府公債、機構債(Agency Debt)及機構保證之房貸擔保證券(Agency MBS)，以釋出流動性並壓低相關利率
 - QE1: 2008年12月至2010年3月
 - 當時背景：雷曼兄弟控股公司破產引爆全球金融海嘯，金融市場流動性枯竭，全球經濟衰
 - QE2: 2010年11月至2011年6月
 - 當時背景：失業率仍處高點，且通貨膨脹率仍低於目標，Fed擔憂可能會發生通貨緊縮
 - QE3: 2012年9月推出
 - 當時背景：經濟狀況略有回升，惟力道仍不強烈*

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2-2

- 由於 LSAPs 亦屬於廣義之公開市場操作，擴大操作的結果造成 Fed 資產負債表規模由 2007 年 8 月金融危機發生前之 8,700 億美元急速膨脹；截至 2014 年 4 月，Fed 資產負債表規模已高達 4.30 兆美元
 - Fed 之資產項目原以美國公債為主(約9成)，後因大舉購入問題銀行、保險公司、政府贊助機構之證券化資產，資產項目變得多樣化(公債比重下滑至55%)
 - 在負債面，過去 Fed 係以通貨發行餘額為主(9成以上)；次貸危機之後，隨著資產規模快速膨脹，存款機構之準備金大幅擴增，至 2014 年準備金餘額已高達 2.51 兆美元，遠超過通貨發行餘額

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2-2.1 三次QE的政策意圖

- QE1：the Fed hoped to prop up the MBS market and to lower interest rates on residential mortgages to stimulate the housing market
- QE2：...purchase \$600 billion of long-term Treasury securities ...intended to lower long-term interest rates (GFC時的短率已近0，長率尚未)
 - long-term interest rates are more relevant to investment decisions ...
 - The Fed's purchase of long-term Treasuries was an effort to stimulate investment spending and the economy by lowering long-term interest rates

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2-2.1

- QE3：that combined elements of QE1 and QE2 ...purchases of ...mortgage-backed securities and ...of long-term Treasuries
 - However, QE3 differed in one major way ...
 - its goal was not to increase assets by a fixed dollar amount but instead was open-ended, with the purchase plan set to continue “if the outlook for the labor market does not improve substantially.”
 - 具前瞻性與權衡性(視實際狀況而定)的操作

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2-3 前瞻指引|(Forward Guidance)

- 央行主要意圖是希望透過預期調控(management of expectations)方式來達到維持低長率的政策目的
 - 除採直接購買長債的政策工具之外的手段
- 理論基礎：利率期限結構之預期假說
 - 長債利率等於市場預期該長期債券存續期間發生的短債利率的平均值
 - 央行若能提供有效的政策承諾，讓市場相信政策短率(如短期的同拆利率)在未來一段時間，皆會持續被維持在一低水準(如近於0)，即能導引市場長率下降

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2-3

- Fed的前瞻指引首見於December 16, 2008，在宣布決定採QE1的FOMC會後；往後數年，Fed持續採用此一前瞻性政策承諾(commitments to future policy actions)的宣示策略
- 成效？
 - Although long-term interest rates on Treasury securities did subsequently fall, **it is not clear** how much of this decline was due to the Fed's forward guidance versus the general weakness of the economy

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2-3.1 兩種類型的前瞻性政策承諾

- (1)有條件的承諾(conditional commitment)
 - 例如在2008年的許諾： it stated that the decision was **predicated on** a weak economy going forward. If economic circumstances changed, the FOMC was indicating that **it might abandon the commitment**
- (2)無條件的承諾(unconditional ...)
 - the Fed **could have** made an unconditional commitment by just stating that it would keep the federal funds rate at zero for an extended period, **without indicating that this decision might change** depending on the state of the economy

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2-3.1

- 優劣?
 - 對長率的影響而言，無條件的承諾要比有條件的效果來得大，也比較不會有時間不一致(time inconsistency)的問題
 - 但無條件的缺點是，若期間情勢大變，央行仍需信守承諾，而喪失合理轉圜的空間與時間
- Fed的經歷
 - 2003-2006因擔心通縮而採**無條件**維持低利率的政策承諾...this commitment led to monetary policy that was too easy for too long, with inflation subsequently rising to well above desirable levels and ...may have helped promote the housing bubble whose bursting led to such devastating consequences for the economy

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2-3.1

- Fed的經歷(cont.)
 - 期間Fed雖試圖澄清其意圖 ...且announced a specific date for exiting from exceptionally low rates, many market participants viewed this announcement as an unconditional commitment
 - 之後為免重蹈覆轍...in December of 2012 the Fed changed its statement to be more clearly conditional by indicating that “the exceptionally low range for the federal funds rate will be appropriate at least as long as the unemployment rate remains above 6½ percent, and inflation between one and two years ahead is projected to be no more than a half percentage point above the Committee’s 2 percent longer-run goal.”

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2-3.1

- Fed的經歷(cont.)
 - 隨著失業率改善... at its March 2014 meeting the FOMC dropped forward guidance based on unemployment and inflation thresholds
 - 隨後， it announced that it would determine the timing and size of changes in the target for the federal funds rate taking “**into account a wide range of information**, including measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial and international developments.” (幾近權衡的決策模式?)
 - ... from forward guidance to data-dependency

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補充參考：貨幣決策採數據依賴模式的風險*

- (1) 各界對經濟數據及其變化的認知與解讀多所不同；若各種經濟數據間顯現的信息不一致時，徒增央行清楚說明的困難度，益增市場難以確實理解與掌握央行真正意圖的不確定性
 - 例如當前景氣為暫時性或持續性的現象？又如當前通膨溫和係因原物料價格下跌或因貨幣寬鬆力道不足？
- (2) 當前經濟數據多有統計誤差，經常需做調整(修正幅度可能很大)，因此一味仰賴最新數據及其推估結果，易使央行決策產生事後修正或對市場溝通說詞前後矛盾的風險，而惡化時間不一致性的問題

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2-4 負利率政策

- Negative Interest Rates on Banks' Deposits
 - ...setting interest rates on deposits held by banks at their central banks to be negative
 - The central bank of **Sweden** was the first to set negative interest rates on bank deposits in July 2009, followed by the central bank of **Denmark** in July 2012, the **ECB** in June 2014, the central bank of **Switzerland** in December 2014, and the Bank of **Japan** in January 2016
- 意圖：壓縮銀行持有超額準備金的傾向，刺激創造信用，以促進總體消費與投資支出

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2-4

- 但效果可能不如預期
 - banks might not lend out their deposits at the central bank, but instead move them into cash (容或自行保管的成本不低但倒帳風險成本更高)
 - 負利率政策可能導致...bank profitability would fall. (因存款利率仍>0) The result might then make banks less likely to lend
- So ...negative interest rates on banks' deposits could cause banks to cut back on lending and therefore be contractionary (另參見李榮謙(2019) p.508)

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後記

- Although these nonconventional tools can help stimulate the economy, they are **more complicated** to use than conventional tools and their impact on the economy is **more uncertain**, so they may be **harder to use effectively** (Mishkin (2019) p.454)

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