

行政院所屬各機關因公出國人員出國報告書
出國類別：進修

經濟政策管理

服務機關：行政院經建會
出國人員職稱：薦任科員
姓名：金秀琴
出國地點：美國
出國期間：88年9月1日至
89年10月1日

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摘 要

1991 年世界銀行正式委託紐約哥倫比亞大學開辦「經濟政策管理」(The Program in Economic Policy Management)課程，希望藉由對開發中國家及前社會主義國家經濟問題的研究，對開發中國家從事經濟政策規劃工作者傳授有效用經濟政策的技巧與能力，該課程之設計透過實際經濟政策運用的成敗，傳授具實用性的經濟課程及科學管理方法。

「經濟政策管理」課程為期一年半，其中一年是在校課程，半年為實習課程。在校課程主要為總體經濟政策管理、個體經濟政策管理、政策規劃者的管理技能、世界經濟展望、專題研究及其他選修課程等。為讓學生能達到學以致用之目的，於結束在校課程後，可申請世界銀行、國際貨幣基金或其他經濟研究機構進行為期半年的實習觀摩，實習結束後需就實習經驗提交實習報告。全部完成在校課程及實習後，學生可獲得哥倫比亞大學國際及公共事務學院的國際事務碩士學位。

「經濟政策管理」課程具多元化且兼顧理論與實務，不僅建立理論基礎，以實務上的問題解決為學習方式，更可達到學以致用的效果。「經濟政策管理」課程之進修，不僅有助於個人在財經知識領域的成長，在工作上亦有所助益。

”經濟政策管理”課程出國報告

一、 目的

1991 年世界銀行正式委託紐約哥倫比亞大學開辦「經濟政策管理」(The Program in Economic Policy Management)課程，希望藉由對開發中國家及前社會主義國家經濟問題的研究，對開發中國家從事經濟政策規劃工作者傳授有效用經濟政策的技巧與能力，該課程之設計透過實際經濟政策運用的成敗，傳授具實用性的經濟課程及科學管理方法。

”經濟政策管理”課程為期一年半，其中一年是在校課程，半年為實習課程。在校課程主要為總體經濟政策管理、個體經濟政策管理、政策規劃者的管理技能、世界經濟展望、專題研究及其他選修課程等。為讓學生能達到學以致用之目的，於結束在校課程後，可申請世界銀行、國際貨幣基金或其他經濟研究機構進行為期半年的實習觀摩，實習結束後需就實習經驗提交實習報告。全部完成在校課程及實習後，學生可獲得哥倫比亞大學國際及公共事務學院的國際事務碩士學位。

哥倫比亞大學開辦 ”經濟政策管理” 課程迄今已第九屆，過去畢業於該課程的校友已遍佈全球且居要職，如喬治亞共和國的財政部長、蒙古共和國中央銀行的金融及監理部長皆是該課程的校友。

二、 內容

「經濟政策管理」(The Program in Economic Policy Management) 課程主要分為兩大項，一項是在校課程，包括暑期班、春季與秋季學期；另一項是實習，學生於在校課程結束後，需選擇世界銀行與國際貨幣基金或其他機構工作半年，整個課程結束以後，學校始發給學位證書。個人因公費期間之限制，於獲得學校同意後，直接上春季與秋季學期課程，另亦獲可於實習四個月後，於一年期間屆滿時返國述職。茲將在校相關課程主要內容及實習情形分述如下：

(一)總體經濟政策管理(Macroeconomic policy management)

課程期間：88年9月至89年5月

指導教授：Ron Miller

該課程就總體經濟理論展開密集訓練課程，主要分三部份進行：

1.國際貨幣理論

回顧開放經濟體制下的國民收支帳及總體經濟本質，進而了解貨幣方法理論下的匯率決定及長期實質匯率的決定，尤其著重分析浮動匯率制度下，各種國際資本市場的交互運作及各種不同市場開放程度下的財政政策與貨幣政策，探討各該政策與實質及名目匯率、經常帳、物價變動、短期產出、國內政策

與國際部門的關聯性及其密切關係。另亦討論、了解國民收支不平衡所產生的危機、內外政策的一致原則、固定匯率機制的瓦解、開發中國家的特殊議題等，另思考貨幣政策的運用，了解不健全的貨幣市場中貨幣政策的實行及與貨幣政策有關的全面性策略的議題。

2. 國內外收支平衡的總體經濟政策

學習了解政府的政策目標及政策工具，尤其是貨幣目標所扮演的角色，同時涵蓋在政策決定因素中，固定及彈性匯率下國內支出組合與水準。另就實務中的超級通貨膨脹及溫和通貨膨脹，討論總體經濟面公共部門預算與貨幣、通貨膨脹及預算間的連結關係，並長期財政赤字下公共部門預算對國內、外經濟變數的敏感度。同時檢驗實際及預測中被低估的經濟成長，其資本流出的成因與後果；分析政府部門及民間部門儲蓄的決定因素，討論在強調政府政策與民間部門儲蓄、投資連結下，國外負債的最適水準；另亦討論世界銀行及國際貨幣基金的放款條件及其實際上的運作效果。

3. 貨幣、銀行及金融市場

檢驗分析通貨膨脹與貨幣的穩定、財政赤字與通貨膨脹的關係、一般金融機構與中央銀行、財政部之間的重要關係，以

實例進行討論超級通貨膨脹及溫和通貨膨脹所衍生出的經貿問題，進而了解物價穩定的實質意義，及其他結構性改革以穩定物價的改革成效。內部金融市場及金融發展方面，首先討論資本市場的經濟角色及與其相關的資訊問題、金融壓抑與金融改革，以理論與實務並行的方式，學習了解金融改革、金融危機及金融法規下的選擇性策略，另亦就現行市場之失敗案例，分析對金融市場干預及採用直接信用計畫的可行性。

(二)個體經濟政策管理(Microeconomic policy management)

課程期間：88年9月至89年5月

指導教授：John McLaren

Kent Leonard

該課程強調以訓練解決實際問題的技巧，以達到有效經濟政策的管理，因此，該課程偏重於個案學習方法，另亦著重計量經濟分析的技巧，以達成多方位的政策制定。該課程共分為四大部份：

1.開發中經濟的國際貿易政策

了解基本的貿易模型：Ricardian 模型、Specific-factor 模型及 Heckscher-Ohlin 模型後，進而深入討論所得及所得分配與國際貿易的關係，涵蓋關稅、配額及補貼等產生的經濟效果；

另分析探討國際貿易的不完全競爭市場效果及政府最適干預理論，並涵蓋國際貿易與工業結構之間的關係、貿易政策策略的角色及效果。最後探討貿易政策的改革及政治因素對國際貿易政策決定的影響性。

2. 預算的決策

深入探討租稅政策、公共財、基礎建設的角色及政府投資的理性分配原則，並涵蓋機會成本及時間價值、方案評估及成本利益分析、有效社會政策的形成及誘因，另瞭解如何透過租稅改革以施行有效率及公平的租稅制度。

3. 人口、健康及勞動力

研究人口、所得分配與貧窮的相關議題，探討經濟發展上人口成長與人口結構對經濟的效果、開發中經濟的所得分配不均與經濟發展的關連性、失業率、城鄉間的人口移動及貧窮等問題；另亦研討教育及人力資源發展、工會組織、最低薪資機制及政府的運作等重要議題；檢視國民健康保險的經濟議題，尤其是健保政策設計與執行的適當性與有效性。

4. 工業發展、市場及法令規章

了解開發中國家工業化的經驗及其成功發展的原因，尤其是有關開發中國家及轉型經濟體的國營企業與私營企業的經營

展驗、政府工業法規之訂定及外部性、環保政策等對經濟潛在的影響力。

(三)政策規劃者的管理技能(Management skills for policy makers)

課程期間：88年9月至89年5月

指導教授：Mitali Das

Katharine Morgan

Thomas A. Banker

主要學習公共部門的有效管理及經濟政策有效率執行的基本技巧與工具，秋季學期主要學習計量經濟學，春季學期以會計基本原理與財務管理及行政管理為主。

1.公共政策管理的統計技巧-計量經濟學

課程提供討論政策管理者如何評估計量上技術學習的有效性，提供實用統計方法的調查研究，讓學生使用自己所蒐集的資料予以驗證。計量方法討論包括時間數列與跨部門分析，如線性與回歸，特別檢定、預測、限制性自變數模型及邏輯回歸。

2.金融及管理技巧-會計學、財務管理及行政管理

該課程主要提供公共政策管理者下列技巧：

(1)學習政策決定所需具備的基本金融財務及會計管理的觀念，主要介紹在資訊制度及決策工具下的會計制度，了解實用的

國民所得帳、國際收支帳、社會收支帳及公營事業帳；同時亦介紹有關財務金融分析的技巧與工具、金融市場及債券價格的基本原理。

(2)學習管理公共組織所需具備的基本公共管理的觀念與技巧，主要內容如下：

- ⇒ 官僚體系下如何提出政策
- ⇒ 如何建構組織以達成最適生產力
- ⇒ 如何善用預算及財務流程
- ⇒ 如何進行溝通及說服他人

(3)了解人力資源管理是著重於人力資源的有效流動性，主要內容包括：

- ⇒ 如何找尋、激勵及留住好的人才
- ⇒ 如何處理主管與部屬的問題
- ⇒ 如何發揮領導者的能力
- ⇒ 如何處理員工衝突問題
- ⇒ 如何設計及規劃人事制度

(四)經濟政策管理專題(Issues in economic policy management)

課程期間：88年9月至89年5月

指導教授：Francisco Batiz

Graciana del Castillo

該課程以討論會的方式進行，每一次的討論會都以當前最重要的議題為主，另亦涵蓋多種不同的議題，同時邀請世界銀行的工作人員、其他國際政策決定者(如 IMF)、企業界人士、報界從業人員及學者來參與討論，讓學生藉由報告人就當前議題的看法，於回國後能就其國家發生相關議題時，具判斷解決的能力。所討論的議題如下：

- ⇒ 政策的選擇
- ⇒ 金融改革
- ⇒ 拉丁美洲金融危機之探討
- ⇒ 東南亞金融危機及其對新興經濟國家的影響
- ⇒ 俄羅斯經濟危機

(五)公共經濟學(Public economics)

課程期間：88年9月至89年12月

指導教授：Eiichi Miyagawa

從個體經濟理論分析政府的功能，主要內容包括：

- 1.公共財：柏拉圖最適境界 (Pareto optimality)的社會福利水準為最高，惟公共財之不具排他性，如免費使用者問題(Free rider problem)的存在，而使私經濟的價格機能，無法反映其實際的社

會邊際效益，自願交易說(Voluntary Contribution Game) 及 Lindahl solution 認為最適公共財決定於社會成員對公共財所願支付價格的總和等於該財貨的邊際成本，並依受益原則，人民應按受益多寡來承擔費用。

- 2.外部性：當外部性存在時，若政府任由私人經濟的進行，而不干預市場活動，則市場的價格機能將破壞Pareto 的最適境界，以致私利與公利產生矛盾的現象。為了使資源作更有效的運用起見，一旦有了外部性，政府應予適度的干預，以使資源達成最佳的配置。政府可給予某經濟主體特有的財產權，以利透過民間的協商來達成資源的重新配置；另外，亦可採用課稅或補貼的政策，務使稅率等於邊際外部成本，從而達成資源的有效調配，重要的理論有：Pigou's solution、Coase Theorem。
- 3.政治經濟：公共支出的決定，可透過投票表決的方式來決定預算，投票過程中的投票法則(Voting Rules)與策略運用乃為公共選擇最關心的問題。投票法則很多，但以簡單多數決(Majority Rules)為最常用，在簡單多數決下，如果個人的偏好函數為單峰(Single-peaked Preference)分配時，則中位投票者就是社會偏好的決定者。重要理論有：Arrow's Impossibility Theorem、Logrollin、Manipulation and Gibbard-Satterthwaite Theorem。

4.租稅：政府為了推行各項公共支出，必須有對等的財源以供支應，租稅為政府最主要的財源，惟租稅的課徵必須以效率、公平及不干預市場價格機能為依歸，以避免扭曲市場上資源的調配。

(六)當代日本經濟(Contemporary Japanese Economy)

課程期間：88年9月至88年12月

指導教授：Hugh Patrick

該課程主要檢視當代日本經濟及其企業制度，課程內容如下：

- 1.介紹與回顧日本戰後的經濟表現，了解日本如何創造其經濟奇蹟，觀察 1990 年代日本經濟結構與表現及從高經濟成長到低經濟成長的變化。
- 2.評估日本某些特殊制度形成的機制，如：工業間的關係、系列(keiretsu)、金融制度及一般的商業公司(sogo shosha)；研究日本總體經濟的工具與政策、國民儲蓄表現與金融制度。
- 3.檢視 1990 年代經濟衰退對 keiretsu 等特殊制度所造成的改變及金融的混亂現象與“金融大改革”(Big Bang)。
- 4.探討日本的科技及其研究與發展、勞動市場與就業結構、公部門的政商關係、日本的工業政策及管制之解除。
- 5.檢討日本與他國的經濟關係，包括貿易形成與規模、國際收

支、多國籍企業、對外投資及美日間的經濟關係。

(七)世界經濟展望(Perspectives on the World Economy)

課程期間：89年1月至89年5月

指導教授：R. Findlay

該課程主要內容如下：

- 1.瞭解世界經濟的演變，內容包括：探索全球化的原始來源，西元1000-1350年回教世界與非洲、歐洲、印度東南亞及中國的貿易接觸方式，黑死病及其經濟後果，航海發現及其對歐洲、非洲及亞洲的影響，十六世紀的價格革命，黑奴的三角貿易，製造業與民生必需品的關係，工業革命及其影響，1870-1914年的世界經濟擴張時期，歐洲海外開墾的各種經驗，世界經濟大恐慌及其對世界經濟的影響及二次世界大戰後世界經濟的整合與發展。
- 2.分析貿易與成長模型，內容如下：(1)人口內生變數的古典模型及土地報酬遞減，熊彼得(Schumpeter)的技術創新，Harrod-Domar 與 Feldman-Mahalanobis 模型，Arthur Lewis 的勞力剩餘與多元經濟的假設理論，Solow 模型，技術進步與經濟成長，邊做邊學、發明與內生成長理論；(2)比較利益、世界價格與經濟效率，價格扭曲、影子價格與最適干預，國際生產要素

的流通，進口替代與出口導向的發展策略；(3)貿易與成長的變動模型，變動要素所佔的比率與比較利益的階層，南北模型，外人投資與科技的移轉。

3.探討分析政治經濟，了解國家與商品市場在經濟發展的相互關係；與私人部門的關係，國家同時為生產者及掠奪者；公共媒介與基礎建設；開放經濟下的”發展國家”及”福利國家”，”貿易設限”與”競租行為”；內生性的關稅障礙。

4.討論某些全球化議題，如：全球化是否發展過度？貿易與科技發展對南北半球的影響程度、”標準化”與貿易、童工、智慧財產權及環境保護等。

(八)世界貿易制度(The World Trading System)

課程期間：89年1月至89年5月

指導教授：Jagdish Bhagwati

該課程主要內容如下：

- 1.針對世界貿易制度形成以前的問題提出討論，如保護主義所產生的貧窮問題；探討自由貿易的爭議及其新舊挑戰，如貿易與工資的關係及貿易政治與勞工之間的議題、環境及勞動規範的要求與貿易間的連結。
- 2.自由貿易的形成，包括多邊貿易談判、特惠國貿易協定、單

邊貿易的自由化及進步的單邊主義(即美國 301 條款)。

3. 國際貿易組織(WTO)的發展及其爭議、貧窮國家對富有國家(政府組織對非政府組織)、WTO 西雅圖部長級會議發生的議題及其教訓。

(九) 實習訓練

實習期間：89 年 6 月至 89 年 9 月

實習機關：國際企業與經濟研究基金會(FIBER, Foundation for International Business and Economic Research, Inc.)

實習地點：紐約

國際企業與經濟研究基金會(FIBER)是以經濟與金融研究為主的機構，以其傑出且具創新的能力，出版多樣化且內容豐富的研究報告與出版品，提供一般機構與個人投資決策之參考，主要出版品及服務項目計有：

1. 美國經濟分析：每個月分析報導美國主要經濟指標如工業原料價格指數、失業率、通貨膨脹率及進出口等，另亦就通貨膨脹做預測。
2. 國際經濟分析：追蹤分析世界主要國家的經濟成長、通貨膨脹、利率及金融市場的趨勢與變動，提供企業、金融經理人

及政策規劃者參考。

- 3.即時經濟情勢展望：就美國國內經濟及國際經濟的變動做即時報導分析。
- 4.金融市場分析：與瑞典 Delphi 公司合作，以財務金融預測模型，提供投資銀行及基金管理公司分析之工具。
- 5.經濟資料庫：其景氣循環資料庫具備各項經濟指標時間數列的來源與組合，可用於預測與解釋經濟社會中生產、就業、通貨膨脹、利率、股價與貿易等部門的波動與方向。該資料庫主要包括工業及開發中國家的領先與同時指標，另提供歐洲及亞洲地區國家景氣指標。除了指標以外，景氣循環資料庫亦提供國際經濟與金融財務時間數列的使用捷徑，其中許多資料是具有專利權且取得不易。
- 6.諮商與訓練，培訓各國政府在職人員或學校、研究單位推薦人員建立景氣指標，另亦提供財務金融諮商服務。

在國際企業與經濟研究基金會實習期間，個人主要參與建立貨幣預測(currency forecasting)模型之工作，另亦以個人過去所從事之景氣調查經驗，協助該機關有關台灣與其他國家之景氣分析與季節調整的工作。實習結束後，個人以”貨幣預測之實證研究”為實習報告之題目。

三、心得與建議

此次能於中古年齡之際獲得出國進修機會，尤其又是就讀於長春藤學校之一，實在是抱著戒慎恐懼的心情以赴。學習期間，的確吃足苦頭，惟課程內容之充實與實用性，對非經濟本課系者助益頗大。學校課程之安排兼顧理論與實務，透過多次的案例學習(case study)及分組簡報，不僅能現學現賣，學習如何解決財經問題，亦可從與國外同學團隊研討中，互相切磋及交換經驗。

印象最深刻的尤屬個體經濟政策管理課程第二學期的教學方法，教授於首二個月教授完畢市場失靈、公營事業訂價政策及租稅的經濟效果等公共經濟重要理論後，將全班五十四名同學分成六組，每一組從六個題目(1.森林濫採 2.可交易的污染權 3.高等教育的經濟效益 4.如何減低開發中國家的貧窮 5.美國社會福利的改革 6.公共基金在研究與發展上的適用-以預防注射為例)中選出各組所喜愛的題目後，於最後兩個月的課堂上輪流由抽籤排定的組別上台做簡報，各小組的每一個人均需上台簡報，且需就各組所報告的題目之現況、成因、市場失靈及解決對策等方向提出簡報分析。簡報結束後，每一個人需繳交 2-3 頁的心得報告外，學期末亦就此六個題目舉行期末考試。

以上述方式進行的實例學習，個人感覺受益很大，其他同學亦有同感，因在短短有限的兩個多月內，除了可以深入了解自己本組的問題之外，透過他組的簡報及老師指定的必讀資料，也同時了解他組所選擇的問題。此種由學生當老師的學習方式，給予學生主動思考分析、解決問題的機會，也給予學生站臺練習膽識的機會，的確獲益良多。

「經濟政策管理」課程具多元化且兼顧理論與實務，不僅建立理論基礎，更以實務上的問題解決為學習方式，達到學以致用的效果。「經濟政策管理」課程之進修，不僅有助於個人在財經知識領域的增長，在工作上亦有所助益。本會主要工作以財經問題為主，在全球化趨勢下，當前財經問題已趨複雜化，所需涉獵範圍更趨廣泛，為提升同仁對於財政、經濟等問題的研究能力，建議給予未具碩士學位的同仁該項進修機會。感恩能有此次的學習機會，更感謝進修期間分擔我工作的所有同仁。

四、附件(學期報告)

(一)日本汽車工業回顧與展望 (Japanese Automobile Industry Retrospect and Prospect)

(二)區域貿易主義破壞多邊貿易主義 (Regionalism undermines Multilateralism)

(三)領導與政策決定 (Leadership and Decision Making)

(四)匯率預測-固定匯率方法的實證研究(Currency Forecasting-In Empirical Study of FX-Method)

Contemporary Japanese Economy

**Japanese Automobile Industry
Retrospect and Prospect**

SHIOW-CHYUN JIN

November 23, 1999

Japanese Automobile Industry

Retrospect and Prospect

Forward

Japanese cars seems has become the symbol of the success of Japan economy recovering from the war. Nissan, Toyota, and Honda are well-known motor companies for consumers¹. However, the bubble economy and consequent recession and Asian financial crisis have put the Japanese automobile industry in trouble. The purpose of this paper is trying to briefly review the structure and development of the Japanese automobile industry and to give some light about its current issues and future as well.

I. The Overview of the Structure of Japanese Automobile Industry

Based to the 1998 automobile production data (see table 1), we know that the major

Table 1 Production of Japanese Motor Makers

Maker	Thousands units; %						Thousands units; %	
	Cars	Share %	Trucks	Share %	Buses	Share %	Total	Share %
Daihatsu	406	5.0	150	7.7	-	-	556	5.5
Fuji	353	4.4	73	3.8	-	-	427	4.2
Hino	-	-	36	1.9	4	7.1	40	0.4
Honda	1,147	14.2	96	4.9	-	-	1,243	12.4
Isuzu	46	0.6	261	13.5	3	5.4	310	3.1
Mazda	707	8.8	132	6.8	-	-	838	8.3
Mitsubishi	748	9.3	325	16.8	8	14.3	1,081	10.8
Nissan Diesel	-	-	28	1.4	1	1.8	29	0.3
Nissan	1,353	16.8	193	10.0	6	10.7	1,552	15.4
Suzuki	625	7.8	182	9.4	-	-	807	8.0
Toyota	2,670	33.1	462	23.8	34	60.7	3,166	31.5
Total	8,053	80.1	1,938	19.3	56	0.6	10,050	100.0

Source: Japan Automobile Manufacturers Association ("JAMA")

type of automobile produced is car, which accounts for 80% of all the motor vehicle produced. Among the eleven automakers, Toyota, Nissan, Honda, Mitsubishi and Mazda are the five largest automobile companies in Japan. In addition, we can also learn that Japanese automobile market is very concentrated. The three biggest automakers manufactured almost 60% of total production. The possible reason is that the motor manufacturing business is very capital- and technical-intensity industry which prohibit small-medium corporations from entering market.

Next, let us see some numbers related to international trade (see table 2). Most of the vehicles were exported to North America and Europe. These two regions are also the areas that most of motors imported from. There are two points worth mention, first, among the imported countries, Germany has exported more than 130 thousands vehicles to Japan. Second, although the share of export of Asia is less than 6%, it is not the normal situation² and should be attributed to the effect of the Asian financial crisis.

Table 2 1998 International Trade of Motor Vehicle

Area	Export (by destination)		Import (by countries of origin)	
	Unit	Share %	Unit	Share %
North America (Canada & U.S.)	1,459,338	32.2	60,764	22.4
Latin America	450,128	9.9	1,046	0.4
Europe	1,370,931	30.3	206,234	76.1
Asia	264,987	5.8	1,512	0.6
Middle East	455,159	10.1	-	-
Oceania	347,194	7.7	1,460	0.5
Africa and other	181,138	4.0	37	0.0
Total	4,528,875	100.0	271,053	100.0

Source: JAMA

¹ The ten largest motor companies, based on 1998 revenue, in the world are General Motors, DaimlerChrysler, Ford Motor, Toyota, Volkswagen, Nissan, Fiat, Honda, Renault, and Peugeot. [Fortune 1999]

II. The Evolution of Japanese Automobile Industry

Toward Industrialization

Japan had developed its motor manufacturing industry before World War Two and focused on trucks for military use³. After war, only the production of trucks was permitted in the earlier year. Then, the limitation had been relaxed gradually. In 1952, Ministry of International Trade and Industry (“MITI”) set up guidelines aimed at introducing new technologies to Japan through: (1) technical collaborations with foreign automobile manufacturers; (2) improving production technologies for passenger cars; and (3) manufacturing automobiles that would be competitive in the export market. In addition, there were some special measures had been adopted:⁴

- Limiting car import: Raised the duty on foreign car up to 40% and implement foreign exchange control, in order to decrease the competition faced by domestic cars.
- Restricting foreign direct investment (“FDI”) on domestic car industry, unless the manufacturing technology can be improved by FDI.
- Providing loan support: Provided soft loan to automobile firms by Japanese banks.
- Applying tax concessions: Reduced the corporate tax, excise tax and duties for auto parts and equipment.

Under those measures, the Japanese car companies could lower the production cost.

They also built up the cooperation relationship with foreign automakers to introduce

² The motors exported to Asia were around 60 thousand units per year in the first half of 1990s.

³ Ford had started its trucks assembly business in Japan in 1925, GM also established its branch in Osaka in 1927. For reducing the huge trade deficit, Japanese government decided to build up its own automobile industry. In 1936, a special law had been promulgate to restrict foreign automakers’ production, raised the car duties and provide tax credit for automakers. [JAMA, 1997]

the concept of making cars and related know-how. For example, Nissan cooperated with Austin, a British firm; Hino with Renault, a French company, etc... All these efforts have made a solid foundation for the next phrase of development.

Rapid Expansion

From the mid-50s to earlier 1970s were the golden years of the Japanese motor companies. Because of government protection, the competitiveness of Japanese automobile has enhanced dramatically. In addition, the economic prosperity during this period increased the demand for cars. As a result, the number of automobile manufactured had grew from 68 thousand in 1955 to 1,875 thousand in 1965, increased 26 times within ten years, and to 5,289 thousand in 1970s (see table 3)

Table 3 The Production of Japanese Automobile

Year	Car		Truck		Bus		Total	
	Unit*	Growth %	Unit*	Growth %	Unit*	Growth %	Unit*	Growth %
1950	2	-	27	-	4	-	32	-
1955	20	1,171.5	44	65.5	5	37.2	69	118.2
1960	165	714.5	308	602.3	8	75.5	482	598.6
1965	698	321.7	1,160	276.6	19	129.3	1,876	289.5
1970	3,178	356.6	2,064	77.9	47	140.7	5,289	182.0
1975	4,567	43.7	2,338	13.3	36	-22.5	6,940	31.2
1980	7,038	54.1	3,913	67.4	92	153.7	11,043	59.1
1985	7,646	8.7	4,545	16.1	80	-13.1	12,271	11.1
1990	9,947	30.1	3,499	-23.1	40	-49.5	13,487	9.9

* thousand units

Source: JAMA

4 I-chi Chan, "The Current Situation of Automobile Industry of Japan". *Taiwan Economic and Financial Monthly*, June 1994.

Japan became the second largest automobile-producing country in the world, next to the U.S. only.

However, the trend of trade liberalization also brought great pressure for Japanese car industry. For example, between 1967 and 1972, the duties of all kinds of automobile had been reduced a half due to the trade talks with the U.S. Moreover, since 1971, foreigners had been allowed to invest in domestic car industry. Facing these challenges, the strategies of Japanese automobile companies included: (1) improving the production efficiency; (2) investing abroad; (3) merger (e.g., Nissan merged Prince) and cooperation.⁵

Strengthening Competitiveness

The 1973 oil crisis had affected world economy and Japanese automobile industry as well. The factor of gasoline-saving was as important as the quality of cars. The small car developed by Japanese firms met those market requirements very well. In addition, the vigorous environmental standards of emission in Japan also let Japanese cars be less air-polluted. Further, automatic production lines, various car models, and just-in-time manufacturing system helped the Japanese companies created the more high-quality, low cost cars that were welcomed by consumer around the world. Although the second oil crisis in 1979 resulted in world economic recession and high unemployment, which caused the rise of the protectionism and less demand for cars, production of Japanese motors still grew from 5,289 thousand units in 1970 to 11,042 thousand units in 1980, and put Japanese automobile industry on the top of the world.

⁵ Institute for Industrial Technology Research, *Analysis of Motor, Motorcycle and Bike Industries*, July 1997.

Globalization

During the 1980s, the total amount of car production of Japan remain about 10 million units per year, which showed Japan was the most important car-making country in the world. However, as the market leader, Japanese motor industry also threatened their counterparts in the U.S. and in Europe. To weaken the protest and counter attack by western countries as well as create the investment opportunity overseas, the Japanese car begin to adopted globalization strategies, such as international technical cooperation and establish overseas manufacturing factory. For example, Nissan invested in Spain to produced trucks in 1980, and set up its production lines in Tennessee in 1983; Toyota cooperated with GM and produced trucks in 1984; Mazda began its production in Michigan in 1987, and cooperated with Volkswagen to make cars in Germany in 1989; Mitsubishi manufactured autos with Volvo in the Netherlands in 1991.

In 1986, total overseas production by Japanese automakers was roughly 1.3 million units. Surpassing their exports for the first time during 1994, their overseas production had more than quadrupled by 1995 to hit 5,620,000 units. In 1995, exports dropped 15 percent to 3,790,000 units, marking the tenth straight year of declining exports and a fall of 44 percent from the 1986 peak.

Development in the 1990s

The Japanese economy prospered in 1980s. But the bubble economy burst in the early 1990 and economic growth slowed, which weakened consumer demand.

The production of autos decreased in the consecutive five years since 1991.

Besides, the expensive labor cost and mature domestic market caused the

automobile companies to shift their production abroad. As a consequence, the car made within Japan decreased 13% in the last decade.⁶ The importation of foreign cars, however, continued increased, thanks to the appreciation of yen.⁷

Contrary to the over domestic production and sales, the Japanese companies expanded their overseas production aggressively (see table 4), mainly because of the concerns to reduce cost and to avoid trade disputes⁸.

Table 4 The Share of Overseas Production of Japanese Automobile Industry

Year	Thousand Unit; %			
	Domestic Production	Overseas Production	Total	Overseas/Total
1990	13,487	3,748	17,235	21.8
1991	13,245	4,029	17,274	23.3
1992	12,499	4,435	16,934	26.2
1993	11,228	5,082	16,310	31.2
1994	10,554	5,757	16,311	35.3
1995	10,196	6,316	16,511	38.3
1996	10,346	6,625	16,971	39.0

Source: JAMA

Among Japanese overseas investment, North America (i.e., Canada, U.S. and Mexico) attracted the largest portion of the investment and produced more cars than other region did. Nevertheless, the growth of the motor production in Asia

⁶ The domestic auto production was 12.6 million in 1988, the number was 10.9 million in 1997. [JAMA, 1998]

⁷ The market share of foreign cars rose from 2.6% in 1990 to 5.6% in 1996. Almost one half of imported cars was made in Germany. [JAMA]

⁸ Shu-lin Liao, "From 97 to 98: The Review of Japan's Car and Motorcycle Markets." Taiwan Economic and Financial Monthly, May 1998.

and in Europe skyrocketed⁹. The major reasons other than diversifying investment are:

1. Asian market is the most potential market in the future.
2. Association of South East Asian Nations (“ASEAN”) planned to establish free trade area in 2003, and this new emerging attract huge amount of FDI, Japan was the largest investor among all investors.
3. Europe became a single market in 1992 and there were lots of advantages to invest.

The Asian Financial Crisis

The bursting of the Asian financial crisis in 1997 had global economic effects. The domestic demand of most of crisis-hit countries has fallen¹⁰. Japan was no exception. In addition, Japanese government raised the consumption tax in 1997 from 3% to 5% to reduce the fiscal deficit, which further deteriorated the consumption and car demand. The export and domestic sales of cars fell dramatically.¹¹

Regarding domestic production, the production units in the second half of 1997 was 5,277 thousand, 10% less than the same period of previous year. Because the stock of inventory continually increased with two-digit growth rate, Japanese motor companies have to cut their production without choice. The production unit in April, 1998 was only 761 thousand, hit the lowest record since 1976. The total

⁹The production number of North American in 1990 was 1.8 million and was 2.9 million in 1996; the number of Asia was 1.2 million and 2.2 million respectively; in Europe, it was 0.2 million and 0.8 million. [JAMA, 1998]

¹⁰ According to EIU, the car sales in Asia would drop 37% in 1998, back to the 1992 level. The car sales might decreased 62% in Korea, 70% in Thailand, 53% in Malaysia and 80% in Indonesia.

¹¹ For example, the sale units of new cars fell in consecutive 15 months compare to the same month of previous year started from June, 1997.

production in the period from July, 1997 to June, 1998 had dropped 15%. In the export market, although the order from Europe and U.S. increased in 1997 due to the weak yen, the effect of Asian financial crisis had emerged since mid-1998. The export growth rate became negative in May and June, 1998, compare to the same month of previous year.

III. Current issues and prospectus

Japanese automobile has faced problems like the low domestic demand due to the recession and export problem caused by financial crisis. What are their future strategies? Following is the analysis:

- Strengthen the alliance partnership with western motor companies: To access the overseas markets, reduced the R&D cost and shorten the developing schedule for new car model, Japanese motor companies has strengthened their international tie with European and American automakers as well as expanding their overseas investment.¹²
- Promoting “Asia Car”: Japan automakers have invested in Southerneast Asian countries since 60s. Establishing auto assembly plants was the strategy to enter the local market at the early stage. At the beginnings of 90s, Japanese companies had realized the importance of “production localization” and the market potential of this region. They began to transfer more advanced technology to their local partners and to purchase more car parts from local enterprises. Many Japan motor companies also began to produce their “Asia Car” to compete with European cars or American cars in

¹² Toyota has invested 42 billion yen to establish its third engine plant in U.S. for Colloa model. [Taiwan Bank, 1998]

Asia market.¹³ The concept of Asia Car is to modify the current car model to fit the need and environment of Asia region. For example, the hitting system would be removed; the price would be lower, and the cars should be made in local countries to reduce the cost.

- Economize procurement of auto parts: In the past, the Japanese motor maker and their parts suppliers had a very strong and close relationship, i.e., so-called center-satellite system. Every motor company (center) had its own auxiliary firms (satellite) and those satellite suppliers would not provide their products, such as car bake and board, to the other motor groups. But the situation has changed. The automakers and parts suppliers both tried to seek their economic scale and flexibility of manufacturing to reduce the cost. Now, the automakers begin to purchase the auto parts from independent car parts producers or those belonging to a different group.¹⁴
- In addition, to enhance the competitiveness, Japanese automakers also purchase car parts from abroad and use ASEAN's Brand to Brand Complementation ("BBC") program to expand the production scale and supply auto parts mutually within the region.¹⁵ These trends might reshape the auto parts industry of Japan in the future: Less company with larger production scale.

¹³ For example, Toyota was the first Japan company to produce this kind of car. It used Tercel as a base and developed a low price "national car" for Asia countries. The ratio of local parts was 70% to reduce the cost. The production base was in Thailand. Nissan plan to develop a modified Sunny car and increased its market share from 2.8% to 5.2% in 2000. Mitsubishi plan to enhance its production lines in eight Asian countries so the production volume could be increased from 300 thousand to 800 thousand.

¹⁴ For instance, Nissan had ordered seat vibrator for Cima model from Aishin corp. which is the member of the Toyota group.

¹⁵ The participant of BBC program could enjoy the 50% duty concession advantage. Nissan planned to increase its auto parts complementation to 15 billion yen in 2000; Honda also joined this program and hope the 70% parts for its City model could be supplied by ASEAN countries.

- Corporate reconstructing: Reorganization and merger are very popular in automobile industry as well as other industry, such as banking, in the modern time.¹⁶ The global market becomes more and more competitive. It is very important for Japanese motor companies to restructure and to make themselves more dynamic. In addition, Japanese enterprises also need to adjust to some new changes, such as the likely break-up of keiretsu. Some automakers, for instance, Mitsubishi Motors, has announced global restructuring plan.¹⁷ The recent case is the restructuring of Nissan Motor, which called for layoff 21,000 workers and closed five factories in Japan.¹⁸

Conclusion

Although the Japanese automobile industry has some troubles due to the Japan's deepening recession, the collapse of other key Asian markets and the stiffer competition around the world. There are some evidence show the worst days might have passed. According to the estimation of IMF, the Asian countries has recovered from the financial turmoil.¹⁹ And Japan's economy, which had stopped deteriorating, is currently turning to improve: The real GDP for the first quarter and second quarter of 1999 increased 7.9% and 0.9% respectively at annual rate from previous quarter.²⁰ Still, restructuring Japanese automobile industry, which is vital for the health of corporate Japan, might have a long way to go.

¹⁶ A well-known case is that Germany car giant, Demiler Benz, merged with Chrysler in 1998.

¹⁷ Barbara McClellan, "Mitsubishi: 'Time of real change'," *Ward's Auto World*, Dec 1998.

¹⁸ Nissan had been bailed out by Renault' injecting 643 billion yen in last March. The restructuring plan will be executed by its COO, Mr.Carols Gosen, who came from Renault. [Economist, 1999]

¹⁹ The estimate of economic growth rate of ASEAN-4 (Indonesia, Malaysia, Thailand, and the Philippines) in 1999 and 2000 were 1.4% and 3.6% respectively, much better than -9.8% of 1998. [IMF, 1999]

²⁰ Economic Planning Agency, *Monthly Economic Report* . July 1999 and November 1999.

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The World Trading System

Regionalism Undermines Multilateralism

SHIOW-CHYUN JIN

April 24, 2000

Economics G4340: World Trading System
Essay Topic: Regionalism undermines Multilateralism

Jennifer Shiow-Chyun Jin

I. Prerequisite Free Trade: Multilateralism and Non-Discrimination

Through international trade in goods and services, and international flows of money, the economies of different countries are more closely linked to one another now than ever before. Countries engage in international trade for two basic reasons, each of which contributes to their gain from trade. First, countries trade because they are different from each other. Nations can benefit from their differences by reaching an arrangement in which each does the things it does relatively well. Second, countries trade to achieve economies of scale in production. That is, if each country produces only a limited range of goods, it can produce each of these goods at a larger scale and hence more efficiently than if it tried to produce everything.

There are three basic models discuss why international trade occurs. The traditional Ricardian model emphasizes technological differences as the cause of trade; the Heckscher-Ohlin-Samuelson model emphasizes differences in factor endowment. Additional model can be generated by varying assumptions about the number of goods and factors, by placing restrictions on the technology, and so on. In the real world, trade between two countries can benefit both countries if each country export goods in which it has a comparative advantage. Each country specializes in the production of the good in which it has a comparative advantage. We know that countries whose relative labor productivities differ across industries will specialize in the production of different goods. And we also know that both countries derive gains from trade from this specialization. This mutual gain can increase production and consumption for each trading country. In the absence of trade, consumption possibilities are the same as the production possibilities. Once trade is allowed, it has enlarged the range of choice, and therefore it must make residents of each country better off.

All gains of free trade come from the differences (resources, technologies, consumption preferences, etc.) and comparative advantages by every country specializing the production in which it has comparative advantage, the world wide resources can reach optimal allocation and most efficient utilization, which in turn promote economic growth and improvement of people's well being.

In order to realize specialization and efficient utilization of resources in the world-scale, we need free flow of commerce covering every area of the world. That is why the founding principles of GATT and the late-WTO are multilateralism and non-discrimination. Any tariff reduction and elimination of non-tariff barrier should be applied to every area of the world. If we don't hold the principles of multilateralism and non-discrimination, the world trade system could downgrade to several trade blocs and trade restriction and retaliation. Protectionism would become the mainstream policy in international trade. Historical experiences had taught us repeatedly that protectionism means simply the trade contraction, economic depression and like in 1930s social disaster.

In the real world there are both many countries and many gradations of trade policy between free trade and complete protection against imports. After the Great Depression, the United States endeavored to develop the internationally coordinated tariff reduction. Bilateral negotiations do not take full advantage of international coordination. Thus the step in international trade liberalization was to process to multilateral negotiations involving a number of countries. Prior to 1980s, the United States placed overriding priority on the global regime as embodied in the General Agreement Tariff and Trade (GATT). In the early 1980s, the US shift its trade policy to pursue global liberalization and a number of regional initiatives simultaneously. And now there are a lot of FTAs and CUs types of regional agreement, not only NAFTA and EU, but also APEC and ASEAN etc. It is violated the merit of free trade for multilateralism.

II. Why regionalism contradicts multilateralism

The central principle of the GATT is nondiscrimination: If trade barriers were lowered for one trading partner, they had to be lowered for all trading partners. The international trade agreements all involved a “nondiscriminatory” reduction in tariff rates. Nondiscrimination is normal in most tariffs. The U.S. grants many countries a status known formally as that of “Most favored nation” (MFN), a guarantee that their exporters will pay tariffs no higher than that of the nation that pays the lowest. All countries granted MFN status pay the same rates. Tariff reductions under GATT always are made on a MFN basis. On the contrary the preferential trading areas (PFTs), founded on the article XXIV of GATT, is a union of two or more countries in which goods produced within the union are subject to lower trade barrier than the goods produced outside the union. The tariffs apply to each other’s products are lower than the rates on the same goods coming from other countries.

Under PFTs, there are free trade areas (FTAs) and customs union (CU). FTAs allow each country’s goods can be shipped to the other without tariffs, but in which the countries set tariffs against the outside world independently. The North American Free Trade Agreement, which establishes free trade among Canada, the United States, and Mexico, creates a free trade areas: There is no requirement in the agreement that, for example, Canada and Mexico have the same tariff rate in textiles from China. Countries in customs union must agree on tariff rates. The European Union is a full customs union. All of the countries must agree to charge the same tariff rate on each imported good. The principle of non-discrimination is the cornerstone of the GATT-WTO system, and free trade areas or customs union are inherently discriminatory and not reducing tariffs all around. The discrimination of tariff, the Spaghetti Bowl Phenomenon, clutters up trade. And now there are a lot of FTAs and CUs types of regional agreement, not only NAFTA and EU, but also APEC and ASEAN etc. It is violated the merit of free trade for multilateralism.

III. Regionalism undermines multilateralism

Many pro-free-trade economists, policy analysts and politicians have come to take the view that regional agreements promote freer trade and multilateralism in at least two senses : that trade creation has generally exceed trade diversion, and that the regionals contribute to both internal and international dynamics that enhance rather than reduce the prospects for global liberalization. Indeed, the following concerns illustrate why regionalism undermines multilateralism:

1. Trade diversion and trade creation

By liberalizing trade among members preferentially, regional agreements create new trade between members and divert trade from low-cost, non-member suppliers to high-cost, member suppliers. It is a shift of imports from an efficient to an inefficient source under trade diversion. In addition, the weaker and uncompetitive industries in a country are more likely to make political contributions to enhance the probability of that country concluding regional agreements with other countries in which producers, who would be their competitors in the regional agreements, are, like themselves, not the most efficient foreign producers. The impact of preferences may more than offset the trade-creation benefit of the regional liberalization. Moreover, an individual member of a preferential arrangement could suffer from adverse income distribution effects that arise from the arrangement's redistribution of tariff revenues.

2. Increased Tariffs on Non-member Countries

Another problem with regional agreements is that they can lead to increase protection against non-member countries, turning even an initially trade-creating into a trade-diverting one. In bad times, pressure for protection grow and when a regional agreements member is unable to raise trade barrier to against a partner, the burden of increased trade barriers falls disproportionately on the outside world. This happened in Israel after it concluded FTAs with

both the United States and EU, and later in Mexico which, aftermath of the Peso crisis, raise tariffs on non-members countries on 503 items from less than 20 percent to 35 percent. The same phenomenon has also been observed recently in the Central African Customs and Economic Union (UDEAC) which introduced an across-the-board increase in tariffs on non-members to support trade preferences among member countries.

3. The Spaghetti-Bowl Phenomenon

To avoid trade deflection, regional agreements usually include rules of origin according to which products receive duty-free status only if a pre-specified proportion of value-added in the product originates in member countries. With the proliferation of crisscrossing regional agreements, the nondiscriminatory MFN (most favored nation) tariff is being fast replaced by a spaghetti bowl whereby tariffs vary according to the ostensible origin of the product. Among these countries the trade tariff are so complicated. There are differing rules of origin for different FTAs and differing phase outs of tariffs on identical products in different FTAs.

IV. The Merit of WTO

Since the United States believed that tariff had disastrous effects on international trade which was caused the Great Depression, they have made effort to reduce tariff rate. The General Agreement on Tariff and Trade (GATT), based on the most favored nation clause and the principle of non discrimination, concluded in 1947, the later shift to multilateralism. Since 1945, there have been eight major multilateral trade agreements. The first five of these took the form of "parallel" bilateral negotiations, where each country negotiates pair-wise with a number of countries at once. The sixth multilateral trade agreement, known as the Kennedy Round, was completed in 1967. This agreement involved an across-the-board 50 percent reduction in tariffs by the major industrial countries. Overall, the Kennedy Round reduced average tariffs by about 35 percent. The so-called Tokyo Round of trade negotiations (completed in 1979) reduced tariffs by a formula more complex than that of the Kennedy

Round. In addition, new codes were established in an effort to control the proliferation of non tariff barriers, such as voluntary export restraints and orderly marketing agreements. Finally, in 1994 an eighth round of negotiations, so-called Uruguay Round, was completed. The most important results of Uruguay Round are trade liberalization and administrative reforms.

The multilateral tariff reductions since World War II have taken place the umbrella framework of the General Agreement on Tariffs and Trade (GATT) which embodies a set of rules of conduct for international trade policy. Uruguay Round creates a new institution, the World Trade Organization (WTO), replacing the GATT. WTO carries out the old function under a new name. The main difference from previous practice is that the charter of the WTO will include a new, accelerated process for resolving disputes between member countries. The most important new agreement-the General Agreement on Trade in Service-has set up a legal framework under which future negotiations to liberalize service trade.

Apparently from GATT to WTO, not only the tariffs on goods have been reduced significantly, but also the non tariffs on service trade do. The world trade volumes have increased promptly so far.

V. How the regionalism emerges

1. The first period of regionalism: Before 1960s

Article XXIV of the GATT allowed a group of countries to dismantle all trade barriers only among themselves. That was the door through which the European Community (EC) passed in 1957, with U.S. approval. Though Americans were not at the time interested in Article XXIV for themselves, the EC effort led to an outpouring of short-lived FTAs in the developing countries, with the 1960 Latin American Free Trade Association being the most prominent. But the time was not yet ripe for their success. From the economic point of view U.S. doesn't like see the formalization of EU, which is not commit to free trade. From the political point of view, U.S. approvals it which could confront to Soviet Union together.

2. The second period of regionalism: From the 1980s

In the early 1980s, U.S. trade policy embraced regional trading arrangement as a tactic to promote a new round of multilateral trading negotiations. Faced with European refusal to start multilateral trade negotiations in 1982, and with growing protectionism at home that required countervailing moves to expand trade. The Reagan administration initiated the talks culminating in the Canada-U.S. Free Trade Agreement now turning a decade later into NAFTA, the North American Free Trade Agreement, with Mexico. The new NAFTA is clearly a regional FTA, and extending it to South America would undoubtedly stamp it as regionalism par excellence.

In the late 1980s under the threatening by Japan, a "diminished giant syndrome" has struck American. This affliction has caused a loss of confidence in America's inherited postwar trade policies. The narrower vision has been to encourage the notion that the United States is interested in trade regionalism no matter how strong its professed commitment to multilateralism. Since the U.S. also recognizes its vital trade interests in the rapidly expanding markets of the Far East, it has found itself in an awkward position. According to that school of thought, the turn to FTAs was a tactical move designed to jumpstart the GATT multilateral negotiations. Having succeeded in doing so, it is now time for America to return to its original commitment to the GATT as the best means to liberalize world trade.

VI. Conclusion

Through international trade in goods and services, and international flows of money, the economies of different countries are more closely linked to one another now than ever before. In the real world there are both many countries and many gradations of trade policy between free trade and complete protection against imports. After the Great Depression, the United States endeavored to develop the internationally coordinated tariff reduction. The step in international trade liberalization was to process to multilateral negotiations involving a

number of countries. The principle of non-discrimination is the cornerstone of the GATT-WTO system, and free trade areas (FTAs) or customs union (CUs) are inherently discriminatory and not reducing tariffs all around. The discrimination of tariff, the Spaghetti Bowl Phenomenon, clutters up trade.

Many pro-free-trade economists, policy analysts and politicians have come to take the view that contemporary regionalism is open and will strengthen the multilateral trading system. Indeed, the following concerns illustrate why regionalism undermines multilateralism: 1. Regional agreements create new trade between members and divert trade from low-cost, non-member suppliers to high-cost, member suppliers. It is a shift of imports from an efficient to an inefficient source under trade diversion. The trade diversion offset more than trade creation; 2. Increasing tariffs on non-member countries grows pressure for protection and when a regional agreements member is unable to raise trade barrier to against a partner, the burden of increased trade barriers falls disproportionately on the outside world; 3. With the proliferation of crisscrossing regional agreements, the nondiscriminatory MFN (most favored nation) tariff is being fast replaced by a spaghetti bowl whereby tariffs vary according to the ostensible origin of the product.

In the early 1980s, U.S. trade policy embraced regional trading arrangement as a tactic to promote a new round of multilateral trading negotiations. In the late 1980s under the threatening by Japan, a "diminished giant syndrome" has struck American. This affliction has caused a loss of confidence in America's inherited postwar trade policies. According to that school of thought, the turn to FTAs was a tactical move designed to jumpstart the GATT multilateral negotiations. Having succeeded in doing so, it is now time for America to return to its original commitment to the GATT as the best means to liberalize world trade.

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Management Skills for Policy Makers-Part 2

Leadership and Decision Making

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Management Skills for Policy Makers-Part 2

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Shiow-Chyun Jin

I. LEADERSHIP

A leader is someone who is able to size up a situation quickly, define a direction to pursue, and mobilize subordinates' energies toward the achievement of a particular goal. Everyone wants to know how to become a better leader. What is the effective leadership? In fact, leadership is the essence of effective management practices. Effective leadership requires an understanding of the situation and the decision-making practices that apply to the situation.. Leadership also requires flexibility in personal style to adapt to the requirements of varying management situation and decision problems. From the differences between transactional and transformational leadership, we can identify the necessary behaviors and characteristics for effective leadership. Transformational leaders capture the fragile essence of leadership by inspiring others, by developing and showing consideration towards subordinates, and by providing intellectual stimulation. Transformational leaders, on the other hand, set up contingent reinforcement practices that create a no-win situation for subordinates-and for the leader. Charismatic leadership is central to the transformational leadership process. A leader is seen as charismatic if he or she has followers who imbue him or her with extraordinary value and personal power. This is more easily done when subordinates have highly dependent personalities. On the other hand, subordinates who pride themselves on their own rationality, skepticism, independence, and concerns for rules of law and precedent are less likely to be influenced by a charismatic leader. Subordinates who are egalitarian, self-confident, and high in status are likely to resist charismatic leaders. Transactional leaders will let their subordinates know what is expected of them and what they

can hope to receive in exchange for fulfilling expectations. Clarification makes subordinates confident that they can fulfill expectations and achieve mutually valued outcomes.

II. The intersection of leadership and Decision-Making

In traditional models of the managerial process, the manager makes decisions on matters within his area of freedom, issues orders or directives to his subordinates, and monitors their performance to ensure conformity with these directives. Scientific management has contributed to this centralization of decision making in organizations by focusing on the development of methods by which managers can make more rational decisions, substituting objective measurements and empirically validated methods for casual judgments. Most social psychologists and other behavioral scientists have called for greater participation by subordinates in problem-solving and decision-making process. The efficacy of participative management indicates that impressive increases in productivity can be brought about by giving workers an opportunity to participate in decision making and goal setting. In addition, several correlational field studies indicate positive relationships between the amount of influence that supervisors afford their subordinates in decisions which affect them and individual or group performance.

Reconciliation of these discrepant findings is not an easy task. It is made complex by different empirical interpretations of the term "participation" and by great differences in the situations in which it is applied. Identification of the situational conditions, which determine the efficacy of participative management, requires the specification of the decision-making process that it may influence the extent to which the formal objectives of the organization are attained. Social scientists begin to develop some definitions of the circumstance under which

participation in decision making may contribute to or hinder organizational effectiveness. A normative model of leadership style was developed. The model attempts to deal with the complexities of the processes involved in leadership by specifying (1) a set of alternatives among which a choice is to be made, (2) the general nature of the processes which they affect, (3) the principal variables governing the effects of the alternatives on each process, and (4) explicit rules for decision making based on estimates of the outcome of each process.

III. The Methods and Modes of Decision-Making Practices

Two methods of decision-making are proposed: the root method and the branch method. The root method involves a comprehensive means-ends analysis; the branch method assumes relativistic comparisons across particular decision-making outcomes. Let us put the characteristics of the two methods side by side in simplest terms. (See Figure 1.)

FIGURE 1

Rational Comprehensive (Root)	Successive Limited Comparisons (Branch)
1a. Clarification of values or objectives distinct from and usually prerequisite to empirical analysis of alternative policies.	1b. Selection of value goals and empirical analysis of the needed action are not distinct from one another but are closely intertwined.
2a. Policy formulation is therefore approached through means-end analysis: First the ends are isolated, then the means to achieve them are sought.	2b. Since means and ends are not distinct, means-end analysis is often inappropriate or limited.
3a. The test of a "good" policy is that it can be shown to be the most appropriate means to desired ends.	3b. The test of a "good" policy is typically that various analysts find themselves directly agreeing on a policy (without their agreeing that it is the most appropriate means to an

4a. Analysis is comprehensive; every important relevant factor is taken into account.	agreed objective). 4b. Analysis is drastically limited: i) Important possible outcomes are neglected. ii) Important alternative potential policies are neglected. iii) Important affected values are neglected.
5a. Theory is often heavily relied upon.	5b. a succession of comparisons greatly reduces or eliminates reliance on theory.

The root method is the method most commonly advocated but it is not adaptable to complex policy decisions, many of which are made by managers. Of particular importance to public administrators is the fact that public agencies are in effect usually instructed not to practice the first method. That is to say, their prescribed functions and constraints – the politically or legally possible- restrict their attention to relatively few values and relatively few alternative policies among the countless alternatives that might be imagined. It is the second method that is practiced. However, the literatures of decision-making, policy formulation, planning, and public administration formalized the first approach rather than the second, leaving public administrators who handle complex decisions in the position of practicing what few preach.

IV. How to Stimulate the Motivation of Subordinates

No matter an institution has created how well policies or ideal objectives, execution is necessary. The understanding of why workers behave as they do which assist leaders in getting workers to behave in a desirable manner is very important. There are at least 20 major approaches to the study of motivation. The following are the greatest utility for practicing managers.

1. Need theory posits that human needs are arrayed in a hierarchy that ranges from basic “low-order” drives to what has become the catchword for the ultimate in motivation, self-actualization. The five needs, which are physiological needs, safety needs, social needs,

esteem needs, and self actualization, must be satisfied in the order, moving up the hierarchy from physiological needs to self-actualization.

2. Two-Factor theory indicates that certain factors contribute to job satisfaction (“motivations”) but a different set of factors leads to job dissatisfaction (“hygiene factors”). Motivators arise from the content of the job itself and include such considerations as the nature of the work and possibilities it affords for responsibility, recognition, and growth. Hygiene factors, on the other hand, are elements of the environmental or context of the job and encompass such factors as salary, status level, interpersonal reactions, organizational procedures, the degree of supervision, working conditions, and the employee’s personal life.
3. Expectancy theory is concerned with explaining how the process of motivation works. The theory assumes that human behavior is a function of the value that one expects to receive as a result of the effort expended. Three concepts are central to expectancy theory: valence, instrumentality, and expectancy.
4. Other approaches are “organizational behavior modification” (O.B.Mod) and “goal-setting theory.” O.B.Mod is based on the principles of operant conditioning that is “the process of changing the frequency or probability of occurrence of behaviors as a result of the consequences that follow them”. Goal-setting theory is based on four board assumptions: first, human behavior occurs in response to goals and intentions, and these goals can take many forms. Second, Because goals are responsible for effort. “ higher and harder goals will result in higher levels of performance the easy goals”. The third, clear and measurable goals result in higher levels of performance than ambiguous goals. Finally, neither extrinsic nor intrinsic incentives will have any effect on behavior unless they result in the setting of goals that are ambitious and specific.

We know that motivation is a very complex process that defines simple description and

explanation. How to linkage between leadership and motivation. contingency theory has provided us with several guideposts along the road to effective leadership. These consist of the various job elements that must be considered in devising appropriate leadership behavior.

V. Motivation in the Public Sector and Private Sector

There are a number of structural constraints in public-personnel systems that inhibit managerial flexibility. Job-protection provisions, unwieldy procedural requirements, and other limits on administrative discretion tend to complicate the management process in many public jurisdictions. Another important consequence of these characteristics of merit systems is the adverse effect that they can have on employee motivation. Public merit systems are plagued by inequities, cumbersome paperwork, and corresponding declines in employee satisfaction. These factors amount to an apparent shortage of extrinsic incentives among public workers.

The private-sector staffing characteristics that are most attractive to public managers are decentralization and an emphasis on performance. A decentralized administrative format is valued because it permits the line managers to make those staffing decisions that directly influence their unit's productivity and morale. Emphasis on performance as a major criterion for allocating rewards and punishments provides managers with an effective motivational tool. Public-sector staffing has made little use of either of these orientations. Decentralization has traditionally been avoided because it is not conducive to control. Concern for the quality of performance was an early casualty of the effort to neutralize the civil service; with seniority as the basic rationale for placement and promotion decisions, supervisors could not punish or reward subordinates on the basis of political consideration.

Internship Report

**Currency Forecasting -
In Empirical Study of FX-Method**

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I. Introduction

As we know that there are a lot of critics on the forecasting and predicting of the exchange rate. The fact that forecasting is always inaccurate, however, forecasting has always been necessary, since the world has always been changing.

A lot of evidences have proved that fundamental-based models have not met much success in explaining the short- and medium-term trend that exchange rates take. While fundamental-based models have not been successful in explaining a significant portion of exchange rate movements over short-and medium-term periods, many technical-based trend following trading models have been found to be quite successful in terms of offering investors the opportunity to earn significant risk-adjusted profits in currency trading over short-run periods. Unfortunately, total reliance on a technical-based approach to currency forecasting can leave an investor vulnerable to frequent whipsaw losses caused by false technical signals when markets are not moving in discernible trends. An ideal approach to currency forecasting would be one that can combine the longer-run advantages of fundamental-based models with the shorter-run advantages of technical-based models.

In fact, there exists some equilibrium level or path that a currency will gravitate to in the long run. A currency's long-term equilibrium path is likely to be driven by either purchasing power parity (PPP) or external balance considerations. If PPP considerations were the dominant factor driving long-term movements in currency values, over time nominal exchange rates would move to offset differences in national inflation rates. If external balance considerations were the dominant factor driving long-term movements in currency values, exchange rates would adjust over time to insure that a balanced

current account was attained in the long run. Whatever the case, a currency's long-term equilibrium path plays an important role by serving as a long-run anchor or magnet, insuring that exchange rates will not wander aimlessly without limit but instead will gravitate toward the long-run equilibrium path over time. Medium-term cyclical and longer-term structural forces interact to determine a currency's fundamental equilibrium path. Exchange rates may, at times, wander away from this fundamental equilibrium path if short-run speculative forces push currency values far beyond the levels justified by fundamental factors alone. Foreign exchange market participants tend to have extrapolative expectations over short-run horizons. Such expectations may accentuate and perpetuate exchange rate movements far beyond the levels justified by fundamentals alone over short-term periods. Such overshooting behavior can persist for appreciable periods of time, but at some point market forces should come into play to bring a currency back into line with its fundamental equilibrium path.

How far and for how long can exchange rate overshoots persist? Because exchange rates often wander away from their fundamental equilibrium path, fundamental-based models will have a difficult time explaining a significant portion of exchange rate movements, particularly over short- and medium-term periods. In contrast, technical-based models have a distinct advantage over fundamental-based models when exchange rates overshoot, since technical-based models are not at all concerned with where value lies but instead are concerned only with where the trend is heading. Indeed, it is during times when exchange rates are overshooting their fundamental equilibrium path that an integrated fundamental/technical analysis approach to currency forecasting works best.

In this paper, first we introduce how the fundamental forces influence exchange rates over time. Then we shift to technical-based models and look at how it can be used to predict the future trend in currency values. Finally, we analyze the real case with the US dollar, Yen, Dutch Mark, and Pound.

II Fundamental-based forces

Because exchange rate movements affect so many business, investment, and policy decisions, “getting the currency right” has become a critical objective of all market participants. Unfortunately, getting the currency right on a consistent basis is a difficult task. That is because economic forces impact exchange rates through a variety of channels—some of which may exert positive influences on a currency’s value, others of which may exert negative influences on a currency’s value. Some of those channels may be more important in determining the long-term trend that a currency takes, while other channels may be more important in explaining the short- or medium-term trend that a currency takes. As the followings we start to understand how the fundamental-based forces influence the exchange rates.

1. Purchasing Power Parity

The purchasing power parity (PPP) approach to exchange rate determination is probably the most widely followed framework used by economists to assess long-term value in the foreign exchange markets. The PPP theory of exchange rates states that the long-run equilibrium value of a currency (E) is completely determined by the ratio of domestic prices (P) relative to the level of prices abroad (P*):

$$E = P/P^*$$

The PPP doctrine will generally be valid in a world where disturbances to an equilibrium position are monetarily induced. This follows from the extension of the quantity theory of money to an open economy. According to the quantity theory, a country's price level is determined by the supply of money relative to the demand for money. According to PPP, exchange rates will adjust to equalize price levels internationally. Thus, if money factors determine price levels and changes in relative price levels determine changes in exchange rates, that implies that monetary factors determine changes in exchange rates.

2. External Balance and the Equilibrium Real Exchange Rate

Identifying what path a currency will take over medium-and longer-run horizons is a critical part of the currency forecasting process. The PPP approach is probably the most widely followed framework used by economists to assess long-term value in the foreign exchange markets. The failure of PPP to hold over medium-term horizons has led many economists to consider alternative approaches to assess long-term value in the currency markets. The most widely followed alternative approach to assess long-term value is the external-balance approach. According to this approach, the long-run equilibrium real exchange rate can be defined as that rate that results in the simultaneous attainment of internal and external balance.

Although there are no tried and true formulas to determine which approach to favor when the estimates of fair value diverge widely, experience favors the estimates derived from the external-balance approach over the PPP approach for medium and long-term analysis.

3. The Balance of Payments Flow Approach to Exchange Rate Determination

Before the monetary and portfolio balance approaches to exchange rate determination came into vogue in the 1970s, the conventional way of analyzing exchange behavior was to monitor the flow supplies of, and demands for, foreign currencies in the foreign exchange market. Since the flow supply of, and demand for, foreign currencies were generated from current account and capital account transactions recorded in the balance of payments, changes in exchange rates were largely explained by underlying changes in balance of payments flows. Utilizing a balance of payment flow framework, the equilibrium exchange rate was determined when the net inflow (outflow) of foreign exchange arising from current account transactions just matched the net outflow (inflow) of foreign exchange arising from capital account transactions.

4. The Mundell-Fleming Model and the Determination of Exchange Rates

The Mundell-Fleming Model has become the textbook standard by which most students study the role of monetary and fiscal policy in an open economy. In Mundell's and Fleming's original work, they stressed the importance of international capital mobility in determining the effectiveness of monetary and fiscal policy in an open economy, under fixed and floating exchange rates. Their work was among the first to incorporate a major role for the capital account most prior model had focused largely on the trade balance. The Mundell-Fleming Model is useful to be a theory of exchange rate determination. As the degree of capital mobility is equally important in determining the exchange rate's response to a change in fiscal or monetary policy. The more mobile capital is—that is, the more sensitive capital movements are to changes in interest rates—the greater the outflow of capital following a monetary expansion. Hence, the more mobile

capital is, the greater the domestic currency will depreciate following a monetary expansion.

5. The Monetary Approach to Exchange Rate Determination

Historically, changes in monetary policy have had a profound impact on exchange rate trends. The evidence suggests that the lags in the effect of monetary policy changes on exchange rates are actually quite long. The monetary approach is more classical in spirit, in that prices are assumed to be flexible in the short run. Thus, purchasing power parity is assumed to hold continuously. That means that monetary policy changes are transmitted to exchange rates through a purchasing power parity channel, not through an interest rate channel. However, in monetary models of exchange rate determination, real factors only affect the demand for money. Expectations also play a key role in monetary models of exchange rate determination, but exchange rate expectations are assumed to be monetarily induced.

Although it is now widely acknowledged that the monetary approach is an incomplete theory of exchange rate determination, it nevertheless remains a useful analytical tool. In addition, since the monetary model serves as the foundation for more sophisticated and complex models of exchange rate determination, knowledge of the monetary approach can be integrated with other approaches to arrive at a clearer picture of the path that currencies may take.

6. Currency Substitution and Exchange Rate Determination

The capacity of individuals and businesses to alter the composition of their money holdings between domestic and foreign currencies is known as currency substitution. The more highly substitutable domestic and foreign currencies are in investor portfolios, the

more volatile exchange rates may be in response to even small changes in underlying economic fundamentals. The issue of currency substitution is important in explaining the dollar's declining role as a vehicle and reserve currency in the world markets. The issue of currency substitution is also important in terms of setting official exchange rate policy. If currencies are highly substitutable in investor portfolios, it may prove difficult, if not impossible, for domestic policymakers to pursue independent monetary policies.

7. The Portfolio Balance Approach to Exchange Rate Determination

The monetary approach is more narrowly focused in that exchange rates are determined only by the supply of and demand for national money stocks. The P-B approach broadens the menu of financial assets that can influence exchange rates. In P-B approach, the exchange rate depends not only on relative money supplies but also on relative bond supplies. That would suggest that the monetary approach is really a subset of the broader portfolio-balance approach to exchange rate determination. In P-B approach, domestic and foreign bonds are viewed as imperfect substitutes. Investors are assumed to view the relative risks and rewards on domestic and foreign bonds differently. The allocation to the domestic and foreign bond markets will change in response to changes in expected return and perceptions of the relative riskiness of each asset. Such portfolio rebalancings can give rise to significant changes in exchange rates and interest rates. Hence, the P-B approach allows the bond market to play a decisive role in exchange rate determination.

8. Real Interest Rate Differentials and the Determination of Exchange Rates

In many models of exchange rate determination, interest rates serve as the conduit linking changes in economic fundamentals with changes in exchange rates. In Mundell-

Fleming model, monetary policy's and fiscal policy's impact in exchange rates operates primarily through an interest rate channel. With an expansionary monetary policy, the rise in the domestic money supply pushes domestic interest rates lower, inducing capital to flow overseas and thereby causing the domestic currency to depreciate. In the case of an expansionary fiscal policy, the resulting increase in domestic demand will put upward pressure on domestic interest rates, resulting in a capital inflow, which, in turn, causes the domestic currency to appreciate.

9. Fiscal Policy and the Determination of Exchange Rates

Fiscal policy's impact on exchange rates is ambiguous in large part because fiscal impulses are transmitted to exchange rates through a variety of channels. Some of those channels may transmit positive influences on a currency's value, while other channels may transmit negative influences on a currency's value. For example, in Mundell-Fleming model of exchange rate determination, an expansionary fiscal policy will typically result in a rise in domestic interest rates and an increase in economic activity. The rise in domestic interest rates will induce a capital inflow that should contribute to a rise in the domestic currency's value, but the consequent rise in domestic economic activity will contribute to a deterioration of the trade account, which should put downward pressure on the domestic currency's value. How sensitive capital movements are to the rise in domestic interest rates will determine whether the induced capital inflow will dominate the deterioration in trade or vice versa. That means that the degree of capital mobility will determine whether a currency will appreciate or depreciate in response to a fiscal stimulus.

10. Central Bank Intervention and the Determination of Exchange Rates

Since the beginning of floating exchange rates in 1973, most of the world's major central banks have intervened frequently, and at times forcefully, in the foreign-exchange markets to influence the path that their respective currencies have taken. Central banks can influence exchange rates by directly intervening in the foreign-exchange markets. Intervention affects exchange rates through a variety of channels, which may be classified in two categories: direct channels, which stress the importance of the volume and intensity of the intervention operations themselves; and indirect channels, which stress the importance of market responses to the intervention operations and how private investor expectations and positions may be altered.

III. Technical Analysis

Of all the methods that have been applied in forecasting the future movement of equity, commodity, and currency values, no forecasting tool has come under closer academic and market scrutiny than technical analysis. Technical analysis has become extremely popular among market participants. Many traders and fund managers today utilize at least some technical input in their investment decisions, particularly for investments over short-term horizons. The growing popularity of technical analysis in the foreign-exchange market stems in large part from market participants' dissatisfaction with fundamental models of exchange rate determination. Technical analysis has a distinct advantage over fundamental-based models when exchange rate swings are unexpectedly great. Technical models are designed to keep an investor trading with, not against, the trend. An investor rigidly following such a technical-based trading system would only close a position if a confirmed technical reversal were signaled.

Investors who place a great deal of weight on technical trading rules are obviously less concerned with a currency's "fair" value. Instead, they are more concerned with the value that the market will assign to it. Because "fair" value may differ markedly from "market" value, investors may take great risks if they choose to ignore short-term fluctuations in exchange rates. A more recent survey conducted by Allen and Taylor (1989) found that approximately 90 percent of chief foreign-exchange dealers surveyed in the London foreign-exchange market used some technical model input to help them formulate their outlook for exchange rates over short-run periods, particularly for intraday and one-week horizons. For longer forecasting horizons, the weight that dealers assigned to the importance of technical analysis was considerably smaller, while the importance of fundamental analysis was correspondingly greater.

Technical models generate exchange rate forecasts by extrapolating the past sequence of currency movements into the future. An investor who rigidly adhered to a trend-following trading rule assumes that a trend is in existence until a reversal is signaled, and if exchange rates move in broad, well-defined trends, such trading rules would, if rigidly followed, essentially require investors to be long when the currency is trending upward and vice versa.

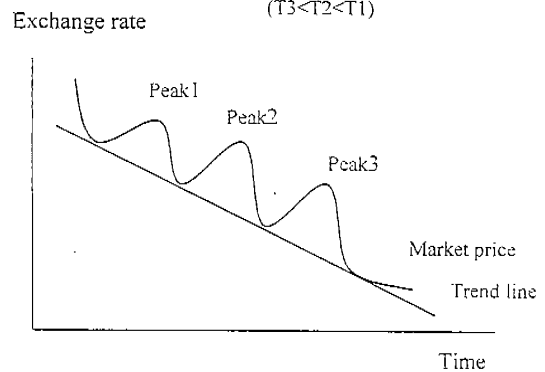
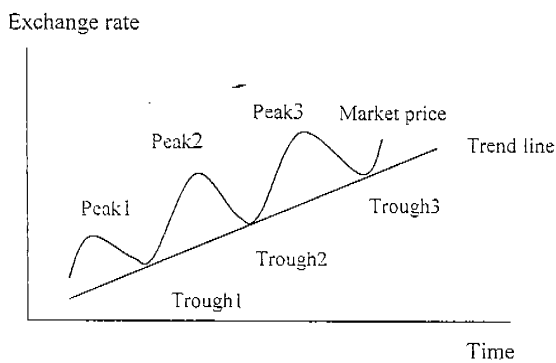
Trend-following models do not attempt to catch the very top and bottom of market moves. Instead, they attempt to capture enough of a market move in the hope of earning a sizable profit. That would only be possible if the ensuing exchange rate swings persisted long enough and carried far enough to yield a profit. Trend-following trading rules come in many forms. They may require the subjective interpretation of price formations on a bar chart, or they may be purely mechanical, with buy or sell signals generated by a

mathematical formula that can be easily cranked out by a computer. What all trend-following trading rules have in common is that they seek to identify which direction the broad trend in market prices is heading.

1. Identification and confirmation of a Valid Uptrend/Downtrend

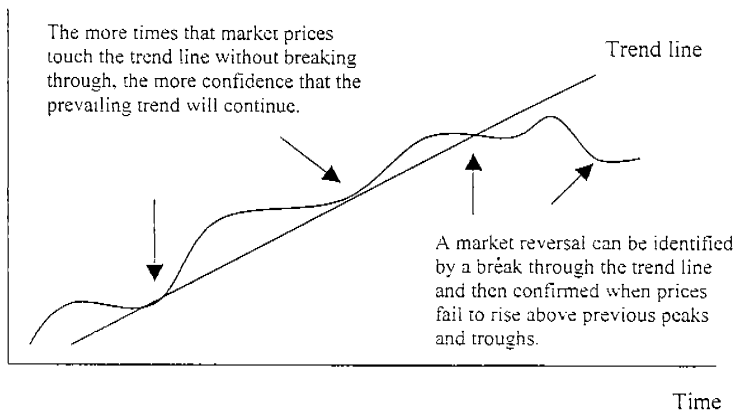
An uptrend is indicated when advancing prices achieve successively higher peaks ($P3 > P2 > P1$) and intervening declines in prices fail to fall below preceding troughs ($T3 < T2 < T1$)

An downtrend is indicated when declining prices achieve successively lower troughs ($T3 < T2 < T1$) and intervening increase in prices fail to rise above preceding troughs ($T3 < T2 < T1$)

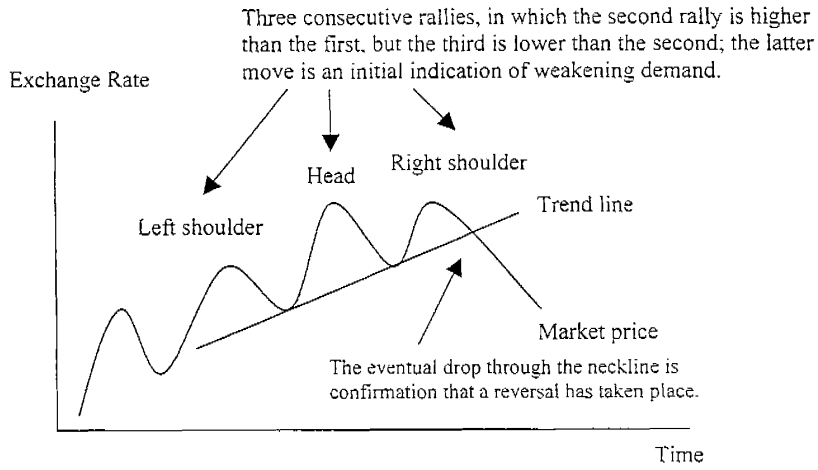


2. Identification and confirmation of a market reversal

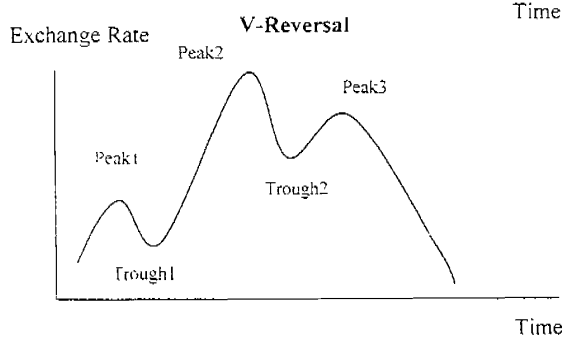
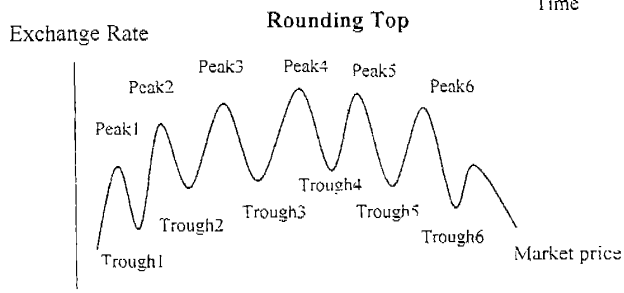
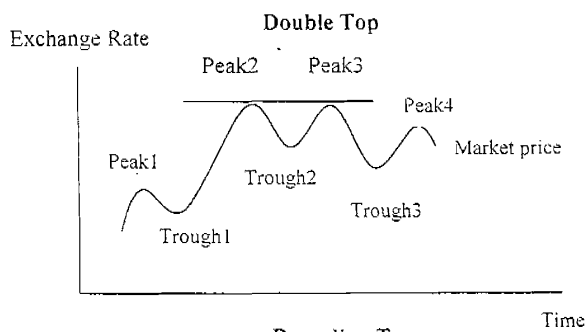
Exchange Rate



3. Head-and-shoulders reversal pattern



4. Other reversal patterns



Market reverse in many different ways, but all reversals have one thing in common: All reversals must be preceded by the failure of market prices to achieve successively higher peaks and troughs. One of the most widely recognizable patterns of market peaks and troughs is the head-and-shoulders reversal pattern. For the other popular reversal patterns, the one they all have in common is that the end of higher peaks and troughs marks the end of a bull market and vice versa.

IV. The Empirical Consequence

According to the Uncovered Interest Rate Parity (UIP) the expected change in an exchange rate is explained by the interest rate differentials between the economies in question and a risk premium. Modifying the UIP slightly and adding a technical analysis component, the model seems to perform better as a forecasting tool on average. It should be noted that the model described in this text is merely a “beta version” and is to be developed further. The methodology for this unfinished model is explained briefly below.

The interest rate differential (nominal rates, domestic less foreign) for the 10-year government bonds (annual basis) has historically proven to explain fairly large parts of the actual change in exchange rates (defined as number of domestic currency units per unit of foreign currency). By adding a sensitivity coefficient to the UIP, the forecasted exchange rate can be improved on average. The formula below has been used:

$$e_{t+1} = (100 + (i_f - i_d)be_t) / 100$$

The sensitivity factor (b) should be determined as the value that, for a particular data set, minimizes the average absolute percentage deviation compared to the actual exchange rate. This minimization problem can be solved in Excel using the *Solver*.

Having simulated a series of exchange rates using the formula above we will proceed by studying the estimates' deviations from the actual exchange rate.

Plotting these deviations in a chart reveals that their sign (i.e. if they are negative or positive) and in fact also their magnitude are quite consistent over time, using monthly data. I believe they can be forecasted. By calculating two moving averages of the deviations, one short (5 days) and one long (15 days), we may be able to predict and thereby adjust our forecast for the deviation. We do this in the following way.

If the short moving average of the deviation is higher than the long, we can assume that it will be so for quite some time. This we know because we've calculated the average length (in months) for both the positive and negative deviations and they seem to have positive auto correlation. The adjustment factor is very simple to calculate. It is actually the average of the positive and negative deviations respectively. If the short moving average is higher than the long we adjust for the average positive deviation, and if the long moving average is higher than the short we adjust for the average negative deviation. Therefore the forecasted exchange rate can be expressed with the formula below:

$$e_{t+1} = (100 + (i_t - i_d)be_t) / 100 - \mu_t$$

where μ_t = average positive deviation if
MavShort > MavLong
where μ_t = average negative deviation if
MavShort \leq MavLong

The model above is only a beta version and is to be further improved even though it in its present form performs better than the nominal interest rate model. I'm planning to develop it by making the adjustment factor explicitly dependent on a number of factors. 1.) the average time of the deviation. 2.) the momentum of the difference between the moving averages. 3.) the magnitude of the differences between the moving averages. If

these factors would prove to be hard to incorporate I would instead try to construct a series of artificial adjustment factors and use the adjustment factor that historically has proved to be accurate, given a certain deviation between the moving averages.

The next obvious step to improve the model is to work with real interest rates instead of nominal. This would hopefully improve the model on average.

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