

An Accounting Study of American Depositary Receipts

by

Daniel Julian Hubbard

Dissertation Submitted to the Faculty of the
Virginia Polytechnic Institute and State University
In Partial Fulfillment of the Requirements for the Degree of
Doctor of Philosophy in Business Administration
With a Concentration in Accounting

Floyd A. Beams

Dr. Floyd A. Beams, Chairman

Vittorio A. Bonomo

Dr. Vittorio A. Bonomo

Robert M. Brown

Dr. Robert M. Brown

Konrad W. Kubin

Dr. Konrad W. Kubin

Frederick M. Richardson

Dr. Frederick M. Richardson

3 August 1992
Blacksburg, Virginia

ABSTRACT

This study uses the tools of accounting research in an exploratory examination of American Depositary Receipts (ADRs). ADRs are registered certificates that represent specified amounts of foreign stocks held in trust by the banks issuing the ADRs. They are used to avoid the day-to-day problems created by international securities transactions.

The empirical portion of this study considers three research areas linking ADRs and accounting. The first question considers whether ADR firms show financial accounting information that is characteristically different from that for non-ADR firms. The major conclusion is that corporate size is the predominant distinguishing factor. The second question is whether the portion of the periodic returns on ADR investments caused by foreign currency exchange effects is significant. The major conclusion to this section is that foreign exchange effects can significantly affect ADR returns, but not in a consistent manner. The third area examines whether ADR returns are more closely correlated with the American markets on which they trade or with the foreign markets on which their underlying shares trade. This portion of the study shows that every possible correlation combination exists among the sample ADRs.

In addition to considering these empirical questions, this study includes a thorough historical investigation of the origin and evolution of the ADR as a financial instrument.

ACKNOWLEDGMENTS

I wish to thank all the people whose help made this dissertation possible. In particular, I wish to recognize:

Lillian Hubbard, my wife and dearest friend, who has endured an ordeal and yet remained steadfast in her love;

Sasha Hubbard, whose smile is magic and whose will is iron;

Dr. Elbert Hubbard, the exemplar of a true scholar, whose tenacity is matched only by his generosity;

Ariane Hubbard, who gave me life and the gift of curiosity, as well as teaching me that the choice between success and honor is no choice at all;

My Baboushka, Madame Olga Nikolaevna Kovalevsky Conus, who set the tone and taught me that character is the only true wealth;

My second family, the Helmens and Hanzels, whose many kindnesses have kept me going;

My cousin, Academician Egor Akkuratov, for reminding me of my duty;

The librarians at Mary Washington College, the University of Richmond, George Mason University and the University of Virginia, who aided a refugee scholar as though he were one of their own; and,

Finally, the members of my dissertation committee, Drs. Floyd Beams, Vittorio Bonomo, Robert Brown, Konrad Kubin and Fred Richardson, for their insights and their example. I will never be able to repay them adequately for their efforts on my behalf.

TABLE OF CONTENTS

Table of Exhibits.....v

Chapter 1 - Introduction.....1

Chapter 2 - Literature Review and Description of ADRs.....10

Chapter 3 - The History of ADRs - Part 1.....21

Chapter 4 - The History of ADRs - Part 2.....90

Chapter 5 - Research Methodology.....189

Chapter 6 - Results and Analysis of Results.....207

Chapter 7 - Summary, Limitations and Possibilities for
Future Research261

Appendix A - Regressions of ADR Returns on
Currency Exchange Effects.....270

Appendix B - Stepwise Regressions of ADR Returns on
Home and American Market and Currency Returns.....279

Bibliography.....326

TABLE OF EXHIBITS

Exhibit 6-1, Paired ADR and non-ADR Firms (Australia).....209

Exhibit 6-2, Paired ADR and non-ADR Firms (Japan).....210

Exhibit 6-3, Paired ADR and non-ADR Firms (Netherlands).....211

Exhibit 6-4, Paired ADR and non-ADR Firms (Sweden).....212

Exhibit 6-5, Paired ADR and non-ADR Firms (United Kingdom).....213

Exhibit 6-6, Results of Initial Wilcoxon Tests (Australia).....214

Exhibit 6-7, Results of Initial Wilcoxon Tests (Japan).....216

Exhibit 6-8, Results of Initial Wilcoxon Tests (Netherlands).....218

Exhibit 6-9 Results of Initial Wilcoxon Tests (Sweden).....219

Exhibit 6-10, Results of Initial Wilcoxon Tests (United Kingdom)....221

Exhibit 6-11, Results of Ratio Wilcoxon Tests (Australia).....226

Exhibit 6-12, Results of Ratio Wilcoxon Tests (Japan).....229

Exhibit 6-13, Results of Ratio Wilcoxon Tests (Netherlands).....233

Exhibit 6-14, Results of Ratio Wilcoxon Tests (Sweden).....235

Exhibit 6-15, Results of Ratio Wilcoxon Tests (United Kingdom).....238

Exhibit 6-16, Results of Grouped t-tests (1982).....242

Exhibit 6-17, Results of Grouped t-tests (1983).....243

Exhibit 6-18, Results of Grouped t-tests (1984).....245

Exhibit 6-19, Results of Grouped t-tests (1985).....246

Exhibit 6-20, Results of Grouped t-tests (1986).....248

Exhibit 6-21, Results of Grouped t-tests (1987).....249

Exhibit 6-22, Results of Overall Grouped t-tests (1982-1987).....251

Exhibit 6-23, Summary of Regressions of ADR Returns on
 Currency Exchange Effects (Return Differences).....256

Chapter 1

INTRODUCTION

Background

In recent years, the accelerated tempo of transborder economic activity has led to a revolutionary transformation of international business. Computerization, creation of new financial instruments, liberalization of existing securities regulation and increasingly sophisticated financial engineering are among the factors that have "globalized" the economic landscape and opened new horizons for business research.

One interesting development in this global restructuring of business is that American investors have sought to reduce their investment risk and increase their investment returns through international diversification. At the same time, foreign business enterprises have looked to American markets as potential sources of capital. This combination has led to a boom in the issuance and trading of American Depositary Receipts (ADRs).

ADRs are registered certificates issued by American depositaries in the names of particular foreign entities. A particular ADR guarantees that the issuer will retain a specific number of the named entity's securities in trust. While the correspondence between an ADR and the underlying security is often one-to-one, both fractional and multiple ADRs exist in order to align the prices of certain foreign

securities with the preferences of American markets. ADRs are predominately share-backed securities. Currently, the French Treasury's OATs (Ordres admissibles du Trésor) are the only form of bond-backed ADRs in existence. There are, however, more than 750 foreign corporations with stock-backed ADRs trading in the United States.¹

While ADRs can be found on all major securities exchanges, most are traded over-the-counter because of registration requirements and listing costs. Although the trading of ADRs is widespread, their issuance is highly concentrated in New York City, with Morgan Guaranty, Bank of New York, Chase Manhattan and Citibank controlling the overwhelming bulk of activity. There are at least two explanations for this concentration. First, the capital investment required to maintain significant foreign security holdings, either in branches or with correspondent banks abroad, militates against significant ADR activity on the part of smaller banks. An additional explanation for the geographical concentration of ADR issuers is the New York City location of the Depository Trust Company, where most exchange traded shares are physically held.²

From an accounting standpoint, ADRs are dealt with as if they were in fact the underlying securities they represent. The rationale for this treatment is that ADRs may be physically exchanged for the actual

¹Anna Merjos, "The Lure of Faraway Places", Barron's, April 16, 1990, pp. 27-31.

²Gerald Warfield, How to Buy Foreign Stocks and Bonds, Harper & Row, New York, 1985, p. 26.

securities, and because the depositaries pass dividends (in the case of stock ADRs) or interest payments (in the case of bond ADRs) on to the ADR holders.

Research Objectives and Questions

Clearly, the existence of ADRs provides many avenues for potential business research. For example, business historians might focus upon the rationale for their emergence at a certain point in time. Another area of historical study might be to consider those factors that have led to the explosive growth in ADR issuance and trading in the past decade. Similarly, finance researchers might consider the nature of the diversification potential of ADRs, or the risk factors involved. Economists might consider the issue of ADR concentration in certain countries and industries, or the political ramifications of ADR growth. Management researchers might focus upon the use of ADRs to facilitate transborder merger activity or to provide employees with international stock ownership portfolios. Finally, marketing researchers might focus on the use of ADRs as a form of international product publicity.

While there are many possible research avenues involving ADRs, this study narrows its focus to some of the specific accounting issues raised by the existence of ADRs. Considerable attention will be paid to the historical development of ADRs, primarily because such accounting issues as securities regulation, tax policies and information standardization have greatly affected ADR trading. The empirical

portion of this study focuses on three particular topics:

identification, foreign currency exchange effects, and trading patterns.

Identification

Investors seeking international portfolio diversification often prefer to invest in ADRs rather than the corresponding foreign securities for reasons of convenience and liquidity.³ Chang, Most and Brain (1983) showed that both individual and institutional investors ranked corporate annual reports as their most important source of information for investment decisions.⁴ Based on this perceived importance, one might inquire whether foreign firms with ADRs report financial accounting characteristics different from those of compatriot firms not having ADRs. If they do, an investor could use such information in assessing the riskiness of a potential international investment, or in estimating the likelihood that a foreign firm's securities will eventually appear on the ADR market. On the other hand, if firms having ADRs show no distinctive financial accounting characteristics, future research can focus on other factors explaining ADR creation. One reason financial accounting exists is to provide information to current and prospective investors; yet, to date, no

³Alyssa A. Lappen, "The ABCs of ADRs", Forbes, June 15, 1987, p. 244.

⁴Lucia S. Chang, Kenneth S. Most, and Carlos W. Brain, "The Utility of Annual Reports: An International Study," Journal of International Business Studies, Spring/Summer 1983, pp. 63-86.

researcher has considered whether publicly available financial accounting information is useful in distinguishing ADR firms from non-ADR firms. Thus, the first research question to be considered here is: Do accounting variables provide sufficient information for a financial statement user to distinguish between those firms that have ADRs and those that do not?

Foreign Currency Exchange Effects

ADRs permit foreign investment without the confusion of dealing in foreign currencies. By purchasing control of assets through the use of ADRs, American investors can maintain the U.S. dollar as the transaction base. It can be shown (see Chapter 5, pp. 199-202), however, that the dollar rate of return on an ADR is composed of two distinct components. One component is due to the rate of return in the domestic currency of the shares underlying the ADR, and the other is due to what might be termed a foreign currency exchange effect. (When dividends are excluded, this foreign currency exchange effect reduces to the product of the ratio of ending to beginning underlying share prices [in the domestic currency] and the currency exchange rate of return). As both Keslar (1988) and Sibley (1986) have noted, this permits ADRs to be used effectively as hedges against foreign currency exposure.⁵ This type of hedging would not be disclosed under the provisions of Statement of

⁵Linda Keslar, "The ADR Weathers the Storm," Euromoney, February 1988, Special Supplement, p. 1; Angus Sibley, "Investing in Global Equities," The Accountant's Magazine, May 1986, p. 28.

Financial Accounting Standards No. 52, "Foreign Currency Translation," however.

Although studies by Thomas (1988) and Madura and Rieff (1985) contain sections discussing the currency exchange risk aspects of investing in foreign equities, both studies fail to consider what portion of historical ADR returns is actually due to foreign currency exchange effects. The absence of such an examination leads to a second research objective for this study. That objective is to determine whether the foreign currency exchange effect portion of ADR returns is significant enough for ADRs to constitute an effective hedging tool against foreign currency commitments or investments in foreign subsidiaries. Clearly, this is an important accounting research area, because the results might indicate that changes are necessary in the current methods of accounting for ADRs. An ancillary objective is to determine whether the foreign currency exchange effect is important enough to be useful in analyzing ADRs for potential investment. Therefore, the second research question to be addressed is:
Is a significant portion of average ADR returns due to foreign currency exchange effects?

Trading Patterns

Another area of interest for this study is the nature of the ADR market. As Darby (1986) has pointed out, it is not at all clear whether ADR returns are correlated more closely with the domestic markets of

their underlying securities or with the American markets on which they trade. She argues that many of the ADR firms have such a large portion of their business based in the U.S. that they are not really different from American-based multinationals in their diversification potential. She also cites sources claiming that the popularity of ADRs has resulted in their overvaluation relative to their local markets and has "subjected the foreign stocks to the vagaries of Wall Street".⁶ This leads to a third research objective for the current study, namely to determine whether ADR returns are more closely linked to American or originating market returns. The accounting rationale for such research is in filling a current void in the information currently supplied to ADR investors. Thus, the final research questions to be considered in this dissertation are:

To what extent are ADR returns correlated with the returns of the markets on which their underlying securities trade?

To what extent are ADR returns correlated with the returns of the American markets on which they trade?

Research Design and Findings

Because this study was an exploratory effort, a combination of research methods was employed in addressing the three research areas. In all three cases, the study period ran from January 1982 to December

⁶Rose Darby, "ADRs Use Sparks Debate", Pensions and Investments Age, April 14, 1986, p. 14.

1989. For the identification question, five national samples (Australia, Japan, the Netherlands, Sweden, and the United Kingdom) were chosen from among those nations having the largest representative number of ADRs. These samples consisted of ADR firms paired with non-ADR firms from the same industry, based on SIC identification. For the sample firms, data on selected financial statement items were obtained from issues of Moody's International or Worldscope for the period.

Hypotheses of equality between the ADR and non-ADR firms for the selected financial statement items were tested using the Wilcoxon matched-pairs signed-ranks procedure. These tests were performed on both the raw data and data presented in ratio format. The major finding of this portion of the study was that corporate size is the overwhelming factor separating ADR and non-ADR firms.

For the second area of study, foreign currency exchange effects, sample ADR firms were chosen from the same five nations. End-of-month price quotations for the sample firms were obtained from Standard & Poor's Daily Stock Price Record and the Financial Times, while currency exchange information was obtained from the International Monetary Fund's Financial Statistics. Using a simple ADR pricing model developed for the study, calculations were made of the monthly foreign currency exchange effects for each of the sample firms. While a visual inspection of these values seemed to demonstrate their significance, a more rigorous use of regression analysis yielded mixed results. The major finding of this portion of the study was that, while currency

exchange effects can indeed play an important role in the overall return, these effects are not consistent over time.

For the final portion of the empirical study, trading patterns, the same sample firms used in the second part of the study were again employed. Appropriate American and foreign end-of-month market indices covering the study period were obtained from the Wall Street Journal and the Financial Times. These were used to calculate monthly market returns. Stepwise regressions were then conducted for each of the sample firms to determine whether the ADR returns were more closely correlated with American market or originating market returns. The findings for this portion of the study were that ADR returns show a variety of correlation patterns with American and originating market returns. No single relationship consistently appears across all ADRs.

Organization of the Study

This study is presented in seven chapters. Chapter 1 serves as an introduction. Chapter 2 provides a review of the literature dealing with ADRs as well as a description of how ADRs are created and traded. Chapters 3 and 4 trace the historical evolution of ADRs. Chapter 5 explains the operating hypotheses and describes the methodology employed in the study. Chapter 6 presents an analysis of the empirical results obtained in the study. Finally, Chapter 7 concludes with a summary of the study and suggestions for further research.

Chapter 2

LITERATURE REVIEW AND DESCRIPTION OF ADRS

Financial and accounting research literature is not rich in studies dealing specifically with ADRs. Accordingly, this chapter includes a review of the literature on ADRs, as well as a description of how ADRs function. Those articles discussing the history of ADRs are considered in the next chapter, which provides a detailed description of the historical evolution of ADRs.

Most articles describing ADRs indicate that they were introduced in 1927 by Guaranty Trust Company of New York, but these financial instruments have received scant attention from business researchers in the past sixty-odd years.¹

Rosenthal Study

Rosenthal (1983) used runs tests and serial correlation to "uphold" the weak form efficiency of the NASDAQ traded ADR market (at least for monthly data) during the period 1974-8. He selected 54 ADRs that met his criterion of having been traded on the New York Stock Exchange, American Stock Exchange or NASDAQ for at least a year prior to the removal of the Interest Equalization Tax in January 1974. These ADRs represented eight countries, although 76 percent (41 of the 54)

¹Anna Merjos, "Investors' Ticket Abroad," Barron's, April 30, 1984, pp. 24-6.

were from South Africa, Japan, or the United Kingdom. Using the CRSP tapes and the ISL Over-the-Counter series as his data source for daily rates of return, Rosenthal calculated weekly, biweekly and monthly returns for the period February 1974 through December 1978. He included dividends obtained from Moody's Dividend Record in his return calculations. While Rosenthal found a slight linear dependence in the lagged security returns with the weekly and biweekly data (and lags of 1 to 3 periods), this dependence was "not large enough to exploit", and disappeared entirely with the monthly data. For the three countries each having more than 10 ADRs in the sample (Japan, South Africa and the United Kingdom), Rosenthal segregated his data and repeated the serial correlation. Again he used lags of one to three periods for weekly, biweekly and monthly data. With the exception of the South African monthly data for lag 2, none of the correlation coefficients was significant at the 0.05 level. Rosenthal therefore concluded that weak form efficiency was upheld. Before continuing, Rosenthal tested the normality of his return data, noting that the serial correlation tests he employed required normally distributed data. Using the "studentized range" as a test of the return data, he found that "only monthly rates of return appear to be drawn from a normal distribution."²

As an additional test, Rosenthal chose to employ the runs test, which does not require an assumption of normally distributed data.

²Leonard Rosenthal, "An Empirical Test of the Efficiency of the ADR Market," Journal of Banking and Finance, v. 7, 1983, p. 25.

While showing some degree of dependence in his weekly and biweekly data, he again found the monthly rates of return to be independent of one another. He also confirmed his results for the three national subsamples of data. Rosenthal concluded by noting that "overall the tests are reasonably consistent with a weak form efficient market for ADRs."³

Officer and Hoffmeister Study

A second study that made use of ADRs was conducted by Officer and Hoffmeister (1987). These two researchers studied the portfolio diversification potential of ADRs. Their avowed purpose was to "examine the investment characteristics of ADRs as an alternative to direct investment in foreign equities."⁴ For their sample, they chose 45 ADRs traded over the entire period 1973 to 1983 on the New York Stock Exchange, American Stock Exchange or over-the-counter markets. They also chose a random sample of 45 domestic American issues traded on the NYSE or ASE during the same time period. As was the case with Rosenthal's study, the ADR sample was heavily weighted with South African, Japanese and British shares (40 of the 45 sample issues). Also, the CRSP database was again used as the data source. Officer and Hoffmeister, unlike Rosenthal, chose to exclude dividend data, arguing

³Ibid., p. 29.

⁴Dennis T. Officer and J. Ronald Hoffmeister, "ADRs: A Substitute for the Real Thing?" The Journal of Portfolio Management, Winter 1987, p. 61.

that the omission, while reducing overall returns, would not preclude comparisons, since all returns were similarly computed. Using the single-market index model, Officer and Hoffmeister calculated systematic risk betas for the five countries represented in their ADR sample. Their conclusion in this portion of the study was that "the systematic risk of ADRs for United States investors is significantly lower than that of the United States market as a whole."⁵ In addition, they concluded that "there appears to be only a small degree of comovement in price of ADRs compared to prices in our domestic stock market."⁶

In the second part of their study, Officer and Hoffmeister constructed a variety of portfolios from their two samples. "Portfolios were constructed for purely domestic securities, purely ADRs, and combinations of domestic and ADR securities."⁷ In both the purely American and purely ADR portfolios, most of the unsystematic variation in portfolio risk, as measured by the portfolio standard deviation, was eliminated after reaching a portfolio containing eight stocks. The undiversifiable risk of the eight-stock portfolios constructed of mixed sets of ADRs and domestic American stocks was nearly 20 percent lower than that of either of the single type portfolios. This led Officer and Hoffmeister to conclude that "investors can reduce their risk exposure

⁵Ibid., p. 63.

⁶Ibid.

⁷Ibid.

20% to 25% when as few as four ADRs are combined with four domestic securities, without any reduction in expected returns."⁸

Madura and Reiff Study

Neither the Rosenthal nor the Officer and Hoffmeister studies considered accounting data or issues. In addition, both studies failed to consider explicitly the currency exchange rate risk inherent in ADR dealings. Madura and Reiff (1985) strongly criticized "analyzing international portfolio performance without consideration of exchange rate fluctuations."⁹ They constructed fictional portfolios based on quarterly returns of major stock indices for six countries in the period January 1974 to October 1983. In their study, the derived all-country portfolios were hedged in the forward market. While the use of ex-post data in the construction of efficient portfolios is troublesome, the authors argued that these portfolios represent a "potentially achievable" return.¹⁰ Whatever the weakness of their approach, their study is worth consideration because of the demonstration that currency exchange risk factors need to be explicitly considered in international security studies. They also pointed out the importance of portfolio managers holding securities denominated in different currencies to allow

⁸Ibid., p. 65.

⁹Jeff Madura and Wallace Reiff, "A Hedge Strategy for International Portfolios," The Journal of Portfolio Management, Fall 1985, p. 70.

¹⁰Ibid., p. 71.

for flexibility when hedging. One of their conclusions is particularly relevant, in consideration of the Rosenthal and Officer and Hoffmeister studies :

The risk reduction from diversifying globally may be at least partially offset by the exchange rate risk that an international equity portfolio exhibits.¹¹

Description of ADRs

As is true of all financial instruments, ADRs exist to solve particular problems and accommodate particular investment or investor goals and preferences encountered in the course of business activity. Numerous sources catalogue these problems and describe how ADRs can be used to surmount them. Good examples of such sources include Eiteman and Stonehill (1986), Merjos (1984) and Keslar (1988). To summarize their discussions, one should note that direct purchases and sales of foreign securities can prove troublesome for the investor. For example, subtle differences in market mechanics can present intractable problems. Additional complications can arise from the need for stock insurance, the requirements of currency exchange, and the arrangements for stock transfer and/or custodianship.

Each of these problems can be solved through recourse to ADRs. In the first place, the staff of an institution that creates and maintains ADRs (a depository) can develop expertise in the intricacies of foreign security markets more readily than can the typical investor. Secondly,

¹¹Ibid., p. 74.

because ADRs are denominated in U.S. dollars, investors can avoid the complexities of buying and selling with foreign currencies. Finally, an ADR is a more liquid investment than the underlying security for most investors. This is because the existing U.S. markets in ADRs obviate the investor's need to travel abroad and deal with foreign brokers. Also, the five-day settlement period for ADRs is almost always shorter than those for foreign securities.

Investors are not the only beneficiaries of ADRs. Foreign firms seeking access to American security markets also benefit from the existence of ADRs. Tomlinson (1977) discusses the legal problems encountered by foreign firms seeking American capital, and the advantages of using ADRs. While a foreign firm can sell its securities directly on American markets, it must overcome several obstacles. First, the foreign firm needs to comply with SEC registration requirements as though it were an American enterprise. This can involve considerable expense, not only in the translation and conversion of financial information, but also in filing fees. Similarly, the foreign firm has to comply with various exchange requirements to obtain listings for its securities. Finally, and perhaps most importantly, the foreign firm needs to designate an American-based transfer agent capable of handling the physical requirements of direct security dealings.

Despite these obstacles, some foreign firms choose to place their securities directly. That is, they obtain the right to list their securities on one or more U.S. securities exchanges. However, for those

foreign firms that find direct placement of securities to be difficult, two different ADR instruments are available, the "unsponsored ADR" and the "sponsored ADR". The rationale for these mutually exclusive ADR types results from a quirk in the American security regulations that prohibits banks from brokering securities. Thus, although ADRs are issued by banks, these depository institutions cannot market ADRs. Various brokers create the actual ADR market.

Unsponsored ADRs

Most ADRs (about 80%) are unsponsored. As described by Sanford (1986), unsponsored ADRs arise when brokers perceive an interest in a particular foreign firm's securities. The broker approaches a potential depository and requests establishment of an ADR facility. The depository, in turn, requests a "no objection" letter from the foreign company in question. If this letter is received, the depository obtains the financial information necessary to permit the company to register Form F-6 (a greatly simplified registration form) with the SEC. All registration and issuance costs for unsponsored ADRs are borne initially by the depository, and are eventually passed through to investors in the form of ADR commission costs.

Once SEC approval for the ADR is granted, the broker purchases the appropriate foreign securities as backing and deposits them either with the foreign branch office of the depository or with its designated correspondent institution, which is generally a banking institution.

Then, as investors purchase the ADRs from the broker, the depositary issues the registered ADR certificates. The depositary "maintains" the ADRs, not just by acting as registrar and by controlling ADR issuance and cancellation, but also by forwarding dividends or interest payments (after converting them to U.S. dollars), proxies and any firm-supplied financial information. The major difference between ADRs and regular securities is that ADRs may be "canceled" at any time by simply returning the ADR certificates to the depositary in exchange for the underlying securities.

Sponsored ADRs

About 120 ADRs are sponsored.¹² A sponsored ADR is different from an unsponsored ADR because, as its name implies, the foreign company takes a more active role in both the creation and maintenance of the sponsored ADR. Frequently, the foreign company, rather than a broker, makes the initial approach to the depositary institution. In addition, the foreign firm, rather than the depositary, foots the bill for SEC registration. Thus, the investor in a sponsored ADR is not saddled with the additional commission fees found in the unsponsored variety. Also, while unsponsored ADRs may be handled by any number of depositaries, a sponsored ADR can only be created by the single depositary with which the foreign company has a deposit agreement. Traditionally, the route

¹²National Association of Securities Dealers, NASDAQ ADRs: The Preferred Way to Trade, Washington: NASD, 1987, p. 30.

has been to develop an unsponsored ADR facility first and then upgrade it to sponsored status upon evidence of sufficient market demand. In order to obtain a NASDAQ listing, or to move from the over-the-counter market to the major exchanges, an ADR must be sponsored.

Whether a sponsored or unsponsored ADR facility is developed, however, foreign firms can use ADRs as a means of capital expansion. By rendering international investment "safer" for American investors, ADRs can encourage diversification of security portfolios. For example, capital-intensive industries in less-populated countries may come to rely heavily on ADR-based financing. This is certainly the case with many of the Australian mining firms. At the other extreme, large Japanese manufacturers might well use ADRs to reduce political risk by encouraging American investment.

The depository institutions themselves benefit from ADR activity. While the various fees and commissions are the most tangible benefits, the latent goodwill generated by improving foreign access to American capital should not be ignored. The international perspective created by ADRs can also lead to depository personnel becoming more attuned to international capital market developments. Finally, the brokerage aspects of ADR issuance and management may prove of great future significance should additional deregulation of the American banking industry occur.

Summary

This chapter provided a review of the findings of the three prior research studies dealing specifically with ADRs. The results of these earlier studies helped to focus the current effort. Rosenthal demonstrated "weak-form efficiency" in the NASDAQ ADR market for the period 1974-78. Officer and Hoffmeister showed the portfolio diversification potential of ADRs. Rather than replicating these earlier studies with more recent data, I chose to study different aspects of ADRs. Both of the earlier studies made no use of actual financial accounting data, nor did they consider any of the accounting issues related to ADRs. Just as importantly, they failed to consider the impact currency exchange rate fluctuations would have on their results. The Madura and Reiff study, which demonstrated the importance of such consideration in any study of international equity portfolios, strongly influenced the design of the current study.

In addition to reviewing these earlier studies, this chapter briefly considered the rationale for ADR existence and included a description of how the ADR mechanism actually functions in practice. Finally, to avoid confusion concerning terminology, the distinction between the unsponsored and sponsored ADR forms was drawn. The following two chapters describe in detail the historical evolution of ADRs and the various factors that have affected their importance.

Chapter 3

THE HISTORY OF ADRS - PART 1

Introduction

Rather surprisingly, since one finds little agreement in matters of history, there appears to be a consensus as to the origins of the financial instruments we now call ADRs. Source after source puts the creation of these instruments at a fairly specific point in time and a very specific locus, both physically and institutionally. According to this "creationist" history, ADRs were created in 1927 by the Guaranty Trust Company of New York as a way to facilitate equity investment in selected British corporations.¹ Given this origin, several intriguing questions need to be answered. The two most obvious ones are the how and why of ADR creation. What were the peculiar circumstances in the nature of the New York investment world of 1927 that led to the creation of ADRs at that particular time? Why did ADRs appear rather than another type of bridging instrument? Were there any precursors to ADRs? Finally, how has the ADR as a financial instrument "evolved" over the years since its creation?

¹Linda Keslar, "Taking American out of ADR?", Euromoney, February 1988, Special Supplement, p. 6; David Zigas, "An Easy Way to Send Your Portfolio Overseas", Business Week, October 5, 1987, p. 128; "Rights of ADRs", The Economist, February 2, 1985, p. 72; James R. Kraus, "Investors Spurn Foreign Shares", American Banker, April 19, 1988, p. 20.

The following discussion is organized chronologically, for the sake of clarity. Instead of immediately focussing on the conditions that in 1927 led to the birth of the ADR, this discussion begins in the days prior to World War I, so as to consider the impact of the technological, political and economic changes wrought by that catastrophe on the American financial environment of the 1920s. Following this examination of the period prior to 1927, a detailed review is made of the period in which ADRs were created. Once this has been completed, an eye will be cast on the changing nature and role of ADRs since their inception. Naturally, the periods selected for this examination of ADRs are somewhat arbitrary, although I believe them to be an appropriate manner of confronting the continuity of ADR existence.

Prewar

International Investment at the Turn of the Century

In considering the economic conditions that existed in America prior to World War I, the essential fact is that the United States was industrializing rapidly and was deeply in debt. Unlike current conditions, this debt was primarily in the private sector and was largely owed to Western European investors. Exploitation of the natural assets of large colonial empires had left Britons, Belgians, Dutch and French with excess capital in search of fruitful investment. While the French poured their funds into the Russian Empire, the other colonial powers, led by the British, focussed their attention on North America.

Indeed, much of the explanation for the parallel development of British and American accounting methods during this period can be traced to the export of Scottish accountants to safeguard English investment in the Americas.

The various "homegrown" fortunes created in the period of rapid industrialization following the War of Northern Aggression (1861-5) were largely reinvested in further American ventures or the ostentatious display of physical assets. Bit by bit, however, wealthy Americans began to turn their attention to European investment. While it is beyond the scope of this historical overview, the influences leading to American investment abroad certainly merit further scrutiny. The type of investment, perhaps as a mirror to the British investment in the United States, was primarily in the form of bonded debt.

Growth in International Securities Transactions

Although security holdings at the turn of the century were primarily in bonds, a drift towards increased common stock holdings began to occur after 1900.² Nonetheless, the mercantilist tendencies to protect domestic industry were still very powerful. For example, the Colonial Stocks Act directed British capital towards investment in the domains and colonies of the British Empire.³ However, the centrifugal

²Herbert Feis, Europe : The World's Banker 1870 - 1914, Yale University Press, New Haven, 1930, p. 59.

³Ibid., p. 93.

power of capital began to extend the lending and borrowing areas of the various industrial powers. The ability of investors to act anonymously led to a period of capitalism in which, to quote Herbert Feis, "History was being made without a signature."⁴

Feis argues that there were at least four fundamental reasons for the increasing international transactions in securities. First and foremost was the spread of "liquid and spared" wealth. Liquidity allowed for easier movement of capital across national and physical boundaries. Spare capital permitted speculation, because it was no longer essential for meeting the survival needs of the putative investor. A second explanation for the increase in transborder security activity was the growing familiarity with both the corporate form and paper securities. As people became more used to the nature of corporate property rights, they became more comfortable with using them. This leads to Feis' third argument for the expansion of security investment, namely the growing faith in property rights. People were more willing to separate themselves from direct possession of assets as they grew more comfortable with the mechanisms of international capitalism. Finally, Feis cites the increased ease of travel and the facility of communication as explanations for the expansion of capital. By the turn of the century, cable communication allowed for two-hour turnarounds in

⁴Ibid., p. 164.

messages from New York to London and back, while the average packet time linking Liverpool and New York had been reduced to 10 days.⁵

Corporate Development

The four factors that Feis cites for the growth of international securities transactions will reappear in the following pages. The process of internationalization has by no means been smooth. In addition, one must also consider the development of the corporation itself as an essential element in the story of international investment. William Ripley, in his often prescient work Main Street and Wall Street (1927), argued that by the beginning of the twentieth century the corporation, "an entirely artificial creature of the law"⁶, had become a "little republic".⁷ Ripley railed against "political honeyfugling" and the "prostitution of the sovereign powers of the Commonwealth" as states competed against each other to attract corporate residents.⁸ Yet he also noted that "along with the extension of markets has come a lessening of the barriers which set off the people of one state socially

⁵Ibid., p. 463.

⁶William Z. Ripley, Main Street and Wall Street, Boston, Little, Brown and Company, 1927, p. 61.

⁷Ibid., p. 85.

⁸Ibid., p. 32.

from their neighbors."⁹ This battle between the integrative effect of capital and the separation of political entities has continued throughout the twentieth century, although the scale has grown considerably.

On a more mundane level, Ripley cited two important developments occurring in the realm of corporate ownership at the turn of the century. The first was the separation of preferred and common shares. Ripley argued that this occurred in the period 1898-1903, and that preferred shares were value adjusted to tangible corporate assets, while common shares represented residual equity. He then argued that this residual equity and hence the value of common shares was directly linked to the quality of management.¹⁰ The second modification Ripley notes was the development of no-par stock, which he credits to Francis Lynde Stetson of New York in 1909. Ripley felt this was important because it promoted the idea that there was "no inherent value" in the ownership of corporate shares. Rather, a share was but a "fractional interest" in the fortunes of the corporation. This change led to a greater, and in Ripley's opinion undesired, degree of financial flexibility on the part of the corporation.¹¹

⁹Ibid., p. 25.

¹⁰Ibid., p. 85.

¹¹Ibid., p. 49.

Cable Arbitrage

Arbitrage via cable was an accepted part of the international securities business at the turn of the century, although the methods would be considered primitive by today's standards. For example, although more than a hundred American firms were traded on the London Exchange in 1903, the financial press only provided "approximate" prices for the various securities. Buy and sell orders were sent by transatlantic cable, and had to be handled by two brokers acting on a joint account.¹² Various sources describe an "arbitrage rail". This was quite literally a rail along the south wall of the floor of the New York Stock Exchange. According to a 1913 account, at this rail there were 42 spaces with tickers and compressed air message tubes linked to the New York offices of the transatlantic cable companies.¹³

The key delay in effecting transactions was that share certificates had to travel by ship. Thus, transactions could not be closed for at least 10 days. This led to the proposal, in 1907, of a telegraphic transfer of stock, rather than the actual physical transfer of the securities.¹⁴ While the telegraphic transfer idea appears to have originated in London, I have been unable to ascertain the

¹²"The Arbitrage Mystery", The New York Times, November 15, 1903, p. 32.

¹³"London Buying Few Stocks Here", The New York Times, July 6, 1913, Section 8, p. 5.

¹⁴"Stock Transfers by Cable", The New York Times, October 2, 1907, p. 4.

individual responsible or the exact nature of the proposed mechanism. Certainly this precursor to the modern electronic transfer merits further research. Whatever its origin, the idea of telegraphic transfer was still too far ahead of its time in 1907.

The use of cable arbitrage led to the notorious International Mercantile Marine Fraud. On July 11, 1910, it was disclosed that fake buy orders for International Mercantile Marine preferred stocks had been sent by cable from Amsterdam, beginning in May 1910. Although these orders had ostensibly been from the Disconto and Effecten Bank of Amsterdam, the bank claimed they were forgeries, and that an anonymous speculator had been seeking to boost share prices in Amsterdam by showing demand for the shares in New York.¹⁵

By December 1910, the New York Stock Exchange was feeling pressure to control cable arbitrage. According to one account, between ten and fifteen percent of New York share trades were actually being conducted from London. The continuation of a London street market until 8 P.M. allowed for trading throughout the five hours of New York trading that took place at the time. Because an international arbitrage transaction involved two brokers, one American and the other foreign, arbitrage brokers would use joint accounts in which they would offset charges of one-eighth of a point on the buy and sell side of transactions. This

¹⁵"Broker Caught by Cable Fraud", The New York Times, July 12, 1910, p. 1.

use of joint accounts caused the arbitrage brokers to run afoul of the New York Stock Exchange's rule banning commission splitting.

A special committee of the exchange investigated the practice and focussed on the central issue of whether the use of joint accounts indeed constituted commission splitting. While the committee reported in favor of the joint account practice, the Board of Governors rejected the committee report.¹⁶ In April 1911, the Board of Governors amended the constitution of the Exchange to exclude the maintenance of joint accounts in New York and London.¹⁷ As of July 1, 1911, the use of offsetting charges in joint accounts was banned.¹⁸ In the respectful tones of the day, "the practice among arbitrage brokers in dealing for joint account of making a single commission cover each transaction is believed to be the cause of the Exchange's displeasure."¹⁹

By 1913, cable arbitrage had dwindled, both as a result of the rule against joint accounts and because of "a general stagnation" of world trade. Five of the forty-two spaces along the arbitrage rail in New York were vacant, and the remaining thirty-seven were held by only

¹⁶"London Buying Few Stocks Here", Section 8, p. 5.

¹⁷"Would Restore Arbitrage", The New York Times, February 26, 1914, p. 12.

¹⁸"London Buying Few Stocks Here", Section 8, p. 5.

¹⁹"Arbitrage Business Up", The New York Times, December 23, 1910, p. 16.

twenty-six firms.²⁰ One observer qualified the arbitrage business as "practically dead".²¹ Pressure began to mount to remove the ban on joint accounts. In early 1914, a petition requesting the restoration of arbitrage trading to pre-1911 conditions was signed by 700 members of the New York Stock Exchange and presented to the Exchange's Board of Governors.²² Another proposed solution was to admit English brokers to actual membership in the New York Stock Exchange.²³ By July 1914, a committee had been created to study the matter and report in September. It was "generally understood" that the pre-1911 arbitrage rules would be reinstated.²⁴ There was to be no going back, however. The assassination of Archduke Franz Ferdinand in a Sarajevo street on June 28, 1914, led to a war that would transform the world.

World War I

The "War to End All Wars" produced a sea change in American finance. In the more than four years during which Europe was ravaged by war, America went from being the world's largest debtor to becoming the world's largest creditor nation, while boosting its own industrial

²⁰"London Buying Few Stocks Here", Section 8, p. 5.

²¹"A Little Arbitrage Business", The New York Times, July 16, 1913, p. 10.

²²"Would Restore Arbitrage", p. 12.

²³"The Arbitrage Problem", The New York Times, February 27, 1914, p. 14.

²⁴"May Restore Arbitrage Trading", The New York Times, July 1, 1914, p. 14.

growth. According to historian Karl Erich Borrr, Europeans in 1914 held seven billion dollars of American debt. By 1919, the Europeans were indebted to Americans to the tune of twelve billion dollars.²⁵ This was to profoundly affect the role and nature of American investment abroad. To quote Borrr :

In the history of money and credit the First World War represents the end of the international gold standard and the reversal of prewar international capital movements and financial relations.²⁶

The first intimation of this financial revolution came before the war itself had begun, when on July 14, 1914, the New York Stock Exchange witnessed a single-day record of arbitrage sales in excess of 30,000 shares.²⁷

Initial Reaction

Initially, both the Central Powers and the Entente Nations foresaw a rapid and inexpensive conflict. Americans, too, were slow to perceive the true nature of the war. Thus, on January 13, 1915, the Board of Governors of the New York Stock Exchange voted to restore the joint account arbitrage operations that had been embargoed in 1911. This action was taken despite the fact that New York's largest arbitrage

²⁵Karl Erich Borrr, International Banking in the 19th and 20th Centuries, translated by Volker R. Berghahn, New York, St. Martin's Press, 1983, p. 199.

²⁶Ibid., p. 185.

²⁷"Arbitrage Men Have Busy Day", The New York Times, July 15, 1914, p. 12.

partner, the London Stock Exchange, had banned arbitrage trading with any foreign exchange soon after the outbreak of war in August 1914. The Americans were unconcerned, however, and merely decided that the date for applying the account restoration would be "decided on later."²⁸

Soon the hopes of a quick war disappeared in the stalemate and slaughter of trench warfare. The "spare wealth" of the combatant nations that had been used for overseas investment in prewar days began to drain inexorably away. As industrial economies were mobilized for war, it soon became apparent that industrial warfare would require a constant stream of supplies, both human and material. While the British maintained a naval blockade on Germany, they were free themselves to resupply their forces and their allies from the industrial output of America. American industrialists, unwilling to bet on the outcome of a war that the Central Powers initially appeared quite capable of winning, demanded prompt payment for their war contracts.

Securities Mobilization and Seizures

Securities themselves thus became a part of the conflict. In March 1915, Alexandre Ribot, the French Minister of Finance, excluded "all securities owned by foreigners" from trading on the Paris Bourse [Stock Exchange]. The main objective of his decision was "to prevent the sale in France of German and Austrian held securities, with the

²⁸"Joint Arbitrage Renewed", The New York Times, January 14, 1915, p. 12.

object either of draining cash from this country or of depressing and manipulating the market."²⁹ By 1916, it was illegal to invest French capital abroad.³⁰

On the other side, German submarine attacks began to affect the orderly physical transfer of securities from European markets to New York. In August 1915, the steamship Arabic was torpedoed, and between 10 and 15 million dollars worth of American securities being transferred from London were lost. Because stock certificates could be replaced only upon positive proof of the loss of the originals, such sinkings created havoc for brokers required to deliver shares.³¹ As a precaution, all securities were photographed before transport, and the photographs were sent separately on neutral ships. In addition, insurance was taken out on the securities, although the rates for such insurance soon became prohibitive.³² Such precautions continued even though the Germans eased their submarine activity following American protest.

Because of merchant demands for prompt payment, Britain's ready capital resources were rapidly exhausted. Searching for a solution to

²⁹"Bourse Bars Foreign Stock", The New York Times, March 13, 1915, p. 4.

³⁰Borr, p. 185.

³¹"Expect A Scramble Here for Lost Stock", The New York Times, August 22, 1915, p. 2.

³²"Securities on Arabic Worth Millions Lost", The New York Times, August 21, 1915, p. 2.

this dilemma, Reginald MacKenna, Chancellor of the Exchequer, developed the policy of "repatriation of capital". Initially, British investors were requested to turn over to the government their holdings in selected foreign firms. While most of the requested repatriations were Canadian and American bonds, some stocks were included. At first (in 1915), the British government promised an additional 1/2 of one percent above the yield, asserting that the mobilized securities were a loan on deposit with the Treasury. Later, the government promised a return of the holdings plus a three percent per annum interest payment on the cessation of conflict. The Treasury reserved itself the right of sale of the mobilized securities, however, promising the original holders an eventual repayment at two and 1/2 percent above the average of the high and low prices on the date of sale.³³ The mobilizing process was gradual, as selected stocks and bonds were added to the Treasury's list. Despite raising millions, the hemorrhage of capital continued unabated. What had begun as a voluntary program based on an appeal to patriotism soon became a mandatory repatriation backed by legal penalty. Soon even neutral residents in Great Britain, including several prominent Americans, were required to turn over their investments to the British government.

In the winter of 1915-1916, two interesting events occurred. First the prominent American financier J.P. Morgan paid a Christmas

³³"Mobilizing American Securities", The New York Times, January 1, 1916, p. 10.

visit to Great Britain. When he returned, he had become the agent for the British government in the sale of the repatriated investments. The investment bank of J.P. Morgan and Company became the repository for the millions of dollars worth of securities sent from Great Britain as collateral for the purchase of war matériel.

The second event was the seizure by the British Royal Navy of neutral vessels on the high seas bound for New York. The ostensible reason for the seizure was that the vessels, though neutral, were carrying war contraband aiding the German war effort. The alleged contraband consisted of share certificates traded by neutral parties, but bearing German transfer stamps.³⁴ The British contended that these shares were actually owned by Germans and that the neutrals were acting as intermediaries, transporting the shares to New York where they were to be sold to raise cash for the German war effort. The neutrals, particularly the Dutch and Swedes, protested vociferously, but to no avail, as the British Admiralty Court held the shares until "definitive" proof of their ownership could be obtained.³⁵ Even when such proof was furnished, the British refused to yield the shares, citing a variety of pretexts. One of the more interesting of these justifications was "on the grounds that the United States government, during the Civil War,

³⁴"Protest Britain's Seizure of Bonds", The New York Times, February 16, 1916, p. 14.

³⁵"Sweden Asks Aid in Protecting Mails", The New York Times, February 18, 1916, p. 3.

seized all the Southern-owned securities it could lay hands on".³⁶ Another was simply to redefine the definition of what constituted "contraband". Thus, the British government took the position that "securities are regarded as contraband if the Teutonic governments are to be the beneficiaries of their sale."³⁷ The Royal Navy continued its policy of stopping certain neutral-flagged vessels, particularly Dutch, and seizing any and all securities on board "until their ownership could be conclusively demonstrated". In essence, this meant until the end of the war, because the British could use their own legal resources to delay decisions almost indefinitely.

Despite the British justification for seizing neutral shipping and pilfering securities, it is significant that they did not universally apply their own curious logic. Had the British seized American-flagged ships during this period, it is quite possible that the Americans would have gone to war on the side of the Central Powers. More subtle pressures were needed for the Americans. Chancellor MacKenna began to push for the surrender to the Treasury of all American securities held in Britain.³⁸ In addition, American brokers were left holding short positions on millions of dollars worth of transactions with the Dutch. British threats to consign seized securities to the prize courts left

³⁶Ibid.

³⁷Ibid.

³⁸"MacKenna Urges British Banks to Push Plan for the Surrender of American Securities", The New York Times, February 19, 1916, p. 1.

several American traders with the perspective of years of litigation and expense.³⁹ Finally, MacKenna began to hint that the British might sell off all the held American securities. Such an action would have flooded the American markets and inevitably depressed security prices. Americans urged the British to use the security holdings as collateral instead.⁴⁰ MacKenna, in a cat-and-mouse manner, "said it would not be in the public interest to publish the amount of American securities which have been collected in consequence of the Government's mobilization plan."⁴¹

Tension continued to build. By March 1916, Dutch authorities disclosed that between ten and twelve million dollars worth of American securities and coupons had been seized by the British. To add pressure, the British sent along "empty or partly empty envelopes containing...official notification that the missing contents would be brought before a prize court."⁴² American bankers were the clear target of the British policy, as any securities actually owned by the Germans were paid for upon being sold in Amsterdam. While the bankers protested that the British had failed to announce securities as contraband upon

³⁹"Await U.S. Action on British Seizures", The New York Times, February 20, 1916, Section 8, p. 5.

⁴⁰"Hoping for a New Credit", The New York Times, February 25, 1916, p. 14.

⁴¹"Refuses News of Stocks", The New York Times, March 1, 1916, p. 3.

⁴²"Seize \$12,000,000 of Our Securities", The New York Times, March 11, 1916, p. 5.

the outbreak of war, seizures continued.⁴³ The British insisted that they were merely preventing the Germans from gaining credit in the New York market, and that the securities were in the same contraband category as gold shipments. In addition, they began to argue that the securities had been stolen by German authorities in the portions of France occupied by the invaders.⁴⁴ The French clearly supported the British policy, as demonstrated by their seizure of the Spanish liner Manuel Calvo in March 1916.⁴⁵

That same month, J.P. Morgan returned from Great Britain, assuring the public that he had taken no part in the British hints that they would dump American shares on the open market.⁴⁶ Soon the British began to offer bonuses for American bonds transferred to the custody of J.P. Morgan and Company, acting as agents for the British Treasury. The securities, although loaned to the British government, were not to be transferred to London, but were to remain in New York. There they were to be used as collateral for British loans.⁴⁷ In response to American

⁴³"Bankers to Make Protest", The New York Times, March 15, 1916, p. 18.

⁴⁴"Stock Mobilizing Fortifies Britain", The New York Times, March 23, 1916, p. 3.

⁴⁵"Spanish Liner Searched", The New York Times, March 16, 1916, p. 4.

⁴⁶"Morgan Reassures Traders in Stocks", The New York Times, March 21, 1916, p. 5.

⁴⁷"Britain Offers Bonus for American Bonds", The New York Times, March 25, 1916, p. 4.

inquiries concerning the seizure of Dutch securities, the British boldly claimed they were seizing "clearly German" securities, and insisted that the securities were contraband and hence that the British had not violated treaty provisions guaranteeing the inviolability of the mails.⁴⁸ It is interesting to note that the American government chose to inquire about rather than protest the British actions.

Neutral Reactions

In April, the Dutch foreign minister argued that the term "correspondence port" used in the Hague Convention covered stocks or other valuable deeds. Under this interpretation, belligerents had no right to confiscate such documents. Because Britain was a signatory to the Hague Convention, the Dutch demanded immediate restitution of all seized securities.⁴⁹ R.H. Towner, an important advisor to American insurance interests, proposed a plan whereby securities from Europe that were liable to seizure by the British would be destroyed in Europe in the presence of European bankers, American consular officials, and surety representatives. Upon telegraphic notification of the destruction and certification by these witnesses, the securities could

⁴⁸"Hold Securities Contraband", The New York Times, March 29, 1916, p. 3.

⁴⁹"Dutch Demand Seized Bonds", The New York Times, April 6, 1916, p. 2.

then be reissued in America.⁵⁰ Within a week, an anonymous banker had proposed a simple expedient for transferring German-held American securities to the United States. He proposed that German banks accept certificates to be held in trust in the names of American buyers "to whom the New York correspondent of the trustee would issue negotiable receipts for the securities purchased."⁵¹ This is essentially a description of what would later be called a depository receipt.

American bankers also tried a more direct assault on the British seizures. Obtaining from the Dutch lists of the serial numbers of the bonds and certificate numbers of the stocks in question, the bankers suggested that any of the securities appearing on the American market after being seized by the British were to be attached immediately. This would force the British to prove ownership rights in an American court, rather than their own Prize Court.⁵² These bankers felt that the British were less interested in seizing the securities than they were in delaying "the completion of commercial transactions between the United States and countries adjacent to Germany and Austria", particularly when

⁵⁰"Burn Bonds Abroad; Reissue Them Here", The New York Times, April 6, 1916, p. 16.

⁵¹"An Interesting Suggestion", The New York Times, April 13, 1916, p. 16.

⁵²"Hold Seized Bonds for Prize Court", The New York Times, April 14, 1916, p. 15.

the British re-worded their contraband list to include bills of lading.⁵³

British Countermeasures

Despite the bankers' proverbial optimism, however, the British continued to exert commercial pressure. In May 29, 1916, the House of Commons voted to impose an additional tax of two shillings for each sterling pound worth of American securities, "exempting those which are deposited with the Treasury."⁵⁴ While this was clearly an effort to flush out those securities that had not yet been mobilized for the war effort, Americans resident in Britain were shocked to learn that the tax was applied to their holdings.⁵⁵ In effect, they were being forced to sell or deposit their holdings with the British Treasury or pay an additional tax. Not only that, but the tax was applied whether the securities were held in Great Britain or the United States.⁵⁶

In addition to their new tax scheme, the British also began massive shipments of American securities to New York, where they were placed in the vaults of J.P. Morgan and Company. The first of these

⁵³Ibid.

⁵⁴"Commons Adopts Securities Tax", The New York Times, May 30, 1916, p. 2.

⁵⁵"Americans Object to Tax", The New York Times, June 2, 1916, p. 6.

⁵⁶"British Surtax Plan Alarms Americans", The New York Times, June 10, 1916, p. 6.

shipments arrived secretly on May 30, 1916, on board the Cunard liner Orduna. This shipment consisted of seven million dollars worth of securities in the custody of Frank Martin, one of the managers of the Bank of England.⁵⁷ On July 8, Percy Foreman, another employee of the Bank of England, arrived on the White Star liner Celtic with eight cases of "personal baggage". The "baggage" consisted of \$25 million worth of American securities, again destined for Morgan and Company.⁵⁸ On July 9, a further twenty million dollars in securities arrived aboard the American liner Philadelphia.⁵⁹ More "personal baggage" worth twenty-five million dollars arrived aboard the Tuscania the next day.⁶⁰ Finally, on July 18, 1916, the Saxonia docked, with securities worth twenty million dollars in the personal baggage of a Captain Alfred Mees, again identified with the Bank of England.⁶¹ In less than three weeks, the Bank of England had physically transferred nearly one hundred million dollars worth of American securities to its agents in New York. By listing the securities as "personal baggage", they had kept them off

⁵⁷"Brought \$7,000,000 Here", The New York Times, June 4, 1916, p. 4.

⁵⁸"\$25,000,000 as Baggage", The New York Times, July 9, 1916, p. 19.

⁵⁹"More Securities Arrive", The New York Times, July 10, 1916, p. 6.

⁶⁰"His Baggage Was Bonds", The New York Times, July 11, 1916, p. 14.

⁶¹"Liner Brings \$20,000,000", The New York Times, July 19, 1916, p. 1.

the ships' declared manifests, and so avoided leaking their value until arrival in New York.

Tension continued to mount as observers speculated as to the British intentions. Were the securities going to be dumped in a massive sell-off? A jittery market was made even more nervous by the arrival of the French liner Rochambeau on July 31, 1916. In what was "said to be the largest batch of securities ever sent on one vessel across the Atlantic", the Rochambeau docked with approximately 43 million dollars worth of American securities, ostensibly to be used as collateral for munitions purchases.⁶²

Suddenly, the British eased their censorship of the transatlantic mails. They came to an agreement with the Dutch to avoid security seizures. The Netherlands Overseas Trust was to maintain a financial department in Amsterdam, which was to ensure that only bona fide neutral securities were transported via the mails. Specially sealed mailbags would then carry the approved securities on Dutch shipping. The British Censor promised that, although it would verify the contents of the special bags, it would allow the securities to depart on the same steamer on which they had been sent by the Dutch.⁶³ In addition, the British government released several consignments of Dutch securities that had been seized "without waiving the right it claims to seize

⁶²"\$43,000,000 Securities Here", The New York Times, August 1, 1916, p. 5.

⁶³"Censorship on Securities", The New York Times, July 29, 1916, p. 16.

international securities as contraband."⁶⁴ Hints were also dropped that the plan of selecting the Netherlands Overseas Trust as a guarantor of neutrality might be extended.⁶⁵

When it became clear that the war was not going to end soon, the British changed their mobilization program to "Scheme B". This scheme called for a five-year loan term on the securities to begin on March 31, 1917. The owners were to receive one-half of one percent more than the interest or dividend rate on their securities. If the British government was forced to sell the securities, the original owners were to receive the price at the time the securities had been offered to the government plus a bonus of five percent. The government could hand back the securities on three months' notice after March 1919. In addition, the owner could borrow against the loaned securities or even sell them, because, as proof of their transfer to the government, the owner was to receive "a deposit certificate which is easily negotiable."⁶⁶

By September, the British had finalized the transfer procedures for the Dutch. A special commission for transmitting American securities was established by the Netherlands Overseas Trust. This commission, consisting of Amsterdam bankers, was to examine and verify

⁶⁴"Britain to Release Seized Securities", The New York Times, August 3, 1916, p. 2.

⁶⁵"A Brightening Horizon", The New York Times, August 4, 1916, p. 12.

⁶⁶"\$3,000,000 Added to Loan Securities", The New York Times, August 27, 1916, Section 8, p. 6.

all securities transactions to insure that "no interests in the transactions were inimical to the Allied Powers."⁶⁷ The acceptable securities would then be transferred under the seal of the commission, along with a manifest. A copy of the manifest would also be filed with the British Censor, which reserved the right of physical inspection and in turn guaranteed there would be no substantive delays in transmission.⁶⁸

Dutch Creation of New York Shares

As a small, neutral power, the Dutch had been left with a limited series of options. They could have instituted a moratorium on overseas securities transactions, but that would have seriously impeded their own financial workings, particularly with their large colonial empire in southeast Asia. They could have appealed for aid to other neutral powers, such as Sweden and the United States. Indeed, this was their first effort, but it was entirely unsuccessful. The Americans, making billions of dollars from wartime sales to Britain were not about to cut off trade for the sake of neutral rights. After a few diplomatic noises, the Americans did nothing. So the Dutch negotiated with the British.

⁶⁷"Holland to Get Securities", The New York Times, September 6, 1916, p. 15.

⁶⁸Ibid.

Financial history has time and again shown the Dutch to be marvelous innovators. The well worn motto, "God may have created the world, but the Dutch created Holland", is revelatory of a people well suited to challenge. Seemingly at the mercy of the British Censor, the Dutch developed a second solution to the transatlantic transfer problem. On December 7, 1916, the investment banking firm of Kuhn, Loeb and Company announced that it had concluded six months of negotiations with the Royal Dutch Company. The result of these negotiations was the purchase of 74,000 shares, or approximately ten percent of the Dutch firm's outstanding equity capital for over \$14,000,000. The shares, denominated in florins, were to be deposited with the Equitable Trust Company of New York. Equitable Trust would then issue 220,000 dollar denominated shares with no par value, to be offered in New York. After December 15, 1917, the holders of the "dollar certificates" were to "have the privilege of exchanging them for the original shares on deposit with the trust company if they so desire."⁶⁹ Applications were to be made "to list the new shares at Amsterdam and on the New York Stock Exchange, and after the war, at London."⁷⁰ For the first time, nearly all the elements of what would later be ADRs appeared in a single instrument.

⁶⁹"Sells \$14,000,000 of Oil Shares Here", The New York Times, December 8, 1916, p. 15.

⁷⁰Ibid.

Faced with a seemingly insurmountable problem, the Dutch had produced a brilliantly simple solution. Rather than transferring the shares to New York whenever trades would occur, they transferred the share registers and began issuing shares of Dutch firms in New York rather than Amsterdam. Quickly these shares began to be called New York Shares, although they were usually referred to as "American shares" until the advent of ADRs. To this day, there are at least four firms issuing New York Shares.

The essential difference between ADRs and New York Shares is that the former are receipts representing shares while the latter are actual share certificates. From a functional standpoint, however, the two financial instruments are virtually identical. New York Shares are equivalent to the domestic shares of the Dutch firms, and should the holder so desire, they may be exchanged for the domestic shares at any time. While it is beyond the scope of this dissertation, an interesting research avenue might be to explore why more firms did not choose to adopt a New York Share approach rather than resort to the use of ADRs. This researcher suspects that the rationale may be found in the legal aspects surrounding the maintenance of joint share registries.

In any case, the New York share issue of Royal Dutch was a smashing success. Within five hours of opening an underwriting syndicate, the issue was twice subscribed, and was considered "unique in that it is the first effort on the part of a foreign corporation to

enlist partners in this country."⁷¹ On December 8, employees of Eugene Meyer, Jr. and Company, who had been made the managers of the underwriting syndicate, announced that the entire offering of 220,000 shares had been sold at 69. Dealings on the Curb Exchange started immediately and 3,000 sales were made the first day at prices between 71 and 74. "Bankers who arranged the transaction with the principal in Amsterdam regretted that they had not been allowed to buy a larger interest in the company."⁷²

Desperate Measures

The Dutch precautions seemed justified when the British further tightened their stock mobilization in January 1917. Although the British held nearly \$400 million in American securities on account with J.P. Morgan, it was not enough to support the continued drain on their resources.⁷³ On January 25, 1917, the British Treasury was empowered, under the Defense of the Realm Act, "to requisition any foreign securities which may be required to strengthen Great Britain's financial position."⁷⁴ The order-in-council further forbade the transfer or sale

⁷¹Ibid.

⁷²"Oil Shares Quickly Sold", The New York Times, December 9, 1916, p. 14.

⁷³"British Now Have \$400,000,000 Here", The New York Times, January 11, 1917, p. 20.

⁷⁴"Britain Now Compels Stock Mobilization", The New York Times, January 26, 1917, p. 10.

of such securities outside the United Kingdom, except under strict conditions. Only securities that had physically been in the United Kingdom and had not been in the possession of an enemy power since the outbreak of war could be sold. In addition, these securities could only be sold in the United States, Canada, or Newfoundland, and then only if the proceeds were "remitted to England and invested" there.⁷⁵

The Germans, too, were pressured by the force of events to interfere with international transactions. In September 1916, a German U-Boat intercepted the Dutch steamer Batavier II en route to New York. When five million francs' worth of French securities were discovered on board in addition to other "contraband", the ship was seized and taken to Germany, where a Hamburg prize court confiscated the securities.⁷⁶ Thus, by early 1917, both sides in the conflict had violated the Hague Convention's stipulations on the inviolability of international mails.

Unfortunately for the Germans, they could not interdict transatlantic shipping with surface ships as could the British. Nor could they send securities or bring matériel purchases from neutrals past the British naval blockade. In August 1916, they had attempted to send securities to New York on board the commercial submarine Premen,

⁷⁵"Lets Britons Sell Securities", The New York Times, January 31, 1917, p. 2.

⁷⁶"Germans Seize Securities", The New York Times, February 19, 1917, p. 11.

but the boat was lost.⁷⁷ As they watched the Allies purchasing more and more munitions and foodstuffs from the Americans, the Germans grew desperate. Finally, on February 1, 1917, they initiated unrestricted submarine warfare in an effort to blockade the British from American resupply.⁷⁸ An outraged American government immediately severed diplomatic relations with Germany. It is perhaps a significant commentary on the power of the capital amassed by the British through their security mobilization scheme to note that the news of broken relations with Germany was greeted with a price rally on Wall Street.⁷⁹

Again, the neutral powers were faced with the problem of interdicted transatlantic securities traffic. This time, however, the problem was not one of seizure and delay, but one of actual destruction. Rarely could a submarine take the time to stop a merchantman and examine its cargo, particularly after the British began the practice of disguising armed "Q-boats" as neutral merchantmen. It was far simpler to sink the vessel with torpedoes or surface gunfire. Insurance rates soared on shipped securities. By March 1917, the rates were one and 1/2 percent on American vessels and two percent on belligerent vessels,

⁷⁷"Germans Now Admit Loss of Bremen", The New York Times, June 16, 1917, p. 3.

⁷⁸Pierre Vidal-Naquet, ed., The Harper Atlas of World History, trans. Chris Turner, New York, Harper & Row, 1987, p. 246.

⁷⁹"Rebound in Stocks on News of Break", The New York Times, February 4, 1917, p. 6.

whereas the prewar rate had been 1/3 per mill.⁵⁰ Plans were resurrected for the supervised destruction of securities intended for transfer and their reissuance in New York.⁵¹

The Germans also followed the British lead in mobilizing securities. The Kaiser's government intended to borrow the securities of neutral companies for a term of three years in return for a fixed payment. While the program was voluntary, strong hints were made that it would later become compulsory.⁵² Reports again began to circulate that the German Army had stolen securities in Belgium and France.⁵³

America Enters the War

On April 6, 1917, the American government declared war on the Central Powers, largely as a result of Germany's resumption of unrestricted submarine warfare. As far as international financial transactions were concerned, the declaration of war eliminated the difficulties of neutrality. With the entry of the United States into the war, there was no further need for the British to attempt to halt any possible transfer of Central Power assets to New York, and hence no

⁵⁰"May Destroy Bonds to Evade Insurance", The New York Times, March 11, 1917, p. 20.

⁵¹Ibid.

⁵²"To Take Neutral Stocks", The New York Times, March 18, 1917, p. 3.

⁵³"German Vandalism Told to Neutrals", The New York Times, March 26, 1917, p. 3.

further need for the Dutch to resort to financial creativity in an effort to protect their transactions. There was, however, a seizure of assets held in "enemy property". In addition, German and Austrian holdings were seized and held by the Custodian of Alien Property.⁸⁴ This was the first instance since the War of Northern Aggression that the American Federal Government had intervened so directly in the portfolio holdings of its own citizens. In November, a transfer tax was levied on stocks to support the war effort. Effective December 1, 1917, the tax charged was two cents on every \$100 or fraction thereof of par value bought or sold. If the stock bore no par value, the tax was fixed at two cents.⁸⁵

At the end of November 1917, the French Secret Service discovered that a worldwide organization of German banks had secretly been marketing both securities and bond coupons that had disappeared from France and Belgium after the German invasion. Geobran Rabbat, a Syrian banker, had acted as a German agent in stolen French, Russian, and Serbian securities since the beginning of the war.⁸⁶ Because of the scare created by the Rabbat Affair, the British decided to prohibit completely the import or export of securities or capital by any resident

⁸⁴"Find More Enemies Hold Steel Stock", The New York Times, July 13, 1917, p. 11.

⁸⁵"Advisers Named on War Tax Act", The New York Times, November 29, 1917, p. 6.

⁸⁶"Germans Sell Stocks Taken on Invasion", The New York Times, November 30, 1917, p. 1.

of the United Kingdom without written authorization of the British Treasury.⁵⁷

By an executive order of President Woodrow Wilson on January 26, 1918, the American government placed oversight for foreign securities' dealings in the hands of the Division of Foreign Exchange of the Federal Reserve Board.⁵⁸ On October 31, 1918, Frank Kent, the Director of the Division of Foreign Exchange, followed the British lead and prohibited dealers in foreign exchange

from transferring funds to foreign countries for the purpose of purchasing securities or making investments of any nature whatsoever... without first obtaining the permission of the Division of Foreign Exchange of the Federal Reserve Board.⁵⁹

This proved the final financial act of the war, as the Armistice to halt the "War to End All Wars" took effect on November 11, 1918.

Postwar

Conflicting Viewpoints

The end of the conflict in Europe left a radically altered political and financial climate. In the words of Max Winkler,

just as the Napoleonic Wars brought about a transfer of the financial hegemony of the Netherlands to London, the World War appears to have been responsible for the shifting, for

⁵⁷"Capital Exports' Prohibited", The New York Times, December 27, 1917, p. 14.; "Bans Security Imports", The New York Times, December 29, 1917, p. 5.

⁵⁸"Board to Control Foreign Investment", The New York Times, October 31, 1918, p. 17.

⁵⁹Ibid.

the time being at least, of the financial supremacy from the classic center of finance to New York.⁹⁰

America had been made wealthy by the war, but the British manipulations had left many citizens wary of foreign entanglements. Some political groups, notably the Progressives, claimed that an alliance of corrupt politicians and big business interests had forced America's war intervention in an effort to blunt the domestic reform agenda.⁹¹ Thus, a curious situation arose in which the United States possessed the liquid capital necessary for European reconstruction at the very moment that a large bulk of the population had become profoundly isolationist. Despite the encouragement of such internationalists as Eugene Meyer, Americans seemed content to concentrate their investments at home. This had profound effects, both in delaying European reconstruction and in inflating the boom of the 1920s.

The Push for American Investment to Rebuild Europe

The forces encouraging European investment were both vocal and powerful. As early as January 1919, the National City Company was proposing the establishment of a New York market in international securities.⁹² A meeting of the Council on Foreign Relations, held in

⁹⁰"Invest \$1,906,705,101 Abroad in One Year", The New York Times, January 1, 1927, p. 29.

⁹¹William B. Hesseltine, Third-Party Movements in the United States, Princeton, Van Nostrand, 1962, p. 83.

⁹²"Market Needed for Foreign Securities", The New York Times, January 26, 1919, Section 2, p. 5.

April 1919, focussed on the "need of educating the small investor to purchase foreign securities as a means of caring for post-war international financial conditions."⁹³ In order to "protect" these small investors, financiers proposed the creation of large investment trusts, similar to the mutual funds of today.⁹⁴

The first of these international investment trusts was the Delaware-based Foreign Bond and Share Corporation. The stated purpose of this corporation was "to finance public and private enterprises in all parts of the world."⁹⁵ The corporation would issue "participating certificates" to the subscribing shareholders. In addition, its debentures were to be secured by depositing the foreign stocks and bonds that it purchased, or it would sell these foreign securities directly to American investors.⁹⁶ One can already see some of the elements which would later exist in ADRs, and it is interesting to note that one of the organizing firms behind the Foreign Bond and Share Corporation was the Guaranty Trust Company, later to be credited with the creation of ADRs.⁹⁷

⁹³"Financiers Discuss Ways to Aid Europe", The New York Times, April 3, 1919, p. 15.

⁹⁴Ibid.

⁹⁵"To Finance Big Enterprises", The New York Times, April 21, 1919, p. 17.

⁹⁶Ibid.

⁹⁷Ibid.

In June 1919, the American Chamber of Commerce in London argued for American investment abroad in order to retain competitiveness: "The United States must buy more foreign securities and goods if the prices at which American goods at the present rate of exchange must sell in foreign countries are to be competitive."⁹⁸ James A. Farrell, the president of U.S. Steel, proposed that American merchants resident abroad be exempted from U.S. income taxes as a further boost to international trade and investment.⁹⁹ Francis H. Sisson, a vice president of Guaranty Trust Company, described the purchase of foreign securities as vital in maintaining an outlet for American products. He further proposed that large loans be made abroad in order to increase the buying power of foreigners, who would then purchase American products.¹⁰⁰ Sisson justified loan expansion by noting that Americans had built up savings during the war, and that a strong gold reserve backed the U.S. dollar.¹⁰¹

Currency stability was an important issue in the investment world of the early 1920s. Most of the belligerent powers made a costly effort to return to the gold standard as soon as possible after the war. While

⁹⁸"Finds Our Exchange Too High in England", The New York Times, June 9, 1919, p. 21.

⁹⁹"Says We Must Get Foreign Markets", The New York Times, November 1, 1919, p. 17.

¹⁰⁰"Urges Americans to Invest Abroad", The New York Times, November 2, 1919, p. 23.

¹⁰¹Ibid.

it is beyond the scope of this study, one of the essential differences between the international financial picture of the 1920s and the 1980s is the issue of gold reserves backing world currencies. English economic historian Derek Aldcroft has admirably described the adverse effects of currency policy in the postwar period. In his opinion

much energy was spent in speculative currency deals rather than in cultivating real trade transactions, and the very slow recovery in European trade must in part be attributed to the uncertainty engendered by currency instability.¹⁰²

In addition, because of the outflow of bullion caused by munitions purchases on the part of the Allies, and by reparations assessed to the Central Powers, the European powers lacked sufficient gold reserves to maintain their currencies at prewar levels of exchange. These nations "were forced onto a gold exchange standard under which they held their legally required reserves partly or wholly in the form of foreign exchange."¹⁰³

Despite these problems, the leadership of the American investment community continued to urge foreign investment. On July 23, 1919, Kuhn, Loeb and Company, the banking firm responsible for the block sale of Royal Dutch Petroleum stock in New York in December 1916, announced a similar deal for 750,000 shares of the Shell Transport and Trading Company. Although nominally a British concern, this firm's operations

¹⁰²Derek H. Aldcroft, The European Economy 1914-1970, London, Croom Helm, 1978, p. 46.

¹⁰³Ibid., p. 70.

were closely allied with those of Royal Dutch Petroleum, the firm that retained effective control. Once again, the shares backing the issue were to be deposited with the Equitable Trust Company.¹⁰⁴ Within a half-hour of opening, the entire issue of this second set of "American shares" was fully subscribed.¹⁰⁵

Another investment trust, similar to the Foreign Bond and Share Corporation, was formed in November 1919. Organized with \$10 million in authorized capital, the New York domiciled Foreign Finance Company was formed to investment funds primarily in foreign enterprises and securities. The president of the new company was the head of J.P. Morgan & Company's bond department, Arthur M. Anderson, who had gained significant international experience acting as Britain's agent in America during World War I.¹⁰⁶

Of all the voices urging increased foreign investment, none was louder than Eugene Meyer, Jr. During America's short period of active involvement in World War I, Meyer had been the managing director of the War Finance Corporation. In this powerful position, he had been directly responsible for running several of the nation's key industries, notably the railroads. While peace had quickly led to a relaxation of

¹⁰⁴"Buy \$25,000,000 British Oil Stock", The New York Times, July 24, 1919, p. 19.

¹⁰⁵"Shell Stock Quickly Sold", The New York Times, July 25, 1919, p. 19.

¹⁰⁶"Form Foreign Finance Company", The New York Times, November 12, 1919, p. 22.

the government control of strategic industries, Meyer had been left with a great sense of the potential American role in rebuilding war ravaged Europe.

In December 1919, Meyer attended a conference with New York Stock Exchange officials, officials of the French Foreign Ministry, and representatives of the Paris Bourse. The purpose of the conference was to discuss the possibility of admitting French rentes to New York Stock Exchange trading. Rentes are a form of perpetual bond, similar to British consols. They are "evidence of the interest debt owed by the French Republic to persons who have purchased what amount to perpetual annuities."¹⁰⁷ Because the rentes were lithographed rather than engraved, and bore no signature of a French government official, they failed to meet the listing requirements of the New York Stock Exchange. Some means of overcoming this obstacle was necessary. Someone at the meeting suggested that a certain amount of rentes be deposited with the Paris agent of an American trust company. This trust company would then issue its engraved certificates of deposit, which would be signed by a company official. In addition, by having the certificates engraved, the chances of counterfeiting were expected to be minimized.¹⁰⁸

¹⁰⁷"Favor Plan to List Allied Securities", The New York Times, December 11, 1919, p. 19.

¹⁰⁸Ibid.

A second problem with the proposed direct listing arose in the so-called "method of dealing".¹⁰⁹ This involved what modern dealers would refer to as currency exchange. How were securities denominated in a foreign currency to be valued on an American stock exchange? Meyer proposed the use of a "flat ratio". For example, the franc-denominated rentes would be given a dollar "face value" at the flat rate of five francs to the dollar. The fluctuations in exchange rates between the dollar and franc would then be reflected in the actual market price of the rentes.¹¹⁰ Apparently, this was already the market practice for dealing with the sterling bonds issued by the British.

The usual practice is to count a pound sterling at \$5 flat. Then from that basis, the fluctuations in sterling exchange are reflected in the movement of the price of the bond.¹¹¹

Meyer toured America promoting the "establishment of broad public markets in this country to handle the internal loans of European nations."¹¹² The crux of his argument was that such investment would provide a "means of stabilizing international commerce and finance."¹¹³ He further argued for the development of "easier mechanisms through the

¹⁰⁹Ibid.

¹¹⁰Ibid.

¹¹¹Ibid.

¹¹²"For Alien Loan Markets", The New York Times, December 14, 1919, p. 20.

¹¹³Ibid.

public markets" to increase the amount of foreign investment.¹¹⁴ On January 3, 1920, in a speech at the Hotel Vanderbilt before the Association of Foreign Correspondents, Meyer publicly called for the creation of an "international public market for international securities."¹¹⁵ Although Meyer was specifically referring to bonds, a portion of his speech succinctly described what would later be the essential mechanism of ADRs. Meyer stated that

American investors are accustomed to securities certified by responsible transfer agents and registrars, and there is no reason why they should not get this protection by American bankers and trust companies issuing local certificates which represent the deposit of foreign certificates.¹¹⁶

Other members of the banking community were quick to respond to Meyer's appeal. A pool of the leading New York banking houses under the leadership of Paul M. Warburg prepared to launch a \$50 million investment trust in January 1920. This trust was intended to purchase both securities and property in the depressed European market, particularly in Germany.¹¹⁷ The proposed scale of this investment was greeted with a jaundiced eye by Treasury Secretary Carter Glass, who

¹¹⁴Ibid.

¹¹⁵"Urges World Mart for Foreign Bonds", The New York Times, January 4, 1920, p. 19.

¹¹⁶Ibid.

¹¹⁷"Bankers Organize Investment Trust", The New York Times, January 22, 1920, p. 24.

feared it would "dislodge" U.S. government securities.¹¹⁸ The Federal Reserve Board also stated that it was

not in favor of new flotations unless the promoters of the new ventures can give reasonably good assurance that the issues will be sold to investors and not lodged with the banks.¹¹⁹

Nonetheless, the pressure to invest abroad continued. In February 1920, W.L. Saunders, president of the American Manufacturers Export Association, urged the massive purchase of European securities to provide Europeans with the wherewithal to purchase American goods.¹²⁰ Also in February 1920, the Edge Act was passed by the Congress and signed into law. This bill allowed banks to subscribe up to 10 percent of their capital and surplus into financial corporations, which were in turn allowed a broad international investment horizon. The only strictures placed on these "Edge corporations" were that they obtain Federal Reserve Board authorization and not invest in more than 10 percent of the outstanding capital of any one company or 15 percent of the outstanding capital of any one bank.¹²¹ In April 1920, the Overseas Securities Corporation, an investment trust capitalized at \$5.1 million,

¹¹⁸"States Treasury View of Foreign Securities", The New York Times, January 24, 1920, p. 17.

¹¹⁹"Foreign Financing Finds Little Favor", The New York Times, February 3, 1920, p. 22.

¹²⁰"Aid to Europe Advised", The New York Times, February 6, 1920, p. 19.

¹²¹"Edge Bill Opens Field to Investors", The New York Times, February 15, 1920, p. 23.

was fathered by Bernard, Scholle and Company.¹²² Finally, in May 1920, Walter Rathenau announced the purchase of a 25 million mark block of shares in the General Electric Company of Germany, which he promised would be retained whole and would be voluntarily restricted in its voting power.¹²³

On May 26, 1920, the list of firms having American shares was enlarged by two. The South African mining firms of DeBeers and Rand Mines saw their temporary certificates admitted to trading on the New York Stock Exchange.¹²⁴ This time the depositaries were the Central Union Trust Company in the case of DeBeers and the Bankers Trust Company for Rand Mines.

In some quarters the admission of these two additional foreign securities was interpreted as a forerunner of many similar additions to the list in the future.¹²⁵

The internationalist trend continued, as New York prepared to resume joint account foreign arbitrage. The amendment to permit resumption of such arbitrage was written according to the guidelines of the 1914 committee report.¹²⁶ While Amsterdam was eager to resume such

¹²²"New Firm to Handle Foreign Securities", The New York Times, April 28, 1920, p. 18.

¹²³"Americans Invest in Germany", The New York Times, May 9, 1920, p. 2.

¹²⁴"DeBeers and Rand Stocks Listed Here", The New York Times, May 27, 1920. p. 20.

¹²⁵Ibid.

¹²⁶"Foreign Arbitrage to Resume Soon", The New York Times, September 26, 1920, Section 2, p. 15.

trade, the British hesitated.¹²⁷ Finally, the Americans acted unilaterally. On December 1, 1920, "international dealings in securities under joint account arbitrage arrangements" were reinstated.¹²⁸ Unlike the prewar proceedings, such dealings were no longer to be conducted "at the rail", but rather from brokerage offices. It was expected that arbitrage dealings would only resume slowly, largely because "restriction against a free interchange of trading by cable exist[ed] in London in that sales of securities for cash only [were] permitted".¹²⁹ This prevented the short sales that formerly had made business elastic.

In May 1921, the Association of Foreign Securities Dealers of America was formed in New York, with a membership including nearly all the important Wall Street players.¹³⁰ Edward K. Brooks, vice-president of American Express, was named vice-president of the new association. In his words, "the importance of American investment in foreign securities as a factor in the readjustment of the world's affairs emphasizes the need for an association to standardize the dealings

¹²⁷"Joint Arbitrage Depends on London", The New York Times, November 4, 1920, p. 17.

¹²⁸"Brokers Reinstall Arbitrage Dealings", The New York Times, December 1, 1920, p. 27.

¹²⁹Ibid.

¹³⁰"Foreign Securities Dealers Organize", The New York Times, May 1, 1921, Section 2, p. 13.

therein."¹³¹ The weight of Wall Street was clearly on the side of internationalism rather than isolationism.

Eugene Meyer also returned to the stump, this time pushing the New York Stock Exchange to list "sound internal investment securities of foreign countries, both governmental and industrial."¹³² In addition to the usual arguments concerning markets for American products and currency stability, Meyer pushed for "active public markets for securities that would be freely purchasable and salable at the same time in other countries."¹³³ In a speech to the National Association of Manufacturers, Meyer "characterized the lack of such a market as the 'missing link in international finance'."¹³⁴ He felt that it was America's role to provide such a market because it had become the world's leading creditor nation.¹³⁵

The New York Times picked up on Meyer's theme in an editorial dated May 29, 1921. This editorial argued that, while London had been "both the best and cheapest universal market" of the prewar years, in the postwar period "New York alone is able to give gold credits on the

¹³¹Ibid.

¹³²"Appeal for Listing Foreign Securities", The New York Times, May 21, 1921, p. 21.

¹³³Ibid.

¹³⁴"Urges Market Here for Foreign Stocks", The New York Times, May 22, 1921, Section 8, p. 6.

¹³⁵Ibid.

old London scale."¹³⁶ The editorialist further argued that "our lead in finance is a fortune of war, and will be lost with peace unless we 'dig in' as world purveyors."¹³⁷

Roadblocks to American Investment Abroad

Despite the investment community's best efforts to push international investment, there were several obstacles. First and foremost was the general economic malaise following the war. Investors were wary of investing in strife-torn Europe, particularly following the aftermath of the Spartacist uprising in Germany and the Bolshevik Revolution in Russia. In addition, America failed to ratify the treaty of Versailles, and in many respects wished to isolate itself from European influence. Furthermore, the British kept delaying a return to joint arbitrage accounting, even after the New York Stock Exchange lifted its restrictions.¹³⁸ Cable traffic with Amsterdam was slow, and other technical problems prevented a shift to large-scale arbitrage operations with the Dutch.¹³⁹ Investment in Germany ran into the problems of massive postwar inflation. In May 1923, the Association of

¹³⁶"World Security Market", The New York Times, May 29, 1921, Section 2, p. 2.

¹³⁷Ibid.

¹³⁸"Joint Stock Deals with London Soon", The New York Times, July 20, 1921, p. 20; "May Soon Resume London Arbitrage", The New York Times, October 11, 1921, p. 26.

¹³⁹Ibid.

American Holders of Foreign Securities accused the German government of deliberately promoting inflation to render German government and industrial obligations worthless.¹⁴⁰ While it is beyond the scope of this study, it would be interesting to research to what extent the lack of American investment in postwar Europe was due to genuine isolationism and how much was caused by misunderstanding the profound changes in world finance created by the war.

A Slow Shift Towards International Investments

When no sudden spurt of international investment occurred, mechanisms were slowly put into place to facilitate such investment. In February 1925, the New York Stock Exchange announced a special code of listing requirements for foreign government bonds.¹⁴¹ Through the 1920s, Dutch trust companies purchased American stocks and registered them in their company names. They then sold their European customers bearer certificates.¹⁴² Dessauer feels this was the origin of the ADR concept. He argues that

through the bearer certificates of the trust company
Europeans were able to own U.S. stocks without exposing

¹⁴⁰"Charge Berlin Plot to Depress Mark", The New York Times, May 13, 1923, p. 11.

¹⁴¹Committee on Publicity, New York Stock Exchange Year Book 1928-1929, New York Stock Exchange, New York, 1929, p. 18.

¹⁴²John Dessauer, International Strategies for American Investors, Prentice Hall Press, New York, 1986, p. 117.

themselves to the long arm of an unfriendly government or tax collector.¹⁴³

In January 1926, European Shares, Inc., was formed under the laws of the state of New York. The avowed purpose of the company was to "acquire, sell and underwrite" foreign securities, particularly from Germany.¹⁴⁴ During the same month, the German Credit and Investment Corporation was formed in Maryland to promote American investment in Germany.¹⁴⁵ On January 20, American shares in both the Dresdner Bank of Berlin and the Vereinsbank in Hamburg were issued in New York.¹⁴⁶

In retrospect, 1926 seems to have been a takeoff year for American investment abroad. According to compilations made at the time by Max Winkler, vice-president of Moody's Investor's Service, Americans invested a net surplus of nearly two billion dollars abroad during 1926, with 43 percent of the total in Europe.¹⁴⁷ This two billion dollars was part of an aggregate American investment abroad estimated at thirteen billion dollars.¹⁴⁸ In Winkler's opinion,

the unprecedented flow of American capital to foreign countries was brought about...by the immense developments of our resources and the enormous accumulation of gold,

¹⁴³Ibid.

¹⁴⁴"To Sell Foreign Stocks", The New York Times, January 7, 1926, p. 33.

¹⁴⁵"Offer New Shares for German Credit", The New York Times, January 21, 1926, p. 29.

¹⁴⁶Ibid.

¹⁴⁷The New York Times, January 1, 1927, p. 29.

¹⁴⁸Ibid.

combined with the exhaustion of Europe and the destruction of working capital in the Old World.¹⁴⁹

Winkler felt that there would soon be about 100 representative foreign companies listed on the New York Stock Exchange, and that arbitrage would increase because

there is always a differential between the price of the so-called 'American shares' as now listed and the price of the corresponding shares in foreign markets.¹⁵⁰

He felt that three factors would "create a feeling of security among investors" and increase the export of American capital to Europe. These key factors were the successful functioning of the League of Nations, the effects of the Locarno treaties limiting rearmament, and the politico-economic rapprochement between France and Germany.¹⁵¹

The Birth of ADRs

The pressure of capital once again showed. On January 26, 1927, the New York Stock Exchange announced that, in association with unspecified "international bankers", it had "evolved a plan to open its doors to the common stock of leading industrial, railroad and public utility corporations of every foreign country."¹⁵² The keystone of the plan was to change the registration requirements of corporate

¹⁴⁹Ibid.

¹⁵⁰Ibid.

¹⁵¹Ibid.

¹⁵²"Stock Exchange Moves to Become a World Market", The New York Times, January 26, 1927, p. 1.

certificates then existing under the laws of the state of New York. The New York Stock Exchange proposed to make bearer shares legal in New York. If the law were passed by the New York State Legislature, foreign shares would "be listed in their original form in the language of the country of their origin."¹⁵³ The Exchange authorities argued against the existing American share system, complaining that it required that large blocks of shares be held in trusteeship, where they were "placed virtually in escrow for a long time and [were] not available for transfer as needed."¹⁵⁴ In support of the New York Stock Exchange's new position, State Assemblyman Hofstadter introduced a bill into the New York State Legislature on March 7, 1927, "amending the personal property law by making negotiable all certificates of stock issued to bearer."¹⁵⁵ He supported his bill by noting that unofficial "interim receipts" had been made negotiable by the Legislature in 1926.¹⁵⁶

A different line of attack was taken by the officials of the New York Curb Market, America's second largest securities market. On March 10, 1927, the Curb's Board of Governors decided to "admit to associate membership an unlimited number of foreign bankers and brokers."¹⁵⁷

¹⁵³Ibid.

¹⁵⁴Ibid., p. 10.

¹⁵⁵"Bill on Bearer Stocks", The New York Times, March 8, 1927, p. 2.

¹⁵⁶Ibid.

¹⁵⁷"Curb Will Admit Foreign Brokers", The New York Times, March 11, 1927, p. 33.

While associate members were not permitted to transact business on the floor of the exchange, they were allowed "important reductions in commission rates."¹⁵⁸ In addition, because its trading requirements were not as strict as those of the New York Stock Exchange, the Curb provided an active market for numerous foreign shares. For this reason, nearly one hundred foreign stocks and bonds were traded on the Curb by the first quarter of 1927. British firms were particularly attracted to the Curb. Some of the major foreign stocks that were most actively traded included Anglo-American Oil, Anglo-Persian Oil, British American Tobacco, Imperial Tobacco, Rio Tinto, Scottish American Oil and Transport, Snia Viscosa, and General Electric of Germany.¹⁵⁹

American investment abroad continued to grow rapidly. W.E. Thorne, head of the Finance and Investment Division of the Department of Commerce, estimated a 72 percent increase in the aggregate foreign investment in the first quarter of 1927 as compared to 1926. Thorne flatly stated

in the matter of foreign investments January [1927] probably was the largest month in the history of American foreign financing. The total par value of foreign capital securities publicly offered during January was \$178,003,200 or \$23,763,200 greater than October [1926], the nearest month of last year.¹⁶⁰

¹⁵⁸Ibid.

¹⁵⁹Ibid.

¹⁶⁰"Investments Abroad Continue to Grow", The New York Times, April 6, 1927, p. 9.

On April 7, 1927, officials at Merrill, Lynch & Company and Harvey Fisk & Sons announced plans to market 250,000 shares of Selfridge Provincial Stores, the British-based department store empire owned by an American, Gordon Selfridge. The shares were to be listed immediately on the Curb Exchange; later, an application was to be made "to list certificates representing them on the New York Stock Exchange."¹⁶¹ This particular transaction interested New York financial circles because of the proposed opening of the New York Stock Exchange to direct listings, and was thus considered "preliminary to the marketing of the securities of other foreign companies in New York."¹⁶²

Also in April, the Hofstadter bill was passed by the New York State Legislature and signed into law by Governor Alf Smith. The act amended Section 45 of the laws of 1909 concerning personal property tax and "relating to the negotiability of certain bearer instruments." Specifically, the law made

interim certificates and the bearer warrants attached negotiable instruments, giving them the same legal status as to negotiability as the definite certificates.¹⁶³

At the same time that American investment abroad began to rise, American growth began to draw more and more foreign investment stymied by the perceived lack of profitable home markets. By 1927, these two

¹⁶¹"Selfridge Stock to be Offered Here", The New York Times, April 8, 1927, p. 33.

¹⁶²Ibid.

¹⁶³"'Bearer Shares' Get Legal Status", The New York Times, April 17, 1927, Section 2, p. 13.

conflicting developments were to produce a profound change. First, the British government grew more and more concerned as sterling values dropped and investment drained out of the United Kingdom and Empire and into the booming markets of American investment. Then, American investors, seeking higher and higher returns on their capital, began increasingly to speculate and innovate. More and more securities were floated, and the dizzying velocity of security trading began to transform itself into a veritable speculative frenzy. Investment abroad soared. Thorne's figures for the second quarter of 1927 showed \$411,211,375 invested abroad.¹⁶⁴

At this key moment, and following lengthy negotiations with representatives of the Bank of England, the Federal Reserve Board decided to ease the discount rate on July 27, 1927.

Beginning in July 1927 and stretching to September, the Federal Reserve System bought \$200 million in open-market purchases and lowered its discount rate over the system by half a percentage point, with 3.5 percent as the rate for the Federal Reserve Bank of New York.¹⁶⁵

Much historical speculation has centered on the Fed's decision, but it seems clear that the intent was to prop up the British pound sterling, which had been seriously overvalued when Britain returned to the gold

¹⁶⁴"Our Investments Abroad \$12,300,000,000", The New York Times, July 6, 1927, p. 39.

¹⁶⁵Charles P. Kindleberger, The World in Depression 1929-1939, University of California Press, Berkeley, 1973, p. 69.

standard in 1925.¹⁶⁶ The Fed's decision added fuel to the speculative fires on Wall Street, as investors sought higher returns than could be obtained from banks. In addition, investors were driven to invest in the British market, where higher base interest rates and stronger sterling made investment attractive.

Curiously, the initial effect of the credit easing was a drop in the amount of aggregate overseas investment. Thorne's figures for the third quarter of 1927 showed only \$269,565,500 invested abroad, a significant drop not only from the second quarter, but also from the \$294,290,000 invested during the third quarter of 1926.¹⁶⁷ The key to this apparent paradox seems to be that the drop in interest rates shifted investment from loans to stock purchases. "Investors were diverted into stocks; financial intermediaries, who were not permitted to buy stocks, loaned funds on the call market."¹⁶⁸

On October 7, 1927, the New York Stock Exchange announced special requirements for the listing of foreign international shares.¹⁶⁹ This date could be considered the "birthday" of the instrument now known as

¹⁶⁶John Brooks, Once in Golconda : A True Drama of Wall Street 1920-1928, Harper & Row, New York, 1969, p. 93.

¹⁶⁷"\$974,472,875 Lent by America This Year", The New York Times, October 4, 1927, p. 40.

¹⁶⁸Kindleberger, The World in Depression, p. 74.

¹⁶⁹Committee on Publicity, New York Stock Exchange Year Book, p. 18.

an American Depositary Receipt. The principal listing requirements were:

[1] To be available for listing, foreign shares must be in the form of certificates issued by an approved American institution or by the American branch of an approved foreign institution based upon the deposit with a foreign correspondent of the original foreign shares.

[2] Conditions of issuance of certificates of deposit must be such that shares deposited abroad may be released upon cable advice upon cancellation of such certificates of deposit and that additional certificates of deposit may be issued in New York upon cable advice from the foreign depository of the deposit of additional shares. The committee [The Stock List Committee of the New York Stock Exchange] may approve restrictions on such interchangeability for a reasonable period.

[3] ...certificates of deposit should be in registered form only.

[4] Such certificates should comply with New York State law as to negotiability.

[5] The agreement covering such certificates of deposit must provide that no original foreign shares against which there are any outstanding 'oppositions' shall be accepted for deposit and must also provide for the publication to American certificate holders of a summary, in the English language, of the current annual reports of the company.¹⁷⁰

In announcing these new listing requirements, the president of the Exchange, E.H.H. Simmons, justified the committee's actions as being intended

to establish the best possible facilities for the smooth flow of American capital into and out of foreign business enterprise, and at the same time to secure the greatest possible protection for the American investing public.¹⁷¹

¹⁷⁰"World Stock Mart Begun by Exchange", The New York Times, October 7, 1927, p. 1.

¹⁷¹Ibid.

As part of its avowed purpose of protecting the investing public, the Stock List Committee would not

recommend for listing corporate securities the nominal value of which is expressed in terms of, or the income from which is payable to security holders in, a currency which is not upon a gold basis.¹⁷²

This provision effectively barred the listing of French, Italian, Japanese and Polish securities, as well as other nations that had not returned to a gold standard for their currencies.¹⁷³

The New York Stock Exchange's decision was greeted enthusiastically by American commentators, as "a recognition of the extent to which American investment capital is already overflowing our own markets."¹⁷⁴ At the time of the decision, only four foreign shares were listed on the New York Stock Exchange. As noted earlier, these firms were Royal Dutch Petroleum, Shell Transport and Trading, De Beers, and Rand Mines, all of which traded as American shares.¹⁷⁵ Observers anticipated the new requirements would produce "a flood of listing applications."¹⁷⁶ In particular, it was anticipated that many of the foreign firms that enjoyed the "unlisted trading privileges" of the New

¹⁷²Ibid.

¹⁷³Ibid.

¹⁷⁴"The Stock Exchange and Foreign Shares", The New York Times, October 8, 1927, p. 16.

¹⁷⁵"World Stock Mart Begun", p. 9.

¹⁷⁶"Exchange Perfects Foreign Stock Plan", The New York Times, October 8, 1927, p. 16.

York Curb Market would soon apply for listing on the New York Stock Exchange.¹⁷⁷

At the time, "the Curb" effectively permitted foreign shares to trade in three different ways. They could directly trade as bearer shares under the "unlisted trades", or they could be listed if they used either dollar or deposit certificates. Only two firms used the latter methods in the Fall of 1927: Dresdner Bank and Selfridge shares were both traded using deposit certificates. The stocks of twenty other foreign firms were allowed "unlisted trading privileges" on the Curb. (Anglo-American Oil, Anglo-Persian Oil, Austrian Central Land Credit Bank, British American Tobacco, Courtauld's, J.P Coats, Consolidated Main Reef Mines, General Electric of Germany, Imperial Tobacco, Imperial Chemical Industries, Leonhard Tietz, Marsfield Mining and Smelting, Marconi Wireless Telegraph, Mercurbank of Vienna, Rio Tinto, Scottish American Oil and Transport, Snia Viscosa, Swedish Match, Trading Company of Amsterdam, and the V.O.C. Holding Company.)¹⁷⁸ While most of these twenty traded in their original form, variants did exist. Austrian Central Land Credit Bank and Mercurbank of Vienna both traded as American shares. General Electric of Germany and Snia Viscosa traded both in their original forms and using trust receipts through their American bank depositaries (National City Bank for General Electric and

¹⁷⁷Ibid.

¹⁷⁸Ibid.

Chase National Bank for Snia Viscosa). Finally, the Trading Company of Amsterdam traded in the form of sub-share certificates.¹⁷⁹

In the midst of the general excitement gripping the New York investment community, there were some dissenting voices. One "leading authority on foreign securities and financing", Dr. Max Winkler, feared that "Americans would be assisting materially in the speculative activity which of late has characterized foreign stock exchange movements without obtaining any corresponding compensation."¹⁸⁰ Winkler felt that most of those firms that would list on the New York markets were actually going to dilute their shareholdings. Thus, the Americans would gain no material control or voice in the operations of these corporations, but would merely help to fuel worldwide stock speculation. He contrasted the situation with the foreign listings on the London market, which he claimed predominately "represent[ed] shares in concerns which are either owned and controlled by the British or in which the British have at least a substantial interest."¹⁸¹ In addition, Winkler expressed a profound mistrust of European intentions, noting that "whatever will be offered us will most likely be something which the Old World will very well be able to do without."¹⁸²

¹⁷⁹Ibid.

¹⁸⁰"Winkler Skeptical of Foreign Listing", The New York Times, November 4, 1927, p. 36.

¹⁸¹Ibid.

¹⁸²Ibid.

Despite the dissenters, plans for international listings surged forward. A "race" ensued between two offering syndicates, one supporting the Amsterdam Trading Company and the other the Austrian Credit-Anstalt, to see which would be "the first to list securities under the New York Stock Exchange's new listing requirements".¹⁸³ Meanwhile, the New York Curb Exchange announced on November 3, 1927, that it would "use the facilities of the Guaranty Trust Company in admitting foreign securities to its unlisted department."¹⁸⁴ The Curb changed its rules for admission to unlisted trading, permitting "only issues of established foreign companies that are seasoned and have long dividend records."¹⁸⁵ The Curb's Committee on Listing would rule on each application, and would only admit firms whose "financial condition and history" had been reported in "some authoritative statement approved by the committee" or in an approved publication such as the Stock Exchange Year Book of London or the Saling Boersen Jahrbuch of Berlin.¹⁸⁶ On November 4, 1927, Columbia Graphophone Company of England became the first shares admitted under the new arrangement. These shares were
issued in pursuance to an American depositary receipt for capital stock of the company issued by the trust company, which will entitle the holder to a certificate or to

¹⁸³"2 Groups Vie to List Foreign Issues Here", The New York Times, November 4, 1927, p. 36.

¹⁸⁴"Foreign Securities Admitted to Curb", The New York Times, November 4, 1927, p. 36.

¹⁸⁵Ibid.

¹⁸⁶Ibid.

certificates for such shares on surrender of the receipt and payment of fee and foreign transfer tax.¹⁸⁷

Lack of Overseas Enthusiasm

An interesting contrast to the American enthusiasm can be found in comments made at the time in London. The British considered the new requirements as "drastic stipulations", and critically compared them with the less stringent admission requirements of the London Stock Exchange.¹⁸⁸ Because of this, the general opinion of the London financial press was that "the first listings of foreign shares at New York" were "likely to be only of well-known British, German and French securities."¹⁸⁹

In fact, the first listing under the new requirements was for a debt issue rather than stock. On November 10, 1927, "American certificates representing participation in a \$25,000,000 note issue of the Deutsche Bank of Berlin were admitted...to trading privileges on the New York Stock Exchange."¹⁹⁰ For the moment, rumors of listings were more prevalent than actual applications. Thus, it was "understood" by

¹⁸⁷Ibid.(Note: This is the earliest use of the specific terminology "American depository receipt" that this researcher has been able to locate.)

¹⁸⁸"Listing Foreign Shares Here and at London", The New York Times, November 6, 1927, Section 2, p. 7.

¹⁸⁹Ibid.

¹⁹⁰"First Foreign Issue Listed on Exchange", The New York Times, November 11, 1927, p. 33.

the financial press that "an application would be made soon for the listing of stock participation certificates by the Deutsche Bank."¹⁹¹ Another report claimed that "negotiations" were underway to list the "preferred stock of the Belgian National Railways and the preference stock of the Kilo-moto Company of Belgium under the new exchange regulations."¹⁹² Brokers were clearly disappointed by the lack of response when, after a month, the Credit-Anstalt and Amsterdam Trading Company applications were the only two which had been received. Expectations had been that forty to fifty would have been made. These brokers were quick to echo the British viewpoint, claiming that "the failure of foreign companies to apply for listing so promptly as had been expected [was] due to the severity of the requirements for listing."¹⁹³ Hints began to be made that the requirements would soon be eased.¹⁹⁴

On November 16, 1927, the Austrian Credit-Anstalt, a Vienna-based banking firm controlled by Louis Rothschild, won the race to be the first foreign firm with shares listed under the New York Stock Exchange's new requirements.

"The Credit-Anstalt's American shares were listed in the form of temporary certificates issued by the Guaranty Trust

¹⁹¹Ibid.

¹⁹²"Belgian Railway Listing", The New York Times, November 11, 1927, p. 33.

¹⁹³"Foreign Stock Listing Disappoints Brokers", The New York Times, November 16, 1927, p. 34.

¹⁹⁴Ibid.

Company of New York as depository for the stock...pursuant to an agreement dated November 1 [1927].¹⁹⁵

Permanent engraved certificates were to be issued later in exchange for the temporary certificates, and these certificates were to "be exchangeable after January 1, 1930, for the corresponding number of deposited shares." Each American share was to represent eight common shares with a par value of 40 Austrian shillings. The total approved listing was for 50,000 American shares, and in Vienna 400,000 Credit-Anstalt common shares were deposited "at the agency of the depository, the Austrian National Bank."¹⁹⁶ The American shares were registered by the International Acceptance Securities and Trust Company, and actual trading in the new issue began on November 17, 1927.¹⁹⁷

In contrast, the Amsterdam Trading Company withdrew the application for its listing on November 18, 1927, "upon the motion of its own officials", who "did not feel a New York market for their shares was necessary or desirable."¹⁹⁸ Despite this rebuff, Exchange President E.H.H. Simmons declared in a December speech to the New York State Chamber of Commerce that the New York Stock Exchange was "surpassed only

¹⁹⁵"Vienna Bank Stock Listed by Exchange", The New York Times, November 17, 1927, p. 36.

¹⁹⁶Ibid.

¹⁹⁷Ibid.; New York Stock Exchange Year Book, p. 18.

¹⁹⁸"Drops Move to List Foreign Stock Here", The New York Times, November 19, 1927, p. 24.

by the century-old market at London" in the volume of its foreign securities transactions.¹⁹⁹

On January 4, 1928, the preferred stock of the Belgian National Railways Company became the second stock admitted to the unlisted trading privileges of the New York Curb Exchange under the depositary agreement with Guaranty Trust.²⁰⁰ On January 28, the New York Stock Exchange admitted 50,000 American shares of Belgian National Railways, which thus became the second foreign listing under the new requirements.²⁰¹ In February 1928, additional shares of Courtauld's were admitted to the Curb under the new depositary requirements.²⁰² The common and preferred shares of Margarine Union, Limited, were admitted to unlisted trading privileges on March 3, 1928.²⁰³ This Anglo-Dutch concern became only the fourth foreign company admitted under the Curb's new requirements.²⁰⁴

¹⁹⁹"Exchange Gaining as World Market", The New York Times, December 2, 1927, p. 33.

²⁰⁰"Belgian Stock on Curb", The New York Times, January 5, 1928, p. 47.

²⁰¹"Exchange Admits New Securities", The New York Times, January 26, 1928, p. 35.

²⁰²"Courtauld's Again Higher", The New York Times, February 24, 1928, p. 33.

²⁰³"New Foreign Shares on Curb", The New York Times, March 3, 1928, p. 28.

²⁰⁴*Ibid.*

Because, by March 1928, only Credit Anstalt and the Belgian National Railways had responded to the New York Stock Exchange's new listings effort, the mood of the financial press had turned somber. One writer stated flatly that "the plans of the Exchange's authorities to create here an international securities market will be a failure."²⁰⁵ Foreign corporations had "three principal objections" to the New York Stock Exchange's listing procedures. First, these corporations were put off by the stringent listing requirements, particularly the need for quarterly or semi-annual reports. A second objection was to the need to deposit shares in trust, "thus restricting the floating supply of shares of the corporation abroad, and involving intricate bookkeeping and expense".²⁰⁶ The third objection was "the lack of opportunity for arbitrage" created by the Exchange's requirements.²⁰⁷

In addition to the objections made by foreign corporations, it appeared that many American bankers preferred to deal "across the wires", and trade directly in the European markets, particularly Paris and Berlin.²⁰⁸ With the Exchange requiring foreign companies "to go on an equal basis and comply with the same rules and regulations

²⁰⁵"Foreign Companies Listing Few Shares", The New York Times, March 4, 1928, p. 9.

²⁰⁶Ibid.

²⁰⁷Ibid.

²⁰⁸Ibid.

as...American companies", some observers were pessimistic about the internationalization of New York's stock markets.²⁰⁹

Slowly, the listings came. On March 30, 1928, the Curb Exchange admitted depositary receipts for both the ordinary and preference shares of the British-American Tobacco Company, and for the ordinary shares of the Imperial Tobacco Company and the Spanish and General Corporation.²¹⁰ On March 12, Debenhams requested that 85,000 American shares be listed on the New York Stock Exchange.²¹¹ Meanwhile, the Curb admitted American shares of Debenhams to its "unlisted trading privileges" on March 14.²¹² In April, Richard Pohl, President of the Board of Directors of the Berlin Boerse [Stock Exchange], arrived in New York "to confer with New York Stock Exchange officials concerning the listing... of a number of German stocks."²¹³ On June 18, the Curb became the first American exchange to use the British clearing system of periodic settlements, specifically for two of its British-backed depositary

²⁰⁹Ibid.

²¹⁰"Changes in Foreign Curb Stocks", The New York Times, March 6, 1928, p. 41.

²¹¹"Debenhams to Ask Listing", The New York Times, March 12, 1928, p. 7.

²¹²"Debenhams Admitted to Curb", The New York Times, March 14, 1928, p. 37.

²¹³"Berlin Boerse Head Here to List Issues", The New York Times, April 3, 1928, p. 47.

receipts.²¹⁴ The same day, DeSaint Phalle and Company of New York began an international quotation service for American investors.²¹⁵

Despite the additional stock listings, however, American investment abroad was essentially in the form of bonds. A Commerce Department report in October 1928, stated that

of the total par value of all foreign corporate securities publicly offered in the United States since and including 1914, amounting to \$11,659,383,529 only \$673,000,000, or less than 6 per cent. of the total, was for preferred or common stocks.²¹⁶

In addition, investment was highly selective, with nine industries accounting for 88 percent of the total. These nine industries, ranked from highest down were public utilities, railways, banking and credit, sugar, paper, mining, oil, iron and steel, and steamship. Each of these industries had absorbed more than \$100 million in American investment during the period, with public utilities accounting for more than \$700 million.²¹⁷

The weight of this American capital was bound to cause friction abroad. In the summer of 1928, French economist Lucien Romier denounced

²¹⁴"New Practice on the Curb", The New York Times, June 8, 1928, p. 40.

²¹⁵"Develops Foreign Service", The New York Times, June 19, 1928, p. 41.

²¹⁶"\$11,659,000,000 Put in Foreign Concerns", The New York Times, October 1, 1928, p. 9.

²¹⁷Ibid.

"the imperialism based on American capital invested abroad."²¹⁸ Romier felt that, although the Americans were "sincerely pacific", the suddenness of their ascent as the world's leading creditor nation, and the intense financial scrutiny that they were imposing on those seeking American capital had caused tension. Romier noted, however, that the nature of America's "financial imperialism" was self-limiting. Because American capital was being used to rebuild European industry, "forces will have been roused which will one day result in competition with the creditor and restore the balance to his own detriment."²¹⁹

As if to underline Romier's words, in April 1929, directors of the General Electric Company of Great Britain voted to strip American stockholders of voting privileges. In addition, they proposed to "issue new stock on favorable terms to British subjects only", in an effort to ensure British control of the company.²²⁰ American investors were appalled by what amounted to "a confiscating of American property rights", and one commentator noted that "possibilities of vast changes loom in the attitude of American investors toward foreign companies in which they are heavily invested."²²¹

²¹⁸"Financial Imperialism", The New York Times, August 5, 1928, p. 6.

²¹⁹Ibid.

²²⁰"American Capital Faces Issue Abroad", The New York Times, April 7, 1929, Section 2, p. 18.

²²¹Ibid.

Vast changes were indeed looming, but not of the sort anticipated by most of the Wall Street investment community. The "Roaring 20s" were about to come to a crashing end. The speculative market bubble, which had been building since July 1927, would burst in a spectacular fashion in October 1929. As the first great era of American investment abroad drew to a close, the world financial situation would once again undergo a period of confusion and fundamental transformation.

Summary

At the beginning of the twentieth century, America was a rapidly industrializing nation whose debt load left little surplus for foreign investment. Gradually, however, a drift began to occur, not only to foreign investment, but also from investment in bonds to investment in common stock. Technology, too, played an important role, as the advent of cable arbitrage dramatically speeded trading in international securities. The restriction of cable arbitrage in 1911 was an effort to reassert an old order in world finance.

This old order was transformed by the unprecedented destruction of World War I. America went from being the world's largest debtor nation to becoming its largest creditor. Britain's mobilization of securities for her war effort led her to interfere in the treaty-guaranteed transfer of financial securities between neutral powers. In attempting to evade this British interference, the Dutch created New York Shares in

December 1916. Although it would be over a decade before ADRs officially appeared, this action in time of war presaged coming events.

Postwar America was unsure of her role in the new financial climate. Torn between the opposing principles of isolationism and internationalism, America only gradually moved towards a more predominant role in world markets. Important members of the financial community pushed for increased investment abroad, primarily to rebuild war ravaged Europe. Investment trusts specializing in foreign holdings were established. Legal mechanisms were gradually put into place to facilitate foreign investment. Finally, the rising tide of stock market speculation led to the creation of the first ADRs in October 1927. Although greeted with an initial lack of enthusiasm by foreign corporations, little by little the new financial instrument began to attract attention. Pushed by the ever more frenetic market speculation, international investment continued to grow. Nonetheless, the tides of history were again turning, as will be seen in the next chapter.

Chapter 4

THE HISTORY OF ADRS - PART 2

The Depression

Much has been written about the underlying causes of the so-called Great Depression. While a serious review of the various depression theories is beyond the scope of this review, it appears that the limited mechanisms of international exchange, and the almost instinctive retreat to protectionism, were central factors in prolonging the economic hard times. As far as ADRs were concerned, the key aspect of the period was the move to increased securities regulation on the part of governmental authority.

The October 1929 Crash

Several important events are mentioned because they played a key role in the evolution of ADRs. In August 1929, the Federal Reserve Board, concerned by the intensity of the speculative frenzy it had helped unleash two years earlier, voted to increase the discount rate in an effort to cool off the market.¹ Joseph P. Kennedy, uttering his immortal remark "only a fool holds out for top dollar", immediately sold most of his stock portfolio.² He was soon followed by "Sell'Em Ben"

¹Kindleberger, World in Depression, p. 118.

²Brooks, Once in Golconda, p. 122.

Smith, who began a systematic and extensive program of short selling.³

Market nervousness was highlighted when, on September 5, the "Babson Break" occurred. Roger Babson, a severe critic of the speculative market and something of a doomsayer, had been consistently predicting a crash. While his prognostications had been ridiculed, during a slow news day one of his speeches was quoted extensively in the financial press. Suddenly, the market dropped precipitously. Although it quickly recovered, and "experts" again refuted Babson's predictions, the market was showing clear signs of instability.⁴

In September 1929, the London-based investment trust empire of Charles Hatry collapsed "when he was caught using fraudulent collateral in an attempt to borrow 8 million pounds to buy United Steel".⁵ The Bank of England raised its interest rates, much as the Federal Reserve had done in August, in an effort to reduce speculation. In addition, the British withdrew their call loans from New York.⁶ Two weeks before the beginning of the October Crash, "brokers' loans for 'others' declined by \$ 120 million, largely because of withdrawals by foreigners."⁷

³Ibid.

⁴Ibid., p. 111.

⁵Charles P. Kindleberger, Manias, Panics, and Crashes: A History of Financial Crises, Basic Books, New York, 1978, p. 84.

⁶Ibid.

⁷Idem., The World in Depression, p. 118.

The market implosion began on October 23, 1929, and deepened on "Black Thursday", the 24th. On Friday, in an effort to restore calm, President Hoover uttered his now infamous remark "the fundamental business of the country...is on a sound and prosperous basis."⁸ For the next two days the market rallied. Then, on Monday, October 28, the decline resumed. The next day, "Black Tuesday" was the worst day in the history of the market when, in a massive sell-off, more than 16 million shares were traded.⁹ The boom of the 1920s was over.

Post-Crash Confusion

The significance of the October Crash was not immediately apparent. For the next few months, the market entered a confused period of great volatility, and actually regained much of the lost ground. As early as June 1930, President Hoover confidently declared that "the depression is over".¹⁰ As for the international financial picture, it is important to note that there had been little immediate correlation between the price movements of the various securities markets.

European security markets had for the most part turned down earlier : Germany as far back as 1927, the United Kingdom in mid 1928, France in February 1929.¹¹

⁸Brooks, p. 118.

⁹Kathleen Odean, High Steppers, Fallen Angels, and Lollipops, Henry Holt and Company, New York, 1988, p. 166.

¹⁰Ibid., p. 129.

¹¹Kindleberger, The World in Depression, p. 108.

When the New York market crashed in October 1929, "it had its effect worldwide, but not through parallel movements in security prices."¹²

As noted earlier, most international investment at the time was in the form of bonds. Thus,

the danger posed by the market was not inherent in the level of prices and turnover so much as in the precarious credit mechanism which supported it, and the pressure which it exerted on credit throughout the United States and the world.¹³

Economic historian Derek Aldcroft has claimed that

even more serious than the collapse in economic activity was the disorganization and partial destruction of the delicate machinery of international economic and financial cooperation. Indeed, the depression and financial crisis more or less destroyed the former international economic mechanism.¹⁴

With the turn into a new decade, it became clear that the worldwide market was not going to revive. Within the next few years, most industrial countries "had abandoned the gold standard and devalued their currencies."¹⁵ As the economic crisis deepened, more desperate measures were taken.

In order to shield domestic economies from external influences a battery of protective restrictions was employed including tariffs, import quotas, exchange controls and

¹²Ibid.

¹³Ibid., p. 109.

¹⁴Aldcroft, The European Economy, p. 93.

¹⁵Ibid.

special devices to iron out fluctuations in the exchanges.¹⁶

The worldwide financial picture was irrevocably altered, and these measures

spelt the end of the ... system of multilateral trade and payments and the free flow of commodities, capital and labour across national borders. Instead nationalistic economic policies and managed currencies became the order of the day.¹⁷

As Charles Kindleberger has stated,

When every country turned to protect its national private interest, the world public interest went down the drain, and with it the private interests of all.¹⁸

In the initial confusion following the October Crash, no immediate changes were made in the listing requirements for the American market. Indeed, there was some talk of reviving world trade by loaning more money abroad.¹⁹ One idea was for American corporations to float securities domestically and then re-lend the money abroad.²⁰ While global securities trading stagnated, Exchange authorities carried on with business as usual, awaiting an anticipated turnaround. In September 1932, the New York Stock Exchange provided its members with a list of "foreign shares represented by American certificates". The list

¹⁶Ibid.

¹⁷Ibid.

¹⁸Kindleberger, The World in Depression, p. 292.

¹⁹"Indirect Lending Abroad Considered", The New York Times, March 15, 1931, Section 2, p. 9.

²⁰Ibid.

included only eleven such instruments (Austrian Credit-Anstalt, Belgian National Railways, Debenham Securities, Electric and Musical Instruments, General Italian Edison Electric, Krueger and Toll, North German Lloyd, Pirelli of Italy, Rhine Westphalia Electric Power, Royal Dutch Petroleum, and Shell Transport and Trading).²¹ The market was trapped in the doldrums.

Increased Governmental Regulation

The mood turned ugly, and fingerpointing became a national sport. Hearing after hearing blamed the mechanisms of a laissez-faire market for the apparent market failure. As the credit mechanisms that had fuelled the boom market of the 1920s unravelled, bank after bank began to fail, and as the loan supply dried up, trading drew to a standstill. Desperate efforts were made to redress the situation. On February 27, 1932, Congress passed the Glass-Steagall Act with the intent of promoting "the soundness and stability of banks" and discouraging the sort of speculation that had occurred in the 1920s. One of the provisions of the Glass-Steagall Act mandated the separation of commercial and investment banking. Thus, banks that took in deposits were prohibited from underwriting or dealing in corporate bonds or equity securities.²² In addition, to improve the balance sheet

²¹"Taxes on Sales of Foreign Stocks Detailed", The New York Times, September 10, 1932, p. 19.

²²"USM : Now We Are Three", The Economist, November 5, 1983, p. 84.

positions of existing banks. Glass-Steagall "enabled the Federal Reserve System to count government securities together with eligible paper as reserves against the system's liabilities."²³ This accounting solution was not enough, and the credit hemorrhage continued. A weary and frightened nation turned to new leadership.

The election of Franklin D. Roosevelt as President in 1932 was to dramatically transform the situation. Immediately following his inauguration in March 1933, Roosevelt "invoked the Trading with the Enemy Act of 1917 to close all the banks in the country."²⁴ (An interesting sidelight to the current discussion is that this dramatic event in America's financial history occurred because of a law initially intended to control foreign trade and investment in time of war.) By June, America had joined the parade of nations dropping the gold standard backing their currencies.²⁵ Part of Roosevelt's reform package included a fundamental overhaul of the securities trading system.

During the faultfinding following the October Crash, leaders of the accounting profession urged financial statement reform in order to deflect criticism of their own actions during the boom. To save itself (and incidentally to increase its own profitability), the accounting profession pushed for greater disclosure requirements. This idea was

²³Kindleberger, The World in Depression, p. 185.

²⁴Kindleberger, The World in Depression, p. 198.

²⁵"Lifts Ban on Issues on Non-Gold Basis", The New York Times, January 23, 1934, p. 27.

seized upon by Roosevelt's New Deal reformers and led directly to the Securities Act of 1933 and the Securities Exchange Act of 1934. Elements of these two pieces of legislation changed the landscape of American equity investment abroad in a profound manner. Because of the stringent disclosure requirements, foreign firms were loathe to expose themselves on the American market. In addition, many institutional funds were legally enjoined from foreign investment. This reflected a clear return to the isolationist atmosphere of the immediate post-WWI era.

These changes to the market came piecemeal. With America leaving the gold standard, the New York Stock Exchange dropped its requirement that foreign share listings be denominated in currencies on a gold basis. Officially, this rule was only suspended on January 23, 1934. The listing of the British firm Roan Antelope Copper Mines on October 25, 1933, however, indicated the rule was in abeyance, as Britain had already left the gold standard.²⁶ By July 12, 1934, the New York Stock Exchange announced the formation of a committee "to study the present methods used by members in the conduct of their foreign business."²⁷

On July 1, 1934, the provisions of the Securities Exchange Act of 1934 took effect. President Roosevelt selected a fox to protect the

²⁶Ibid.

²⁷"Exchange Widens Foreign Inquiry", The New York Times, July 12, 1934, p. 27.

henhouse when he named former stock speculator Joseph Kennedy as the first chairman of the Securities and Exchange Commission.²⁸ The SEC took over from the Federal Trade Commission in enforcing the registration and disclosure requirements of the Securities Act of 1933, as well as the more specific protective requirements of the 1934 Act.²⁹

The creation of the SEC was a turning point in the history of American international investment. After July 1934, nearly every major change in the investing mechanism would in some manner involve the SEC. This influence began almost immediately. On September 23, 1934, SEC officials released detailed rules concerning security data. They also broadened the legal definition of an "equity security" to include "any security ...which is convertible into an equity security or which carries any warrant or right to subscribe to or purchase an equity security."³⁰ Clearly, ADRs fell within this expanded definition.

Another federal organization also increased its oversight. On November 25, 1934, the Federal Reserve Bank of New York "requested" that the New York Stock Exchange deliver four different reports on foreign stock dealings. These reports were to provide aggregate data on security transactions executed for foreigners, security transactions abroad for domestic accounts, transactions in joint foreign arbitrage

²⁵Brooks, Once in Golconda, p. 205.

²⁹John Downes and J.E. Goodman, Dictionary of Finance and Investment Terms, Barron's, Woodbury, New York, 1985, p. 361.

³⁰"SEC Details Rules on Security Data", The New York Times, September 23, 1934, Section 2, p. 7.

accounts and foreign debit and credit balances.³¹ These reports were to be delivered weekly.

The Battle over Disclosure

Foreign firms proved unwilling to comply with the detailed new reporting and registration requirements. Deadlines were extended. On May 15, 1935, foreign firms, other than those required to file Form 10 (essentially Canadian firms), were given until December 31, 1935 to comply with the new regulations.³² On July 15, 1935, "registration on the country's 20 national exchanges of securities of corporations was effected" under the "regulations of the Securities and Exchange Commission".³³ Although the extension for foreign firms until December 31 was confirmed, it did not apply to corporate issues originating in North America and Cuba. Thus, Canadian and Cuban firms were required to file as though they were United States domiciled companies.³⁴

The next day, the SEC issued three special forms for foreign filers. In addition to providing most of the same information required of

³¹"Exchange to Report on Foreign Dealings", The New York Times, November 25, 1934, Section 2, p. 11.

³²"SEC Filing Time Extended", The New York Times, May 15, 1935, p. 33.

³³"Issues Registered on 20 Exchanges", The New York Times, July 16, 1935, p. 25.

³⁴Ibid.

registered American filers of Form 10, the foreign filer had to provide copies of its own financial statements, the financial statements of its major subsidiaries, a statement describing any exchange controls in the issuer's country, a three-year record of dividend payments, and a description of any laws or decrees which might affect dividend payments to foreign holders of the filer's shares. The only concession was that periodic rather than annual reports were required.³⁵

Foreign companies were not eager to provide this information. The December 31, 1935, deadline for registration was further extended to March 31, 1936, in an effort to encourage more foreign registrants. By January 31, 1936, only 62 of the 167 firms with bonds trading on the New York Stock Exchange had complied with the new registration requirements. The percentage of compliance for ADR firms was even lower. Only three had filed their SEC registrations. Finally, foreign firms were given until May 15, 1936, to register with the SEC.³⁶ On May 16, 1936, forty foreign bonds and 3 foreign stocks were officially de-listed by the New York Stock Exchange. Of the three stock delistings, two were the original foreign shares to have been listed, Royal Dutch Petroleum and

³⁵"SEC Issues Forms for Foreign Firms", The New York Times, July 17, 1935, p. 31.

³⁶"Exchange to Drop Many Bonds May 16", The New York Times, May 9, 1936, p. 24.

Shell Transport and Trading. The third delisting was for the shares of North German Lloyd.³⁷

The SEC continued to tighten its review policies. In February 1937, the rule exempting foreign securities from annual reports was rescinded, and the firms were given until September 30, 1937, to file their first reports. Form 19-K was designated "for American certificates against foreign issues and for the underlying securities", while Form 20-K was required "for securities, other than bonds, of foreign private issuers."³⁸

Isolationism and Administrative Intervention

Meanwhile, the economic malaise in Germany had led to the rise of Adolf Hitler, and the storm clouds presaging another world war began to gather. When officials of the Reich announced, in March 1937, that they would seize all alien goods in the event of another war, they were perceived by the American financial community as "holding hostages of property". It was revealed that Americans held 384.9 million marks' worth of German stocks.³⁹

³⁷"Exchange to Drop 43 Foreign Issues", The New York Times, May 16, 1936, p. 24.

³⁸"Foreign Concerns Report to SEC", The New York Times, February 11, 1937, p. 40.

³⁹"Reich Would Seize Alien Goods in War", The New York Times, March 11, 1937, p. 18.

As the world drifted towards another conflict, America sought to isolate herself by proclaiming neutrality. The famous Neutrality Acts were part of this effort to avoid foreign entanglements. In addition, and much less well known, was the effort to increase scrutiny over international securities transactions. In April 1939, all members of the New York Stock Exchange were required to file monthly reports with the SEC "on short sales of shares listed on the New York Stock Exchange and executed abroad by residents of the United States."⁴⁰ Apparently, speculators had been dealing through London in an effort to avoid restrictions and disclosure of short sales in America.⁴¹

After the outbreak of war in Europe in September 1939, America remained officially neutral for over two years. The Roosevelt government was nonetheless quietly preparing the way for America's entry into the conflict. On April 10, 1940, Executive Order #8389 was issued with no publicity. This order gave the President the authority "during time of war or any other period of national emergency" to prohibit American ownership or dealing in designated foreign securities. Apparently, this order was later embodied as a legal statute.^{42 43}

⁴⁰"Bear Sales Abroad to be Listed by SEC", The New York Times, Section 6, p. 1.

⁴¹Ibid.

⁴²12 United States Code, paragraph 95a.

⁴³It appears that this executive order still could be legally enforced. This is clearly an area that should be further researched, because the implications are that the President, in declaring a general "national emergency", could force American investors to relinquish part

On August 9, 1940, the Roosevelt administration impounded the "assets of nations and their citizens invaded by Germany."⁴⁴ Officially, the rationale was that these assets would be "frozen" until it became clear what would happen to American investments in these countries, and also to "protect" the remaining debts from World War I. Secretary of the Treasury Morgenthau estimated the frozen funds at \$2 billion, with \$1 billion of the total representing French holdings.⁴⁵ Impounded assets could only be removed from the United States with the issuance of a "special Treasury license".⁴⁶

On June 14, 1941, Roosevelt issued an executive order freezing all German credits in the United States, with the exception of the \$517.8 million in war debts. The Hitler government had long since stopped servicing this debt, but still reacted strongly to the American action. Hints were made that the estimated \$475 million in American investments in Germany might be "jeopardized" by the president's actions.⁴⁷ When Italian credits were similarly frozen, all U.S. funds in Italy were

or all of their ADR holdings.

⁴⁴"U.S. May Use Funds of France on Debt", The New York Times, August 9, 1940, p. 1.

⁴⁵Ibid.

⁴⁶Ibid.

⁴⁷"Assets in Germany Put at \$475,000,000", The New York Times, June 15, 1941, p. 28.

blocked in retaliation.⁴⁵ Much as in the earlier world conflict, the financial war began before the shooting started.

World War II

Despite the valiant efforts of many Americans, the country did indeed become enmeshed in another global conflict. Once again, alien properties were seized by the government. Just as importantly, the international patterns of financial exchange were thoroughly disrupted. Interestingly, the United States, so eager to return to an isolationist outlook at the conclusion of the Great War, now pushed into the forefront of international financial organization. Whereas before there had been reluctance to invest abroad, now there was a wholesale effort to reconstruct a ravaged world economy.

During the course of the war itself, several interesting events occurred from the standpoint of American involvement in international finance. First, in March 1943, as the tide of war turned against the Axis powers, Dr. Alexander Loudon, the Netherlands Ambassador to Washington, proposed a postwar trusteeship of German corporations. Loudon's idea was that this trusteeship would control the ownership shares of German corporations to prevent rearmament. In the innovative fashion characteristic of the Dutch, Loudon suggested that the shares be apportioned to various nations based on their reparation claims against

⁴⁸"U.S. Bank Accounts Impounded in Rome", The New York Times, June 17, 1941, p. 4.

Germany. Thus, those who had suffered the most from German depredation would have the most say in how future German corporations were managed.⁴⁹ One wonders how Loudon's idea would have worked in practice. At the outbreak of war, both the Germans and Americans had rapidly centralized control of the seized assets of their opponents. The Americans used the same procedures as had been employed in World War I, placing all seized assets with the Treasury Department's Alien Property Custodian, James E. Markham.⁵⁰ The Germans, in turn, placed "all securities and other evidence of ownership by American interests" in the charge of the Treuhand Gesellschaft, directed by the admirably named H. Julio Caesar.⁵¹ These assets included not only those in Germany, but also those seized in the occupied territories of Europe.

Unlike the earlier conflict, however, it became apparent that the victors were determined to utterly transform the societies of the vanquished. While initially muted, this determination began to surface as the combined weight of America's productive capital and the Soviet Union's manpower began to wear down the Axis war machine. Under the provisions of Executive Order #9193, issued on July 6, 1942, the Alien Property Custodian was authorized to "turn into cash" any seized

⁴⁹"Loudon Proposes Trustee for Axis", The New York Times, March 29, 1943, p. 3.

⁵⁰"New Policy Looms on Italian Assets", The New York Times, January 25, 1945, p. 8.

⁵¹"U.S. Interests Run in France by Nazi", The New York Times, February 14, 1943, p. 5.

commercial or property assets.⁵² In August 1943, the Alien Property Custodian announced the sale of the seized shares of the German-owned tobacco company G. Bruning at a sealed auction. More importantly, during this action it was made clear that there would be no restoration of ownership following the conflict.⁵³ Instead, the plan was to "Americanize" all seized Axis properties.⁵⁴

In the midst of war, an interesting comment was made by Dean John T. Madden, the director of the Institute of International Finance of New York University. Madden foresaw that postwar reconstruction assistance would involve direct funding rather than loans, as had been the primary method following World War I.⁵⁵ He pointed out that "equity investment creates no fixed obligation", and that the return on equity was "contingent upon the profitable operation of the enterprise." Because non-payment of dividends does not constitute a default, as would non-payment of loan interest, equity instruments allow more flexibility in times of economic strain. In Madden's words, "transfer problems as a rule arise in periods of economic depression." By using stocks rather than bonds to finance corporate operations, international firms can

⁵²"New Policy Looms", January 25, 1945, p. 8.

⁵³"Custodian to Sell G. Bruning Shares", The New York Times, August 22, 1943, Section 3, p. 5.

⁵⁴"Alien Custodian to Sell Axis Securities Today", The New York Times, September 29, 1943, p. 29.

⁵⁵"Trend to Equities in Financing Seen", The New York Times, October 11, 1943, p. 33.

reduce or eliminate the transfer of funds abroad during hard times. Madden foresaw increased equity investment following the devastation of World War II.⁵⁶

Interesting wartime situations arose concerning not just American holdings in enemy securities, but also in those of Allied powers. On July 20, 1943, the Treasury Department amended its foreign property control regulations to permit the sale and transfer within the U.S. of securities of Britain, Canada, Newfoundland, Bermuda, and the Netherlands East and West Indies.⁵⁷ In late October, the British government eased restriction on its blocked sterling accounts.⁵⁸ In November 1943, a little-known Missouri senator named Harry Truman began questioning the Lend-Lease payment mechanism. He was concerned that Americans would again be left with unpaid bills following the conflict. To avoid a recurrence of the "victimization of the 1920s", Truman proposed transferring internationally-held assets to the United States. In particular, he proposed that British-held petroleum securities be transferred to American control. Truman's concept was that American control of key raw material supplies would allow for an orderly reversal

⁵⁶Ibid.

⁵⁷"Ban Eased on Sale of Foreign Issues", The New York Times, July 20, 1943, p. 25.

⁵⁸"Britain to Ease Rule on Release of Funds", The New York Times, October 27, 1943, p. 34.

of lend-lease following the war.⁵⁹ Despite his accession to the Presidency in 1945, Truman's ideas were never put into practice.

Post WWII

Renewed Need for American Aid

The nature of international finance in the immediate postwar period was strongly influenced by the need to rebuild following the renewed orgy of destruction. While this meant massive flows of both financial and physical capital into the war ravaged areas, particularly Western Europe and Japan, there were some curious anomalies. For example, several of the European countries maintained wartime currency and trading controls during the postwar reconstruction phase. The purpose of these controls was to insure that a massive outflow of investment capital to more economically robust areas did not occur. From the point of view of ADR development, however, these controls had a pernicious effect.

Immediately upon the cessation of hostilities, the New York Stock Exchange launched a study examining the role of the Exchange in the postwar financial climate.⁶⁰ The argument was made that foreign securities "dealings mainly have been undertaken by well-informed

⁵⁹"Truman Group Asks Pay for Lease Aid", The New York Times, November 6, 1943, p. 8.

⁶⁰"Survey Under Way on Foreign Issues", The New York Times, September 17, 1945, p. 25.

specialists, who do not require the full disclosures made necessary by our laws for the protection of the little trader of small means."⁶¹ The survey argued that "there are at present only technical obstacles to the listing of many foreign shares", particularly "the requirements of the Stock Exchange and the requirements of the SEC".⁶² It is characteristic of American postwar confidence that the survey expected these "obstacles" to be overcome by having other nations modify their financial reporting requirements. While the survey concluded that the probable form of foreign listing would be American Depositary Receipts, it was noted that "there has been widespread criticism of the high cost of this method and much pressure for direct trading in the securities themselves."⁶³

America's effort to push other nations into adopting American financial disclosure practices proceeded apace. In October, Eduardo Suarez, Mexico's Secretary of Finance, stated that Mexican stock listing in the United States would soon become general practice. As a justification, Suarez cited access to the world's largest money market and a more ample market for securities.⁶⁴ In a November 1945 speech, Ganson Purcell, then chairman of the SEC, suggested that a single

⁶¹Ibid.

⁶²Ibid.

⁶³Ibid, p. 26.

⁶⁴"Mexico to List Stocks", The New York Times, October 12, 1945, p. 32.

registration procedure be adopted that would be the same for both foreign and U.S. firms.⁶⁵ Colonel John Haskell, vice-president of the New York Stock Exchange, toured Europe in the late fall of 1945, "to determine how the New York Stock Exchange can contribute to the reconstruction of Europe."⁶⁶ Haskell particularly focused on removing impediments to renewed listing of Dutch shares. He cited three key obstacles to "normal resumption of security trading : exchange restrictions, standards covering information to be disclosed and tax matters."⁶⁷

Meanwhile, as part of his efforts to smash the Japanese zaibatsu, General Douglas MacArthur required disclosure of all financial and manufacturing records relating to these Japanese industrial combines for the period 1935-1944. In particular, MacArthur initiated a search for the names of foreign stakeholders in the zaibatsu, apparently with the intention of disclosing these names publicly.⁶⁸

On December 18, 1945, La Consolidada, Mexico's largest steel firm, filed an SEC registration for its six percent convertible shares. Each share bore a 75 peso par value and could be exchanged for one common

⁶⁵"U.S. Credit Called Hope of the World", The New York Times, November 17, 1945, p. 24.

⁶⁶"Haskell in Amsterdam", The New York Times, December 2, 1945, Section 3, p. 1.

⁶⁷"U.S. Finance Lead Held Europe's Wish", The New York Times, February 5, 1946, p. 36.

⁶⁸"M'Arthur [sic] Demands Records of Trust", The New York Times, October 30, 1945, p. 2.

share; the proposed format for American listing was via American shares.⁶⁹ By March, the Dutch agreed to pay dividend arrears on American shares accumulated since August 1, 1944.⁷⁰ On June 21, 1946, Carel Overhoff, then chairman of the Amsterdam Stock Exchange Association, left for New York to confer with officials of the New York Stock Exchange concerning the readmission of Dutch securities to the Exchange and the listing of American securities in Amsterdam.⁷¹ Financial circles in Amsterdam were not overly eager for relisting, however. Some felt that "too large an American market might create undesirable price movements...in Amsterdam."⁷² Overhoff himself declared that relisting would not occur until the Netherlands were "over the bridge" in reconstruction.⁷³ In fact, by August, Dutch authorities would issue regulations requiring non-residents holding Netherlands securities to declare their holdings by October 1946, or risk forfeiture.⁷⁴ Finally, in October 1946, six Dutch companies, including

⁶⁹"Mexico's Largest Steel Concern to Offer Preferred Stock Here", The New York Times, December 19, 1945, p. 32.

⁷⁰"Holland to Pay Dividends", The New York Times, March 19, 1946, p. 36.

⁷¹"Dutch Seeking Relisting", The New York Times, June 21, 1944, p. 34.

⁷²"Amsterdam Sees Important Developments From Visit Here of Its Stock Exchange Head", The New York Times, June 24, 1946, p. 35.

⁷³"Change Won't List Dutch Shares Now", The New York Times, June 27, 1946, p. 31.

⁷⁴"Deadline on Dutch Securities", The New York Times, August 9, 1946, p. 27.

the international giants Unilever and Royal Dutch Petroleum, removed permission for foreign acquisition of their shares in Amsterdam.⁷⁵

Push Towards Equity Investment

In September 1946, Emil Schram, the president of the New York Stock Exchange, declared that the Exchange would "stimulate the flow of enterprise capital" to ravaged nations. He predicted "substantial listings of foreign securities on the Big Board."⁷⁶ By early October, financial circles were speaking of revamped regulations and "the need for reciprocity."⁷⁷ On October 3, 1946, the Board of Governors of the New York Stock Exchange approved a set of liberalized "provisional" rules to replace those in effect since 1927. The requirement that the currency of origin be on a gold basis was eliminated. Nevertheless, the Exchange "would not list foreign shares when foreign Government [sic] exchange restrictions prevent the free transferability into dollars of either dividends or the proceeds of sale."⁷⁸ ADRs were retained

as the most effective mechanical means of bridging the gap between the form and technical set-up of foreign share

⁷⁵"New Curb is Placed on Dutch Securities", The New York Times, October 12, 1946, p. 22.

⁷⁶Warren Williams, "Stock Exchange Preparing Way for Reciprocal Foreign Trade", The New York Times, September 22, 1946, Section 3, p. 1.

⁷⁷"Foreign Issues Studied", The New York Times, October 2, 1946, p. 43.

⁷⁸"Foreign Listings Made Easier Here", The New York Times, October 4, 1946, p. 27.

certificates and New York Stock Exchange protective standards, negotiability and transferability.⁷⁹

More importantly, the new rules were to be considered as 'a guide rather than a set of inflexible orders', and considerable leeway was given to case-by-case evaluation of the suitability of listing.⁵⁰ Financial disclosure requirements were still to be those applied to American firms, however, although the Exchange authorities pressed for SEC relaxation of detailed requirements.⁵¹

Colonel Haskell, echoing the wartime remarks of John Madden, felt the investment community should push international equity investment rather than bond flotation. In addition, he encouraged America to avoid the impression of "Uncle Shylock" by relaxing disclosure requirements and expanding international investment.⁵² Haskell envisaged a large increase in the volume of international equity trading over that of the pre-war years, even the fast-paced twenties. He further estimated that about 10 million American shares were being traded in the fall of 1946, excluding unregistered equity securities.⁵³

While the New York Stock Exchange was changing its listing requirements and pushing for regulatory reform, the Curb Exchange once

⁷⁹Ibid.

⁸⁰Ibid.

⁸¹Ibid.

⁸²Warren Williams, "Open Door Sought in Foreign Finance", The New York Times, October 6, 1946, Section 3, p. 3.

⁸³Ibid.

again "stole a march" on its rival. On October 31, 1946, the American shares of O'okiep Copper Company appeared on its quotation board. The South African mining concern became the first foreign firm admitted to unlisted trading privileges since the start of World War II.⁵⁴ Further, the Curb pushed itself as a "seasoning exchange" for foreign issues, anticipating expansion in issues from the Far East and Central and South America.⁵⁵ By May 1947, eighty-five foreign corporations had shares quoted on the Curb, whereas the New York Exchange traded only eighteen. These totals are somewhat misleading, however, because fifty-five of the Curb's foreign firms and ten of the "Big Board's" were Canadian securities, which were required to list as Americans. The same was true of the three Cuban listings on the New York Stock Exchange. The nation with the second most quotations was Great Britain, which had twenty-one firms shown on the Curb and two on the New York Stock Exchange.⁵⁶

Problems and Restrictions in International Investment

Unlike the situation following World War I, there was little optimism for a rapid listing of numerous issues. Because "of the extensive damage done to industrial plants", European investment was

⁵⁴"Foreign Listing on Curb First Since Start of War", The New York Times, October 31, 1946, p. 39.

⁵⁵"New Listings Rate Priority on the Curb", The New York Times, November 18, 1946, p. 40.

⁵⁶J.E. McMahon, "Foreign Shares Bid for Interest Here", The New York Times, May 18, 1947, p. 4.

deemed "unattractive under prevailing circumstances."⁸⁷ Many observers felt that investment would only increase "as the political and monetary affairs of the nations become stabilized."⁸⁸ In May 1947, the visiting president of the Paris Bourse, Marc Desache, said he was "not hopeful" for reciprocal listing of French and American stocks, due to unspecified "legislative and political problems."⁸⁹ In a similar fashion, The Dutch system of "blocked guilders" created confusion among American investors. Essentially, the Dutch created two separate currencies, one for internal use and the other for external dealings. American shareholders who received rights to buy additional shares (for example, in Royal Dutch Petroleum) were required to pay for these rights at the official rate of exchange. If they sold their rights, however, they were to receive "blocked guilders" worth 1/3 of the official rate of exchange. In addition, these blocked guilders could only be reinvested inside the Netherlands.⁹⁰ Discrepancies were created in the pricings of subscription rights, and each foreign trade center saw "an independent price development" in both rights and shares.⁹¹

⁸⁷Ibid., p. 1.

⁸⁸Ibid.

⁸⁹"Visitor from France", The New York Times, May 3, 1947, p. 21.

⁹⁰"Rights and Foreign Exchange", The New York Times, November 21, 1947, p. 43.

⁹¹"Officials Defend Royal Dutch Rule", The New York Times, December 1, 1947, p. 33.

This created a firestorm of protest, and by December 1947, the Dutch partially relented, allowing the issue of general licenses for the export and sale of Amsterdam issued rights to the financial centers of London, Paris, Brussels and Zurich. New York, however, was still blocked.⁹² By April 1949, the creative Dutch had adopted the system of "red-black" securities. Dutch securities abroad carried "a red certificate attesting to the propriety of their registration and export", while "securities domiciled domestically" were "certificated similarly in black."⁹³

The British, meanwhile, had also instituted protective restrictions. During the war American investors had been issued exemptions to the wartime "blocking" of new investment. One estimate is that, by 1943, American investment in British securities exceeded \$300 million, two-thirds of it in stocks.⁹⁴ In 1947, without warning, Britain's Labour government "halted issuance of licenses exempting new investment from blocking."⁹⁵ Like the Dutch, the British maintained two currencies, one official and the other "blocked". Because of the difference in exchange values, blocked pounds were worth half of the official rate. Foreign investors were required to purchase at the

⁹²"Ease Royal Dutch Terms", The New York Times, December 2, 1947, p. 45.

⁹³"Dutch Securities", The New York Times, April 1, 1949, p. 37.

⁹⁴Paul Heffernan, "U.S. Investments Trapped in Britain", The New York Times, September 4, 1949, Section 3, p. 1.

⁹⁵Ibid.

official rate, but once purchased securities were considered blocked. Thus, half the "value" of the shares was lost on purchase.⁹⁶

As part of Britain's postwar protectionism, regulations were issued by the Bank of England limiting the freedom of foreign investors to switch sterling-backed securities or to sell these securities for American dollars. In July 1948, these restrictions were extended to prohibit the export of bearer sterling certificates. Securities, both stocks and bonds, were divided into thirteen different groups, according to their companies' lines of business. While holdings outside of Britain could be freely exchanged, foreign investors who sold their securities in London were required to reinvest their proceeds within the same group or in "gilts" [government bonds].⁹⁷ Once investors purchased government bonds, their investment could no longer be "switched". (This is the reason some accounts refer to the "blocked securities sterling" currency as "switch sterling".)⁹⁸ While the stated motive for the regulations was to permit securities to trade abroad without affecting the foreign exchange position of the domestic market, many observers felt that the true motive was "to cut down the market traffic in security transactions at the free demand-and-supply rates".⁹⁹ It was

⁹⁶Ibid.

⁹⁷Paul Heffernan, "New British Curb Hits U.S. Investors", The New York Times, July 18, 1948, Section 3, p. 1.

⁹⁸"Switch Sterling 'Yields'", The New York Times, September 20, 1949, p. 43.

⁹⁹Heffernan, "New British Curb", p. 2.

felt that a free traffic would "tend to show up in public how much the pound sterling may be overvalued in the international market".¹⁰⁰

Restrictions were relaxed somewhat in February 1949. Eleven of the thirteen groups were consolidated into a single "industrial" group, and the remaining two groups were also combined. This gave foreign investors somewhat more leeway.¹⁰¹ A further relaxation occurred in September 1949, when American holders of sterling securities were allowed to sell them to investors of "soft-currency" countries with no gold standard backing their currencies. The trade was only one-way, however, as "soft-currency" investors were not permitted to sell their British securities to Americans. The British allowed this practice because once the Americans had sold, "payment of interest and dividends need be made in soft currencies rather than dollars," thus maintaining the pound sterling against the dollar.¹⁰²

A new player on the international financial scene appeared with the rebirth of the nation of Israel in 1948. The first Israeli use of ADRs came on October 4, 1949, when American certificates for 300,000

¹⁰⁰Ibid.

¹⁰¹"Securities Sterling", The New York Times, February 8, 1949, p. 37.

¹⁰²"Blocked Sterling", The New York Times, September 1, 1949, p. 31.

common shares of Palestine Cotton Mills, Ltd., of Tel Aviv were issued by First Guardian Securities.¹⁰³

1950s

Easing of Postwar Restrictions

The year 1950 marked a turning point, as the barriers to securities transactions with Europe began to ease. The Dutch announced that on January 2, 1950, they would permit "switch deals" to occur in New York. These deals would consist of one party selling newly issued dollar certificates based on the cancellation of existing Dutch certificates sold in Amsterdam. The second party would then trade these new issues for existing original dollar securities purchased in New York.¹⁰⁴ Other countries also eased restrictions, albeit slowly. By April 1950, Belgium had terminated blocking. The Dutch were continuing their efforts to repatriate ownership, while the British were refusing to increase securities trading. France and Italy were allowing proceeds

¹⁰³"First Offer of Israeli Issue", The New York Times, October 4, 1949, p. 41.

¹⁰⁴"Amsterdam Tells Method for Resumption of 2-Way Trade in Securities with New York", The New York Times, December 26, 1949, p. 36; "Dutch Market Widening", The New York Times, January 2, 1950, p. 30.

from the sale of foreign owned securities to be used either for reinvestment or travel expenses within their boundaries.¹⁰⁵

The British finally relaxed some of their restrictions in September 1950, five years after the end of World War II. Sterling securities and "blocked sterling securities owned by non-residents" were allowed to be freely transferred anywhere within the "sterling area" (essentially Great Britain and the British Empire). More importantly, investors were allowed to switch their investments freely between any securities within the sterling area. This effectively freed a great deal of frozen American investment capital.¹⁰⁶

Also in September 1950, the ever-innovative Dutch introduced "mantles". A "mantle" consists of "an actual stock certificate without dividend or coupon sheets".¹⁰⁷ The Netherlands Bank decided to "allow holders of securities to send abroad a main part of their holdings as a precautionary measure" as Cold War tensions mounted.¹⁰⁸ To prevent capital export, mantles could not be "deposited in the country where they [were] payable." In addition deposits had to be in the name of a

¹⁰⁵Paul Heffernan, "Outlook Improves for U.S. Holders of Some West European Securities", The New York Times, April 16, 1950, Section 3, p. 1.

¹⁰⁶"Britain Moves to Ease Curbs on Trading in Sterling Securities", The New York Times, September 2, 1950, p. 21.

¹⁰⁷"New Dutch Action Aids Stock Prices", The New York Times, September 18, 1950, p. 31.

¹⁰⁸Ibid.

Dutch bank or stock broker and transfers could only be made to the Netherlands West Indies, the United States, Britain, Canada or South Africa.¹⁰⁹

Emergence of Japanese ADRs

The first real burst of renewed ADR activity came not from Europe but from Asia. The American occupation government, headed by General MacArthur, had been determined to graft America's political, legal and even cultural ways onto those of ancient Japan. As part of his effort to destroy the power of the zaibatsu, MacArthur had pushed the concept of widespread security ownership. Securities regulations were put into place that were virtual carbon copies of those in force in America. In addition, the political ancestors of today's leading Japan-bashers were in the late 1940s vigorously promoting American investment in Japan as a "bulwark against Communism". With the infusion of American capital, the industries of Japan were rapidly rebuilt.

Japanese industrialization accelerated with the advent of the Korean War in June 1950. The Allied armies fighting in Korea could be more easily supplied from Japan than from the distant United States. Thus, massive American expenditures were made in equipping Japanese industry to meet the demands of war. Between June 1950 and April 1952, foreign investors, mostly American, had purchased over 67 million shares

¹⁰⁹Ibid.

in more than 160 Japanese firms.¹¹⁰ Pressure began to build for American trading in the shares of some of these companies, particularly after the return of Japanese sovereignty in April 1952.

In March 1952, discussions had begun between Japanese authorities and Thomas Boylan, a member of the New York Curb Exchange, concerning the possible listing of Japanese shares on the Curb.¹¹¹ Boylan had worked in the occupation government, as an officer in the Economic and Scientific Section. After first liquidating several of the zaibatsu holdings, Boylan had played a significant role in the reopening of Japan's securities exchanges in May 1949. He had been instrumental in changing the trading format from the earlier British-based model in effect before occupation, to one modelled closely on the New York Curb Exchange. Finally, he had helped to establish the Japanese Securities and Exchange Commission, a carbon copy of the American SEC.¹¹² Boylan journeyed to Japan in May to convince Japanese officials that a system of American depository receipts would shift additional American capital to Japan. Ironically, the major stumbling block was the Japanese law, partially written by Boylan himself, which stated that warrants and rights for Japanese stocks were not transferable.¹¹³

¹¹⁰Burton Crane, "Foreign Investments in Japan Seen Rising", The New York Times, April 27, 1952, Section 3, p. 1.

¹¹¹Burton Crane, "Curb Aims to List Japanese Stocks", The New York Times, March 16, 1952, Section 3, p. 1.

¹¹²Ibid.

¹¹³Ibid., Section 3, p. 3.

After spending four months in Japan, Boylan returned to New York in September 1952. He announced that five major Japanese corporations would soon register with the SEC and begin trading as ADRs on the Curb Exchange. These firms were Canon Camera, Toyo Rayon, Kobe Steel, Kawasaki Iron and Kwansai Electric Distribution.¹¹⁴ Boylan had negotiated two major changes in Japanese law. The first allowed for dividends paid on shares having ADRs to be payable in dollars. The second change allowed for full repatriation of dollar investments after seven years. Twenty percent of any such dollar investment could be repatriated after three years, with an additional twenty percent released each year thereafter. In addition, the Japanese promised to make warrants and stock rights transferable. The effect of these changes was to increase the attractiveness of Japanese investment to the American financial community, particularly because part of the agreement Boylan had negotiated was that each of the firms was to "have their books audited by American certified public accountants."¹¹⁵

Renewed European Listings

While the Japanese were initiating capital ties with America, Europe began to renew its links. In June 1953, the Dutch firm Algemene Kunstzijde Unie (United Rayon Manufacturing), became the first European

¹¹⁴"Japanese Issues to be Traded Here", The New York Times, September 10, 1952, p. 41.

¹¹⁵Ibid.

firm since before World War II to have new American depositary receipts issued.¹¹⁶ The New York Stock Exchange considered lifting the 1926 ban against listing corporate stocks not privileged with full voting rights. This restriction had limited the listing of Dutch firms because, since 1929, the Dutch had limited the voting rights of any one stockholder to twelve votes (six in person and six by proxy), no matter how many shares were held by the stockholder. ("This reflects the Dutch concept of 'democracy' in corporation control and was instituted to make it difficult for a small group of speculative operators to seize control."¹¹⁷) An additional Dutch innovation, which met with the disapproval of American financiers, was that voting for directors was limited to a special class of stock held in trusteeship by management. A group of 20% of owners could, however, "require management to give to the courts an account of their stewardship".¹¹⁸

By November 1953, Royal Dutch Petroleum, whose shares were still traded over-the-counter in the United States, joined A.K.U. in seeking a New York Stock Exchange listing. To obtain a listing, A.K.U. initiated "major policy changes related to accounting practice and to public

¹¹⁶"Stock Pushed Here by Dutch Concern", The New York Times, June 10, 1953, p. 43.

¹¹⁷Paul Heffernan, "Big Board is Considering Ending Ban on Listing Non-Voting Stock", The New York Times, July 7, 1953, p. 38.

¹¹⁸Ibid.

reports of operations."¹¹⁹ Quarterly reports were issued for the first time in the corporation's history. In these reports, "accounting and reporting procedures...[were] modified to jibe with the accepted practices in the United States."¹²⁰ Full explanations were provided of any significant discrepancies caused by differences in Dutch and American accounting methods. Despite this effort, both A.K.U. and Royal Dutch were denied listing on the New York Stock Exchange, which "decided to make no exception" to its rule that "all common stock must have full voting privileges."¹²¹

Regulatory Relaxation and Increased ADR Activity

While the New York Stock Exchange was refusing to change, the election of Dwight Eisenhower as President in 1952 was to produce a transformation in the American regulatory environment. With the advent of the Eisenhower Administration, the SEC began to ease many of the restrictions that had been imposed in the 1930s. In addition, the Eisenhower-appointed Randall Commission proposed that American corporations with 50 percent or more of their capital invested abroad have their income taxed at 37 percent rather than the domestic corporate

¹¹⁹Paul Heffernan, "Dutch Stock Sale Slated this Week", The New York Times, November 29, 1953, Section 3, p. 8.

¹²⁰Ibid.

¹²¹"Stock Listing Denied", The New York Times, December 21, 1953, p. 42.

rate of 51 percent.¹²² This proposal was designed to permit investment companies to establish international investment trusts. As the door to American capital was swung open, there would be a boom in ADR issuance.

Irving Trust began an active international campaign in December 1954. The first noises were heard from South Africa, where the chairman of Anglo-Transvaal urged the American listing of numerous gold and uranium mining companies.¹²³ By April, the Dutch had reopened their market to two-way traffic, finally allowing Dutch residents to purchase foreign securities. This permitted Dutch arbitrage houses to deal directly in the American shares of Dutch firms and so create a more active and efficient market.¹²⁴ In May, Amsterdam Exchange officials backed the Irving Trust plan to create additional ADRs.¹²⁵ In Britain, additional depositary receipts were pushed in anticipation of a Conservative Party victory in the upcoming elections.¹²⁶ On May 25, Irving Trust announced that it would issue ADRs for 34 firms listed on

¹²²Charles Egan, "Tax Shifts Sought to Help Investors", The New York Times, February 6, 1955, p. 51.

¹²³"Listing is Sought on South African Stocks", The New York Times, December 18, 1954, p. 27.

¹²⁴"Dutch are Free to Buy Foreign Securities", The New York Times, April 18, 1955, p. 33.

¹²⁵"Amsterdam Welcomes Irving Trust Plan", The New York Times, May 30, 1955, p. 17.

¹²⁶Lewis Nettleton, "Stocks in London Face Labor Test", The New York Times, May 30, 1955, p. 17.

the London Stock Exchange, most of them British, but including some South African and Dutch firms.¹²⁷

Meanwhile, on May 2, 1955, Simca had become the first French company to list its shares on an American exchange. Its shares, appearing on the American Stock Exchange, replaced those of Ford of France, which had been taken over by Simca in December 1954.¹²⁸ (The New York Curb Exchange had changed its name to the American Stock Exchange on January 5, 1953.¹²⁹) This is the first instance that I was able to document where ADRs were issued as part of a transnational merger agreement.¹³⁰

Royal Dutch Petroleum shares, after an absence of over seventeen years, were readmitted to New York Stock Exchange trading on July 20, 1955. The Dutch firm had "made changes in its articles of association to comply not only with Securities and Exchange Commission rules, but with the strict requirements of the Stock Exchange regarding reports and voting rights for stock."¹³¹ At the time of readmission, Jan Loudon, who

¹²⁷Robert Bedingfield, "Irving Trust Restores Old Form For Trading in Foreign Stocks", The New York Times, May 26, 1955, p. 45.

¹²⁸Clare M. Reckert, "Trading in SIMCA Will Begin Today", The New York Times, May 2, 1955, p. 29.

¹²⁹"'Curb' Disappears as a Market Here", The New York Times, January 6, 1953, p. 33.

¹³⁰"Trading Begins in Simca Stock", The New York Times, May 3, 1955, p. 43.

¹³¹"Royal Dutch Back on Exchange Here", The New York Times, July 21, 1955, p. 33.

had become Royal Dutch's general manager, stated that about 15 percent of the firm's shares were already in American hands.¹³²

The increased ADR activity led the SEC to reevaluate the situation, particularly when the Irving Trust Company had begun to issue large numbers of ADRs based on London Stock Exchange-listed firms.¹³³ In August 1955, the SEC announced that it was "drafting registration and prospectus forms to provide for the first time a means of registering new offerings of depositary receipts under the 1933 Securities Act".¹³⁴ This would permit more foreign firms to use the ADR mechanism to trade in the United States. The SEC also announced that Irving Trust would be required to register the ADRs it had issued on London Stock Exchange-listed shares.¹³⁵ The proposed "registration form would embody a prospectus describing the security represented by the depositary receipt."¹³⁶ These SEC actions were "expected to awaken interest" in ADRs on the part of other American banks.¹³⁷

¹³²Ibid.

¹³³"Depositary Receipts Under S.E.C. Study", The New York Times, August 24, 1955, p. 42.

¹³⁴Leif Olsen, "S.E.C. Drafts Visa for Foreign Stock", The New York Times, August 28, 1955, Section 3, p. 1.

¹³⁵Ibid.

¹³⁶"Stricter Rules Proposed by S.E.C.", The New York Times, August 31, 1955, p.29.

¹³⁷Olsen, "S.E.C. Drafts", p. 1.

On November 18, 1955, the SEC announced "the adoption of a new simplified form for registration of 'American depository receipts' covering foreign securities".¹³⁸ While ruling that depository receipts must be registered, the SEC provided for a much simpler registration than that required for new American issues. Much less information was required, and the new form proposed that this information be disclosed on the depository receipt itself. Thus, the actual receipt would also be a prospectus for the underlying foreign share. (This simplified registration procedure was referred to as an "S-12 registration".)¹³⁹

By November 25, registration statements covering American depository receipts for securities of eight foreign companies had been filed with the SEC, and with Guaranty Trust Company named as the depository. These eight firms were: Anglo-American Corporation, Borax Consolidated, Bowater Paper, Burmah Oil, De Beers Consolidated Mines, Great Universal Stores, Selection Trust, and the Union Minière du Haut-Katanga. On November 28, Irving Trust announced that it had filed registration statements with the SEC for the 34 London Stock Exchange-listed shares for which it had begun issuing ADRs in May 1955. (The thirty-four shares included: British Motor, Blyvooruitzicht Gold Mining, Boots Pure Drug, British South Africa, British Aluminum, Burmah Oil, Central Mining and Investment, J.P. Coats, Canadian Pacific Railway

¹³⁸"S.E.C. Has New Form for Foreign Listings", The New York Times, November 19, 1955, p. 25.

¹³⁹Ibid.

{preferred}, Central Mining and Investment, Consolidated Gold Fields, Consolidated Tin Smelters, Crown Mines, Daggafontein Mines, De Beers Consolidated Mines, Decca Record, Gaumont-British Picture [both "A" and ordinary], General Mining and Finance, Johannesburg Consolidated Investment, London Tin, Middle Witwatersrand, Nchanga Consolidated Copper Mines, Orange Free State Investment Trust, Rand Mines, Rhodesia Broken Hill Development, Rhokana, Sub Nigel, Tanganyika Concessions, Tate & Lyle, Ultramar, Unilever Limited, Unilever N.V., Virginia Orange Free State Gold Mining, and Welkom Gold Mining.)¹⁴⁰

Much as had been the case in the 1920s, new players entered the ADR arena. On December 28, 1955, The Belgian-American Bank and Trust Company began issuing ADRs representing the Union Minière du Haut Katanga, then the third largest copper producer in the world.¹⁴¹ In February 1956, International Investors, Inc., was organized as an investment fund specializing in foreign "blue chip" shares. This fund greatly resembled the investment trusts of the 1920s.¹⁴² In August, J.P. Morgan announced that it would issue ADRs representing the Italian chemical and mining giant Montecatini.¹⁴³ This issue was unusual in

¹⁴⁰"Filing Effective on Stock Receipts", The New York Times, November 29, 1955, p. 45.

¹⁴¹"Share Receipts Issued", The New York Times, December 28, 1955, p. 36.

¹⁴²"Fund Will Offer Shares in Plan to Invest in Foreign 'Blue Chips'", The New York Times, February 10, 1956, p. 29.

¹⁴³"Two New York Banks Set Up Foreign Stock Trading System", The New York Times, August 1, 1956, p. 31.

that it was the first instance that I encountered where the company represented paid all the fees for the issue, transfer or cancellation of its ADRs. Until that time such fees had traditionally been paid by the stockholders, as is the case with the unsponsored ADRs of today.¹⁴⁴

Also in August 1956, Guaranty Trust announced a direct sub-depository relationship with a Johannesburg bank (Barclays Bank Dominion Colonial and Overseas). South African shares for which ADRs existed could now be purchased and deposited in Johannesburg rather than being shipped to London before an ADR could be issued. Not only did this speed South African ADR transactions but it also created a three-way arbitrage market in several South African and Rhodesian securities between New York, London and Johannesburg.¹⁴⁵

By August 1956, the ADR landscape was vastly altered. Whereas a year before Guaranty Trust had been virtually the only ADR issuer, there were now four major New York-based depository banks : Irving Trust, J.P. Morgan, Guaranty Trust, and the Chemical Corn Exchange Bank. The number of foreign companies for which ADRs existed had soared from about thirty in 1955 to nearly eighty in the summer of 1956.¹⁴⁶ Observers credited

¹⁴⁴Ibid.

¹⁴⁵Ibid., p. 34.

¹⁴⁶Leif Olsen, "More Banks Help Investing Abroad", The New York Times, August 5, 1956, Section 3, p. 1.

the SEC's regulatory reform as the catalyst initiating the boom, and noted that mutual funds were becoming important buyers.¹⁴⁷

On October 17, 1956, Australian exchange control authorities approved Irving Trust Company's proposed issuance of ADRs for Stanhill Holdings, a large real estate and textile holding company. This became the first American depositary plan to be developed for Australian securities.¹⁴⁸ Also in October, Montecatini became the first Italian company to seek an ADR listing on the New York Stock Exchange.¹⁴⁹ On October 30, Chemical Bank announced three new ADRs on the same day : August Thyssen-Huette, the German steel company; Stewarts and Lloyds, a British steel concern; and Swears and Well, the British chain store.¹⁵⁰

Hints of Change

The first hint that the boom might not continue came in December 1956. The SEC indicated that it might not permit the New York Stock Exchange to list Montecatini ADRs as planned on January 17, 1957. The sticking point concerned the auditing issue of physical inspection of inventory holdings. While such an inspection was required "for an

¹⁴⁷Ibid.

¹⁴⁸"Down Under Shares", The New York Times, October 18, 1956, p. 48.

¹⁴⁹Herbert Koshetz, "Montecatini to List Depositary Receipts Here", The New York Times, October 29, 1956, p. 40.

¹⁵⁰"Depositary Receipts Issued", The New York Times, October 31, 1956, p. 49.

accountant's certificate" in the United States, it was not required in Italian audits. New York Stock Exchange officials advocated exempting foreign firms that had assets in excess of \$100 million and had been in existence for 25 years or more from mandatory physical inventory inspections. SEC officials were not sure they wanted to allow such exemptions for foreign corporations, however.¹⁵¹ In the end, a temporary compromise was reached and the Montecatini shares were listed.

The tide continued to run in favor of ADR expansion. On May 1, 1957, KLM Royal Dutch Airlines announced that blocks of its common stock would go on sale in New York. The old New York Share method was used rather than ADRs. Of even more interest, however, was the admission that the purpose of the offering was largely public relations.¹⁵² During and after World War II, KLM had become essentially a government-owned enterprise. While the 1957 public offering in New York and a simultaneous offering in Amsterdam represented a partial divestment, over seventy percent of the shares remained in government hands. This is the earliest example I found of the intentional partial divestment on an international scale of a government-owned enterprise. According to one observer, "the Dutch [were] anxious to interest investors in the airline on a world-wide basis."¹⁵³

¹⁵¹"Foreign Issue in Doubt", The New York Times, December 27, 1956, p. 37.

¹⁵²"Offering Slated of Stock of KLM", The New York Times, May 1, 1959, p. 51.

¹⁵³Ibid.

A second hint of change came in January 1958, when the SEC again questioned the idea of differential disclosure for foreign issuers. This time the focus was on executive compensation. For some time, routine exemptions had been granted to European firms seeking ADR issuance. Unlike their American counterparts, these firms were not required to disclose the salaries paid to their top executives. In a speech on January 8, the Commissioner of the SEC stated that this ran "against the fundamental concepts of Security Act disclosure", and he staunchly opposed any further lessening of disclosure requirements for foreigners.¹⁵⁴

Paul Heffernan cited two major forces for the bull market of Americans buying European shares during the late 1950s. In his opinion the first of these was "speculation springing from the idea that stock values abroad are trailing the price heights of the New York market."¹⁵⁵ The second force was the widespread "belief that sees Europe's new Common Market as the beginning of the next big era of economic growth on capitalist lines."¹⁵⁶ The possibility of a boom in Europe and the dropping of most foreign exchange controls had pushed the market to a "fever pitch".¹⁵⁷ Official New York Stock Exchange figures show that

¹⁵⁴"Commissioner of S.E.C. Assails Foreign Companies' Exemptions", The New York Times, January 9, 1958, p. 49.

¹⁵⁵Paul Heffernan, "Foreign Stock Fever", The New York Times, February 3, 1959, p. 41.

¹⁵⁶Ibid.

¹⁵⁷Ibid.

"some 30,500,000 shares of the twenty-six listed foreign concerns were traded in 1958."¹⁵⁸ Overall, 1958 was the most active year for stock trading since 1930.

In February 1959, investor demand for European securities led to the creation of Eurofund, Inc.. This closed-end investment company was created to invest solely in equity securities of the then six Common Market countries.¹⁵⁹ By May, proposed legislation had been placed before Congress to create "foreign business corporations". These proposed entities "would pay no U.S. taxes until the income earned abroad was actually distributed or otherwise divested from foreign uses."¹⁶⁰

A snapshot of the ADR situation in August 1959 showed three major depositaries. Morgan Guaranty Trust Company, created by the merger of J.P. Morgan and Company and The Guaranty Trust Company, led the depositaries with sixty-seven registered ADRs. Irving Trust had just registered its fifty-first issue, the Australian firm Santos. Chemical Corn Exchange Bank brought up the rear with twenty-seven, following its July issue of Dresdner Bank ADRs. The majority of these ADRs were still traded over-the-counter because of the foreign firms' unwillingness to

¹⁵⁸"Income up 30% for Big Board", The New York Times, March 4, 1959, p. 44.

¹⁵⁹"New Investment Company", The New York Times, February 27, 1959, p. 36.

¹⁶⁰"Markets Abroad Called Risky", The New York Times, May 6, 1959, p. 58.

provide the detailed financial disclosures required for exchange listing. The last New York Stock Exchange listing had been Montecatini in January 1957. The oldest continual listing was for Roan Antelope Copper Mines, whose ADRs had been listed on the Big Board in 1931. While Exchange officials continued to expect expansion, some securities dealers were not so certain. Carl Marks, one of the premier foreign securities dealers, felt that disclosure was not the only hurdle to increased listings. He felt that many foreign companies were deterred by the "high cost of listing" and the expense of paying transfer agents. In addition, he felt that listing occasionally had the countereffect of "dulling" trading interest in foreign securities, "because nobody pushed the stock".¹⁶¹

An additional source of confusion was created because most of the ADRs extant in 1959 were in the form of what today would be called "unsponsored" ADRs. Because no contractual linkage existed between the foreign company and the American depository, several depositories could issue receipts for the same company. This issue came to a head in February 1960 because Irving Trust and Morgan Guaranty both chose to issue ADRs for the South African firm Welkom Gold Mining. Unfortunately for the investing public, the Irving Trust-issued ADR represented two underlying shares; the one issued by Morgan Guaranty represented but a single share. Because of a tide of complaints concerning broker price

¹⁶¹Elizabeth Fowler, "More Buy Shares They Never See", The New York Times, August 22, 1959, pp. 21, 27.

quotations, the Uniform Practices Committee of the National Association of Securities Dealers officially announced that the two ADRs were to be classified as "different" securities, with separate quotations given for each.¹⁶²

The ADR boom continued into the early 1960s. By June 1960, there were at least 125 companies with their shares represented by ADRs.¹⁶³ (Elizabeth Fowler, who put the December 1958 total at 120 ADRs representing 110 different companies, put the August 1960 total at over 160 ADRs representing "about 130 companies".¹⁶⁴) Morgan Guaranty led the depository charge. After adding a single-year record 15 new listings in 1959, Morgan had already added 13 more in the first seven months of 1960, for a total of 84 house issues.¹⁶⁵ While exchange listings were still rare, the depository banks were not hesitant to issue ADRs, even when they ended up "on the shelf" due to a lack of investor interest. Fowler attributed this willingness to the low cost of ADR issuance:

The minimum registration fee runs to \$25. Printing an initial batch of certificates (1,000 certificates for 100 shares and 500 for odd lots) runs about \$500. Added to this

¹⁶²"Unwelcome Confusion", The New York Times, February 9, 1960, p. 40.

¹⁶³Edward Marcus, "The American Depository Receipts for Foreign Equity", The Commercial and Financial Chronicle, June 2, 1960, p. 2374.

¹⁶⁴Elizabeth Fowler, "Bank Makes First in Stock Device", The New York Times, August 28, 1960, Section 3, p. 5.

¹⁶⁵Ibid.

is about \$150 for counsel fees and \$500 to set up the books.¹⁶⁶

Eased Japanese Restrictions

In January 1961, the Japanese government eased its restrictions on foreign exchange, allowing investors to shift dollars into and out of Japan much more easily. More importantly, the requirement that foreigners could only buy and sell Japanese securities through a Tokyo broker was removed. These two restrictions had been the main impediment to expansion of the number of Japanese ADRs.¹⁶⁷ On January 18, 1961 the Japanese Finance Ministry permitted sixteen additional ADRs to be issued, allocating major companies to each of the four main American depositories. Morgan Guaranty was assigned five : Sony, Fuji Iron and Steel, Yawata Iron and Steel, Toshiba and Hitachi. Irving Trust was also permitted to issue ADRs for Hitachi and Fuji Iron and Steel, as well as Mitsubishi Chemical Industries, Mitsui Shipping, and Nippon Electric. Chemical Bank was assigned Toshiba, Yawata Iron and Steel, Mitsubishi Heavy Industries, Maruzen Oil and Mitsubishi Trading. Finally, First National City Bank of New York was allocated Mitsui

¹⁶⁶Ibid.

¹⁶⁷Anna Merjos, "More ADRs : Buying Foreign Securities in the U.S. Gets Easier All the Time", Barron's, January 23, 1961, p. 9.

Bussan, Japan Steel Tube, Kawasaki Steel, Kansai Electric Power and Tokyo Marine and Fire Insurance.¹⁶⁸

With the addition of these Japanese shares, more than 150 firms from seventeen countries were represented in the ADR market. The British were the largest contingent with 78, followed by South Africa with 20 and West Germany with 19. The remaining countries having firms represented by ADRs were Japan, Australia, Brazil, the Netherlands, Italy, Northern Rhodesia, Southern Rhodesia, France, Mexico, Israel, Venezuela, Bolivia, Colombia, and Canada.¹⁶⁹ (The Canadian ADR was based on a London Stock Exchange listing, and so was not required to be registered by the SEC. The rule requiring Canadian firms to register as though they were American was still in force.)

A further Japanese relaxation occurred in April. The Finance Ministry announced that after May 1, 1961, proceeds from the sale of Japanese stock could be completely withdrawn from Japan after a two-year holding period, rather than the lengthier apportioned withdrawal required previously.¹⁷⁰ Shortly after this change, on June 7, 1961, the first public offering of a newly permitted Japanese ADR was made in the United States. Two hundred thousand Sony ADRs, each representing ten

¹⁶⁸"Depository Moves Approved in Japan", The New York Times, January 19, 1961, pp. 39, 43; Merjos, "More ADRs", p. 21.

¹⁶⁹Merjos, "More ADRs", p. 21.

¹⁷⁰"Restrictions Eased", The New York Times, April 19, 1961, p. 52.

ordinary shares were offered by an underwriting group headed by Nomura Securities and Smith, Barney & Company.¹⁷¹

Lack of Big Board Listings

Listings of ADRs on the New York Stock Exchange remained elusive. In fact, on December 12, 1961, when Unilever became the first foreign firm listing on the Big Board since American-South African Investment had listed in December 1958, a curious incident occurred. As required, Unilever terminated its existing unsponsored ADRs, which had been traded over-the-counter. Unilever did not substitute a sponsored ADR arrangement for New York Stock Exchange Listing, however. Instead, New York Shares were once again called upon for the listing of the shares of Unilever N.V., the Dutch side of the giant holding company. Simultaneously, "United States Shares" were created for the British side of the holding company, Unilever Ltd.. This has never been publicly explained, and still creates confusion in the financial press, which invariably includes these two listings as ADRs.¹⁷²

The New York Stock Exchange kept waiting for the listings to come, and its officials kept emphasizing its "expanded international role". In his 1961 annual report, Keith Funston, the Exchange's president, declared that

¹⁷¹"Shares of Sony Corp. of Tokyo are Offered Here", The New York Times, June 7, 1961, p. 55.

¹⁷²William Freeman, "Trading in Unilever Opens on the Big Board", The New York Times, December 12, 1961, p. 65.

once free convertibility of currency and capital is generally established and such principles as full disclosure adopted, a much greater increase in the interchange of securities between the people of the Free World should follow.¹⁷³

The insistence that the rest of the world should adopt American standards of disclosure was clearly the sticking point. Yet, New York Stock Exchange officials saw nothing awkward in such insistence.

Despite the listing barriers, ADR trading continued to increase. Andries Woudhuysen, a partner in the brokerage firm of Burnham & Company, estimated foreign share trading during the last three months of 1961 at an average of \$5 million a day, or \$1.25 billion for the quarter.¹⁷⁴ The depositaries, although legally permitted to issue unsponsored ADRs without the foreign company's prior approval, continued their "gentlemen's agreement" of seeking such approval. For this reason, ADRs were not issued in Swedish shares despite significant American demand.¹⁷⁵

Conflicting Currents

In July 1962, two conflicting events struck the ADR market. On July 16, the SEC announced that foreign firms registering their securities in the United States would be required to name a broker-

¹⁷³"Big Board Sights New Global Role", The New York Times, February 20, 1962, p. 45.

¹⁷⁴Elizabeth Fowler, "Foreign Shares Get a Play Here", The New York Times, March 25, 1962, Section 3, p. 7.

¹⁷⁵Ibid.

dealer as an authorized representative "against whom investors may have legal recourse in appropriate cases."¹⁷⁶ The idea that dealers would be legally responsible in cases of foreign fraud sent a chill through the ADR ranks - a chill that was offset by events in Japan. On July 24, the Japanese Finance Ministry reduced the waiting time for repatriation of investment from two years to six months. The stated rationale was a desire to increase investment inflow, particularly from the United States.¹⁷⁷

On September 24, 1962, Frederic Donner, the chairman of General Motors, addressed the closing session of the Eight International Congress of Accountants, meeting at the Waldorf Astoria Hotel in New York. The theme of his speech was that the time had come "when thought should be given to making the ownership of these international corporations also truly international."¹⁷⁸ His rationale was that "broadening of share ownership in world-wide corporations would help the economic development of the world's free nations."¹⁷⁹ Nonetheless, he saw significant barriers to the internationalization of securities. Chief among these were tax barriers, ownership limitations, the

¹⁷⁶"S.E.C. Planning to Tighten Foreign Stock Registration", The New York Times, July 17, 1962, p. 35.

¹⁷⁷"Japan Shortens Wait in Money Repatriation", The New York Times, July 25, 1962, p. 45.

¹⁷⁸Elizabeth Fowler, "G.M. Chief's Dream : Holders in All Lands", The New York Times, September 28, 1962, p. 45.

¹⁷⁹Ibid.

"unpatriotic connotations" of foreign share ownership, and "lack of information about securities".¹⁸⁰ As a partial solution to these problems, Donner proposed that annual reports be prepared in "a number of languages" and that stock certificates be printed in "foreign languages of countries where international companies operate." In addition, he suggested "the possibilities of placing stock in the hands of local employees through savings or other benefit plans." He further proposed that dividends be paid directly to local shareholders in worldwide corporations out of the operating funds of the local subsidiary, thus avoiding the problem of transborder currency transfer. He concluded his speech by noting that "a new kind of capitalism" was being created by "the emergence of the modern industrial corporation as an institution that is transcending national boundaries." In Donner's view these international corporations were "international resources", and "their benefits should be regarded as flowing" to workers, customers and owners "without regard to any individual nationality."¹⁸¹

In October, Arnhold and S. Bleichroder surveyed the largest American investment trusts concerning their foreign investments. The most widely held foreign securities were in six European firms. These six were Royal Dutch Petroleum, The Unilever "twins", Philips Gloeilampen, Bayer, Siemens and Halske, and Gevaert Photo-Produkten of Belgium. While the survey results were publicly disclosed, no

¹⁸⁰Ibid.

¹⁸¹Ibid., p. 53.

explanations were given as to why these particular securities were the favored investment holdings.¹⁸² Other observers explained that institutional investors, particularly mutual funds, had "discovered" European stocks during the period 1958 to 1961. These mutual funds were interested in buying what brokers referred to as "the true internationals" - namely "big European companies, usually in such basic industries as chemicals and steel", with worldwide operations and holdings.¹⁸³ Other institutional investors such as insurance and pension funds were much slower to purchase European securities, preferring smaller holdings in "quality stocks". These investors saw the major drawbacks to European securities as "the lack of hard information about European corporations and the absence of true liquidity in the stock markets." In particular, the "thinness" of European markets made the block trading favored by American institutions problematical; the lack of American-style disclosure made them wary.¹⁸⁴

On November 4, 1962, investors again heard from the SEC. At the time, one of the reporting exemptions enjoyed by the approximately 50 listed foreign firms was that they were not required to report proxy solicitations and stock transactions by corporate officials. The SEC proposed a rule change that would eliminate this exemption for any

¹⁸²"Six Foreign Favorites", The New York Times, October 17, 1962, p. 54.

¹⁸³Vartanig Vartan, "A Slap Loses its Sting", The New York Times, May 24, 1963, pp. 39, 43.

¹⁸⁴Ibid, p. 43.

foreign firm which had its "principal executive offices" in the United States, had the majority of its assets here, had a majority of American directors, or that was "more than 50 percent owned by United States investors".¹⁸⁵ It was expected that about a dozen companies would be affected by the rule change. More importantly, the shift indicated that the SEC was not going to further relax foreign disclosure requirements.

By early 1963, the Morgan Guaranty "stable" of ADRs had neared the century mark. Eleven issues had been added to its list in 1961, and a further twelve in 1962. The economic growth rate in the Common Market countries and the high price-to-earnings ratios of American firms were seen as further stimuli to American interest in European security investment.¹⁸⁶ Morgan Guaranty also stimulated European interest in depositary receipts, by initiating EDRs (European Depositary Receipts) in 1963. The first two EDRs were for shares of Sony and Honda Motors, and their creation increased the arbitrage possibilities available to investors in these firms.¹⁸⁷ This became particularly attractive when the Japanese removed all capital repatriation controls on April 1, 1963. In May, a single month's record of \$14,664,000 dollars of foreign investment in Japan was achieved.¹⁸⁸ ADR trading was soaring.

¹⁸⁵"S.E.C. Would Curb Foreign Exemptions", The New York Times, November 4, 1962, Section 3, p. 8.

¹⁸⁶Elizabeth Fowler, "Foreign Stocks a Greater Lure", The New York Times, April 19, 1963, p. 47.

¹⁸⁷Ibid.

¹⁸⁸"Japanese Market", The New York Times, June 28, 1963, p. 36.

The Interest Equalization Tax

Advent and Rationale

The boom in American investment abroad was not cherished in all quarters, particularly because the American economy was in recession in the early 1960s. This led politicians to search for methods of pumping up American capital. President John F. Kennedy decided that Americans should be encouraged to invest more domestically rather than abroad. One of his chosen instruments was the IET (Interest Equalization Tax). The idea behind this tax was to balance the interest costs that would be incurred in purchasing American or foreign investments. In practice, the imposition of this levy stifled the growth of the ADR market. While existing ADRs were not subjected to the IET, any new issues were. For a period of 10 years, there was virtually no new ADR activity. A brief discussion of the IET and its effects is included here.

The advent of the IET came like the proverbial bolt out of the blue. While concern about capital outflows had been mounting, the investment community was apparently surprised on July 18, 1963, when President Kennedy requested that Congress impose a fifteen percent tax on the value of American purchases of foreign stocks. The tax was to have been retroactive to July 18, 1963, and was to have expired in 1965. Kennedy's stated rationale was to stem the outflow of long-term capital from the American market by raising the capital cost to foreigners seeking American financing. He felt that such an

interest equalization tax...would, in effect, increase by approximately 1 per cent the interest cost to foreigners of obtaining capital in this country, and thus help equalize interest rate patterns for longer-term financing in the United States and abroad.¹⁸⁹

Market Reaction

Market reaction was swift and predictable. Immediate price drops occurred in nearly all American-traded foreign issues, responding to the retroactive aspect of Kennedy's proposal. "The investment community voiced deep disappointment", and optimistically predicted that the measure would "never become law".¹⁹⁰ Because of "difficulties in setting up stock exchange record-keeping systems that would identify the nationality of the seller of foreign securities", the Treasury Department announced on July 19 that purchases could be made up to August 16, 1963, without being subject to the proposed tax.¹⁹¹ This was a transparent attempt to avert panic selling, although it was partially credible because Americans buying foreign securities from other Americans under the President's proposal would have been liable for the IET. That this was a ruse became clear when Treasury Secretary Douglas

¹⁸⁹John Fitzgerald Kennedy, "Message to the Nation", The New York Times, July 19, 1963, p. 30.

¹⁹⁰Robert Metz, "Traders Critical", The New York Times, July 19, 1963, p. 1.

¹⁹¹"Levy Would Vary", The New York Times, July 19, 1963, p. 1.

Dillon refused to extend the same postponement for the vast majority of ADRs which were traded over-the-counter.¹⁹²

Because foreign securities already held by Americans were not liable for the IET, a dual market developed almost instantly. While American purchases of foreign securities from foreigners almost ceased by July 19,

American Depositary Receipts were quoted by the National Association of Security Dealers with the stipulation that prices were valid only for stocks supplied with affidavit of American ownership.¹⁹³

(Temporary affidavit forms were issued by the Treasury Department, to be used as "certificates of origin".) Price declines of two to three percent occurred on the major European stock markets, and Tokyo prices declined five percent. A major panic was averted in the American market because of "doubts that the proposed taxes would be enacted", and that Congress would agree to retroactive taxation.¹⁹⁴ The general reaction of the financial community was summed up by an anonymous dealer who described the proposed IET as "the most stupid and short-sighted measure that could have been taken".¹⁹⁵

¹⁹²Joseph Lelyveld, "Trading in Foreign Securities Shaken by Kennedy Tax Plan", The New York Times, July 20, 1963, p. 28.

¹⁹³Ibid., p. 23.

¹⁹⁴Ibid., p. 28.

¹⁹⁵Ibid.

Trading Rules

On August 15, the Treasury Department announced trading rules for foreign securities under the proposed IET. These rules clearly indicated that sales between Americans of foreign securities already owned by Americans would be IET-exempt. American owners of foreign securities would be able to file "blanket certificates of American ownership" with their brokers that would apply to any subsequent sale of their foreign holdings. The purpose of this rule was to minimize red tape and facilitate trading. The American and New York Stock Exchanges would continue the normal trading procedures only for "foreign securities that were previously American-owned." Beginning on Monday, August 19, 1963, transactions with a foreign seller were to "be handled as special transactions", with "the sale specifically recorded as 'subject to interest equalization tax'". When such sales appeared on the ticker they were to be tagged with a ".F" following the regular ticker symbol.¹⁹⁶

The New York Stock Exchange released to the public a list of 23 equity and 89 debt issues that would be subject to the proposed IET and would therefore trade under the new Treasury rules. Of the equity issues, most were Canadian. Only eight were ADRs or the closely related New York and American shares (American-South African Investment, Electric and Musical Instruments, KLM Royal Dutch Airlines, Montecatini,

¹⁹⁶"U.S. Issues Rules on Foreign Stock", The New York Times, August 16, 1963, p. 31.

Royal Dutch Petroleum, Shell Transport and Trading, Unilever N.V. and Unilever Limited).¹⁹⁷ These eight included one Italian, one South African, three British (two of which were linked to Dutch ventures), and three Dutch firms.

The following day, the American Stock Exchange released a listing of 83 Canadian and 32 other foreign issues which would be subject to the new rules. Of the 32 other foreign issues, 23 were ADRs or American shares (A.K.U., Associated Electrical Industries, British American Tobacco [two separate issues, one for regular and the other for bearer shares], British Petroleum, Burma Mines, Carreras, Courtauld's, Dunlop Rubber, General Electric Limited, Imperial Chemical Industries, Imperial Tobacco, Marconi International Marine, O'Okiep Copper, Rolls-Royce, Simca, Singer Manufacturing Limited, Tobacco Securities Trust [two separate issues, one for ordinary and the other for deferred shares], United Molasses, Western Stockholders Investment Trust, and F.W. Woolworth & Company [two separate issues, representing preferred and ordinary shares]). Of the 20 firms represented by these 23 issues, one was French, one was South African, one was Dutch and seventeen were British.¹⁹⁸

Trading in existing securities drastically declined by September, and no new ADRs had been created. The outflow of American capital due

¹⁹⁷Ibid, p. 39.

¹⁹⁸Joseph Lelyveld, "Trading is Heavy in Foreign Bonds", The New York Times, August 17, 1963, p. 29.

to the purchase of foreign securities, which had been estimated at \$1 billion during the first half of 1963, was practically halted.¹⁹⁹ The financial community, which in July had so confidently predicted the demise of the IET proposal, was clearly uncertain. Not only was it possible that the bill would pass, but it also appeared possible that the retroactive feature would be installed.²⁰⁰ Rumors began to spread that New York would be "downgraded" as an international financial center, and that London would regain its historical primacy.²⁰¹ Within two months, Kennedy was dead.

Committee Approval and Market Reaction

Ironically, the assassination of President Kennedy actually pushed the enactment of his legislative program in this area as well as in others. On December 6, 1963, the House Ways and Means Committee approved the IET proposal. The committee-approved IET was to be retroactive to July 18, 1963, the date of Kennedy's speech proposing the tax, except on exchange-listed shares, on which the tax was retroactive to August 17, 1963. The only change in Kennedy's initial proposal was an amendment exempting foreign firms where the American ownership interest was greater than or equal to 50 percent. The proposed tax was

¹⁹⁹Edwin Dale Jr., "U.S. Proposal to Tax Purchases of Foreign Stocks Cuts Trading", The New York Times, September 23, 1963, p. 43.

²⁰⁰Ibid.

²⁰¹Clyde Farnsworth, "City of London Regains Status as Market for Raising Capital", The New York Times, November 2, 1963, p. 28.

to expire on December 31, 1965. Interestingly, the committee approval of the proposed IET came on an anonymous voice vote rather than on the usual roll call.²⁰²

This time there was little apparent market reaction. Observers suggested that the reaction had already occurred following the President's proposal in July.²⁰³ Nevertheless, the reaction of international firms seeking capital was swift. On December 10, the Japanese firms Takeda Chemical and Canon Camera announced convertible bond issues denominated in U.S. dollars, but floated in London and Luxembourg. The Eurobond market was off and running. (There is some indication that the Japanese had sought an exemption to the IET for their securities, but had been rebuffed by Kennedy Administration officials. This is an interesting possibility that merits investigation beyond the scope of the current research effort.)²⁰⁴

Focus on Reporting Differences

Official attention again turned to the issue of differences in foreign firm reporting. One complaint centered on the alleged "tardiness" of European earnings reports as compared to those filed by

²⁰²Edwin Dale, "House Unit Votes Tax on Securities", The New York Times, December 6, 1963, p. 49.

²⁰³Joseph Lelyveld, "Markets Ignore Tax on Securities", The New York Times, December 7, 1963, p. 41.

²⁰⁴Richard Mooney, "Japan is Raising Capital in Europe", The New York Times, December 7, 1963, p. 41.

American firms. With the exception of the Dutch firms, these reports generally were filed at least three months later than American reports.²⁰⁵ More importantly, analysts complained about the quality of foreign financial reports. While the British and Dutch reports were considered "generally good", German balance sheets were "generally understated", and French firms were accused of hiding sales figures in their unreported subsidiaries. Finally, Italian statements were considered "virtually useless". These generalities aside, security analyst Andre Sharon cited three accounting practices which made comparable analysis difficult. First, foreign reports were generally not consolidated. Second, there were no uniform international rules regarding the allocation of reserves. Finally, differences in accelerated depreciation allowances caused confusion.²⁰⁶ Sharon optimistically expected accounting harmonization because of the American interest in European securities and the continued search for American capital on the part of a growing Europe.

The complaints concerning foreign delays in filing required financial reports fell on fertile ground. During hearings of the House Commerce Committee, a young Michigan congressman named John Dingell "criticized the commission [SEC] at length for its decision not to ask for general authority to require foreign issuers of over-the-counter

²⁰⁵Philip Shabecoff, "Foreign Earnings Reports on Earnings Lag", The New York Times, February 16, 1964, Section 3, p. 1.

²⁰⁶Ibid., p. 5.

securities sold in the United States to comply with the same rules as are imposed on domestic companies."²⁰⁷ The SEC official present rather logically responded that "it was difficult to exercise jurisdiction over foreign issuers".²⁰⁸

Meanwhile, the IET proposal, which had sailed through committee in the aftermath of the Kennedy assassination, lingered on the Congressional floor. The financial community began to hint that it need not be enacted. An editorial appeared in The New York Times proposing that a "capital issues committee" be established by executive order as a means for controlling capital outflow. It was argued that this executive committee would prove a more flexible means of control than would the IET.²⁰⁹ Others began to argue that the capital outflow had been sufficiently reduced by the threat of the IET to obviate the need for actually enacting the tax. One broker even argued that "the interest equalization tax did not cause the sell-off of foreign stocks, it merely accelerated a process already begun", noting that the "condition of rapid growth in Europe and relatively slow growth in the United States had been reversed by late 1962."²¹⁰ Supposedly, the American investment community, concerned about thin capitalization and

²⁰⁷Eileen Shenahan, "House Commerce Panel Ends Hearings on Policy Market", The New York Times, February 20, 1964, p. 39.

²⁰⁸Ibid.

²⁰⁹"Turning on the Tap", The New York Times, March 4, 1964, p. 39.

²¹⁰Philip Shabecoff, "Americans Sell Foreign Stocks", The New York Times, April 19, 1964, Section 3, p. 1.

political instability abroad, had lost its appetite for foreign security investment, except for "interest in special situations and a broad market for the widely-held international shares".²¹¹

In May 1964, while the IET was still under consideration, the House Committee on Interstate and Foreign Commerce added a surprise amendment to its proposed Securities Acts bill. This amendment was to require

all foreign companies whose securities are traded in the U.S. to register them with the Securities and Exchange Commission, unless they are granted an exemption by the SEC.²¹²

The Senate version of the same bill had only proposed that the SEC "single out for registration a foreign stock or a class of stocks that it deems suspect".²¹³ The House version would have constituted a drastic change in practice, because most of the foreign securities traded over-the-counter were not registered with the SEC. This included the vast majority of ADRs. Wall Street reacted with alarm to the proposed full-registration rule, with some brokers predicting that it would "just about end U.S. trading in all but a relatively few foreign issues".²¹⁴

²¹¹Ibid., p. 13.

²¹²"The Silent Market", Fortune, July 1964, p. 90.

²¹³Ibid.

²¹⁴Ibid.

When the "market reform" law was passed in August 1964, with the full-registration provision intact, Wall Street reacted pessimistically. William Cary, the chairman of the SEC, "agreed to continue the ... blanket exemption on outstanding issues of foreign securities for another year," however.²¹⁵ The purpose of the delay was both to calm market anxiety and to give the SEC time to decide "how extensive it should be in carrying out the registration requirements."²¹⁶

In September, the SEC gave credence to those who believed that its disclosure requirements would follow a moderate course. First, it extended the deadline for foreign corporate compliance with the 1964 Securities Act to November 30, 1965, rather than the April 30, 1965, deadline imposed on American firms. More importantly for the ADR market, a blanket "temporary exemption" to registration requirements was granted to those foreign firms already trading in the over-the-counter markets.²¹⁷ The SEC justified this action by noting that "Congress ...authorized the S.E.C. to exempt classes of foreign securities from registration when it finds such action would be in the public interest".²¹⁸ Clearly, the SEC felt that requiring all over-the-counter ADR firms to register would lead to a wholesale exodus from the American

²¹⁵M.J. Rossant, "New Stock Law Vexes Wall Street", The New York Times, August 9, 1964, Section 3, p. 1.

²¹⁶Ibid.

²¹⁷Edward Cowan, "S.E.C. Postpones Filing Deadlines", The New York Times, September 15, 1964, p. 51.

²¹⁸Ibid.

market, and would cause serious market disruption. Nonetheless, the growth of the ADR market was stymied when the SEC stated that future foreign entrants would be required to register with the SEC when their total assets exceeded \$1 million and they had more than 750 shareholders. This decision, and the passage of the IET in the fall of 1964, signalled the start of a period of ADR dormancy.

The market eagerly awaited the proposed expiration date of the IET in 1965. One observer politely referred to the IET as "an impediment to the use of new ADRs by foreign corporations."²¹⁹ This was a rather tongue-in-cheek statement, because the IET was far more than a mere impediment to ADR expansion. Indeed, no new ADRs had been issued since proposal of the IET in July 1963. Market observers predicted that "if this 'temporary' tax" were to "expire at the end of 1965, the ADR's use by foreign issuers should resume its expansion".²²⁰

German Pressure

On another front, a committee of West German financiers and industrialists sent the SEC a detailed letter in June 1965, requesting that West German "concerns be exempted" from the proposed "reporting

²¹⁹Herbert Bratter, "Foreign Utility Investment via American Depositary Receipts", Public Utilities Fortnightly, March 18, 1965, p. 37.

²²⁰Ibid.

requirements for over-the-counter companies".²²¹ Much of their argument centered on accounting issues. For example, they noted that West German balance sheets were "examined by an auditor appointed by the government", and that "because this audit takes a long time, often eight months after the end of the reporting year", it was impossible for West German firms to comply with the SEC requirements for "early publication of earnings".²²² The Germans also charged that "American firms transgress by padding their balance sheets whereas West German corporations tend to understate their income."²²³ In an unusually frank manner, the Germans concluded that there was no need for the new reporting amendments to be applied to their firms because the amendments had been intended for American over-the-counter companies and German firms "form only a minute fraction of over-the-counter transactions."²²⁴ The Germans were optimistic about compromise because they felt that the American government was "preoccupied with its international payments deficit" and that "regulation of foreign stock [was] only a minor concern."²²⁵ They boldly proposed a further extension of the compliance deadline and noted that even a failure to comply would not mean an

²²¹Philip Shabecoff, "Germans Oppose S.E.C. Stock Plan", The New York Times, June 24, 1965, p. 53.

²²²Ibid.

²²³Ibid.

²²⁴Ibid.

²²⁵Ibid.

automatic bar to their stocks trading in American markets. Clearly, pressure was being applied both at home and abroad for a relaxation of trading restrictions.

IET Extension and SEC Leniency

In September, the Johnson Administration surprised observers by proposing that Congress extend the IET through July 1967. The rationale for this extension was to improve the international payments position and to continue to "stem the outflow of investment".²²⁶ While the IET applied to foreign stock purchases was to remain 15 percent of the purchase price, the tax was to be expanded to cover some of the shorter term bonds that had initially been exempted. Once again, the market observers had been wrong.

The SEC, however, adopted a more lenient approach when its rules for foreign firm disclosures under the 1964 amendments to the Securities Act were announced in November 1965. While requiring "foreign companies whose stock is held by 300 or more United States residents" to comply, the SEC's "proposed rules appeared to be less extensive than those sought by members of Congress".²²⁷ In particular, foreign companies whose stocks were traded over-the-counter were

permitted to comply with the new disclosure rules by filing the information they [were] required to make public by their

²²⁶John D. Morris, "Interest-Tax Bill Will Go to Congress", The New York Times, September 11, 1965, p. 30.

²²⁷Richard Rutter, "Sidelights", The New York Times, November 17, 1965, p. 66.

own governments or the information they [gave] their security holders.²²⁵

The SEC indicated that in "several months" it would provide brokers with a list of foreign companies that should have complied with the new registration requirements but had failed to do so. The brokers would then be required to inform prospective purchasers of the listed stocks and to "include a written notation to this effect on the confirmation of the stock purchase". Brokers "would not be made liable for any damage actions resulting from purchases of such stock," however.²²⁹ The German "compromise" appeared to have carried the day, particularly when the registration exemption was again extended, this time until November 30, 1966.²³⁰

By August 1966, the SEC reported that 81 of the 112 foreign companies that it had identified as needing to meet the disclosure requirements had "agreed to submit the requested documents to the commission".²³¹ The documents were to be available for public inspection at the SEC headquarters in Washington, D.C., and included all documents and reports that the companies have been required to make public in their home countries or file with

²²⁸Ibid.

²²⁹Ibid.

²³⁰"SEC Postpones Foreign-Stock Rule", The New York Times, April 22, 1966, p. 57.

²³¹Eileen Shanahan, "Overseas Units to Give Reports", The New York Times, August 11, 1966, p. 50.

a foreign stock exchange or distribute to their securities holders elsewhere.²³²

The SEC acknowledged the opposition to its new regulations and noted that "the material to be published is not comparable in most cases with that required from American companies".²³³ More importantly, the SEC admitted that it would "not be able to check on its own the accuracy of the information" provided by the foreign firms.²³⁴ The deadline for compliance or receipt of an exemption was again extended, this time to June 30, 1967.²³⁵

Administrative Controls on Foreign Investment

In January 1968, the Commerce Department announced mandatory controls on foreign direct investment in order to stem continued capital outflows. These mandatory controls, enacted under the provisions of Section 95A of the Banking Act, were substituted for the voluntary balance-of-payments program which had been in effect since 1965. Two elements of the new controls were to affect the ADR market. The first element included the investment limitation and required repatriation of a percentage of capital instituted in those cases where the ownership interest was 10 percent or more. (This was the threshold level used to

²³²Ibid.

²³³Ibid.

²³⁴Ibid.

²³⁵"SEC to Exempt Filing of Some Foreign Stock", The New York Times, May 5, 1967, p. 59.

define a "direct investor"). Clearly these limits affected the freedom of international investment, and skewed the market dynamics. Ironically, a second element of the controls exerted an opposite effect. The controls specifically did not apply to "purchases of portfolio securities where the total interest of the purchaser is less than 10 percent".²³⁶ Thus, a legal incentive was put into place to diversify foreign corporate holdings.

Slow Growth in ADRs

Despite the continued existence of the IET, the ADR market continued to develop, albeit more slowly. By June 1968, there were approximately 200 different ADRs in existence. The three leading countries represented by ADRs were the British with 80, the South Africans with 30 and the West Germans with 20. The vast majority of ADRs continued to be traded in the over-the-counter markets rather than on the American or New York Stock Exchanges.²³⁷ Most of the trading in ADRs occurred in issues that had been established before the IET took effect, creating the curious situation of a nearly sealed internal market in receipts representing external investments.

Quietly, American investors had been adding foreign stocks to their portfolios. In 1969, many institutional investors increased their

²³⁶"Summary of Rules on Foreign Investing", The New York Times, January 2, 1968, p. 15.

²³⁷Anna Merjos, "More ADRs", Barron's, June 3, 1968, p. 9.

holdings in Japanese corporations. On January 8, 1970, the Federal Reserve Board announced that "long-term investments in Japan by non-banking institutions would come under the Board's overseas lending restraints in 1970".²³⁸ The Fed estimated American institutional holdings in Japanese stock at an aggregate value of \$200 million. Announcement of the Fed's decision to restrict American purchasing led to the then-largest single day drop in the Tokyo Stock Exchange's history.²³⁹ Purchases were soon back on track, however; Japan eased its curbs on foreign investment in April 1970. The 20 percent limit on "total foreign holdings in a Japanese concern's equity" was raised to 25 percent. In addition, "the seven percent limit on individual foreign holdings in a Japanese concern's equity" was "entirely abolished".²⁴⁰ A Vickers Associates' survey of investment company portfolios in the summer of 1970 gives some idea of the rising tide of foreign stock investment:

The funds held stocks in 20 Japanese companies with a total market value of \$452.1 million. Holland was in second place with six companies and holdings worth \$369.5 million. It was followed by Great Britain (four companies, \$186.7 million), South Africa (16 companies, \$66.6 million) and Australia (two companies, \$15.4 million).²⁴¹

²³⁸James Nagle, "Stocks in Tokyo Plunge Sharply", The New York Times, January 9, 1970, p. 45.

²³⁹Ibid.

²⁴⁰"Japan Due to Ease Curb on Portfolios", The New York Times, April 7, 1970, p. 61.

²⁴¹John Abele, "Market Place", The New York Times, August 15, 1970, p. 32.

Further Extension of the IET

In his presidential campaign of 1968, Richard Nixon promised the business community a less regulated investment environment. Nevertheless, when the IET was due to expire in 1971, Nixon failed to lobby against passage of its extension by Congress. When the Congress voted to renew the IET, and despite his promises to the business community, President Nixon signed legislation extending the IET on April 2, 1971. The "temporary" tax was now scheduled to remain in effect until March 31, 1973, although the rate was dropped to 11.25 percent.²⁴²

On January 11, 1973, the SEC announced the creation of an Office of International Corporate Finance. This office was to be responsible for supervising both issues of American securities to foreign investors and offerings made by foreign issuers in the United States.²⁴³ This division was the idea of William J. Casey, then chairman of the SEC. Ostensibly, "the step was taken in recognition of the growing internationalization of capital markets and the securities business", but given Casey's role as a once and future master spy, one can only speculate as to the true purpose of this "office".²⁴⁴ Whatever the nature of the OICF, part of its organizational mandate was "supervisory

²⁴²"Nixon Signs Tax Extension", The New York Times, April 3, 1971, p. 45.

²⁴³"S.E.C. Unit to Oversee Foreign Issues", The New York Times, January 12, 1973, p. 47.

²⁴⁴Ibid.

responsibility" for "financial reporting by foreign issuers under the Securities and Exchange Act", as well as "offerings of American Depositary Receipts to United States investors".²⁴⁵

Elimination of the IET

On February 12, 1973, during an announcement that the U.S. dollar was going to be devalued by ten percent, it was revealed by a Treasury Department spokesman that the IET was going to be "phased out" by the end of 1974, if not earlier.²⁴⁶ This announcement had immediate effects. Two days later, on February 14, the American Stock Exchange announced "that it was undertaking a major program to attract more listings of corporate securities from Europe and Japan".²⁴⁷ Paul Kolton, the chairman of the American Stock Exchange, said the Nixon Administration's plan to phase out the IET had "accelerated Amex efforts to seek more listings abroad".²⁴⁸

By December, following extensive consultations with foreign corporate heads and brokers, particularly in Japan and Europe, Kolton announced specific program steps to increase foreign listings on the Amex. These steps included "special original listings requirements for

²⁴⁵Ibid.

²⁴⁶Edwin L. Dale, Jr., "U.S. Orders Dollar Devalued 10 Per Cent", The New York Times, February 13, 1973, p. 1.

²⁴⁷Terry Robards, "Nixon's Plan Spurs Amex in Foreign Listing Effort", The New York Times, February 15, 1973, p. 63.

²⁴⁸Ibid.

foreign securities issuers to reflect overseas corporate practice"; an easing of the filing requirements for foreign issuers; and the issuance of semi-annual rather than quarterly financial reports.²⁴⁹ Kolton justified the proposed changes by citing the "Government's commitment to increase...the international flow of capital".²⁵⁰

As if to confirm Kolton's remarks, the Treasury Department announced on December 27 that the IET would be lowered to 3.75 percent effective January 1, 1974, and that the Nixon administration would definitely not seek a further renewal of the tax when it expired in 1974.²⁵¹

ADR Renaissance

The elimination of the IET was just one of several factors that led to a renaissance in ADR activity. The oil crisis of the early 1970s and the consequent explosion of Petrodollars led to a new interest in international investment transfers. A third factor was the collapse of the Bretton Woods Agreement of 1944. With the dollar free to float, the currency speculation aspect of ADRs came to the fore. Gradually, more and more ADRs began to appear on the market.

While the elimination of the IET was a boon to those seeking to increase foreign listings, the old disclosure problem again surfaced.

²⁴⁹"Big Board Asks More Data Disclosure", The New York Times, December 17, 1973, p. 61.

²⁵⁰Ibid.

²⁵¹"Equalization Tax Effect Cited", The New York Times, December 28, 1973, p. 41.

In April 1974, the National Association of Securities Dealers announced that 13 of the 52 ADRs whose prices it quoted had "never filed with the S.E.C."²⁵² Supposedly, this had been "discovered" when the NASD conducted a "routine check" in December 1973.²⁵³ Warning letter were sent to the violators informing them that they would no longer be quoted on the NASD quotation system if they failed to file. At least two of the larger ADRs, Bayer of Germany and Telefonos de Mexico, informed the NASD that they had no intention of complying. This did not completely eliminate the market for such ADRs, since they could still appear in the "pink sheet" price listings of broker-dealer offerings. Because many investors did not have access to "pink sheet" data, however, it was assumed that the market for the ADRs dropped by the NASD quotation system would be "less active"²⁵⁴

In June, the SEC again muddied the waters by announcing that it might soon tighten foreign disclosure requirements. The markets were left in a quandary, because SEC officials failed to offer specific details concerning the planned changes.²⁵⁵ Paul Kolton, the Amex chairman, responded to the SEC's vague proposal in a London speech on June 12, 1974. He boldly proposed that foreign companies seeking an

²⁵²Elizabeth Fowler, "A Case of Impropriety", The New York Times, April 9, 1974, p. 59.

²⁵³Ibid.

²⁵⁴Ibid.

²⁵⁵"S.E.C. May Tighten Foreign Disclosures", The New York Times, June 11, 1974, p. 68.

American listing be subjected to the regulations of the NYSE and the Amex rather than the SEC. Kolton claimed that such a change "would attract more foreign listings on the exchanges".²⁵⁶ On July 23, 1974, the Amex formally appealed to the SEC, seeking an exemption from the existing SEC filing requirements for exchange-listed foreign securities.²⁵⁷

Kolton's proposal that "the Amex could be a satisfactory watchdog" over foreign securities met with mixed reactions.²⁵⁸ While acknowledging that such a move would bolster the sagging revenues of the Amex and conceivably increase capital flows between companies, observers noted that Kolton's proposals would reduce the number of over-the-counter shares. Frederic Rittreiser, a leading OTC dealer in foreign securities, argued that

the public interest would suffer from the switch because one Amex specialist could not provide the market depth and liquidity that the competing O-T-C firms offer.²⁵⁹

He made the counterproposal "that the Amex junk its prohibition against specialists' trading in listed stocks off the exchange", which would

²⁵⁶"Big Board Backs Foreign Members", The New York Times, June 13, 1974, p. 70.

²⁵⁷"AMEX Seeks to List Foreign Securities", The New York Times, July 24, 1974, p. 56.

²⁵⁸Peter Kilborn, "Marketplace", The New York Times, June 28, 1974, p. 44.

²⁵⁹Ibid.

allow a joint market to develop in foreign shares.²⁶⁰ On the other hand, some observers felt that Kolton's proposal would actually increase investor security, because the existing SEC requirements covering OTC-traded foreign securities were minimal. The market waited to see whether the SEC would "opt for market liquidity and depth" by denying the Amex request, or choose greater disclosure and adversely affect the over-the-counter foreign securities specialists.²⁶¹

While the market awaited the SEC's decision, events indicated that the Commission would soon be more aggressively exerting its watchdog role. In December 1974, the Federal District Court in Washington approved the regulatory concept that SEC jurisdiction over firms listed on American exchanges extended to both foreign investors and transactions occurring outside of the United States. The SEC had sought judgement against OSEC Petroleum, a West German firm which had purchased a 20 percent interest in a Canadian firm, Ulster Petroleum, whose shares were listed on the Pacific Stock Exchange. The SEC charged that it had not been notified of the acquisition of a larger than 5 percent interest in a U.S.-listed company and that

the transaction was fraudulent in that the tender offer for the Ulster Petroleum stock failed to disclose that the purchase was intended to give the purchaser a controlling interest in the company acquired".²⁶²

²⁶⁰Ibid.

²⁶¹Ibid.

²⁶²Felix Belair, Jr., "S.E.C. Wins Case on a German Offer", The New York Times, December 19, 1974, p. 74.

The Federal Court ruled in favor of the SEC, and required the OSEC Petroleum to post \$150,000 to reimburse Ulster stockholders, many of whom were not Americans. This court assent to the principle of the extraterritoriality of SEC jurisdiction subsequently played a pivotal role in the evolution of international securities trading.²⁶³

Meanwhile, the NYSE had joined the Amex in proposing special listing standards for foreign firms seeking exchange listings. On February 10, 1976, James Needham, then chairman of the NYSE, disclosed that the Exchange's board of directors

was studying a proposal for special standards to facilitate the listing of stocks of large foreign corporations that do not qualify under the existing standards.²⁶⁴

These standards were adopted on March 4, 1976. The eased listing requirements provided that foreign firms would qualify if they had 5,000 round-lot shareholders worldwide rather than the 2,000 United States resident round-lot shareholders required of American firms seeking NYSE listing. In addition, foreign corporations would

have to show 2.5 million publicly owned shares valued at \$100 million on a worldwide basis, rather than the one million shares valued at \$16 million for United States companies.²⁶⁵

²⁶³Ibid.

²⁶⁴Alexander Hammer, "People and Business", The New York Times, February 11, 1976, p. 73.

²⁶⁵Robert J. Cole, "Big Board Seeks Foreign Listings", The New York Times, March 5, 1976, p. 44.

On August 19, 1976, Bell Canada became the first firm to list shares on the NYSE under the new rules, although it had to list directly rather than use ADRs because of the SEC requirements concerning Canadian firms.²⁶⁶ The first ADR application for NYSE listing under the new standards came from Kubota on September 2, 1976. This Japanese manufacturer of agricultural machinery was the first new NYSE ADR since the abolition of the IET in 1974.²⁶⁷

By 1978, there were nearly 390 foreign ADR issues compared with about 150 in 1961.²⁶⁸ The national composition of ADRs had also changed. Japan, with approximately 105 ADR listings, was now the country with the most ADRs. South Africa followed with 92, and the United Kingdom was third with some 89 ADR issues. Most of these ADRs remained over-the-counter and unsponsored, although exchange listings had begun to increase.²⁶⁹

In the summer of 1979, the SEC again raised the issue of "a disclosure gap" between foreign and U.S. firms. This time, the pressure for fuller foreign disclosure was publicly challenged by large foreign firms. The issue of extraterritoriality was central, but several

²⁶⁶"Bell Canada Joins Big Board Listings", The New York Times, August 19, 1976, p. 53.

²⁶⁷"Kubota Seeks Big Board Listing", The New York Times, September 3, 1976, Section D, p. 4.

²⁶⁸Anna Merjos, "How to Invest Abroad", Barron's, July 24, 1978, p. 9.

²⁶⁹Ibid.

specific disclosure items were the subject of debate. Apparently, foreign corporations found "most objectionable a proposal that they disclose the identity and remuneration of their top officers and directors, rather than report the aggregate".²⁷⁰ ²⁷¹ A second objection, particularly on the part of the Japanese, was to line-of-business reporting. In this case, apparently, the argument centered on the longer term perspective of Japanese business and also to the fears that trade secrets might be compromised by reporting specific line-of-business data.²⁷²

1980s

The third period of ADR expansion continued into the 1980s, culminating in a veritable explosion. In many respects the 1980s were an echo of the 1920s. Much investment was made for speculation rather than acquisition of physical capital. In addition there was a strong effort to remove regulations on business activity. Ironically, this led

²⁷⁰"Fuller Disclosure for Foreign Stock", Business Week, July 23, 1979, p. 64.

²⁷¹While it is beyond the scope of the current research effort, this unwillingness on the part of foreign top executives to report their income merits further research. Was it motivated by fear of kidnapping or other direct attacks in countries where the class struggle was more overt? Or was the desire for secrecy a cultural phenomena of countries where salary braggadocio was held in less esteem than in the United States? Whatever the motivating factors, the national willingness or unwillingness to disclose specific items of financial information is certainly a worthy arena for accounting research.

²⁷²Ibid.

to a situation in which foreign-domiciled enterprises were placed at an advantage over American enterprises as far as SEC reporting requirements were concerned.

Initially, it appeared as if the severe recession of the early eighties would drive American investors back to their own shores. According to the Securities Industry Association, Americans bought only \$73 million worth of foreign shares in 1981, following the record year of 1980, when American purchases of foreign stocks totalled \$2.1 billion.²⁷³ The diminution of interest in foreign shares was short-lived, however. Two factors seem to have driven the desire for foreign investment in the 1980s. The first was the desire to diversify asset portfolios, while the second was the search for economies growing at a rate faster than that of the American economy.²⁷⁴

A clue to the coming deluge came in 1983, as the exclusive Bessemer Trust cut back its holdings of U.S. equities and increased its commitments in foreign stocks.²⁷⁵ John Whitmore, the president and CEO of Bessemer argued that Pacific Basin and European economies were showing higher growth potential than the American economy and that their foreign currencies were going to improve against the dollar. The importance of the Bessemer decision lay in the nature of Bessemer's

²⁷³Vartanig G. Vartan, "Risks in Foreign Stocks", The New York Times, April 4, 1982, Section 3, p. 18.

²⁷⁴Ibid.

²⁷⁵Vartanig G. Vartan, "Market Place", The New York Times, December 20, 1983, Section 4, p. 10.

clientele. Bessemer had originally been set up to manage the trust accounts of the heirs of Henry Phipps, one of the leading magnates of Carnegie Steel. By 1980 Bessemer also managed 250 individual accounts, each with a minimum account size of \$3 million. One of these accounts was a so-called "blind trust" for Donald Regan, then Treasury Secretary in the Reagan Administration. Clearly, Bessemer's shift to foreign equities presaged a move on the part of other institutional investors.²⁷⁶

Regulatory Easing

The regulatory environment eased during the Reagan years. This prompted additional entrants to the ADR arena, such as Norsk Data in September 1984 and Oce-van der Grinten in November of the same year.²⁷⁷ As the dollar began to weaken in 1985, more and more investors began to look abroad in the search for higher investment returns.²⁷⁸ Nicholas Bratt, a portfolio manager for the mutual fund Scudder International, described the "ideal" situation for American investors in international securities as one in which a gradual "erosion" in the value of the

²⁷⁶Ibid.

²⁷⁷"Norsk Data Plans to Sell American Depositary Receipts", The Wall Street Journal, September 11, 1984, p. 52; "Oce-Van of Netherlands Offers One Million ADRs", The Wall Street Journal, November 1, 1984, p. 48.

²⁷⁸Anise Wallace, "A New Allure for Foreign Stocks", The New York Times, March 31, 1985, Section 3, p. 10.

American currency would take place.²⁷⁹ A sharp drop in value might shock both American and foreign stock markets and lead to a rise in interest rates.

From 1980 to February 1985, the dollar climbed almost 50 percent against key foreign currencies.²⁵⁰ This situation reversed in February 1985, and the "foreign currency play" of buying stocks, particularly ADRs, that benefitted from the drop in the dollar was in full spate.²⁸¹ By the beginning of April 1985, nearly a million dollars a day were flowing into the Scudder International Fund alone.²⁸² Some idea can be garnered of the massive shift of American investment offshore by looking at the figures released by Lipper Analytic Services. At the time, Lipper tracked 17 "international mutual funds" that only invested abroad, unlike the so-called "global funds" that invested both in the United States and abroad. Lipper's reported data for these international mutual funds indicated that an aggregate investment of \$608 million at the end of 1983 had swollen to \$1.09 billion by the end of 1984.²⁸³

²⁷⁹Ibid.

²⁸⁰Vartanig Vartan, "Falling-Dollar Stock Plays", The New York Times, July 12, 1985, Section 4, p. 4.

²⁸¹Ibid.

²⁸²David R. Francis, "U.S. Investors Looking Overseas", The Christian Science Monitor, April 4, 1985, p. 23.

²⁸³Ibid.

A further move to accelerate the international securities trade came in July. The New York Stock Exchange announced that, as of September 30, 1985, it would open one half-hour earlier, at 9:30 local time. The avowed purpose of the change was to increase foreign participation in the United States equity markets.²⁸⁴ Of equal importance was the commencement of negotiations between the NYSE and the London Stock Exchange with a view toward developing a common data processing system. Observers felt that 24-hour security trading was a question of "not if but when".²⁸⁵

Institutional Investment Moves

In September 1985, market observer Vartanig Vartan reported that "institutional investors own an estimated \$15.7 billion of foreign stocks compared with \$3 billion just five years ago".²⁸⁶ In the same month, the investment firm of Morgan Stanley purchased the Geneva securities research firm Capital International Perspectives. The official justification for this purchase was that overseas securities provided 20 percent of Morgan Stanley's business and that the firm's directors felt this percentage would double by 1990.²⁸⁷ They therefore

²⁸⁴Eric Berg, "Big Board Set to Open at 9:30", The New York Times, Section D, p. 11.

²⁸⁵Ibid.

²⁸⁶Vartanig Vartan, "Foreign Stocks Draw Attention", The New York Times, September 12, 1985, Section 4, p. 12.

²⁸⁷Ibid.

needed a good research service attuned to international issues. Capital International Perspectives had been tracking over 1,600 stock issues in 19 different countries. Similarly, other organizations tried to supply information to potential investors thirsty for international investment opportunities. First Boston had produced the quarterly Global Investors' Valuation Guide in June 1985. This publication focusses on European, Japanese and Australian issues.²⁵⁸ A worthwhile area for future research would be to study the growth of international corporate news information services as a response to the growth in institutional investment.

The first intimation that all was not well in the growing international securities market came at the beginning of December 1985. On November 30, the Singapore-based Pan Electric Industries went into receivership. Because of the potentially devastating effects of this failure on the Singapore market, the Singapore Stock Exchange was closed indefinitely. This event prompted observers in New York to question the safety of investing abroad because of the higher investment risk created by lax regulatory environments.²⁸⁹

Perhaps as a result of such concerns, several mutual funds began applying "sector strategies" to their global investments. Some even began to specialize in securities of a single country. For example,

²⁵⁸Laurence DeMaria, "Tracking the Foreign Equity Markets", The New York Times, April 6, 1986, Section 4, p. 10.

²⁸⁹Vartanig Vartan, "Singapore's Chilling Effect", The New York Times, December 3, 1985, Section 4, p. 12.

Prudential Bache established the First Australia Fund in January 1986.²⁹⁰ Other investors began to avoid so-called "inactive ADRs", fearing that the lack of ready liquidity might be an investment trap.²⁹¹ Still, for many investors, foreign stocks continued to be "in vogue". While no one knew the "exact size" of American foreign holdings, it was estimated that "85 to 90 percent" of American foreign securities investment was in equities by June 1986.²⁹² This represented a near-total reversal of the situation at the beginning of the century. Yet there remained one group of institutional holdouts to the international investment trend. According to one observer, less than two percent of all pension fund assets were invested abroad by June 1986. This same observer, Michael Sesit, felt that "cultural biases limited overseas investing" on the part of pension funds.²⁹³ Unfortunately, Sesit gave no hard evidence to support his contention, and one could make a convincing argument that institutional conservatism and fear of the untried played key roles in keeping pension fund investments abroad at a low level.

²⁹⁰"Latest Strategy of Mutual Funds", The Wall Street Journal, January 6, 1986, p. 23.

²⁹¹Leonard Sloane, "Buying Stocks Internationally", The New York Times, March 8, 1986, p. 36.

²⁹²Michael R. Sesit, "U.S. Institutions Find Buying Foreign Stocks Can be Very Profitable", The Wall Street Journal, June 3, 1986, p. 19.

²⁹³Ibid.

The British Stamp Tax Fiasco

In the spring of 1986, a curious sequence of events revealed the growing importance of the global securities market. British officials, concerned that British ADRs were pulling trading away from London to the benefit of New York, made a surprise addition to their annual budget statement.²⁹⁴ The Thatcher government, ostensibly a proponent of free trade, imposed a five percent tax on the creation of British ADRs, to be paid by the "banks that issue the ADRs and hold the underlying shares".²⁹⁵ The justification for this tax was that the Thatcherites hoped to "recapture lost revenues and help the British brokerage community".²⁹⁶ The potential effect on the American ADR market was enormous, as the nearly 100 British ADR issues amounted, according to one estimate, "to about 17.5 percent of all foreign securities traded as ADRs in the United States".²⁹⁷

"Reaction to the new levy ranged from amazement to anger".²⁹⁸

While the negative American reaction to the expanded Stamp Tax was

²⁹⁴Gary Putka, "New Tax on ADRs of British Concerns May Hurt Business of U.S. Brokers, Banks", The New York Times, March 20, 1986, p. 8.

²⁹⁵Ibid.

²⁹⁶Peter C. DuBois, "U.K. Slaps 5% Penalty Tax on New ADRs", Barron's, March 24, 1986, p. 66.

²⁹⁷Lynn Stronger Dodds, "Hidden Agenda", Financial World, May 13, 1986, p. 10.

²⁹⁸DuBois, "U.K Slaps", p. 66.

expected, the Thatcher government was taken aback by the ferocity of British corporate opposition.²⁹⁹ Apparently, the government was unaware that "some of Britain's better known firms have greater A.D.R. volume than underlying share volume".³⁰⁰ In early April, Morgan Guaranty Trust disclosed that it hadn't "issued a new certificate since the day the tax was imposed - meaning no new U.S. acquisitions".³⁰¹ At the same time, a committee of leading British corporate treasurers "met and issued a statement condemning the A.D.R. tax, saying it would restrict the ability of British industry to raise capital in the United States".³⁰²

As the outcry over the tax continued, and more importantly, as the trading of British ADRs came to a screeching halt, the Thatcher government hinted that it might make adjustments to the levy.³⁰³ On April 29, 1986, Nigel Lawson, Thatcher's Chancellor of the Exchequer, dropped the tax to 1.5 percent from the original five percent.³⁰⁴ He defended the levy by claiming that "the main target of the tax is

²⁹⁹"London's Shield", The Economist, March 29, 1986, p. 68.

³⁰⁰Steve Lohr, "Briton's Assail New Tax Affecting U.S. Investors", The New York Times, April 3, 1986, Section 4, p. 1.

³⁰¹Gary Putka, "U.K. Tax on Foreign Share Purchases Cuts U.S. Trading in British Concerns", The Wall Street Journal, April 3, 1986, p. 30.

³⁰²Lohr, "Britons Assail", p. 5.

³⁰³"Britain Signals it Might Change its Levy on ADRs", The Wall Street Journal, April 17, 1986, p. 32.

³⁰⁴Gary Putka, "Planned Tax on ADRs Cut by Britain", The Wall Street Journal, April 30, 1986, p. 37.

Britons, who avoid the stamp tax on British shares by purchasing ADRs instead".³⁰⁵ At least one observer speculated that the tax paring occurred because several British firms had hinted that they might list on American exchanges directly so that their investors might avoid the five percent levy.³⁰⁶ Others attributed it to "the Great Stamp Tax Revolt" on the part of American investors, who simply refused to deal in British ADRs until the tax was dropped to a "more reasonable" level.³⁰⁷ In hindsight, the larger levy appears to have been a "miscalculation" on the part of a government that chose to make a "minimum of reference to market practitioners" and entirely failed to consult with the experts at the Bank of England.³⁰⁸

Fear of Fraud

Just as the Stamp Tax storm abated, a second disturbing event occurred involving British ADRs. In October 1986, a sudden price drop in the ADRs for the British biotech firm Senetek was traced back to London. Without informing their ADR issuer, the Bank of New York, Senetek's management had converted about one million unregistered

³⁰⁵Michael McFadden, "Britain's Tax Stunner", Fortune, April 28, 1986, p. 243.

³⁰⁶Ibid.

³⁰⁷Amy Pershing, "The Great Stamp Tax Revolt", Institutional Investor, May 1986, p. 263.

³⁰⁸Martin French, "Red Faces at the UK Treasury", Euromoney, May 1986, p. 20.

British shares into an equivalent number of ADRs.³⁰⁹ Clever market mechanics had been able to infiltrate the American market by exploiting a weak spot in the British supervision of securities. Ironically, at almost the same time that this weakness in investor protection was being exposed, the Reagan Administration's SEC was further loosening its regulatory oversight. On November 13, 1986, the SEC proposed rules changes to permit the NASD to issue standards for companies listed on its over-the-counter market, without seeking prior Federal approval.³¹⁰ The self-policing tide was in full spate.

Not surprisingly, concern began to develop that the international market system was ripe for fraud. In March 1987, Nahum Vaskevitch, the former managing director of Merrill Lynch & Company's London merger team, and David Sofer, an Israeli businessman were arrested for cross-border securities fraud. This case has yet to be clearly examined, but it involved insider trading in British and Israeli ADRs.³¹¹ In a highly perceptive analysis, Flora Lewis noted that as a result of lower oil prices, industrialized countries saved some 70 to 100 billion dollars in the early 1980s. It was her contention that these surplus funds had inflated stock markets worldwide rather than creating production and

³⁰⁹Gene G. Marcial, "Questions About Senetek's Tumble", Business Week, October 13, 1986, p. 158.

³¹⁰"NASD Rule Proposed", The New York Times, November 14, 1986, Section 4, p. 16.

³¹¹"Insider Fraud : Global Specter", The New York Times, March 16, 1987, Section D, p. 1.

employment. Lewis argued that three changes in the 1980s had ignited the global securities market: computer communication, removal of regulation and financial engineering. While each of these elements were ripe for new types of international securities fraud, Lewis was particularly caustic about European securities oversight. She felt that "European dirty linen never gets washed", and that only "international market rules" could prevent massive securities fraud.³¹² It seems clear from Lewis's remarks that pressure was building to standardize securities market rules.

Continued ADR Growth and the October 1987 Crash

Concerns or not, the ADR market continued its period of rapid expansion. On July 31, 1987, the first Spanish ADRs made their appearance, representing the shares of Banco Santander.³¹³ Meanwhile, the British had adopted a completely new approach to the "threat" of ADRs siphoning trade from London. Rather than another ill-fated tax measure, they chose to permit ADR trading in London. On the surface, it seems rather paradoxical for the British to deal in American securities representing British firms. The solution lies in the laws regulating certain American institutional investors, notably state retirement funds. These investors are legally enjoined from investing in foreign

³¹²Flora Lewis, "Regulating A Global Market", The New York Times, March 20, 1987, p. 31.

³¹³"Banco Santander Sells ADRs in U.S., Abroad", The New York Times, July 31, 1987, p. 26.

securities. They are not forbidden, however, to invest in American securities physically dealt abroad. The British authorities were taking full advantage of this quirk in American law. Rather than attacking the ADR market, they were siphoning a portion of this market to London, where daily trading hours opened well ahead of New York because of the difference in time zones. On August 3, 1987, ADRs began to trade in London officially.³¹⁴

The market crash of October 1987 initially seemed to be a signal of the end of an era, much like the Great Crash of October 1929. Unlike the earlier crash, however, this one occurred nearly simultaneously on various exchanges across the globe.³¹⁵ The effect on the ADR market was enormous, because the first action of confused investors around the world was a general retreat from foreign investment.³¹⁶ Yet, by the end of 1987, a very confusing picture emerged. On the one hand, one observer noted that American "professional and individual investors are pulling back from what they now fear has become a 'globalization of insecurities'", concerned at the lack of reliable information and the arcana of individual market quirks.³¹⁷ Other experts echoed the opinion

³¹⁴Steve Lohr, "London Seeks Part of A.D.R. Market", The New York Times, August 3, 1987, Section 4, p. 8.

³¹⁵Steve Lohr, "Investors Retreating from Foreign Markets", The New York Times, December 15, 1987, p. 1.

³¹⁶Vartanig Vartan, "New Stock Strategies Abroad", The New York Times, November 7, 1987, p. 37.

³¹⁷Steve Lohr, "Investors Retreating form Foreign Markets", The New York Times, December 16, 1987, p. 1.

of Stanley Yassukovitch, the head of Merrill Lynch Europe, who stated that the "underlying trend toward globalization is irreversible".³¹⁸

Innovations

Periods of confusion often favor innovation, and the period following the October 1987 Crash was no exception. One idea forwarded by Kenneth Liebler, then president of the American Stock Exchange, was the development of a "two-tier" trading system designed as "an accommodation to 'global realities'".³¹⁹ Liebler argued that the existing SEC requirements were "designed to protect an average investor but are not necessary to protect institutions".³²⁰ Indeed, Liebler contended that the SEC requirements were actually hindering free trade among sophisticated investors because of the need to file disclosures and register issues. He proposed the establishment of a closed network of investors who could trade freely among themselves.³²¹ Work on this network, provisionally named SITUS (System for Institutional Trading of Unregistered Securities), had actually begun in 1985 at the instigation of the British brokerage house Quadrex. While shares would not actually be listed as they were on the AMEX, a similar "entry fee" was proposed.

³¹⁸Ibid.

³¹⁹Alison Leigh Cowan, "AMEX Seeks New Network", The New York Times, December 28, 1987, Section 4, p. 1.

³²⁰Ibid.

³²¹Ibid.

The network itself was to be internally policed and supervised by the AMEX. The key issue was whether the SEC would allow differential disclosure and registration requirements.³²²

A second innovation occurred in September 1988. For the first time ADRs were issued representing a sovereign debt instrument. The French government listed ADRs for its OATS (Ordres assimilables du Trésor) on the AMEX. Apparently, the idea had been proposed to the French Treasury by CL Global Partners Security, an American subsidiary of the French banking firm Crédit Lyonnais. The intent of the listing was "enhanced visibility and a broader investment base".³²³ Trades were to occur through the Automated Bond System, and to attract investors, the OATs were "exempt from French withholding, income and capital gains taxes".³²⁴

A third change occurred as American pension funds finally began to take the plunge into significant foreign equity investment. While it is difficult to determine a precise turning point, the years 1988 and 1989 saw a discernible shift abroad. The clear motivation was a search for higher returns. A Morgan Stanley survey of the returns for twenty national stock indices ranked the United States twelfth in both 1987 and

³²²Ibid.

³²³Michael Quint, "French Government Bonds to be Traded in New York", The New York Times, September 8, 1988, Section 4, p. 1.

³²⁴Ibid.

1988.³²⁵ By the middle of 1988, the average pension fund holdings of foreign securities had climbed to nearly five percent.³²⁶ The debate was no longer whether pension funds would invest abroad, but how. One group of fund managers clearly preferred sector investment, choosing countries first and then selecting companies within the target countries.³²⁷ Another group, led by such advisors as Eric Sorenson of Salomon Brothers, felt that the investment issue of the 1990s would "become what companies not which countries".³²⁸ Central to the entire debate was what Flora Lewis aptly categorized as "the shifting standard for sovereignty".³²⁹ Would the old principle of nationalism continue to survive in a world of economic interdependence, where by the end of 1988 one observer could claim that "about one in six [securities] transactions in the world is cross-border"?³³⁰

³²⁵Jonathan Fuerbringer, "Foreign Stock Gains Outpaced U.S. in 1988", The New York Times, January 2, 1989, Section 1, p. 32.

³²⁶Ibid.

³²⁷Jonathan Burton, "Seeking a Higher Return Abroad", The New York Times, February 5, 1989, Section 4, p. 5.

³²⁸Fuerbringer, p.32.

³²⁹Flora Lewis, "Shifting Standard for Sovereignty", The New York Times, June 26, 1988, Section 4, p. 27.

³³⁰Fuerbringer, p. 32.

Summary

The evolution of ADRs has been a mirror of the changing nature of international finance in the twentieth century. While its antecedents may have been created in the heat of global warfare, the ADR owes its existence to the desire for more rapid international movement of investment capital in an era of steamship travel. Like a voltage transformer, the ADR has permitted securities designed for a particular legal, cultural, and regulatory environment to be used in a seemingly incompatible environment.

Yet, there is no stasis in world affairs. The 1920s' desire for higher returns abroad promoted the first flowering of ADR growth. This growth was virtually frozen in the regulatory aftermath of the Great Depression and the international tragedy of a second global conflict. The second period of ADR growth occurred during a time of American hegemony over reconstruction of the war ravaged economies of Japan and Western Europe. This was followed by a period when nationalistic fears drove American policymakers to restrict growth in a market that Americans themselves had created. Finally, a third period of growth occurred as global economic interdependence began to open nationalistic barriers to growth.

CHAPTER 5
RESEARCH METHODOLOGY

This study of American Depositary Receipts is of an exploratory nature and, therefore, a combination of research methods is used. The first research question is investigated through a statistical hypothesis testing procedure. The remaining research questions are addressed by use of descriptive regression methods.

Part 1 - Identification

The first research question is restated as follows:

Do accounting variables provide sufficient information for a financial statement user to distinguish between those firms that do and do not have ADRs?

This research question is investigated through an empirical examination of the relationship between financial accounting information and the existence of ADRs.

Research Design

Several potential sources of financial accounting data for foreign firms were investigated, including the NAARs and EXTEL databases and actual SEC filings. A trip was made to the SEC in Washington, D.C., to ascertain the feasibility of direct file access. Unfortunately, each request for an individual file required a minimum of four hours waiting time for processing. This rendered the use of SEC filings

impracticable. In a similar fashion, the various financial accounting databases such as EXTEL or NAARs could not be used because of a lack of research funding. The only readily available and practical source of financial accounting data for foreign firms was Moody's International. Thus, the information contained in this publication was selected as the basic data source for the study. Moody's International has been published since 1981 by the Moody's Investors Service, a subsidiary of the Dun and Bradstreet Corporation. Approximately 5,000 large foreign firms are presented in a standard format, which includes a brief history of the firm and a description of its business, as well as key officers, subsidiaries and the address of the home office. In addition financial statement information is usually presented for two years, but occasionally a five-year summary is provided. Where practicable, the financial statement information is also obtained from SEC filings. If these are not available, stockholder reports are used. While this approach induces possible selection bias, no acceptable alternative procedure was found to check on the reliability of the information supplied.

Clearly, the population of firms described in any given edition of Moody's International can be readily divided into the two mutually exclusive groups of firms having and not having ADRs. Because ADRs are largely concentrated in only a few countries, however, five national samples were selected from those countries with the largest representation of ADRs. A single exception was made to exclude South

African ADRs from the study. There were two reasons for this exclusion. First, during the time frame of the study, the Republic of South Africa was being boycotted by many investors in the world financial community because of its apartheid laws. Any possible study of price fluctuations, as required in the second portion of this study, would necessarily be skewed by these restrictions. Secondly, because many of the South African ADRs were for gold mining stocks, it was recommended that they not be included because of the potentially confounding effect of world gold price movements. An interesting future research project might be to analyze whether this effect does indeed occur.

The five national samples selected were one each for Australia, Japan, the Netherlands, Sweden, and the United Kingdom. These samples were drawn to pair ADR and non-ADR firms from the same country, and where possible the same industry, in order to control for any national or industrial peculiarities that might arise. While any of a variety of approaches might be used to classify firms within industries, a decision was made to use three-digit SIC codes. Ward's International Directory provides a convenient source listing for these SIC codes, as well as allowing one to eliminate any unknown subsidiaries from consideration. As will be described later, this study focuses on particular financial statement items. Data on these financial statement items were obtained from Moody's International for the sample firms covering the period 1982-1988.

While the selection of large foreign firms for the population was dictated by the lack of readily available data for smaller firms, there is at least one more rationale for choosing a population of large firms for study. By choosing large firms, some control can be exercised for the most obvious factor driving ADR creation, namely corporate size. Clearly, larger international corporations are more apt to garner the attention of American investors and to seek American capital.

A boom in ADR creation occurred during the period of study, and it was necessary to select a single base year when dividing the firms into ADR and non-ADR groups. The base year was selected as 1987 for two reasons. First, Moody's International, the major data source employed in the study began publication in 1981, and the most current edition at the beginning of this study (1988) included financial information through 1987. Thus, it was possible to obtain at least five years of data for each of the firms selected for study. In addition, the 1980s have witnessed an explosion in the use of ADRs. While it would be interesting to study earlier periods of ADR activity, such an effort might lack relevance to the current role of ADRs in international securities action. Finally, by choosing 1987 as the study year, one could avoid selecting non-ADR firms that "went ADR" in 1988 or 1989.

The purpose of selecting single country samples in which firms are paired by industry is to avoid confounding results created by the accounting peculiarities of particular nations or industries. As Choi et al. (1983) have pointed out, comparisons of accounting ratios across

borders can easily be misapplied. Even with the proposed pairing technique, it is important to consider possible data effects due to accounting changes during the study period.

Variable Selection

While a variety of accounting data variables might have been appropriate for the initial phase of the study, the following items were examined:

1. "Accounting" debt-to-equity ratios (with debt defined as long-term debt obligations and equity including preferred stock)
2. "Financial" debt-to-equity ratios (with preferred stock being considered as debt rather than equity)
3. Total assets
4. Fixed asset ratios (fixed assets to total assets)
5. Net sales
6. Cash flow (net income + noncash adjustments)
7. Total capitalization (shareholders' equity + long-term debt)
8. Interest expense
9. Depreciation, depletion and amortization expense
10. Net property, plant and equipment
11. Net income

The motivation and/or justification for selecting these particular items is as follows:

1. Debt-to-equity ratios might be expected to decrease as firms use stock ADRs to access American capital.
2. The fixed asset ratios might be higher for "ADR firms" because they might indicate a greater need for capital in order to support larger capital expenditures. For the same reason, ADR firms might be expected to have larger amounts of property, plant and equipment, as well as higher depreciation, depletion and amortization expenses.
3. Sales, cash flow, net income and total assets are potential size proxies for "political costs". (While the selection of a large firm population is an effort to control for gross size effects, it is nonetheless important to consider the role of size differentials in

- key accounting variables.)
4. Total capitalization might well provide a threshold indicator of ADR activity.
 5. Interest expense might be expected to be lower for ADR firms because of the greater use of stockholder equity rather than debt as a means of raising capital. (This might not necessarily follow, since some highly leveraged firms may resort to ADRs as an alternative form of financing, however the possibility should be explored.)

Research Hypotheses

The following operating hypotheses (each expressed in the null form) were developed for investigating the research question:

- H1a: There are no significant differences in the magnitude of accounting debt-to-equity ratios between foreign firms with ADRs and those without ADRs.
- H1b: There are no significant differences in the magnitude of financial debt-to-equity ratios between foreign firms with ADRs and those without ADRs.
- H1c: There are no significant differences in the magnitude of total assets between foreign firms with ADRs and those without ADRs.
- H1d: There are no significant differences in the fixed asset ratios of foreign firms having ADRs and those not having ADRs.
- H1e: There are no significant differences in the magnitude of net sales between foreign firms with ADRs and those without ADRs.
- H1f: There are no significant differences in the magnitude of net cash flows between foreign firms with ADRs and those without ADRs.
- H1g: There are no significant capitalization differences between foreign firms with ADRs and those without ADRs.
- H1h: There are no significant interest expense differences between foreign firms with ADRs and those without ADRs.
- H1i: There are no significant depreciation, depletion and amortization expense differences between foreign firms with ADRs and those without ADRs.
- H1j: There are no significant differences in the amount of net property, plant and equipment between foreign firms with ADRs and those without ADRs.
- H1k: There are no significant differences in the amount of net income between foreign firms with ADRs and those without ADRs.

Data Sources and Analysis

The primary sources of the financial accounting data used in this study were the editions of Moody's International at the Boatwright Library of the University of Richmond. Several other sources proved useful. The Boatwright Library maintains a collection of corporate annual reports as does the Colgate Darden Library at the University of Virginia. Amongst these corporate reports, a few examples of foreign firm reports were scattered. Unfortunately, these reports could only be used as a check on the validity of the Moody's International data, since the collection of actual reports was not extensive enough for research purposes. An additional source of data was the CD-ROM format database of financial statement data developed by Compact Disclosure. This database is a distillation of SEC filings and is much more readily accessible than the actual SEC filings, at least until the much awaited EDGAR system finally becomes available to the research community. Unfortunately for purposes of this study, the vast majority of the firms contained in this database are American and only a handful of foreign firms are included. Mary Washington Library maintains access to this database, and also has the latest edition of Worldscope. This extremely useful publication is issued by the Center for International Financial and Accounting Research in Princeton, New Jersey. Standardized financial statement information is presented, and adjustments are made to produce data that are as comparable as possible. In addition to

acting as a check on the accuracy of the data reported by Moody's International, the Worldscope data were used in those cases where Moody's International data were unavailable either for a given firm or a given period. Finally, Value Line occasionally presents limited financial accounting data in its analyses of foreign firms having ADRs. Unfortunately from a researcher's standpoint, these reports have not been systematically assembled and must be laboriously dug out from a mass of other reports. Nonetheless, in a few instances, the data presented in Value Line were used as a reliability check on the primary data source.

Because of the relatively small size of the database, reliability checks were made whenever information was obtained from a secondary source. The values for all the items selected were compared between different sources and differences were studied. Most of the differences were minimal, and were caused by differences in rounding, or by one of the sources aggregating values differently for reporting purposes. (For example, Worldscope reports common stock combined with shareholders' equity, whereas Moody's International reports common stock as a separate line item at par value.) In several cases, evident typographical errors had occurred, and the data were corrected. (In one example, a value that clearly should have been in the millions of dollars was recorded in the thousands.) In the few cases where the differences were significant, and the source of the difference could not be determined, the data item was recorded as "not available", and was not included in the analysis.

While these reliability checks proved time consuming, it was important to perform them as thoroughly as possible, because secondary data sources were being employed. In the case of future research, when online data will be more readily accessible, this procedure might well be reduced.

Each of the hypotheses was tested by using a series of Wilcoxon matched-pairs signed-ranks tests within each national sample. In addition to testing for significant differences in the magnitudes of each of the variables between the matched ADR and non-ADR firms, the assumed directionalities described above were also tested. The Wilcoxon procedure was used rather than paired t-tests because there was no theoretical reason to assume a priori that the data would follow a normal distribution. In addition, as Randles and Wolfe point out, the efficiency of the Wilcoxon procedure is over 95 percent of that for the paired t-test in those cases where the a priori assumptions of the t-test are met.¹ Taken together, these two rationales support the use of the Wilcoxon procedure.

¹Ronald H. Randles and Douglas A. Wolfe, Introduction to the Theory of Nonparametric Statistics, New York: J. Wiley, 1979, p. 95.

Part 2 - Foreign Currency Exchange Effects

The second research question posed in Chapter 1 was:

Is a significant portion of average ADR returns due to foreign currency exchange effects?

Research Design

In order to assess this second research question, representative samples of sponsored ADRs were selected from each of the five countries chosen in the first part of the research (Australia, Japan, the Netherlands, Sweden and the United Kingdom). End of the month price quotations (both U.S. and local) as well as dividend and currency exchange rate information were obtained for as much of the period from December 1982 to December 1989 as possible. Using the simple ADR pricing model described below, calculations of the portion of monthly returns due to foreign currency exchange effects were made for each of the ADRs over the period. The rationale for the selection of the particular time period is that SFAS 52 (issued in December 1981) took effect for all fiscal years beginning after 15 December 1982. While SFAS 52 does not classify ADRs as currency hedges, Tomlinson (1977) has described them as "inherent currency speculation".² It seems relevant to study just how significant the foreign currency exchange effect has been for individual ADRs during the period of SFAS 52 applicability. Analyzing empirical data might make it possible to judge whether ADRs

²Timothy Tomlinson, "Federal Regulation of Secondary Trading in Foreign Securities", The Business Lawyer, v. 32, January 1977, p. 486.

provide effective foreign currency hedges, and whether changes in ADR holding disclosures seem warranted.

ADR Pricing Model

Because of continual arbitrage possibilities, the market price of an ADR should be closely correlated to the price of the underlying security that it represents.³ Thus, one model of the ADR price would be:

$$P\$ = (PLC * CE * AR) + TC + E$$

where P\$ = ADR price in dollars

PLC = price in the local currency of the underlying shares

CE = currency exchange rate (\$/LC)

AR = ADR ratio (number of shares per ADR)

TC = transaction costs (e.g. ADR issuance fees)

E = residual term

³David Eiteman and Arthur Stonehill, Multinational Business Finance, Addison-Wesley, Reading, Massachusetts, Fourth Edition, 1986, p. 412.

ADR Return Model (no dividends)

Now, the one period dollar rate of return on a stock ADR (assuming no dividends during the period) would be given by:⁴

$$R\$ = \frac{P\$\{t+1\} - P\$\{t\}}{P\$\{t\}}$$

where R\$ = the dollar rate of return for the period

P\$[t] = the ADR price in dollars at the period's beginning

P\$[t+1] = the ADR price in dollars at the period's end

Assuming equal ADR transaction costs and ADR ratios across the period, and an expected value of zero for the residual term, this dollar rate of return could be rewritten as:

$$R\$ = \frac{PLC\{t+1\} * CE\{t+1\} - PLC\{t\} * CE\{t\}}{PLC\{t\} * CE\{t\}}$$

Now, the local currency rate of return on the underlying shares would be:

$$RLC = \frac{PLC\{t+1\} - PLC\{t\}}{PLC\{t\}}$$

The difference between the dollar rate of return on the ADR and the local currency rate of return on the underlying shares would be:

$$R\$ - RLC = \frac{PLC\{t+1\} * CE\{t+1\} - PLC\{t\} * CE\{t\}}{PLC\{t\} * CE\{t\}} - \frac{PLC\{t+1\} - PLC\{t\}}{PLC\{t\}}$$

⁴Jack Clark Francis, Investments: Analysis and Management, McGraw-Hill, New York, 1986, p. 32.

$$= \frac{\text{PLC}[t+1]*\text{CE}[t+1]-\text{PLC}[t+1]*\text{CE}[t]}{\text{PLC}[t]*\text{CE}[t]}$$

$$= \frac{\text{PLC}[t+1]}{\text{PLC}[t]} * \frac{(\text{CE}[t+1]-\text{CE}[t])}{\text{CE}[t]}$$

Finally, regrouping terms yields:

$$\text{R\$} = \text{RLC} + \frac{\text{PLC}[t+1]}{\text{PLC}[t]} * \frac{(\text{CE}[t+1]-\text{CE}[t])}{\text{CE}[t]}$$

Thus, the dollar rate of return on an ADR is equal to the local currency rate of return on the underlying shares plus the product of the ratio of ending to beginning underlying share prices (in the local currency) and the currency exchange rate of return.

ADR Return Model (with dividends)

Adding dividends to the one-period return model yields:

$$\text{R\$} = \frac{\text{P\$}[t+1] - \text{P\$}[t] + \text{D\$}[d]}{\text{P\$}[t]}$$

where DS = ADR dividend in dollars,

d = the ADR dividend date, $t \leq d \leq t+1$,

and the remaining terms are the same as in the earlier model.

Again assuming equal ADR transaction costs across the period, and an expected value of zero for the residual term,

$$\text{R\$} = \frac{\text{PLC}[t+1]*\text{CE}[t+1]-\text{PLC}[t]*\text{CE}[t]+\{\text{DLC}[d]*\text{CE}[d]-\text{DTC}\}}{\text{PLC}[t]*\text{CE}[t]}$$

where DLC = the local currency dividend

DTC = the dividend transaction cost

and the remaining terms are the same as in the earlier model.

The local currency rate of return on the underlying shares would now be given by:

$$RLC = \frac{PLC[t+1] - PLC[t] + DLC[d]}{PLC[t]}$$

The difference between the dollar rate of return on the ADR and the local currency rate of return on the underlying shares now would be:

$$R\$-RLC = \frac{PLC[t+1]*\{CE[t+1]-CE[t]\}+DLC[d]*\{CE[d]-CE[t]\}-DTC}{PLC[t]*CE[t]}$$

Again, the dollar rate of return is obtained by regrouping terms:

$$R\$=RLC+\frac{PLC[t+1]*\{CE[t+1]-CE[t]\}+DLC[d]*\{CE[d]-CE[t]\}-DTC}{PLC[t]*CE[t]}$$

This produces a somewhat more cumbersome model, at least as far as the currency exchange effect component is concerned.

Research Hypothesis

This part of the study proceeded with the following operating hypothesis (expressed in the null form):

H2: The portion of ADR returns resulting from foreign currency exchange effects is not significant.

Data Sources and Analysis

The primary source for U.S. monthly ADR price quotations and dividend information was Standard & Poor's Daily Stock Price Record. The Wall Street Journal was used both as an additional source, and as a reliability check on the S&P data. Most of the domestic market prices for the underlying securities were obtained from the Financial Times of London. (A printers' strike at this paper from May to August 1983 produced a data gap for some of the stocks used in this study.) Additional sources for local prices included The Wall Street Journal, The London Times, The Far Eastern Economic Review and The Australian Stock Exchange Journal. Dividend information for British securities was obtained from the Financial Times, but was largely unavailable for other countries.

Currency exchange rate information was obtained from the International Monetary Fund's Financial Statistics. These data were tested for reasonableness by comparison to data found in The Wall Street Journal.

Part 3 - Trading Patterns

Research Hypotheses

The following operating hypotheses (each expressed in the null form) were developed to investigate the third and fourth research questions:

H3: ADR returns are not correlated with the overall market returns for the foreign markets on which their underlying securities trade.

H4: ADR returns are not correlated with the overall market returns for the American markets on which they trade.

Research Design, Data Sources and Analysis

To examine the third and fourth research questions, the sample firms selected in the second part of the study were used again. Correlations were carried out by regressing monthly ADR returns on the monthly returns separately for the relevant domestic and American markets (using market-wide indices to calculate market returns). The relevant market indices were obtained from the Wall Street Journal and the Financial Times.

It is important to ascertain whether ADR trading patterns more closely follow their home market or the U.S. market on which they trade. Much of the argument advanced for investing in ADRs is that they serve to diversify portfolio risk because their home markets are not perfectly correlated with the American markets. Several observers have noted that world markets are becoming more and more closely correlated.⁵ Nonetheless, it seems clear that there will still be pockets of

⁵Paul Kupiec, "Financial Liberalization and International Trends in Stock, Corporate-Bond and Foreign-Exchange Market Volatilities," OECD Working Paper 94, cited by "Dances with Bulls", The Economist, April 20, 1991, p. 77; E. Bertero and C. Mayer, Global Interdependence of Stock Markets Around the Crash of October 1987, Center for Policy Research, March 1989, cited by "Why Stockmarkets Move Together", The Economist, March 11, 1989, p. 77.

differentiation between different national markets. What has not been established, however, is that ADRs closely track their home markets. It appears from a review of the literature that this has generally been assumed without being tested. It is thus relevant to the current study to ascertain whether ADRs track their own or U.S. markets more closely.

Chapter Summary

This chapter describes the methodology of the current study, as well as the data sources and sampling procedures employed. Succinctly stated, the study is divided into three portions. In the first, particular financial statement data for the years 1982-1988 were selected from Moody's International and Worldscope for paired samples of ADR and non-ADR firms from five different nations: Australia, Japan, the Netherlands, Sweden and the United Kingdom. These data were compared using Wilcoxon signed rank procedures. In addition, overall t-tests were conducted by combining the five samples into a larger sample. Although highly inadequate from a statistical standpoint, it was felt that this would provide worthwhile information on which later research might be based.

The second portion of the study involves a consideration of the currency effects on ADR returns. This was done in a two-tiered approach. First, the end-of-month prices, both domestic and foreign, were obtained from the Wall Street Journal and The Financial Times for the period November 1982 to December 1989. Using the simple ADR pricing

model, which assumes that arbitrage will eliminate any pricing differences between the home and U.S. markets, monthly returns were calculated. Two different methods were then employed to assess the importance of currency effects. One method was to look at the percentages of total returns due to currency effects. This descriptive method was supplemented by a regression approach to determine what portion of the variation in overall ADR returns could be explained by the variation in the currency exchange effects.

Finally, the third portion of the study involves studying whether individual ADRs more closely tracked the home market or the U.S. markets on which they were traded. Market indices were obtained from the IMF Financial Statistics, The Financial Times, and The Wall Street Journal for Australia, Japan, the Netherlands, Sweden and the United Kingdom. In addition, market indices were obtained for the New York Stock Exchange, the American Stock Exchange, and the NASDAQ system. Using the same pricing data obtained in the second portion of the study, regressions were calculated to determine the correlation between the ADR price movements and the market movements, and to determine which market, if any, the ADR tracked more closely.

Chapter 6

RESULTS AND ANALYSIS OF RESULTS

This chapter contains a detailed analysis of the results obtained from application of the procedures outlined in Chapter 5. The analysis is presented in three sections: identification, foreign currency exchange effects and trading patterns. Within each section, the discussion is developed on a country by country basis in alphabetical order. To facilitate the reader's task, most of the data are presented in summary form. Preliminary conclusions are stated at the end of each section. General conclusions are presented in Chapter 7.

Section 1 - Identification

As discussed in Chapter 5, the Wilcoxon matched-pairs signed-ranks procedure was used to test the various statistical hypotheses outlined in the identification section of the study. According to Howell, this procedure is "the distribution-free analogue of the t-test for related samples".¹ Because there was no theoretical justification to support an a priori assumption of normality for the financial statement data in question, this procedure rather than paired t-tests was selected. Siegel and Castellan point out that when the number of differences exceeds 15, the sum of the ranks is "approximately normally

¹David C. Howell, Statistical Methods for Psychology, Second Edition, Boston: Duxbury Press, 1987, p. 564.

distributed".² This simplification has been used in calculating the p-values for the individual Wilcoxon tests.

Exhibits 6-1 through 6-5 list the corporate matched pairs from the five study nations. In total, 43 matched pairs were selected in the five samples chosen from those nations having the greatest number of distinct ADRs. Six Australian, eighteen Japanese, three Dutch, seven Swedish and nine British pairs are represented. As shown in Exhibits 6-1 through 6-5, a variety of SIC groups appear in the samples. Two separate analyses of the data were conducted, one using the actual financial statement figures, and the second using scaled data in ratio format. The initial results for each national sample are discussed first, followed by a discussion of the modified test results based on ratios. The concluding portion of this section examined the overall t-tests that result from grouping the five national samples into single samples for each year of data.

Initial Results

Australian Pairs

The results of the initial Wilcoxon matched-pairs signed-ranks tests for the six Australian pairs are shown in Exhibit 6-6. All of the tests are highly significant, with the p-values in all but two of the cases being less than 0.0005. These two exceptions relate to the fixed

²Sidney Siegel and N. John Castellan, Jr., Nonparametric Statistics for the Behavioral Sciences, Second Edition, New York: McGraw-Hill Book Company, 1988, p. 91.

Country : Australia

Exhibit 6-1

<u>Non-ADR Firm</u>	<u>ADR Firm</u>	<u>SIC</u>
Advertiser Newspapers	News Corporation	271
Blue Circle Southern Cement	Boral	327
Humes	Monier	327
Tubemakers of Australia	Broken Hill Proprietary	331
Bramble Industries	Mayne Nickless	421
Waltons Bond	Coles Myer	531

SIC Groups :

- 271 - Newspaper Publishing and Printing
- 327 - Concrete, Gypsum and Plaster Products
- 331 - Blast Furnaces, Steel Works and Rolling and Finishing Mills
- 421 - Trucking (Local and Long Distance)
- 531 - Department Stores (Retail)

Country : Japan

Exhibit 6-2

<u>Non-ADR Firm</u>	<u>ADR Firm</u>	<u>SIC</u>
Sapporo Breweries	Kirin Brewery	208
Nissin Food Products	Ajinomoto	209
Kyokuyo	Nippon Suisan Kaisha	209
Kuraray	Toray Industries	282
Yokohama Rubber	Bridgestone	301
NGK Insulators	Kyocera	326
Nippon Steel	Nisshin Steel	331
Fujitec	Furukawa Electric	353
Toyoda Automatic Loom Works	Komatsu	353
Amano	Fujitsu	357
Oki Electric Industry	Mitsubishi Electric	357
Aiwa	Sony	365
Japan Radio	NEC	366
Daihatsu Motor	Toyota Motor	371
Mazda Motor	Nissan Motor	371
Minolta Camera	Fuji Photo Film	386
Olympus Optical	Canon	386
Isetan	Ito-Yokado	531

SIC Groups :

- 208 - Beverages
- 209 - Miscellaneous Food Preparations and Kindred Products
- 282 - Plastic Materials and Synthetic Resins, Synthetic Rubber, Synthetic and Other Man-Made Fibers (Except Glass)
- 301 - Tires and Inner Tubes
- 326 - Pottery and Related Products
- 331 - Blast Furnaces, Steel Works and Rolling and Finishing Mills
- 353 - Construction, Mining and Materials Handling Machinery and Equipment
- 357 - Office, Computing and Accounting Machines
- 365 - Radio and TV Receiving Equipment
(Except Communication Types)
- 366 - Communication Equipment
- 371 - Motor Vehicles and Motor Vehicle Equipment
- 386 - Photographic Equipment and Supplies
- 531 - Department Stores (Retail)

Country : Netherlands

Exhibit 6-3

<u>Non-ADR Firm</u>	<u>ADR Firm</u>	<u>SIC</u>
N.V. Koninklijke Distilleerderij Erven Lucas Bols	Heineken	208
DSM	Akzo	282
Maatschapping Van Berkel's Patent N.V.	Philips Gloeilampen	357

SIC Groups :

- 208 - Beverages
- 282 - Plastic Materials and Synthetic Resins, Synthetic Rubber,
Synthetic and Other Man-Made Fibers (Except Glass)
- 357 - Office, Computing and Accounting Machines

Country : Sweden

Exhibit 6-4

<u>Non-ADR Firm</u>	<u>ADR Firm</u>	<u>SIC</u>
Mo Och Domsjo	Svenska Cellulosa	262
Kemanobel	AGA	281
Astra	Pharmacia	283
Incentive	ASEA	344
Akermans Verkstad	Atlas Copco	353
Flakt Group	SKF	356
Flygt	Alfa-Laval	356

SIC Groups :

- 262 - Paper Mills (Except Building Paper Mills)
- 281 - Industrial Inorganic Chemicals
- 283 - Drugs
- 344 - Fabricated Structural Metal Products
- 353 - Construction, Mining and Materials Handling Machinery and Equipment
- 356 - General Industrial Machinery and Equipment

Country : United Kingdom

Exhibit 6-5

<u>Non-ADR Firm</u>	<u>ADR Firm</u>	<u>SIC</u>
Northern Foods	Hanson	201
Unigate	Allied-Lyons	202
Rowntree Mackintosh	Cadbury Schweppes	206
Bass	Guinness	208
Reckitt & Colman	Grand Metropolitan	208
Laporte	BOC Group	281
Smith & Nephew	Glaxo Holdings	283
Paterson Zochonis	Beecham Group	284
Haden	Davy	891

SIC Groups :

- 201 - Meat Products
- 202 - Dairy Products
- 206 - Sugar and Confectionery Products
- 208 - Beverages
- 281 - Industrial Inorganic Chemical
- 283 - Drugs
- 284 - Paints, Varnishes, Lacquers, Enamels and Related Products
- 891 - Engineering, Architectural and Surveying Services

Country : Australia

Exhibit 6-6

Net Sales	$p < 0.00003$	Reject H
Depreciation, Depletion and Amortization Expense	$p < 0.0005$	Reject H
Interest Expense	$p < 0.00011$	Reject H
Net Income	$p = 0.00007$	Reject H
Cash Flow	$p = 0.00007$	Reject H
Net Property, Plant and Equipment	$p = 0.00016$	Reject H
Total Assets	$p < 0.00007$	Reject H
Fixed Asset Ratio	$p = 0.0359$	Reject H
Total Capitalization	$p < 0.00007$	Reject H
Accounting Debt- to-Equity Ratio	$p = 0.00016$	Reject H
Financial Debt- to-Equity Ratio	$p = 0.0020$	Reject H

asset ratio, which shows a p-value of 0.0359 and the financial debt-to-equity ratio, which shows a p-value of 0.002. Because even these two ratios have p-values less than the rejection criterion (α) of 0.05, each of the null hypotheses that there are no significant differences between the selected financial statement data for paired ADRs and non-ADRs would be rejected for the selected sample of Australian firms. Of particular interest in the results, however, is the fact that the sign of the T score for the two debt-to-equity ratios and for interest expense is the opposite of what had been anticipated. In other words, the debt-to-equity ratios and interest expense figures for the Australian ADR firms were statistically higher than for their non-ADR counterparts.

Japanese Pairs

The results of the initial Wilcoxon matched-pairs signed-ranks tests for the 18 Japanese pairs are shown in Exhibit 6-7. Eight of the tests were highly significant, with p-values less than 0.005. Of the remaining tests, the fixed asset ratio was significant, with a p-value of 0.0268 falling well within the rejection region. For cash flow and depreciation, depletion and amortization expense, however, the results were quite different. In these cases, the p-values of 0.1949 and 0.2578 fell well above an $\alpha = 0.05$. Thus, one could not reject the null hypotheses of no significant differences between Japanese ADR and non-ADR firms for these two items. Finally, the sign of the T score for interest expense was the opposite of what had been anticipated, with

Country : Japan

Exhibit 6-7

Net Sales	$p < 0.00003$	Reject H
Depreciation, Depletion and Amortization Expense	$p = 0.2578$	Fail to Reject H
Interest Expense	$p < 0.00003$	Reject H
Net Income	$p < 0.00003$	Reject H
Cash Flow	$p = 0.1949$	Fail to Reject H
Net Property, Plant and Equipment	$p < 0.00003$	Reject H
Total Assets	$p < 0.00003$	Reject H
Fixed Asset Ratio	$p = 0.0268$	Reject H
Total Capitalization	$p < 0.00003$	Reject H
Accounting Debt- to-Equity Ratio	$p = 0.0023$	Reject H
Financial Debt- to-Equity Ratio	$p = 0.0023$	Reject H

Japanese ADR firms showing significantly higher interest expense figures than their non-ADR compatriots.

Dutch Pairs

The results of the initial Wilcoxon matched-pairs signed-ranks tests for the three Dutch pairs are shown in Exhibit 6-8. The results were all significant, with seven of the tests having p-values falling below 0.005. Thus, each of the null hypotheses that there were no significant differences in the chosen financial statement items between the Dutch ADR firms and their non-ADR counterparts would be rejected. As was the case with both the Australian and Japanese samples, the sign of the T score for interest expense was the opposite of what had been anticipated, with Dutch ADR firms showing significantly higher interest expense figures than their non-ADR matches.

Swedish Pairs

The results of the initial Wilcoxon matched-pairs signed-ranks tests for the seven Swedish pairs are shown in Exhibit 6-9. Except for the debt-to-equity ratios, the p-values for all tests were equal to or less than 0.0001, and so were highly significant. The accounting debt-to-equity ratio had a p-value of 0.0122, while the financial debt-to-equity ratio showed a p-value of 0.0062. These were both well below the $\alpha = 0.05$ level of significance. Thus, the null hypotheses that there were no differences in the selected financial statement items between

Country : Netherlands

Exhibit 6-8

Net Sales	p = 0.0139	Reject H
Depreciation, Depletion and Amortization Expense	p = 0.0069	Reject H
Interest Expense	p < 0.0002	Reject H
Net Income	p < 0.0002	Reject H
Cash Flow	p < 0.0002	Reject H
Net Property, Plant and Equipment	p = 0.0006	Reject H
Total Assets	p = 0.0003	Reject H
Fixed Asset Ratio	p = 0.0014	Reject H
Total Capitalization	p < 0.0002	Reject H
Accounting Debt- to-Equity Ratio	p = 0.0427	Reject H
Financial Debt- to-Equity Ratio	p = 0.0427	Reject H

Country : Sweden

Exhibit 6-9

Net Sales	p < 0.00003	Reject H
Depreciation, Depletion and Amortization Expense	p < 0.00003	Reject H
Interest Expense	p < 0.00003	Reject H
Net Income	p = 0.00011	Reject H
Cash Flow	p < 0.00003	Reject H
Net Property, Plant and Equipment	p < 0.00003	Reject H
Total Assets	p < 0.00003	Reject H
Fixed Asset Ratio	p < 0.00005	Reject H
Total Capitalization	p < 0.00003	Reject H
Accounting Debt- to-Equity Ratio	p = 0.0122	Reject H
Financial Debt- to-Equity Ratio	p = 0.0062	Reject H

Swedish ADRs and their non-ADR counterparts would all be rejected. As has been the case throughout, however, the sign of the T score for interest expense was the opposite of what had been anticipated at the outset of the study. Swedish ADR firms show significantly higher interest expense than their non-ADR compatriots.

British Pairs

The results of the initial Wilcoxon matched-pairs signed-ranks tests for these nine pairs are shown in Exhibit 6-10. Ten of the eleven tests show p-values less than or equal to 0.0003 and were thus highly significant. The test for fixed asset ratio, however, had a p-value of 0.1151, which is well above $\alpha = 0.05$. Thus, one could not reject the null hypothesis that British ADR and non-ADR firms had no significant differences in their fixed asset ratios. For the remaining financial statement items chosen for study, the highly significant results would lead one to reject the null hypotheses of no significant differences between British ADRs and their non-ADR counterparts. Finally, as was the case with the Australian portion of the study, both debt-to-equity ratios, as well as interest expense, bore T scores of opposite sign to what had been anticipated. Thus, British ADR firms have higher interest expense and debt-to-equity figures than their non-ADR counterparts.

Net Sales	p < 0.00003	Reject H
Depreciation, Depletion and Amortization Expense	p < 0.00003	Reject H
Interest Expense	p < 0.00003	Reject H
Net Income	p < 0.00003	Reject H
Cash Flow	p < 0.00003	Reject H
Net Property, Plant and Equipment	p < 0.00003	Reject H
Total Assets	p < 0.00003	Reject H
Fixed Asset Ratio	p = 0.1151	Fail to Reject H
Total Capitalization	p < 0.00003	Reject H
Accounting Debt- to-Equity Ratio	p = 0.00005	Reject H
Financial Debt- to-Equity Ratio	p < 0.0003	Reject H

Summary of Preliminary Conclusions

Several preliminary conclusions can be drawn from these initial identification tests. The most obvious one is that the various size factors showed highly significant results. In general, the ADR firms were much, much larger than their non-ADR counterparts. A second conclusion is that interest expense was incorrectly considered at the beginning of the study, when it was hypothesized that ADR firms might show lower interest expense figures than their non-ADR counterparts. The rationale for this assumption was that ADR firms might tend to rely more on equity than on debt as a means of raising capital. In all five national samples, however, the absolute ADR interest expense figures were significantly higher than those for non-ADR firms. Clearly, this item should have been classified as a size factor. Another factor that revealed unexpected results was the debt-to-equity ratio, at least for the Australian and British samples. A conclusion that debt-to-equity ratios are always lower for ADR firms is not acceptable, since two of the five country samples revealed the opposite result. The selection between debt and equity financing is evidently much more complicated than a simple proposition of one or the other.

A similar problem arises in explaining the results obtained for fixed asset ratios. The test of British fixed asset ratios resulted in a failure to reject the null hypothesis. However, both the Japanese and Australian tests showed higher p-values for fixed asset ratios than were typical across the study. In addition, the fact that the null

hypotheses for the tests of Japanese firm cash flows and depreciation, depletion and amortization expense could not be rejected requires interpretation. Because the test of net income was highly significant, the cash flow result is due to the overwhelming influence of lower than anticipated depreciation, depletion and amortization expenses. This may result from the failure of most Japanese firms in the study to disclose depreciation, depletion and amortization expense separately. The test of this element included a much smaller sample size ($N = 27$ versus $N > 100$) than did the remainder of the tests for Japanese firms.

Ratio Format

Before discussing the results of the second part of the study, an important point needs to be made. Questions have arisen concerning the validity of the non-ratio variables selected in the identification portion of the study. The contention is that because most of the ADR firms are much larger than their non-ADR counterparts all of the non-ratio variables will effectively be proxy measures of firm size. For this reason, it can be argued that variables in a ratio format provide a more interesting basis of study. Therefore, it was decided to repeat the testing procedure for the non-ratio variables after first scaling the income statement items by net sales and the balance sheet items by total assets.

In a further attempt to improve the second analysis, several variables not included in the original analysis were added to the study. Because the first analysis had made no effort to consider whether ADRs were more profitable than their non-ADR counterparts, the two profitability ratios of return on assets and return on equity were included among these additional variables. Similarly, the efficiency ratio of interest expense to long-term debt was included to determine whether ADR firms showed a lower cost of debt than non-ADR firms. Finally, ratios of current liabilities and current assets to total assets were added to see whether there were significant liquidity differences between ADRs and non-ADRs.

As a result of these changes, the identification tests were repeated for each of the five samples with the following fifteen variables:

1. Depreciation, Depletion and Amortization Expense to Net Sales
2. Operating Income to Net Sales
3. Interest Expense to Net Sales
4. Pretax Income to Net Sales
5. Net Income to Net Sales
6. Cash Flow to Net Sales
7. Interest Expense to Long-term Debt
8. Interest Expense to Total Assets
9. Current Assets to Total Assets
10. Net Property, Plant and Equipment to Total Assets
11. Current Liabilities to Total Assets
12. Long-term Debt to Total Assets
13. Shareholders' Equity to Total Assets
14. Return on Assets = Net Income to Total Assets
15. Return on Equity = Net Income to Shareholders' Equity

The operating hypotheses from Chapter 5 of no significant differences in the values for the variables between the ADR and non-ADR groups were also employed in this second set of tests.

Australian Pairs

Exhibit 6-11 shows the results of the Wilcoxon matched-pairs signed-ranks tests for the ratio formatted data from the six Australian pairs. These results are quite different from those produced by the initial tests, lending support to the contention that the earlier tests merely demonstrated size differences between ADR and non-ADR firms. Only five of the variables showed p-values less than the critical value of $\alpha = 0.05$. This means that only five of the null hypotheses of ADR and non-ADR equivalence could be rejected. These five variables are interest expense to long-term debt, current assets to total assets, net property, plant and equipment to total assets, long-term debt to total assets and shareholders' equity to total assets. For the remaining ten variables, the null hypotheses could not be rejected, because the p-values were much greater than the rejection criterion (α) of 0.05.

The highest significance level obtained was the $p < 0.0002$ for the variable long-term debt to total assets. The sign of the T score for this test was negative, which indicates that the Australian sample ADR firms, as a whole, had a significantly higher value for this ratio than did their non-ADR counterparts. This contradicts the initial expectation, as it indicates that Australian ADR firms have higher debt

Country : Australia

Exhibit 6-11

Depreciation, Depletion and Amortization Expense to Net Sales	p = 0.1635	Fail to Reject H
Operating Income to Net Sales	p = 0.4960	Fail to Reject H
Interest Expense to Net Sales	p = 0.3228	Fail to Reject H
Pretax Income to Net Sales	p = 0.4052	Fail to Reject H
Net Income to Net Sales	p = 0.3228	Fail to Reject H
Cash Flow to Net Sales	p = 0.3264	Fail to Reject H
Interest Expense to Long-term Debt	p = 0.0007	Reject H
Interest Expense to Total Assets	p = 0.2676	Fail to Reject H
Current Assets to Total Assets	p = 0.0026	Reject H
Net Property, Plant and Equipment to Total Assets	p = 0.0352	Reject H
Current Liabilities to Total Assets	p = 0.4404	Fail to Reject H
Long-term Debt to Total Assets	p < 0.0002	Reject H
Shareholders' Equity to Total Assets	p = 0.0021	Reject H
Return on Assets = Net Income to Total Assets	p = 0.3936	Fail to Reject H
Return on Equity = Net Income to Shareholders' Equity	p = 0.0838	Fail to Reject H

to asset ratios than do their non-ADR mates. One possible explanation for this result lies in the volatile nature of the Australian stock markets. Because many Australian securities represent highly speculative ventures in resource extraction, Australian exchanges are characterized by wild fluctuations.³ Thus, larger firms might seek debt financing, as well as foreign capital, rather than relying excessively on a volatile equity market. Another possibility, of course, is that the large size of the Australian ADRs permits them a degree of leverage that might be unavailable to their smaller, non-ADR counterparts.

The next highest significance level was the $p = 0.0007$ obtained for the interest expense to long-term debt variable. The sign of the T score for this test was positive, indicating that the Australian sample ADR firms, as a whole, had significantly smaller values for this ratio than did their non-ADR counterparts. This finding is compatible with the initial expectations, because it indicates that the Australian ADR firms had a lower cost of debt than did their non-ADR counterparts. This might result from size differences rather than any ADR effect, however.

The third most significant value was the $p = 0.0021$ obtained for the variable shareholders' equity to total assets. The sign for the T score was also positive, again indicating that the Australian ADR firms had a smaller value for this ratio than did their non-ADR compatriots.

³Gerald Warfield, How to Buy Foreign Stocks and Bonds, New York: Harper & Row, 1985, p. 159.

Next most significant was the $p = 0.0026$ obtained for the current assets to total assets ratio variable. The sign for this test's T score was positive, indicating that the sample of Australian ADRs had a smaller value for this ratio than did their paired sample of non-ADRs. Finally, the $p = 0.0352$ obtained for the net property, plant and equipment to total assets variable was just below the rejection criterion of 0.05. The T score obtained for the test of this variable was negative. This was expected, because it means that the Australian ADR firms had a higher ratio of property to assets than did their non-ADR counterparts. Such a finding is in line with the prior assumption concerning the link between property and increased need for equity financing.

Japanese Pairs

Exhibit 6-12 shows the results of the Wilcoxon matched-pairs signed-ranks tests for the ratio formatted data from the eighteen Japanese pairs. These results are quite different from the earlier tests and also from the Australian results. This time the p-values for eleven of the fifteen tests were below the rejection criterion of 0.05. Three of the four variables for which the null hypotheses of equality between the ADR and non-ADR data could not be rejected involved interest expense. These were the ratios for interest expense to net sales, interest expense to long-term debt, and interest expense to total assets. The only remaining variable for which the null hypothesis could not be rejected was long-term debt to total assets ratio. This is not

Country : Japan

Exhibit 6-12

Depreciation, Depletion and Amortization Expense to Net Sales	p = 0.0256	Reject H
Operating Income to Net Sales	p < 0.0001	Reject H
Interest Expense to Net Sales	p = 0.4013	Fail to Reject H
Pretax Income to Net Sales	p < 0.0001	Reject H
Net Income to Net Sales	p = 0.0017	Reject H
Cash Flow to Net Sales	p = 0.0125	Reject H
Interest Expense to Long-term Debt	p = 0.3336	Fail to Reject H
Interest Expense to Total Assets	p = 0.0681	Fail to Reject H
Current Assets to Total Assets	p = 0.0004	Reject H
Net Property, Plant and Equipment to Total Assets	p = 0.0146	Reject H
Current Liabilities to Total Assets	p = 0.0048	Reject H
Long-term Debt to Total Assets	p = 0.0901	Fail to Reject H
Shareholders' Equity to Total Assets	p = 0.0146	Reject H
Return on Assets = Net Income to Total Assets	p = 0.0026	Reject H
Return on Equity = Net Income to Shareholders' Equity	p = 0.0011	Reject H

unexpected, because long-term debt represents the source of interest expense.

The most significant results for the Japanese pairs were for the two variables operating income to net sales and pretax income to net sales. Both of these showed p-values less than 0.0001, and both had negative T scores. This supported the a priori expectation that the Japanese ADR firms had, on the average, higher income per sales than did their non-ADR counterparts. This expectation was confirmed by the significant results obtained for the cash flow to net sales and net income to net sales variables. Although less significant than the other two income-related variables, these two had p-values of 0.0125 and 0.0017, respectively. From these results one can generalize that the Japanese sample ADR firms were, on average, more efficient at generating cash and income from sales than were their non-ADR mates.

The third most highly significant result for the Japanese pairs was obtained for the current assets to total assets variable. The p-value for this test was 0.0004. As with the Australian test of this variable, the T score was positive, indicating that Japanese ADR firms have, on average, a smaller percentage of their total assets in current asset form than do their non-ADR counterparts. They also appear to have a smaller percentage of their total liabilities in current form, since the T score for the test of the current liabilities to total assets variable was also positive. While less significant than the results obtained for the current asset ratio, the current liability test

produced a p-value of 0.0048, which is still highly significant. It appears that Japanese ADR firms are less liquid, both in assets and in liabilities, than their non-ADR counterparts. Perhaps the large size of the ADR firms enable them to structure their assets and liabilities toward a longer time horizon than is possible for the smaller, non-ADR firms.

Significant results were also obtained for the variables return on equity and return on assets. These showed p-values of 0.0011 and 0.0026. As anticipated, the T scores for both of these return variables were negative. This indicates that, on average, the Japanese ADR firms showed higher rates of return on both assets and equity than did their paired non-ADR compatriot firms.

The final three results were less significant. The stockholders' equity to total assets, and net property, plant and equipment to total assets variables both showed p-values of 0.0146. The variable depreciation, depletion and amortization expense to net sales showed a p-value of 0.0256. The T scores for all three of these variable tests were negative. Thus, the average Japanese ADR firm in the sample had higher percentages of stockholders' equity and net property to total assets as well as a higher ratio of depreciation-type expenses to sales than did its non-ADR counterpart. This supports the a priori assumption that ADR firms might be those with higher needs for physical capital, as well as a tendency to finance capital expenditures with equity rather than debt.

Dutch Pairs

The results of the Wilcoxon matched-pairs signed-ranks tests for the ratio formatted data from the three Dutch pairs are shown in Exhibit 6-13. Only five of the fifteen tests produced p-values below the 0.05 level of significance. Three of the five were income statement related ratios, namely cash flow to net sales, interest expense to net sales and depreciation, depletion and amortization to net sales. The remaining two significant results were for current liabilities to total assets and interest expense to total assets.

Among the significant results, the lowest p-value (0.0003) was obtained for the interest expense to net sales ratio. This score was negative, which indicated that, on average, the Dutch ADR firms had a higher level of interest expense to sales than did their non-ADR counterparts. The opposite result was expected, namely that ADR firms would show lower interest expense because of their use of equity rather than debt financing. A reversed sign was also encountered for the interest expense to total assets variable, albeit with a much less significant p-value. One explanation for these results might be that the larger ADR firms require more cash from all sources than their smaller non-ADR counterparts. Thus, they might produce higher interest expense ratios because their borrowing is less efficient than that for firms with smaller debt loads.

The T scores for the two remaining significant income statement variables were both negative. Thus, on average, the Dutch sample ADR

Country : Netherlands

Exhibit 6-13

Depreciation, Depletion and Amortization Expense to Net Sales	p = 0.0048	Reject H
Operating Income to Net Sales	p = 0.0655	Fail to Reject H
Interest Expense to Net Sales	p = 0.0003	Reject H
Pretax Income to Net Sales	p = 0.2643	Fail to Reject H
Net Income to Net Sales	p = 0.2709	Fail to Reject H
Cash Flow to Net Sales	p = 0.0116	Reject H
Interest Expense to Long-term Debt	p = 0.2296	Fail to Reject H
Interest Expense to Total Assets	p = 0.0262	Reject H
Current Assets to Total Assets	p = 0.1075	Fail to Reject H
Net Property, Plant and Equipment to Total Assets	p = 0.2483	Fail to Reject H
Current Liabilities to Total Assets	p = 0.0069	Reject H
Long-term Debt to Total Assets	p = 0.0853	Fail to Reject H
Shareholders' Equity to Total Assets	p = 0.5000	Fail to Reject H
Return on Assets = Net Income to Total Assets	p = 0.0749	Fail to Reject H
Return on Equity = Net Income to Shareholders' Equity	p = 0.0918	Fail to Reject H

firms had higher ratios of cash flow and depreciation related expenses to net sales than did their non-ADR counterparts. Finally, the T score for the current liability to total assets ratio was positive. As with the Japanese sample, the Dutch ADRs have, on average, a lower ratio of current liabilities to total assets than do their non-ADR compatriots. Again, this might indicate that the ADR firms are able to maintain less liquid liability structures, because their large size enables them to adopt a longer-term financial strategy.

Swedish Pairs

Exhibit 6-14 reports the results of the Wilcoxon matched-pairs signed-ranks tests for the ratio formatted data from the seven Swedish pairs. This time, only four of the fifteen tests produced p-values below the rejection criterion of 0.05. These four were current assets to total assets, current liabilities to total assets, net property, plant and equipment to total assets and depreciation, depletion and amortization expense to net sales.

The most significant p-values were obtained for the tests of the current assets to total assets ratio and the net property, plant and equipment to total assets ratio. Both of these ratios produced p-values less than 0.0001. In the case of the current assets to total assets ratio the T score was positive. Thus, on average, the Swedish sample ADR firms had lower ratios of current to total assets than did their non-ADR partners. On the other hand, the T score for the test of net

Country : Sweden

Exhibit 6-14

Depreciation, Depletion and Amortization Expense to Net Sales	p = 0.0069	Reject H
Operating Income to Net Sales	p = 0.0968	Fail to Reject H
Interest Expense to Net Sales	p = 0.2713	Fail to Reject H
Pretax Income to Net Sales	p = 0.2601	Fail to Reject H
Net Income to Net Sales	p = 0.4364	Fail to Reject H
Cash Flow to Net Sales	p = 0.2981	Fail to Reject H
Interest Expense to Long-term Debt	p = 0.1335	Fail to Reject H
Interest Expense to Total Assets	p = 0.0618	Fail to Reject H
Current Assets to Total Assets	p < 0.0001	Reject H
Net Property, Plant and Equipment to Total Assets	p < 0.0001	Reject H
Current Liabilities to Total Assets	p = 0.0080	Reject H
Long-term Debt to Total Assets	p = 0.1314	Fail to Reject H
Shareholders' Equity to Total Assets	p = 0.3300	Fail to Reject H
Return on Assets = Net Income to Total Assets	p = 0.0749	Fail to Reject H
Return on Equity = Net Income to Shareholders' Equity	p = 0.0694	Fail to Reject H

property, plant and equipment to total assets was negative. In this case, on average, the Swedish ADR firms had higher ratios of plant, property and equipment to total assets than did their non-ADR counterparts. This finding is in line with a priori expectations that ADR firms would have higher levels of physical capital than would non-ADR firms.

The result for the test of depreciation, depletion and amortization expense to net sales was also highly significant, with a p-value of 0.0069. The sign of the T score in this test was negative. Thus, on average, the Swedish ADR firms had higher ratios of depreciation related expenses to net sales than did their non-ADR counterparts. This result is expected in light of the higher proportions of fixed assets present in the Swedish sample ADR firms, and is also in accordance with the a priori expectations concerning the potentially higher demand of ADR firms for physical capital.

The final result that warranted rejection at the 0.05 level was for the current liabilities to total assets ratio. In this case, the p-value was a highly significant 0.0080, and the T score was positive. Thus, on average, the Swedish ADR firms had a lower ratio of current liabilities to total assets than did their non-ADR partners. As in the earlier samples, it seems that Swedish ADRs have a less liquid liability profile than do their non-ADR counterparts. Again, this is probably a result of their larger size permitting a longer-term structure for firm liabilities.

British Pairs

The results of the Wilcoxon matched-pairs signed-ranks tests for the ratio formatted data from the nine pairs of British firms are shown in Exhibit 6-15. Only five of the fifteen tests produced results that would reject the null hypotheses of equivalence in values between the paired ADR and non-ADR firms. The significant results were obtained for the following five ratio pairs: operating income to net sales, interest income to net sales, interest expense to total assets, long-term debt to total assets and shareholders' equity to total assets.

The most significant p-values of 0.0011 were obtained for the tests of operating income to net sales and long-term debt to total assets. The T scores for both were negative. This means that, on average, the British sample ADR firms have higher operating income to net sales and long-term debt to total assets ratios than do their non-ADR counterparts. In the case of long-term debt, this contradicts a priori expectations that ADR firms would show lower percentages of long-term debt than would their non-ADR counterparts.

Two of the interest expense-related ratios produced significant results. The test of the interest expense to net sales ratio yielded a p-value of 0.0023, while that for interest expense to total assets produced a p-value of 0.00143. In both cases, the T scores were negative. Therefore, on average, the British sample ADR firms had higher ratios of interest expense to net sales and interest expense to

Country : United Kingdom

Exhibit 6-15

Depreciation, Depletion and Amortization Expense to Net Sales	p = 0.0618	Fail to Reject H
Operating Income to Net Sales	p = 0.0011	Reject H
Interest Expense to Net Sales	p = 0.0023	Reject H
Pretax Income to Net Sales	p = 0.2676	Fail to Reject H
Net Income to Net Sales	p = 0.3050	Fail to Reject H
Cash Flow to Net Sales	p = 0.0934	Fail to Reject H
Interest Expense to Long-term Debt	p = 0.1423	Fail to Reject H
Interest Expense to Total Assets	p = 0.0143	Reject H
Current Assets to Total Assets	p = 0.2546	Fail to Reject H
Net Property, Plant and Equipment to Total Assets	p = 0.0869	Fail to Reject H
Current Liabilities to Total Assets	p = 0.0708	Fail to Reject H
Long-term Debt to Total Assets	p = 0.0011	Reject H
Shareholders' Equity to Total Assets	p = 0.0099	Reject H
Return on Assets = Net Income to Total Assets	p = 0.1093	Fail to Reject H
Return on Equity = Net Income to Shareholders' Equity	p = 0.3821	Fail to Reject H

total assets than did their paired non-ADR firms. As was the case with long-term debt, these results are the opposite of the a priori expectations that ADR firms would show lower levels of interest expense because of the additional use of equity financing in the form of ADRs.

The last significant British result was obtained for the ratio of shareholders' equity to total assets. The p-value from this test was 0.0099, and the T score sign was positive. Thus, on average, the British sample ADR firms had lower ratios of shareholders' equity to total assets than did their non-ADR counterparts.

Results of the Ratio Format

The overall results of testing the hypotheses under the ratio format support the observation that the initial test results were due to size effects. None of the ratio format variables was significant across all five samples, but the tests of the Japanese sample firms produced a majority of significant results across the variables tested. This was not the case with the other national samples. The only overall conclusion that appears to be warranted is that size dominates the ADR selection process. Even so, five of the test variables did show significant results in at least three of the five samples. These variables were the current assets to total assets ratio, the current liabilities to total assets ratio, the shareholders' equity to total assets ratio, the net property, plant and equipment to total assets

ratio and the depreciation, depletion and amortization expense to net sales ratio.

With the exception of the shareholders' equity to total assets ratio, the signs of the T scores for the five variables referred to above were consistent across the three samples in which they were significant. Both the current to total assets ratio and the current liabilities to total assets ratio had positive T scores. This indicates that in the three samples for which these ratios showed significant differences, the ADR firms had, on average, lower ratios of current assets to total assets, and current liabilities to total assets. In these cases, the ADR firms have, on average, less liquid asset and liability structures than do their non-ADR counterparts. It appears that the ADR firms have financial structures geared more towards the long-term, in both assets and liabilities, than do non-ADR firms. Most likely, this is a result of the ADR firms being so much larger than the non-ADR firms.

The T scores for the net property, plant and equipment to total assets ratios and the depreciation, depletion and amortization expenses to net sales ratios were negative across the three samples for which they were significant. Thus, in these samples, the ADR firms had, on average, higher ratios of property to total assets and depreciation related expenses to net sales. These results support, if only partially, the a priori expectation that ADR firms would be those with higher levels of physical capital, and thus higher levels of

depreciation expense. It must be reiterated, however, that the only definitive conclusion to be drawn from the ratio format tests is a negative one, because no single variable stands out as significant across all five sample groups.

Overall t-tests

Additional tests were performed by combining the five samples into single samples of paired ADRs and non-ADRs for each year of data in the study. While the validity of such tests may be questioned, based upon the national differences in financial statement data, the tests were nonetheless carried out, using the ratio formatted data. Rather than using the Wilcoxon matched-pairs signed-ranks testing procedures, it was decided to test this grand sample data by using paired t-tests.

Exhibit 6-16 shows the results of the overall t-tests for the 1982 data. Only four of the variables yielded significant results, with probabilities below the rejection criterion of 0.05. These four were operating income to net sales, interest expense to long-term debt, current assets to total assets and net property, plant and equipment to total assets. The directionalities of these results were as anticipated, with the ADR firms showing higher ratios of property to assets and operating income to sales, but lower ratios of current to total assets and interest expense to long-term debt.

For the 1983 data, only three significant results were obtained, as shown in Exhibit 6-17. This time, the three significant variables

Grouped t-tests (1982)		Exhibit 6-16	
		<u>t</u>	<u>df</u>
Depreciation-related Expenses to Net Sales			
0.30 < p < 0.50	Fail to Reject H	0.3789	23
Operating Income to Net Sales		2.2548	30
0.01 < p < 0.025	Reject H		
Interest Expense to Net Sales		1.2057	28
0.10 < p < 0.15	Fail to Reject H		
Pretax Income to Net Sales		1.6453	28
0.05 < p < 0.10	Fail to Reject H		
Net Income to Net Sales		-0.6166	31
0.25 < p < 0.30	Fail to Reject H		
Cash Flow to Net Sales		-0.5878	23
0.25 < p < 0.30	Fail to Reject H		
Interest Expense to Long-term Debt		-1.7652	28
0.025 < p < 0.05	Reject H		
Interest Expense to Total Assets		0.3263	29
0.35 < p < 0.40	Fail to Reject H		
Current Assets to Total Assets		-2.2199	32
0.01 < p < 0.025	Reject H		
Net Property, Plant and Equipment to Total Assets		2.3074	32
0.01 < p < 0.025	Reject H		
Current Liabilities to Total Assets		-1.4277	31
0.05 < p < 0.10	Fail to Reject H		
Long-term Debt to Total Assets		0.0572	32
0.45 < p < 0.50	Fail to Reject H		
Shareholders' Equity to Total Assets		0.0753	32
0.45 < p < 0.50	Fail to Reject H		
Return on Assets = Net Income to Total Assets		-1.0660	32
0.10 < p < 0.15	Fail to Reject H		
Return on Equity = Net Income to Shareholders' Equity		-0.7892	32
0.20 < p < 0.25	Fail to Reject H		

Grouped t-tests (1983)

Exhibit 6-17

	<u>t</u>	<u>df</u>
Depreciation-related Expenses to Net Sales 0.05 < p < 0.10 Fail to Reject H	1.6096	25
Operating Income to Net Sales 0.10 < p < 0.15 Fail to Reject H	1.2115	34
Interest Expense to Net Sales 0.025 < p < 0.05 Reject H	1.7570	36
Pretax Income to Net Sales 0.05 < p < 0.10 Fail to Reject H	1.5710	35
Net Income to Net Sales 0.40 < p < 0.45 Fail to Reject H	0.2074	40
Cash Flow to Net Sales 0.20 < p < 0.25 Fail to Reject H	0.7900	25
Interest Expense to Long-term Debt 0.15 < p < 0.20 Fail to Reject H	-0.8714	36
Interest Expense to Total Assets 0.40 < p < 0.45 Fail to Reject H	0.1851	38
Current Assets to Total Assets 0.01 < p < 0.025 Reject H	-2.3599	42
Net Property, Plant and Equipment to Total Assets 0.01 < p < 0.025 Reject H	2.2924	41
Current Liabilities to Total Assets 0.05 < p < 0.10 Fail to Reject H	-1.6725	42
Long-term Debt to Total Assets 0.40 < p < 0.45 Fail to Reject H	0.1510	42
Shareholders' Equity to Total Assets 0.45 < p < 0.50 Fail to Reject H	0.1074	42
Return on Assets = Net Income to Total Assets 0.40 < p < 0.45 Fail to Reject H	0.1914	42
Return on Equity = Net Income to Shareholders' Equity 0.45 < p < 0.50 Fail to Reject H	0.1237	42

were interest expense to net sales, current assets to total assets and net property, plant and equipment to total assets. As was the case with the 1982 results, the ADR firms in the combined sample had, on average, higher ratios of property, plant and equipment to total assets than did the non-ADR firms. Also, the ADR firms showed lower ratios of current assets to total assets than did the non-ADR firms. The interest expense to net sales ratios were on average higher for the ADR firms than for their non-ADR counterparts.

Exhibit 6-18 shows the results of the overall t-tests performed on the grouped data for 1984. Three significant results were obtained, for current assets to total assets, current liabilities to total liabilities and for net property, plant and equipment to total assets. The ADR firms had, on average, lower current liabilities to total assets ratios than did the non-ADR firms. In addition, as was true in the earlier cases, the ADR firms had higher net property, plant and equipment to total assets ratios but lower current to total assets ratio than did their non-ADR mates. These latter results are hardly surprising, because the two ratios are inversely related. Because the "other assets" category is negligible for most of the sample firms, any increase in the ratio of net property to total assets would produce a concomitant decrease in the ratio of current to total assets, and vice versa.

Exhibit 6-19 shows the results of the overall t-tests for the 1985 data. Three significant results were obtained. They were for the

Grouped t-tests (1984)		Exhibit 6-18	
		<u>t</u>	<u>df</u>
Depreciation-related Expenses to Net Sales			
0.10 < p < 0.15	Fail to Reject H	1.1005	26
Operating Income to Net Sales			
0.40 < p < 0.45	Fail to Reject H	-0.1956	36
Interest Expense to Net Sales			
0.20 < p < 0.25	Fail to Reject H	0.8299	38
Pretax Income to Net Sales			
0.15 < p < 0.20	Fail to Reject H	0.9162	40
Net Income to Net Sales			
0.40 < p < 0.45	Fail to Reject H	0.2052	40
Cash Flow to Net Sales			
0.40 < p < 0.45	Fail to Reject H	0.1440	26
Interest Expense to Long-term Debt			
0.10 < p < 0.15	Fail to Reject H	1.0087	37
Interest Expense to Total Assets			
0.35 < p < 0.40	Fail to Reject H	-0.2891	39
Current Assets to Total Assets			
0.005 < p < 0.01	Reject H	-2.7402	41
Net Property, Plant and Equipment to Total Assets			
0.025 < p < 0.05	Reject H	2.0176	40
Current Liabilities to Total Assets			
0.025 < p < 0.05	Reject H	-1.3665	41
Long-term Debt to Total Assets			
0.10 < p < 0.15	Fail to Reject H	1.0699	41
Shareholders' Equity to Total Assets			
0.45 < p < 0.50	Fail to Reject H	0.0037	41
Return on Assets = Net Income to Total Assets			
0.35 < p < 0.40	Fail to Reject H	0.3164	41
Return on Equity = Net Income to Shareholders' Equity			
0.20 < p < 0.25	Fail to Reject H	0.7868	41

Grouped t-tests (1985)

Exhibit 6-19

	<u>t</u>	<u>df</u>
Depreciation-related Expenses to Net Sales 0.05 < p < 0.10 Fail to Reject H	1.5541	26
Operating Income to Net Sales 0.01 < p < 0.025 Reject H	2.1787	36
Interest Expense to Net Sales 0.35 < p < 0.40 Fail to Reject H	0.3629	38
Pretax Income to Net Sales 0.20 < p < 0.25 Fail to Reject H	0.7962	40
Net Income to Net Sales 0.15 < p < 0.20 Fail to Reject H	1.0019	40
Cash Flow to Net Sales 0.05 < p < 0.10 Fail to Reject H	1.6091	26
Interest Expense to Long-term Debt 0.45 < p < 0.50 Fail to Reject H	-0.1073	37
Interest Expense to Total Assets 0.20 < p < 0.25 Fail to Reject H	-0.7803	39
Current Assets to Total Assets 0.05 < p < 0.10 Fail to Reject H	-1.6940	41
Net Property, Plant and Equipment to Total Assets 0.025 < p < 0.05 Reject H	1.8913	41
Current Liabilities to Total Assets 0.025 < p < 0.05 Reject H	-1.8419	41
Long-term Debt to Total Assets 0.10 < p < 0.15 Fail to Reject H	1.2924	39
Shareholders' Equity to Total Assets 0.45 < p < 0.50 Fail to Reject H	-0.0090	41
Return on Assets = Net Income to Total Assets 0.20 < p < 0.25 Fail to Reject H	0.7914	41
Return on Equity = Net Income to Shareholders' Equity 0.15 < p < 0.20 Fail to Reject H	0.8946	41

variables operating income to net sales, current liabilities to total assets and net property, plant and equipment to total assets. As was true in the earlier cases, the ADR firms showed higher ratios of net property, plant and equipment to total assets than did the non-ADR firms. In addition, the ADR firms, on average, had significantly higher operating income to net sales ratios than did the non-ADR firms. Once again, however, the ADR firms had lower current liabilities to total asset ratios than did the non-ADR firms.

The results of the t-tests on the grouped data for 1986 are shown in exhibit 6-20. Five variables produced significant results: depreciation, depletion and amortization expense to net sales, operating income to net sales, pretax income to net sales, current assets to total assets and long-term debt to total assets. For both the operating income to net sales and pretax income to net sales ratios, the ADR firms had, on average, higher values than did the non-ADR firms. This was also true for the ratios of depreciation, depletion and amortization expense to net sales and the long-term debt to total assets. As in the earlier cases, the ADR firms showed, on average, lower ratios of current assets to total assets than did the non-ADR firms.

Exhibit 6-21 shows the results of the 1987 grouped t-tests. The only significant result was obtained for the variable operating income to net sales. As in the earlier samples, the ADR firms had, on average, higher ratios of operating income to net sales than did their non-ADR counterparts.

Grouped t-tests (1986)		Exhibit 6-20	
		<u>t</u>	<u>df</u>
Depreciation-related Expenses to Net Sales			
0.025 < p < 0.05	Reject H	1.3323	38
Operating Income to Net Sales		2.2617	38
0.01 < p < 0.025	Reject H		
Interest Expense to Net Sales		0.5366	36
0.25 < p < 0.30	Fail to Reject H		
Pretax Income to Net Sales		1.8488	39
0.025 < p < 0.05	Reject H		
Net Income to Net Sales		1.0205	38
0.15 < p < 0.20	Fail to Reject H		
Cash Flow to Net Sales		0.9349	27
0.15 < p < 0.20	Fail to Reject H		
Interest Expense to Long-term Debt		-0.6469	35
0.25 < p < 0.30	Fail to Reject H		
Interest Expense to Total Assets		-1.0430	37
0.15 < p < 0.20	Fail to Reject H		
Current Assets to Total Assets		-1.7759	39
0.025 < p < 0.05	Reject H		
Net Property, Plant and Equipment to Total Assets		1.3583	40
0.05 < p < 0.10	Fail to Reject H		
Current Liabilities to Total Assets		0.5130	40
0.30 < p < 0.35	Fail to Reject H		
Long-term Debt to Total Assets		1.7574	40
0.025 < p < 0.05	Reject H		
Shareholders' Equity to Total Assets		0.7869	40
0.20 < p < 0.25	Fail to Reject H		
Return on Assets = Net Income to Total Assets		0.4482	39
0.30 < p < 0.35	Fail to Reject H		
Return on Equity = Net Income to Shareholders' Equity		1.1142	39
0.10 < p < 0.15	Fail to Reject H		

Grouped t-tests (1987)

Exhibit 6-21

	<u>t</u>	<u>df</u>
Depreciation-related Expenses to Net Sales 0.05 < p < 0.10 Fail to Reject H	1.6086	22
Operating Income to Net Sales 0.01 < p < 0.025 Reject H	2.1125	31
Interest Expense to Net Sales 0.20 < p < 0.25 Fail to Reject H	0.7328	34
Pretax Income to Net Sales 0.05 < p < 0.10 Fail to Reject H	1.5242	35
Net Income to Net Sales 0.35 < p < 0.40 Fail to Reject H	-0.3437	35
Cash Flow to Net Sales 0.40 < p < 0.45 Fail to Reject H	-0.1488	22
Interest Expense to Long-term Debt 0.10 < p < 0.15 Fail to Reject H	-1.3390	33
Interest Expense to Total Assets 0.45 < p < 0.50 Fail to Reject H	-0.0787	35
Current Assets to Total Assets 0.20 < p < 0.25 Fail to Reject H	-0.8043	37
Net Property, Plant and Equipment to Total Assets 0.35 < p < 0.40 Fail to Reject H	0.3678	37
Current Liabilities to Total Assets 0.05 < p < 0.10 Fail to Reject H	-1.5665	37
Long-term Debt to Total Assets 0.10 < p < 0.15 Fail to Reject H	1.2365	37
Shareholders' Equity to Total Assets 0.25 < p < 0.30 Fail to Reject H	-0.6432	37
Return on Assets = Net Income to Total Assets 0.45 < p < 0.50 Fail to Reject H	-0.0094	37
Return on Equity = Net Income to Shareholders' Equity 0.05 < p < 0.10 Fail to Reject H	1.3997	37

Finally, Exhibit 6-22 shows the results of the t-tests for the grand sample of grouped data for the years 1982 through 1987. Seven variables yielded significant results for these tests: depreciation, depletion and amortization expense to net sales, operating income to net sales, interest expense to net sales, pretax income to net sales, current assets to total assets, net property, plant and equipment to total assets and long-term debt to total assets. The ADR firms had, on average, higher values than their non-ADR partners for all of these ratios except current assets to total assets.

While any conclusions from these tests are of dubious validity due to the comparability problem, it is interesting to note that three of the variables produced significant results in four of the six yearly sample tests, as well as in the tests of the grand sample. These were operating income to net sales, current assets to total assets and net property, plant and equipment to total assets. In each case, the directionalities of these variables remained consistent. On average the ADR firm had higher values than their non-ADR partners for the ratios of operating income to net sales and net property, plant and equipment to total assets. On the other hand, the ADR firms, on average, had lower values than the non-ADR firms for the ratio of current assets to total assets.

Overall Grouped t-tests (1982-1987)		Exhibit 6-22	
		<u>t</u>	<u>df</u>
Depreciation-related Expenses to Net Sales			
p < 0.005	Reject H	2.5882	154
Operating Income to Net Sales		2.9780	210
p < 0.005	Reject H		
Interest Expense to Net Sales		1.9432	215
0.025 < p < 0.05	Reject H		
Pretax Income to Net Sales		2.6261	222
p < 0.005	Reject H		
Net Income to Net Sales		0.6177	229
0.25 < p < 0.30	Fail to Reject H		
Cash Flow to Net Sales		0.8586	154
0.15 < p < 0.20	Fail to Reject H		
Interest Expense to Long-term Debt		0.5302	211
0.25 < p < 0.30	Fail to Reject H		
Interest Expense to Total Assets		-0.5893	222
0.25 < p < 0.30	Fail to Reject H		
Current Assets to Total Assets		-4.3136	237
p < 0.005	Reject H		
Net Property, Plant and Equipment to Total Assets		2.4699	236
0.005 < p < 0.01	Reject H		
Current Liabilities to Total Assets		-0.8337	237
0.15 < p < 0.20	Fail to Reject H		
Long-term Debt to Total Assets		2.1296	236
0.01 < p < 0.025	Reject H		
Shareholders' Equity to Total Assets		0.2532	238
0.40 < p < 0.45	Fail to Reject H		
Return on Assets = Net Income to Total Assets		0.3661	237
0.35 < p < 0.40	Fail to Reject H		
Return on Equity = Net Income to Shareholders' Equity		1.1571	237
0.10 < p < 0.15	Fail to Reject H		

Section 2 - Foreign Currency Exchange Effect

For this section of the study, price data were gathered for 44 separate ADR firms (10 Australian, 12 Japanese, 6 Dutch, 6 Swedish and 10 British). Because of a lack of sufficient sponsored Australian ADRs, several unsponsored issues were included in the Australian sample. The first question to be considered was whether the simple ADR pricing model derived in Chapter 5 provided a reasonable approximation of actual ADR prices. Because it was not possible to obtain domestic dividend information for most of the sample firms in the study, the no-dividend model was used to calculate estimated ADR prices based on each available end-of-month domestic price for the period. This estimated ADR price was subtracted from the actual ADR price for that date, and the difference was taken as a percent of the actual price.

These difference percentages are generally less than two percent of the actual ADR price. In addition, the differences are not consistently of one sign or the other. This appears to support the use of the simple ADR pricing model in obtaining reasonable approximations of actual ADR prices. The Japanese ADRs showed no differences greater than five percent, while the Dutch showed only one difference greater than five percent and none greater than ten percent. The Swedish ADRs showed two differences greater than ten percent. Although the British ADRs showed ten differences greater than ten percent of the actual ADR price, this was for a data set of over 800 items, and the large differences generally occurred in lower-priced shares. The only case in

which significant numbers of differences greater than 20 percent of the actual ADR price appeared was in those unsponsored Australian ADRs that were low-priced. Because of the low prices of these shares, small differences in magnitude were greatly magnified as percentage differences, exaggerating the apparent inaccuracy of the pricing model. Whether the unsponsored nature of these shares played a significant role in the larger than expected deviations from the estimated values remains an unanswered question. As more unsponsored ADR price information becomes available with the automation of pink-sheet data, this issue might provide an interesting area for further research.

Currency Exchange Effects and ADR Returns

Accepting the simple ADR pricing model described in Chapter 5 as a reasonable approximation allows one to turn to the central question of this portion of the study. Do currency exchange effects constitute a significant portion of the overall price returns of ADRs? As derived in Chapter 5, the currency exchange effect is the product of the currency exchange rate of return and the ratio of end-of-period to beginning-of-period underlying share prices. In addition, under the derived ADR pricing model, the currency exchange effect is the difference between the ADR and domestic returns for the period. Using this difference relationship, derived values for the currency exchange effect were calculated for the sample firms.

Originally, a very simple technique was employed to gauge the importance of the currency exchange effect in the overall ADR return. First, the value of the monthly currency exchange effect as a percentage of the monthly ADR return was calculated. These percentage figures were then summarized by country, and a visual inspection was made of the values. Such an inspection seemed to demonstrate the prominence of the currency exchange effect in the overall ADR return. Very high percentages were common, with frequent occurrences of currency exchange effects more than ten times the magnitude of the overall ADR return for the month. My initial conclusion was that currency exchange effects are indeed an important portion of the overall monthly returns for ADRs.

Subsequently, I adjusted the methodology to determine the significance of the currency exchange effect through the use of regression analysis. For each of the sample firms, simple linear regressions were performed of the monthly ADR returns regressed on the return differences. This made use of the relationship derived from the ADR pricing model, namely that the currency exchange effect is equal to the difference between the ADR return and the domestic return for the period. The results of these regressions are reported in Appendix A and summarized in Exhibit 6-23.

The results of this methodology are less clear-cut than were those of the more simplistic visual method. Using F-tests of the "R-squared" values at a 0.05 level of significance, over half the sample showed a significant correlation of the currency exchange effect and the overall

Summary of Regressions of
ADR Returns on Currency Exchange Effects (Return Differences)

<u>National Subsample</u>	<u>Significant *</u> <u>"R-Squared" Values</u>	<u>Average Significant</u> <u>"R-Squared"</u>	<u>Average</u> <u>"Other"</u> <u>"R-Squared"</u>
Australia	5 of 10	0.1984	0.0081
Japan	6 of 12	0.1510	0.0138
Netherlands	2 of 6	0.1050	0.0362
Sweden	2 of 6	0.0803	0.0336
UK	10 of 10	0.1906	N/A
Overall	25 of 44	0.1670	0.0211

*Based on the F-test results reported in Appendix A, using a 0.05 level of significance

Note: The simple linear regressions reported in Appendix A are obtained from the equation
 $y = \alpha + \beta x + \epsilon$, where

y is the overall ADR return for the period, and
x is the derived currency exchange effect for the period
(The currency exchange effect is derived from the simple ADR pricing model described on pp. 199-201, and is equal to the difference in the ADR and domestic security returns for the period. The justification for using derived rather than calculated currency exchange effects is the accuracy of the ADR pricing model.)

ADR return. Yet the results are not consistent. For example, all the British firms showed significant "R-squared" values, whereas the remaining four national samples were evenly divided between statistically significant and insignificant "R-squared" values at the 0.05 level of significance. As shown in the average "R-squared" figures calculated in Exhibit 6-23, there seems to be no middle ground between those correlations that are well above the cutoff and those that are well below. Because these tests are of the stability of the proportion of the variation in overall ADR returns that can be explained by the variation in the currency exchange effect, the overall conclusion to this portion of the study is a tentative one. It is that, while the currency exchange effect can indeed play an important role in the overall ADR return, its effect is not a consistent one over time.

Section 3 - Trading Patterns

The final portion of the study considered the correlations of ADR returns with the market returns for both the domestic markets of their underlying shares and with the American markets on which the ADRs themselves were traded. The monthly ADR returns were obtained from the sample of ADR firms used in Section 2. The market returns were obtained by taking the difference between the end-of-the month and end-of-the prior month index values and dividing this difference by the end-of-the-prior month index value. These returns were expressed in percentage terms.

Initially, simple linear regressions were calculated for as many monthly data points as were available for the period December 1982 to December 1989. In the cases where ADRs switched U.S. exchanges, the regressions only cover the period for which the ADR was traded on that exchange. This methodology was changed to a stepwise regression approach that was deemed more appropriate, because it reveals the significance of each additional variable. In addition to the home and U.S. market returns, a currency return was included as an additional variable. The results of the stepwise regressions are reported in detail in Appendix B.

Results of Regression Analysis

Several results stand out from an examination of the coefficients of determination of these regressions. The most important is that no general statement can be made as to whether ADR returns are more closely correlated with their domestic market returns or with the returns of the American markets on which they trade. All possible relationships appear. Some ADRs, such as Glaxo, have fairly high correlations with both their domestic and American market returns. Others, such as B.A.T., Pacific Dunlop and ASEA, have fairly high correlations with their domestic market returns, but low correlations with their American market returns. Still others, for example AEGON and Unilever NV, have fairly high correlations with their American market returns, but low correlations with their domestic markets. Finally, some ADRs, such as

Sony and Swan Resources, have low correlations with both their domestic and American market returns.

When considered on a country-by-country basis, however, several interesting results appear. For the Australian ADRs, the four sponsored issues (Broken Hill, News, Pacific Dunlop, and Santos) are much more highly correlated with their domestic market returns than are the unsponsored ADRs. With the exception of Santos, these sponsored ADRs are also much more highly correlated with their American market returns than are their unsponsored compatriots. This result is not unexpected, since one would expect the sponsored ADR market to be both more efficient and more highly integrated than the unsponsored ADR market. (As more unsponsored ADR pricing data become available, the possible existence of this dichotomy in other countries can be investigated.) All the Australian ADRs loaded first on their domestic returns, indicating that they are more closely linked to home trading patterns rather than American.

As far as the Japanese ADRs were concerned, none of my sample had returns that were highly correlated with American market returns. Interestingly, only two of the twelve sample firms (Kirin and Tokio Marine & Fire Insurance) were even moderately correlated with domestic market returns. Of the sample firms, only the Japanese ADRs showed this consistently low correlation with both domestic and American market returns. Although most of the Japanese ADRs loaded first on the domestic return, two loaded first on the currency return and two on the

American market return. In all four cases, however, the correlations were low. I find this result difficult to explain. It appears that the Japanese ADRs may actually form something of a market unto themselves. If these low correlations are stable over time, it would indicate that Japanese ADRs would be useful in diversifying both Japanese and American portfolios.

With the Dutch firms, all six showed higher correlations with their American market than with their domestic market returns. The existence of New York Shares does not seem to be the cause of this relationship, as firms with ADRs and those with New York Shares similarly loaded first on the American returns. If this relationship proved stable over time, it would indicate that American investors seeking to reduce their portfolio risk by investing in Dutch securities might do better by directly investing in non-ADR firms.

Unlike the Dutch, the Swedish ADRs tend to be more highly correlated with their domestic market returns. Of the six sample firms, only Ericsson and Pharmacia had higher correlations with the American market returns, and in their cases the correlations were nearly the same with both market returns. Another interesting aspect of the Swedish ADRs is that, as a group, the coefficients of determination with the domestic market returns were much higher than for any other country. This is perhaps a result of the fairly narrow Swedish market, in which capital is rather highly concentrated in a few very large firms. One would expect a high correlation of returns in this case, because the ADR

firms form a significant portion of the overall Swedish market capitalization.

The British ADR firms provide the most varied results, with nearly every combination possible. As with ADRs overall, no general statements seem appropriate for British ADRs. Glaxo is highly correlated with both the British and American markets, and is the sample ADR with the highest correlation with the American market return. B.A.T., Courtauld's, and Unilever PLC appear more highly correlated with the British market returns, yet remain moderately correlated with their American markets. Burmah Oil and Beecham loaded first on the currency return, while Tricentrol loaded first on the American market and has a low correlation with its domestic market for the period.

In conclusion, the correlation of ADR returns to domestic and American markets cannot be viewed in a global fashion. Indeed, as was shown in the British results, inconsistent results are sometimes obtained within a single country. For this study, however, Japanese ADRs generally showed low correlations with both the domestic and American market returns. Dutch ADRs, as a group, showed a higher correlation with the American than the domestic market returns, while the Swedish ADRs showed the opposite result. Finally, the Australian sample, the only one that included both sponsored and unsponsored ADRs, showed an interesting dichotomy, with most of the sponsored ADRs showing moderate to high correlations with both domestic and American markets while the unsponsored ADRs showed low correlations with both.

Chapter 7

SUMMARY, LIMITATIONS AND POSSIBILITIES FOR FUTURE RESEARCH

This study focused on three research areas related to ADRs, namely identification, foreign currency exchange effects and trading patterns. Several general conclusions emerge from the research concerning these topics. First, there are indeed significant differences in the selected financial statement items between ADRs and non-ADRs. The key factor appears to be size. The sponsored ADRs are generally from large firms, and they tend to dwarf their non-ADR counterparts. An interesting conclusion to be drawn concerning shareholders' equity is that globalization at this point is primarily a large-firm phenomenon.

In the second research area, the evidence is mixed. When a simple visual inspection is made of overall returns, the conclusion is that currency exchange effects account for a significant portion of overall ADR returns. Indeed, in numerous instances, the currency exchange effect "swamped" the overall return. A more systematic regression analysis showed, however, that there was no consistency to the portion of overall ADR return variation that could be explained by variation in the currency exchange effect. The most reasonable conclusion to draw is that while currency exchange effects sometimes form a significant portion of overall ADR returns, this portion is neither consistent nor stable over time. Nonetheless, this is an important result, in that it demonstrates that the currency speculation "bundling" involved in the

use of ADRs can be of more than just theoretical interest. ADRs are by their nature a hybrid instrument, linking currency speculation with ownership investment. This study has shown that any examination of ADRs must take account of both aspects of their dual nature.

Finally, the correlation of ADR returns to their domestic and American market returns also provides potentially important results. Although some consistent patterns did emerge, these patterns were within national groupings, and not all national groupings showed distinctive patterns. This finding has important implications for international diversification as it relates to portfolios that include ADRs. From the results of this research, it appears that global statements concerning the diversification benefits of ADR investments are of questionable validity. At best, only statements regarding national groupings appear to be supportable. For example, Japanese ADRs, because of their low correlation with both the Japanese and American markets during the period of study, would have provided a good potential for portfolio diversification both for Japanese and American investors. On the other hand, Dutch ADRs, because they were more highly correlated with the American markets, would have provided less of a diversification potential. Nevertheless, as demonstrated by the inconsistent results across British ADRs, even such broad national statements concerning international diversification can be suspect.

Possibilities for Further Research

Several interesting possibilities for future research arise out of this dissertation. First, it will be interesting to see if globalization of ADR shares and shareholding expands beyond the realm of large firms in which it is currently and primarily contained. Will the coming years witness a "downward" expansion in the use of ADRs, or will they remain a "giants' preserve"? Research topics related to this issue would center on the forms of "smaller firm globalization".

The magnitude of the foreign currency exchange effects found in this study was something of a surprise. It would be interesting to pursue archival research in this area, while at the same time maintaining a continuing ADR price database. In addition, the cycling tendencies of the cumulative exchange effects need to be studied. Are the "currency periodicities" stable over time? If not, is it possible to determine the change-generating causes?

The correlation of ADR returns with foreign and American markets is also an area where further archival work would be appropriate. To what extent are the correlation patterns found during the study period consistent over time? If they are not consistent, what impact would this have on theoretical studies of international portfolio diversification? Finally, the dichotomy between unsponsored and sponsored ADRs apparent in the Australian data seems worthy of study for other countries as the data become available.

Conceptual Issues of ADR Ownership

In addition to these possible future research areas, it is important to note that the current dissertation only deals with a few accounting issues related to ADRs. The greater number of these issues remain for future study. For example, it has already been noted that stock ADRs are accounted for as if they were marketable equity securities when, in reality, they involve a hybrid instrument that combines equity investment with currency speculation. In addition, ADRs further separate ownership and management. Because the supporting stocks for many European ADRs are bearer shares, a theoretical issue of control arises in this situation. When ADRs are based on bearer shares, who actually owns an interest in the foreign firm? While in most cases depositaries pass voting rights through to ADR holders, the fact remains that the ADR has converted a bearer instrument to a registered instrument. The larger accounting issue remains as to whether a stock ADR is actually a full-fledged owners' equity security or something less.

A further example of this classification issue concerns new issue rights. "Under American law, ADR holders cannot take up their rights to [purchase] new shares unless the company is registered with the SEC."¹ Therefore, when new rights issues have not been registered with the SEC - as often occurs with ADR firms - the depositaries have simply sold the stock purchase rights and remitted the cash proceeds to the ADR holders.

¹"Rights of ADRs," The Economist, February 2, 1985, p. 72.

In these cases, ADR holders do not have the same breadth of financial choice as do direct investors in foreign securities, because they cannot exercise their theoretical purchase rights. In this respect, an ADR is clearly not equivalent to a marketable security, or as Tomlinson puts it, the American investor is in an "inferior position" to that of his or her foreign counterpart.² Further accounting research, perhaps of a legal nature, is needed in this area.

Another accounting issue arises from the bearer to registered security conversion. As part of this process, the depositary establishes dividend payment schedules. Frequently, there are substantial delays between the time when the underlying bearer share coupons can be exchanged for dividends and when the registered ADR holders receive their dividend payments. This is an area in which the legal requirements are unclear, and custom appears to be the guiding factor. One focus for future research might be to determine whether the market price of the underlying foreign securities reflects an "ex-dividend" status before the ADR reflects that status.

Differences in Accounting Standards

National differences in accounting standards represent yet another accounting issue related directly to ADRs. Firms having sponsored ADR facilities are required to file yearly statements with the SEC. Because

²Timothy Tomlinson, "Federal Regulation of Secondary Trading in Foreign Securities," The Business Lawyer, January 1977, p. 487.

these statements either present financial information in accordance with U.S. generally accepted accounting principles, or explain deviations, one could argue that ADRs represent standardization catalysts. Research could focus on whether ADR companies do indeed contribute to the international harmonization of accounting and the improvement of accounting disclosure. As noted earlier, this research could be linked to the idea of reduced information risk through ADRs.

In a similar vein, research could focus on the international transfer of accounting data inherent in the ADR process. Because the depository institutions gather and transmit financial information about foreign firms, ADRs are part of the accounting bridge between cultures. By providing market linkage, and by increasing the efficiency of international financial transactions, ADRs create a form of "security currency". It is important to note that this flow of information can be impeded by national laws and customs that may not allow certain data to be transferred. In this case, the financial statement data "supporting" an ADR may be quite different from the data dealing with a domestic security.

Tax Implications of ADRs

Tax impacts on ADRs also need to be considered, albeit briefly. Tomlinson (1977) describes how the interest equalization tax dampened ADR dealings in the United States from 1963-74. For a more recent example, Pershing (1986) and French (1986) both describe how the

Thatcher government in the United Kingdom grew concerned that ADR expansion in British securities was drawing international investors to American markets and away from the London Stock Exchange. As discussed in Chapter 4, a five percent "stamp duty reserve tax" was placed on the issuance of all new British security-based ADRs in 1986. Much to the surprise of the Tory government, a "stamp tax revolt" occurred, in which American investors, in a fashion reminiscent of their ancestors, stopped buying British.³ Concerned by this threat to a lucrative source of investment capital, British business interests forced the government to reduce drastically the stamp tax on ADR creation. Historical research into the tax effects on ADR creation and trading could prove very fruitful. Further tax research could focus on whether there are tax advantages of investing in ADRs rather than the underlying foreign securities.

Legal Implications of ADRs

Two very interesting accounting implications of ADRs arise from legal restrictions. The first occurs in those situations where governments limit the percentage of corporate ownership allowed foreigners. For example, both the Japanese and Swedish governments have chosen to cap the amount of ownership permitted to non-citizens. The ADR markets for Japanese and Swedish firms have built-in ceilings. If

³Amy Pershing, "The Great Stamp Tax Revolt", Institutional Investor, May 1986, p. 263.

the foreign ownership percentage in a given company should approach the limit, a sudden supply crunch would occur in ADRs. This could create interesting market gyrations that would not occur with the securities of American firms. (I have been unable to document an actual occurrence of such a "legal" ADR supply crunch, however.) One interesting research approach might be to determine whether these ownership ceilings result in price differentials between ADRs reaching the ceilings and the underlying foreign securities.

The second legal situation arises because certain institutional investors, notably state pension funds, are legally prevented from investing in foreign currency denominated securities. Because ADRs are denominated in U.S. dollars, they allow these investors to diversify their security portfolios without running afoul of legal restrictions. In fact, as Darby (1986) and Emken (1988) note, there has been a veritable explosion in international investments by pension funds. An interesting paradox exists for these investors, however. Although it would be illegal for them to convert their ADRs into the underlying foreign securities, they account for these ADRs as if they were the actual securities. This raises the interesting question of whether such investors disrespect the traditional accounting concept of "substance over form" through ADR investments. More importantly, do legal restrictions on foreign currency denominated investments make economic sense in an era of increasingly efficient international financial markets?

Globalization of American Business and ADRs

Because of the increasingly global extent of American business interests, future accounting research is likely to focus more attention on the accounting implications of both American investments abroad and foreign investments in the United States. In this regard, numerous ADR-related topics that are beyond the scope of this dissertation await exploitation. First, ADRs are but one example of the use of depository receipts. Hong Kong, European, and International Depository Receipts all exist and provide fertile research possibilities for those able to access the appropriate data. Similarly, a study of the all-electronic Amsterdam Shares Accounting System (ASAS) developed by the Dutch would offer an intriguing glimpse into the potential future of the ADR. Finally, the actual corporate use of ADRs, and the extent and nature of ADR holdings provide interesting research areas. Unfortunately, the survey techniques currently required to elicit the necessary information are prone to all the inherent difficulties of survey research. Because there are no simple ways of verifying such research data, it would probably be difficult to glean useful results from such an approach. For the moment, this study provides only a glimpse of potential ADR research.

Appendix A
Regressions of ADR Returns on
Currency Exchange Effects
(Return Differences)

Australia

Broken Hill Proprietary
ADR Return regressed on
Return Difference

Regression Output:

Constant	2.420841
Std Err of Y Est	8.916571
R Squared	0.284369
No. of Observations	82
Degrees of Freedom	80

X Coefficient(s) 1.293111
Std Err of Coef. 0.229347
F = 31.78954

Central Pacific Minerals
ADR Return regressed on
Return Difference

Regression Output:

Constant	4.054312
Std Err of Y Est	22.03999
R Squared	0.000000
No. of Observations	45
Degrees of Freedom	43

X Coefficient(s) 0.000203
Std Err of Coef. 0.316130
F = 0.000000

Meridian Oil
ADR Return regressed on
Return Difference

Regression Output:

Constant	-1.98106
Std Err of Y Est	20.87809
R Squared	0.159972
No. of Observations	43
Degrees of Freedom	41

X Coefficient(s) 0.441004
Std Err of Coef. 0.157824
F = 7.807944

News Limited
ADR Return regressed on
Return Difference

Regression Output:

Constant	1.809902
Std Err of Y Est	15.19318
R Squared	0.139853
No. of Observations	43
Degrees of Freedom	41

X Coefficient(s) 1.211015
Std Err of Coef. 0.469037
F = 6.666277

Pacific Dunlop
ADR Return regressed on
Return Difference

Regression Output:

Constant	0.534258
Std Err of Y Est	8.647967
R Squared	0.230427
No. of Observations	29
Degrees of Freedom	27

X Coefficient(s) 1.169592
Std Err of Coef. 0.411348
F = 8.084409

Pelsart
ADR Return regressed on
Return Difference

Regression Output:

Constant	-1.98458
Std Err of Y Est	19.36206
R Squared	0.000000
No. of Observations	43
Degrees of Freedom	41

X Coefficient(s) -0.00028
Std Err of Coef. 0.330696
F = 0.000000

Australia

Santos
ADR Return regressed on
Return Difference

Regression Output:

Constant	0.408132
Std Err of Y Est	11.49861
R Squared	0.177293
No. of Observations	82
Degrees of Freedom	80

X Coefficient(s) 1.213213
Std Err of Coef. 0.292192
F = 17.23997

Southern Pacific Petroleum
ADR Return regressed on
Return Difference

Regression Output:

Constant	3.286190
Std Err of Y Est	20.64919
R Squared	0.000185
No. of Observations	64
Degrees of Freedom	62

X Coefficient(s) 0.021756
Std Err of Coef. 0.202896
F = 0.011497

Swan Resources
ADR return regressed on
Return Difference

Regression Output:

Constant	-1.37785
Std Err of Y Est	13.80467
R Squared	0.014584
No. of Observations	43
Degrees of Freedom	41

X Coefficient(s) 0.063849
Std Err of Coef. 0.081966
F = 0.606801

Trans-Global Resources
ADR Return regressed on
Return Difference

Regression Output:

Constant	4.139042
Std Err of Y Est	29.18967
R Squared	0.025540
No. of Observations	41
Degrees of Freedom	39

X Coefficient(s) 0.124173
Std Err of Coef. 0.122819
F = 1.022174

Japan

Canon
ADR Return regressed on
Return difference

Regression Output:

Constant 1.469033
Std Err of Y Est 9.413357
R Squared 0.012626
No. of Observations 81
Degrees of Freedom 79

X Coefficient(s) 0.258563
Std Err of Coef. 0.257249
F = 1.010239

Fuji Photo Film
ADR Return regressed on
Return difference

Regression Output:

Constant 1.907361
Std Err of Y Est 9.863851
R Squared 0.010963
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) 0.273891
Std Err of Coef. 0.290840
F = 0.886841

Honda
ADR Return regressed on
Return difference

Regression Output:

Constant 1.656134
Std Err of Y Est 9.369367
R Squared 0.044196
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) 0.502208
Std Err of Coef. 0.261111
F = 3.699255

Ito Yokado
ADR Return regressed on
Return difference

Regression Output:

Constant 2.427139
Std Err of Y Est 7.694367
R Squared 0.239061
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) 1.115545
Std Err of Coef. 0.222516
F = 25.13335

Kirin Brewery
ADR Return regressed on
Return difference

Regression Output:

Constant 2.394576
Std Err of Y Est 8.891747
R Squared 0.215880
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) 1.209738
Std Err of Coef. 0.257768
F = 22.02532

Kyocera
ADR Return regressed on
Return difference

Regression Output:

Constant 2.334195
Std Err of Y Est 11.90147
R Squared 0.003599
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) -0.19050
Std Err of Coef. 0.354354
F = 0.289034

Japan

Sony

ADR Return regressed on
Return difference

Regression Output:

Constant 2.155937
Std Err of Y Est 10.09522
R Squared 0.003254
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) -0.15795
Std Err of Coef. 0.309082
F = 0.261179

Tokio Marine & Fire Insurance

ADR Return regressed on
Return difference

Regression Output:

Constant 2.170011
Std Err of Y Est 10.39404
R Squared 0.243947
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) 1.365557
Std Err of Coef. 0.268777
F = 25.81279

Hitachi

ADR Return regressed on
Return difference

Regression Output:

Constant 1.588186
Std Err of Y Est 9.518039
R Squared 0.051185
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) 0.593203
Std Err of Coef. 0.285544
F = 4.315783

Matsushita Elec. Industries

ADR Return regressed on
Return difference

Regression Output:

Constant 1.803235
Std Err of Y Est 9.882618
R Squared 0.007975
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) 0.243656
Std Err of Coef. 0.303812
F = 0.643196

Japan Air Lines

ADR Return regressed on
Return difference

Regression Output:

Constant 3.579441
Std Err of Y Est 12.39610
R Squared 0.060959
No. of Observations 81
Degrees of Freedom 79

X Coefficient(s) 0.845932
Std Err of Coef. 0.373546
F = 5.128416

Toyota Motors

ADR Return regressed on
Return difference

Regression Output:

Constant 1.933948
Std Err of Y Est 9.446929
R Squared 0.094736
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) 0.748360
Std Err of Coef. 0.258638
F = 8.372088

The Netherlands

AEGON

ADR Return regressed on
Return Difference

Regression Output:

Constant 1.150593
Std Err of Y Est 8.375296
R Squared 0.105921
No. of Observations 49
Degrees of Freedom 47

X Coefficient(s) 0.695855
Std Err of Coef. 0.294894
F = 5.568068

KLM

ADR Return regressed on
Return difference

Regression Output:

Constant 1.557955
Std Err of Y Est 9.041991
R Squared 0.009194
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) 0.210397
Std Err of Coef. 0.244194
F = 0.74235

Oce van der Grinten

ADR Return regressed on
Return Difference

Regression Output:

Constant 1.036749
Std Err of Y Est 9.520103
R Squared 0.056630
No. of Observations 61
Degrees of Freedom 59

X Coefficient(s) 0.560980
Std Err of Coef. 0.298082
F = 3.541792

Philips

ADR return regressed on
Return difference

Regression Output:

Constant 1.471705
Std Err of Y Est 8.520613
R Squared 0.046774
No. of Observations 81
Degrees of Freedom 79

X Coefficient(s) 0.490032
Std Err of Coef. 0.248889
F = 3.876473

Royal Dutch Petroleum

ADR Return regressed on
Return difference

Regression Output:

Constant 1.960232
Std Err of Y Est 5.950406
R Squared 0.032072
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) 0.272498
Std Err of Coef. 0.167369
F = 2.650795

Unilever NV

ADR return regressed on
Return difference

Regression Output:

Constant 2.184008
Std Err of Y Est 5.797308
R Squared 0.104149
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) 0.504138
Std Err of Coef. 0.165307
F = 9.300644

Sweden

ASEA
 ADR Return regressed on
 Return difference
 Regression Output:
 Constant 3.226342
 Std Err of Y Est 8.076800
 R Squared 0.002315
 No. of Observations 49
 Degrees of Freedom 47

X Coefficient(s) -0.12154
 Std Err of Coef. 0.368011
 F = 0.109079

Svenska Cellulosa
 ADR Return regressed on
 Return difference
 Regression Output:
 Constant 1.433488
 Std Err of Y Est 9.102474
 R Squared 0.108580
 No. of Observations 68
 Degrees of Freedom 66

X Coefficient(s) 0.911195
 Std Err of Coef. 0.321369
 F = 8.039218

Ericsson
 ADR Return regressed on
 Return difference
 Regression Output:
 Constant 2.003497
 Std Err of Y Est 10.29094
 R Squared 0.024829
 No. of Observations 82
 Degrees of Freedom 80

X Coefficient(s) 0.497640
 Std Err of Coef. 0.348678
 F = 2.036951

Pharmacia
 ADR Return regressed on
 Return difference
 Regression Output:
 Constant 1.258364
 Std Err of Y Est 12.67240
 R Squared 0.052099
 No. of Observations 81
 Degrees of Freedom 79

X Coefficient(s) 0.673394
 Std Err of Coef. 0.323160
 F = 4.342114

SKF
 ADR Return regressed on
 Return difference
 Regression Output:
 Constant 2.401383
 Std Err of Y Est 9.712332
 R Squared 0.069336
 No. of Observations 49
 Degrees of Freedom 47

X Coefficient(s) 0.775497
 Std Err of Coef. 0.414425
 F = 3.501618

Volvo
 ADR Return regressed on
 Return difference
 Regression Output:
 Constant 2.004879
 Std Err of Y Est 9.972641
 R Squared 0.037725
 No. of Observations 60
 Degrees of Freedom 58

X Coefficient(s) 0.583825
 Std Err of Coef. 0.387170
 F = 2.273840

United Kingdom

BAT (British American Tobacco)
ADR Return regressed on
Return Difference
Regression Output:
Constant 2.487285
Std Err of Y Est 9.607403
R Squared 0.265597
No. of Observations 85
Degrees of Freedom 83

X Coefficient(s) 0.871686
Std Err of Coef. 0.159102
F = 30.01706

Beechan
ADR Return regressed on
Return Difference
Regression Output:
Constant 0.953704
Std Err of Y Est 6.779532
R Squared 0.321960
No. of Observations 79
Degrees of Freedom 77

X Coefficient(s) 1.057984
Std Err of Coef. 0.174968
F = 36.56262

British Petroleum
ADR Return regressed on
Return difference
Regression Output:
Constant 1.709394
Std Err of Y Est 7.173079
R Squared 0.083335
No. of Observations 85
Degrees of Freedom 83

X Coefficient(s) 0.517687
Std Err of Coef. 0.188459
F = 7.545681

Burmah Oil
ADR Return regressed on
Return difference
Regression Output:
Constant 2.403834
Std Err of Y Est 9.129024
R Squared 0.229649
No. of Observations 85
Degrees of Freedom 83

X Coefficient(s) 0.876867
Std Err of Coef. 0.176281
F = 24.74312

Courtauld's
ADR Return regressed on
Return difference
Regression Output:
Constant 2.525896
Std Err of Y Est 10.23016
R Squared 0.354510
No. of Observations 85
Degrees of Freedom 83

X Coefficient(s) 0.907564
Std Err of Coef. 0.134421
F = 45.58463

Glaxo
ADR Return regressed on
Return difference
Regression Output:
Constant 2.281314
Std Err of Y Est 8.588958
R Squared 0.073437
No. of Observations 85
Degrees of Freedom 83

X Coefficient(s) 0.628928
Std Err of Coef. 0.245211
F = 6.578395

United Kingdom

Plessey

ADR Return regressed on
Return difference

Regression Output:

Constant	0.805247
Std Err of Y Est	9.969777
R Squared	0.073277
No. of Observations	83
Degrees of Freedom	81

X Coefficient(s) 0.566228
Std Err of Coef. 0.223737
F = 6.404780

Rank Organisation

ADR Return regressed on
Return difference

Regression Output:

Constant	2.688277
Std Err of Y Est	8.475267
R Squared	0.098280
No. of Observations	85
Degrees of Freedom	83

X Coefficient(s) 0.675450
Std Err of Coef. 0.224572
F = 9.046395

Tricentrol

ADR Return regressed on
Return difference

Regression Output:

Constant	1.403796
Std Err of Y Est	17.08321
R Squared	0.235279
No. of Observations	64
Degrees of Freedom	62

X Coefficient(s) 1.460170
Std Err of Coef. 0.334323
F = 19.07538

Unilever PLC

ADR Return regressed on
Return difference

Regression Output:

Constant	2.060358
Std Err of Y Est	6.337439
R Squared	0.170409
No. of Observations	85
Degrees of Freedom	83

X Coefficient(s) 0.631474
Std Err of Coef. 0.152933
F = 17.04939

Appendix B
Stepwise Regressions of ADR Returns on
Home and American Market and Currency Returns

Broken Hill Proprietary (Australia)

ADR return regressed on Currency return

Regression Output:

Constant 0.035137
 Std Err of Y Est 0.128311
 R Squared 0.136620
 No. of Observations 82
 Degrees of Freedom 80

X Coefficient(s) 1.294079
 Std Err of Coef. 0.363713
 F = 12.65908

ADR return regressed on All-Ords. return

Regression Output:

Constant 0.017844
 Std Err of Y Est 0.112754
 R Squared 0.333288
 No. of Observations 82
 Degrees of Freedom 80

X Coefficient(s) 0.960920
 Std Err of Coef. 0.151950
 F = 39.99196

ADR return regressed on NYSE return

Regression Output:

Constant 0.023692
 Std Err of Y Est 0.132962
 R Squared 0.072895
 No. of Observations 82
 Degrees of Freedom 80

X Coefficient(s) 0.782440
 Std Err of Coef. 0.311975
 F = 6.290157

ADR return regressed on All-Ords. return
 and Currency return

Regression Output:

Constant 0.021207
 Std Err of Y Est 0.109402
 R Squared 0.380185
 No. of Observations 82
 Degrees of Freedom 79

X Coefficient(s) 0.789816 0.855725
 Std Err of Coef. 0.323050 0.153583
 F = 24.22878
 F inc = 5.977402

ADR return regressed on All-Ords. return
 and NYSE Comp. Return

Regression Output:

Constant 0.019762
 Std Err of Y Est 0.112739
 R Squared 0.341797
 No. of Observations 82
 Degrees of Freedom 79

X Coefficient(s) 1.074875 -0.33291
 Std Err of Coef. 0.189202 0.329420
 F = 20.51196
 F inc = 1.021304

ADR return regressed on All-Ords. return,
 currency return and NYSE Comp. Return

Regression Output:

Constant 0.022538
 Std Err of Y Est 0.109675
 R Squared 0.384979
 No. of Observations 82
 Degrees of Freedom 78

X Coefficient(s) 0.762352 0.945419 -0.25134
 Std Err of Coef. 0.325764 0.192192 0.322356
 F = 16.27502
 F inc = 0.607960

Central Pacific Petroleum (Australia)

ADR regressed on
Currency Return

Regression Output:

Constant 0.018567
Std Err of Y Est 0.207338
R Squared 0.071388
No. of Observations 48
Degrees of Freedom 46

X Coefficient(s) 1.484659
Std Err of Coef. 0.789495
F = 3.536344

ADR regressed on
All-Ord. Return

Regression Output:

Constant 0.008220
Std Err of Y Est 0.163104
R Squared 0.425346
No. of Observations 48
Degrees of Freedom 46

X Coefficient(s) 1.455254
Std Err of Coef. 0.249397
F = 34.04820

ADR regressed on
NASDAQ Return

Regression Output:

Constant 0.010701
Std Err of Y Est 0.182078
R Squared 0.283873
No. of Observations 48
Degrees of Freedom 46

X Coefficient(s) 1.793989
Std Err of Coef. 0.420119
F = 18.23447

ADR regressed on
All-Ord. and NASDAQ Returns

Regression Output:

Constant 0.007244
Std Err of Y Est 0.163578
R Squared 0.434567
No. of Observations 48
Degrees of Freedom 45

X Coefficient(s) 1.236854 0.461686
Std Err of Coef. 0.357154 0.538946
F = 17.29252
F inc. = 0.733842

ADR regressed on
Currency and All-Ord. Returns

Regression Output:

Constant 0.008099
Std Err of Y Est 0.164882
R Squared 0.425515
No. of Observations 48
Degrees of Freedom 45

X Coefficient(s) 0.078650 1.442895
Std Err of Coef. 0.682232 0.273960
F = 16.66557
F inc. = 0.013290

ADR regressed on Currency,
All-Ord. and NASDAQ Returns

Regression Output:

Constant 0.006947
Std Err of Y Est 0.165317
R Squared 0.435312
No. of Observations 48
Degrees of Freedom 44

X Coefficient(s) 0.166626 1.201531 0.481009
Std Err of Coef. 0.691404 0.389575 0.550546
F = 11.30640
F inc. = 0.763341

Meridian Oil (Australia)

ADR regressed on
Currency Return
Regression Output:
Constant -0.03510
Std Err of Y Est 0.205642
R Squared 0.000048
No. of Observations 46
Degrees of Freedom 44

X Coefficient(s) 0.036122
Std Err of Coef. 0.785905
F = 0.002112

ADR regressed on
All-Ord. Return
Regression Output:
Constant -0.04060
Std Err of Y Est 0.199255
R Squared 0.061190
No. of Observations 46
Degrees of Freedom 44

X Coefficient(s) 0.520444
Std Err of Coef. 0.307321
F = 2.867884

ADR regressed on
NASDAQ Return
Regression Output:
Constant -0.03700
Std Err of Y Est 0.204860
R Squared 0.007632
No. of Observations 46
Degrees of Freedom 44

X Coefficient(s) 0.276406
Std Err of Coef. 0.475136
F = 0.338422

ADR regressed on
All-Ord. and NASDAQ Returns
Regression Output:
Constant -0.03937
Std Err of Y Est 0.199965
R Squared 0.075985
No. of Observations 46
Degrees of Freedom 43

X Coefficient(s) 0.773341 -0.54102
Std Err of Coef. 0.433610 0.652045
F = 1.768023
F inc. = 0.688467

ADR regressed on
Currency and All-Ord. Returns
Regression Output:
Constant -0.03970
Std Err of Y Est 0.200435
R Squared 0.071631
No. of Observations 46
Degrees of Freedom 43

X Coefficient(s) -0.58276 0.615831
Std Err of Coef. 0.838027 0.338206
F = 1.658904
F inc. = 0.483584

ADR regressed on Currency,
All-Ord. and NASDAQ Returns
Regression Output:
Constant -0.03825
Std Err of Y Est 0.200895
R Squared 0.089056
No. of Observations 46
Degrees of Freedom 42

X Coefficient(s) -0.65505 0.903387 -0.58985
Std Err of Coef. 0.843813 0.466727 0.658091
F = 1.368672
F inc. = 0.803380

News Limited (Australia)

ADR regressed on
Currency Return

Regression Output:

Constant 0.003647
Std Err of Y Est 0.169441
R Squared 0.135093
No. of Observations 43
Degrees of Freedom 41

X Coefficient(s) 1.698114
Std Err of Coef. 0.671029
F = 6.403991

ADR regressed on
All-Ord. Return

Regression Output:

Constant -0.00192
Std Err of Y Est 0.109694
R Squared 0.637504
No. of Observations 43
Degrees of Freedom 41

X Coefficient(s) 1.446195
Std Err of Coef. 0.170311
F = 72.10490

ADR regressed on
NYSE Comp. Return

Regression Output:

Constant -0.00775
Std Err of Y Est 0.136819
R Squared 0.436069
No. of Observations 43
Degrees of Freedom 41

X Coefficient(s) 2.088377
Std Err of Coef. 0.370895
F = 31.70404

ADR regressed on
All-Ord. and NYSE Comp. Returns

Regression Output:

Constant -0.00537
Std Err of Y Est 0.106666
R Squared 0.665603
No. of Observations 43
Degrees of Freedom 40

X Coefficient(s) 1.171064 0.715396
Std Err of Coef. 0.223490 0.390215
F = 39.80921
F inc. = 3.361123

ADR regressed on
Currency and All-Ord. Returns

Regression Output:

Constant -0.00241
Std Err of Y Est 0.110278
R Squared 0.642571
No. of Observations 43
Degrees of Freedom 40

X Coefficient(s) 0.355181 1.393588
Std Err of Coef. 0.471687 0.184923
F = 35.95522
F inc. = 0.567011

ADR regressed on Currency,
All-Ord. and NYSE Comp. Returns

Regression Output:

Constant -0.00611
Std Err of Y Est 0.106834
R Squared 0.672932
No. of Observations 43
Degrees of Freedom 39

X Coefficient(s) 0.428702 1.095687 0.746290
Std Err of Coef. 0.458588 0.237923 0.392226
F = 40.12067
F inc. = 0.873905

Pacific Dunlop (Australia)

ADR regressed on
Currency Return

Regression Output:

Constant 0.000549
Std Err of Y Est 0.088084
R Squared 0.371588
No. of Observations 29
Degrees of Freedom 27

X Coefficient(s) 1.790747
Std Err of Coef. 0.448170
F = 10.03289

ADR regressed on
All-Ord. Return

Regression Output:

Constant 0.014426
Std Err of Y Est 0.054494
R Squared 0.759475
No. of Observations 29
Degrees of Freedom 27

X Coefficient(s) 0.836753
Std Err of Coef. 0.090622
F = 20.50584

ADR regressed on
NASDAQ Return

Regression Output:

Constant 0.006770
Std Err of Y Est 0.079796
R Squared 0.484284
No. of Observations 29
Degrees of Freedom 27

X Coefficient(s) 1.073724
Std Err of Coef. 0.213238
F = 13.07567

ADR regressed on
All-Ord. and NASDAQ Returns

Regression Output:

Constant 0.015133
Std Err of Y Est 0.055258
R Squared 0.761851
No. of Observations 29
Degrees of Freedom 26

X Coefficient(s) 0.906333 -0.13475
Std Err of Coef. 0.164642 0.264571
F = 41.58783
F inc. = 0.259408

ADR regressed on
Currency and All-Ord. Returns

Regression Output:

Constant 0.009663
Std Err of Y Est 0.045933
R Squared 0.835441
No. of Observations 29
Degrees of Freedom 26

X Coefficient(s) 0.888241 0.717380
Std Err of Coef. 0.256386 0.083797
F = 65.99927
F inc. = 12.00249

ADR regressed on Currency,
All-Ord. and NASDAQ Returns

Regression Output:

Constant 0.008697
Std Err of Y Est 0.046553
R Squared 0.837475
No. of Observations 29
Degrees of Freedom 25

X Coefficient(s) 0.939260 0.642302 0.132121
Std Err of Coef. 0.275389 0.158845 0.236227
F = 42.94086
F inc. = 0.312813

Pelsart (Australia)

ADR regressed on
Currency Return

Regression Output:

Constant -0.04168
Std Err of Y Est 0.176750
R Squared 0.101353
No. of Observations 46
Degrees of Freedom 44

X Coefficient(s) 1.504777
Std Err of Coef. 0.675492
F = 4.962543

ADR regressed on
All-Ord. Return

Regression Output:

Constant -0.04532
Std Err of Y Est 0.169322
R Squared 0.175300
No. of Observations 46
Degrees of Freedom 44

X Coefficient(s) 0.798670
Std Err of Coef. 0.261154
F = 9.352773

ADR regressed on
NASDAQ Return

Regression Output:

Constant -0.03966
Std Err of Y Est 0.184594
R Squared 0.019822
No. of Observations 46
Degrees of Freedom 44

X Coefficient(s) 0.403858
Std Err of Coef. 0.428134
F = 0.889813

ADR regressed on
Currency and All-Ord. Returns

Regression Output:

Constant -0.04661
Std Err of Y Est 0.168515
R Squared 0.201712
No. of Observations 46
Degrees of Freedom 43

X Coefficient(s) 0.840379 0.661116
Std Err of Coef. 0.704567 0.284345
F = 5.432646
F inc. = 5.405836

ADR regressed on
NASDAQ and Currency Returns

Regression Output:

Constant -0.04296
Std Err of Y Est 0.178283
R Squared 0.106482
No. of Observations 46
Degrees of Freedom 43

X Coefficient(s) 0.210735 1.427361
Std Err of Coef. 0.424171 0.698940
F = 2.562211
F inc. = 0.246825

ADR regressed on Currency,
All-Ord. and NASDAQ Returns

Regression Output:

Constant -0.04461
Std Err of Y Est 0.166129
R Squared 0.242199
No. of Observations 46
Degrees of Freedom 42

X Coefficient(s) 0.740471 1.058532 -0.81521
Std Err of Coef. 0.697787 0.385957 0.544205
F = 4.474525
F inc. = 2.243959

Santos (Australia)

ADR regressed on

Currency Return

Regression Output:

Constant 0.002234
Std Err of Y Est 0.108394
R Squared 0.259130
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) 1.625294
Std Err of Coef. 0.307254
F = 27.98123

ADR regressed on

All-Ord. Return

Regression Output:

Constant -0.01740
Std Err of Y Est 0.089491
R Squared 0.494995
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) 1.067940
Std Err of Coef. 0.120600
F = 78.41456

ADR regressed on

NASDAQ Return

Regression Output:

Constant -0.00810
Std Err of Y Est 0.117065
R Squared 0.135847
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) 0.812272
Std Err of Coef. 0.229047
F = 12.57627

ADR regressed on

All-Ord. and NASDAQ Returns

Regression Output:

Constant -0.01692
Std Err of Y Est 0.089085
R Squared 0.505821
No. of Observations 82
Degrees of Freedom 79

X Coefficient(s) 1.198714 -0.29770
Std Err of Coef. 0.155868 0.226301
F = 40.43059
F inc. = 1.730555

ADR regressed on

Currency and All-Ord. Returns

Regression Output:

Constant -0.01280
Std Err of Y Est 0.080089
R Squared 0.600592
No. of Observations 82
Degrees of Freedom 79

X Coefficient(s) 1.080805 0.923989
Std Err of Coef. 0.236491 0.112431
F = 59.39658
F inc. = 20.88635

ADR regressed on Currency,

All-Ord. and NASDAQ Returns

Regression Output:

Constant -0.01264
Std Err of Y Est 0.080237
R Squared 0.604183
No. of Observations 82
Degrees of Freedom 78

X Coefficient(s) 1.053131 1.003710 -0.17309
Std Err of Coef. 0.239204 0.147209 0.205781
F = 39.68697
F inc. = 0.707534

Southern Pacific Petroleum (Australia)

ADR regressed on
Currency Return

Regression Output:

Constant 0.014806
Std Err of Y Est 0.195330
R Squared 0.026562
No. of Observations 65
Degrees of Freedom 63

X Coefficient(s) 0.772711
Std Err of Coef. 0.589338
F = 1.719116

ADR regressed on
All-Ord. Return

Regression Output:

Constant -0.00230
Std Err of Y Est 0.163646
R Squared 0.316747
No. of Observations 65
Degrees of Freedom 63

X Coefficient(s) 1.278659
Std Err of Coef. 0.236601
F = 29.20607

ADR regressed on
NASDAQ Return

Regression Output:

Constant 0.001443
Std Err of Y Est 0.183413
R Squared 0.141714
No. of Observations 65
Degrees of Freedom 63

X Coefficient(s) 1.237762
Std Err of Coef. 0.383774
F = 10.40214

ADR regressed on
All-Ord. and NASDAQ Returns

Regression Output:

Constant -0.00192
Std Err of Y Est 0.164893
R Squared 0.317299
No. of Observations 65
Degrees of Freedom 62

X Coefficient(s) 1.330805 -0.10800
Std Err of Coef. 0.333264 0.482304
F = 14.40793
F inc. = 0.050144

ADR regressed on
Currency and All-Ord. Returns

Regression Output:

Constant -0.00262
Std Err of Y Est 0.164931
R Squared 0.316992
No. of Observations 65
Degrees of Freedom 62

X Coefficient(s) -0.07822 1.290503
Std Err of Coef. 0.524490 0.251336
F = 14.38752
F inc. = 0.022243

ADR regressed on Currency,
All-Ord. and NASDAQ Returns

Regression Output:

Constant -0.00226
Std Err of Y Est 0.166197
R Squared 0.317648
No. of Observations 65
Degrees of Freedom 61

X Coefficient(s) -0.09396 1.350127 -0.11855
Std Err of Coef. 0.532503 0.353298 0.489782
F = 9.465570
F inc. = 0.031135

Swan Resources (Australia)

ADR regressed on
Currency Return
Regression Output:
Constant -0.02511
Std Err of Y Est 0.137837
R Squared 0.011243
No. of Observations 46
Degrees of Freedom 44

X Coefficient(s) 0.372612
Std Err of Coef. 0.526777
F = 0.500334

ADR regressed on
All-Ord. Return
Regression Output:
Constant -0.02846
Std Err of Y Est 0.132263
R Squared 0.089601
No. of Observations 46
Degrees of Freedom 44

X Coefficient(s) 0.424512
Std Err of Coef. 0.203996
F = 4.330499

ADR regressed on
NASDAQ Return
Regression Output:
Constant -0.02742
Std Err of Y Est 0.134993
R Squared 0.051628
No. of Observations 46
Degrees of Freedom 44

X Coefficient(s) 0.484568
Std Err of Coef. 0.313092
F = 2.395316

ADR regressed on
All-Ord. and NASDAQ Returns
Regression Output:
Constant -0.02862
Std Err of Y Est 0.133751
R Squared 0.090160
No. of Observations 46
Degrees of Freedom 43

X Coefficient(s) 0.391387 0.070865
Std Err of Coef. 0.290030 0.436136
F = 2.130539
F inc. = 0.026401

ADR regressed on
Currency and All-Ord. Returns
Regression Output:
Constant -0.02836
Std Err of Y Est 0.133771
R Squared 0.089884
No. of Observations 46
Degrees of Freedom 43

X Coefficient(s) -0.06464 0.435093
Std Err of Coef. 0.559303 0.225720
F = 2.123375
F inc. = 0.013357

ADR regressed on
All-Ord. and NASDAQ Returns
Regression Output:
Constant -0.02852
Std Err of Y Est 0.135318
R Squared 0.090374
No. of Observations 46
Degrees of Freedom 42

X Coefficient(s) -0.05647 0.402598 0.066655
Std Err of Coef. 0.568372 0.314376 0.443275
F = 1.390944
F inc. = 0.009871

Trans-Global Resources (Australia)

ADR regressed on
Currency Return

Regression Output:

Constant 0.009108
Std Err of Y Est 0.273296
R Squared 0.000021
No. of Observations 44
Degrees of Freedom 42

X Coefficient(s) 0.030950
Std Err of Coef. 1.037600
F = 0.000889

ADR regressed on
All-Ord. Return

Regression Output:

Constant -0.00136
Std Err of Y Est 0.256261
R Squared 0.120793
No. of Observations 44
Degrees of Freedom 42

X Coefficient(s) 0.938148
Std Err of Coef. 0.390545
F = 5.770326

ADR regressed on
NASDAQ Return

Regression Output:

Constant -0.00131
Std Err of Y Est 0.256827
R Squared 0.116905
No. of Observations 44
Degrees of Freedom 42

X Coefficient(s) 1.378378
Std Err of Coef. 0.584560
F = 5.560047

ADR regressed on
All-Ord. and NASDAQ Returns

Regression Output:

Constant -0.00330
Std Err of Y Est 0.256373
R Squared 0.140976
No. of Observations 44
Degrees of Freedom 41

X Coefficient(s) 0.576010 0.787740
Std Err of Coef. 0.537396 0.802591
F = 3.364312
F inc. = 0.963335

ADR regressed on
Currency and All-Ord. Returns

Regression Output:

Constant 0.000423
Std Err of Y Est 0.255791
R Squared 0.144875
No. of Observations 44
Degrees of Freedom 41

X Coefficient(s) -1.14912 1.131293
Std Err of Coef. 1.069403 0.429272
F = 3.473112
F inc. = 1.154651

ADR regressed on Currency,
All-Ord. and NASDAQ Returns

Regression Output:

Constant -0.00147
Std Err of Y Est 0.256443
R Squared 0.161474
No. of Observations 44
Degrees of Freedom 40

X Coefficient(s) -1.06433 0.787337 0.717190
Std Err of Coef. 1.076354 0.578467 0.805972
F = 2.567592
F inc. = 0.791822

Canon (Japan)

ADR return regressed on
Currency Return

Regression Output:

Constant 0.012848
Std Err of Y Est 0.091572
R Squared 0.000197
No. of Observations 81
Degrees of Freedom 79

X Coefficient(s) 0.037522
Std Err of Coef. 0.300023
F = 0.015641

ADR return regressed on
Nikkei Dow Return

Regression Output:

Constant -0.00219
Std Err of Y Est 0.085831
R Squared 0.121614
No. of Observations 81
Degrees of Freedom 79

X Coefficient(s) 0.777257
Std Err of Coef. 0.235018
F = 10.93770

ADR return regressed on
NASDAQ Comp. Return

Regression Output:

Constant 0.009216
Std Err of Y Est 0.087587
R Squared 0.085322
No. of Observations 81
Degrees of Freedom 79

X Coefficient(s) 0.469664
Std Err of Coef. 0.173012
F = 7.369206

ADR return regressed on
Nikkei Dow and NASDAQ Comp. Returns

Regression Output:

Constant -0.00096
Std Err of Y Est 0.085363
R Squared 0.142182
No. of Observations 81
Degrees of Freedom 78

X Coefficient(s) 0.604289 0.262192
Std Err of Coef. 0.265761 0.191723
F = 6.464196
F inc. = 1.870203

ADR return regressed on
Currency and Nikkei Dow Returns

Regression Output:

Constant -0.00284
Std Err of Y Est 0.086333
R Squared 0.122576
No. of Observations 81
Degrees of Freedom 78

X Coefficient(s) 0.082818 0.780613
Std Err of Coef. 0.283191 0.236668
F = 5.448311
F inc. = 0.085525

ADR return regressed on
Currency, Nikkei Dow and NASDAQ Comp. Returns

Regression Output:

Constant -0.00206
Std Err of Y Est 0.085757
R Squared 0.145327
No. of Observations 81
Degrees of Freedom 77

X Coefficient(s) 0.151946 0.598836 0.279792
Std Err of Coef. 0.285418 0.267186 0.195427
F = 4.364343
F inc. = 0.283411

Fuji Photo Film (Japan)

ADR return regressed on
Currency Return

Regression Output:

Constant 0.017757
Std Err of Y Est 0.093289
R Squared 0.001130
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) 0.092808
Std Err of Coef. 0.308392
F = 0.090565

ADR return regressed on
Nikkei Dow Return

Regression Output:

Constant 0.002544
Std Err of Y Est 0.087036
R Squared 0.130557
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) 0.815084
Std Err of Coef. 0.235167
F = 12.01294

ADR return regressed on
NASDAQ Comp. Return

Regression Output:

Constant 0.013653
Std Err of Y Est 0.087332
R Squared 0.124630
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) 0.579358
Std Err of Coef. 0.171666
F = 11.38995

ADR return regressed on
Nikkei Dow and NASDAQ Comp. Returns

Regression Output:

Constant 0.004354
Std Err of Y Est 0.085469
R Squared 0.172046
No. of Observations 82
Degrees of Freedom 79

X Coefficient(s) 0.561202 0.381907
Std Err of Coef. 0.263843 0.191946
F = 8.207978
F inc. = 3.958725

ADR return regressed on
Currency and Nikkei Dow Returns

Regression Output:

Constant 0.001512
Std Err of Y Est 0.087463
R Squared 0.132972
No. of Observations 82
Degrees of Freedom 79

X Coefficient(s) 0.135759 0.819835
Std Err of Coef. 0.289398 0.236539
F = 6.057945
F inc. = 0.220063

ADR return regressed on
Nikkei Dow and NASDAQ Comp. Returns

Regression Output:

Constant 0.002656
Std Err of Y Est 0.085631
R Squared 0.179423
No. of Observations 82
Degrees of Freedom 78

X Coefficient(s) 0.240936 0.550723 0.410355
Std Err of Coef. 0.287725 0.264640 0.195288
F = 5.685026
F inc. = 0.701209

Hitachi (Japan)

ADR return regressed on
Currency Return

Regression Output:

Constant 0.012021
Std Err of Y Est 0.092083
R Squared 0.038260
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) 0.543055
Std Err of Coef. 0.304406
F = 3.182595

ADR return regressed on
Nikkei Dow Return

Regression Output:

Constant -0.00186
Std Err of Y Est 0.086067
R Squared 0.159820
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) 0.907181
Std Err of Coef. 0.232551
F = 15.21778

ADR return regressed on
NYSE Comp. Return

Regression Output:

Constant 0.010821
Std Err of Y Est 0.091431
R Squared 0.051828
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) 0.456102
Std Err of Coef. 0.218109
F = 4.372954

ADR return regressed on
Nikkei Dow and NYSE Comp. Returns

Regression Output:

Constant -0.00182
Std Err of Y Est 0.086596
R Squared 0.160103
No. of Observations 82
Degrees of Freedom 79

X Coefficient(s) 0.883073 0.039868
Std Err of Coef. 0.276714 0.244303
F = 7.529628
F inc. = 0.026631

ADR return regressed on
Currency and Nikkei Dow Returns

Regression Output:

Constant -0.00636
Std Err of Y Est 0.084241
R Squared 0.205154
No. of Observations 82
Degrees of Freedom 79

X Coefficient(s) 0.591667 0.927890
Std Err of Coef. 0.278737 0.227826
F = 10.19518
F inc. = 4.505713

ADR return regressed on
Currency, Nikkei Dow and NYSE Comp. Returns

Regression Output:

Constant -0.00646
Std Err of Y Est 0.084610
R Squared 0.208329
No. of Observations 82
Degrees of Freedom 78

X Coefficient(s) 0.620523 0.846807 0.135757
Std Err of Coef. 0.284672 0.270880 0.242721
F = 6.841942
F inc. = 0.312829

Honda (Japan)

ADR return regressed on
Currency Return

Regression Output:

Constant 0.013750
Std Err of Y Est 0.090841
R Squared 0.012831
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) 0.306227
Std Err of Coef. 0.300298
F = 1.039881

ADR return regressed on
Nikkei Dow Return

Regression Output:

Constant 0.001836
Std Err of Y Est 0.086418
R Squared 0.106611
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) 0.721460
Std Err of Coef. 0.233499
F = 9.546717

ADR return regressed on
NYSE Comp. Return

Regression Output:

Constant 0.007468
Std Err of Y Est 0.083953
R Squared 0.156844
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) 0.772579
Std Err of Coef. 0.200271
F = 14.88161

ADR return regressed on
Nikkei Dow and NYSE Comp. Returns

Regression Output:

Constant 0.002373
Std Err of Y Est 0.083550
R Squared 0.175366
No. of Observations 82
Degrees of Freedom 79

X Coefficient(s) 0.355646 0.604946
Std Err of Coef. 0.266981 0.235711
F = 8.400087
F inc. = 1.774492

ADR return regressed on
NYSE Comp. and Currency Returns

Regression Output:

Constant 0.003229
Std Err of Y Est 0.082734
R Squared 0.191390
No. of Observations 82
Degrees of Freedom 79

X Coefficient(s) 0.837393 0.510426
Std Err of Coef. 0.200491 0.277835
F = 9.349282
F inc. = 3.375130

ADR return regressed on Currency,
Nikkei Dow and NYSE Comp. Returns

Regression Output:

Constant -0.00128
Std Err of Y Est 0.082455
R Squared 0.206995
No. of Observations 82
Degrees of Freedom 78

X Coefficient(s) 0.489316 0.327049 0.680559
Std Err of Coef. 0.277423 0.263983 0.236541
F = 6.786680
F inc. = 1.534876

Ito Yokado (Japan)

ADR return regressed on
Currency Return

Regression Output:

Constant 0.023137
Std Err of Y Est 0.073377
R Squared 0.187442
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) 1.042039
Std Err of Coef. 0.242567
F = 18.45451

ADR return regressed on
Nikkei Dow Return

Regression Output:

Constant 0.015673
Std Err of Y Est 0.075174
R Squared 0.147144
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) 0.754624
Std Err of Coef. 0.203119
F = 13.80252

ADR return regressed on
NASDAQ Comp. Return

Regression Output:

Constant 0.028383
Std Err of Y Est 0.080246
R Squared 0.028188
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) 0.240287
Std Err of Coef. 0.157738
F = 2.320531

ADR return regressed on
Currency and Nikkei Dow Returns

Regression Output:

Constant 0.007432
Std Err of Y Est 0.066070
R Squared 0.349450
No. of Observations 82
Degrees of Freedom 79

X Coefficient(s) 1.083560 0.792548
Std Err of Coef. 0.218612 0.178683
F = 21.21788
F inc. = 19.67360

ADR return regressed on
NASDAQ Comp. and Currency Returns

Regression Output:

Constant 0.019482
Std Err of Y Est 0.071027
R Squared 0.248171
No. of Observations 82
Degrees of Freedom 79

X Coefficient(s) 0.358076 1.146119
Std Err of Coef. 0.141750 0.238386
F = 13.03855
F inc. = 6.381237

ADR return regressed on Currency,
Nikkei Dow and NASDAQ Comp. Returns

Regression Output:

Constant 0.007706
Std Err of Y Est 0.066314
R Squared 0.352933
No. of Observations 82
Degrees of Freedom 78

X Coefficient(s) 1.108676 0.728285 0.097991
Std Err of Coef. 0.222817 0.204940 0.151233
F = 14.18131
F inc. = 0.419834

Japan Airlines (Japan)

ADR return regressed on
Currency Return

Regression Output:

Constant 0.027715
Std Err of Y Est 0.112868
R Squared 0.075266
No. of Observations 81
Degrees of Freedom 79

X Coefficient(s) 0.944985
Std Err of Coef. 0.372666
F = 6.429980

ADR return regressed on
Nikkei Dow Return

Regression Output:

Constant 0.033647
Std Err of Y Est 0.117363
R Squared 0.000155
No. of Observations 81
Degrees of Freedom 79

X Coefficient(s) 0.035147
Std Err of Coef. 0.316642
F = 0.012321

ADR return regressed on
NASDAQ Comp. Return

Regression Output:

Constant 0.035477
Std Err of Y Est 0.117107
R Squared 0.004511
No. of Observations 81
Degrees of Freedom 79

X Coefficient(s) -0.13726
Std Err of Coef. 0.229415
F = 0.358008

ADR return regressed on
NASDAQ and Currency Returns

Regression Output:

Constant 0.028171
Std Err of Y Est 0.113561
R Squared 0.075724
No. of Observations 81
Degrees of Freedom 78

X Coefficient(s) -0.04440 0.932423
Std Err of Coef. 0.225671 0.380351
F = 3.195229
F inc. = 0.038719

ADR return regressed on
Currency and Nikkei Dow Returns

Regression Output:

Constant 0.026414
Std Err of Y Est 0.113557
R Squared 0.075798
No. of Observations 81
Degrees of Freedom 78

X Coefficient(s) 0.948046 0.064969
Std Err of Coef. 0.375218 0.306602
F = 3.198572
F inc. = 0.044902

ADR return regressed on Currency,
Nikkei Dow and NASDAQ Returns

Regression Output:

Constant 0.026141
Std Err of Y Est 0.114205
R Squared 0.077207
No. of Observations 81
Degrees of Freedom 77

X Coefficient(s) 0.925588 0.124420 -0.08928
Std Err of Coef. 0.382999 0.353744 0.260359
F = 2.147458
F inc. = 0.117600

Kirin Brewery (Japan)

ADR return regressed on
Currency Return

Regression Output:

Constant 0.019459
Std Err of Y Est 0.084138
R Squared 0.208256
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) 1.275908
Std Err of Coef. 0.278142
F = 21.04283

ADR return regressed on
Nikkei Dow Return

Regression Output:

Constant 0.001680
Std Err of Y Est 0.075740
R Squared 0.358416
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) 1.368113
Std Err of Coef. 0.204649
F = 44.69149

ADR return regressed on
NASDAQ Comp. Return

Regression Output:

Constant 0.025871
Std Err of Y Est 0.093052
R Squared 0.031622
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) 0.295637
Std Err of Coef. 0.182910
F = 2.612401

ADR return regressed on
Currency and Nikkei Dow Returns

Regression Output:

Constant -0.00858
Std Err of Y Est 0.060843
R Squared 0.591155
No. of Observations 82
Degrees of Freedom 79

X Coefficient(s) 1.350059 1.415365
Std Err of Coef. 0.201318 0.164547
F = 57.11369
F inc. = 44.97148

ADR return regressed on
Nikkei Dow and NASDAQ Returns

Regression Output:

Constant 0.000532
Std Err of Y Est 0.075245
R Squared 0.374705
No. of Observations 82
Degrees of Freedom 79

X Coefficient(s) 1.529264 -0.24241
Std Err of Coef. 0.232280 0.168983
F = 23.67019
F inc. = 2.057902

ADR return regressed on Currency,
Nikkei Dow and NASDAQ Returns

Regression Output:

Constant -0.00882
Std Err of Y Est 0.061084
R Squared 0.593124
No. of Observations 82
Degrees of Freedom 78

X Coefficient(s) 1.328120 1.471500 -0.08559
Std Err of Coef. 0.205246 0.188778 0.139307
F = 37.90164
F inc. = 0.377548

Iyocera (Japan)

ADR return regressed on
Currency Return

Regression Output:

Constant	0.017327
Std Err of Y Est	0.113489
R Squared	0.001904
No. of Observations	82
Degrees of Freedom	80

X Coefficient(s) -0.14657
Std Err of Coef. 0.375167
F = 0.152637

ADR return regressed on
Nikkei Dow Return

Regression Output:

Constant	-0.00031
Std Err of Y Est	0.107950
R Squared	0.096949
No. of Observations	82
Degrees of Freedom	80

X Coefficient(s) 0.854800
Std Err of Coef. 0.291678
F = 8.588597

ADR return regressed on
NYSE Comp. Return

Regression Output:

Constant	0.008189
Std Err of Y Est	0.108069
R Squared	0.094965
No. of Observations	82
Degrees of Freedom	80

X Coefficient(s) 0.746921
Std Err of Coef. 0.257797
F = 8.394428

ADR return regressed on
Nikkei Dow and NYSE Comp. Returns

Regression Output:

Constant	0.000111
Std Err of Y Est	0.106923
R Squared	0.125125
No. of Observations	82
Degrees of Freedom	79

X Coefficient(s) 0.563844 0.481154
Std Err of Coef. 0.341670 0.301651
F = 5.649311
F inc. = 2.544238

ADR return regressed on
Currency and Nikkei Dow Returns

Regression Output:

Constant	0.000460
Std Err of Y Est	0.108576
R Squared	0.097869
No. of Observations	82
Degrees of Freedom	79

X Coefficient(s) -0.10197 0.851231
Std Err of Coef. 0.359256 0.293638
F = 4.285232
F inc. = 0.080575

ADR return regressed on
Currency, Nikkei Dow and NYSE Comp. Returns

Regression Output:

Constant	0.000109
Std Err of Y Est	0.107606
R Squared	0.125125
No. of Observations	82
Degrees of Freedom	78

X Coefficient(s) 0.000306 0.563826 0.481202
Std Err of Coef. 0.362043 0.344503 0.308691
F = 3.718534
F inc. = 0.000000

Matsushita Electrical Industries (Japan)

ADR return regressed on
Currency Return

Regression Output:

Constant 0.013835
Std Err of Y Est 0.098258
R Squared 0.003851
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) 0.180641
Std Err of Coef. 0.324820
F = 0.309278

ADR return regressed on
Nikkei Dow Return

Regression Output:

Constant -0.00342
Std Err of Y Est 0.090234
R Squared 0.159916
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) 0.951438
Std Err of Coef. 0.243809
F = 15.22863

ADR return regressed on
NYSE Comp. Return

Regression Output:

Constant 0.008062
Std Err of Y Est 0.093680
R Squared 0.094525
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) 0.645813
Std Err of Coef. 0.223473
F = 8.351451

ADR return regressed on
Nikkei Dow and NYSE Comp. Returns

Regression Output:

Constant -0.00317
Std Err of Y Est 0.090133
R Squared 0.172263
No. of Observations 82
Degrees of Freedom 79

X Coefficient(s) 0.784520 0.276031
Std Err of Coef. 0.288019 0.254284
F = 8.220474
F inc. = 1.178359

ADR return regressed on
Currency and Nikkei Dow Returns

Regression Output:

Constant -0.00517
Std Err of Y Est 0.090463
R Squared 0.166197
No. of Observations 82
Degrees of Freedom 79

X Coefficient(s) 0.230910 0.959520
Std Err of Coef. 0.299324 0.244652
F = 7.873341
F inc. = 0.595119

ADR return regressed on Currency,
Nikkei Dow and NYSE Comp. Returns

Regression Output:

Constant -0.00541
Std Err of Y Est 0.090148
R Squared 0.182477
No. of Observations 82
Degrees of Freedom 78

X Coefficient(s) 0.299418 0.767021 0.322300
Std Err of Coef. 0.303304 0.288610 0.258608
F = 5.803396
F inc. = 0.974541

Sony (Japan)

ADR return regressed on
Currency Return

Regression Output:

Constant 0.018766
Std Err of Y Est 0.096995
R Squared 0.013448
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) -0.33485
Std Err of Coef. 0.320644
F = 1.090570

ADR return regressed on
Nikkei Dow Return

Regression Output:

Constant 0.002426
Std Err of Y Est 0.092988
R Squared 0.093275
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) 0.720776
Std Err of Coef. 0.251252
F = 8.229654

ADR return regressed on
NYSE Comp. Return

Regression Output:

Constant 0.008589
Std Err of Y Est 0.091594
R Squared 0.120258
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) 0.722560
Std Err of Coef. 0.218498
F = 10.93579

ADR return regressed on
Nikkei Dow and NYSE Comp. Returns

Regression Output:

Constant 0.002901
Std Err of Y Est 0.091106
R Squared 0.140489
No. of Observations 82
Degrees of Freedom 79

X Coefficient(s) 0.396995 0.535437
Std Err of Coef. 0.291128 0.257029
F = 6.456412
F inc. = 1.859530

ADR return regressed on
NYSE and Currency Returns

Regression Output:

Constant 0.009949
Std Err of Y Est 0.092009
R Squared 0.123374
No. of Observations 82
Degrees of Freedom 79

X Coefficient(s) 0.701770 -0.16372
Std Err of Coef. 0.222966 0.308981
F = 5.559127
F inc. = 0.280773

ADR return regressed on Currency,
Nikkei Dow and NYSE Comp. Returns

Regression Output:

Constant 0.004321
Std Err of Y Est 0.091465
R Squared 0.144672
No. of Observations 82
Degrees of Freedom 78

X Coefficient(s) -0.19006 0.408103 0.506067
Std Err of Coef. 0.307736 0.292827 0.262386
F = 4.397727
F inc. = 0.381458

Tokio Marine & Fire Insurance (Japan)

ADR return regressed on
Currency Return

Regression Output:

Constant 0.014030
Std Err of Y Est 0.098817
R Squared 0.230634
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) 1.599729
Std Err of Coef. 0.326667
F = 23.98176

ADR return regressed on
Nikkei Dow Return

Regression Output:

Constant -0.00611
Std Err of Y Est 0.091002
R Squared 0.347522
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) 1.605033
Std Err of Coef. 0.245884
F = 42.60959

ADR return regressed on
NASDAQ Comp. Return

Regression Output:

Constant 0.024183
Std Err of Y Est 0.112476
R Squared 0.003243
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) 0.112804
Std Err of Coef. 0.221093
F = 0.260314

ADR return regressed on
Currency and Nikkei Dow Returns

Regression Output:

Constant -0.01894
Std Err of Y Est 0.071386
R Squared 0.603509
No. of Observations 82
Degrees of Freedom 79

X Coefficient(s) 1.686910 1.664075
Std Err of Coef. 0.236203 0.193060
F = 60.12408
F inc. = 51.00494

ADR return regressed on
Nikkei Dow and NASDAQ Comp. Returns

Regression Output:

Constant -0.00890
Std Err of Y Est 0.086677
R Squared 0.415466
No. of Observations 82
Degrees of Freedom 79

X Coefficient(s) 1.997165 -0.58987
Std Err of Coef. 0.267570 0.194657
F = 28.07528
F inc. = 9.182709

ADR return regressed on Currency,
Nikkei Dow and NASDAQ Comp. Returns

Regression Output:

Constant -0.02006
Std Err of Y Est 0.069001
R Squared 0.634245
No. of Observations 82
Degrees of Freedom 78

X Coefficient(s) 1.583648 1.928287 -0.40288
Std Err of Coef. 0.231848 0.213246 0.157362
F = 45.08598
F inc. = 6.554744

Toyota Motors (Japan)

ADR return regressed on
Currency Return

Regression Output:

Constant 0.015400
Std Err of Y Est 0.090891
R Squared 0.060393
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) 0.681334
Std Err of Coef. 0.300463
F = 5.142050

ADR return regressed on
Nikkei Dow Return

Regression Output:

Constant 0.009621
Std Err of Y Est 0.091069
R Squared 0.056706
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) 0.539620
Std Err of Coef. 0.246065
F = 4.809231

ADR return regressed on
NASDAQ Comp. Return

Regression Output:

Constant 0.018015
Std Err of Y Est 0.092623
R Squared 0.024234
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) 0.256639
Std Err of Coef. 0.182067
F = 1.986913

ADR return regressed on
Currency and Nikkei Dow Returns

Regression Output:

Constant 0.004215
Std Err of Y Est 0.088398
R Squared 0.122336
No. of Observations 82
Degrees of Freedom 79

X Coefficient(s) 0.710908 0.564502
Std Err of Coef. 0.292491 0.239067
F = 5.505856
F inc. = 5.575565

ADR return regressed on
NASDAQ Comp. and Currency Returns

Regression Output:

Constant 0.011964
Std Err of Y Est 0.089473
R Squared 0.100865
No. of Observations 82
Degrees of Freedom 79

X Coefficient(s) 0.336719 0.779206
Std Err of Coef. 0.178562 0.300295
F = 4.431149
F inc. = 3.555962

ADR return regressed on Currency,
Nikkei Dow and NASDAQ Comp. Returns

Regression Output:

Constant 0.004707
Std Err of Y Est 0.088530
R Squared 0.130847
No. of Observations 82
Degrees of Freedom 78

X Coefficient(s) 0.756133 0.448786 0.176448
Std Err of Coef. 0.297465 0.273598 0.201899
F = 3.914189
F inc. = 0.763781

AEON (Netherlands)

ADR Return regressed on
Currency Return

Regression Output:

Constant -0.04311
Std Err of Y Est 0.200822
R Squared 0.009357
No. of Observations 49
Degrees of Freedom 47

X Coefficient(s) 0.505179
Std Err of Coef. 0.758201
F = 0.443938

ADR Return regressed on
ANP-CBS Return

Regression Output:

Constant -0.03713
Std Err of Y Est 0.194334
R Squared 0.072335
No. of Observations 49
Degrees of Freedom 47

X Coefficient(s) 0.673638
Std Err of Coef. 0.351882
F = 3.664870

ADR Return regressed on
NASDAQ Return

Regression Output:

Constant -0.04660
Std Err of Y Est 0.190760
R Squared 0.106141
No. of Observations 49
Degrees of Freedom 47

X Coefficient(s) 1.018704
Std Err of Coef. 0.431212
F = 5.581014

ADR Return regressed on
Currency and NASDAQ Returns

Regression Output:

Constant -0.05559
Std Err of Y Est 0.190200
R Squared 0.130292
No. of Observations 49
Degrees of Freedom 46

X Coefficient(s) 0.824026 1.104016
Std Err of Coef. 0.729078 0.436521
F = 3.445687
F inc. = 1.277418

ADR Return regressed on
NASDAQ and ANP-CBS Returns

Regression Output:

Constant -0.04427
Std Err of Y Est 0.191332
R Squared 0.119903
No. of Observations 49
Degrees of Freedom 46

X Coefficient(s) 0.796924 0.343360
Std Err of Coef. 0.505412 0.404846
F = 3.133499
F inc. = 0.719314

ADR Return regressed on Currency,
NASDAQ and ANP-CBS Returns

Regression Output:

Constant -0.05328
Std Err of Y Est 0.190757
R Squared 0.144205
No. of Observations 49
Degrees of Freedom 45

X Coefficient(s) 0.826599 0.881290 0.345237
Std Err of Coef. 0.731221 0.509389 0.403633
F = 2.527581
F inc. = 0.731582

KLM Royal Dutch Airlines (Netherlands)

ADR Return regressed on Currency Return
Regression Output:

Constant 0.014330
Std Err of Y Est 0.092670
R Squared 0.000410
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) -0.04929
Std Err of Coef. 0.271846
F = 0.032882

ADR Return regressed on ANP-CBS Return
Regression Output:

Constant 0.008206
Std Err of Y Est 0.080634
R Squared 0.243208
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) 0.644432
Std Err of Coef. 0.127095
F = 25.70943

ADR Return regressed on NYSE Comp. Return
Regression Output:

Constant 0.003276
Std Err of Y Est 0.079779
R Squared 0.259171
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) 0.996708
Std Err of Coef. 0.188403
F = 27.98721

ADR Return regressed on Currency Return
and Neth ANP-CBS Return
Regression Output:

Constant 0.006814
Std Err of Y Est 0.080600
R Squared 0.253297
No. of Observations 82
Degrees of Freedom 79

X Coefficient(s) 0.251557 0.676720
Std Err of Coef. 0.243487 0.130829
F = 13.39923
F inc. = 26.79846

KLM Royal Dutch Airlines (Netherlands)

ADR Return regressed on
NYSE Comp. and Currency Returns

Regression Output:

Constant	0.002397
Std Err of Y Est	0.080074
R Squared	0.263012
No. of Observations	82
Degrees of Freedom	79

X Coefficient(s)	1.016372	0.152682
Std Err of Coef.	0.191567	0.237960
F =	14.09654	
F inc. =	0.411686	

ADR Return regressed on ANP-CBS Return
and NYSE Comp. Return

Regression Output:

Constant	0.002908
Std Err of Y Est	0.076162
R Squared	0.333262
No. of Observations	82
Degrees of Freedom	79

X Coefficient(s)	0.413010	0.682207
Std Err of Coef.	0.139393	0.208847
F =	19.74370	
F inc. =	8.778847	

ADR Return regressed on Currency,
Neth ANP-CBS and NYSE Comp. Returns

Regression Output:

Constant	0.001229
Std Err of Y Est	0.075893
R Squared	0.346351
No. of Observations	82
Degrees of Freedom	78

X Coefficient(s)	0.286832	0.445752	0.694216
Std Err of Coef.	0.229511	0.141349	0.208330
F =	13.77671		
F inc. =	1.561879		

Oce van der Grinten (Netherlands)

ADR Return regressed on
Currency Return

Regression Output:

Constant	0.009375
Std Err of Y Est	0.107017
R Squared	0.012183
No. of Observations	61
Degrees of Freedom	59

X Coefficient(s) 0.310505
Std Err of Coef. 0.363989
F = 0.727715

ADR Return regressed on
ANP-CBS Return

Regression Output:

Constant	0.010766
Std Err of Y Est	0.092343
R Squared	0.264507
No. of Observations	61
Degrees of Freedom	59

X Coefficient(s) 0.762261
Std Err of Coef. 0.165481
F = 21.21834

ADR Return regressed on
NASDAQ Return

Regression Output:

Constant	0.002609
Std Err of Y Est	0.090970
R Squared	0.286210
No. of Observations	61
Degrees of Freedom	59

X Coefficient(s) 0.952867
Std Err of Coef. 0.195906
F = 23.65738

ADR Return regressed on
ANP-CBS and NASDAQ Returns

Regression Output:

Constant	0.004670
Std Err of Y Est	0.086775
R Squared	0.361538
No. of Observations	61
Degrees of Freedom	58

X Coefficient(s) 0.477799 0.651668
Std Err of Coef. 0.182650 0.219495
F = 16.42165
F inc. = 6.843034

ADR Return regressed on Currency,
ANP-CBS and NASDAQ Returns

Regression Output:

Constant	-0.00310
Std Err of Y Est	0.083374
R Squared	0.420765
No. of Observations	61
Degrees of Freedom	57

X Coefficient(s) 0.701371 0.500300 0.731231
Std Err of Coef. 0.290520 0.175739 0.213452
F = 13.80189
F inc. = 5.828292

Phillips (Netherlands)

ADR Return regressed on
Currency Return

Regression Output:

Constant 0.014728
Std Err of Y Est 0.087628
R Squared 0.017062
No. of Observations 31
Degrees of Freedom 79

X Coefficient(s) 0.301466
Std Err of Coef. 0.257437
F = 1.371302

ADR Return regressed on
ANP-CBS Return

Regression Output:

Constant 0.011388
Std Err of Y Est 0.080762
R Squared 0.165063
No. of Observations 31
Degrees of Freedom 79

X Coefficient(s) 0.502926
Std Err of Coef. 0.127260
F = 15.61792

ADR Return regressed on
NASDAQ Return

Regression Output:

Constant 0.008908
Std Err of Y Est 0.072986
R Squared 0.318094
No. of Observations 81
Degrees of Freedom 79

X Coefficient(s) 0.861923
Std Err of Coef. 0.141983
F = 36.85182

ADR Return regressed on
NYSE Comp. Return

Regression Output:

Constant 0.004484
Std Err of Y Est 0.072839
R Squared 0.320848
No. of Observations 81
Degrees of Freedom 79

X Coefficient(s) 1.051129
Std Err of Coef. 0.172058
F = 37.32162

ADR Return regressed on
ANP-CBS and NASDAQ Returns

Regression Output:

Constant 0.008050
Std Err of Y Est 0.072327
R Squared 0.338837
No. of Observations 81
Degrees of Freedom 78

X Coefficient(s) 0.205737 0.735162
Std Err of Coef. 0.131518 0.162366
F = 19.98698
F inc. = 2.447104

ADR Return regressed on
ANP-CBS and NYSE Comp. Returns

Regression Output:

Constant 0.004331
Std Err of Y Est 0.072329
R Squared 0.338799
No. of Observations 81
Degrees of Freedom 78

X Coefficient(s) 0.193406 0.901981
Std Err of Coef. 0.132905 0.199237
F = 19.98364
F inc. = 2.117652

Phillips (Netherlands)

ADR Return regressed on
NASDAQ and Currency Returns
Regression Output:

Constant 0.006088
Std Err of Y Est 0.070628
R Squared 0.369529
No. of Observations 81
Degrees of Freedom 78

X Coefficient(s) 0.919908 0.530698
Std Err of Coef. 0.139305 0.210378
F = 22.85861
F inc. = 6.363458

ADR Return regressed on
NYSE Comp. and Currency Returns
Regression Output:

Constant 0.001369
Std Err of Y Est 0.070468
R Squared 0.372385
No. of Observations 81
Degrees of Freedom 78

X Coefficient(s) 1.121475 0.531192
Std Err of Coef. 0.168763 0.209891
F = 23.14000
F inc. = 6.404948

ADR Return regressed on Currency,
ANP-CBS and NASDAQ Returns
Regression Output:

Constant 0.004515
Std Err of Y Est 0.069058
R Squared 0.404980
No. of Observations 81
Degrees of Freedom 77

0.760277
X Coefficient(s) 0.611960 0.273497 0.155265
Std Err of Coef. 0.209170 0.127692
F = 17.46916
F inc. = 8.559419

ADR Return regressed on Currency,
ANP-CBS and NYSE Comp. Returns
Regression Output:

Constant 0.000713
Std Err of Y Est 0.069113
R Squared 0.404023
No. of Observations 81
Degrees of Freedom 77

X Coefficient(s) 0.607557 0.261049 0.930277
Std Err of Coef. 0.209292 0.129117 0.190629
F = 17.39991
F inc. = 4.087689

Royal Dutch Petroleum (Netherlands)

ADR Return regressed on
Currency Return
Regression Output:
Constant 0.022095
Std Err of Y Est 0.057003
R Squared 0.014259
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) 0.179887
Std Err of Coef. 0.167216
F = 1.157292

ADR Return regressed on
ANP-CBS Return
Regression Output:
Constant 0.019820
Std Err of Y Est 0.052314
R Squared 0.169732
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) 0.333469
Std Err of Coef. 0.082458
F = 16.35450

ADR Return regressed on
NYSE Comp. Return
Regression Output:
Constant 0.015524
Std Err of Y Est 0.047661
R Squared 0.310875
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) 0.676165
Std Err of Coef. 0.112554
F = 36.08925

ADR Return regressed on
ANP-CBS and NYSE Comp. Returns
Regression Output:
Constant 0.015400
Std Err of Y Est 0.047179
R Squared 0.333175
No. of Observations 82
Degrees of Freedom 79

X Coefficient(s) 0.140352 0.569289
Std Err of Coef. 0.086348 0.129372
F = 19.73596
F inc. = 2.641958

ADR Return regressed on
NYSE and Currency Returns
Regression Output:
Constant 0.013668
Std Err of Y Est 0.046381
R Squared 0.355537
No. of Observations 82
Degrees of Freedom 79

X Coefficient(s) 0.717701 0.322512
Std Err of Coef. 0.110962 0.137834
F = 21.79141
F inc. = 5.474885

ADR Return regressed on Currency,
ANP-CBS and NYSE Comp. Returns
Regression Output:
Constant 0.013187
Std Err of Y Est 0.045325
R Squared 0.392335
No. of Observations 82
Degrees of Freedom 78

X Coefficient(s) 0.377728 0.183469 0.585103
Std Err of Coef. 0.137072 0.084418 0.124422
F = 16.78676
F inc. = 4.723361

Unilever NV (Netherlands)

ADR Return regressed on
Currency Return
Regression Output:
Constant 0.023601
Std Err of Y Est 0.058829
R Squared 0.036655
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) 0.301093
Std Err of Coef. 0.172574
F = 3.044023

ADR Return regressed on
ANP-CBS Return
Regression Output:
Constant 0.020902
Std Err of Y Est 0.051289
R Squared 0.267780
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) 0.437271
Std Err of Coef. 0.080841
F = 29.25685

ADR Return regressed on
NYSE Comp. Return
Regression Output:
Constant 0.016308
Std Err of Y Est 0.046793
R Squared 0.390505
No. of Observations 82
Degrees of Freedom 80

X Coefficient(s) 0.791154
Std Err of Coef. 0.110506
F = 51.25623

ADR Return regressed on
ANP-CBS and NYSE Comp. Returns
Regression Output:
Constant 0.016105
Std Err of Y Est 0.044960
R Squared 0.444366
No. of Observations 82
Degrees of Freedom 79

X Coefficient(s) 0.227713 0.617753
Std Err of Coef. 0.082287 0.123287
F = 31.58996
F inc. = 7.657934

ADR Return regressed on
NYSE Comp. and Currency Returns
Regression Output:
Constant 0.013601
Std Err of Y Est 0.043592
R Squared 0.477666
No. of Observations 82
Degrees of Freedom 79

X Coefficient(s) 0.851730 0.470352
Std Err of Coef. 0.104288 0.129545
F = 36.12220
F inc. = 13.18269

ADR Return regressed on Currency,
ANP-CBS and NYSE Comp. Returns
Regression Output:
Constant 0.012837
Std Err of Y Est 0.040134
R Squared 0.562847
No. of Observations 82
Degrees of Freedom 78

X Coefficient(s) 0.558055 0.291415 0.641117
Std Err of Coef. 0.121372 0.074750 0.110171
F = 33.47576
F inc. = 15.19852

ASEA (Sweden)

ADR return regressed on currency return
Regression Output:

Constant 0.029706
Std Err of Y Est 0.082489
R Squared 0.021322
No. of Observations 46
Degrees of Freedom 44

X Coefficient(s) -0.45856
Std Err of Coef. 0.468354
F = 0.958619

ADR return regressed on J&P return
Regression Output:

Constant 0.009682
Std Err of Y Est 0.058556
R Squared 0.506835
No. of Observations 46
Degrees of Freedom 44

X Coefficient(s) 0.901040
Std Err of Coef. 0.133992
F = 45.21980

ADR return regressed on NASDAQ return
Regression Output:

Constant 0.022595
Std Err of Y Est 0.073533
R Squared 0.222310
No. of Observations 46
Degrees of Freedom 44

X Coefficient(s) 0.602234
Std Err of Coef. 0.169809
F = 12.57788

ADR return regressed on J&P return
and NASDAQ return
Regression Output:

Constant 0.009973
Std Err of Y Est 0.058478
R Squared 0.519338
No. of Observations 46
Degrees of Freedom 43

X Coefficient(s) 0.812822 0.168296
Std Err of Coef. 0.157682 0.159131
F = 23.23004
F inc = 1.118500

ADR return regressed on
Currency and J&P Returns
Regression Output:

Constant 0.006763
Std Err of Y Est 0.058267
R Squared 0.522799
No. of Observations 46
Degrees of Freedom 43

X Coefficient(s) 0.427086 0.964724
Std Err of Coef. 0.356094 0.143513
F = 23.55445
F inc = 1.438477

ADR return regressed on Currency,
J&P and NASDAQ Returns
Regression Output:

Constant 0.007130
Std Err of Y Est 0.058239
R Squared 0.534336
No. of Observations 46
Degrees of Freedom 42

X Coefficient(s) 0.414221 0.878011 0.161765
Std Err of Coef. 0.356149 0.166742 0.158582
F = 16.06462
F inc = 1.040537

Ericsson (Sweden)

ADR Return regressed on
Currency Return

Regression Output:

Constant	0.016050
Std Err of Y Est	0.103791
R Squared	0.006221
No. of Observations	79
Degrees of Freedom	77

X Coefficient(s) 0.307651
Std Err of Coef. 0.443119
F = 0.482030

ADR Return regressed on
J&P Return

Regression Output:

Constant	0.002396
Std Err of Y Est	0.092940
R Squared	0.203155
No. of Observations	79
Degrees of Freedom	77

X Coefficient(s) 0.702187
Std Err of Coef. 0.158482
F = 19.63112

ADR Return regressed on
NASDAQ Return

Regression Output:

Constant	0.009247
Std Err of Y Est	0.092528
R Squared	0.210207
No. of Observations	79
Degrees of Freedom	77

X Coefficient(s) 0.821818
Std Err of Coef. 0.181536
F = 20.49393

ADR Return regressed on
J&P and NASDAQ Returns

Regression Output:

Constant	0.002513
Std Err of Y Est	0.089444
R Squared	0.271563
No. of Observations	79
Degrees of Freedom	76

X Coefficient(s) 0.452555 0.549805
Std Err of Coef. 0.178867 0.205799
F = 14.16650
F inc. = 6.401455

ADR Return regressed on
NASDAQ and Currency Returns

Regression Output:

Constant	0.008035
Std Err of Y Est	0.092134
R Squared	0.227094
No. of Observations	79
Degrees of Freedom	76

X Coefficient(s) 0.847524 0.509952
Std Err of Coef. 0.181859 0.395736
F = 11.16513
F inc. = 1.660525

ADR Return regressed on Currency,
J&P and NASDAQ Returns

Regression Output:

Constant	-0.00050
Std Err of Y Est	0.087766
R Squared	0.307871
No. of Observations	79
Degrees of Freedom	75

X Coefficient(s) 0.767409 0.532918 0.540186
Std Err of Coef. 0.386888 0.180127 0.201996
F = 11.12047
F inc. = 3.934434

Pharmacia (Sweden)

ADR Return regressed on
Currency Return

Regression Output:

Constant -0.00379
Std Err of Y Est 0.152971
R Squared 0.000257
No. of Observations 78
Degrees of Freedom 76

X Coefficient(s) -0.09139
Std Err of Coef. 0.653345
F = 0.019566

ADR Return regressed on
J&P Return

Regression Output:

Constant -0.02667
Std Err of Y Est 0.133350
R Squared 0.240277
No. of Observations 78
Degrees of Freedom 76

X Coefficient(s) 1.104463
Std Err of Coef. 0.225276
F = 24.03657

ADR Return regressed on
NASDAQ Return

Regression Output:

Constant -0.01567
Std Err of Y Est 0.132902
R Squared 0.245370
No. of Observations 78
Degrees of Freedom 76

X Coefficient(s) 1.283042
Std Err of Coef. 0.258101
F = 24.71169

ADR Return regressed on
J&P and NASDAQ Returns

Regression Output:

Constant -0.02633
Std Err of Y Est 0.127282
R Squared 0.316957
No. of Observations 78
Degrees of Freedom 75

X Coefficient(s) 0.712131 0.847264
Std Err of Coef. 0.254002 0.291993
F = 17.40140
F inc. = 7.860421

ADR Return regressed on
NASDAQ and Currency Returns

Regression Output:

Constant -0.01623
Std Err of Y Est 0.133640
R Squared 0.247010
No. of Observations 78
Degrees of Freedom 75

X Coefficient(s) 1.295035 0.232170
Std Err of Coef. 0.261224 0.574500
F = 12.30148
F inc. = 0.163317

ADR Return regressed on Currency,
J&P and NASDAQ Returns

Regression Output:

Constant -0.02878
Std Err of Y Est 0.127115
R Squared 0.327828
No. of Observations 78
Degrees of Freedom 74

X Coefficient(s) 0.613980 0.777135 0.839202
Std Err of Coef. 0.561242 0.260536 0.291704
F = 12.03029
F inc. = 1.196763

SKF (Sweden)

ADR Return regressed on
Currency Return

Regression Output:

Constant	0.027365
Std Err of Y Est	0.095213
R Squared	0.038346
No. of Observations	46
Degrees of Freedom	44

X Coefficient(s) -0.71606
Std Err of Coef. 0.540594
F = 1.754530

ADR Return regressed on
J&P Return

Regression Output:

Constant	0.002963
Std Err of Y Est	0.066871
R Squared	0.525648
No. of Observations	46
Degrees of Freedom	44

X Coefficient(s) 1.068476
Std Err of Coef. 0.153017
F = 48.75819

ADR Return regressed on
NASDAQ Return

Regression Output:

Constant	0.017718
Std Err of Y Est	0.082801
R Squared	0.272725
No. of Observations	46
Degrees of Freedom	44

X Coefficient(s) 0.776703
Std Err of Coef. 0.191211
F = 16.49989

ADR Return regressed on
J&P and NASDAQ Returns

Regression Output:

Constant	0.003458
Std Err of Y Est	0.065712
R Squared	0.552360
No. of Observations	46
Degrees of Freedom	43

X Coefficient(s) 0.918330 0.286438
Std Err of Coef. 0.177187 0.178817
F = 26.52969
F inc. = 2.565930

ADR Return regressed on
Currency and J&P Returns

Regression Output:

Constant	0.000866
Std Err of Y Est	0.067209
R Squared	0.531725
No. of Observations	46
Degrees of Freedom	43

X Coefficient(s) 0.306836 1.114230
Std Err of Coef. 0.410744 0.165539
F = 24.41324
F inc. = 0.558045

ADR Return regressed on
Currency, J&P and NASDAQ Returns

Regression Output:

Constant	0.001506
Std Err of Y Est	0.066101
R Squared	0.557575
No. of Observations	46
Degrees of Freedom	42

X Coefficient(s) 0.284411 0.963091 0.281953
Std Err of Coef. 0.404225 0.189250 0.179989
F = 17.64378
F inc. = 0.495049

Svenska Cellulosa (Sweden)

ADR Return regressed on
Currency Return

Regression Output:

Constant 0.014523
Std Err of Y Est 0.085867
R Squared 0.026381
No. of Observations 67
Degrees of Freedom 65

X Coefficient(s) 0.528674
Std Err of Coef. 0.398357
F = 1.761293

ADR Return regressed on
J&P Return

Regression Output:

Constant 0.000608
Std Err of Y Est 0.056717
R Squared 0.575227
No. of Observations 67
Degrees of Freedom 65

X Coefficient(s) 1.086178
Std Err of Coef. 0.115771
F = 88.02304

ADR Return regressed on
NASDAQ Return

Regression Output:

Constant 0.012316
Std Err of Y Est 0.081838
R Squared 0.115598
No. of Observations 67
Degrees of Freedom 65

X Coefficient(s) 0.488860
Std Err of Coef. 0.167716
F = 8.496071

ADR Return regressed on
J&P and NASDAQ Returns

Regression Output:

Constant 0.000704
Std Err of Y Est 0.056935
R Squared 0.578540
No. of Observations 67
Degrees of Freedom 64

X Coefficient(s) 1.135500 -0.09644
Std Err of Coef. 0.135429 0.135968
F = 43.92671
F inc. = 0.503180

ADR Return regressed on
Currency and J&P Returns

Regression Output:

Constant -0.00482
Std Err of Y Est 0.049407
R Squared 0.682616
No. of Observations 67
Degrees of Freedom 64

X Coefficient(s) 1.090586 1.186193
Std Err of Coef. 0.234358 0.103116
F = 68.82447
F inc. = 21.65495

ADR Return regressed on
J&P and NASDAQ Returns

Regression Output:

Constant -0.00472
Std Err of Y Est 0.049541
R Squared 0.685883
No. of Observations 67
Degrees of Freedom 63

X Coefficient(s) 1.090348 1.235143 -0.09576
Std Err of Coef. 0.234992 0.119782 0.118311
F = 45.85416
F inc. = 0.655172

Voivo (Sweden)

ADR Return regressed on
Currency Return

Regression Output:

Constant	0.021545
Std Err of Y Est	0.096830
R Squared	0.000061
No. of Observations	57
Degrees of Freedom	55

X Coefficient(s) -0.02785
Std Err of Coef. 0.479144
F = 0.003379

ADR Return regressed on
J&P Return

Regression Output:

Constant	-0.00164
Std Err of Y Est	0.062937
R Squared	0.577559
No. of Observations	57
Degrees of Freedom	55

X Coefficient(s) 1.178394
Std Err of Coef. 0.135891
F = 75.19599

ADR Return regressed on
NASDAQ Return

Regression Output:

Constant	0.012487
Std Err of Y Est	0.083975
R Squared	0.247944
No. of Observations	57
Degrees of Freedom	55

X Coefficient(s) 0.775957
Std Err of Coef. 0.182223
F = 18.13290

ADR Return regressed on
J&P and NASDAQ Returns

Regression Output:

Constant	-0.00191
Std Err of Y Est	0.062481
R Squared	0.591223
No. of Observations	57
Degrees of Freedom	54

X Coefficient(s) 1.066819 0.213902
Std Err of Coef. 0.158421 0.159214
F = 39.05076
F inc. = 1.804971

ADR Return regressed on
Currency and J&P Returns

Regression Output:

Constant	-0.00848
Std Err of Y Est	0.059774
R Squared	0.625883
No. of Observations	57
Degrees of Freedom	54

X Coefficient(s) 0.815562 1.280659
Std Err of Coef. 0.308804 0.134745
F = 45.17005
F inc. = 6.975040

ADR Return regressed on Currency,
J&P and NASDAQ Returns

Regression Output:

Constant	-0.00877
Std Err of Y Est	0.059198
R Squared	0.639849
No. of Observations	57
Degrees of Freedom	53

X Coefficient(s) 0.818120 1.168177 0.216256
Std Err of Coef. 0.305836 0.154805 0.150850
F = 31.38683
F inc. = 2.055159

E.A.T. (UK)

ADR Return regressed on
Currency Return

Regression Output:

Constant 0.022289
Std Err of Y Est 0.112144
R Squared 0.025639
No. of Observations 85
Degrees of Freedom 83

X Coefficient(s) 0.487686
Std Err of Coef. 0.329996
F = 2.184045

ADR Return regressed on
FT Ind-Ord Return

Regression Output:

Constant 0.004641
Std Err of Y Est 0.084315
R Squared 0.449211
No. of Observations 85
Degrees of Freedom 83

X Coefficient(s) 1.283498
Std Err of Coef. 0.155999
F = 67.69308

ADR Return regressed on
Amex Return

Regression Output:

Constant 0.013027
Std Err of Y Est 0.100002
R Squared 0.225200
No. of Observations 85
Degrees of Freedom 83

X Coefficient(s) 0.968992
Std Err of Coef. 0.197283
F = 24.12455

ADR Return regressed on
Currency and FT Ind.-Ord. Returns

Regression Output:

Constant 0.003854
Std Err of Y Est 0.080015
R Squared 0.509940
No. of Observations 85
Degrees of Freedom 82

X Coefficient(s) 0.756578 1.343366
Std Err of Coef. 0.237341 0.149229
F = 42.66333
F inc = 10.16158

ADR Return regressed on
FT Ind-Ord and AMEX Returns

Regression Output:

Constant 0.004608
Std Err of Y Est 0.084637
R Squared 0.451684
No. of Observations 85
Degrees of Freedom 82

X Coefficient(s) 1.393686 -0.15529
Std Err of Coef. 0.239471 0.255340
F = 33.77453
F inc = 0.369888

ADR Return regressed on Currency,
FT Ind-Ord and AMEX Returns

Regression Output:

Constant 0.003803
Std Err of Y Est 0.080187
R Squared 0.513826
No. of Observations 85
Degrees of Freedom 81

X Coefficient(s) 0.766316 1.482429 -0.19490
Std Err of Coef. 0.238160 0.228551 0.242229
F = 28.53572
F inc = 0.647407

Beecham Group (UK)

ADR regressed on
Currency Return

Regression Output:

Constant 0.018715
Std Err of Y Est 0.102849
R Squared 0.131160
No. of Observations 79
Degrees of Freedom 77

X Coefficient(s) 1.085566
Std Err of Coef. 0.318404
F = 11.62398

ADR regressed on
PT Ind. Ord. Return

Regression Output:

Constant 0.010661
Std Err of Y Est 0.105558
R Squared 0.084787
No. of Observations 79
Degrees of Freedom 77

X Coefficient(s) 0.541936
Std Err of Coef. 0.202907
F = 7.133454

ADR regressed on
NASDAQ COMP. Return

Regression Output:

Constant 0.012842
Std Err of Y Est 0.103133
R Squared 0.126367
No. of Observations 79
Degrees of Freedom 77

X Coefficient(s) 0.671383
Std Err of Coef. 0.201174
F = 11.13775

ADR regressed on
NASDAQ Comp. and Currency Returns

Regression Output:

Constant 0.012670
Std Err of Y Est 0.093265
R Squared 0.294818
No. of Observations 79
Degrees of Freedom 76

X Coefficient(s) 0.770237 1.240208
Std Err of Coef. 0.183400 0.291072
F = 15.88685
F inc. = 17.63803

ADR regressed on Currency,
PT Ind-Ord. and NASDAQ Comp. Returns

Regression Output:

Constant 0.010778
Std Err of Y Est 0.093394
R Squared 0.302174
No. of Observations 79
Degrees of Freedom 75

X Coefficient(s) 1.268223 0.239262 0.592453
Std Err of Coef. 0.293172 0.269094 0.271493
F = 10.82557
F inc. = 0.790566

ADR regressed on
Currency and PT Ind-Ord. Returns

Regression Output:

Constant 0.009486
Std Err of Y Est 0.095678
R Squared 0.257867
No. of Observations 79
Degrees of Freedom 76

X Coefficient(s) 1.264433 0.671739
Std Err of Coef. 0.300335 0.186481
F = 13.20378
F inc. = 12.97571

British Petroleum (UK)

ADR Return regressed on
Currency Return

Regression Output:

Constant 0.009595
Std Err of Y Est 0.070303
R Squared 0.161650
No. of Observations 85
Degrees of Freedom 83

X Coefficient(s) 0.839079
Std Err of Coef. 0.209743
F = 16.00400

ADR Return regressed on
FT Ind-Ord. Return

Regression Output:

Constant 0.009595
Std Err of Y Est 0.065113
R Squared 0.280866
No. of Observations 85
Degrees of Freedom 83

X Coefficient(s) 0.685914
Std Err of Coef. 0.120471
F = 32.41661

ADR Return regressed on
NYSE Comp. Return

Regression Output:

Constant 0.010383
Std Err of Y Est 0.066364
R Squared 0.252961
No. of Observations 85
Degrees of Freedom 83

X Coefficient(s) 0.822642
Std Err of Coef. 0.155172
F = 28.10539

ADR Return regressed on
FT Ind-Ord and NYSE Comp. Returns

Regression Output:

Constant 0.008883
Std Err of Y Est 0.064626
R Squared 0.300119
No. of Observations 85
Degrees of Freedom 82

X Coefficient(s) 0.456260 0.368430
Std Err of Coef. 0.194105 0.245302
F = 17.58145
F inc = 2.255829

ADR Return regressed on
Currency and FT Ind-Ord. Returns

Regression Output:

Constant 0.007387
Std Err of Y Est 0.064676
R Squared 0.299034
No. of Observations 85
Degrees of Freedom 82

X Coefficient(s) 0.335634 0.572374
Std Err of Coef. 0.230222 0.142775
F = 17.49076
F inc = 2.125391

Burmah Oil (UK)

ADR return regressed on
Currency Return

Regression Output:
Constant 0.039650
Std Err of Y Est 0.177523
R Squared 0.101924
No. of Observations 85
Degrees of Freedom 83

X Coefficient(s) 1.603282
Std Err of Coef. 0.522383
F = 9.419798

ADR return regressed on
FT Ind-Ord. Return

Regression Output:
Constant 0.035668
Std Err of Y Est 0.186564
R Squared 0.008118
No. of Observations 85
Degrees of Freedom 83

X Coefficient(s) 0.284502
Std Err of Coef. 0.345178
F = 0.679335

ADR return regressed on
NASDAQ Comp. Return

Regression Output:
Constant 0.036289
Std Err of Y Est 0.185837
R Squared 0.015835
No. of Observations 85
Degrees of Freedom 83

X Coefficient(s) 0.415762
Std Err of Coef. 0.359769
F = 1.335495

ADR return regressed on
Currency and FT Ind-Ord. Returns

Regression Output:
Constant 0.033914
Std Err of Y Est 0.176879
R Squared 0.119170
No. of Observations 85
Degrees of Freedom 82

X Coefficient(s) 1.686948 0.417991
Std Err of Coef. 0.524659 0.329881
F = 5.547025
F inc. = 1.605529

ADR return regressed on
NASDAQ Comp. and Currency Returns

Regression Output:
Constant 0.035421
Std Err of Y Est 0.176000
R Squared 0.127902
No. of Observations 85
Degrees of Freedom 82

X Coefficient(s) 0.535637 1.691009
Std Err of Coef. 0.342721 0.520934
F = 6.013082
F inc. = 2.442639

ADR return regressed on Currency,
FT Ind-Ord. and NASDAQ Returns

Regression Output:
Constant 0.034687
Std Err of Y Est 0.177041
R Squared 0.128321
No. of Observations 85
Degrees of Freedom 81

X Coefficient(s) 1.698203 0.094995 0.463464
Std Err of Coef. 0.525280 0.481359 0.502591
F = 3.974720
F inc. = 0.038946

Courtauld's (UK)

ADR return regressed on
FT Ind-Ord Return

Regression Output:
Constant 0.000993
Std Err of Y Est 0.103474
R Squared 0.404342
No. of Observations 85
Degrees of Freedom 83

X Coefficient(s) 1.437019
Std Err of Coef. 0.191446
F = 56.34171

ADR return regressed on
AMEX Return

Regression Output:
Constant 0.008381
Std Err of Y Est 0.113070
R Squared 0.288737
No. of Observations 85
Degrees of Freedom 83

X Coefficient(s) 1.294809
Std Err of Coef. 0.223064
F = 33.69396

ADR return regressed on
Currency Return

Regression Output:
Constant 0.020749
Std Err of Y Est 0.132906
R Squared 0.017297
No. of Observations 85
Degrees of Freedom 83

X Coefficient(s) 0.472711
Std Err of Coef. 0.391092
F = 1.460946

ADR return regressed on
FT Ind-Ord and AMEX Returns

Regression Output:
Constant 0.001059
Std Err of Y Est 0.103454
R Squared 0.411743
No. of Observations 85
Degrees of Freedom 82

X Coefficient(s) 1.212071 0.317031
Std Err of Coef. 0.292712 0.312109
F = 28.69754
F inc = 1.031787

ADR return regressed on
Currency and FT Ind-Ord Returns

Regression Output:
Constant 0.000190
Std Err of Y Est 0.100051
R Squared 0.449814
No. of Observations 85
Degrees of Freedom 82

X Coefficient(s) 0.772586 1.498154
Std Err of Coef. 0.296771 0.186596
F = 33.52028
F inc. = 6.777201

ADR return regressed on Currency,
FT Ind-Ord and AMEX Returns

Regression Output:
Constant 0.000262
Std Err of Y Est 0.100146
R Squared 0.455483
No. of Observations 85
Degrees of Freedom 81

X Coefficient(s) 0.758705 1.299932 0.277817
Std Err of Coef. 0.297439 0.285438 0.302520
F = 22.58528
F inc. = 0.843351

Glaxo (UK)

ADR Return regressed on
Currency return

Regression Output:

Constant 0.020159
Std Err of Y Est 0.087932
R Squared 0.014827
No. of Observations 85
Degrees of Freedom 83

X Coefficient(s) 0.289205
Std Err of Coef. 0.258752
F = 1.249236

ADR Return regressed on
FT Ind Ord Return

Regression Output:

Constant 0.004072
Std Err of Y Est 0.055014
R Squared 0.614379
No. of Observations 85
Degrees of Freedom 83

X Coefficient(s) 1.170488
Std Err of Coef. 0.101786
F = 132.2373

ADR Return regressed on
NASDAQ Comp. Return

Regression Output:

Constant 0.011691
Std Err of Y Est 0.064577
R Squared 0.468659
No. of Observations 85
Degrees of Freedom 83

X Coefficient(s) 1.069681
Std Err of Coef. 0.125018
F = 73.20856

ADR Return regressed on
FT Ind Ord and NASDAQ Returns

Regression Output:

Constant 0.004705
Std Err of Y Est 0.053399
R Squared 0.641064
No. of Observations 85
Degrees of Freedom 82

X Coefficient(s) 0.908986 0.374193
Std Err of Coef. 0.144838 0.151551
F = 73.22675
F inc. = 6.096405

ADR Return regressed on
Currency and FT Ind-Ord. Returns

Regression Output:

Constant 0.003519
Std Err of Y Est 0.051684
R Squared 0.663744
No. of Observations 85
Degrees of Freedom 82

X Coefficient(s) 0.531919 1.212579
Std Err of Coef. 0.153307 0.096392
F = 80.93111
F inc. = 12.03833

ADR Return regressed on Currency,
FT Ind Ord and NASDAQ Returns

Regression Output:

Constant 0.004163
Std Err of Y Est 0.049757
R Squared 0.692158
No. of Observations 85
Degrees of Freedom 81

X Coefficient(s) 0.541298 0.943410 0.386228
Std Err of Coef. 0.147629 0.135285 0.141252
F = 60.70754
F inc. = 7.476420

Plessey (UK)

ADR return regressed on
Currency return
Regression Output:
Constant 0.004986
Std Err of Y Est 0.097622
R Squared 0.115225
No. of Observations 83
Degrees of Freedom 81

X Coefficient(s) 0.935466
Std Err of Coef. 0.288022
F = 10.54880

ADR return regressed on
FT Ind-Ord. Return
Regression Output:
Constant -0.00690
Std Err of Y Est 0.088349
R Squared 0.275315
No. of Observations 83
Degrees of Freedom 81

X Coefficient(s) 0.912017
Std Err of Coef. 0.164407
F = 30.77272

ADR return regressed on
NYSE Comp. Return
Regression Output:
Constant -0.00494
Std Err of Y Est 0.093705
R Squared 0.184791
No. of Observations 83
Degrees of Freedom 81

X Coefficient(s) 0.939131
Std Err of Coef. 0.219168
F = 18.36104

ADR return regressed on
Currency and FT Ind-Ord. Returns
Regression Output:
Constant -0.00782
Std Err of Y Est 0.077779
R Squared 0.445280
No. of Observations 83
Degrees of Freedom 80

X Coefficient(s) 1.146157 1.007378
Std Err of Coef. 0.231502 0.146013
F = 32.10846
F inc. = 24.51182

ADR return regressed on
FT Ind-Ord. and NYSE Comp. Returns
Regression Output:
Constant -0.00711
Std Err of Y Est 0.088861
R Squared 0.275948
No. of Observations 83
Degrees of Freedom 80

X Coefficient(s) 0.855702 0.089613
Std Err of Coef. 0.269629 0.338895
F = 15.24465
F inc. = 0.069922

ADR return regressed on Currency,
FT Ind-Ord. and NYSE Comp. Returns
Regression Output:
Constant -0.00816
Std Err of Y Est 0.078146
R Squared 0.447038
No. of Observations 83
Degrees of Freedom 79

X Coefficient(s) 1.150895 0.913828 0.149490
Std Err of Coef. 0.232786 0.237407 0.298275
F = 21.28901
F inc. = 0.251184

Bank Organisation (UK)

ADR Return regressed on
Currency Return

Regression Output:

Constant 0.026034
Std Err of Y Est 0.101608
R Squared 0.044641
No. of Observations 85
Degrees of Freedom 83

X Coefficient(s) 0.588832
Std Err of Coef. 0.298995
F = 3.878412

ADR Return regressed on
FT Ind-Ord. Return

Regression Output:

Constant 0.013491
Std Err of Y Est 0.088789
R Squared 0.270507
No. of Observations 85
Degrees of Freedom 83

X Coefficient(s) 0.911362
Std Err of Coef. 0.164275
F = 30.77768

ADR Return regressed on
NASDAQ Comp. Return

Regression Output:

Constant 0.020292
Std Err of Y Est 0.095533
R Squared 0.155473
No. of Observations 85
Degrees of Freedom 83

X Coefficient(s) 0.722948
Std Err of Coef. 0.184946
F = 15.27993

ADR Return regressed on
Currency and FT Ind-Ord. Returns

Regression Output:

Constant 0.012676
Std Err of Y Est 0.084429
R Squared 0.348326
No. of Observations 85
Degrees of Freedom 82

X Coefficient(s) 0.783666 0.973374
Std Err of Coef. 0.250435 0.157462
F = 21.91492
F inc. = 9.791971

ADR Return regressed on
FT Ind-Ord. and NASDAQ Returns

Regression Output:

Constant 0.013585
Std Err of Y Est 0.089303
R Squared 0.270927
No. of Observations 85
Degrees of Freedom 82

X Coefficient(s) 0.872849 0.055110
Std Err of Coef. 0.242221 0.253448
F = 15.23583
F inc. = 0.047281

ADR Return regressed on Currency,
FT Ind-Ord. and NASDAQ Returns

Regression Output:

Constant 0.012797
Std Err of Y Est 0.084901
R Squared 0.349054
No. of Observations 85
Degrees of Freedom 81

X Coefficient(s) 0.785428 0.922797 0.072572
Std Err of Coef. 0.251903 0.230840 0.241023
F = 14.47815
F inc. = 0.090661

Tricentral (UK)

ADR Return regressed on
Currency Return

Regression Output:

Constant 0.006439
Std Err of Y Est 0.166285
R Squared 0.005899
No. of Observations 64
Degrees of Freedom 62

X Coefficient(s) 0.344761
Std Err of Coef. 0.568355
F = 0.367957

ADR Return regressed on
FT Ind-Ord. Return

Regression Output:

Constant -0.00436
Std Err of Y Est 0.157357
R Squared 0.109777
No. of Observations 64
Degrees of Freedom 62

X Coefficient(s) 0.882279
Std Err of Coef. 0.319081
F = 7.645528

ADR Return regressed on
NYSE Comp. Return

Regression Output:

Constant -0.00444
Std Err of Y Est 0.154099
R Squared 0.146267
No. of Observations 64
Degrees of Freedom 62

X Coefficient(s) 1.236155
Std Err of Coef. 0.379283
F = 10.62231

ADR Return regressed on
NYSE Comp. and Currency Returns

Regression Output:

Constant -0.00665
Std Err of Y Est 0.153580
R Squared 0.165686
No. of Observations 64
Degrees of Freedom 61

X Coefficient(s) 1.308643 0.633519
Std Err of Coef. 0.382869 0.531684
F = 6.056990
F inc. = 1.419750

ADR Return regressed on
FT Ind-Ord. and NYSE Comp. Returns

Regression Output:

Constant -0.00530
Std Err of Y Est 0.155144
R Squared 0.148596
No. of Observations 64
Degrees of Freedom 61

X Coefficient(s) 0.209045 1.036011
Std Err of Coef. 0.511795 0.621221
F = 5.323204
F inc. = 0.166835

ADR Return regressed on Currency,
FT Ind-Ord. and NYSE Comp. Returns

Regression Output:

Constant -0.00772
Std Err of Y Est 0.154552
R Squared 0.168933
No. of Observations 64
Degrees of Freedom 60

X Coefficient(s) 0.649579 0.247343 1.073670
Std Err of Coef. 0.536079 0.510821 0.619630
F = 4.065469
F inc. = 0.234456

Unilever PLC (UK)

ADR Return regressed on
Currency Return

Regression Output:
Constant 0.020709
Std Err of Y Est 0.065976
R Squared 0.059307
No. of Observations 85
Degrees of Freedom 83

X Coefficient(s) 0.444113
Std Err of Coef. 0.194143
F = 5.232895

ADR Return regressed on
FT Ind-Ord. Return

Regression Output:
Constant 0.011469
Std Err of Y Est 0.055142
R Squared 0.342887
No. of Observations 85
Degrees of Freedom 83

X Coefficient(s) 0.671420
Std Err of Coef. 0.102023
F = 43.31012

ADR Return regressed on
NYSE Comp. Return

Regression Output:
Constant 0.012180
Std Err of Y Est 0.056374
R Squared 0.313188
No. of Observations 85
Degrees of Freedom 83

X Coefficient(s) 0.810933
Std Err of Coef. 0.131814
F = 37.84826

ADR Return regressed on
Currency and FT Ind-Ord. Returns

Regression Output:
Constant 0.010857
Std Err of Y Est 0.050978
R Squared 0.445139
No. of Observations 85
Degrees of Freedom 82

X Coefficient(s) 0.587817 0.717935
Std Err of Coef. 0.151213 0.095076
F = 32.89249
F inc. = 15.11140

ADR Return regressed on
FT Ind-Ord. and NYSE Comp. Returns

Regression Output:
Constant 0.010743
Std Err of Y Est 0.054390
R Squared 0.368382
No. of Observations 85
Degrees of Freedom 82

X Coefficient(s) 0.437298 0.375598
Std Err of Coef. 0.163362 0.206450
F = 23.91267
F inc. = 3.309896

ADR Return regressed on Currency,
FT Ind-Ord. and NYSE Comp. Returns

Regression Output:
Constant 0.010048
Std Err of Y Est 0.049864
R Squared 0.475613
No. of Observations 85
Degrees of Freedom 81

X Coefficient(s) 0.602594 0.462871 0.411070
Std Err of Coef. 0.148063 0.149898 0.189469
F = 24.48871
F inc. = 4.707104

BIBLIOGRAPHY

- Aldcroft, Derek H. The European Economy 1914-1970. London: Croom Helm, 1978.
- Bertero, E. and Mayer, C. Global Interdependence of Stock Markets Around the Crash of October 1987. Center for Economic Policy Research, March 1989. Cited by "Why Stockmarkets Move Together." The Economist, March 11, 1989, p. 77.
- Borr, Karl Erich. International Banking in the 19th and 20th Centuries. Translated by Volker R. Berghahn. New York: St. Martin's Press, 1983.
- Bratter, Herbert. "Foreign Utility Investment via American Depository Receipts." Public Utilities Fortnightly, March 18, 1965, p. 37.
- "Britain Signals it Might Change its Levy on ADRs." The Wall Street Journal, April 17, 1986, p. 32.
- Brooks, John. Once in Golconda: A True Drama of Wall Street 1920-1928. New York: Harper & Row, 1969.
- Center for International Financial and Accounting Research. Worldscope. Princeton, New Jersey: CIFAR, 1982-89.
- Chang, Lucia S.; Most, Kenneth S.; and Brain, Carlos W. "The Utility of Annual Reports: An International Study." Journal of International Business Studies, Spring/Summer 1983, pp. 63-86.
- Choi, Frederick D.S.; Hino, Hisaaki; Min, Sang Kee; Nam, Sang Oh; Ujie, Junichi; and Stonehill, Arthur I. "Analyzing Foreign Financial Statements: The Use and Misuse of International Ratio Analysis." Journal of International Business Studies, Spring/Summer 1983, pp. 113-31.
- Committee on Publicity. New York Stock Exchange Year Book 1928-1929. New York: New York Stock Exchange, 1929.
- Darby, Rose. "ADRs' Use Sparks Debate." Pensions & Investments Age, April 14, 1986, pp. 13-4.
- Dessauer, John. International Strategies for American Investors. New York: Prentice-Hall Press, 1986.

- Dodds, Lynn Stronger. "Hidden Agenda." Financial World, May 13, 1986, p. 10.
- Downes, John, and Goodman, J. E. Dictionary of Finance and Investment Terms. Woodbury, New York: Barron's, 1985.
- DuBois, Peter C. "U.K. Slaps 5% Penalty Tax on New ADRs." Barron's, March 24, 1986, p. 66.
- Eiteman, David K. and Stonehill, Arthur I. Multinational Business Finance. Fourth Edition. Reading, Massachusetts: Addison-Wesley, 1986.
- Emken, Allan R. "International Investing by State and Local Government." Government Finance Review, February 1988, pp. 33-42.
- Feis, Herbert. Europe: The World's Banker 1870 - 1914. New Haven, Connecticut: 1930.
- Financial Accounting Standards Board. "Foreign Currency Translation," Statement of Financial Accounting Standards No. 52. Stamford, Connecticut: FASB, December 1981.
- The Financial Times (London), December 1, 1982 - January 5, 1990.
- Foster, George. Financial Statement Analysis. Second Edition. Englewood Cliffs, New Jersey: Prentice-Hall, 1986.
- Francis, David R. "U.S. Investors Looking Overseas." The Christian Science Monitor, April 4, 1985, p. 23.
- Francis, Jack Clark. Investments: Analysis and Management. Fourth Edition. New York: McGraw-Hill, 1986.
- French, Martin. "Red Faces at the UK Treasury." Euromoney, May 1986, pp. 18,20.
- Hesseltine, William B. Third-Party Movements in the United States. Princeton, New Jersey: Van Nostrand, 1962.
- Howell, David C. Statistical Methods for Psychology. Second Edition. Boston: Duxbury Press, 1987.
- Information Access Company. Ward's Business Directory of Major International Companies, Belmont, California: IAC, 1986.
- International Monetary Fund. Financial Statistics. Washington: IMF, 1982-1990.

- Keslar, Linda. "Taking American Out of ADR ?" Euromoney, February 1988, Special Supplement, pp. 6-7, 10.
- _____. "The ADR Weathers the Storm." Euromoney, February 1988, Special Supplement, pp. 1-4.
- Kindleberger, Charles P. Manias, Panics, and Crashes: A History of Financial Crises. New York: Basic Books, 1978.
- _____. The World in Depression 1929-1939. Berkeley, California: University of California Press, 1973.
- Kraus, James R. "Investors Spurn Foreign Shares." American Banker, April 19, 1988, p. 20.
- Kupiec, Paul. "Financial Liberalization and International Trends in Stock, Corporate-Bond and Foreign-Exchange Market Volatilities," OECD Working Paper 94. Cited by "Dances with Bulls." The Economist, April 20, 1991, pp. 77-8.
- Lappen, Alyssa. "The ABCs of ADRs." Forbes, June 15, 1987, p. 244.
- "Latest Strategy of Mutual Funds." The Wall Street Journal, January 6, 1986, p. 23.
- "London's Shield." The Economist, March 29, 1986, p. 68.
- McFadden, Michael. "Britain's Tax Stunner." Fortune, April 28, 1986, p. 243.
- Madura, Jeff and Reiff, Wallace. "A Hedge Strategy for International Portfolios." The Journal of Portfolio Management, Fall 1985, pp. 70-4.
- Marcial, Gene G. "Questions About Senetek's Tumble." Business Week, October 13, 1986, p. 158.
- Marcus, Edward. "The American Depositary Receipts for Foreign Equity." The Commercial and Financial Chronicle, June 2, 1960, p. 2374.
- Merjos, Anna. "How to Invest Abroad." Barron's, July 24, 1978, p. 9.
- _____. "Investors' Ticket Abroad." Barron's, April 30, 1984, pp. 24-6.
- _____. "The Lure of Faraway Places." Barron's, April 16, 1990, pp. 27-31.

- _____. "More ADRs." Barron's, June 3, 1968, p. 9.
- _____. "More ADRs: Buying Foreign Securities in the U.S. Gets Easier All the Time." Barron's, January 23, 1961, p. 9.
- National Association of Securities Dealers. NASDAQ ADRs: The Preferred Way to Trade. Washington: NASD, 1987.
- The New York Times, November 15, 1903 - February 5, 1989.
- "Norsk Data Plans to Sell American Depositary Receipts." The Wall Street Journal, September 11, 1984, p. 52.
- "Oce-Van of Netherlands Offers One Million ADRs." The Wall Street Journal, November 1, 1984, p. 48.
- Odean, Kathleen. High Steppers, Fallen Angels, and Lollipops. New York: Henry Holt and Company, 1988.
- Officer, Dennis T. and Hoffmeister, J. Ronald. "ADRs: A Substitute for the Real Thing?" The Journal of Portfolio Management, Winter 1987, pp. 61-5.
- Oldfield, Tim. "ADRs: An Emerging Force in Cross-Border Deals." Mergers & Acquisitions, January-February 1989, pp. 57-9.
- Pershing, Amy. "The Great Stamp Tax Revolt." Institutional Investor, May 1986, pp. 263-4.
- Putka, Gary. "Planned Tax on ADRs Cut by Britain." The Wall Street Journal, April 30, 1986, p. 37.
- _____. "U.K. Tax on Foreign Share Purchases Cuts U.S. Trading in British Concerns." The Wall Street Journal, April 3, 1986, p. 30.
- Randles, Ronald H., and Wolfe, Douglas A. Introduction to the Theory of Nonparametric Statistics. New York: J. Wiley & Sons, 1979.
- "Rights of ADRs." The Economist, February 2, 1985, p. 72.
- Ripley, William Z. Main Street and Wall Street. Boston: Little, Brown and Company, 1927.
- Rosenthal, Leonard. "An Empirical Test of the Efficiency of the ADR Market." Journal of Banking and Finance, 1983, pp. 17-29.

- Sanford, Thomas D. "Arranging an ADR Programme." The Treasurer, March 1986, pp. 33-6.
- Sesit, Michael R. "U.S. Institutions Find Buying Foreign Stocks Can Be Very Profitable." The Wall Street Journal, June 3, 1986, p. 19.
- Sibley, Angus. "Investing in Global Equities." The Accountant's Magazine, May 1986, pp. 27-9.
- Siegel, Sidney and Castellano, N. John, Jr. Nonparametric Statistics for the Behavioral Sciences. Second Edition. New York: McGraw-Hill, 1988.
- "The Silent Market." Fortune, July 1964, p. 90.
- Standard and Poor's Corporation. AMEX Daily Stock Price Record, New York: S&P, 1982-89.
- _____. NYSE Daily Stock Price Record, New York: S&P, 1982-89.
- _____. OTC Daily Stock Price Record, New York: S&P, 1982-89.
- Thomas, Lee R. III. "Currency Risk in International Equity Portfolios." Financial Analysts Journal, March-April 1988, pp. 68-71.
- Tomlinson, Timothy. "Federal Regulation of Secondary Trading in Foreign Securities." The Business Lawyer, January 1977, pp. 463-505.
- United States Code, vol. 12.
- "USM: Now We Are There." The Economist, November 5, 1983, p. 84.
- Vidal-Naquet, Pierre, ed. The Harper Atlas of World History. Translated by Chris Turner. New York: Harper & Row, 1987.
- The Wall Street Journal, December 1, 1982 - January 5, 1990.
- Warfield, Gerald. How to Buy Foreign Stocks and Bonds. New York: Harper & Row, 1985.
- Wilcox, Jarrod W. "Practice and Theory in International Equity Investment." Financial Analysts Journal, January-February 1986, pp. 17-21.
- Zigas, David. "An Easy Way to Send Your Portfolio Overseas." Business Week, October 5, 1987, p. 128.

VITA

Daniel Julian Hubbard de Bayser was born on July 27, 1958 in Euclid, Ohio, where his father was on active duty with the United States Air Force. After a youth spent in Ohio, Pennsylvania, Texas, Georgia and Vermont, he moved to Virginia with his family in August 1981. On October 4, 1986, Mr. Hubbard wed Lillian Campbell Helmen of Fredericksburg, Virginia. Their daughter, Alexandra Conus Hubbard de Bayser, was born on September 30, 1987, in Fredericksburg, where the family continues to reside.

Mr. Hubbard obtained a B.A. degree in French from Georgia State University in August 1979, and a B.S. degree, *summa cum laude*, in Applied Physics from Georgia Tech in June 1981. In August 1983, he was awarded the M.A. degree in French from Middlebury College in Middlebury, Vermont. He obtained the M.ACCT. degree from Virginia Tech in August 1985.

Mr. Hubbard has worked as a patent examiner, translator and auditor. He is a member of the honor societies of Beta Alpha Psi, Phi Kappa Phi and Beta Gamma Sigma. Mr. Hubbard is also a member of the Russian-American Congress.