Division of Research
Graduate School of Business Administration
The University of Michigan

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INTERNATIONAL CAPITAL MARKETS: STRUCTURE AND RESPONSE IN AN ERA OF INSTABILITY

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Gunter Dufey

The University of Michigan

I. INTRODUCTION

As part of a larger research project of the global financial environment[1], this study is concerned with the structure of important capital markets outside of the United States and their reaction to economic instability.

1. A Classification of International Capital Markets

In order to avoid the semantic problems that so frequently afflict the discussion of international financial markets and distract from the substantial issues, we begin by introducing a simple conceptual scheme for classifying worldwide capital markets.

The scheme is based on the fundamental notion that financial markets result from the interaction of (a) the activities of profit-seeking entities and (b) a framework provided by government regulation. The impact of government policy on the organization of financial markets is pervasive. It begins with such basic governmental functions as the enforcement of private contracts and the conduct of monetary and fiscal policy. But governments influence the structure and behavior of financial markets through their attempts to achieve a host of objectives which are not directly related to these basic functions. Exhibit 1 provides a list of the most important objectives.

In most nations these objectives are accepted as appropriate concerns for government regulation of financial markets, although vast differences exist as to how these objectives are to be achieved, and how much weight each should be given relative to others.

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[1]Booz, Allen & Hamilton, Study of World Economic Change, unpublished paper, 1978/79.

EXHIBIT 1

TYPICAL GOVERNMENT OBJECTIVES
WITH RESPECT TO FINANCIAL MARKET REGULATION

- Enforcement of private contracts
- Monetary and fiscal policy
- Prevention of fraud
- Stability of essential financial institutions
- Market structure and competition
- Income distribution and credit allocation
- Preferential treatment of national market participants

Since government and the extent of governmental jurisdiction are such important factors in determining the structure of capital markets, they represent one natural dimension for our classification scheme.

The other dimension is the "channel," or institutional structure of market participants, through which funds are moved. Capital markets allocate funds (financial claims on real goods and services) over time. Savers, whose income exceeds temporarily their use of funds, make the additional output that they have created available to those having a shortage of funds because they commit resources to real assets--either consumer durables, or productive assets in the form of business investment, or government projects.

Thus, the scheme presented here is based essentially on two dimensions: we ask how (through which channel) and where (in which jurisdiction) the process of transferring funds from savers to investors is effected.

Resources can be transferred from savers to investors through two channels: (1) through financial intermediaries which attract funds from savers by issuing their own claims and in turn lend the funds to those who invest in real assets; (2) alternatively, savers and investors can link up directly; it happens, for example, when savers purchase securities issued by ultimate borrowers. This is a function performed largely by organized securities markets, whereby the organizational pattern is determined either by convention and agreement of the participating private entities, and/or by government regulation.

The proportion of funds that is channeled from savers to investors either by financial intermediaries or directly, via organized securities markets, is an important distinguishing feature of different capital markets. This is because these two channels for funds tend to react differently to external shocks. A capital market dominated by intermediaries is relatively better able to withstand external disturbances, because financial intermediaries absorb some of the risk faced by both savers and ultimate investors. Therefore, different capital markets may react to the same shocks differently depending upon whether the intermediated or the direct channel is more important.

The second categorization concerns the jurisdiction where resources are transferred. Most of the savings-investment transfer takes place in the domestic financial market of a nation. However, many financial markets have extensive links abroad: domestic investors purchase foreign securities and may invest funds in foreign financial institutions. Conversely, domestic banks may lend to foreign residents, and foreign residents may issue securities in the national market or deposit funds with resident financial intermediaries. These are the traditional "foreign markets" for international financial transactions.

The significant aspect of such traditional foreign lending and borrowing is that all transactions are directly subject to the rules, usances and institutional arrangements prevailing in the respective national market. Most important, all these transactions are directly subject to public policy governing foreign transactions in a particular market. To illustrate, when savers purchase securities in a foreign market, they do so according to the rules, market practices, and the regulatory precepts which govern such transactions in that particular market. The same applies to those who invest in foreign financial intermediaries.

Likewise, foreign borrowers who wish to issue securities in a domestic market must follow the rules and regulations of this market. Frequently these rules are discriminatory and restrictive. The same is true with respect to financial intermediaries; the borrower who approaches a foreign financial institution for a loan borrows at rates and conditions imposed by the financial institutions of the foreign country and he is directly affected by the authorities' policy toward lending to foreign residents.

In contrast, during the decade of the 1960s, market mechanisms have developed that remove international--and to a certain extent even national--borrowing and lending from the jurisdiction of national authorities. This is done simply by locating the market for credit denominated in a particular currency outside the country of that currency, i.e., into the market of a jurisdiction that offers a more hospitable regulatory climate for such transactions.

To illustrate; markets for dollar denominated loans, deposits, and securities in jurisdictions other than the United States effectively avoid U.S. banking and securities regulations. We refer to these markets as "Euro-," or more properly as "external" markets in order to indicate that they are not part of the domestic or national financial system. Thus, the essence of our classification criterion is the nature of regulation. Differences in interest rates, practices, and regulations that exist between domestic and external markets arise primarily from the extent to which regulatory constraints are different.

Today, virtually all major capital markets, including those of the United States, exhibit the three-tiered structure depicted in our scheme. It consists of:

(1) a domestic market, usually with special and unique aspects and institutions stemming from historical and regulatory differences;

(2) a foreign segment attached to the national market where non-residents participate as suppliers and takers of funds, frequently playing both roles simultaneously, but always under the specific conditions, rules and regulations established for foreign participants in a particular national market;

EXHIBIT 2

INTERNATIONAL CREDIT MARKETS:
A SCHEMATIC PRESENTATION

	<u>National</u>	<u>International</u>	
Credit Channel	Domestic	Foreign	"Euro"
Financial Intermediaries			
Securities Markets			
	<u>"internal"</u>		<u>"external"</u>

(3) an external segment that is characterized by being in a different political jurisdiction, with only the currency used to denominate the financial claims being the essential link to the national market.

As a result, the various external markets have more common features among each other than with the respective national markets. Therefore, they are properly discussed as a common, integrated market where claims denominated in different currencies are exchanged.

2. A Bird's-Eye View of World Capital Markets: International Significance and Regulatory Philosophy

For purposes of this essay it is neither useful nor practical to discuss each and every market outside the United States individually. Instead, we shall only analyze those that are internationally of significance: where funds can be raised in a market for international purposes, i.e., for working capital and investment in operations outside the particular country where the funds have been obtained.[2]

The international role of a capital market and the regulatory climate that prevails are closely related. Appropriate regulation can and does make markets more attractive, e.g., by minimizing the risk of losses through fraud, various conflict-of-interest situations, and lack of adequate disclosure. However, the dividing line between regulatory measures that improve markets and those that have just the opposite effect is very thin. When governments, in addition, pursue other objectives, such as credit allocation or discrimination against nonresidents, markets can become quickly inefficient. The result is then

[2]This type of financing goes far beyond the traditional short and medium export credit which is available in a fairly large number of countries.

that both foreign and domestic market participants use markets in other jurisdictions.

Looking at world capital markets under this perspective, the current situation can be summarized as follows:

1. The largest market is still the U.S. national market, with its significant traditional foreign sector. In addition, there is an ever-growing external segment, where funds are invested and borrowed via U.S. dollar denominated financial claims ("Eurodollar" market). The Canadian market is closely linked with that in the United States, being of limited international significance, except for a small, external sector ("Euro-Canadian dollar" market).

2. Internationally, the next most important capital market is that of West Germany, to which might be added the markets of Switzerland and the Netherlands. They are structurally similar and closely linked to the German market: all are dominated by large financial intermediaries ("universal banks"), and have active securities markets; regulations are liberal by international standards, and they are relatively open. Still, in quantitative terms, these markets amount *in toto* to only approximately 20 percent of the size of the North American dollar markets.

3. There is the Japanese market with a huge domestic segment, that is second only to the U.S. markets. However, due to its "over-regulated" nature,[3] its external segments are very under-developed.

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[3] See pp. 18-20 for the precise regulatory conditions that affect the growth of external markets.

4. There are the capital markets of the United Kingdom and France which have limited significance internationally. Domestic economic problems, in combination with excessive regulation, have successively curtailed their former international role to that of "offshore" markets.
5. There is a fairly heterogeneous group of countries, which includes Australia, the smaller European countries, and some of the advanced developing countries such as Mexico and Brazil. What the capital markets of these countries have in common is that they are straining to fulfill the needs of their respective domestic economies; thus, both public and private borrowers in these markets rely heavily on other markets, including the external markets. As a rule, they suffer from overregulation. However, these markets are sufficiently developed to provide limited amounts of funds for domestic purposes.
6. There are the so-called offshore markets, usually based in countries whose markets are insignificant by themselves (or carefully insulated from the underlying market, like in the United Kingdom and France), but they are important by playing host to the external markets. Bahrein, Luxembourg, Singapore, Hong Kong, the Bahamas, Panama and the Cayman Islands are the principal locations although there are many eager contenders, some of which have succeeded in attracting a small part of the financial market activity.
7. There is the fairly large number of countries whose credit markets are insignificant for international purposes and which must rely on external markets to provide a portion of the

capital needs for their domestic economies, and to serve as depositories for their private and public savings.[4]

II. THE REACTION OF INTERNATIONAL CAPITAL MARKETS TO HIGH INFLATION, ECONOMIC INSTABILITY AND GOVERNMENT INTERVENTION

1. A Scenario of Instability and Capital Market Characteristics.

After having outlined the structure of world capital markets, we shall now attempt to assess the reaction of these markets to the scenarios outlined in the Study of World Economic Change.

The relevant aspects of these scenarios can be summarized as follows:

- Because of the nature of economic policymaking in industrialized democracies, the interaction of individual and group self interest--leading to inappropriate monetary and fiscal policy--moves the real sectors of the economy along a dynamic time path characterized by considerable instability.

- In the financial markets this instability will manifest itself in the relatively high cost of funds, further aggravated by rapid, amplified swings in exchange rates and interest rates.

- Governments will feel compelled to resist financial market adjustment. Therefore, they will increasingly resort to interest rate controls and credit allocation domestically, and will employ controls on international capital flows to resist exchange rate changes and to conserve seemingly scarce capital resources.

- All this implies that financial markets will continue to be sources of great risk and uncertainty, manifesting themselves not only in extreme fluctuations in terms of output, prices, interest and exchange rates, but most importantly, uncertainty about the form and effects of government regulation.

- These problems will occur regardless of the precise inflation scenario; however, the amplitude of fluctuations of rates and the severity of government regulation will vary depending on the magnitude of the projected inflation rates.

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[4]With the possible exception of Kuwait, the OPEC countries do not have organized capital markets that are of international significance. Instead, they use the Euromarkets or the foreign markets of the United States, United Kingdom, Switzerland and West Germany to invest and borrow funds.

At first sight these environmental conditions may, indeed, lead to a very pessimistic assessment of the ability of financial markets to provide the necessary funds for productive enterprise operating on an international basis. However, the comprehensive analysis of world capital markets leads to a somewhat differentiated perspective. And while there is reason for concern, the probability is high that markets *in toto* will continue to perform their function of providing financial capital quite well, *provided* that banks and corporations develop appropriate legal structures as well as internal financial strategies that allow them to simultaneously access several segments of the complex structure of world capital markets.

This conclusion is supported by both general considerations regarding the availability of financial capital as well as an analysis of the structure of individual capital markets.

As far as the supply of funds is concerned, past experience suggests that the overall volume of financial savings can be expected to be fairly stable under the conditions specified. Indeed, there is some evidence that households, which ultimately provide the bulk of savings, react to increased uncertainty and instability by increasing the level of financial savings.

Looking at this issue from an institutional perspective, it is apparent that in spite of the expansion of social security systems in all industrial countries--a phenomenon that involves a current transfer of funds and does not promote capital formation--private pension schemes of various kinds are expanding virtually everywhere, generating a considerable volume of financial savings which have to be channeled through the financial markets.

Internationally, payments imbalances--by definition--create a need for borrowing, which is offset by investment undertaken by surplus countries. The past decade has shown that a large volume of these official savings both of traditional surplus countries, and especially the new OPEC surplus countries, is channeled via private international markets.

Thus, the high price of capital is not so much the result of a shortfall of financial savings that can be made available through financial markets, but rather the high cost of capital investment, as well as the need to finance levels of consumption in certain countries on a temporary basis.

As far as the capital needs of private industry are concerned, the growth opportunities in the next decade are precisely in those countries which have small, and/or poorly developed, and/or overregulated capital markets. The savings, on the other hand, will be generated by the mature industrialized countries and countries with temporary surpluses (as long as there are countries with temporary deficits), a category that includes selected OPEC countries. Thus, there is a need for international financial markets, and our discussion will show how financial markets adapt flexibly to different operating conditions as long as there is a basic need to be fulfilled.

Finally, savers in many of the developing countries, where markets do not offer sufficient, safe and convenient financial investment opportunities, will use international markets to invest their funds. Frequently, these funds will be made available to the very country where the funds originated through the international financial markets.

Thus, fundamental factors suggest that the basic need for international financial markets will be unaffected by the environmental conditions outlined above. The crucial question now becomes whether financial markets can fulfill this need in an environment characterized by high rates of inflation, instability and government intervention.

A casual review of the past decade provides the basis for guarded optimism. After all, the structure of international capital markets that exists today has evolved in precisely the kind of environment that has been outlined above.

The fact that international capital markets have not only grown during the last decade, but have performed quite well under most difficult conditions, suggests that not all market segments are equally susceptible to economic fluctuations and certain modes of government intervention.

Specifically, financial markets have survived the strains of the transition from the fixed exchange rate system to one of managed floating in the late 60s and early 70s; they have also coped successfully with the tremendous dislocations in various economies caused by the OPEC-induced rise in energy costs. All this suggests that financial markets do have a great deal of resilience.

To a certain extent, such resilience is built into international financial markets because overall they represent a closed system. High interest rates and falling exchange rates that affect one set of financial markets must, by definition, be mirrored by rising exchange rates and lower interest rates in other market segments. By the same token, when government intervention and controls cause deterioration in operating conditions in certain financial markets, other market segments--that for one reason or another escape those controls--thrive because business simply shifts. On another dimension, when investors become reluctant to commit funds for long terms at fixed rates, short-term funds become more plentiful.

Our analysis of international financial markets during the past decade also suggests that trends of government regulations do not follow a straight line; nor is the pattern of restrictions uniform from country to country. Indeed, the extent of controls over international financial transactions during the more recent period has been less than the level of such restrictions which was in force in the late 60s and early 70s.

2. National Markets

Even cursory analysis of the pertinent features of the regulations and regulatory philosophies of key countries, will show a certain reduction of controls during recent years. Those countries that had traditionally pursued liberal policies, such as the United States, West Germany, and the Netherlands, either completely abolished or substantially reduced controls on foreign lending and borrowing. And those countries that had a history of extensive regulation liberalized important activities. The United Kingdom freed capital flows connected with foreign investment, France liberalized its rules regarding foreign portfolio investment by residents, and Japan opened its domestic securities markets to certain foreign borrowers, while it took selective measures to liberalize international flows of financial capital through other channels.

And while there is no doubt that these trends can and will reverse themselves when strains on the economic system intensify, the lack of uniformity of regulation allows a degree of freedom for those financial institutions and corporations that have the appropriate internal flexibility to move funds internationally within their respective organizations. For instance, a country-by-country analysis would show that--while credit allocation is practiced virtually everywhere--wide discrepancies exist as to intensity and the specific forms or methods used.

The same holds true for regulations that have restrained international financial transactions in recent years; even among industrial countries they range from "market-based controls," such as special foreign exchange markets (United Kingdom), unique deposits (Germany) or penalty taxes (United States) all the way to detailed administrative regulations of transaction by transaction (France, Japan).

A detailed country-by-country analysis would show that domestic market structures have improved to a certain extent. One will find, for instance, that the system of financial intermediaries has been strengthened in Germany, France, the Netherlands, and Switzerland in particular, while the role of securities markets has been improved in the Netherlands, Japan, and France. Also, money markets have improved in terms of the variety of instruments available and in terms of volume and depth. And while some of these structural improvements have been the result of increased supply of government securities, markets based on private securities, such as varieties of commercial paper, negotiable CDs, and different acceptance instruments, as well as medium-term debt securities, have grown considerably.

Last but not least, significant stimulus to domestic market efficiency has been provided by the growth of external ("Euro") markets which provided borrowers and investors with efficient alternatives and created competition for domestically operating financial institutions.

The liberalization of policies that has followed the transition from fixed to floating rates has also permitted the opening, or reopening of some of the national markets where non-resident borrowers can raise funds for international deployment, on medium and long terms at fixed interest rates.

Quite obviously, these national markets are most susceptible to any tightening of government regulations that will be brought about by an increase in inflation and economic instability. This holds especially for the Japanese market and possibly the U.S. market. On the other hand, because of their nature as "financial turntables," where largely non-resident investors purchase the securities issued by non-resident borrowers, both the Swiss and the German foreign bond markets can be expected to be untouched by the authorities of these countries, simply because they are effectively insulated from their own domestic market.

3. The External Markets

With the increasing significance of external (Euro) markets for international borrowing and lending, the reaction of these markets to (1) financial instability and (2) government controls becomes crucial.

As regards the first factor, the Eurobond market is probably the most vulnerable. Bond markets suffer whenever there are high rates of inflation as the concomitant increase in uncertainty about future interest rates makes investors unwilling to make long-term commitments. Thus, maturities shrink and soon bond markets disappear. And while inventive underwriters can attempt to compensate for the uncertainty by adding equity features, such as convertibles or attached warrants, the receptiveness of the markets for issues will invariably drop. The change of denominations of currencies will alleviate things somewhat, provided borrowers are willing to indebt themselves in strong currencies.

We can summarize the effect of instability on the Eurobond market by saying that it will make the market considerably less reliable, and that the borrowers should expect to find it inaccessible for periods of time. At best, they may be forced to accept instruments and terms on which they would not borrow normally.

As far as regulations are concerned, nothing short of comprehensive worldwide exchange controls would destroy the market completely. We shall detail those conditions next when we discuss the outlook for the Eurocurrency markets.

In contrast to the Eurobond market, the Eurocurrency market adjusts to uncertainty and instability very well; indeed, it is a creature of these environmental conditions. Our institutional analysis has shown that the market, developing unhampered by onerous regulations, has borrowed underwriting techniques from the securities markets and adapted them to the needs of a market based on financial intermediaries. The technique of the syndicated credit permits the distribution of the risk of any single borrower over the books of a multitude of financial institutions. Thus, in case of default, the effects are distributed over banks from so many countries and banking systems, that even a country or large corporate default will hardly shake the safety of the institutions.

Furthermore, the practice of separating the commitment period for funds and the interest period has provided the market with a great capability to survive unstable times. The maturities for Eurocurrency loans are medium- or even long-term, providing borrowers with the assurance of availability of funds for extensive periods of time, allowing them to use these funds to finance long-term investment projects.

In contrast, interest rates are adjusted frequently in line with the maturity of the deposit structure. Thus Eurocurrency loans are repriced every three, six, or twelve months. Clearly this puts a certain interest rate risk on the borrower, but this should not be overestimated. To the extent that interest rates move parallel to rates of inflation--and there is considerable evidence that a high but not perfect degree of co-variation exists--the risk is minimized to the extent that the revenue streams of the borrower also exhibit covariance with the rate of inflation.

Obviously, this represents a challenge to corporate funding policies. Traditional rules state that long-term investments should be funded with long-term funds at fixed rates of interest, but these rules are not applicable in an environment that is characterized by high and rapidly varying rates of inflation. To the extent that the traditional rules assume implicitly steady nominal returns from assets, the situation has changed fundamentally.

As far as regulation is concerned, one must remember that the Eurocurrency market is fundamentally a creature of regulation; its very rationale arises from the presence of costly regulations in domestic credit markets.

To be precise, the growth and the stability of offshore banking activities is predicated on two sets of conditions. First, since the segments of the Eurocurrency markets are simply external sectors competing with the internal sectors of the markets denominated in the respective currency, the external sector must in each case continue to have some net competitive advantage over the internal sector. Second, Eurobanking can thrive only as long as worldwide restrictions on international capital transfers are not so comprehensive as to preclude the transactions which are necessary for Eurocurrency depositing and lending.

Thus, increased credit allocation and other restrictions that affect domestic markets will push more of the intermediation activity into the external markets. On the other hand, when do restrictions on international transfers of funds become so onerous that Eurocurrency banking becomes severely hampered? In general, to have any serious effect on the stability of the Euromarket, restrictions would necessarily have to be so severe and widespread as to violate one or more of the following three preconditions for a functioning Eurocurrency market:

(1) There must be jurisdictions that permit financial institutions to bid for deposits denominated in some foreign currency and, by the same token, make loans denominated in such a currency.

Since such activities provide earnings, there are always jurisdictions that either have succeeded in or have ambitions of playing host to Eurocurrency activities. Any restrictions imposed on one or two centers would simply cause such business to shift to more hospitable places.

(2) It is necessary that Eurobanks are permitted to keep working balances (demand deposits) in banks of countries such as the U.S. and West Germany whose currencies are being used to denominate the credit transactions undertaken by the Eurobanks. There must also be no restrictions on the transfer of such balances, at least among parties who are non-residents of the country whose currency is involved.

Indeed, were major countries, especially the United States, severely to restrict non-resident convertibility, it would mean the end of Eurocurrency lending and borrowing. But the removal, or severe restriction, of "non-resident convertibility" is a very drastic step.[5] Few countries are willing to bear the economic costs of such controls. If foreigners are prevented from freely transferring bank balances, investment from abroad will be deterred and international trade inhibited. Not only does the country lose what are, in effect, interest-free loans from foreigners, but residents of the country also would be unable to undertake any international transactions involving their own

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[5]The freeze of the Iranian dollar deposits by order of President Carter in November 1979 may be considered a partial removal of non-resident convertibility justified by "quasi-war" conditions.

currency. It is not surprising that the U.S. has never seriously considered this option. Other major countries have resorted to such measures only in times of war.

(3) Borrowers and lenders must be able and willing to take up loans from, and to invest funds with, Eurobanks. Because almost all borrowers and depositors of Eurocurrencies are ultimately subject to national exchange controls, access to the Euromarket can be, and is, restricted in many ways by national monetary authorities. If such controls were universal and comprehensive, the Euromarket, and indeed all international trade and investment, would disappear. However, unless they <u>are</u> total and comprehensive, all measures regulating the access of non-banks to the external money market remain piecemeal.

The sources of funds that are invested in the Eurocurrency market come from too many sources to be significantly affected by traditional exchange controls. The central banks of surplus countries, the governments of certain OPEC countries, and the international institutions are not subject to such controls in any case.

Furthermore, because of the extensive internationalization of business, the volume of international trade, service, and financial transactions cannot be effectively controlled without severely damaging real output. In fact, the recognition that controls on business firms are either ineffective, if piecemeal, or too costly, if comprehensive, has strengthened the hand of those in the political arena who argue against controls.

In addition, a sophisticated infrastructure has developed. It consists of "offshore" jurisdictions with good communications, support facilities and liberal regulation, and worldwide networks of branches, subsidiaries, and joint ventures that international banks and multinational corporations have developed in order to minimize the impact of regulations.

III. CONCLUSIONS

Overall, the review of the structure of international financial markets suggests that the system in toto is extremely resilient and should be of considerable help to those business organizations that (a) maintain access to several markets simultaneously (b) adopt internal flexibility to move funds within the enterprise and (c) implement financial techniques, based on a coordination of asset and liability management, that minimize risk. This will be the challenge for the future.