1-3-2001

Power Borrowing Hydro-Quebec's Financial Strategy.

Christine Dehayes

The Institute for U.S.-Canada Business Studies

Links with Canada constitute our nation's single most important economic and financial relationship. Moreover, as U.S.-Canada relations enter a new phase, the business communities of both countries face an increased need to understand the wide range of trade, investment and financial ties which link the two economies.

The Institute for U.S.-Canada Business Studies was created to facilitate access to resources — human and documentary — to enhance knowledge and understanding of this critical relationship. Our particular, though not exclusive, emphasis is on designing and providing materials and services for business school programs.

Such materials and services include course modules, brief case studies using U.S.-Canada examples to illustrate generic business transactions, consultations with faculty to integrate U.S.-Canada examples into course content, availability of Institute staff as guest lecturers, and assistance to students working on Canada-related projects. New materials are constantly evolving as new contacts are made, custom-tailored services are made generic, and collaboration with students generates new case studies. - **Stephen Blank, Director**

Power Borrowing

Hydro-Quebec's Financial Strategy

Institute Teaching Modules

Our teaching module program is designed to take the guesswork out of ordering classroom materials. We offer a range of readings, cases and backgrounders on Canada - U.S. Business Relations. And we can combine this material in a unique package to fit your particular needs. You can even write your own students' guide to bring out the points you want to emphasize, describe exercises your way and we'll be happy to put your copy in the material we send you. This guarantees students will get only the material they will actually use, all in the same attractive format, for added focus and impact. To take advantage of this service, call Susan Sorrell at the Institute: (212) 346-1865.

About the Module

This module begins with a case prepared by Christine Deshayes, Research Associate, Institute for U.S.-Canada Business Studies, Lubin Schools of Business, Pace University, under the supervision of Dr. Guy Stanley, Director, Case Writing Program. The case was written to serve as a basis for class discussion rather than to illustrate either effective or ineffective handling of an administrative situation.

The Institute for U.S.-Canada Business Studies gratefully acknowledges the kind assistance of M. Paul Lacoursiere, Financial Coordinator, Hydro-Quebec, Montreal, M. Denis Chaput, l'Ecole des Hautes Etudes Commercials, Montreal, and officials at the Hydro-Quebec Office in New York.
Naturally, any mistakes are the responsibility of the case writer and her superviser, Dr. Guy Stanley.

Table of Contents

The Institute for U.S.-Canada Business Studies

This teaching module is published with funding from the Canadian Imperial Bank of Commerce. Please address requests for information to: **The Institute for U.S.-Canada Business Studies, Pace University, One Pace Plaza, New York, NY 10038.** Telephone: (212)346-1865.

Prof. Stephen Blank
Director

Susan Sorrell
Program Manager

Discussion Note

This case comprises a narrative treatment of Hydro-Quebec's approach to capital markets. Also available in this series are the notes of a presentation entitled "How to Borrow a Billion Dollars" prepared for internal use at Hydro-Quebec.

The purpose of the case is to expose students to considerations in a company whose future depends on access to world capital markets and then lead them step by step through the process of getting an issue together.

Generally speaking, the unique feature of a power company is that its "inventory" cannot be adjusted to fluctuations in demand: it must always be sufficient to cover demand at peak periods (although this can be mitigated through power sharing). The hazards involved in having to maintain essentially excess capacity for most of its operating hours are offset to a degree by a monopoly position as sole supplier. But the monopoly extends only to electricity: it doesn't cover hydrocarbon sources such as gas and oil. Nor does it cover private sources such as

Continued on page four

Power Borrowing

Hydro-Quebec's Financial Strategy

By Christine Deshayes

Historical Overview

The first hydro-electric station in Quebec came on stream in 1894 with the opening of a power station at Montmorency Falls, near Quebec City. Gradually, as small, privately-owned stations were established, a grid was put together. However, owing to lack of standardization and coordination, it could only offer service close to larger settlements and at relatively expensive rates. Public dissatisfaction led, in 1944, to the creation of the Quebec Hydro Electric Commission.

The Commission was chiefly concerned with the supply of electricity to Montreal. It oversaw the takeover of the two private companies then undertaking this responsibility— Montreal Light, Heat and Power Consolidated and Montreal Island Power Co. were nationalized, reorganized and renamed Hydro-Quebec under the Hydro-Quebec Act of that year. The new company also acquired ownership of Beauharnois Light Heat and Power Co. and was entrusted with the management of the provincially-owned hydro-electric power development at Rapid VII on the Upper Ottawa River.

Between 1944 and 1963, the company grew by acquiring most of the private power companies around Montreal and smoothing out the imperfections in the grid. This was in accordance with its legislative mandate, namely the provision of low-cost electricity to the region.

Today, Hydro Quebec has three subsidiaries: the James Bay Company, set up in 1971; Hydro-Quebec International, set up in 1978; and Cedar Rapids Transmissions Company Limited. Hydro-Quebec also owns 34.2 per cent in the Churchill Falls (Labrador) Corporation Limited, and 100 per cent of Nouveler Inc., which markets technology developed by Hydro-Quebec. In 1985, Hydro-Quebec also acquired 50 percent in Electrolyser Inc., HydrogenAl Inc. and ArgonAl Inc.

Hydro-Quebec is a joint stock company whose sole shareholder is the government of Quebec. It has 2.8 million customers and operates 80 generators, of which 90 per cent are hydro-electric. In addition, the company has developed an extensive transmission system in order to serve communities at a long distance from its generators and with a view to exporting energy surplus to Quebec requirements.

In terms of assets, it is the largest non-financial corporation in Canada and, in terms of net income, it ranks only slightly behind the top U.S. utilities. From its beginnings as a technical, construction/ expansion oriented company, it is now a giant entity of some 18,900 employees geared to the "marketing" of power.

Evolution of its Financial Strategy

The spectacular expansion of Hydro-Quebec required the setting up of a comprehensive financial strategy tailored to the business objectives of the company at each stage of its evolution.

Under its 1944 mandate, the company had to maintain accumulated reserves of 20 per cent or more of total capitalization, and maintain rates sufficient to pay the provincial government $20 million in profits from gross revenues. These funds would flow into the provincial consolidated revenue fund.

The early expropriations were not trouble- free. Controversy remained lively and the financial rules were not actually implemented until 1947, when Hydro-Quebec conducted its first major borrowing: C$112.5 at 2 per cent interest, placed through Canadian banks.

1954 - 1963: Two Principal Markets

From its first bond issue on the U.S. market in 1953 to its acquisition of rival power companies in 1963, Hydro Quebec borrowed capital at the rate of approximately $100 million a year. During this period, the company worked out the fundamentally conservative principles that would govern its future financial strategy:

— Maximize long term debt at fixed rates;

— Obtain the longest possible maturities;

— Keep intermediaries' commissions to a minimum.

The U.S. market was particularly attractive because its long term rates were lower than those available in Quebec, The maturities available were also longer — 30 years vs. 25 in Canada — so that the company was able to borrow under attractive conditions up to half its capital needs.

1960 -1966: Exceptions to the Rules

From 1960 to 1962, Hydro-Quebec abstained from borrowing in U.S. markets, however attractive the terms available, because of a 15 per cent withholding tax imposed by the Canadian federal government on all interest payments to foreigners. This restriction was imposed in order to maintain the value of the Canadian dollar.

Discussion Note

from page three

wood-burning and sunlight or, for that matter, private generation.

This limits the ability of the monopoly to set its own prices. So too does its position as a state-owned (as in Canada) or even state-regulated (as in the U.S.) monopoly. For this means that to a greater or lesser extent its pricing will reflect the political limits. In the case of Hydro- Quebec, the company's position on prices is subject to review by a Committee of the National Assembly and approval by the Government of Quebec.

For Hydro-Quebec, the pricing issue also involves export considerations. Here the matter becomes more complicated, for the federal government in Ottawa, not the provincial government in Quebec City, regulates exports.

In the period covered by the case, exports required a permit from the National Energy Board that was based on at least two principal considerations: (i) an estimate of national requirements and a demonstration by the applicant that the amounts to be exported would be surplus to domestic requirements and (ii) a "least cost alternative" constraint. This operated such that the price offered for export could not be significantly less than that of the least cost alternative available to the U.S. customer.

As well, the least cost alternative rule arguably created a trade barrier that prevented energy exports that would lower input costs to Quebec's major trading partners in the Northeastern U.S. Given the importance of energy in an industrial economy, it can reasonably be concluded that higher than necessary energy costs would ultimately distort factor prices in both economies, again with a retarding effect on growth and competitiveness.

The energy provisions of the Free Trade Agreement recently signed by Canada and the U.S. eliminate the least cost rule but maintain other price tests of cost recovery and whether the export price is less than the domestic price (Canadian energy prices are considerably lower than those in the Northeastern U.S.). Cost recovery, however, raises other complexities— essentially whether one should be recovering marginal costs attributable to extensions of existing infrastructure, or average costs applied across the whole system.

A good classroom approach to this material is to discuss the financial decisions taken at each turning point. Then, ask students (a) to evaluate Hydro-Quebec's opportunities based on current markets for exchanging fixed for floating rate debt, and (b) to formulate an approach to the market from the standpoint of the utility or (c) an approach to the company from the point of view of a would-be underwriter.

In 1963, taking advantage of a favorable spread between short and long-term rates, the company decided to use short term notes to complete the acquisition of subsidiaries not acquired in previous buy-outs. By this time, Hydro-Quebec's debt securities equalled about half those issued by all of Canada's non-financial enterprises.

In 1966, Hydro-Quebec issued short term notes on the New York market. The underwriting and market maker responsibilities were undertaken by Lehman Brothers. It was the first issue in the U.S. by a foreign entity. In the same year, the Quebec government established the Caisse de depots et placements, a provincial portfolio management organization that managed the Quebec provincial pension fund, among others. It became the largest buyer of Hydro-Quebec debentures issued in Canada.

HYDRO-QUEBEC
FUNDS FROM EXTERNAL FINANCING
(Millions of Dollars)

	1983	1984	1985	1986	1987
Net Issues					
Long-term debt	1,841	1,164	1,952	1,259	1,842
Perpetual debt	--	--	--	550	--
Redemption of long term debt	(436)	(759)	(1,228)	(1,050)	(1,541)
	1,402	405	724	759	301

(Source: annual reports)

Internationalization — the 1970s

Throughout the 1950s and 60s Hydro-Quebec chiefly thought of itself as a provider of low-cost electricity. During this same period, Quebec underwent a profound social transformation, known as the Quiet Revolution. In essence, French-speaking Quebecers of the Pierre Trudeau - Rene Levesque generation mounted a political and legislative assault on the managerial and technological power centers of the province (and the federal government of Canada).

From the mid-1950s onwards, they transformed a province in which English was the language of social power into a province in which French became the language of affairs and French speaking professionals increasingly formed the core of the province's technocracy. Hydro-Quebec enjoyed symbolic importance as a demonstration of the capability of this new class.

Globally, too, the decade of the 1970s was one of furious change. In particular, it was the decade of quadrupling oil prices and the scramble for new energy sources of every sort—chiefly fossil fuel to be sure, but hydroelectric as well.

Reflecting these changes, the company embarked on a massive construction program to ensure adequate energy sources for a new urbanized and technology-driven society, culminating in the James Bay project.

Financially, until 1969, Hydro-Quebec was limited to markets in Canada and the U.S. But in the 1970s, the company began to borrow increasingly on the Eurodollar market. This developed into a new element of the company's financial strategy, namely to use international markets to diversify the source of funds.

Partly this was the result of necessity, rather than choice, as credit markets tightened in North America, forcing the company to look offshore where, however, the terms of the loans tended to be shorter.

— From 1969 to 1973, five significant issues were launched on the German market with the participation of two German banks, the Westdeutsche Landesbank and the Commerzbank.

— After a disappointing attempt at a European Canadian dollar issue in 1972, the company succeeded in 1975, with some difficulty, in a Canadian dollar placement in Europe assisted by a financial syndicate led by Union Banques Suisses (UBS).

— From 1972 to 1976, the company successfully issued eight Swiss franc placements, with the assistance of the three major Swiss banks: UBS; Credit Suisse; and the Swiss Bank Corp.

—From 1973 to 1983, Hydro-Quebec began to reach out to other markets, such as the middle east in 1973-4, a private placement in Japan in 1977, London in 1981 and the European market in ECUs a year later.

The Liquidity Problem

The diversification of financial markets reduced Hydro-Quebec's dependence on the United States. The year 1982 saw a record borrowing of $2.3 billion. Borrowing declined to $1.5 billion a year in 1984 but reached $2.9 billion in 1986, $2.4 billion in 1987, and $2.06 billion in 1988 in order to cover the company's needs. Borrowing is currently expected to be about $2 billion or below for 1989.

A major accomplishment of Hydro Quebec's financial strategy was a private placement of $1 billion in 1976. Canadian markets were used to the maximum, but putting together a sum of that size required access to U.S. markets as well. This was undertaken in the form of an exceptional borrowing with the cooperation of First Boston, Prudential, Metropolitan and four other investment bankers. The placement facilitated the financing of the James Bay project.

A New Turning Point — the 1980s

The autumn of 1976 marked another turning point in Hydro- Quebec's financial strategy. At the beginning of this period, the Canadian dollar traded slightly higher than the U.S. dollar. By the end of the 1970s, the Canadian dollar had dropped to U.S.$0.89 and was still falling.

This reversal meant a considerable rise in the cost of servicing U.S.$ de-markets could not be avoided. But henceforth the company would try harder to diversify its borrowings. Additionally, to cover its foreign exchange risk with the U.S., it would seek to expand energy sales in U.S. markets and use the receipts from these sales to cover its U.S.$ denominated debt.

Euro-Credit Markets

Beginning in 1978, Hydro-Quebec negotiated a series of standby credit lines in Euromarkets. Unlike previous borrowings, these were at variable rates of LIBOR plus a spread that was renegotiated downwards at various times over subsequent years. This marked an opening towards floating rates, which henceforth played a major role in the company's financial strategy.

The Beginning of the Swaps Market

Starting in 1983, Hydro-Quebec sought to reduce exchange risks by entering into swap arrangements. Today the company has completed 53 swap transactions in both rate swaps and foreign currency swaps, mainly between U.S.$ and C$ or U.S.$ and Swiss francs. Swap techniques play a part in company financing insofar as they serve to reduce borrowing costs. The company also limits its exposure in floating rates to 12 per cent of total debt.

A New Financial Policy

In 1981, the legislation founding Hydro-Quebec was amended (under Bill 16 of the Quebec National Assembly). One aim of the changes was to guarantee greater security to company bond-holders. Hydro-Quebec redefined its capitalization in terms of 50 million common shares at a par value of $100, of which 43,741,000 shares were allocated to the Provincial Gov-

HYDRO-QUEBEC FINANCIAL INFORMATION

(dollar amounts in millions)

	1983	1984	1985	1986	1987
Electricity Sales Revenue					
Quebec	$3,065	$3,455	$3,750	$4,024	$4,327
Export	528	646	673	649	713
	$3,593	$4,101	$4,423	$4,673	$ 5,040
Net income	$ 707	$ 301	$ 209	$ 303	$ 508
Funds from operations before interest	$1,984	$2,309	$2,542	$2,751	$2,950
Capital expenditure	$2,248	$1,618	$1,615	$1,566	$1,688
Dividends declared by the Government	$ 60	$ 156	---	---	---
General rate increase	7.3%	3.4%	2.5%	5.4%	4.6%
Interest Coverage (before dividends)[1]	1.04x	1.01x	1.12x	1.15x	1.25x
(in billions of dollars at end of period)					
Assets	$ 25.2	$ 27.1	$ 29.2	$ 30.6	$31.7
Long-term and perpetual debt	$ 16.5	$ 18.3	$ 20.1	$20.4	$ 21.2
Shareholder equity	$ 6.4	$ 6.5	$ 6.7	$ 7.0	$ 7.5

1 Income before interest and exchange loss plus net investment income divided by gross interest charges.

(Source: annual reports)

ernment of Quebec. As well, financial management guidelines were explicitly stated, setting out ratios that must be maintained if dividends were to be paid to its owner, the Quebec Government.

— The first requirement concerned interest charges. These had to be covered by net operating revenues;

— Second, the capitalization was calculated on a basis more conservative than that of its competitors, with equity to remain at least 25 per cent of total capitalization.

— Third, the return on capital must be superior to the cost of debt.

— Fourth, the company sought to achieve self- financing equal to or greater than 30 per cent.

Current Outlook

One of the priorities of Hydro-Quebec at the beginning of 1987 was to recover its position vis a vis the guidelines which it had technically breached since 1985.

Regarding its debt strategy, the company had to take into account an economic and energy environment that was increasingly unpredictable. At the same time as it took steps to reduce its commercial risk, the company also had to minimize the costs and risks of meeting its capital requirements.

This outlook led to increasing borrowings in floating rate instruments for which, it was hoped, the average rate would be less than that for fixed rate instruments.

— In the short term, the company had to restore compliance with two of the four financial guidelines, in particular those dealing with covering interest charges, the company's self-financing capability and its rate of capitalization. This would be possible by taking steps to reduce operating costs, developing new, profitable export markets and establishing an energy price that reflected costs of production (including the financing of enlarged capacity). The aim: to achieve a superior capital ratio and liquidity.

At the same time, the company would seek to lower its finance costs and exercise greater effort to control and reduce risk. This would be achieved by:

— Enhancing the credit of some partners as a way of participating in their expansion and thus expanding sales of power;

— Increasing C$-denominated debt to minimize foreign exchange risk;

— Accepting maturities of 10 years or greater;

— Refinancing loans subject to recall whenever it would be advantageous in order to lower debt costs;

— Gradually reducing in the short term the volatility of debt costs by using the futures or options markets; and

— Gradually expanding the proportion of floating rate debt insofar as that would increase the company's financial margin for manoeuvre.

With respect to minimizing exchange risk with the U.S., Hydro-Quebec sought to: (i) increase sale of electricity to the U.S. and repay its loans in the foreign exchange earned by these sales and (ii) reduce financial dependence on the U.S.

In this connection, Hydro-Quebec forecast reduced U.S.$ debt, while expanding C$ denominated debt.

The financial policy described herein is of cardinal importance to Hydro-Quebec whose expenditures, as well as long term sinking fund requirements of $6.3 billion (from 1987 to 1991), represent cash requirements of some $20.1 billion. Capital requirements are forecast to rise from $1.9 billion in 1987 to $2.7 billion in 1988. In addition to this, an annual refinancing of $1 billion required for the foreseeable future requires regular access to world capital markets.

HYDRO-QUEBEC OPERATING STATISTICS
(in thousands)

	1983	1984	1985	1986	1987
Energy sold (GWh)					
Quebec	88.1	100.9	109.7	117.2	124.1
Export	19.5	22.9	24.2	26.9	20.8
	107.6	123.8	133.9	144.1	152.9
Installed capacity at end of period (MW)	25.6	27.7	27.8	28.7	29.6
Peak winter requirements beginning Dec. (MW)	22.0	25.5	25.7	26.0	28.3
Customer accounts	2,644	2,697	2,784	2,862	2,947
Permanent employees	19.0	18.6	18.2	18.5	18.9

(Source: annual reports)

How to Borrow a Billion Dollars

by Claude Germain

What follows are excerpts from a presentation by M. Claude Germain, financial officer of Hydro-Quebec, to a seminar on financial services in New York.

The first stage in international borrowing is to put together all the available information about the costs of borrowing on the various markets.

This is not as difficult as it sounds, because bankers will be happy to provide this kind of information, hoping to become the leading underwriter in a syndicate handling your account.

Why International?

The second step is to understand why large firms in general turn to international markets to meet their borrowing requirements.

The reasons are the following:

(1) Market Size. The market in which the company is primarily active may be too small to provide all the funds the company needs because a too-significant presence in a market generally implies higher costs. This was the case for Hydro-Quebec when financing the James Bay project at a cost of $14 billion.

(2) Foreign Currency needs. If your company operates in different markets, it is likely that its capital needs to finance expansion will cover several currencies. Borrowing exclusively in Canadian or American dollars means accepting an exchange risk exposure if your revenues are in other currencies. The most logical thing to do is to borrow in the currencies in which you have revenues.

(3) Arbitrage. Big borrowers often try to take advantage of the arbitrage possibilities between different markets, trading off interest rate against exchange rate risk, which explains why they keep an eye on exchange rates.

For example, an issue for a company like Hydro-Quebec for 10 years would cost, say, (assuming AA+ ratings):

9 3/4% in Canadian dollars.
8 7/8% in U.S. dollars
4 3/4% in Swiss francs.

Clearly, if I am ready to accept an exchange rate risk, I will choose the 4 3/4% in the Swiss market.

(4) Swaps. Finally and very widespread in the last few years, are swap transactions which, generally speaking, are more economic and virtually eliminate foreign exchange risk. Let me illustrate what I mean by the following example:

Hydro-Quebec wants to borrow C$100 million. Rather than make a public issue on the Canadian or Euro-Canadian markets, we can make a Euro-yen issue for 9.1 million yen and exchange it for C$. Depending on market conditions, it is sometimes possible to realize substantial savings compared to the costs of a domestic issue (sometimes as much as 25 to 30 basis points.)

Where do these savings come from? Some borrowers have a competitive advantage on certain markets. For example, Hydro-Quebec can get costs the same as AAA in the Swiss and German market and the yen market, despite the fact that the company is only rated AA and pays more or less the price of an AA rated obligation in the USA and Canada. On the other hand, another borrower who wants Swiss francs could have to pay more, whatever the rating.

EXHIBIT ONE
WHY BORROW ON INTERNATIONAL MARKETS?
- THE DOMESTIC MARKET IS TOO SMALL
- NEED FOREIGN EXCHANGE FOR INTERNATIONAL OPERATIONS
- ARBITRAGE OPPORTUNITIES
- SWAP TRANSACTIONS

Borrowing on Wall Street

Let us discuss the procedures for an issue in particular markets.

The procedure varies according to the regulations affecting companies and stock market authorities such as the Securities and Exchange Commission in the U.S. or the provincial securities commissions in Canada.

The U.S. market is the most sophisticated and the most stringent in its formal requirements (except perhaps for the Samurai market).

1. Ratings. Before borrowing on Wall Street, your company has to be known and has to have received at least one rating by one of the big rating agencies, such as Standard and Poor, Moody's or Duff & Phelps.

2. Relationships. You should have developed links with one or more investment banks. It's easy. All you have to do is to accept their invitations to lunch. If your company is highly-rated, you won't have to pay for lunch for weeks. If it is less highly rated, you have to do the asking for lunch for weeks before the links are established. Then you have to bring together a syndicate of banks whose number will depend on the size of your needs and the relations your company enjoys with the banking community. Hydro-Quebec's syndicate is composed of 36 institutions. Five institutions make up the guarantee commission.

3. SEC Approval. Then you have to get SEC approval. For this, you need to prepare an issuing prospectus. The prospectus has to provide all financial information about the company and the risks associated with the investment.

It's ultimately easier and quicker to get approval for an issue if the SEC has already reviewed the prospectus by means of a basic prospectus filed previously with the agency. Then, when the time comes for an issue, you provide the prospectus already reviewed or the basic prospectus with a supplementary section updating the basic prospectus.

Before final approval is received, the issue prospectus, along with the registration declaration, is sent to the SEC.

4. Guarantee Contract. At the same time as you deposit a prospectus with the SEC, you have to negotiate a guarantee contract with your syndicate members. This agreement has to clearly set out the conditions under which your syndicate will buy your company's issue. In other words, it's a normal loan agreement. The particular conditions of the loan are fixed by the terms of the contract.

5. Special Clauses. Particular clauses (showing the amount, interest rate, term of the loan) will be set out in the contract which sets the terms as of the date of issue.

6. Timing. Whenever the market looks favorable, the interest rate is at an acceptable level, there is firm demand for long term obligations, you decide to make an issue. You will negotiate the exact amount, the interest rate and the term of payment and of course get the approval of your board of directors.

7. Other formalities. A series of declarations that the legal steps have been respected and that the borrower is legally entitled to make such issues must also be put together.

8. Auditors Letter. A letter from your auditor stating that he has reviewed the finances and found that no significant changes had occurred since the last quarterly or annual report.

9. Blue Sky. The "Blue Sky memorandum" is a certificate signed by bankers' lawyers saying that they have verified the relevant legislation in different states and have no objections to the selling of the issue in those states. (Only for municipal bonds in the U.S.)

10. Responsibility. The agreement with the fiscal agent for payment is a convention signed between the borrower and a company mandated to look after interest and capital payments to the lenders. This agreement should be negotiated directly between the borrower and the mandated company. In certain countries like Germany or Switzerland, a choice is not available. The banker responsible for the issue will insist on being your payment agent.

11. Printing. You then have to negotiate with a printer to have the obligations printed.

12. Pre-closure. A ceremony in the course of which the lawyers for the two

EXHIBIT TWO
HOW TO BORROW A BILLION ON WALL STREET

1. COMPANY RATING BY A MAJOR AGENCY
2. SYNDICATION
3. PROSPECTUS
4. GUARANTEE CONTRACT WITH SYNDICATE
5. CONSENT OF THE BOARD OF DIRECTORS
6. LETTERS OF ATTESTATION
7. "BLUE SKY" (U.S. MUNICIPALS ONLY)
8. PRINTING
9. PRE-CLOSURE
10. CLOSURE
11. PAYMENT AND DELIVERY

parties verify that the whole document is satisfactory.

13. Closure. A signing ceremony.

14. Delivery and payment.

Euro-Markets

Procedures for borrowing on other markets are, with the exception of Japan, rather similar but in general easier. In Europe, central bankers are less demanding regarding declarations and legal procedures than is the case in the U.S. In London, the prospectus has been replaced by a so-called "Extel Card". Generally speaking, one or two pages is enough to describe the issue and the company whereas in the U.S., it can take between 60 to 100 pages.

Borrowing approval is virtually automatic if you are a regular borrower. The same thing is true in Switzerland where the prospectus takes the form of a summary prospectus of a few pages. In Germany, a complete prospectus is required, but it is less stringent. In both countries approval is straightforward if you have indicated your intention to borrow to the central bank, generally a few weeks in advance. The other stages are almost the same as in the U.S.

Conditions in Canada

In Canada, a complete prospectus has to be provided by most companies unless they are the property of the government, which are exempt from this requirement. It is therefore much easier for Hydro-Quebec to borrow on the Canadian market. The guarantee contract consists of only a few pages. Generally, we prepare a circular of offer of about a page giving the essential details of the issue (although this is not required by law.)

We get the approval of the Board of Directors and of the Government of Quebec which guarantees our issues. For companies subject to the Canadian Security Commissions, the steps are virtually the same as those in the U.S.

Teaching Resources

Publications of the Institute for U.S.-Canada Business Studies

These materials have been produced by the Pace University Institute for U.S.-Canada Business Studies and are available for use in your classes. Where publications contain more than one element, each is available separately.

Financial Services Series

Financial Services: The Canadian Model
A comparative overview of institutions and management issues in this sector in the wake of Canadian deregulation

Banking in the U.S. and Canada
A reprint of a three-part series from *The Canadian Banker*.

Casting Down Pillars:
Canada's Financial Deregulation
Background to and detailed examination of Canada's "Big Bang".

Chase Manhattan in Canada
A company manager examines the Canadian branch following announced changes in financial services regulations. With introduction and overview.

Power Borrowing:
Hydro-Quebec's Financial Strategy
An examination of developments leading to Hydro-Quebec's importance in world fina ncial markets. Also includes **How to Borrow a Billion Dollars**
A Hydro-Quebec executive outlines the borrowing process in U.S. and European markets.

Free Trade Agreement Series

Canada's Strategic Options:
A Small Country Faces its Economic Future
An overview and series of readings showing how a major trading country decides to adopt free trade with its largest trading partner.

Evaluating Free Trade:
How the Experts Assess the Deal
An overview and readings about the significance of the FTA, how business in Canada and the U.S. is likely to be affected.

Negotiating Free Trade: Contrasting Strategies on the U.S.-Canada Trade Agreement
Designed for the negotiation element in international business courses. An insider discusses the arrangements and strategies of each side.

Dispute Settlement: Assessing a Trade Pact's Impact on Future Friction
A series of readings including opinions by legal experts evaluating the likely practical effect of one of the main pathbreaking elements of the Canada-U.S. Free Trade Agreement.

Industry Sector Series

Cross-Border Energy Flows: Canada-U.S. Energy Trade
An overview and readings discuss aspects of energy policy. Cases consider electricity trade from an importer perspective (New York Power) and the financial strategy of a major exporter (Hydro-Quebec).

Automotive Trade
Discussion of auto trade issues prior to the FTA. (Being updated.)

Telecommunications
In preparation.

Institute Cases on U.S.-Canada Business Relations

Chase Manhattan Canada
A company manager examines the Canadian branch following announced changes in financial services regulations.
Issues: International Banking, International Finance, Strategy and Policy, Services Management
Case Writer: Mary-Ann Cozzati

Developing a Canadian Dollar Purchasing Strategy
A treasury manager at Inco poses the question of how much Canadian cash the company should hold.
Issues: International Finance
Case Writer: Melissa Stoehr Brown

A Survey of Teachers in Canadian Business Schools
Results of a 1986 survey of professors in leading Canadian business schools about what cases they would recommend to U.S. professors for illustrating U.S.-Canada business.
Issues: Finance, General, Marketing, Strategy, Planning
Case Writer: Guy Stanley

Administered Trade Protection and the Case of Wood Shakes and Shingles
An examination of U.S. trade action.
Issues: International Business, Public Policy and Business, Strategy and Policy
Case Writer: Jeffrey S. North

Canadian Patent Reform and a Generic Pharmaceutical Company
A change in Canada's patent laws threatens the basis of the company's business strategy.
Issues: Public Policy and Business, Strategy, International Business
Case Writer: James Mulligan

A Comparative Study of Canadian and Scandinavian Newsprint Industries
A consultant's report comparing industry prospects and performance.
Issues: Strategy, Policy, International Business, Resource Firm Management
Case Writer: Erkki Keino

Edison Price Inc.: Evaluating a Licensing Agreement
A U.S. small business looks at its Canadian strategy following successful talks on a Free Trade Agreement.
Issues: Small Business, Strategy and Policy, International Marketing, International Business
Case Writer: Jeffrey Shaver

Quick Messenger: A Small Canadian Courier Tries the Big U.S. Market
A Canadian messenger service examines its U.S. strategy.
Issues: Small Business, Strategy and Policy
Case Writers: Roy Morrison and Kerry Pernetti

The Privatization of De Havilland Aircraft
Canada sells a crown company to a U.S. aerospace multinational.
Issues: Strategy and Policy, Public Policy and Business, Industrial Policy
Case Writer: Christian Bellissen

Safeguarding Innovation: Pfizer Inc. and Reform of the Canadian Patent Act
A leading innovator evaluates patent reform in Canada. Forthcoming.

Occasional Papers

Conference Proceedings: Canada's New Rules of the Game — The Impact on North America's Financial Services Industries
Essay by Fred Harrison, former *Financial Post* (Canada) Washington editor, which describes the impact of Canadian financial deregulation on U.S. and Canadian financial institutions. Based on June 1987 conference sponsored by the Institute.

The Canada-U.S. Relationship: A Strategy for Teaching International Business
Surveys management issues arising from transborder trade and how Canadian material can be used in internationalizing U.S. business education.

Business Backgrounders

Canada: An Economic and Social Portrait
Places Canada in an international economic framework, comparing the country with other OECD partners.
Writers: Stephen Blank, Fred Harrison and Julie Katzman

The Invisible Border
Describes in non-technical language the integrating economies of the U.S. and Canada.
Writer: Stephen Blank

Absent Partner: The Japanese Response to U.S.-Canada Free Trade.
Looks at the triangular trading relationship among Japan, Canada and the U.S. in the light of the Canada-U.S. Free Trade Agreement.

To order any of the materials listed above, please call the Institute at (212)346-1865. Or write to The Institute for U.S.-Canada Business Studies, Pace University, Pace Plaza, New York, N.Y. 10038