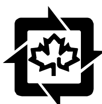
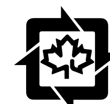
MEMBER REGULATION



INVESTMENT
DEALERS
ASSOCIATION
OF CANADA

notice



ASSOCIATION
CANADIENNE DES
COURTIERS EN
VALEURS MOBILIÈRES

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MR0181
Re-Issuance of CIB C-101

December 5, 2002

ATTENTION:
Ultimate Designated Persons
Chief Financial Officers
Panel Auditors

Distribute internally to:

- ❑ Corporate Finance
- ■ Credit
- ■ Institutional
- ■ Internal Audit
- ❑ Legal & Compliance
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- ❑ Research
- ■ Retail
- ■ Senior Management
- ■ Trading desk
- ❑ Training

Foreign Exchange Margin Rules

This notice is a re-issuance of Compliance Interpretation Bulletin C-101. It was originally issued in 1996 to detail the capital and margin requirements for unhedged foreign currency transactions pursuant to IDA Regulation 100.2(d), which came into effect on September 1, 1996. This notice is being re-issued with the objective of addressing changes that have taken place in the foreign exchange markets over the last five plus years and to provide guidance to Member firms with respect to calculation of foreign exchange margin for unhedged positions. The notice will:

- Describe the foreign exchange market and the concept of foreign exchange position and associated risk.
- Define currency group criteria and detail the margining of positions in various currency groups.
- Provide guidance for application of margin rules and treatment of foreign exchange futures and forwards as well as explain the margin concentration charge.
- Provide examples of margin calculation of unhedged foreign exchange positions of Members and customer accounts.

1. How is the foreign exchange market organized?

The foreign exchange market is the international forum for the exchange of national currencies in which the currency exchange rate is the price. Unlike traditional stock exchanges, the Foreign exchange market is not found in any one place, but is spread throughout the world in dealing rooms linked through telephone inter-communication and computer networks. This makes the foreign exchange market one of the largest markets in the world and essentially an over-the-counter market. There are three broad categories of exchange regimes that exist in various countries: **floating exchange rate regime, fixed exchange rate regime** and an intermediate arrangement called **pegged exchange rate regime**.

Under a **floating exchange rate** regime the monetary authority set the monetary policy and lets the exchange rate be determined by the supply and demand of the currency. The change in the supply or demand of a currency is a function of changes in the economic events, monetary policy, domestic political policy, fiscal policy and other factors unique to a particular country. In contrast to the stock market, the foreign exchange market is decentralised, fundamentally free from government regulation, although the individual or sovereign government may intervene in the trading of its own currencies.

Canada is an example of a country operating under a **floating exchange rate regime**. The Bank of Canada monetary authority follows a policy of allowing the exchange rate to be determined by the market with any intervention aimed at promoting orderly conditions in the market for the Canadian dollar. Its current policy is to intervene only on a discretionary basis. This is accomplished through the buying or selling the US dollar, which represents the **primary intervention** currency.

Under **a fixed rate regime** the monetary authority sets the exchange rate and not the monetary policy. The monetary authority commits to exchange the domestic currency for a specified foreign currency at a fixed rate thus leaving the monetary base to be determined by the balance of payments. In other words, when a country's official net foreign reserves increase, its monetary base increases and vice versa. An example is Hong Kong's Currency Board which has maintained the exchange rate of 7.8 $ per 1 US$ since 1983 and Malaysia with a fixed exchange rate of 3.8 Malaysia Ringgits per 1 US$ since September 1998.

Under a **pegged-rate regime,** the government authority, usually the central bank of the country, limits the variation in the country's exchange rate within a narrow range around a central rate. Pegged rates (adjustable pegs, bands, crawling pegs, managed floats, etc.), are not free-market mechanisms for international payments. Pegged rates enable central banks to combine some degree of exchange rate stability with a degree of independence in monetary policy. To maintain the exchange rate within the pre-established range, the government may impose a controlled or restricted foreign exchange system in which it acts as intermediary to all foreign exchange transactions. Most developing countries have continued to employ some variant of pegged exchange rates despite evidence that pegged exchange rates are vulnerable to major balance of payments and currency crisis that result in the exchange rate being either repegged at lower rate or replaced by a floating rate.

2. What is a foreign exchange exposure and what is foreign exchange rate risk?

For the sake of clarity, any currency other than the reporting currency of an entity is considered to be a foreign currency. As a result, since Member firms are required to report in Canadian dollars[1], a Member firm foreign exchange exposure would result from any transaction/balance denominated in a currency other than the Canadian dollar. For example, when a Member firm purchases a security that trades only in US dollars, the purchase would be considered to have created a **foreign exchange exposure**.

Foreign exchange rate risk is the risk associated with assuming foreign exchange exposures and includes both asset and liability related exposures. Foreign Exchange rate risk can either be in the form of a spot risk or term risk, depending upon the nature of the exposure. Asset and liability exposures that may be subject to exchange rate risk include monetary asset and liability items resulting from entering into foreign currency spot transactions (such as the purchase of a US dollar

[1] This requirement is set out in Note 8 of the General Notes and Definitions section of Form 1.

denominated security referred to above), currency futures and forward contracts and currency swaps. Monetary assets and liabilities of a Member or its clients are defined as money and claims to money that are fixed by contract or otherwise.

The **spot exchange rate** is the rate at which the currency of one country can currently be exchanged for the currency of another country. A spot deal normally settles in two working days after the dealing date to allow for settlement instructions to be processed in different time zones. The **forward exchange rate** is the rate at which the currency of one country can be exchanged for the currency of another country on a predetermined future date. The spot exchange rate is determined based on the market conditions which exist at the point in time the rate is quoted whereas the forward exchange rate is determined based on the expectations of market participants of what the spot rate will be on the date the forward contract expires. The forward exchange rate reflects the expectations of market participants with respect to what the inflation rate, real interest rates, rate of economic growth and the many other factors of one country relative to another will be on the date the forward contract expires. The risk that the forward exchange rate agreed to (i.e., expected future spot rate) does not equal the actual spot rate is referred to as **term risk** or basis risk. A Member is exposed to foreign exchange term risk whenever there is a mismatch in the timing of the cash flows relating to its monetary assets or liabilities.

The FX Regulation is designed to address the foreign currency exposure to which a Member or its client faces as the result of a mismatch in the monetary assets or liabilities in absolute dollar terms or in terms of the relative timing of their respective cash flows.

3. What are the Currency Group criteria?

The currency group criteria found in the FX Regulation classify each foreign currency into 1 of 4 currency groups based on the their riskiness as reflected in the historical and current volatility of the currency, and the liquidity of the currency in foreign exchange markets. The **quantitative criteria** established for each currency group are designed to identify the price risk whereas the **qualitative criteria** for each currency group are designed to identify the liquidity risk.

The following is a summary of the quantitative and qualitative criteria for currency groups 1-4.

- **Currency Group 1** consists of the US dollar, the primary intervention currency of the Canadian dollar.
- **Currency Group 2** consists of all countries whose currencies have a historical volatility of less than 3% relative to the Canadian dollar, are quoted on a daily basis by a Canadian Schedule 1 chartered bank, and are either a member of the European Monetary System and a participant of the Exchange Rate Mechanism or there is a listed future for the currency on a recognized futures exchange such as the Chicago Mercantile Exchange (CME), or Philadelphia Board of Trade (PBOT). The requirement that there exist a listed future on a recognized exchange is designed to identify those currencies for which there is a high degree of liquidity.
- **Currency Group 3** consists of all countries whose currencies have a historical volatility of less than 10% relative to the Canadian dollar, are quoted on a daily basis by a Canadian Schedule 1 chartered bank and are a full member of the International Monetary Fund (IMF). To be a full member of the IMF, a country must attain Article VIII Section 2(a) status of the IMF's Articles of Agreement, which states, "no member shall, without the approval of the Fund, impose restrictions on the making of payments and transfers for current international transactions without the IMF's approval".

- **Currency Group 4** consists of all countries, which do not satisfy the quantitative and qualitative criteria for Currency Groups 1-3.

For a summary of the currencies that qualify as Group 1-3 currencies, refer to Attachment 1 to this Notice.

4. What are the unhedged margin rates for each currency group?

The unhedged margin rates for each currency are designed to address the price and liquidity risk associated with a particular unhedged FX position. The following is a summary of the margin rates by currency Group.

	Currency Group			
	1	2	3	4
Spot Risk Margin Rate	1.0%	3.0%	10.0%	25.0%
Term Risk Margin Rate	1.0%	3.0%	5.0%	12.5%

The total margin requirement is the sum of the spot risk margin requirement and the term risk margin requirement calculated using the spot risk margin rate and the term risk margin rate. The **spot risk margin requirement** is designed to provide for the risk of adverse changes in the spot exchange rate whereas the **term risk margin requirement** is designed to provide for the additional term risk associated with FX positions with terms to maturity of greater than 3 days. The spot risk margin requirement applies to all unhedged FX positions regardless of term to maturity. The term risk margin requirement is designed to address the basis risk associated with other than spot transactions and applies to all unhedged FX positions with a term to maturity of greater than 3 days.

5. What is the foreign exchange margin surcharge?

To take account of the fact that the FX margin rate applicable to each currency is based on the historical volatility in the exchange rate and as a result may not accurately reflect the current volatility of the currency, the FX Regulation includes a **FX margin surcharge mechanism** which adjusts the margin rate for a specific Group 1-3 currency if the volatility of the currency exceeds a predetermined volatility threshold. The threshold for the tolerable number of offside base days before the margin surcharge is triggered as a percentage of the preceding 60 trading days is 3 or 5% of the trading days (i.e., 95% confidence level). An offside base day is deemed to have occurred when the percentage change in the exchange rate of the foreign currency over the preceding 5 trading day period exceeds the margin rate for the currency group. If the number of offside base days during the period is 4 or more or 6.7% of the trading days, then the volatility threshold has been exceeded and the margin surcharge mechanism is deemed to have been triggered.

In the event that the margin surcharge mechanism is triggered, the FX Regulation requires that the margin rate for the specific currency be increased in increments of 10% until the number of offside base days during the preceding 60 trading days is reduced to a number no greater than 2 (i.e., increase in the confidence interval from 95% to 96.7%). The FX Regulation includes a requirement that the volatility threshold be reduced from 4 offside base days to 2 offside base days to reduce the likelihood of re-triggering of the FX margin surcharge mechanism during the FX margin surcharge period.

The increased margin rate which results after the application of the margin surcharge shall apply for a minimum of 30 trading days and shall be automatically reduced when the number of offside base days during the preceding 60 trading days is reduced to a number no greater than 3.

6. What is the margin rule application for unhedged foreign exchange positions?

The FX Regulation provides a framework for identifying and margining the FX risk associated with FX positions and is applicable to both inventory and customer **trade date** FX positions. All debt and equity security positions are spot positions under the FX Regulation.

The FX margin requirement for a particular FX position is the sum of the spot risk margin requirement and the term risk margin requirement. The margin requirement of an individual FX position is determined based on the currency the FX position is denominated in, the term to maturity of the FX position and extent to which the FX position is hedged.

The spot risk margin requirement applies to all foreign currency positions, regardless of the term to maturity whereas the term risk margin requirement only applies to unhedged foreign exchange positions with a term to maturity of greater than 3 days. The spot risk margin requirement is calculated as the product of the market value of the net monetary position and the spot risk margin rate. The term risk margin requirement is calculated as the product of the market value of the monetary asset or liability, the weighting factor and the term risk margin rate, where the weighting factor is calculated as the number of days to maturity divided by 365 days subject to the following maximum term risk margin rates.

	Currency Group			
	1	2	3	4
Maximum Term Risk Margin Rate	4.0%	7.0%	10.0%	25.0%

The following is a summary of the term risk margin requirements and offset provisos:

- Where a Member has monetary assets and monetary liabilities which have terms to maturity of 2 years or less the term risk margin requirement is calculated as the net of the term risk margin requirements of the monetary assets and liabilities.
- Where a Member has monetary assets and liabilities one having a term to maturity of 2 years or less and one having a term to maturity of more than 2 years which have a difference in their respective terms to maturity of 180 days or less the term risk margin requirement is calculated as the net of the term risk margin requirements of the monetary assets and liabilities.
- Where a Member has monetary assets and liabilities which have terms to maturity of greater than 2 years the term risk margin requirement is calculated as the greater of the term risk margin requirement of the monetary assets and liabilities with the proviso that the term risk margin requirement shall not exceed established limits.

Refer to Attachment 1-4 to this Notice for detailed example of the calculation of the FX margin requirement.

7. How are foreign currency futures and forward contract positions treated for margin purposes?

The following is a summary of the margin treatment for futures and forward contract positions under the FX Regulation:

Futures:

- Where a member has futures only, positions may be margined at exchange margin rates or the member has the option to include futures contract positions denominated in a currency other than Canadian dollars as part of the spot risk and term risk margin requirement calculation.

Forwards:

- Where a member has positions in forward contracts where neither contract is the Canadian dollar (i.e., sold UK£ 10,000 vs. US$ 3 month forward), the member may compute the margin requirement in the following manner:

  Compute separately the spot risk and the term risk margin calculation in Canadian dollars for each of the contractually linked pair of currencies.

  The margin requirement to be provided will be the greater of the margin on each of the two contractually linked currencies (Refer to Attachment 2 to this Notice for a detailed example).

Futures and Forwards:

- Where a Member has a combination of forward contract positions and futures contracts where neither contract currency is the Canadian dollar and there exists a listed futures contract for the currency on the CME or PBOT, the rules allow for an alternative method to margin such contracts:

  Separately compute the spot risk margin requirement and the term risk margin requirement in Canadian dollars for each of the contractually linked pair of currencies. The margin requirement to be provided will be the greater of the margin on each of the two contractually linked currencies.

- Two forward contracts held by the member which a) have one currency common to both contracts, b) are for the same value date, and c) the common currency is equal and offsetting, may be treated as a single contract for the purposes of calculating the hedged and weighted unhedged margin (i.e., long UK£ 10,000 vs. German 3 month contract and short German 10,000 vs. US$ 3 month contract may be treated as long UK£ 10,000 vs. US$ 3 month contract).

Mark to market:

- Mark to market in respect of any future or forward currency contract position must be provided in inventory.

8. What is the foreign exchange margin concentration charge?

An implicit assumption underlying the margin rates found in the FX Regulation is that a member firms exposure to FX rate risk is diversified across currency groups. To take account of the increased risk associated with a member becoming excessively concentrated in a Group 2, Group 3 or Group 4 currency a **FX concentration charge** in addition to the FX margin already provided was adopted.

The FX concentration charge is a charge in addition to the FX margin requirement that is levied when the exposure of a Member to a particular Group 2, Group 3 or Group 4 currency exceeds a predetermined FX concentration threshold. Specifically, when the margin provided on a particular Group 2, Group 3, or Group 4 currency exceeds 25% of a Member's Net Allowable Assets net of Minimum Capital, a concentration charge equal to the FX margin already provided which is in excess of 25% of a Member's Net Allowable Assets net of Minimum Capital shall apply. The concentration charge is based on a Member's monetary balance sheet exposure and does not contemplate FX exposure in client accounts other than the cash balances reported on the balance sheet.

9. What are the margin requirements for foreign exchange positions held in customer accounts?

Unhedged FX positions (excluding foreign currency denominated cash balances) of customers of a member firm shall be margined in accordance with the FX Regulation provided that:

- No margin is required in respect of forward contract positions in the accounts of customers who are Acceptable Institutions.
- The margin required in respect of forward contract positions in the accounts of Acceptable Counterparties and Regulated Entities shall be calculated on a mark to market basis.
- The margin required in respect of Group 1 and 2 forward contract positions in the accounts of counterparties classified as other counterparties shall be calculated based on a mark to market on the position (See Attachment 3 for detailed example).
- The margin required in respect of forward contract currency positions or securities denominated in a Group 3 or group 4 currency in the accounts of counterparties classified as other counterparties shall be calculated based on two components 1) a mark to market on the position and 2) unhedged and weighted value margin on the positions (Refer to Attachment 4 to this Notice for a detailed example).
- There is a proviso in the regulations that the sum of the margin provided on the security and the margin provided under the FX Regulation shall not exceed 100%.

The following table summarizes the client margin application for foreign currency forward contract positions and equity/debt security positions.

		Margin Rate Groups			
Counterparty	**Position**	**1**	**2**	**3**	**4**
AI	Forward Contracts:	No Margin	No Margin	No Margin	No Margin
	Other Securities:	No Margin	No Margin	No Margin	No Margin
AC	Forward Contracts:	Mark to Market	Mark to Market	Mark to Market	Mark to Market
	Other Securities:	No FX Margin	No FX Margin	No FX Margin	No FX Margin
Regulated Entity	Forward Contracts:	Mark to Market	Mark to Market	Mark to Market	Mark to Market
	Other Securities:	No FX Margin	No FX Margin	No FX Margin	No FX Margin
Other	Forward Contracts:	Mark to Market + FX Margin	Mark to Market + FX Margin	Mark to Market + FX Margin	Mark to Market + FX Margin
	Other Securities:	No FX Margin	No FX Margin	FX Margin*	FX Margin*

Note: that in the case of **future contract** positions in the accounts of any of the above counterparties, the positions must be margined in accordance with minimum margin requirements set by the exchange in which the future contract is traded.

* Proviso: Only applicable where the security margin rate is less than the spot margin rate for the currency.

10. Can non-allowable monetary assets be excluded from monetary assets for the purpose of determining the FX margin requirement?

Member firms are permitted to elect at their option to exclude non-allowable monetary assets from monetary assets for the purposes of the FX margin calculation. The rationale which underlies this proviso is that a Member firm should not have to provide FX margin on a non-allowable monetary asset that is already fully provided for in the determination of the capital position of the firm. This proviso is premised on the concept that the margin on any asset should never exceed 100% of the value of the asset. A Member firm would not utilize this election in cases where the inclusion of the non-allowable monetary asset would result in a lower FX margin requirement than otherwise calculated. For example, a Member firm would likely not elect to exclude commissions/fees receivable from a non-AI from monetary assets when their inclusion results in a lower FX margin requirement as the result of their hedging a monetary liability denominated in the same foreign currency.

ATTACHMENT #1

as at May 31, 2002

FOREIGN EXCHANGE CURRENCY GROUPINGS

The currency groups for the purposes of IDA Regulation 100.2(d) are as follows, until amended or supplemented from time to time by the SROs.

Country	IMF Member (Article VIII)	EMU[2] Participant	Daily Quoted Spot Rate	Listed Future on Recognized Exchange	Volatility Threshold (subject to surcharge)
GROUP 1					
United States	Yes	No	Yes	Yes	Yes
GROUP 2					
Australia	Yes	No	Yes	Yes	Yes
Euro[3]	NA	Yes	Yes	Yes	Yes
Japan	Yes	No	Yes	Yes	Yes
Mexico	Yes	No	Yes	Yes	Yes
Switzerland	Yes	No	Yes	Yes	Yes
United Kingdom	Yes	No	Yes	Yes	Yes
GROUP 3					
Czeck Republic	NA	NA	Yes	NA	Yes
Denmark[4]	Yes	No	Yes	No	Yes
Hong Kong	Yes	No	Yes	No	Yes
Malaysia	Yes	No	Yes	No	Yes
New Zealand	Yes	No	Yes	No	Yes
Norway	Yes	No	Yes	No	Yes
Saudi Arabia	Yes	No	Yes	No	Yes
Singapore	Yes	No	Yes	No	Yes
Sweden	Yes	No	Yes	No	Yes
GROUP 4					
All other currencies					

[2] The Economic and Monetary Union (the "EMU") replaces the Group 2 criteria formerly known as ERM/EMS.

[3] The Euro is the official currency of the participating countries of the EMU. The European Currency Unit ceased to exist as a currency as at January 1, 1999.

[4] Denmark was downgraded to Group 3 as a result of non-EMU/non-Euro participation.

ATTACHMENT #2

UNHEDGED FOREIGN CURRENCIES
MARGIN EXAMPLE – ABC CO.

As at May 31, 2002

ASSUMPTIONS:

Country	United States	United Kingdom
Currency Unit	Dollar ("US$")	Pound ("UK£")
Spot rate at reporting date	1.5339	2.2478
Currency group	1	2
Monetary Assets:		
Deposits with Acceptable Clearing Corporations	$0	£50,000
Securities owned (sovereign debt – 3 years to maturity)	$300,000	£150,000
Clients' accounts	$100,000	£0
Brokers and dealers trading balance	$0	£0
Sub-total	$400,000	£200,000
Non-monetary Assets:		
Assets acquired under capital leases	$50,000	£0
Sub-total	$50,000	£0
Monetary Liabilities:		
Brokers and dealers trading balance	($50,000)	(£0)
Repurchases (30 day fixed term repo)	($150,000)	(£100,000)
Subordinated loan	($200,000)	(£0)
Sub-total	($400,000)	(£100,000)

Summary of forward and future contract transactions as at May 31, 2002:

1. Sold 1 UK£ Sept 02 futures contract on the CME[5] at 1.4585
2. Sold UK£ 60,000 vs. US$ forward contract for August 31, 2002 delivery at 1.4625
3. Bought 1 CAN$ Sept 02 futures contract on the CME[6] at 0.6490
4. Sold US$ 50,000 vs. CAN$ forward contract for July 31, 2002 delivery at 1.5355
5. Sold UK£ 300,000 vs. US$ forward contract for December 31, 2004 delivery at 1.4537
6. Sold US$ 100,000 vs. CAN$ forward contract for April 30, 2004 delivery at 1.5360
7. Sold UK£ 70,000 vs. US$ forward contract for June 30, 2004 delivery at 1.4250

Other Information

1. US$ spot risk margin rate – 1.10%
2. UK£ spot risk margin rate – 3.00%
3. Net allowable assets net of minimum capital - $2,000,000.

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[5] The contract is quoted in US$ per UK£, settles two business days before the third Wednesday of the expiry month and the contract size for the UK£ futures contract is 62,500 UK£.

[6] The contract is quoted in US$ per CAN$, settles two business days before the third Wednesday of the expiry month and the contract size for the CAN$ futures contract is 100,000 CAN$.

ATTACHMENT #2

UNHEDGED AND TERM WEIGHTING CALCULATIONS
ABC CO.

CURRENCY GROUP 1

US – Dollar		Unhedged Foreign Exchange Positions	Term (days)	Term Weighted (days/365)
TWO YEARS AND UNDER				
MONETARY ASSETS:				
Securities owned		$300,000	0	$0
Client receivables		$100,000	0	$0
Broker receivables		$0	0	$0
Clearing corp. deposit		$0	0	$0
Total		$400,000		$0
TOTAL LONG FORWARD/FUTURES[7, 8]:				
Contract expiry date				
August 31, 2002	2	$87,750	92	$22,118
September 16, 2002	1	$91,156	108	$26,972
June 30, 2004 *(See note 9)*	7	$99,750	761	$207,972
Total		$278,656		$257,062
MONETARY LIABILITIES:				
Bank loan		$0	0	$0
Broker payable		($50,000)	0	$0
Repurchase liability		($150,000)	30	($12,329)
Subordinated loan		($200,000)	0	$0
Total		($400,000)		($12,329)
TOTAL (SHORT) FORWARD/FUTURES[7, 8]:				
Contract expiry date				
July 31, 2002	4	($50,000)	61	($8,356)
September 16, 2002	3	($64,900)	108	($19,203)
April 30, 2004 *(See footnote 9)*	6	($100,000)	700	($191,781)
Total		($214,900)		($219,340)
OVER TWO YEARS				
Contract expiry date				
December 31, 2004	5	$436,110	945[10]	$1,129,107

CURRENCY GROUP 2

UK – Pound		Unhedged Foreign Exchange Positions	Term (days)	Term Weighted (days/365)
TWO YEARS AND UNDER				
MONETARY ASSETS:				
Securities owned		£150,000	0	£0
Client receivables		£0	0	£0
Broker receivables		£0	0	£0
Clearing corp. deposit		£50,000	0	£0
Total		£200,000		£0
TOTAL LONG FORWARD/FUTURES[7, 8]:				
Contract expiry date				
		£0	0	£0
		£0	0	£0
		£0	0	£0
Total		£0		£0
MONETARY LIABILITIES:				
Bank loan		£0	0	£0
Broker payable		£0	0	£0
Repurchase liability		(£100,000)	30	(£8,219)
Subordinated loan		£0	0	£0
Total		(£100,000)		(£8,219)
TOTAL (SHORT) FORWARD/FUTURES[7, 8]:				
Contract expiry date				
August 31, 2002	2	(£60,000)	92	(£15,123)
September 16, 2002	1	(£62,500)	108	(£18,493)
		£0	0	£0
Total		(£122,500)		(£33,616)
OVER TWO YEARS				
Contract expiry date				
June 30, 2004	7	(£70,000)	761	(£145,945)
December 31, 2004	5	(£300,000)	945[11]	(£700,000)

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[7] See Attachment #2, page 10 for forward/future currency contract transaction references.

[8] Forward/future currency contract positions must also be marked to market in member firm's inventory.

[9] Transactions 6 and 7 may be offset according to Regulation "offset provisos" for offsetting positions straddling 2 years which have a difference in their respective terms to maturity of 180 days or less.

[10] Based on the expiry date of December 31, 2004 the contract has 945 days to maturity. The margin rate determined by the calculation 945/365 x 1.10% is less than the maximum term risk margin rate of 4%. As a result, no adjustment to weighted value of this contract is required.

[11] Based on the expiry date of December 31, 2004 the contract has 945 days to maturity. The margin rate determined by the calculation 945/365 x 3.00% is greater than the maximum term risk margin rate of 7%. As a result, adjust the weighted value amount for this contract to 7% / 3% or 2.33 x 300,000 = 700,000.

Total	$43,611	$1,129,107	Total	(£370,000)	(£845,945)

PART II

JOINT REGULATORY FINANCIAL QUESTIONNAIRE AND REPORT

ABC Co

(Firm Name)

UNHEDGED FOREIGN CURRENCIES CALCULATION

SUMMARY

A. Total foreign exchange margin requirement $ 114,238

B-15

B. Details for individual currencies with margin requirement greater than or equal to $5,000:

Foreign Currency with margin requirement ≥ $5,000 (For each foreign currency, a Schedule 11A must be completed)	Margin Group	Required Margin
US Dollars	1	27,914
UK Pounds	2	86,334
Subtotal		$ **114,238**
All other foreign exchange margin requirement		
Total		$ **114,248**

DATE: ____________________

PART II
JOINT REGULATORY FINANCIAL QUESTIONNAIRE AND REPORT

ABC Co.
(Firm Name)

DETAILS OF UNHEDGED FOREIGN CURRENCIES CALCULATION FOR INDIVIDUAL CURRENCIES WITH MARGIN REQUIRED GREATER THAN OR EQUAL TO $5,000

Foreign Currency: **US Dollar**

Margin Group: **1**

BALANCE SHEET ITEMS AND FORWARD/FUTURE COMMITMENTS <= TWO YEARS TO MATURITY

		Amount	Weighted Value	Margin Required
1.	Total monetary assets	$400,000	$0	
2.	Total long forward / futures contract positions	$278,656	$257,062	
3.	Total monetary liabilities	($400,000)	($12,329)	
4.	Total (short) forward / futures contract positions	($214,900)	($219,340)	
5.	Net long (short) foreign exchange positions	$63,756		
6.	Net weighted value		$25,393	
7.	Net weighted value multiplied by term risk for Group	1 of 1.10%		$279

BALANCE SHEET ITEMS AND FORWARD/FUTURE COMMITMENTS > TWO YEARS TO MATURITY

		Amount	Weighted Value	Margin Required
8.	Total monetary assets	$0	$0	
9.	Total long forward / futures contract positions	$436,110	$1,129,107	
10.	Total monetary liabilities	$0	$0	
11.	Total (short) forward / futures contract positions	$0	$0	
12.	Net long (short) foreign exchange positions	$436,110		
13.	Net weighted value		$1,129,107	
14.	Net weighted value multiplied by term risk for Group	1 of 1.10 %		$12,420

FOREIGN EXCHANGE MARGIN REQUIREMENTS

		Amount		Margin Required
15.	Net long (short) foreign exchange positions	$499,866		
16.	Net foreign exchange position multiplied by spot risk for Group		1 of 1.10 %	$5,499
17.	Total term risk and spot risk margin requirement			$18,198
18.	Spot rate at reporting date			1.5339
19.	Margin requirement converted to Canadian dollars			$27,914

FOREIGN EXCHANGE CONCENTRATION CHARGE

20.	Total foreign exchange margin (line 19) in excess of 25% of net allowable assets less minimum capital [not applicable to Group 1]	N/A
	TOTAL FOREIGN EXCHANGE MARGIN FOR U.S. DOLLAR:	$27,914

ATTACHMENT #2

DATE: ____________________ **SCHEDULE 11 A**

PART II
JOINT REGULATORY FINANCIAL QUESTIONNAIRE AND REPORT

ABC Co.
(Firm Name)

DETAILS OF UNHEDGED FOREIGN CURRENCIES CALCULATION FOR INDIVIDUAL CURRENCIES WITH MARGIN REQUIRED GREATER THAN OR EQUAL TO $5,000

Foreign Currency: **UK Pound**

Margin Group: **2**

BALANCE SHEET ITEMS AND FORWARD/FUTURE COMMITMENTS <= TWO YEARS TO MATURITY

		Amount	Weighted Value	Margin Required
1.	Total monetary assets	£200,000	£0	
2.	Total long forward / futures contract positions	£0	£0	
3.	Total monetary liabilities	(£100,000)	(£8,219)	
4.	Total (short) forward / futures contract positions	(£122,500)	(£33,616)	
5.	Net long (short) foreign exchange positions	(£22,500)		
6.	Net weighted value		(£41,836)	
7.	Net weighted value multiplied by term risk for Group 2 of 3.00 %			£1,255

BALANCE SHEET ITEMS AND FORWARD/FUTURE COMMITMENTS > TWO YEARS TO MATURITY

		Amount	Weighted Value	Margin Required
8.	Total monetary assets	£0	£0	
9.	Total long forward / futures contract positions	£0	£0	
10.	Total monetary liabilities	£0	£0	
11.	Total (short) forward / futures contract positions	(£370,000)	(£845,945)	
12.	Net long (short) foreign exchange positions	(£370,000)		
13.	Net weighted value		(£845,945)	
14.	Net weighted value multiplied by term risk for Group 2 of 3.00 %			£25,378

FOREIGN EXCHANGE MARGIN REQUIREMENTS

		Amount	Margin Required
15.	Net long (short) foreign exchange positions	(£392,500)	
16.	Net foreign exchange position multiplied by spot risk for Group 2 of 3.00 %		£11,775
17.	Total term risk and spot risk margin requirement		£38,408
18.	Spot rate at reporting date		2.2478
19.	Margin requirement converted to Canadian dollars		$86,334

FOREIGN EXCHANGE CONCENTRATION CHARGE

20.	Total foreign exchange margin (line 19) in excess of 25% of net allowable assets less minimum capital [not applicable to Group 1]	$0
	TOTAL FOREIGN EXCHANGE MARGIN FOR U.K. POUND:	$86,334

ALTERNATIVE FORWARDS/FUTURES MARGIN CALCULATION[12]

ASSUMPTIONS:

1. Sold 10 UK£ Sept 02 futures contracts on the CME[13] at 1.4585
2. Bought UK£ 450,000 vs. US$ forward contract for September 16, 2002 delivery at 1.4560
3. Sold 10 UK£ Dec 02 futures contracts on the CME[14] at 1.4545
4. Bought UK£ 700,000 vs. US$ forward contract for January 31, 2003 delivery at 1.4530
5. US$ spot risk margin rate - 1.5339
6. UK£ spot risk margin rate - 2.2478

CURRENCY GROUP 1

US – Dollar	Unhedged Foreign Exchange Positions	Term (days)	Term Weighted (days/365)
FORWARD/FUTURES: *Contract expiry date*			
September 16, 2002	$911,563	108	$269,723
September 16, 2002	-$655,200	108	-$193,867
December 16, 2002	$909,063	199	$495,626
January 31, 2003	-$1,017,100	245	-$682,711
Net long/(short) contract position	$148,325		
Net weighted value			-$111,230
MARGIN CALCULATED:			
US$ spot margin rate			1.10%
Spot risk margin			$1,632
Term risk margin			$1,224
Total spot and term risk margin			$2,855
US$ spot exchange rate			1.5339
Total spot and term risk margin – CAN$			$4,379

CURRENCY GROUP 2

UK – Pound	Unhedged Foreign Exchange Positions	Term (days)	Term Weighted (days/365)
FORWARD/FUTURES: *Contract expiry date*			
September 16, 2002	-£625,000	108	-£184,932
September 16, 2002	£450,000	108	£133,151
December 16, 2002	-£625,000	199	-£340,753
January 31, 2003	£700,000	245	£469,863
Net long/(short) contract position	-£100,000		
Net weighted value			-£77,329
MARGIN CALCULATED:			
UK£ spot margin rate			3.00%
Spot risk margin			£3,000
Term risk margin			£2,320
Total spot and term risk margin			£5,320
UK£ spot margin rate			2.2478
Total spot and term risk margin – CAN$			$11,958

Greater of US$ and UK£ requirements	$11,958

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[12] This alternative margin calculation only applies to inventory forward contract/futures positions in which there is a listed futures on a recognized exchange. Any contract positions in which the margin is calculated under the alternative method must be reported as part of the inventory margin calculation for such positions and must be excluded from Schedule 11 unhedged foreign currency margin calculations.

[13] The contract is quoted in US$ per UK£, settles two business days before the third Wednesday of the expiry month and the contract size for the UK£ futures contract is 62,500 UK£.

[14] The contract is quoted in US$ per UK£, settles two business days before the third Wednesday of the expiry month and the contract size for the UK£ futures contract is 62,500 UK£.

CUSTOMER MARGIN EXAMPLE
ILLUSTRATION OF CALCULATION OF MARGIN REQUIREMENT FOR A FORWARD CONTRACT DENOMINATED IN A GROUP ONE OR TWO GROUP CURRENCY

ASSUMPTIONS:

Client XYZ – Other Counterparty (i.e., Non AI, AC or Regulated Entity)

Day 1 Client XYZ buys from a Member firm a US$ 1,000,000 vs. CAN$ forward contract for November 30, 2002 (six months) delivery at 1.5410.

Day 2 US$/CAN$ 6 month forward rate is 1.5400

Day 3 US$/CAN$ 6 month forward rate is 1.5430

Day 1-3US$/CAN$ spot rate is 1.5339

	CLIENT ACCOUNT MARGIN CALCULATION:	MARGIN REQUIRED / (EXCESS)	
Day 1	**Foreign Exchange Margin Requirement:** = [spot risk margin requirement + term risk margin requirement] x spot rate = [(US$ 1,000,000 x 1.10%) + ((US$ 1,000,000 x 183/365) x 1.10%) x 1.5339		
	Total margin requirement on Day 1	$25,332	CDN
Day 2	**Forward Contract Mark to Market:** Mark to Market loss/(gain) = US$ 1,000,000 x (contract rate – market rate) = US$ 1,000,000 x (1.5410 – 1.5400)	$1,000	CDN
	Foreign Exchange Margin Requirement: = [spot risk margin requirement + term risk margin requirement] x spot rate = [(US$ 1,000,000 x 1.10%) + ((US$ 1,000,000 x 183/365) x 1.10%) x 1.5339	$25,286	CDN
	Total margin requirement on Day 2	$26,286	CDN
Day 3	**Forward Contract Mark to Market:** Mark to Market loss/(gain) = US$ 1,000,000 x (contract rate – market rate) = US$ 1,000,000 x (1.5410 – 1.5430)	($2,000)	CDN
	Foreign Exchange Margin Requirement: = [spot risk margin requirement + term risk margin requirement] x spot rate = [(US$ 1,000,000 x 1.10%) + ((US$ 1,000,000 x 183/365) x 1.10%) x 1.5339	$25,240	CDN
	Total margin requirement on Day 3	$23,286	CDN

Notes:

1. The US dollar is a Group 1 Currency. For forward contracts margin required is the mark to market adjustment plus the foreign exchange margin requirement.
2. Member firm must also mark to market forward contract positions held in inventory.
3. Member firm to provide unhedged foreign exchange margin on forward currency contracts held in inventory as part of Schedule 11 – unhedged foreign currency calculation.

CUSTOMER MARGIN EXAMPLE
ILLUSTRATION OF CALCULATING CLIENT ACCOUNT MARGIN REQUIREMENT INVOLVING MORE THAN ONE CURRENCY

ASSUMPTIONS:

Client EFG – Other Counterparty (i.e., Non-Acceptable Institutions, Acceptable Counterparty or Regulated Entity)

Account balance:	US$ $100,000 debit
Spot rates:	US$/CAN$ = 1.5339 PEN/CAN$ = .4385
Security 1	Sold US$ 100,000 vs. CAN$ 6 month forward contract 5/29/2002 @1.5407. US$/CAN$ 6 month forward rate is 1.5607 as at 5/31/2002.
Security 2	Long 100,000 US T-Bill maturing in 6 months. Market value is 98 as at 5/31/2002.
Security 3	Long 25,000 Peru New Sol (PEN) T-Bill maturing in 1 year. Market value is par.

CLIENT ACCOUNT MARGIN CALCULATION:

	Account debit balance	$100,000	USD	
Security 1	**Foreign Exchange Margin Requirement:** = [Spot risk margin requirement + Term risk requirement] = [(US$ 100,000 x 1%) + (US$ 100,000 x (182-2 days)/365 x 1%)]	1,493	USD	
	Forward Contract Mark to Market: = Forward contract mark to market loss/(gain) = Short US$ 100,000 x (Transaction rate – Market value) = (100,000) x (1.5407-1.5607) =	2,000	USD	
Security 2	**Security (Loan Value) or Margin Requirement:** = Market value of long security x loan value = [(US$ 100,000 x .98) x (100% - (1% x 182/365)] =	(97,511)	USD	
	Subtotal	$5,982	USD	
	Converted to CDN @1.5339			$9,175 CDN
Security 3	**Security (Loan Value) or Margin Requirement:** = Market value of long security x loan value x spot rate = [PESO 25,000 x (100% - 10%)] x .4385 =	(9,866)	CDN	
	Foreign Exchange Margin Requirement: = Spot risk margin rate requirement = [PESO 25,000 x 25%] x .4385 =	2,740	CDN	($7,126) CDN
	Required to margin			$2,049 CDN

Notes:

1. US dollar (USD) is a Group 1 currency. For forward contracts margin required is mark to market adjustment plus FX margin requirement.
2. The Peru New Sol (PEN) is a Group 4 currency. The combined security margin of 10% plus FX margin of 25% is 35% and does not exceed 100% of market value of the security.
3. Member firm must also mark to market forward contract positions held in inventory.
4. Member firm to provide unhedged foreign exchange margin on forward currency contracts held in inventory as part of Schedule 11 – UNHEDGED FOREIGN CURRENCIES CALCULATION.