

A New Historical Database on Syndicated Loans, 1973–1990 *

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Abstract

This article introduces a new historical loan-level database for the period 1973–1990. We draw on loan-level information from two sources: (1) the World Bank reports on Borrowing in International Capital Markets covering 1973–1981 and (2) information printed in the Euromoney magazine during 1974–1990. This document describes these data and the structure of the underlying database. We also provide some descriptive statistics, including aggregate loan volumes and loan volumes by region, country, sector, and top lenders. These new data significantly expand the currently available data on syndicated loans, and are particularly relevant for research on international banking activities in the 1970s and 1980s.

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1 Introduction

This document describes a new historical database on newly issued syndicated loans for the time period 1973 to 1990. We believe these data have potentially many applications, especially in the fields of economic history, international macroeconomics, and international finance.

The underlying data are organized into two databases, reflecting the two sources they were taken from. As such, the remainder of this document zooms in on the construction of the database based on information digitized from World Bank documents in section 2 and information digitized from the magazine Euromoney in section 3.

2 World Bank Eurocurrency Credits

2.1 Data Source

The World Bank Eurocurrency Credits (WBEC) database tabulates data on syndicated loans published by the World Bank in a series of reports entitled “Borrowing in International Capital Markets.” These reports are publicly accessible on the World Bank website.¹ The data covers the period 1973:Q1–1981:Q2; we have not found additional publications after that date. Figure 2.1 shows a sample page of a report where we observe various details of a loan contract, e.g., borrower, country, loan amount, interest rates, lenders, etc.

2.2 Database Structure

In this section, we describe the tabulation process and the database structure.

2.2.1 Tabulation

The objective of the tabulation process is to construct a relational database similar to other popularly used syndicated loan datasets, such as DealScan. We carry out this process in three steps:

- Step 1: Digitization. The objective is to record raw information as much as possible in table format.
- Step 2: Standardization. The objective is to standardize some variables for convenience of use, such as country name, currency, etc. We also try our best to standardize borrower and lender names and assign unique identifiers to these entities so that the same entity appearing as slightly different names can be identified.
- Step 3: Extensions. The objective of this step is to produce auxiliary variables that could facilitate the usage of this database, potentially in combination with other popularly used databases. This includes assigning an

¹One can search for these documents on <https://documents.worldbank.org/en/publication/documents-reports>

industry code to borrowers, RSSDID to US banks, or GKEY to Compustat firms. Most of these tasks are still in progress.

2.2.2 Tables and variables

We tabulate loan contract information in seven tables: Borrower, Guarantor, Package, Facility, Lender, Terms and Fees. A unique identifier PKGID is created for each loan package and can be used to link information about a loan across different tables. In the following, we will lay out the variable definitions in each table. Unless otherwise noted, the value for each variable is taken from the WBEC documents “as is.”

Borrower. Contains borrower information for each loan package, such as the borrower’s name, country, industry, etc. Table 2.1 presents variable definitions.

Guarantor. Records guarantor names, if any are mentioned. Table 2.2 presents variable definitions.

Package. Contains information specific to the loan package: date of issuance, currency of denomination, amount, etc. Table 2.3 presents variable definitions.

Facility. This table contains facility level information of each loan: currency, amount, maturity, etc. A loan package may contain multiple facilities with different characteristics. Table 2.4 presents variable definitions of this table.

Lender. Contains lender information for each loan. A loan package usually has multiple lenders. Table 2.5 presents variable definitions.

Terms. Contains interest rate information for each loan: type of interest (floating or fixed) and the term structure. Table 2.6 presents variable definitions.

Since interest rates are expressed in various ways in the World Bank’s documents, some explanations are warranted on how they are tabulated. For illustration purposes, we provide two examples below.

The first example in Table 2.8 shows how interest rates in different formats and periods are tabulated. Panel A shows a loan contract from the WBEC document in February 1973 in a format resembling the raw data file. The maturity of the loan is 15 years and the interest spreads are 7/8% over LIBOR for the first 7 years, 1% for the next 3 years, and 3/4% for the remaining 5 years. Panel B

demonstrates how these interest rates are recorded in the Terms Table. There are three rows, each representing an interest rate applied to a different time period. The first two columns are the loan identifiers, which are identical across rows because they refer to the same loan package and facility. Columns (3)–(6) show the time period to which the interest rate is applied. Row one records the interest rate from year 1, month 1 to year 7, month 12; row two records the interest rate from year 8, month 1 to year 12, month 12; etc. If the interest rate is expressed in fractions, we use the columns MININT, MINNUMR and MINDENM to store the value: MININT records the integer part, MINNUMR the numerator, and MINDENM the denominator. For example, as shown in the first row of Panel B, “7/8” will be recorded as “0” in column MININT, “7” in column MINNUMR and “8” in column MINDENM. If the interest rate is expressed in decimal points or an integer, then we use column MINDEC to store the value. For example, as shown in the second row of Panel B, the interest rate for the second period is “1”, which is recorded under column MINDEC.

The second example in Table 2.9 demonstrates how an interest rate range is tabulated. Sometimes interest rates are reported as a range rather than a single number. Panel A shows such an example from a loan contract in February 1981. The maturity of the loan is 8 years and the interest rate ranges from 0.625 to 0.750 with a weighted average of 0.688. Panel B shows how these interest rates are tabulated. The first six columns are similar to the first example, where we record the identifier of the loan and the time period in which the interest rates are applied. And since the interest rates are expressed in decimal points and as a range, we use the fields MINDEC and MAXDEC to record the minimum and the maximum. The average interest rate is recorded in field AVG.

Fees. This table records the type and amount of fees for each loan, which is only available since the second half of 1976. A loan may have multiple fees. Table 2.7 presents variable definitions.

2.2.3 Examples of tabulation output

The format of the raw data documents changed in 1976. We provide two full examples below, one from before 1976 and one for the period afterwards, to demon-

strate how we tabulate loan contract information from the WBEC documents.

The first example comes from a loan in April 1974.

- Panel A in Table 2.10 shows the information of this loan in a format resembling the raw data file.
- **Borrower.** The borrower is the US company “Kraft Corporation.” This information is recorded in the Borrower Table as shown by Panel B.
- **Package.** The loan package amount is \$150 million, which is recorded in the Package table as shown by Panel C. The currency is “\$” which we take directly from the document and record as the variable CURRENCY and then assign the standardized ISO code “USD” as the variable CURRISO. There are some remarks containing information about the loan type and fees. These are recorded under REMARKS. In the future, additional information from this column could be tabulated.
- **Facility.** The loan has only one facility. The facility amount is thus equal to the package amount. The maturity is 5 years or 60 months. This is recorded in the Facility Table as shown by Panel D.
- **Lender.** There are three lenders, which we list in the Lender Table as shown by Panel E. Variable ORDER indicates the order in which these lenders are listed in the WBEC document.
- **Terms.** The interest rates will be recorded in the Terms Table as in Panel F. The interest rate is 3/4% over Libor for 5 years.

The second example comes from a loan in April 1981.

- Panel A in Table 2.11 shows information on this loan in a format resembling the raw data file.
- **Borrower.** The borrower is the French company named “ELECTRICITE DE FRANCE”. This will be recorded in the Borrower Table as in Panel B. Panel A also shows the type of borrower (“PUBLIC NON-FINANCIAL ENTERPRISE”) and the purpose of its business (“PUBLIC UTILITIES”), which are recorded under variables TYPE and PURPOSE.
- **Guarantor.** This loan is guaranteed by “REPUBLIC OF FRANCE,” which is recorded in the Guarantor Table as in Panel C.

- **Package.** The loan package was signed in April 1981, and the amount is \$1200 million, which are recorded in the Package Table as in Panel D. We also record the identifier of the loan from the WBEC document (“81E5556”) under variable LOANNUM.
- **Facility.** The loan has only one facility with 10 years to maturity (or 120 months). This information is recorded in the Facility Table as in Panel E. The information on the type of creditor (“SYNDICATE OF BANKS”) and the type of credit (“OTHER”) is also recorded under variables CREDITORTYPE and CREDITTYPE.
- **Lender.** The lenders are recorded in the Lender Table as in Panel F. To conserve space, we only plot the first two lenders here.
- **Terms.** The interest rates are recorded in the Terms Table as in Panel G. The minimum interest is 0.375 and the maximum is 0.5 with an average of 0.413.
- **Fees.** There are two fees associated with this loan. A commitment fee (0.125) and a fee classified as “other” (0.2). This information is recorded in the Fees Table as in Panel H.

2.3 Summary Statistics

In this section, we provide some descriptive statistics of the data, including aggregate loan volumes, as well as loan volumes by region, country, sector and major lenders.

Figure 2.2 shows aggregate loan volumes in terms of the number of loan packages and the dollar amount of loans by year and quarter. The grey bars represent the total volume for a year, while the coloured bars represent volumes of each quarter. Panel A shows the number of loan packages, and Panel B shows the dollar amount of loans. Note that data in year 1981 is only available for the first two quarters.

Figure 2.3 plots loan volumes by major sectors: non-financial firms, financial firms, local/central government and international organizations.

Figure 2.4 plots loan volumes by country groups. Countries are classified according to Table 2.12, which is in turn based on the IMF International Financial

Statistics. The majority of loans are borrowed by major developed countries and countries in Latin America and the Caribbean.

Figure 2.5 shows the loan volumes for the top five borrowing countries in each year. The grey bars represent the total volumes by these countries. Panel A plots the number of loans and Panel B plots the dollar amount of these loans.

Table 2.13 reports the loan volumes by the top lenders in each year. Lenders are ranked by the total number of loans they are involved in, which are reported in column #Loan. Additional measures of loan volumes are provided: (1) the number of loans accounting for the number of lenders in a loan package with each lender equally sharing the loan (e.g., if a loan has four lenders, then each gets assigned loan number of 1/4), reported in column #LoanSh; (2) the total loan amount a lender was involved (e.g. if a loan is \$100 million and has four lenders, then each is assigned loan amount of \$100 million), reported in column \$Loan; (3) and the amount of loans accounting for the number of lenders in a loan package with each lender equally sharing the loan (e.g., if a loan is \$100 million and has four lenders, then each lender is assigned a loan amount of \$25 million), reported in column \$LoanSh.

Table 2.1: Variables in the WBEC Borrower Table

Variable	Type	Definition	Note
PKGID	Num	Identifier of the loan package	
ORDER	Num	The order in which borrowers of a loan are listed	1
BORROWERID	Char	Assigned borrower identifier	2
BORROWER	Char	Borrower name	
ABBR	Char	Abbreviation of borrower name, if any	
TYPE	Char	Entity type of the borrower: private non-financial enterprise, public non-financial enterprise, deposit money bank, other private financial institution, other public financial institution, state or local government, central government, central monetary institution, international organization, other	3
PURPOSE	Char	Industry description of the borrower: bank & finance, general purpose, industry, international organization, natural resources, petroleum & natural gas, public & community services, public utilities, transport, unknown	3
COUNTRY	Char	Country of borrower	
COUNTRYIS03	Char	Three-letter ISO country code	4
ISIC	Char	3-digit international standard industry classification code	5

¹ Usually one loan package has a unique borrower, so this field will be 1. If there is a second borrower, its ORDER will be 2, the third 3, and so on.

² This variable is manually assigned with the best efforts to identify the same borrower that may appear multiple times but in different names (e.g., due to different ways of abbreviation or typos). An auxiliary table BorrowerList is created to record unique borrowers with standardized names.

³ This variable is only available since the second half of 1976.

⁴ This variable is manually added as a standardization of country name.

⁵ This variable is manually assigned through an internet search for borrower information or based on variables TYPE and PURPOSE.

Table 2.2: Variables in the WBEC Guarantor Table

Variable	Type	Definition	Note
PKGID	Num	Identifier of the loan package	
ORDER	Num	The order in which guarantors of a loan are listed	
GUARANTOR	Char	Guarantor name	
ABBR	Char	Abbreviation of guarantor name, if any	

Table 2.3: Variables in the WBEC Package Table

Variable	Type	Definition	Note
PKGID	Num	Identifier of the loan package	
LOANNUM	Char	An identifier of loan in the document	1
YEAR	Num	Year in which loan contract was signed	
MONTH	Num	Month in which loan contract was signed	
CURRENCY	Char	Currency in which loan amount is denominated	2
CURRFULL	Char	Standardized currency name	3
CURRISO	Char	Standardized currency ISO code	3
PKGAMT	Num	Loan amount in the currency of denomination	
PKGAMTUSD	Num	Loan amount in US dollar	
REMARKS	Char	Additional information on fees, purpose of the loan, type of credits, etc.	4

¹ This variable is only available since the second half of 1976.

² This variable is taken as is from the document, which often appear as a symbol, such as “US\$” or “DM”.

³ This variable is manually assigned to standardize the CURRENCY variable.

⁴ This variable is only available until 1976:Q2. Some information, such as credit type or fees, could be further tabulated, and is left for future work.

Table 2.4: Variables in the WBEC Facility Table

Variable	Type	Definition	Note
PKGID	Num	Identifier of the loan package	
FACID	Char	Identifier of loan facility within package	1
CURRENCY	Char	Currency in which loan amount is denominated	
CURRFULL	Char	Standardized currency name	2
CURRISO	Char	Standardized currency ISO code	2
FACAMT	Num	Loan amount in the currency of denomination	
FACAMTUSD	Num	Loan amount in US dollar	
MATURITY	Num	Maturity in months	
CREDITORTYPE	Char	Type of the creditors: single bank, syndicate of banks	3
CREDITTYPE	Char	Type of the credit: term credit, revolving credit, unknown, other	3

¹ Most loan packages have only one facility, so this variable is 1. The second facility will be assigned 2, the third 3, and so on.

² This variable is manually assigned.

³ This variable is available since 1976.

Table 2.5: Variables in the WBEC Lender Table

Variable	Type	Definition	Note
PKGID	Num	Identifier of the loan package	
ORDER	Num	The order in which lenders are listed	
LENDERID	Char	Identifier of lender	1
LENDER	Char	Lender name	
ROLE	Char	Role of the lender: leading financial institution, lead & co-manager	2

¹ This variable is manually assigned with the best efforts to identify the same lender which may appear multiple times in different names (e.g., due to different ways of abbreviation or typos). An auxiliary table LenderList is created to record unique lenders with standardized names.

² This variable is taken as is from the header of the document, so all lenders assume the same role. The two values are due to the change in terminology. Until 1976:Q2, the lenders are listed under the column “leading financial institution”. Since 1976:Q3, the lenders are listed under “lead & co-manager”.

Table 2.6: Variables in the WBEC Terms Table

Variable	Type	Definition	Note
PKGID	Num	Identifier of the loan package	
FACID	Num	Identifier of the loan facility within package	
YSTART	Num	The first year in which this interest rate is applied	
MSTART	Num	The first month in which this interest rate is applied	
YEND	Num	The last year in which this interest rate is applied	
MEND	Num	The last month in which this interest rate is applied	
MINDECM	Num	The minimum interest rate in decimal points	
MAXDECM	Num	The maximum interest rate in decimal points	
MININTG	Num	The integer part of the minimum interest rate	
MINNUMR	Num	The numerator part of the minimum interest rate	
MINDENM	Num	The denominator part of the minimum interest rate	
MAXINTG	Num	The integer part of the maximum interest rate	
MAXNUMR	Num	The numerator part of the maximum interest rate	
MAXDENM	Num	The denominator part of the maximum interest rate	
AVG	Num	The average interest rate	
UNIT	Num	The unit of the interest rate (bp or %)	
REFRATE	Num	Reference rate	

Table 2.7: Variables in the WBEC Fees Table

Variable	Type	Definition	Note
PKGID	Num	Identifier of the loan package	
TYPE	Char	Type of fee, coded as in the document C: Commitment fee M: Management fee O: Other fee P1: Participation fee, 1st level P2: Participation fee, 2nd level P3: Participation fee, 3rd level P4: Participation fee, 4th level	
AMOUNT	Char	Amount of fee	

Table 2.8: Tabulation of WBEC Interest Rates: Example 1

Panel A: Excerpt from WBEC Document

Month	Borrower (Guarantor)	Terms (Years)	Interest (Percent)
Feb.	Centrais Eletricas de Sao Paulo—CESP	15	+7/8 (7)
			+1 (3)
			+3/4 (5)

Panel B: Terms Table

(1) PKGID	(2) FACID	(3) YSTART	(4) MSTART	(5) YEND	(6) MEND	(7) MINDEC	(8) MININT	(9) MINNUMR	(10) MINDENM	(11) UNIT	(12) REFRATE
197301029	1	1	1	7	12		0	7	8	%	LIBOR
197301029	1	8	1	10	12	1				%	LIBOR
197301029	1	11	1	15	12		0	3	4	%	LIBOR

Notes: Only relevant columns are shown.

Table 2.9: Tabulation of WBEC Interest Rates: Example 2

Panel A: Excerpt from WBEC Document

LOAN NUMBER, DATE BORROWER, (GUARANTOR)	AMOUNT IN MILLIONS (US\$ EQUIV)	INTEREST RATE	TERM (YR-MO)
TYPE OF BORROWER, PURPOSE			
TYPE OF CREDITOR, CREDIT			
81E5102 02/-/81	US\$ 70.0	0.625 0.750	08-00
ASTILLEROS Y FABRICAS NAVALES ESTADO (REPUBLIC OF ARGENTINA)		0.688 (WT)	
PUBLIC NON-FINANCIAL ENTERPRISE PUBLIC & COMMUNITY SERVICES			
SYNDICATE OF BANKS TERM CREDIT			

Panel B: Terms Table

(1) PKGID	(2) FACID	(3) YSTART	(4) MSTART	(5) YEND	(6) MEND	(7) MINDEC	(8) MAXDEC	(9) AVG	(10) UNIT	(11) REFRATE
198102004	1	1	1	8	12	0.625	0.750	0.688	%	LIBOR

Notes: Only relevant columns are shown.

Table 2.10: Tabulation of WBEC Loan Contract: Example 1

Panel A: Excerpt from WBEC Document

PUBLICIZED EUROCURRENCY CREDITS COMPLETED DURING 1974						
Month	Borrower (Guarantor)	Leading Financial Institutions	Amount in Millions	Terms (Years)	Interest (Percent)	Remarks
<u>UNITED STATES</u>						
Apr.	Kraft Corporation	Manufacturers Hanover Ltd.; Deutsche Bank A.G.; Banque de Bruxelles S.A.	\$150.00	5	+ 3/4	Revolving credit; commitment fee of 1/4%; multicurrency option

Panel B: Borrower

PKGID	ORDER	BORROWERID	BORROWER	ABBR	COUNTRY	COUNTRYISO3	TYPE	PURPOSE	ISIC
197401418	1	B3322	KRAFT CORPORATION		UNITED STATES	USA			C10

Panel C: Package

PKGID	LOANNUM	YEAR	MONTH	CURRENCY	CURRFULL	CURRISO	PKGAMT	PKGAMTUSD	REMARKS
197401418		1974	4	\$	UNITED STATES DOLLAR	USD		150	REVOLVING CREDIT; COMMITMENT FEE OF 1/4%; MULTI CURRENCY OPTION.

Panel D: Facility

PKGID	FACID	CURRENCY	CURRFULL	CURRISO	FACAMT	FACAMTUSD	MATURITY	CREDITORTYPE	CREDITTYPE
197401418	1	\$	UNITED STATES DOLLAR	USD		150	60		

Panel E: Lender

PKGID	ORDER	LENDERID	LENDER	ROLE
197401418	1	L1192	MANUFACTURERS HANOVER LTD.	LEADING FINANCIAL INSTITUTION
197401418	2	L0750	DEUTSCHE BANK A.G.	LEADING FINANCIAL INSTITUTION
197401418	3	L0389	BANQUE DE BRUXELLES S.A.	LEADING FINANCIAL INSTITUTION

Panel F: Terms

PKGID	FACID	YSTART	MSTART	YEND	MEND	MININT	MINNUMR	MINDENM	UNIT	REFRATE
197401418	1	1	1	5	12	0	3	4	%	LIBOR

Notes: Only relevant tables and columns are shown. The identifiers for loan package, borrowers and lenders shown above may be different from the database due to updates to the database.

Table 2.11: Tabulation of WBEC Loan Contract: Example 2

Panel A: Excerpt from WBEC Document

LOAN NUMBER, DATE BORROWER, (GUARANTOR)	AMOUNT IN MILLIONS (US\$ EQUIV)	INTEREST RATE	FEES	TERM (YR-MO)	LEAD & CO-MANAGERS
81E5556 04-/81 ELECTRICITE DE FRANCE (REPUBLIC OF FRANCE)	US\$ 1,200.00	0.500 0.375 0.413 (WT)	0.125 (C) 0.200 (O)	10-00	AMSTERDAM - ROTTERDAM BANK NV ARAB BANKING CORP BK OF NOVA SCOTIA GROUP BK OF TOKYO LTD BQ NATIONALE DE PARIS BARCLAYS BANK SA (FR.) CREDIT AGRICOLE CREDIT LYONNAIS NAT. BK OF CANADA
PUBLIC NON-FINANCIAL ENTERPRISE					
PUBLIC UTILITIES					
SYNDICATE OF BANKS					
OTHER					

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Panel B: Borrower

PKGID	ORDER	BORROWERID	BORROWER	ABBR	COUNTRY	COUNTRYISO3	TYPE	PURPOSE	ISIC
198102099	1	B1916	ELECTRICITE DE FRANCE	FRANCE	FRA		PUBLIC NON-FINANCIAL ENTERPRISE	PUBLIC UTILITIES	D35

Panel C: Guarantor

PKGID	ORDER	GUARANTOR	ABBR
198102099	1	REPUBLIC OF FRANCE	

Panel D: Package

PKGID	LOANNUM	YEAR	MONTH	CURRENCY	CURRFULL	CURRISO	PKGAMT	PKGAMTUSD	REMARKS
198102099	81E5556	1981	4	\$	UNITED STATES DOLLAR	USD		1200	

Panel E: Facility

PKGID	FACID	CURRENCY	CURRFULL	CURRISO	FACAMT	FACAMTUSD	MATURITY	CREDITORTYPE	CREDITTYPENAME
198102099	1	\$	UNITED STATES DOLLAR	USD		1200	120	SYNDICATE OF BANKS	OTHER

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Panel F: Lender

PKGID	ORDER	LENDERID	LENDER	ROLE
198102099	1	L0046	AMSTERDAM-ROTTERDAM BANK NV	LEAD & CO-MANAGER
198102099	2	L0063	ARAB BANKING CORP	LEAD & CO-MANAGER

Panel G: Terms

PKGID	FACID	YSTART	MSTART	YEND	MEND	MINDEC	MAXDEC	AVG	UNIT	REFRATE
198102099	1	1	1	10	12	0.375	0.5	.413	%	LIBOR

Panel H: Fees

PKGID	TYPE	AMOUNT
198102099	C	0.125
198102099	O	0.2

Notes: Only relevant tables and columns are shown. Some lenders are omitted to save space. The identifiers for loan package, borrowers and lenders shown above may be different from the database due to updates to the database.

Table 2.12: Country Classification

Group	Countries
Industrial Countries	AUS, AUT, BEL, CAN, CHE, DEU, DNK, ESP, FIN, FRA, GBR, IRL, ISL, ITA, JPN, LUX, NLD, NOR, NZL, SWE, USA
Africa	BWA, CIV, CMR, COG, DZA, ETH, GAB, GHA, KEN, LBR, LSO, MAR, MDG, MRT, MUS, MWI, NER, NGA, SDN, SEN, SWZ, TUN, TZA, UGA, ZAF, ZAR, ZMB, ZWE
Asia	FJI, IDN, IND, KOR, LKA, MMR, MYS, PAK, PHL, PNG, SGP, THA
Europe	CYP, GRC, HUN, MLT, PRT, ROU, TUR, YUG
Middle East	BHR, EGY, JOR, SAU, YEM
Western Hemisphere	ANT, ARG, ATG, BHS, BOL, BRA, BRB, CHL, COL, CRI, DOM, ECU, GTM, GUY, HND, JAM, MEX, NIC, PAN, PER, PRY, SLV, TTO, URY, VEN

Notes: Country classification is based on IMF International Financial Statistics 1984.

Table 2.13: WBEC Loan Volumes of Top Lenders

Year	Lender	#Loan	#LoanSh	\$Loan	\$LoanSh
1973	Bank Of Tokyo	21	11.00	3.31	1.07
	Hambros Bank	20	17.33	0.74	0.64
	Citicorp	20	11.43	2.50	0.86
	Bank Of America	18	10.93	2.91	0.87
	First National Bank Of Boston	17	10.33	1.81	0.63
	Bankers Trust	17	9.25	1.39	0.46
	Loeb Rhoades & Co	15	10.50	0.39	0.25
	Credit Lyonnais	15	7.64	1.71	0.39
	Manufacturers Hanover	15	7.01	2.56	0.67
1974	First National Bank Of Chicago	14	6.92	1.06	0.31
	Citicorp	42	20.95	4.87	1.29
	Morgan Guaranty Trust	35	15.09	6.44	1.20
	Credit Lyonnais	33	13.90	3.49	0.72
	Bank Of America	31	10.59	4.76	1.01
	Orion Bank	27	17.81	1.99	0.90
	Manufacturers Hanover	27	12.02	3.79	0.93
	Credit Commercial De France	21	12.45	1.02	0.51
	Chase Manhattan	20	11.88	2.97	0.84
1975	Bankers Trust	20	11.88	2.16	0.51
	Banque Nationale De Paris	20	5.52	3.45	0.63
	Bank Of America	59	16.25	6.32	0.90
	Citicorp	54	14.82	6.18	0.87
	Chase Manhattan	49	13.97	5.35	0.81
	Manufacturers Hanover	35	9.96	4.93	0.74
	First National Bank Of Chicago	34	9.89	3.93	0.48
	Morgan Guaranty Trust	33	8.46	5.18	0.87
	Canadian Imperial Bank Of Commerce	30	6.00	3.21	0.45
1976	Westdeutsche Landesbank Girozentrale	29	6.37	4.22	0.50
	Toronto-Dominion Bank	26	3.83	4.08	0.43
	Chemical New York	25	4.90	3.56	0.41
	Citicorp	81	18.56	13.78	2.10
	Chase Manhattan	70	17.36	9.69	1.41
	Bank Of America	51	11.07	7.89	1.32
	Manufacturers Hanover	48	9.21	8.11	1.11
	Chemical New York	43	7.07	7.83	1.07
	Bankers Trust	42	7.41	7.10	0.94

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Year	Lender	#Loan	#LoanSh	\$Loan	\$LoanSh
1977	Citicorp	69	19.26	8.08	1.45
	Chase Manhattan	64	22.07	7.74	1.32
	Bank Of America	57	11.22	8.69	1.29
	Deutsche Bank	53	9.32	9.53	1.29
	Manufacturers Hanover	45	11.67	5.95	0.93
	Chemical New York	43	7.90	8.06	1.01
	Lloyds Bank	38	6.19	5.42	0.69
	Bank Of Tokyo	37	7.54	5.14	0.66
	Morgan Guaranty Trust	35	8.67	7.20	1.48
	Bank Of Montreal	34	6.88	6.05	0.81
1978	Chase Manhattan	102	28.05	18.56	3.40
	Citicorp	96	25.26	18.92	3.37
	Bank Of Tokyo	74	14.47	16.68	2.29
	Bank Of Montreal	61	11.98	10.48	1.52
	Bank Of America	60	16.11	12.37	1.85
	Manufacturers Hanover	57	15.56	12.71	2.41
	Bankers Trust	54	11.63	13.28	1.66
	National Westminster Bank	54	9.33	9.28	1.32
	Lloyds Bank	47	10.99	8.84	1.21
	Chemical New York	43	10.35	10.31	1.47
1979	Bank Of Montreal	83	16.41	15.28	2.50
	Citicorp	82	19.76	14.42	2.40
	Midland Bank	69	15.40	7.11	1.47
	Bank Of Tokyo	67	11.91	15.59	2.95
	Credit Lyonnais	67	11.36	10.58	1.54
	Lloyds Bank	60	16.99	11.29	1.71
	Bank Of America	59	23.29	7.55	1.87
	Chase Manhattan	59	20.23	8.40	1.81
	National Westminster Bank	53	13.50	7.14	1.28
	Canadian Imperial Bank Of Commerce	50	9.54	8.59	1.22
1980	Credit Lyonnais	112	21.53	14.23	1.93
	Chase Manhattan	97	27.79	14.61	2.39
	Lloyds Bank	82	14.57	13.63	1.76
	Citicorp	80	21.34	14.01	2.39
	Bank Of Montreal	75	13.01	15.93	2.15
	Midland Bank	73	13.97	7.01	1.00
	Bank Of America	69	16.97	12.52	2.04
	National Westminster Bank	66	16.89	8.41	1.86
	Barclays Bank	61	10.14	9.34	1.27
	Bank Of Tokyo	60	8.08	13.85	1.57

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Year	Lender	#Loan	#LoanSh	\$Loan	\$LoanSh
1981	Citicorp	47	10.50	6.95	1.02
	Bank Of Tokyo	44	7.30	9.64	1.10
	Chase Manhattan	39	8.60	6.67	1.30
	Arab Banking Corporation	39	5.49	8.64	1.11
	Manufacturers Hanover	35	6.74	3.97	0.54
	Credit Lyonnais	35	5.26	5.54	0.70
	Barclays Bank	33	5.27	7.17	0.85
	Lloyds Bank	30	5.70	3.64	0.52
	Midland Bank	30	5.65	3.24	0.44
	Gulf International Bank Bsc	28	4.19	3.83	0.46
	Bank Of Nova Scotia	28	3.59	5.40	0.62

EUROCURRENCY CREDITS BY BORROWING COUNTRY FIRST HALF 1981								
LOAN NUMBER, DATE BORROWER, (GUARANTOR) TYPE OF BORROWER, PURPOSE TYPE OF CREDITOR, CREDIT	AMOUNT IN MILLIONS (US\$ EQUIV)	INTEREST RATE	FEES	TERM (YR-MO)	LEAD & CO-MANAGERS	TOTAL BY BORROWING COUNTRY		
BRAZIL								
81E5517 04/--/81 CIA VALE DO RIO DOCE	US\$ 300.0	2.125		08-00	ARAB BANKING CORP BAILEYS TRUST INT. LTD BK OF TOKYO LTD CHASE MERCHANT BANKING GROUP CITICORP INT. GROUP			
PUBLIC NON-FINANCIAL ENTERPRISE NATURAL RESOURCES			0.375 (P1)		CIE LUXEMBOURGEOISE DE DRESDNER BK			
SYNDICATE OF BANKS			0.625 (P2)		INDUSTRIAL BANK OF JAPAN LTD			
TERM CREDIT		2.125 (WT)	0.875 (P3)		MORGAN GUARANTY TRUST CO (US)			
			1.125 (P4)		NAT. BK OF CANADA			
					PLUS EIGHT OTHERS			
81E5520 04/--/81 EMPRESAS NUCLEARES BRASILEIRAS SA (FEDERATIVE REPUBLIC OF BRAZIL)	US\$ 150.0	2.125		08-00	CIE LUXEMBOURGEOISE DE DRESDNER BK BK FUR GEMEINWIRTSCHAFT AG			
PUBLIC NON-FINANCIAL ENTERPRISE PUBLIC UTILITIES			1.500 (0)		BAYERISCHE LANDESBANK GIROZENTRALE			
SYNDICATE OF BANKS			0.375 (P1)		COMMERZBANK INT. SA			
TERM CREDIT		2.125 (WT)	0.500 (P2)		DEUTSCHE BANK DEUTSCHE FIN. LUXEMBOURG			
			0.625 (P3)		DO BANK INTERNATIONAL SA			
			0.750 (P4)		HYPOBANK INT. SA			
					WEST LB INT. SA			
					BC DO BRASIL SA			
					BAYERISCHE VEREINSBANK INT. SA			
81E5522 04/--/81 PETROLEO BRASILEIRO SA	US\$ 70.0	1.875	N.A.	08-00	BO DE PARIS ET DES PAYS-BAS			
PUBLIC NON-FINANCIAL ENTERPRISE PETROLEUM & NATURAL GAS					BO DE L'UNION EUROPEENNE SA			
SYNDICATE OF BANKS					ARAB BANKING CORP			
TERM CREDIT			1.875 (WT)					
OTHER FEES								
(C) = COMMITMENT FEE					PARTICIPATION FEES			
(M) = MANAGEMENT FEE					(P1) = 1ST LEVEL			
(O) = OTHER FEE					(P2) = 2ND LEVEL			
					(P3) = 3RD LEVEL			
					(P4) = 4TH LEVEL			

Figure 2.1: Sample Page of WBEC Document File

Notes: This figure shows a sample page of the document of World Bank Eurocurrency Credits published in “Borrowing in the International Markets”.

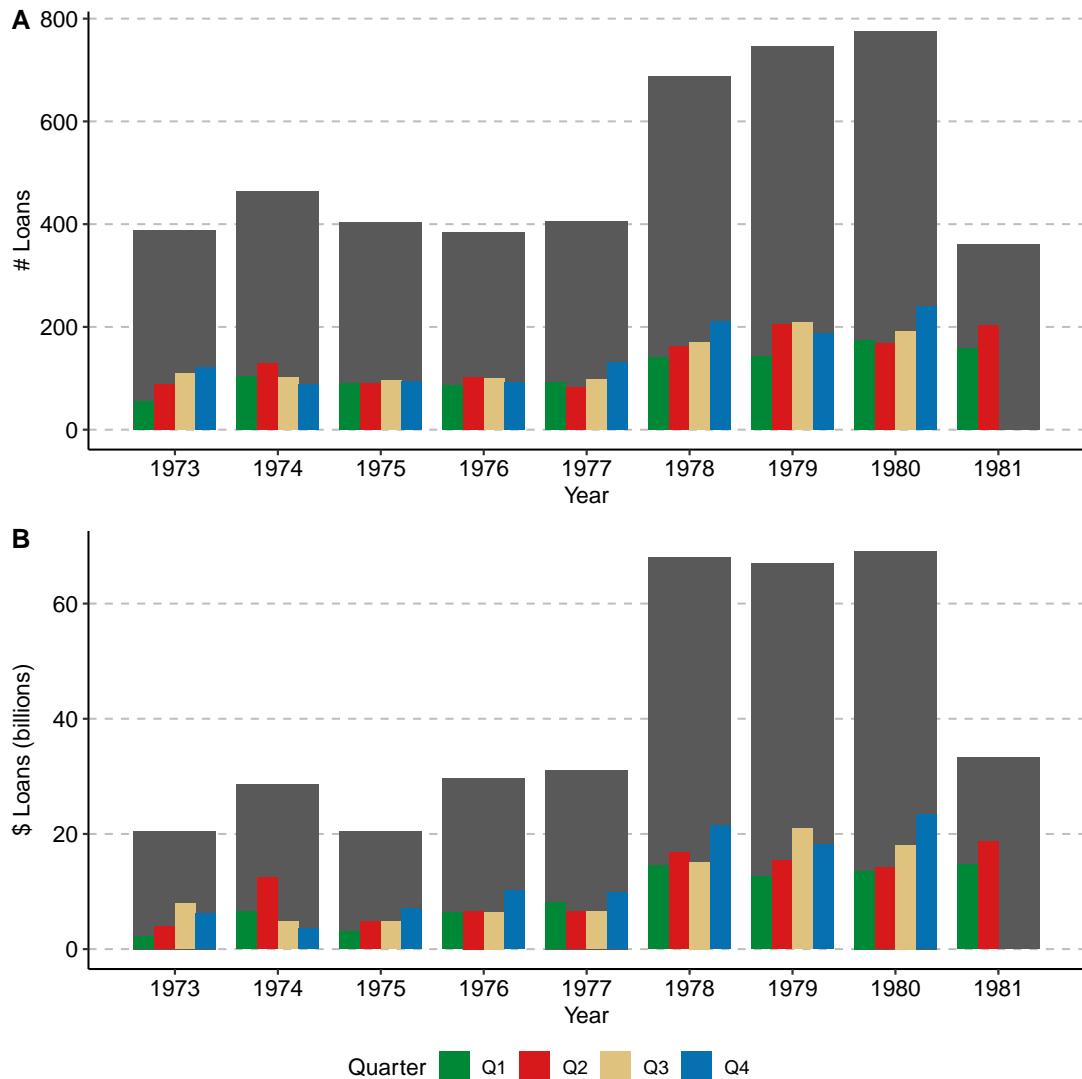


Figure 2.2: WBEC Aggregate Loan Volumes

Notes: This figure plots the aggregate loan volumes by year and quarter in the WBEC database. Note that the year 1981 only has data on the first two quarters. Panel A shows the number of loan packages. Panel B shows the amount of loans in billion dollars.

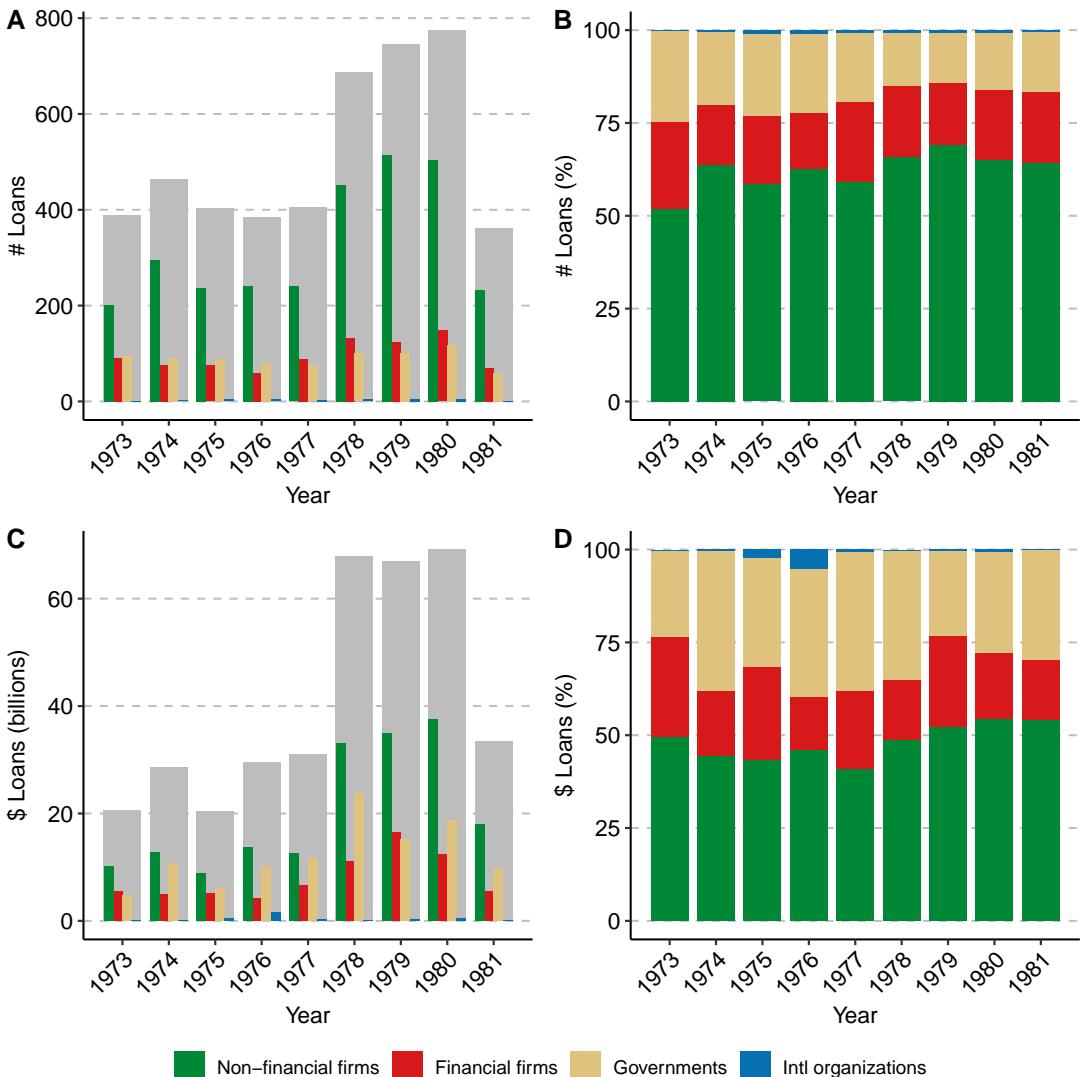


Figure 2.3: WBEC Loan Volumes by Sector

Notes: This figure plots the loan volumes by major sectors. Panels A and B plot the number of loan packages. Panels C and D plot the amount of loans in billion dollars. The grey bars in Panels A and C represent the total volumes.

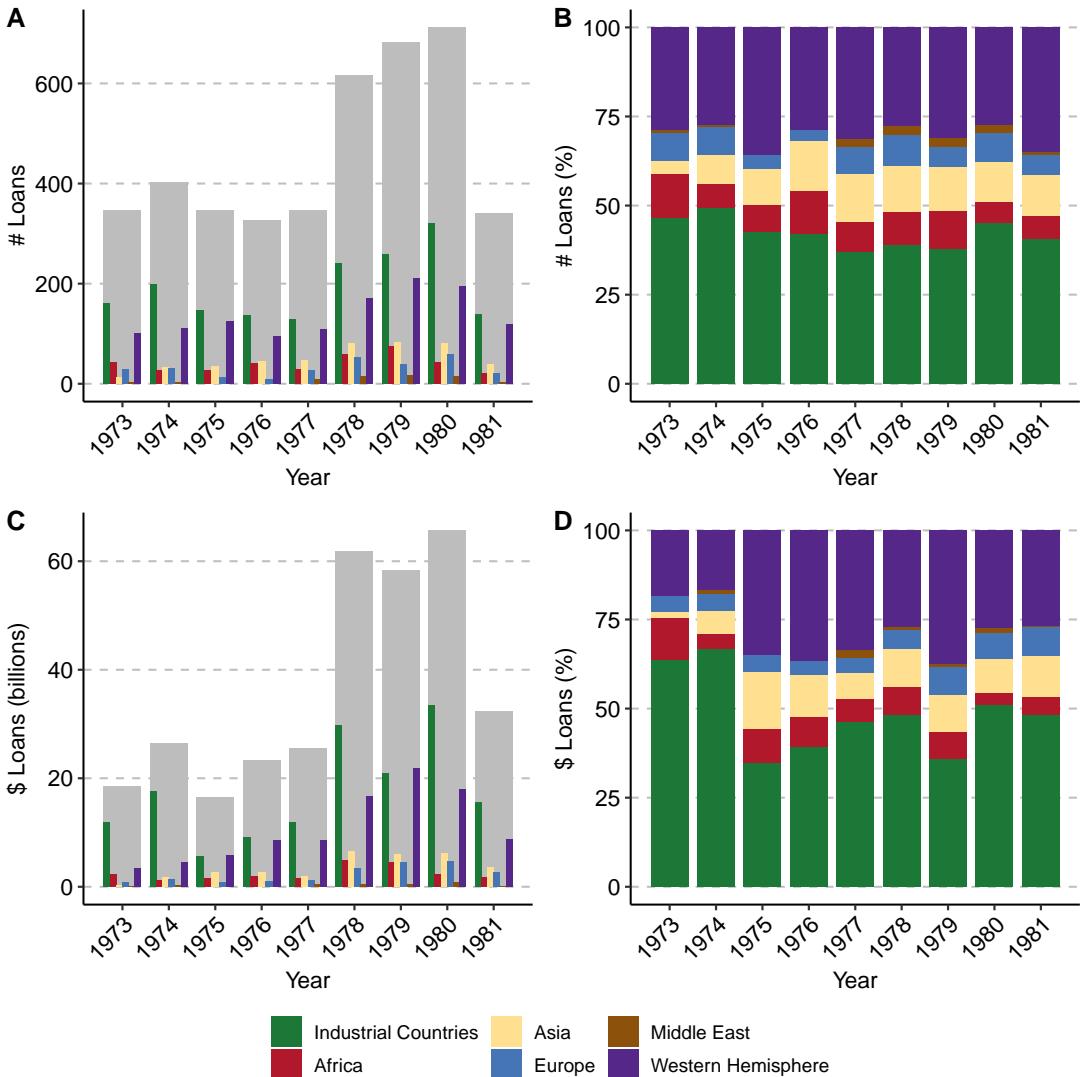


Figure 2.4: WBEC Loan Volumes by Country Groups

Notes: This figure plots the loan volumes by country groups. Panels A and B plot the number of loan packages. Panels C and D plot the amount of loans in billion dollars. The grey bars in Panels A and C represent the total volumes by countries in these groups.

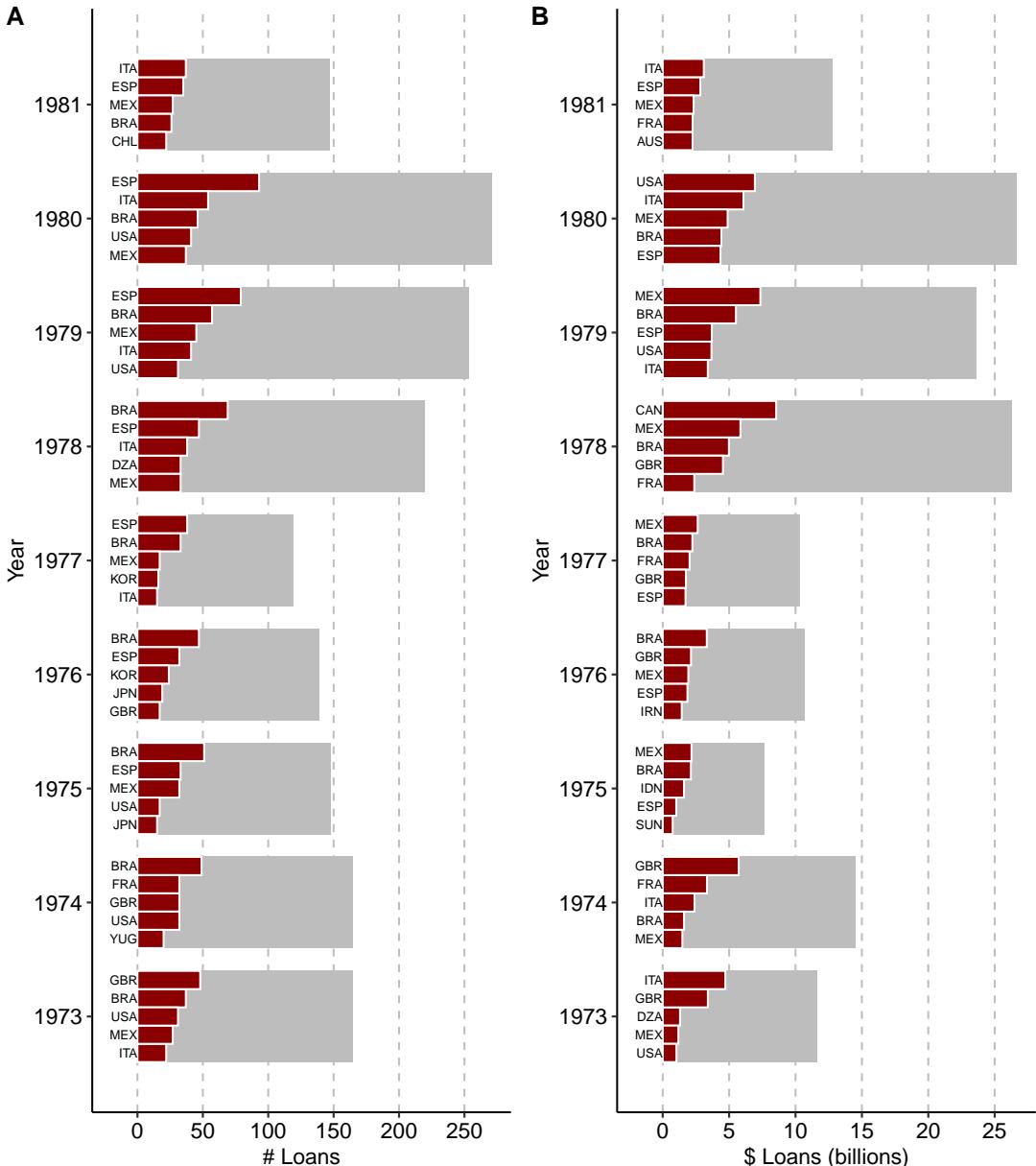


Figure 2.5: WBEC Loan Volumes of Top Borrowing Countries

Notes: This figure plots the loan volumes by top five borrowing countries in each year. Panel A shows the number of loan packages. Panel B shows the amount of loans in billion dollars. The grey bars represent the total volumes by these top countries.

3 Euromoney Syndicated Loans

3.1 Data Source

The Euromoney Syndicated Loans (EMSL) database tabulates data on (mostly) syndicated loans published monthly in the magazine Euromoney from January 1974 to April 1990. Hard copies of the magazine were obtained from the Princeton University Library. Figure 3.1 shows two sample pages of the magazine, one from January 1982 and the other from April 1990. The later years contain richer information on loan contracts than earlier years.

3.2 Database Structure

In this section, we describe the tabulation process and the database structure. The tabulation process follows the same process as for the World Bank Eurocurrency Credits database.

3.2.1 Tables and variables

We tabulate information about the loan contracts in six tables: Borrower, Guarantor, Package, Facility, Lender, Terms. A unique identifier PKGID is created for each loan package and can be used to link information about a loan across different tables. In the following, we will lay out the variable definitions in each table. Unless otherwise noted, the values for each variable are taken from the documents “as is.”

Borrower. Contains information about the borrower of each loan package. Table 3.1 presents variable definitions. Importantly, the assigned BORROWERID is compatible with the WBEC database, i.e., the same BORROWERID identifies the same borrower in both EMSL and WBEC.

Guarantor. Shows guarantor name if any is mentioned. Table 3.2 presents variable definitions.

Package. Contains information on the loan package. Unlike WBEC, which records the exact time of loan issuance, the recorded time (year-month) in EMSL is the time when the loan contract was published in the Euromoney magazine. A rough comparison of the overlapping period between EMSL and WBEC suggests

that the publication time is usually two months later than when a loan contract was actually signed. For example, if a loan in EMSL was published in April 1980, then it was likely to be signed in February 1980. Table 3.3 presents variable definitions.

Facility. Contains facility-level information for each loan package. Table 3.4 presents variable definitions.

Lender. Contains lender information for each loan. A loan package usually has multiple lenders. Table 3.5 presents variable definitions. Note that the variable LENDERID is compatible with WBEC database, i.e., the same LENDERID identifies the same lender in both databases.

Terms. Contains interest rate information for each loan. Table 3.6 presents variable definitions.

3.2.2 Examples of tabulation output

In this section, we provide two examples on how the loan contract information is tabulated.

The first example comes from a loan in January 1982.

- Panel A of Table 3.7 shows the loan contract information as published in the Euromoney magazine.
- **Borrower.** The borrower name “Trasmediterranean” is recorded in the Borrower Table as shown by Panel B. Note that the country information is missing from the publication. We manually searched for the borrower location or each entry to assign the country name. In this case, the borrower is a Spanish company, so we assigned “Spain” to variable COUNTRY and “ESP” to variable COUNTRYIS03.
- **Package.** The total package amount is 1,500 million denominated in Spanish peseta. The information is recorded in the Package Table as shown in Panel C. We converted the amount into US dollars using data on exchange rates from the BIS. Note that the year and month in the Package Table refer to the publication date, in this case January 1982.
- **Facility.** The package only has one facility, and the amount is thus equal to the package amount. The maturity is 8 years (or 96 months), which is

recorded in the Facility Table as shown in Panel D.

- **Lender.** The package has six lenders which are listed in the Lender Table as shown in Panel E.
- **Terms.** The interest rate is 11/16% over Mibor for the first year, and 2/4% over Mibor for the following seven years. This information is recorded in the Terms Table as shown by Panel F. The first row shows the interest rate for year 1, month 1 to year 1, month 12. The second row records the interest rate for the next seven years, or from year 2, month 1 to year 8, month 12.

The second example comes from a loan by a US borrower in November 1989.

- Panel A of Table 3.8 shows the loan contract information as published in Euromoney magazine.
- **Borrower.** The borrower name is recorded in the Borrower Table as shown in Panel B, together with the assigned country.
- **Package.** The loan package amount is \$152 million, which is recorded in the Package Table as shown in Panel C column PKGAMT. The currency is “\$” with the standardized ISO code “USD”. The year and month in the Package Table record the publication date, in this case November 1989.
- **Facility.** The loan has two tranches or facilities. The first facility is a \$92 million term loan with 5.5 years (or 66 months) to maturity. This information is recorded in the Facility Table, as shown by the first row of Panel D. The second facility is a \$60 million revolving loan with 3 years (or 36 months) to maturity. This information is recorded as in the second row of Panel D. Both facilities require bullet repayment, which is recorded in column REPAYMETHOD in the Facility Table.
- **Lender.** There are two lenders serving as arrangers for both facilities. This information is recorded in the Lender Table as shown by Panel E.
- **Terms.** Panel A also shows that the interest rates are different for these two facilities, and the borrower is given two choices of interest rates for each facility. The interest rate for the first facility is either at 2 3/4% over Libor or 1 3/4% over Prime. This information is recorded in Terms Table, as shown by the first two rows of Panel F. Variable CHOICE is used to dis-

tinguish different choices of interest rates. The time period in which this interest rate applies is from the 1st year 1st month to the 6th year 6th month, which covers the entire 5 1/2 years until maturity, as suggested by the information in Panel A. Similarly, the interest rate for second facility is either at 2 1/2% over Libor or 1 1/2% over Prime. This information is recorded as in the last two rows of Panel F.

3.3 Summary Statistics

In this section, we provide some descriptive statistics of the data, including aggregate loan volumes, as well as loan volumes by region, country and major lenders.

Figure 3.2 shows aggregate loan volumes in terms of the number of loan packages and the dollar amount of these loans by year and quarter from the EMSL database. The grey bars represent the total volume of the year, while the coloured bars represent volumes of each quarter. Panel A shows the number of loan packages, while Panel B shows the dollar amount of loans. Note that data in year 1990 is only available until April.

Figure 3.3 plots loan volumes by country groups. The majority of loans are borrowed by major developed countries and countries in Latin America and the Caribbean before the mid-1980s. Since 1984, the majority of loans were borrowed by developed countries.

Figure 3.4 shows the loan volumes for the top five borrowing countries in each year. The grey bars represent the total volumes by these countries. Panel A plots the number of loans while Panel B plots the dollar amount of loans.

Table 3.9 reports the loan volumes by the top lenders during 1978–1989. Note that there is no lender information before May 1977. Lenders are ranked by the total number of loans they are involved in, which are reported in column #Loan. The additional measures of loan volumes are: (1) the number of loans accounting for the number of lenders in a loan package with each lender equally sharing the loan (e.g., if a loan has four lenders, then each gets assigned a loan number of 1/4), reported in column #LoanSh; (2) the total amount of loans a lender is involved in (e.g. if a loan is \$100 million and has four lenders, then each is

assigned loan amount of \$100 million), reported in column \$Loan; (3) and the amount of loans accounting for the number of lenders in a loan package with each lender equally sharing the loan (e.g., if a loan is \$100 million and has four lenders, then each lender is assigned a loan amount of \$25 million), reported in column \$LoanSh.

Table 3.1: Variables in the EMSL Borrower Table

Variable	Type	Definition	Note
PKGID	Num	Identifier of the loan package	1
ORDER	Num	The order in which borrowers of a loan are listed in a loan package	2
BORROWERID	Char	Assigned borrower identifier	3
BORROWER	Char	Borrower name	
ABBR	Char	Abbreviation of the borrower name, if any	
COUNTRY	Char	Country of the borrower	4
COUNTRYISO3	Char	Three-letter ISO country code	5
ISIC	Char	3-digit international standard industry classification code	6

¹ This variable is manually created.

² This variable is manually created. The first borrower is assigned 1, the second 2, and so on. Typically, one loan package has a unique borrower.

³ This variable is manually created with the best efforts to identify the same borrower that may appear multiple times but in different names (e.g., due to different ways of abbreviation or typos). An auxiliary table BorrowerList is created to record unique borrowers with standardized names.

⁴ Country information is not available in the magazine in the early years from 1973 to September 1982. We extracted this information either from WBEC database, or through an internet search for borrower location.

⁵ This variable is manually created as a standardization of country name.

⁶ This variable is manually created through an internet search for borrower information.

Table 3.2: Variables in the EMSL Guarantor Table

Variable	Type	Definition	Note
PKGID	Num	Identifier of the loan package	1
FACID	Num	Identifier of the loan facilities within package	2
ORDER	Num	The order in which guarantors of a loan are listed within a facility	3
GUARANTOR	Char	Guarantor name	

¹ This variable is manually created.

² This variable is manually created. The first facility in the loan package is assigned 1, the second 2, and so on.

³ This variable is manually created. The first guarantor in the loan facility is assigned 1, the second 2, and so on.

Table 3.3: Variables in the EMSL Package Table

Variable	Type	Definition	Note
PKGID	Num	Identifier of the loan package	1
YEAR	Num	Year in which loan contract was published	
MONTH	Num	Month in which loan contract was published	
CURRENCY	Char	Currency in which loan amount is denominated	2
CURRISO	Char	Standardized currency ISO code	3
PKGAMT	Num	Loan amount in millions of the currency of denomination	
PKGAMTUSD	Num	Loan amount in millions of US dollar	4

¹ This variable is manually created.

² This variable is taken as is from the document, which often appear as a symbol, such as “US\$” or “DM”.

³ This variable is manually created to standardize the CURRENCY variable.

⁴ This variable is manually created to convert non-USD denominated loan amount to USD. Data on Exchange rates were obtained from BIS.

Table 3.4: Variables in the EMSL Facility Table

Variable	Type	Definition	Note
PKGID	Num	Identifier of the loan package	1
FACID	Char	Identifier of loan facility within package	2
CURRENCY	Char	Currency in which loan amount is denominated	
CURRISO	Char	Standardized currency ISO code	3
FACAMT	Num	Loan amount in millions of the currency of denomination	
FACAMTUSD	Num	Loan amount in millions of US dollar	4
MATURITY	Num	Maturity in months	
GRACE	Num	Grace period in months	
REPAYMETHOD	Char	Method of repayment: bullet repayment, annual instalments, semi-annual instalments, etc.	
REPAYNUM	Num	Number of repayments	
AVAIL	Num	Time of availability	
AVAILUNIT	Char	Unit of time of availability: day, week, month, year	

¹ This variable is manually created.

² This variable is manually created. The first facility in the loan package is assigned 1, the second 2, and so on.

³ This variable is manually created to standardize variable CURRENCY.

⁴ This variable is manually created to convert non-USD denominated loan amount to USD. Data on Exchange rates were obtained from BIS.

Table 3.5: Variables in the EMSL Lender Table

Variable	Type	Definition	Note
PKGID	Num	Identifier of the loan package	1
FACID	Num	Identifier of the loan facilities within a package	2
ORDER	Num	The order in which lenders are listed for a facility	3
LENDERID	Char	Identifier of lender	4
LENDER	Char	Lender name	
ABBR	Char	Abbreviation of the lender name, if any	
ROLE	Char	Role of the lender	2
SHARE	Num	Amount of loan contributed by the lender	

¹ This variable is manually created.

² This variable is manually created. The first facility in a loan package is assigned 1, the second 2, and so on. If a loan package has multiple facilities but all facilities share the same syndicate of lenders, then, to save space, the FACID is assigned 0 for this loan package, and we record these lenders only once.

³ This variable is manually created. The first lender is assigned 1, the second 2, and so on.

⁴ This variable is manually created with the best efforts to identify the same lender which may appear multiple times in different names (e.g., due to different ways of abbreviation or typos). An auxiliary table LenderList is created to record unique lenders with standardized names.

Table 3.6: Variables in the EMSL Terms Table

Variable	Type	Definition	Note
PKGID	Num	Identifier of the loan package	1
FACID	Num	Identifier of the loan facility within package	2
CHOICE	Num	Identifier of the choices of interest rates within facility	3
YSTART	Num	The first year in which this interest rate is applied	
MSTART	Num	The first month in which this interest rate is applied	
YEND	Num	The last year in which this interest rate is applied	
MEND	Num	The last month in which this interest rate is applied	
MINDECM	Num	The minimum interest rate in decimal points	
MAXDECM	Num	The maximum interest rate in decimal points	
MININTG	Num	The integer part of the minimum interest rate	
MINNUMR	Num	The numerator part of the minimum interest rate	
MINDENM	Num	The denominator part of the minimum interest rate	
MAXINTG	Num	The integer part of the maximum interest rate	
MAXNUMR	Num	The numerator part of the maximum interest rate	
MAXDENM	Num	The denominator part of the maximum interest rate	
UNIT	Num	The unit of the interest rate (bp or %)	
REFRATE	Num	Reference rate	

¹ This variable is manually created.

² This variable is manually created. The first facility in the loan package is assigned 1, the second 2, and so on.

³ This variable is manually created. Sometimes borrower is given multiple choices of interest rates for a loan facility. This variable is used to distinguish these choices. The first listed is assigned 1, the second 2, and so on.

Table 3.7: Tabulation of EMSL Loan Contract: Example 1

Panel A: Excerpt from Euromoney magazine

Borrower: Trasmediterranean	Amount in millions	Interest rate margins	Term (years)
	Spanish peseta 1,500	$\frac{11}{16}$ $\frac{3}{4}$	1 7 (above Mibor)

Lead management group: Midland Bank (Spain); Banco de Financiacion Industrial; Banco de Finanzas; Caja de Ahorros de Galicia; Caja Postal; Banco de Progreso

Panel B: Borrower

PKGID	ORDER	BORROWERID	BORROWER	ABBR	COUNTRY	COUNTRYISO3
198201109	1	B5607	TRASMEDITERRANEAN		SPAIN	ESP

Panel C: Package

PKGID	YEAR	MONTH	CURRENCY	CURRISO	PKGAMT	PKGAMTUSD
198201109	1982	1	SPANISH PESETA	ESP	1500	15.3

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Panel D: Facility

PKGID	FACID	CURRENCY	CURRISO	FACAMT	FACAMTUSD	MATURITY
198201109	1	SPANISH PESETA	ESP	1500	15.3	96

Panel E: Lender

PKGID	FACID	ORDER	LENDERID	LENDER	ROLE
198201109	1	1	L1233	MIDLAND BANK (SPAIN)	LEAD MANAGEMENT GROUP
198201109	1	2	L1214	BANCO DE FINANCIACION INDUSTRIAL	LEAD MANAGEMENT GROUP
198201109	1	3	L0200	BANCO DE FINANZAS	LEAD MANAGEMENT GROUP
198201109	1	4	L0538	CAJA DE AHORROS DE GALICIA	LEAD MANAGEMENT GROUP
198201109	1	5	L0567	CAJA POSTAL	LEAD MANAGEMENT GROUP
198201109	1	6	L0209	BANCO DE PROGRESO	LEAD MANAGEMENT GROUP

Panel F: Terms

PKGID	FACID	CHOICE	YSTART	MSTART	YEND	MEND	MININT	MINNUMR	MINDENM	UNIT	REFRATE
198201109	1	1	1	1	1	12	0	11	16	%	MIBOR
198201109	1	1	2	1	8	12	0	3	4	%	MIBOR

Notes: Only relevant tables and columns are shown. The identifiers for loan package, borrowers and lenders shown above may be different from the database due to updates.

Table 3.8: Tabulation of EMSL Loan Contract: Example 2

*Panel A: Excerpt from Euromoney magazine***Borrower:** Koppers Industries — \$152m

Tranche (1) \$92m — term loan

Tranche (2) \$60m — revolving credit

Terms: (1) 5 1/2 years at 2 3/4% over Libor or 1 3/4% over Prime

(2) 3 years at 2 1/2% over Libor or 1 1/2% over Prime

Bullet repayment

Arrangers: Chase Manhattan, Mellon Bank*Panel B: Borrower*

PKGID	ORDER	BORROWERID	BORROWER	ABBR	COUNTRY	COUNTRYISO3
198911099	1	B3282	KOPPERS INDUSTRIES		UNITED STATES	USA

Panel C: Package

PKGID	YEAR	MONTH	CURRENCY	CURRISO	PKGAMT	PKGAMTUSD
198911099	1989	11	\$	USD	152	152

Panel D: Facility

PKGID	FACID	CURRENCY	CURRISO	FACAMT	FACAMTUSD	TYPE	MATURITY	REPAYMETHOD
198911099	1	\$	USD	92	92	TERM LOAN	66	BULLET REPAYMENT
198911099	1	\$	USD	60	60	REVOLVING CREDIT	36	BULLET REPAYMENT

Panel E: Lender

PKGID	FACID	ORDER	LENDERID	LENDER	ROLE
198911099	1	1	L0620	CHASE MANHATTAN	ARRANGER
198911099	1	2	L1214	MELLON BANK	ARRANGER
198911099	2	1	L0620	CHASE MANHATTAN	ARRANGER
198911099	2	2	L1214	MELLON BANK	ARRANGER

Panel F: Terms

PKGID	FACID	CHOICE	YSTART	MSTART	YEND	MEND	MININT	MINNUMR	MINDENM	UNIT	REFRATE
198911099	1	1	1	1	6	6	2	3	4	%	LIBOR
198911099	1	2	1	1	6	6	1	3	4	%	PRIME
198911099	2	1	1	1	3	12	2	1	2	%	LIBOR
198911099	2	2	1	1	3	12	1	1	2	%	PRIME

Notes: Only relevant tables and columns are shown. The identifiers for loan package, borrowers and lenders shown above may be different from the database due to updates.

Table 3.9: EMSL Loan Volumes of Top Lenders

Year	Lender	#Loan	#LoanSh	\$Loan	\$LoanSh
1978	Chase Manhattan	76	37.84	18.33	4.72
	Citicorp	71	28.55	18.96	3.88
	Bank Of America	53	23.64	13.44	2.52
	Manufacturers Hanover	45	13.53	15.33	3.02
	Bank Of Tokyo	42	11.25	14.45	1.33
	Lloyds Bank	40	15.01	11.72	1.34
	Westdeutsche Landesbank Girozentrale	35	14.22	8.26	1.75
	Chemical New York	35	9.52	11.92	1.09
	Bank Of Montreal	35	8.75	10.30	1.24
	Morgan Guaranty Trust	31	9.79	10.39	2.52
1979	Chase Manhattan	52	30.18	6.41	2.60
	Citicorp	39	22.72	6.82	3.06
	Bank Of Montreal	36	20.15	4.24	2.03
	Bank Of America	34	17.34	5.25	2.04
	Manufacturers Hanover	29	15.95	5.43	1.83
	Bank Of Tokyo	27	14.89	6.50	3.53
	Long-Term Credit Bank Of Japan	26	11.17	2.98	0.92
	Lloyds Bank	25	12.48	5.64	1.70
	Bankers Trust	24	14.63	2.96	1.30
	Midland Bank	23	9.05	3.74	0.98
	Credit Lyonnais	23	8.94	5.43	1.90
	Chase Manhattan	79	36.93	12.49	3.11
1980	Citicorp	74	33.32	12.34	2.86
	Credit Lyonnais	74	18.21	14.77	2.94
	Bank Of America	59	25.71	9.59	2.09
	Midland Bank	46	12.53	5.79	1.04
	Bank Of Montreal	45	9.56	10.35	1.60
	Lloyds Bank	43	9.92	9.19	1.51
	National Westminster Bank	42	17.43	8.90	2.12
	Royal Bank Of Canada	36	12.97	6.09	1.14
	Bank Of Tokyo	35	7.20	9.28	0.98
	Chase Manhattan	111	37.76	47.35	20.60
1981	Manufacturers Hanover	103	25.41	37.84	5.50
	Lloyds Bank	77	25.01	11.23	2.05
	Midland Bank	71	21.13	8.50	1.53
	Credit Lyonnais	71	15.53	11.66	1.75
	National Westminster Bank	69	20.95	19.69	4.58
	Bank Of Tokyo	68	16.09	14.95	1.77
	Barclays Bank	64	11.53	16.14	1.95
	Bank Of America	63	14.71	26.66	6.90

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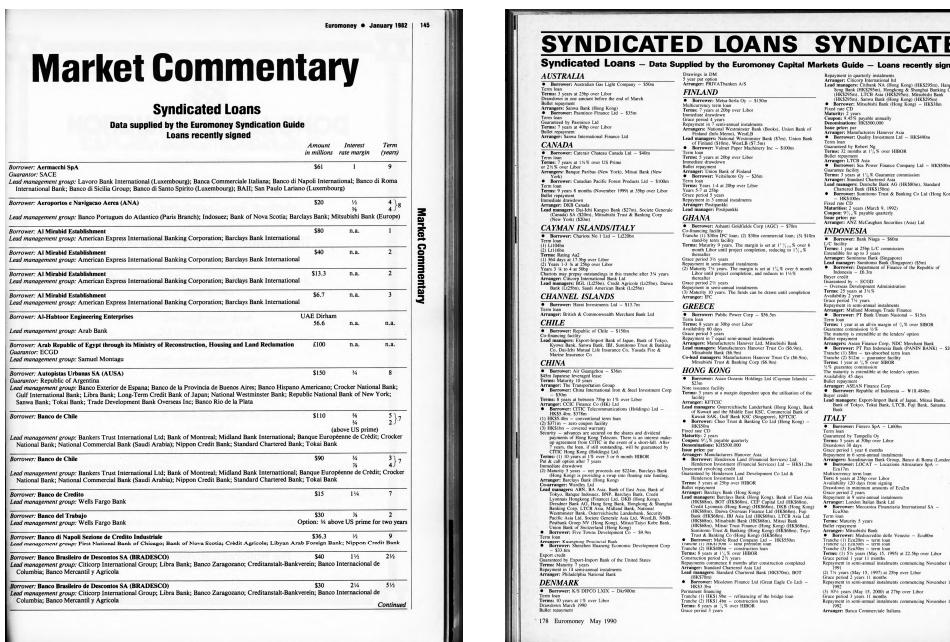
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Year	Lender	#Loan	#LoanSh	\$Loan	\$LoanSh
1982	Bank Of Tokyo	136	33.54	31.62	3.49
	Citicorp	107	34.77	46.61	9.54
	Bank Of America	95	31.14	35.36	5.06
	Chase Manhattan	94	25.71	41.86	4.31
	National Westminster Bank	93	22.43	34.54	2.60
	Lloyds Bank	81	25.24	16.36	2.50
	Fuji Bank Ltd	74	14.16	22.08	1.57
	Manufacturers Hanover	73	14.04	34.74	2.64
	Midland Bank	72	17.39	21.72	1.58
	Sumitomo Bank	70	13.09	19.34	1.57
1983	Bank Of Tokyo	117	26.75	44.95	3.19
	Fuji Bank Ltd	76	20.80	18.52	1.25
	Chase Manhattan	74	13.48	42.18	2.84
	Lloyds Bank	72	15.02	17.28	1.52
	Sumitomo Bank	64	8.62	27.13	1.29
	Citicorp	63	17.92	38.79	2.99
	Mitsubishi Bank	60	10.60	28.47	1.39
	National Westminster Bank	57	18.01	19.77	3.70
	Arab Banking Corporation	56	12.22	26.63	1.31
	Industrial Bank Of Japan	55	16.81	25.53	1.77
	Sanwa Bank	55	9.62	14.61	0.93
1984	Citicorp	81	36.47	35.79	11.15
	Bank Of Tokyo	73	17.54	28.51	3.52
	Chase Manhattan	71	23.50	41.87	18.04
	Lloyds Bank	70	30.17	18.56	1.86
	Manufacturers Hanover	70	21.35	25.90	5.08
	Industrial Bank Of Japan	68	19.00	22.15	1.86
	Fuji Bank Ltd	61	9.89	15.22	1.09
	Mitsubishi Bank	57	11.23	14.70	1.02
	Banque De Paris Et Des Pays Bas	56	19.97	11.48	2.96
	Sanwa Bank	55	13.27	12.96	0.80
1985	Citicorp	119	33.81	85.46	34.07
	Bank Of Tokyo	115	15.35	71.29	4.22
	Industrial Bank Of Japan	114	10.37	58.59	2.36
	Banque Nationale De Paris	97	7.88	58.45	2.30
	Sumitomo Bank	90	9.39	58.30	1.80
	Long-Term Credit Bank Of Japan	87	12.55	45.34	1.57
	Sanwa Bank	85	9.17	37.65	0.95
	National Westminster Bank	78	14.12	39.54	1.43
	Chase Manhattan	76	23.91	45.32	10.86
	Banque De Paris Et Des Pays Bas	76	8.08	28.17	1.02

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Year	Lender	#Loan	#LoanSh	\$Loan	\$LoanSh
1986	Citicorp	135	64.88	59.37	19.70
	Chase Manhattan	99	38.73	38.44	5.95
	Bank Of Tokyo	95	18.00	45.05	2.56
	Mitsubishi Bank	90	21.32	52.58	3.77
	Industrial Bank Of Japan	90	12.61	58.86	5.06
	Morgan Guaranty Trust	78	33.61	42.00	12.21
	Barclays Bank	78	20.88	39.09	6.27
	Credit Lyonnais	75	9.90	48.03	1.60
	Banque Nationale De Paris	75	7.89	52.63	3.85
	Dai-Ichi Kangyo Bank	72	8.61	38.52	1.39
1987	Citicorp	121	73.84	122.07	48.56
	Morgan Guaranty Trust	100	59.54	71.24	28.95
	Chase Manhattan	91	43.89	33.91	7.23
	Industrial Bank Of Japan	85	27.32	30.54	3.21
	Barclays Bank	79	32.37	40.41	4.45
	Mitsubishi Bank	78	30.83	33.80	5.16
	S.g. Warburg & Co	67	41.88	20.18	8.64
	Credit Lyonnais	66	9.94	36.18	2.29
	Banque Nationale De Paris	65	13.43	34.57	2.27
	Bank Of America	63	38.01	33.83	9.09
1988	Citicorp	84	69.21	47.21	20.59
	Barclays Bank	80	61.19	17.08	9.93
	Chase Manhattan	78	63.03	18.59	10.04
	Credit Suisse First Boston	58	47.74	28.13	13.86
	Morgan Guaranty Trust	49	35.47	39.77	21.14
	Swiss Bank Corp	48	35.95	24.40	14.95
	National Westminster Bank	46	31.17	34.63	11.07
	Merrill Lynch	44	36.81	8.06	6.74
	S.g. Warburg & Co	44	36.02	8.58	5.72
	Manufacturers Hanover	43	32.16	38.03	8.78
1989	Chase Manhattan	87	60.29	77.70	14.35
	Barclays Bank	71	36.60	84.63	12.37
	National Westminster Bank	56	21.55	80.56	5.55
	Dai-Ichi Kangyo Bank	55	22.94	28.89	3.27
	Industrial Bank Of Japan	50	18.40	42.21	3.36
	Citicorp	49	30.70	79.13	28.99
	Sumitomo Bank	49	22.88	45.87	3.59
	Sanwa Bank	44	13.97	44.79	2.71
	Mitsubishi Bank	44	10.70	50.33	3.68
	Bank Of America	43	27.59	52.26	10.72



January 1982 April 1994

Figure 3.1: Sample Pages of Euromoney Magazines

Notes: This figure shows two sample pages of the Euromoney magazines that publish
listings of the top 1000 companies.

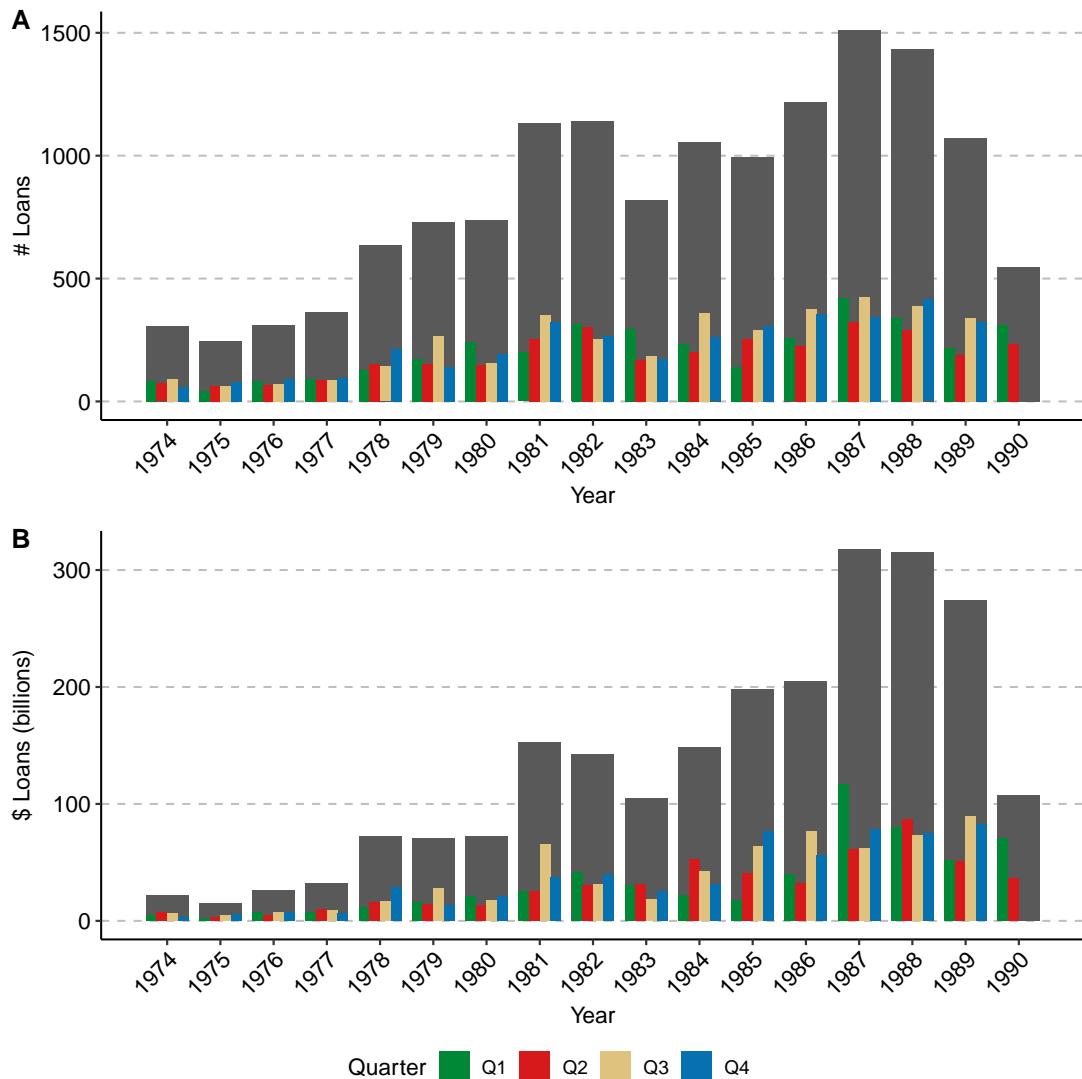


Figure 3.2: EMSL Aggregate Loan Volumes

Notes: This figure plots the aggregate loan volumes by year and quarter in the EMSL database. Note that the year 1981 only has data on the first two quarters. Panel A shows the number of loan packages. Panel B shows the amount of loans in billion dollars.

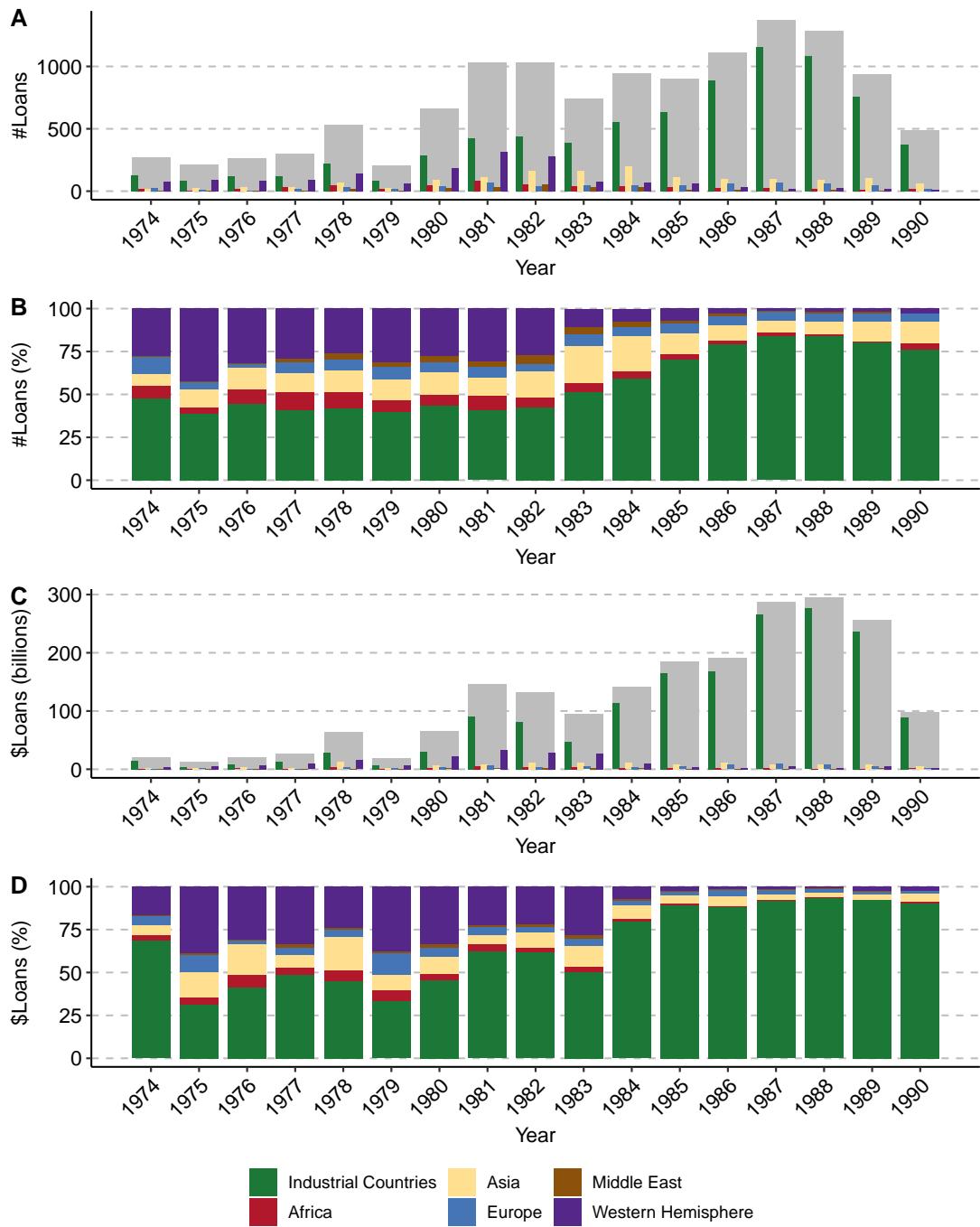


Figure 3.3: EMSL Loan Volumes by Country Groups

Notes: This figure plots the loan volumes by country groups. Panels A and B plot the number of loan packages. Panels C and D plot the amount of loans in billion dollars. The grey bars in Panels A and C represent the total volumes by countries in these groups.

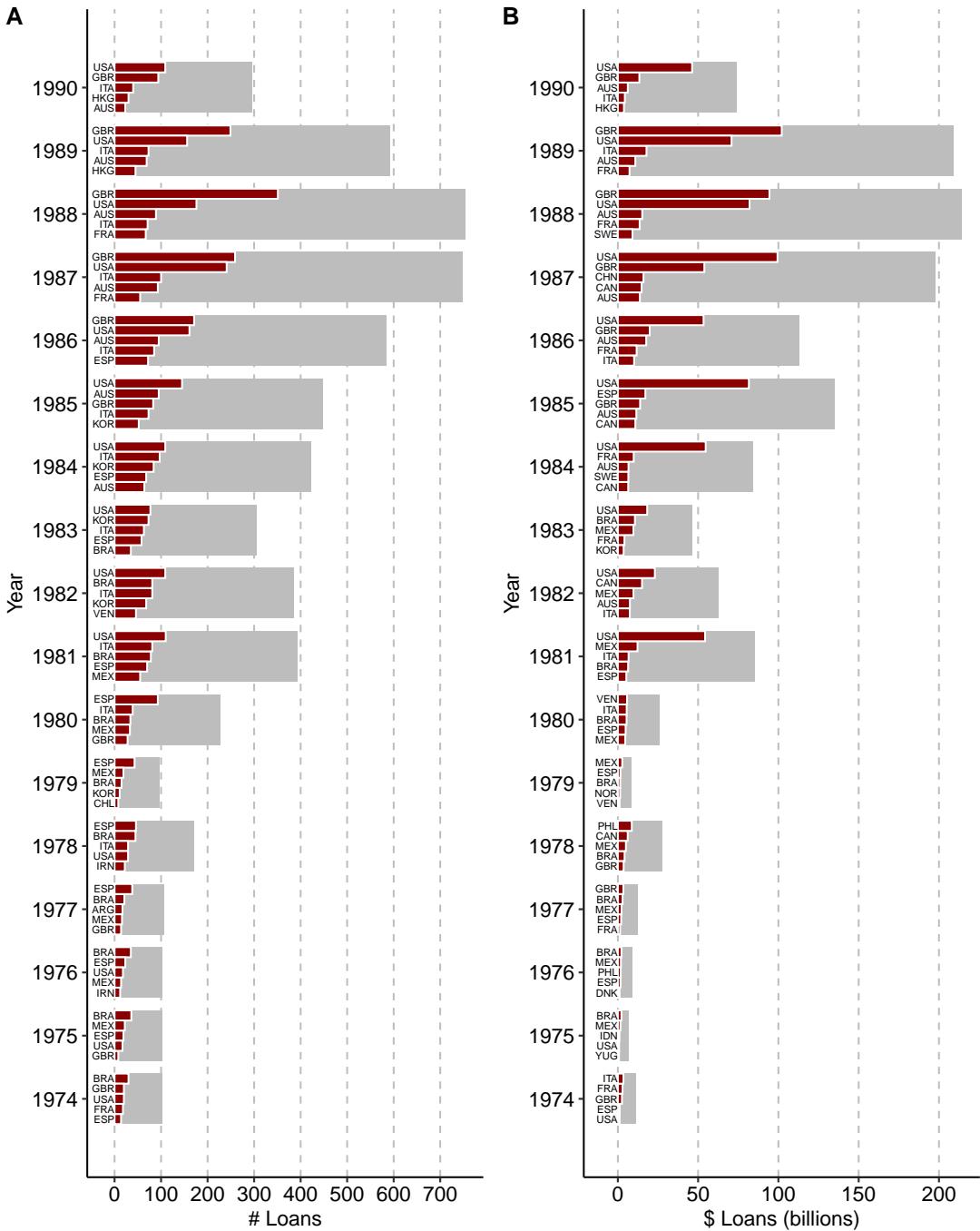


Figure 3.4: EMSL Loan Volumes of Top Borrowing Countries

Notes: This figure plots the loan volumes by top five borrowing countries in each year. Panel A shows the number of loan packages. Panel B shows the amount of loans in billion dollars. The grey bars represent the total volumes by these top countries.