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# Portfolio Management in International Syndicated Lending

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## ABSTRACT

This article is **aimed** at presenting a wholesome approach to the management of a syndicated loan portfolio. **Methods** utilized include the following: (i) *portfolio analysis* – calculating the parameters of a syndicated loan portfolio (main, liquidity, diversification, and commercial parameters); (ii) *measuring completion of the Key Performance Indicators (KPIs)* – comparing the actual values of the parameters of the syndicated loan portfolio to the target values of the KPIs and making the required managerial decisions; (iii) *portfolio management* – using the various syndicated loan market techniques with which a portfolio can be managed to achieve the completion of the KPIs (actively, passively, and via restructurings). Active syndicated loan portfolio management includes the execution of transactions in both primary and secondary syndicated loan markets. Cases of passive syndicated loans management relate to repayments of the syndicated loans in the portfolio: voluntary full or partial repayments based on the decisions of the borrowers; mandatory repayments when the borrowers have to fully or partially repay the syndicated loans based on the decisions of the lenders; scheduled repayment in accordance with the repayment schedules of the syndicated loans. The portfolio can also be affected by restructurings, when the lenders agree to change a number of major terms and conditions of the syndicated loans due to the circumstances of the borrowers. In order to assess the **results** of the syndicated loan portfolio management, a managerial dashboard is built, an important accounting tool allowing for decision-making based on the comparison of the actual values of the parameters of the syndicated loan portfolio to the target values of the KPIs. An important issue in syndicated loan portfolio management is the monitoring of compliance of the borrowers with financial covenants: (i) the ratio of the Net Debt to EBITDA (earnings before interest, taxes, depreciation and amortization); (ii) the ratio of Net Interest Payments to EBITDA. In cases when the financial covenants or other terms and conditions of syndicated loans are violated, the borrowers can request the lenders with either waiver requests (for “one-off” issues) or amendment requests (for permanent changes). The process of handling waiver and amendment requests, including the involved parties, documents and timelines is reviewed. The **main conclusion** involves combining of syndicated loan portfolio management results, financial covenant monitoring, and working on waiver and amendment requests in order to create the executive report, as well as the formalization of the general scheme for managing a portfolio of syndicated loans.

**Keywords:** syndicated loans; portfolio management; investment banking; international capital markets; key performance indicators; managerial accounting; financial covenants

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## ОРИГИНАЛЬНАЯ СТАТЬЯ

# Портфельный менеджмент в международном синдицированном кредитовании

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## АННОТАЦИЯ

**Целью** данного исследования является разработка и представление целостного подхода к управлению портфелем синдицированных кредитов. **Методы:** (i) *портфельный анализ* – расчет параметров портфеля

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синдицированных кредитов (основные параметры, параметры ликвидности и диверсификации, коммерческие параметры); (ii) *измерение достижения ключевых показателей эффективности («КПЭ»)* – сравнение текущих параметров портфеля синдицированных кредитов с целевыми КПЭ для принятия управленческих решений; (iii) *управление портфелем* – использование инструментария рынка синдицированного кредитования для достижения КПЭ (активные и пассивные инструменты, реструктуризация). К активным инструментам рынка относятся сделки на первичном и вторичном рынках синдицированного кредитования. Пассивные инструменты включают случаи полного или частичного погашения задолженности по синдицированным кредитам: добровольное погашение по решению заемщика; обязательное погашение по решению кредиторов; плановое погашение в соответствии с графиком амортизации синдицированного кредита. На портфель также оказывают влияние реструктуризации входящих в него кредитов, когда с согласия кредиторов меняются основные условия сделки. **Результаты** исследования заключаются в построении управленческого дашборда (визуальной информационной панели), важного инструмента управленческого учета для оценки текущего состояния портфеля и принятия соответствующих решений для достижения КПЭ. Также в статье рассматриваются вопросы мониторинга выполнения финансовых ковенант по входящим в портфель синдицированным кредитам: (i) отношение чистого долга к показателю EBITD (аналитический показатель, равный объему прибыли до вычета расходов по выплате процентов, налогов, износа и начисленной амортизации); (ii) отношение чистых процентных платежей к показателю EBITDA. При нарушении пороговых значений финансовых ковенант или других условий синдицированного кредита заемщики обращаются к кредиторам с запросами либо на разовое согласие с данными нарушениями (*waiver requests*), либо на постоянное изменение соответствующих условий сделки (*amendment requests*). В статье описаны процессы работы над данными запросами, а также роли и функции вовлеченных сторон. В **заключение** представлены итоговый отчет по портфелю синдицированных кредитов, который интегрирует результаты анализа и управления портфелем, мониторинга финансовых ковенант и работы над запросами заемщика, а также общая схема портфельного менеджмента в синдицированном кредитовании. **Ключевые слова:** синдицированные кредиты; портфельный менеджмент; инвестиционная деятельность банков; международные рынки капитала; ключевые показатели эффективности; управленческий учет; финансовые ковенанты

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## Introduction

This article continues a series of papers by the author dedicated to the syndicated loan market (Tarasov [1–3]). A syndicated loan is provided to the borrower by a syndicate of lenders. It is structured and arranged by a number of coordinating banks and is syndicated in the *primary* loan market to financial institutions, which include commercial and investment banks as well as institutional investors. Lenders can also trade participation in the *secondary* syndicated loan, sharing the risks and rewards of syndicated loans among a wide investor base, including asset managers, hedge funds and insurance companies. The set of legal documents for syndicated loan transactions are prepared by reputable legal firms based on templates developed by market associations (such as the Loan Market Association and the Loan Syndications and Trading Association<sup>1</sup>). The main document of a

syndicated loan is the facility agreement, which includes all terms and conditions of the transaction. The flows of funds and information between the borrower and lenders are channeled via the facility agent (a bank that executes its duties in accordance with the facility agreement).

The aim of this article is to develop a framework for banks and investors to work with a portfolio of syndicated loans. The objectives include the development of methods for: (i) analyzing the portfolio (by calculating the parameters of the portfolio and building a managerial dashboard where these parameters are compared to the Key Performance Indicators (“KPIs”)); (ii) managing the portfolio (by executing transactions in the primary and secondary syndicated loan markets, dealing with repayments and restructurings); (iii) monitoring the portfolio (by calculating the financial covenants and working on waiver and amendment requests).

The article is arranged in three sections. In Section 1, we present a framework for analyzing

<sup>1</sup> For additional information regarding the LMA and the LSTA, please refer to: [lma.eu.com](http://lma.eu.com), [lsta.org](http://lsta.org).



a portfolio of syndicated loans, including the calculation of key parameters to build a managerial dashboard. In Section 2, we consider the various techniques of managing a portfolio: active, passive, and via restructurings. Active management includes the execution of transactions in both the primary and secondary syndicated loan markets. Cases of passive management relate to prepayments: voluntary prepayments based on the decisions of the borrowers and mandatory prepayments when the borrowers have to prepay the loans based on the decisions of the lenders, both scenarios being described in the relevant clauses of the facility agreements. The portfolio can also be affected by restructurings, when the lenders agree to change a number of major terms and conditions due to the circumstances of the borrower. Following these activities, the “new” portfolio can be analyzed at the end of the reporting period. In Section 3, we present an algorithm for monitoring a syndicated loan portfolio based on compliance with the financial covenants; this is done for each loan as per the process set out in each facility agreement, as well as for the portfolio as a whole. In conclusion, we combine portfolio management results and financial covenant monitoring to create the portfolio report, as well as the formalization of the general scheme for managing a portfolio of syndicated loans.

### Literature overview

There are a number of major treatments of the global syndicated loan market: Dennis, Mulineaux [4], Fight [5], Altunbas et al. [6], Shutter [7], Shaiman, Marsh [8]. Since the syndicated loan market is a part of the broader capital markets, it is also considered in more general studies, including those relating to debt and structured finance (Altunbas et al. [9], Rhodes [10], Caselli, Gatti [11]), leveraged markets (Maxwell, Shenkman [12], Strumeyer, Swammy [13]), and investment banking (Davis [14], Iannotta [15], Liaw [16], Stowell [17]). Due to the importance of legal aspects, we must note the following specialized works: Ellinger et al. [18], Ryan [19], Wright [20], Bellucci, McCluskey [21], Campbell, Weaver [22]. Special attention should be granted to the books of the Loan Market Association (“LMA”) that duly reflect the current topics of fundamental importance to the syn-

dicated loan market Slocombe, Voisey [23–26]. The various issues relating to the management of a loan portfolio have been the subject of research by Amenc, Le Sourd [27], Gregoriou, Hoppe [28], Marston [29], Francis, Kim [30]. The latest impacts on the syndicated loan market of the COVID-19 pandemic and the trends dominating the market are assessed in Hasan [31] and Saharti [32].

The Russian syndicated loan market in recent years can be characterized as being in the phase of developing the local infrastructure and instruments [3]. It can be said that some of the most notable market events were related to legislation. The Federal Law dated 31.12.2017 “On Syndicated Credit (Loan)...”<sup>2</sup> has provided an important impetus for the Russian loan market, including defining loan market terms and streamlining legal processes, expanding the availability of funding for borrowers, providing for the participation in the market of institutional investors. The Federal Law dated 22.12.2020 “On amendments...”<sup>3</sup> changed and further expanded this law by covering such important issues as funded sub-participation deals, optimization of procedures relating to loan security, and the actions of the lenders and the facility agent in cases involving syndicated loans in bankruptcy proceedings. An important feature of the market is the availability of Russian-law documentation templates developed by the Association of Banks of Russia<sup>4</sup> (“ABR”). These documents are used for “local” deals, mainly bridge loans and project finance facilities, denominated in RUB and provided by Russian banks and development institutions. The methods presented in this article for working with the syndicated loan portfolio will have an important application with the Russian syndicated loan market having further developed, and lenders and investors will be focused not only

<sup>2</sup> Federal Law dated 31.12.2017 No. 486-FZ “On Syndicated Credit (Loan) and Amendments to the Legislative Acts of the Russian Federation”.

<sup>3</sup> Federal Law dated 22.12.2020 No. 447-FZ “On Amendments to the Federal Law “On Syndicated Credit (Loan) and Amendments to the Legislative Acts of the Russian Federation” and to Certain Legislative Acts of the Russian Federation”.

<sup>4</sup> The English language website of the Association of Banks of Russia can be found following the link: <https://asros.ru/en/>. The documentation for the syndicated loan market is developed by the Committee for Investment Banking Products (link to Russian language website is: <https://asros.ru/committee/iproduct/>).



Table 1  
The syndicated loan portfolio, beginning of the reporting period

SL	Currency, USD exchange rate	Amount in SL currency, mln	Amount in USD mln	Base rate	Margin, % per annum (p.a.)	Tenor, years	Market price, % of notional	Credit rating of the Borrower	Industry of the Borrower
SL No. 1	USD	50.00	50.00	SOFR	3.50	1.20	97.50	BBB	Transport
SL No. 2	EUR, 0.90	60.75	67.50	EURIBOR	4.25	0.90	92.00	BB+	Manufacturing
SL No. 3	GBP, 0.75	56.25	75.00	SONIA	2.50	0.50	95.00	BB-	Trading
SL No. 4	USD	125.00	125.00	SOFR	3.75	3.50	99.00	BB	Chemicals
SL No. 5	EUR, 0.90	121.50	135.00	EURIBOR	2.75	2.30	100.00	BBB-	Metals and mining

Source: Author-generated data for illustrative purposes.

on the primary market (which will demonstrate sufficient deal volumes), but also on the secondary market and the efficiency of managing their syndicated loan portfolios.

### Analyzing the syndicated loan portfolio

The syndicated loan portfolio that will be considered in this section is presented in *Table 1*. To note, this is a hypothetical portfolio that will only be used as an example. It is a “global” portfolio composed of syndicated loans governed by international law from the international capital markets, denominated in international currencies: US Dollars (“USD”), Euros (“EUR”), Pound Sterling (“GBP”). The reporting period can be set to equal a month, a quarter, or a year.

We can calculate the following parameters of the syndicated loan portfolio:

- *The main parameters* include the total nominal volume of the portfolio and the total market value of the portfolio.
- *Liquidity parameters* include the weighted average of the tenors of the loans in the portfolio (i.e., the synthetic tenor of the portfolio itself) and the breakdown of the loans in the portfolio into the following three term groups: (i) short-term loans (with a tenor of less than 1 year); (ii) medium-term loans (with a tenor between 1 year and 3 years); (iii) long-term loans (with a tenor of more than 3 years).
- *Diversification parameters* include the breakdown of the loans in the portfolio based on the following criteria: (i) industry of the borrowers; (ii) credit rating of the borrowers.
- *Commercial parameters* include the weight-

ed average margin of the loans in the portfolio (i.e., the synthetic margin of the portfolio itself) and the weighted average market price of the loans in the portfolio (i.e., the synthetic market price of the portfolio itself).

The above parameters can be incorporated into a managerial dashboard that will compare the current values of the parameters to “KPIs” that have been set for the portfolio. A managerial dashboard for the portfolio at the beginning of the reporting period from *Table 1* is presented in *Table 2*.

The following conclusions can be made by the portfolio manager based on the analysis of the managerial dashboard:

- *Main parameters*: the actual total nominal volume of the portfolio and the total market value of the portfolio are less than the target KPIs by USD 77.50 mln and USD 84.15 mln.
- *Liquidity parameters*: the synthetic tenor of the portfolio is 0.3 years less than required; the share of short-term and long-terms exceeds the target share by 6.49% and 7.62% at the expense of medium-term loans (−14.12%).
- *Diversification parameters*: the share of borrowers from three industries exceeds the target (metals and mining, +4.83%; chemicals, 7.62%; trading, 6.57%); the share of borrowers from manufacturing (−15.08%) and transport (−3.95%) is less than required; the share of borrowers with non-investment grade rating is exceeded (+14.12%).
- *Commercial parameters*: the synthetic margin of the portfolio and the synthetic market price of the portfolio are less than the



Table 2

Managerial dashboard of the syndicated loan portfolio, beginning of the reporting period

Parameter	KPI value	Actual value	Difference	Parameter	KPI value	Actual value	Difference
Main parameters				Liquidity parameters			
Total nominal volume, USD mln	530.00	452.50	−77.50	Tenor of the portfolio, years	2.30	2.00	−0.30
Total market value, USD mln	525.00	440.85	−84.15	Breakdown of SLs by tenor (short-, medium-, long-term), %	25.00	31.49	+6.49
					55.00	40.88	−14.12
					20.00	27.6	+7.62
Diversification parameters				Commercial parameters			
Breakdown of SLs by industry of the Borrowers (manufacturing, metals and mining, chemicals, transport, trading), %	30.00	14.92	−15.08	Margin of the portfolio, % p.a.	3.75	3.29	−0.46
	25.00	29.83	+4.83				
	20.00	27.62	+7.62				
	15.00	11.05	−3.95				
	10.00	16.57	+6.57				
Breakdown of SLs by credit rating of the Borrowers (investment, non-investment grade), %	55.00	40.88	−14.12	Market price of the portfolio, % of notional	99.00	97.43	−1.57
	45.00	59.12	14.12				

Source: Author-generated data for illustrative purposes.

target KPIs by 0.46% per annum (p.a.) and 1.57% p.a.

From this analysis, it can be concluded that the following actions are required to be executed regarding the portfolio: (i) increasing both the total nominal volume and total market value of the portfolio; (ii) increasing the synthetic tenor of the portfolio and the share of medium-term loans; (iii) increasing the share of Borrowers from the manufacturing and transport industries, as well as the share of Borrowers with an investment-grade rating; (iv) increasing the synthetic margin of the portfolio and the synthetic market price of the portfolio. In order to achieve these aims, we will consider in the next section the following methods of managing the syndicated loan portfolio: active, passive, and restructurings.

### Methods of managing the syndicated loan portfolio

Banks and investors in the syndicated loan market utilize a number of methods for managing the syndicated loan portfolio. These can be classified as active, passive, and restructurings. Active portfolio management methods include the execution of transactions in the primary and secondary syndicated loan markets. The result is the addition of new syndicated loans to the portfolio from both primary and secondary markets, as well as the sale of deals from the portfolio (fully or partially) in the secondary market.

We assume that in the current reporting period, three such transactions have been executed by the portfolio manager:



Table 3  
Terms and conditions of syndicated loans No. 6 and No. 7

SL	Currency, USD exchange rate	Amount in SL currency, mln	Amount in USD mln	Base rate, % p.a.	Margin, % p.a.	Tenor, years	Market price, % of notional	Credit rating of the Borrower	Industry of the Borrower
SL No. 6	USD	180.00	180.00	SOFR	4.00	2.95	100.00	BBB	Manufacturing
SL No. 7	EUR, 0,90	40.50	45.00	EURIBOR	4.50	0.80	96.00	BB+	Transport

Source: Author-generated data for illustrative purposes.

- *Transaction 1*: participating in syndicated loan deal No. 6 (primary market).

- *Transaction 2*: buying the participation in syndicated loan deal No. 7 (secondary market).

The terms and conditions of these transactions are presented in *Table 3*.

- *Transaction 3*: selling the full amount of USD 50 mln in syndicated loan deal No. 1 (secondary market).

Passive portfolio management techniques relate to prepayments: voluntary prepayments based on the decisions of the borrowers and mandatory prepayments based on the decisions of the lenders, both scenarios being described in the relevant clauses of the facility agreements for each syndicated loan. It should also be noted that during the reporting period the scheduled repayments of syndicated loans as per the repayment schedule of the facility agreements occur.

We assume that in the current reporting period, three such events have taken place:

- *Repayment 1*: full mandatory prepayment in the amount of EUR 75.00 mln of syndicated loan No. 2 (based on the decision of the lenders).

- *Repayment 2*: partial voluntary prepayment in the amount of USD 25.00 mln of syndicated loan No. 4 (based on the decision of the lenders).

- *Repayment 3*: scheduled repayment in the amount of EUR 2.00 mln of syndicated loan No. 5 (based on the repayment schedule of the facility agreement).

Another event that can affect the portfolio is restructurings, when the lenders agree to change a number of major terms and conditions of the syndicated loans (according to the procedure set out in the relevant facility agreement).

We assume that in the current reporting period, the following restructuring has taken place:

- *Restructuring*: based on the decision of the lenders the terms and conditions of syndicated loan No. 3 have been restructured as set-out in *Table 4*.

### Results of managing the syndicated loan portfolio

As a result of applying the above methods of portfolio management, at the end of the reporting period, the new syndicated loan portfolio has the composition presented in *Table 5*.

The portfolio of syndicated loans can also be analyzed between two time periods. In the considered case, we can calculate the changes in the parameters of the portfolio between the beginning of the reporting period and the end of the reporting period (*Table 6*).

As follows from the above table, the major changes in the syndicated loan portfolio during the reporting period that occurred were the following:

- *Main parameters*: increases in both total nominal volume and total market value of the portfolio (by USD 82.50 mln and USD 87.45 mln).

- *Liquidity parameters*: increase of the synthetic tenor of the portfolio by 0.31 years and increase of the share of medium-term loans (by 13.79%) at the expense of short- and long-term loans (−4.86% and −8.93%).

- *Diversification parameters*: significant increase in the share of borrowers from the manufacturing industry (+18.73%) and a mild increase in the share of borrowers from the transport industry (+5.77%), with decreases for the metals and mining (−8.81%), chemicals (−8.93%) and trading (−6.76%) industries; the share of borrowers with investment grade ratings increased by 13.79%.



Table 4

Terms and conditions of the restructuring of syndicated loan No. 3

SL	Currency	Amount in SL currency, mln	Amount in USD mln	Base rate	Margin, % p.a.	Tenor, years	Market price, % of notional	Credit rating of the Borrower	Industry of the Borrower
SL No. 3	GBP, 0.75	56.25	75.00	SONIA	2.50	0.50	95.00	BB-	Trading
Restructured SL No. 3		39.38	52.50		2.75	0.90	96.00	BB	

Source: Author-generated data for illustrative purposes.

Table 5

The new syndicated loan portfolio, end of the reporting period

SL	Cur- rency	Amount in SL currency, mln	Amount in USD mln	Base rate	Margin, % p.a.	Tenor, years	Market price, % of notional	Credit rating of the Bor- rower	Industry of the Bor- rower
Restruc- tured SL No. 3	GBP, 0.75	39.38	52.50	SONIA	2.75	0.90	96.00	BB	Trading
SL No. 4	USD	100.00	100.00	SOFR	3.75	3.40	99.00	BBB	Chemicals
SL No. 5	EUR, 0.90	101.25	112.50	EURIBOR	2.75	2.20	100.00	BBB-	Metals and mining
SL No. 6	USD	180.00	180.00	SOFR	4.00	2.95	100.00	BBB	Manufac- turing
SL No. 7	EUR, 0.75	81.00	90.00	EURIBOR	4.5	0.80	96.00	BB+	Transport

Source: Author-generated data for illustrative purposes.

• *Commercial parameters:* increases in both the synthetic margin of the portfolio and the synthetic market price of the portfolio (by 0.36% p.a. and 1.32% p.a.).

### Discussion of the results of portfolio management

The portfolio manager can now build the managerial dashboard for the new portfolio at the end of the reporting period based on Table 5. The updated managerial dashboard is presented in Table 7.

The following conclusions can be made based on the analysis of the updated managerial dashboard:

• *Main parameters:* the actual total nominal volume of the portfolio and the total market value of the portfolio now close to the target KPIs (exceeding by only USD 5.00 mln and USD 3.30 mln).

• *Liquidity parameters:* the synthetic tenor of the portfolio matches the required KPI; the breakdown of short-, medium- and long-terms closely follows the target (with a difference of less than 2.00%).

• *Diversification parameters:* the share of borrowers from all five industries is close to the KPI levels, with no significant mismatches; the share of borrowers with non-investment and investment grade ratings is very close to target (with a difference of less than 0.50%).

• *Commercial parameters:* the synthetic margin of the portfolio and the synthetic market price of the portfolio are less than the target KPIs, but only by 0.10% p.a. and 0.25% p.a. (both amounts being less than the differences at the beginning of the reporting period).

From this analysis, it can be concluded that at the end of the reporting period, the syndicated loan portfolio is demonstrating improved KPIs.



Table 6

Comparison of the parameters of the syndicated loan portfolio, beginning and end of the reporting period

Parameter	Actual value, beginning of reporting period	Actual value, end of reporting period	Difference	Parameter	Actual value at beginning of reporting period	Actual value at end of reporting period	Difference
Main parameters				Liquidity parameters			
Total nominal volume, USD mln	452.50	535.00	+82.50	Tenor of the portfolio, years	2.00	2.31	+0.31
Total market value, USD mln	440.85	528.30	+87.45	Breakdown of SLs by tenor (short-, medium-, long-term), %	31.49	26.64	-4.86
					40.88	54.67	+13.79
					27.62	18.69	-8.93
Diversification parameters				Commercial parameters			
Breakdown of SLs by industry of the Borrowers (manufacturing, metals and mining, chemicals, transport, trading), %	14.92	33.64	+18.73	Margin of the portfolio, % p.a.	3.29	3.65	+0.36
	29.83	21.03	-8.81				
	27.62	18.69	-8.93				
	11.05	16.82	+5.77				
	16.57	9.81	-6.76				
Breakdown of SLs by credit rating of the Borrowers (investment, non-investment grade). %	40.88	54.67	+13.79	Market price of the portfolio,% of notional	97.43	98.75	+1.32
	59.12	45.33	-13.79				

Source: Author-generated data for illustrative purposes.

### Monitoring the syndicated loan portfolio

One of the major structural parameters of syndicated loans are financial covenants. Financial covenants are set out in the facility agreement of the syndicated loan, including the threshold levels and the mechanics of calculation for each covenant. During the tenor of the syndicated loan, the borrowers send to the lenders at the end of each reporting period the compliance certificate. This document includes all the relevant details regarding the calculations of the financial covenants and their compliance with the required levels.

The two main covenants used in syndicated loans facility agreement are the following:

*Net Debt/EBITDA* (earnings before interest, taxes, depreciation and amortization): the ratio of the borrower's net debt as of the end of the reporting period (calculated as total debt minus cash and cash equivalents) to the borrower's EBITDA on a rolling 12-month basis ending with the current reporting period. This covenant reflects the indebtedness of the borrower relative to its cash flow and is a key credit metric for lenders in the syndicated loan market.

*Net Interest Expenses/EBITDA*: the ratio of the borrower's net interest payments (calculated as interest paid minus interest received) to the



Table 7

Updated Managerial Dashboard of the new syndicated loan portfolio, end of the reporting period

Parameter	KPI value	Actual value	Difference	Parameter	KPI value	Actual value	Difference
Main parameters				Liquidity parameters			
Total nominal volume, USD mln	530.00	535.00	+5.00	Tenor of the portfolio, years	2.30	2.31	+0.01
Total market value, USD mln	525.00	528.30	+3.30	Breakdown of SLs by tenor (short-, medium-, long-term), %	25.00% 55.00% 20.00%	26.64% 54.67% 18.69%	1.64% -0.33% -1.31%
Diversification parameters				Commercial parameters			
Breakdown of SLs by industry of the Borrowers (manufacturing, metals and mining, chemicals, transport, trading), %	30.00 25.00 20.00 15.00 10.00	33.64 21.03 18.69 16.82 9.81	+3.64 -3.97 -1.31 +1.82 -0.19	Margin of the portfolio, % p.a.	3.75	3.65	-0.10
Breakdown of SLs by credit rating of the Borrowers (investment, non-investment grade), %	55.00 45.00	54.67 45.33	-0.33 +0.33	Market price of the portfolio, % of notional	99.00	98.75	-0.25

Source: Author-generated data for illustrative purposes.

borrower's EBITDA, both values calculated on a rolling 12-month basis ending with the current reporting period. This covenant reflects the debt service capacity of the borrower relative to its cash flow.

Consolidating the data from the compliance certificates for each syndicated loan in the portfolio, the compliance with financial covenants for the syndicated loan portfolio can be analyzed (Table 8).

As follows from the table above, all borrowers are in full compliance with the financial covenants. Therefore, the syndicated loan portfolio as a whole is also in full compliance. We can also calculate the synthetic financial covenants headroom for the portfolio as the weighted average of the headrooms for each loan: (i) the Net Debt/EBITDA headroom is 0.20x; (ii) the Net Interest Expenses/EBITDA headroom is 0.12x.

The facility agreement for each syndicated loan includes a number of clauses the violation

of which require the obtaining of waivers from the lenders. The procedure of working on waiver requests is set out in detail in the facility agreement. This process involves the facility agent, the borrower, and the lenders. To note, cases of waivers deal with one-off violations of the facility agreement clauses.

As an example, we will assume that during the reporting period the borrower under Syndicated Loan No. 4 has violated the clause in the facility agreement that refers to restrictions on Mergers and Acquisitions (M&A). This clause is formulated as follows: "Restriction on M&A transactions: the total value of M&A transactions during the reporting period shall not exceed 10% of the borrower's total assets". The borrower under Syndicated Loan No. 4 has informed the facility agent that during the reporting period the total value of executed M&A transactions has totaled 12% of the borrower's total assets. The borrower then sends to the facility agent for further distribu-



Table 8

*Financial covenants compliance of the new syndicated loan portfolio, end of the reporting period*

SL	Financial covenant	Threshold value per Facility Agreement	Actual value	Headroom
Restructured SL No. 3	Net Debt / EBITDA	$\leq 2.75x$	2.52x	+0.23x
	Net Interest Expenses / EBITDA	$\leq 0.40x$	0.32x	+0.08x
SL No. 4	Net Debt / EBITDA	$\leq 4.00x$	3.75x	+0.25x
	Net Interest Expenses / EBITDA	$\leq 0.80x$	0.64x	+0.16x
SL No. 5	Net Debt / EBITDA	$\leq 3.25x$	3.10x	+0.15x
	Net Interest Expenses / EBITDA	$\leq 0.75x$	0.58x	+0.17x
SL No. 6	Net Debt / EBITDA	$\leq 3.00x$	2.80x	+0.20x
	Net Interest Expenses / EBITDA	$\leq 0.45x$	0.36x	+0.09x
SL No. 7	Net Debt / EBITDA	$\leq 3.50x$	3.35x	+0.15x
	Net Interest Expenses / EBITDA	$\leq 0.50x$	0.42x	+0.08x

Source: Author-generated data for illustrative purposes.

tion to the lenders a waiver request, describing the details of the executed M&A transactions and asking the lenders to waive the violation of the relevant covenant of the facility agreement. together with the waiver request, the borrower also prepares for the lenders a package of supplementary materials, including the Information Memorandum with the details of the M&A transactions and the updated financial model of the borrower with the impact of these transactions.

Following receipt of the waiver request, the facility agent checks that is in compliance with the template set out in the faculty agreement and then sends it to the lenders. The waiver request includes the timeframe for the lenders to provide their response (usually, 1–2 months) and the fee that the lenders will receive for agreeing to the request (usually includes an “early-bird” fee).

After receiving the request, each lender launches the approval processes and obtains the decision of the credit committee. The lender then informs the facility agent of the decision. For the waiver to be granted, usually a positive response from Lenders with total participation amounts of more than 66.6% of the total syndicated loan amount is required. If this threshold is reached, the facility agent informs the borrower that the waiver request has been granted. If this threshold if not obtained, then the waiver request is not granted, and the borrower will be in a situation of technical default (leading either to a mandatory repayment of the syndicated loan or to a restructuring). The process of handling waiver requests is presented in *Fig. 1*.

The difference between amendment and waiver requests is that in cases of the former the relevant



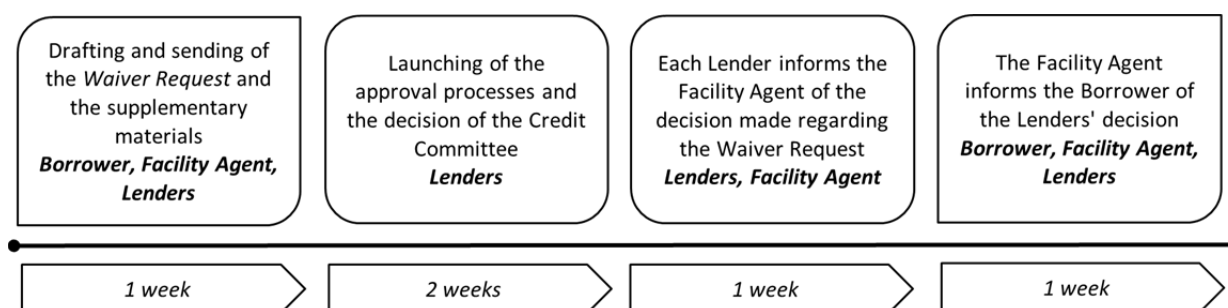


Fig. 1. The process of handling waiver requests for syndicated loans

Source: Prepared by the author.

Table 9

Comparison of the waiver and amendment requests of syndicated loans

Parameters	Waiver Request	Amendment Request
Legal nature	Request of the Borrower to the Lenders asking for a one-off agreement to a violation of one or a number of clauses of the Facility Agreement	Request of the Borrower to the Lenders asking for an agreement to permanently alter one or a number of clauses of the Facility Agreement
Facility Agreement clauses impacted	General covenants, Financial covenants, Information Covenants	General covenants, Financial covenants, Information Covenants, Facility Amount, Interest Rate, Facility Tenor, Repayment Schedule
Documents overview	The Waiver Request, package of supplementary materials (including the Information Memorandum and the updated Financial Model of the Borrower)	The Amendment Request, package of supplementary materials (including the Information Memorandum and the updated Financial Model of the Borrower), the Amendment Agreement, the Re-stated Facility Agreement
Involved parties	Borrower, Lenders, Facility Agent	Borrower, Lenders, Facility Agent, Legal Counsel
Fees payable	Waiver fee payable by the Borrower to the Lenders (including early bird fee)	Amendment fee payable by the Borrower to the Lenders. Legal fee payable by the Borrower to the Legal Counsel.
Time-frame for considering the request	1–2 months	3–4 months (depending on the complexity of the request)

Source: Prepared by the author.

clause (or clauses) of the facility agreement have to be changed (thereby representing not a one-off acceptance by the lenders of a covenant violation, but a new covenant threshold until the maturity of the syndicated loan). The procedure of working on amendment requests is set out in detail in the facility agreement. This process is more complex than for waiver requests since it also requires the work of the legal counsel, in addition to the facility agent, the borrower, and the lenders. The

comparison of waiver and amendment requests for syndicated loans is presented in *Table 9*.

As an example of an amendment request, we will assume that during the reporting period the borrower under syndicated loan No. 5 has not only violated the clause in the facility agreement that refers to the restriction on total financial indebtedness (TFI). This clause is formulated as follows: “*Restriction on TFI level*: the level of TFI at the end of each reporting period shall not exceed



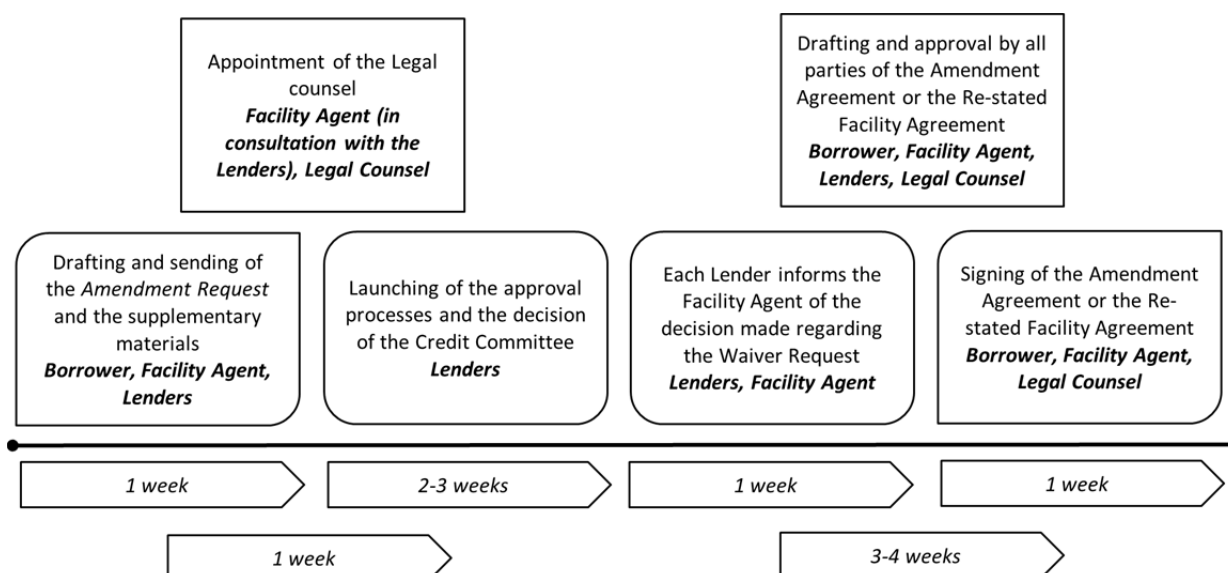


Fig. 2. The process of working on amendment requests for syndicated loans

Source: Prepared by the author.

25% of the borrower's total assets". The borrower under Syndicated Loan No. 5 has informed the facility agent that as of the end of the reporting period the level of TFI has totaled 32% of the borrower's total assets and will exceed the level of 25% of total assets until the final maturity of the syndicated loan. The borrower then sends to the facility agent for further distribution to the lenders an amendment request, describing the details of the TFI and asking the Lenders to agree to an amendment of the clause in the facility agreement to state: "*Restriction on TFI level*: the level of TFI at the end of each reporting period shall not exceed 35% of the borrower's total assets". The borrower also prepares for the lenders a package of supplementary materials, including the details of the TFI and the updated financial model. Following receipt of the amendment request, the facility agent checks that is in compliance with the template set out in the facility agreement and then sends it to the lenders. The amendment request includes the timeframe for the lenders to provide their response (usually, 2–3 months) and the fee that the lenders will receive for agreeing to the request (higher than for waiver requests). For the amendment of the facility agreement and the preparation of the legal opinion regarding the amendment, the lenders will appoint a legal counsel. After receiving the request, each lender launches the approval processes and obtains the decision of the credit committee. The lender then informs the facility

agent of the decision. For the amendment to be agreed, usually a positive response from lenders with total participation amounts of more than 66.6% of the total syndicated loan amount is required. If this threshold is reached, the facility agent informs the borrower that the amendment request has been granted. In this case the legal counsel prepares either an amendment agreement (regarding the changes to the amended clauses of the facility agreement) or a re-stated facility agreement (when the number of amended clauses is significant. If the required approval threshold is not obtained, then the amendment request is not granted, and the borrower will be in a situation of a technical default (leading either to a mandatory repayment of the syndicated loan or to a restructuring). The process of working on amendment requests is presented in Fig. 2.

## Conclusion

Integrating all of the data regarding the syndicated loan portfolio during the reporting period, including the results of Transactions 1–3, Repayment events 1–3, the Restructuring event, as well as the results of Tables 6–8, at the end of each reporting period the portfolio manager prepares executive report (presented in Table 10).

In Fig. 3 the general scheme for managing a portfolio of syndicated loans is presented.

We have considered three major aspects of managing a portfolio of syndicated loans. Firstly, it is the analysis of the portfolio and the building



Table 10

*Executive Report of the new syndicated loan portfolio, end of the reporting period*

Operational information					
Parameter	Details	Parameter	Details	Parameter	Details
Composition of the syndicated loans portfolio	Restructured SL No. 3; SL No. 4; SL No. 5; SL No. 6; SL No. 7	Executed transactions	1 primary market deal (SL No. 6); 2 secondary market deals (SL No. 1 and No. 7)	Repayments and restructurings	3 repayments: (mandatory SL No. 2; voluntary SL No. 4; scheduled SL No. 5); 1 restructuring (SL No. 3)
KPI information					
Parameter	KPI value	Actual value, beginning of reporting period	Actual value, end of reporting period	Difference between KPI value and value at beginning of period	Difference between value at end and beginning of period
Total nominal volume, USD mln	530.00	452.50	535.00	+5.00	+82.50
Total market value, USD mln	525.00	440.85	528.30	+3.30	+87.45
Tenor of the portfolio, years	2.30	2.00	2.31	+0.01	+0.31
Margin of the portfolio, % p.a.	3.75	3.29	3.65	−0.10	+0.36
Monitoring information					
Financial covenants	Compliance	Waiver requests	Details	Amendment requests	Details
Net Debt / EBITDA; Net Interest Payments / EBITDA	Yes, (headroom: +0.20x); Yes (headroom: +0.12x)	SL No. 4	Restriction on Mergers and Acquisitions transactions, granted	SL No. 5	Restriction on Total Financial Indebtedness, granted

Source: Author-generated data for illustrative purposes.

of the managerial dashboard in order to assess the status of the KPIs achievement. Secondly, based on this analysis, the portfolio manager can use various syndicated loans portfolio management methods in order to change the portfolio composition in order to achieve the KPIs. Thirdly, the monitoring procedure to assess the compliance with the financial covenants by the borrowers of the syndicated loans under each separate facility agreement, as well as for the portfolio as a whole.

What has been achieved in terms of new results is the combined application of established

portfolio management techniques (KPIs, dashboard, financial ratios analysis) to the specifics of syndicated loans. The new theoretical approach takes account of the nature of the primary syndicated loan market (with various types of transactions for borrowers from various industries), the secondary syndicated loan market (with the opportunity to trade in participations and obtain a market price for the loans), as well as specialized financial covenants of international deals (Net Debt/EBITDA, Net Interest Expenses/EBITDA). In practice, the developed



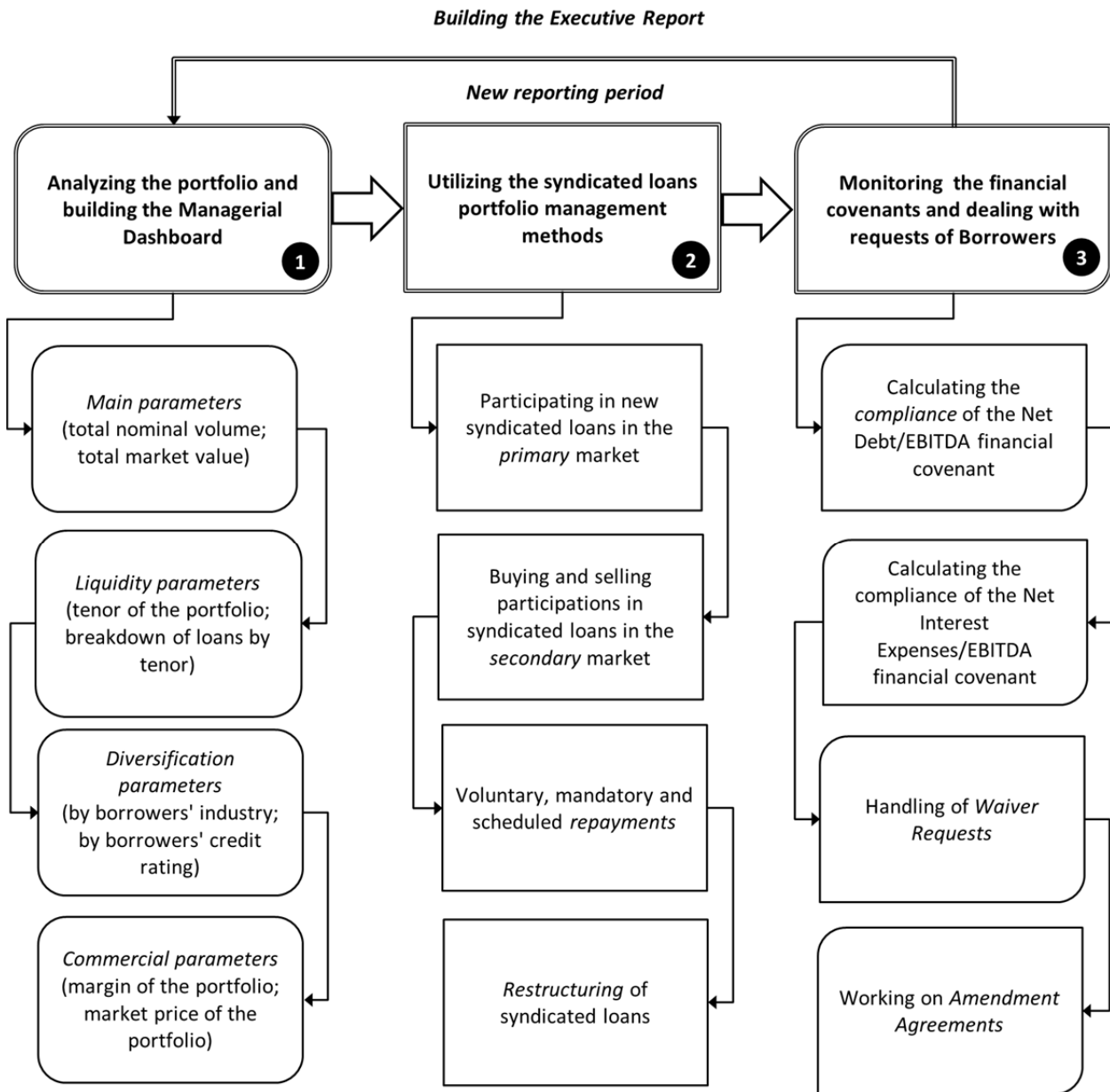


Fig. 3. The general scheme for managing a portfolio of syndicated loans

Source: Prepared by the author.

methods can be used by Portfolio Managers from various financial institutions (banks, insurance companies, asset managers and hedge funds) to analyze, manage and monitor their own syndicated loan portfolios. With certain adjustments that are the subject of future research, the

presented approach can be applied not only to “global” portfolios composed of syndicated loans governed by international law and originated from international capital markets but also to “local” portfolios that include country-specific deals in various jurisdictions.

## REFERENCES

1. Tarasov A. Underwriting syndicated loans in the Russian market. *Review of Business and Economics Studies*. 2017;3:45–51.
2. Tarasov A. Management issues in loan syndications banking. *Review of Business and Economics Studies*. 2019;3:37–44.
3. Tarasov A. Developments in the Russian syndicated loans market. *Review of Business and Economics Studies*. 2022;1:41–47. DOI: 10.26794/2308-944X-2022-10-1-41-47



4. Dennis S., Mullineaux D. Syndicated loans. *Journal of Financial Intermediation*. 2000;9(4):404–426. URL: <https://doi.org/10.1006/jfin.2000.0298>
5. Fight A. Syndicated lending. Butterworth-Heinemann; 2004. 208 p.
6. Altunbas, Y., Gadanez, B., Kara, A. Syndicated loans: hybrid of relationship lending and publicly traded debt. Palgrave Macmillan; 2006. 255 p.
7. Shutter A. A practitioner's guide to syndicated lending, 2<sup>nd</sup> ed. Sweet and Maxwell; 2017. 560 p.
8. Shaiman L., Marsh B. The handbook of loan syndications and trading, 2<sup>nd</sup> ed., McGraw-Hill; 2021. 704 p.
9. Altunbas Y., Kara A., Marques-Ibanez D. Large debt financing: syndicated loans versus corporate bonds. *The European Journal of Finance*. 2010;16(5):437–458. DOI: 10.1080/13518470903314394
10. Rhodes T. Encyclopedia of debt finance, 2<sup>nd</sup> ed. Euromoney Books; 2012. 276 p.
11. Caselli S., Gatti S. Structured finance: techniques, products and market, 2<sup>nd</sup> ed. Springer; 2017. 220 p.
12. Maxwell W., Shenkman M. Leveraged financial markets: a comprehensive guide to loans, bonds, and other high-yield instruments. McGraw-Hill; 2010. 416 p.
13. Strumeyer G., Swamy S. The capital markets: evolution of the financial ecosystem. Wiley; 2017. 648 p.
14. Davis S. Investment banking: addressing the management issues. Palgrave Macmillan; 2002. 182 p.
15. Iannotta G. Investment banking: a guide to underwriting and advisory services. Springer; 2010. 193 p.
16. Liaw T. The Business of investment banking: a comprehensive overview, 3<sup>rd</sup> ed. Wiley; 2011. 384 p.
17. Stowell D. Investment banks, hedge funds, and private equity, 3<sup>rd</sup> ed. Academic Press; 2017. 732 p.
18. Ellinger E., Lomnicka E., Hare C. Modern banking law, 5<sup>th</sup> ed. Oxford University Press; 2009. 948 p.
19. Ryan R. The role of lead counsel in syndicated lending transactions. *The Business Lawyer*. 2009;3:783–800.
20. Wright S. The handbook of international loan documentation. Palgrave Macmillan; 2014. 387 p.
21. Bellucci M., McCluskey J. The LSTA's complete credit agreement guide, 2<sup>nd</sup> ed. McGraw-Hill; 2016. 752 p.
22. Campbell M., Weaver C. Syndicated lending: practice and documentation, 7<sup>th</sup> ed. Harriman House; 2019. 762 p.
23. Slocombe A., Voisey N. The loan book. Edwin Buckley and Co Ltd.; 2011. 229 p.
24. Slocombe A., Voisey N., Haley G. Developing loan markets. Edwin Buckley and Co Ltd.; 2013. 244 p.
25. Slocombe A., Voisey N. 20 years in the loan market. Edwin Buckley and Co Ltd.; 2016. 352 p.
26. Slocombe A., Voisey N. 25 years in the loan market. Edwin Buckley and Co Ltd.; 2021. 422 p.
27. Amenc N., Le Sourd V. Portfolio theory and performance analysis. Wiley; 2003. 284 p.
28. Gregoriou G., Hoppe C. The handbook of credit portfolio management. McGraw-Hill; 2008. 504 p.
29. Marston R. Portfolio design: a modern approach to asset allocation. Wiley; 2011. 368 p.
30. Francis J., Kim D. Modern portfolio theory: foundations, analysis, and new developments. Wiley; 2013. 554 p.
31. Hasan I., Politsidis P., Sharma Z. Global syndicated lending during the COVID-19 pandemic. *Journal of Banking and Finance*. 2021;133:106121. DOI: 10.1016/j.jbankfin.2021.106121
32. Saharti M., Chaudhry S., Ahmad N., Hussain S. Syndicated loans: mapping the trends, sources and intellectual evolution. *Review of Quantitative Finance and Accounting*. 2024;62:1–24. DOI: 10.1007/s11156-024-01243-x

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