



**APPRAISAL REPORT AP-0333/16-01**

**COMPANHIA SÃO JOSÉ HOLDING AND CETIP  
S.A. MERCADOS ORGANIZADOS**

<i>REPORT:</i>	<i>AP-0333/16-01</i>	<i>REFERENCE DATE:</i>	<i>December 31<sup>st</sup>, 2015</i>
----------------	----------------------	------------------------	---------------------------------------

*APPLICANT:*

BM&FBOVESPA S.A. BOLSA DE VALORES, MERCADORIAS E FUTUROS, hereinafter called BVMF.

Public Company, with head office located at Praça Antônio Prado, No 48, 7<sup>th</sup> floor, Centro, in the City and State of São Paulo, registered with the Brazilian Taxpayers' Registry (CNPJ) under No. 09.346.601/0001-25.

*OBJECT:*

COMPANHIA SÃO JOSÉ HOLDING, present name of NETANYA EMPREENDIMENTOS E PARTICIPAÇÕES S.A., hereinafter called NETANYA.

Private held company with head office located at Rua Fernando de Albuquerque, No 31, Conj. 72, Consolação, in the City and State of São Paulo, registered with the Brazilian Taxpayers' Registry (CNPJ) under No. 23.791.728/0001-84.

CETIP S.A. MERCADOS ORGANIZADOS, hereinafter called CETIP.

Public Company, with head office located at Av. República do Chile, No 230, 10<sup>th</sup> and 11<sup>th</sup> floors, Centro, in the City and State of Rio de Janeiro, registered with the Brazilian Taxpayers' Registry (CNPJ) under No. 09.358.105/0001-91.

*PURPOSE:*

Calculation of the net equity of NETANYA, at book value, for the purposes of the merger of NETANYA with and into BVMF, pursuant to sections 226 and 227 of Law No. 6,404/76 ('Brazilian Corporation Law').

## *INDEX*

1. EXECUTIVE SUMMARY-----	3
2. PRINCIPLES AND QUALIFICATIONS-----	5
3. LIABILITY LIMITATIONS -----	7
4. APPRAISAL METHODOLOGY -----	8
5. APPRAISAL OF NET EQUITY OF NETANYA -----	9
6. CONCLUSION -----	10
7. LIST OF EXHIBITS -----	11

## 1. EXECUTIVE SUMMARY

BM&FBOVESPA S.A. *Bolsa De Valores, Mercadorias e Futuros* ('BVMF') is a company that manages the organized Securities and Derivatives markets, providing registration, clearing and settlement services. It acts as central counterparty, guaranteeing financial liquidity for the trades executed in its environments.

COMPANHIA SÃO JOSÉ HOLDING, present name of NETANYA EMPREENDIMENTOS E PARTICIPAÇÕES S.A. ('NETANYA') is a wholly-owned subsidiary of BVMF. NETANYA's main activity is the rental of its own real state property and the holding of equity interests in other companies.

CETIP S.A. - MERCADOS ORGANIZADOS ('CETIP') is a publicly-held company that offers services related to registration, central securities depository (CSD), trading and settlement of assets and securities. Through technological and infrastructure solutions, it provides liquidity, security and transparency for financial operations in the Brazilian market.

BVMF, according to Events of Relevance to the Market disclosure on February 19th, 2016, approved the presentation of Biding Precedent, toward the respective shareholders of the Companies, for the combination of the operations of BVMF and CETIP ('Proposta Vinculante' or 'Operação'), that will result: (i) on the entitlement from BVMF, of the total CETIP issued shares, and (ii) on the receipt, for each CETIP issued common share, subject to the adjustments provided for in the referred Events of Relevance to the Market, of 0.8991 BVMF common share and more 30.75 BRL (thirty Brazilian *reais* and seventy five cents), in Brazilian currency (to be re-adjusted).

APSYS CONSULTORIA E AVALIAÇÕES LTDA., hereinafter called APSIS, with its head office located at Rua da Assembleia, 35, 12<sup>nd</sup> floor, in the City and State of Rio de Janeiro, registered with the Brazilian Taxpayers' Registry (CNPJ) under No. 08.681.365/0001-30 was retained to determine net equity of NETANYA, at book value, for the purposes of the merger of NETANYA with and into BVMF, pursuant to sections 226 and 227 of Law No. 6,404/76 ('Brazilian Corporation Law').

In order to prepare this report, we have used data and information provided by third parties, i.e., documents and verbal interviews with the client. Estimates used in this process are based on the following documents and information, among others:

- Audited Balance Sheet of NETANYA, as of December 31<sup>st</sup>, 2015;
- Subsequent events to be taken place in NETANYA before the merging date; and
- CETIP's economic appraisal report, used to support the operation of incorporation of CETIP's shares in NETANYA, developed by a third party.

APSYS has recently prepared appraisal reports for publicly-held companies, for several purposes:

- AMBEV S.A.
- BCO BTG PACTUAL S.A.
- BEMATECH S.A.
- BR PROPERTIES S.A.
- CENTRAIS ELET BRAS S.A. - ELETROBRAS
- CIA SIDERÚRGICA NACIONAL
- ESTÁCIO PARTICIPAÇÕES S.A.
- GOL LINHAS AÉREAS INTELIGENTES S.A.
- JBS S.A.
- JEREISSATI TELECOM S.A.
- NET SERVIÇOS DE COMUNICAÇÃO S.A.
- OI S.A.
- QUALICORP S.A.
- RESTOQUE COMÉRCIO E CONFECÇÕES DE ROUPAS S.A.
- TOTVS S.A.

The team responsible for preparing such report comprises the following professionals:

- AMILCAR DE CASTRO  
Director  
Bachelor in Law
- ANA CRISTINA FRANÇA DE SOUZA  
Vice-President  
Civil Engineer (CREA/RJ 1991103043)
- ANTONIO LUIZ FEIJÓ NICOLAU  
Director  
Lawyer (OAB/RJ 167.543)
- EDUARDO DE CASTRO ROSSI  
Director  
Electrical Engineer (CREA/SP 5062320397)
- GIANCARLO FALKENSTEIN  
Senior Consultant  
Accountant (CRC/SP - 317492/O-1)
- LUIZ PAULO CESAR SILVEIRA  
Vice-President  
Mechanical Engineer and Accountant (CREA/RJ 1989100165 and CRC/RJ-118263/P-0)
- MARCIA APARECIDA DE LUCCA CALMON  
Director  
Accountant (CRC/SP-143169/O-4)
- MÁRCIA MOREIRA FRAZÃO DA SILVA  
Director  
Accountant (CRC/RJ-106548/O-3)
- MARINA RAGUCCI  
Executive Manager  
Economist
- RENATA POZZATO CARNEIRO MONTEIRO  
President  
Postgraduate in Law (OAB/RJ 109.393)
- SERGIO FREITAS DE SOUZA  
Vice-President  
Economist (CORECON/RJ 23521-0)

## 2. PRINCIPLES AND QUALIFICATIONS

The following information is important and must be read carefully.

The Report complies with the fundamental principles described below:

- The consultants have no interest, direct or indirect, in the companies involved neither in their operation; as well as there is not any other relevant circumstance that may characterize conflict of interest.
- APSIS does not hold BVMF nor CETIP's securities, nor do its partners, directors, officers, managers, controllers or people related to them.
- APSIS declares that there is no commercial or credit relation that may affect the report.
- There is no conflict of interest that jeopardizes the necessary Independence for the performances of APSIS' professionals' duties in this work.
- APSIS' professional fees are not in any way whatsoever subject to the conclusions of this Report.
- To the best of the consultants' knowledge and credit, the analyses, opinions, and conclusions expressed in this report are based on data, diligence, research and surveys that are true and correct.
- For purposes of this report, it was assumed that the information received from third parties is correct; the sources of such information are stated in this Report.
- For projection purpose, it was assumed the nonexistence of liens or encumbrances of any nature, judicial or extrajudicial, affecting the companies in question, other than those listed in this report.
- This report presents all the limiting conditions, if applicable, imposed by the adopted methodologies, which may affect the analyses, opinions and conclusions comprised herein
- This report was prepared by APSIS and no one other than the consultants themselves prepared the analyses and respective conclusions.
- APSIS assumes full liability on the appraised matter, including implicit appraisals, for the exercise of its honorable duties, primarily established in the appropriate laws, codes or regulations.
- This Report complies with the specifications and criteria established by the USPAP (Uniform Standards of Professional Appraisal Practice) and the International Valuation Standards Council (IVSC), in addition to the requirements imposed by various agencies and regulations, such as the Brazilian Accounting Practice Committee (CPC), the Ministry of Treasury, Brazilian Central Bank, Banco do Brasil, CVM (Brazilian Securities Commission), SUSEP (Brazilian Insurance Commission), Income Tax Regulations (RIR), Brazilian Committee of Business Appraisers (CBAN) etc.
- The controlling shareholders and managers of the companies involved did not direct, restrict, hinder or engage in any acts which have or

may have compromised access to, use, or knowledge of information, assets, documents, or work methods applicable to the quality of the respective conclusions contained herein.

- For the services provided through this report, APSIS will receive the amount of 28,000.00 BRL (twenty-eight thousand reais).
- APSIS did not provide any kind of service in the last 12 months for the companies that were involved in this operation.

### 3. *LIABILITY LIMITATIONS*

- In order to prepare this Report, APSIS used historic data and information, audited by third-parties or unaudited, provided in writing by the management of NETANYA, CETIP and BVMF, or obtained from the mentioned sources. As such, APSIS assumed that the data and information obtained for this Report are true and APSIS does not have any liability with respect to their veracity.
- The scope of this Report did not include auditing financial statements or revising the work performed by auditors. Therefore, APSIS is not issuing an opinion on the financial statements of NETANYA.
- We are not liable for eventual losses to BVMF, its subsidiaries, shareholders, officers, creditors or other parties as a result of the use of data and information provided by the companies and contained herein.
- Our work was developed solely for use by BVMF, its shareholders and any other entities or persons involved in the transaction.



#### 4. APPRAISAL METHODOLOGY

Analysis of the previously mentioned supporting document, aiming at verifying whether bookkeeping was accurately conducted and in compliance with the legal, regulatory, normative and statutory disposals which govern the matter, according to the 'Generally Accepted Accounting Principles and Conventions in Brazil'.

We examined the accounting books of NETANYA as well as all other documents required to prepare this report, which was prepared based on NETANYA's balance sheet as of December 31<sup>st</sup>, 2015 (Exhibit 02).

The experts concluded that the assets and liabilities of NETANYA have been duly accounted.

It is not part of the scope of APSIS to validate the assumptions that supported the contribution values reported in the subsequent events, which are reasoned on reports issued by a third party (KPMG *Corporate Finance* Ltda.).

#### *SUBSEQUENT EVENTS CONSIDERED IN EVALUATING*

In this evaluation some events that must occur before the incorporation were considered pro forma, according to the description below:

- NETANYA had 1,200 common shares at a value of 1.00 BRL;
- BVMF will make a contribution in cash on NETANYA in the amount of 9,257,820,000.00 BRL, through the subscription of at least 794,650,830 new common shares.;

- NETANYA will incorporate the shares of CETIP and will issue in favor of CETIP shareholders:
  - 1 common share of NETANYA for each share of CETIP;
  - 3 redeemable preferred shares of NETANYA for each share of CETIP.
- Considering the emissions above, there will be a new contribution on NETANYA of 11,295,468,416.20 BRL; and
- Buy back of all preferred shares of NETANYA for the estimated amount of 9,257,820,000.00.

It is important to highlight, that the buy back, described in the subsequent events, is subject to variation due to the agreement between BVMF and CETIP to update this contribution by CDI while it awaits the approval of the business combination by the regulatory agencies and government authorities. For this Report it was considered the base value of the report developed by third parties, updated, for the purposes of cash contribution held by BVMF, by the accumulated CDI of 9.29% regarding the CDI projected by FOCUS April/2016 to December/2016, resulting in a cash contribution in the amount of 9,257,820,000.00 BRL.

## 5. APPRAISAL OF NETANYA'S NET EQUITY

NETANYA's accounting books were examined and all the others necessary documents in order to prepare this report.

The experts concluded that the book value of NETANYA's net equity, if occurring the increase of its capital events, the incorporation of CETIP's shares and the redemption of its redeemable preferred shares, for the purpose the merger of NETANYA with and into BVMF, will be equivalent to, at least, 11,295,468,000.00 BRL (eleven billion, two hundred ninety-five million, four hundred and sixty-eight thousand *reais*), as shown in the table below:

NETANYA	STATEMENTS						
BALANCE SHEET (BRL '000)	Balance in December 31st, 2015	Capital Contribution in cash*	Balance after Capital Contribution in December 31st, 2015	Transference and Issuance of Shares *	Balance after Transference and Issuance of Shares in December 31st, 2015	Redemption of Shares*	Balance after Redemption of Shares in December 31st, 2015
<b>CURRENT ASSETS</b>	0,13	9.257.820	9.257.820	-	9.257.820	(9.257.820)	-
Cash and Cash Equivalents	0,13	9.257.820	9.257.820	-	9.257.820	(9.257.820)	-
<b>NON CURRENT ASSETS</b>	-	-	-	11.295.468	11.295.468	-	11.295.468
<b>LONG TERM RECEIVABLES</b>	-	-	-	-	-	-	-
<b>INVESTMENTS</b>	-	-	-	1.695.815	1.695.815	-	1.695.815
CETIP S.A. 100%	-	-	-	1.695.815	1.695.815	-	1.695.815
<b>PROPERTY, PLANT AND EQUIPAMENT</b>	-	-	-	-	-	-	-
<b>INTANGIBLES</b>	-	-	-	9.599.653	9.599.653	-	9.599.653
Goodwill	-	-	-	9.599.653	9.599.653	-	9.599.653
<b>TOTAL ASSETS</b>	0	9.257.820	9.257.820	11.295.468	20.553.289	(9.257.820)	11.295.468
<b>CURRENT LIABILITIES</b>	-	-	-	-	-	-	-
<b>NON CURRENT LIABILITIES</b>	-	-	-	-	-	-	-
<b>LONG TERM DEBTS</b>	-	-	-	-	-	-	-
<b>SHAREHOLDERS EQUITY</b>	0,13	9.257.820	9.257.820	11.295.468	20.553.289	(9.257.820)	11.295.468
Capital Stock	1	9.257.820	9.257.821	1.695.815	10.953.636	(9.257.820)	1.695.816
Capital Reserve	-	-	-	9.599.653	9.599.653	-	9.599.653
Net Income of Previous Fiscal Years	(1)	-	(1)	-	(1)	-	(1)
<b>TOTAL LIABILITIES</b>	0	9.257.820	9.257.820	11.295.468	20.553.289	(9.257.820)	11.295.468

\* Values are subject to variation, because of suspensive conditions subject to the approval of regulatory and government authorities

## 6. CONCLUSION

In light of the analyses of the previously mentioned documents and based on studies conducted by APSIS, the experts concluded that the book value of NETANYA's net equity, as of December 31<sup>st</sup>, 2015, for purpose of the merger of NETANYA with and into BVMF, is equivalent to, at least, **11,295,468 BRL thousand** (eleven billion, two hundred and ninety five million, four hundred and sixty eight thousand *reais*), after subsequent events informed by the company.

The report AP-0333/16-01 was elaborated in the form of Digital Report (eletronic document in *Portable Document Format* - PDF), with the certification of the responsible technicians and printed by APSIS, composed by eleven (11) pages typed on one side and three (3) exhibits. APSIS Consultoria e Avaliações Ltda., a company specialized in the appraisal of assets, CRC/RJ-005112/O-9, legally represented by its representatives, makes itself available for any clarifications which may be deemed necessary.

São Paulo, April 15<sup>th</sup>, 2016.



LUÍZ PAULO CESAR SILVEIRA  
Vice President



MARCIA APARECIDA DE LUCCA CALMON  
Director

## *7. LIST OF EXHIBITS*

1. BALANCE SHEET OF NETANYA WITH ALL THE EVENTS
2. BALANCE SHEET OF NETANYA ON DECEMBER, 2015
3. GLOSSARY AND APSIS' PROFILE

RIO DE JANEIRO - RJ  
Rua da Assembleia, nº 35, 12º andar  
Centro, CEP 20011-001  
Tel.: + 55 (21) 2212-6850 Fax: + 55 (21) 2212-6851

SÃO PAULO - SP  
Av. Angélica, nº 2.503, Conj. 101  
Consolação, CEP 01227-200  
Tel.: + 55 (11) 3662-5453 Fax: + 55 (11) 3662-5722

A large orange triangle graphic on the left side of the page, pointing towards the top right.

## EXHIBIT 1

NETANYA	STATEMENTS						
BALANCE SHEET (BRL '000)	Balance in December 31st, 2015	Capital Contribution in cash*	Balance after Capital Contribution in December 31st, 2015	Transference and Issuance of Shares *	Balance after Transference and Issuance of Shares in December 31st, 2015	Redemption of Shares*	Balance after Redemption of Shares in December 31st, 2015
CURRENT ASSETS	0,13	9.257.820	9.257.820	-	9.257.820	(9.257.820)	-
Cash and Cash Equivalents	0,13	9.257.820	9.257.820	-	9.257.820	(9.257.820)	-
NON CURRENT ASSETS	-	-	-	11.295.468	11.295.468	-	11.295.468
LONG TERM RECEIVABLES	-	-	-	-	-	-	-
INVESTMENTS	-	-	-	1.695.815	1.695.815	-	1.695.815
CETIP S.A. 100%	-	-	-	1.695.815	1.695.815	-	1.695.815
PROPERTY, PLANT AND EQUIPAMENT	-	-	-	-	-	-	-
INTANGIBLES	-	-	-	9.599.653	9.599.653	-	9.599.653
Goodwill	-	-	-	9.599.653	9.599.653	-	9.599.653
<b>TOTAL ASSETS</b>	<b>0</b>	<b>9.257.820</b>	<b>9.257.820</b>	<b>11.295.468</b>	<b>20.553.289</b>	<b>(9.257.820)</b>	<b>11.295.468</b>
CURRENT LIABILITIES	-	-	-	-	-	-	-
NON CURRENT LIABILITIES	-	-	-	-	-	-	-
LONG TERM DEBTS	-	-	-	-	-	-	-
<b>SHAREHOLDERS EQUITY</b>	<b>0,13</b>	<b>9.257.820</b>	<b>9.257.820</b>	<b>11.295.468</b>	<b>20.553.289</b>	<b>(9.257.820)</b>	<b>11.295.468</b>
Capital Stock	1	9.257.820	9.257.821	1.695.815	10.953.636	(9.257.820)	1.695.816
Capital Reserve	-	-	-	9.599.653	9.599.653	-	9.599.653
Net Income of Previous Fiscal Years	(1)	-	(1)	-	(1)	-	(1)
<b>TOTAL LIABILITIES</b>	<b>0</b>	<b>9.257.820</b>	<b>9.257.820</b>	<b>11.295.468</b>	<b>20.553.289</b>	<b>(9.257.820)</b>	<b>11.295.468</b>

\* Values are subject to variation, because of suspensive conditions subject to the approval of regulatory and government authorities

A large orange triangle graphic on the left side of the page, pointing towards the top right.

## EXHIBIT 2

Descrição	Saldo Anterior	Débito	Crédito	Saldo Atual
[1]ATIVO	0,00D	1.200,00	1.068,60	131,40D
[11]ATIVO CIRCULANTE	0,00D	1.200,00	1.068,60	131,40D
[111]DISPONIBILIDADE	0,00D	1.200,00	1.068,60	131,40D
[1111]CAIXA	0,00D	1.080,00	1.068,60	11,40D
[111101]CAIXA MATRIZ	0,00D	1.080,00	1.068,60	11,40D
[112]DEPÓSITOS BANCÁRIOS À VISTA	0,00D	120,00	0,00	120,00D
[111203]BANCO DO BRASIL S/A	0,00D	120,00	0,00	120,00D
[2]PASSIVO	0,00C	0,00	1.200,00	1.200,00C
[23]PATRIMÔNIO LÍQUIDO	0,00C	0,00	1.200,00	1.200,00C
[231]CAPITAL SOCIAL	0,00C	0,00	1.200,00	1.200,00C
[2311]CAPITAL REALIZADO - DE RESIDENTES NO PAÍS	0,00C	0,00	1.200,00	1.200,00C
[231101]CAPITAL SUBSCRITO DE DOMICILIADOS E RESIDENTES	0,00C	0,00	1.200,00	1.200,00C
[234]OUTRAS CONTAS DO PATRIMÔNIO LÍQUIDO	0,00C	0,00	0,00	0,00C
[2341]OUTRAS CONTAS DO PATRIMÔNIO LÍQUIDO	0,00C	0,00	0,00	0,00C
[234104](-) PREJUÍZOS ACUMULADOS	0,00D	0,00	0,00	0,00D
[5]DESPESAS	0,00D	1.068,60	0,00	1.068,60D
[51]DESPESAS OPERACIONAIS	0,00D	1.068,60	0,00	1.068,60D
[513]DESPESAS OPERACIONAIS	0,00D	223,39	0,00	223,39D
[5131]DESPESAS OPERACIONAIS DAS ATIVIDADES EM GERAL	0,00D	223,39	0,00	223,39D
[513124]HONORÁRIOS CONTÁBEIS	0,00D	223,39	0,00	223,39D
[515]DESPESAS TRIBUTÁRIAS	0,00D	505,21	0,00	505,21D
[5151]DESPESAS TRIBUTÁRIAS	0,00D	505,21	0,00	505,21D
[515108]IMPOSTOS E TAXAS	0,00D	484,21	0,00	484,21D
[515109]IMPOSTOS E TAXAS FEDERAIS	0,00D	21,00	0,00	21,00D
[516]OUTRAS DESPESAS OPERACIONAIS	0,00D	340,00	0,00	340,00D
[5161]OUTRAS DESPESAS OPERACIONAIS EM GERAL	0,00D	340,00	0,00	340,00D
[516103]CONTRIBUIÇÃO PATRONAL	0,00D	11,40	0,00	11,40D
[516117]DESPESAS DE CARTÓRIO	0,00D	13,90	0,00	13,90D
[516124]MATERIAL DE ESCRITÓRIO	0,00D	314,70	0,00	314,70D
[53]RESULTADO DO EXERCÍCIO	0,00D	0,00	0,00	0,00D
[531]RESULTADO DO EXERCÍCIO	0,00	0,00	0,00	0,00
[5311]RESULTADO DO EXERCÍCIO	0,00	0,00	0,00	0,00
[531101]RESULTADO DO EXERCÍCIO	0,00	0,00	0,00	0,00
Análise do Balancete				
Ativo ----->	131,40D	Passivo ----->	1.200,00C	
Despesa ----->	1.068,60D	Receita ----->	0,00C	
Custo----->	0,00D			
=====>	1.200,00D	=====>	1.200,00C	
Prejuízo ----->	1.068,60			
=====				



A large orange triangle graphic on the left side of the page, pointing towards the bottom right.

## EXHIBIT 3

# Glossary

## A

### ABL

Gross Leasable Area

### ABNT (Associação Brasileira de Normas Técnicas)

Brazilian Technical Standards Association.

### Allocated Codes

serial number (grades or weights) to differentiate the quality features of properties.

### Allotment

subdivision of a tract of land into lots for buildings with the opening of new thoroughfares, or the extension, modification or expansion of existing ones.

### Amortization

systematic allocation of the depreciable value of an asset over its useful life.

### Apparent Age

estimated age of a property according to its characteristics and conservation status at the time of inspection.

### Asset

a resource controlled by the entity as a result of past events from which future

economic benefits are expected for the entity.

### Asset Approach

valuation of companies where all assets (including those not accounted for) have their values adjusted to the market. Also known as market net equity.

## B

### Base Date

specific date (day, month and year) of application of the assessment value.

### Basic Infrastructure

urban rainwater drainage equipment, street lighting, sewage system, drinking water, public and home electricity supply and access routes.

### BDI (Budget Difference Income)

a percentage that indicates the benefits and overhead costs applied to the direct cost of construction.

### Best Use of the Property

the most economically appropriate use of a certain property according to its characteristics and surroundings, respecting legal limitations.

### Beta

a systematic risk measure of a share;

price trend of a particular share to be correlated with changes in a given index.

### Book Value

the value at which an asset or liability is recognized on the balance sheet.

### Building Standard

the quality of the improvements according to the specifications of design, materials, workmanship and performance effectively used in construction.

### Business Combination

union of separate entities or businesses producing financial statements of a single reporting entity. Transaction or other event by which an acquirer obtains control of one or more businesses, regardless of the legal form of operation.

### Business Risk

uncertainty of realization of expected future returns of the business resulting from factors other than financial leverage.

## C

### CAPEX (Capital Expenditure)

fixed asset investments.

### Capitalization

conversion of a simple period of economic benefits into value.

### CAPM (Capital Asset Pricing Model)

model in which the capital cost for any share or lot of shares equals the risk free rate plus risk premium provided by the systematic risk of the share or lot of shares under investigation. Generally used to calculate the Cost of Equity or the Cost of Shareholder Capital.

### Capitalization Rate

any divisor used to convert economic benefits into value in a single period.

### Capital Structure

composition of a company's invested capital, between own capital (equity) and third-party capital (debt).

### Cash Flow

cash generated by an asset, group of assets or business during a given period of time. Usually the term is supplemented by a qualification referring to the context (operating, non-operating, etc...).

### Cash Flow on Invested Capital

cash flow generated by the company to be reverted to lenders (interest and amortizations) and shareholders (dividends) after consideration of cost and operating expenses and capital investments.

### Cash-Generating Unit

smallest identifiable group of assets generating cash inflows that are largely independent on inputs generated by other assets or groups of assets.

### Casualty

an event that causes financial loss.

### Company

commercial or industrial entity, service provider or investment entity holding economic activities.

### Conservation Status

physical status of an asset as a result of its maintenance.

### Control

power to direct the strategic policy and administrative management of a company.

### Control Premium

value or percentage of the pro-rata value of a lot of controlling shares over the pro-rata value of non-controlling shares, which reflect the control power.

### Cost

the total direct and indirect costs necessary for production, maintenance or acquisition of an asset at a particular time and situation.

### Cost of Capital

Expected rate of return required by the market as an attraction to certain investment funds.

### CPC (Comitê de Pronunciamentos Contábeis)

Accounting Pronouncements Committee.

### Current Value

value replacement with a new value depreciated as a result of the physical state the property is in.

### CVM

Securities and Exchange Commission.

## D

### Damage

damage caused to others by the occurrence of flaws, defects, accidents and crimes, among others.

### Data Treatment

application of operations to express, in relative terms, the attribute differences between the market data and data of the property being assessed.

### Date of Issue

closing date of the valuation report, when conclusions are conveyed to the client.

### DCF (Discounted Cash Flow)

discounted cash flow.

### D & A

depreciation and amortization.

### Dependent Variable

variable to be explained by the independent ones.

### Depreciable Value

cost of the asset, or other amount that substitutes such cost (financial statements), less its residual value.

### Depreciation

systematic allocation of the depreciable value of an asset during its useful life.

### Dichotomous Variable

variable that assumes only two values.

### Direct Production Cost

spending on inputs, including labor, in the production of goods.

### Discount for Lack of Control

value or percentage deducted from the pro-rata value of 100% of the value of a company that reflects the absence of part or all of the control.

### Discount for Lack of Liquidity

value or percentage deducted from the pro-rata value of 100% of the value of a company that reflects the lack of liquidity.

### Discount Rate

any divisor used to convert a flow of future economic benefits into present value.

### Drivers

value drivers or key variables.

## E

### EBIT (Earnings before Interest and Taxes)

earnings before interest and taxes.

### EBITDA (Earnings before Interest, Taxes, Depreciation and Amortization)

earnings before interest, taxes, depreciation and amortization.

### Economic Benefits

benefits such as revenue, net profit, net cash flow, etc.

### Efficient Use

that which is recommendable and technically possible for the location on a reference date, among the various uses permitted by the applicable law, observing surrounding marketing trends.

### Electrical Damage Value

estimated cost of the repair or replacement of parts, when the property suffers electrical damage. Values are tabulated in percentages of the Replacement Value and have been calculated through the study of equipment manuals and the expertise in corrective maintenance of Apsis technicians.

### Enterprise

set of properties capable of producing revenue through marketing or economic exploitation. It can be: real estate (e.g. subdivision, commercial / residential buildings), real-estate based (e.g., hotel, shopping mall, theme parks), industrial or rural.

### Enterprise Value

economic value of the company.

### Equity Value

economic value of the equity.

### Equivalent Construction Area

constructed area on which the unit cost equivalence of corresponding construction is applied, according to ABNT postulates.

## Equivalent Depth

numerical result of the division of a lot area by its main projected front.

## Expertise

technical activity performed by a professional with specific expertise to investigate and clarify facts, check the status of property, investigate the causes that motivated a particular event, appraise assets, their costs, results or rights.

# F

## Facilities

set of materials, systems, networks, equipment and operational support services for a single machine, production line or plant, according to the degree of aggregation.

## Fair Market Value

value at which an asset could have its ownership exchanged between a potential seller and a potential buyer, when both parties have reasonable knowledge of relevant facts and neither is under pressure to do so.

## Fair Value Less Cost to Sell

value that can be obtained from the sale of an asset or cash-generating unit less sale expenses, in a transaction between knowledgeable, willing and uninterested parties.

## FCFF (Free Cash Flow to Firm)

Free cash flow to firm, or unlevered free cash flow.

## Financial Lease

that which substantially transfers all

the risks and benefits related to the ownership of the asset, which may or may not eventually be transferred. Leases that are not financial leases are classified as operating leases.

## Fixed Asset

tangible asset available for use in the production or supply of goods or services, in third-party leasing, investments, or for management purposes, expected to be used for more than one accounting period.

## Flaw

anomaly that affects the performance of products and services, or makes them inadequate to the purposes intended, causing inconvenience or material loss to the consumer.

## Forced Liquidation

condition on the possibility of a compulsory sale or in a shorter period than the average absorption by the market.

## Free Float

percentage of outstanding shares on the company's total capital.

## Frontage

horizontal projection of the line dividing the property and the access road; measurement of the front of a building.

# G

## Goodwill

see Premium for Expected Future Profitability.

# H

## Homogenization

treatment of observed prices by application of mathematical transformations that express, in relative terms, the differences between market data attributes and those of the property assessed.

## Homogenized Area

useful or private area, or built with mathematical treatments for valuation purposes, according to criteria based on the real estate market.

# I

## IAS (International Accounting Standards)

principles-based standards, interpretations and the framework adopted by the International Accounting Standards Board (IASB). See International Accounting Standards.

## IASB (International Accounting Standards Board)

International Accounting Standards Board. Standard setting body responsible for the development of International Financial Reporting Standards (IFRSs).

## Ideal Fraction

percentage owned by each of the buyers (tenants) of the land and of the building's common items.

## IFRS (International Financial Reporting Standards)

International Financial Reporting Standards, a set of international accounting pronouncements published and reviewed by the IASB.

## Impairment

see Impairment losses

## Impairment Losses (impairment)

book value of the asset that exceeds, in the case of stocks, its selling price less the cost to complete it and expense of selling it; or, in the case of other assets, their fair value less expenditure for sale.

## Income Approach

valuation method for converting the present value of expected economic benefits.

## Independent Variables

variables that provide a logical content to the formation of the value of the property subject to the assessment.

## Indirect Production Cost

administrative and financial costs, benefits and other liens and charges necessary for the production of goods.

## Influence Point

atypical point that, when removed from the sample, significantly changes the estimated parameters or the linear structure of the model.

## Insurance

risk transfer guaranteed by contract whereby one party undertakes, subject to payment of premium, to indemnify another for the occurrence of casualties covered under the policy.

## Insurance Value

value at which an insurance company assumes the risks. Except in special cases, it is not applied to land and foundations.

## Intangible Asset

identifiable non-monetary asset without physical substance. This asset is identifiable when: a) it is separable, i.e., capable of being separated or divided from the entity and sold, transferred, licensed, leased or exchanged, either alone or together with the related contract, asset or liability; b) it arises from contractual or other legal rights, regardless of whether those rights are transferable or separable from the entity or from other rights and obligations..

## Internal Rate of Return

discount rate where the present value of future cash flow is equivalent to the cost of investment.

## International Accounting Standards (IAS)

standards and interpretations adopted by the IASB. They include: International Financial Reporting Standards (IFRS) International Accounting Standards (IAS) and interpretations developed by the Interpretation Committee on International Financial Reporting Standards (IFRIC) or by the former Standing Interpretations Committee (SIC).

## Invested Capital

the sum of own capital and third-party capital invested in a company. Third-party capital is usually related to debt with interest (short and long-term) and must be specified within the context of the valuation.

## Investment Property

property (land, building or building part, or both) held by the owner or lessee under the lease, both to receive payment of rent and for capital appreciation or both, other than for use in the production or supply of goods or services, as well as for administrative purposes.

## Investment Value

value for a particular investor based on individual interests in the property in question. In the case of business valuation, this value can be analyzed by different situations, such as the synergy with other companies of an investor, risk perceptions, future performance and tax planning.

## K

### Key Money

amount paid by the prospective tenant for signature or transfer of the lease contract, as compensation for the point of sale.

### Key Variables

variables that, a priori, and traditionally have been important for the formation of property value.

## L

### Levered Beta

beta value reflecting the debt in capital structure.

### Liability

present obligation that arises from past events, whereby it is hoped that the settlement thereof will result in the inflow of funds from the entity embodying economic benefits.

### Liquidation Value

value of a property offered for sale on the market outside the normal process, i.e. one that would be established if the property were offered for sale separately, taking into account the costs involved and the discount required for a sale in a reduced period.

### Liquidity

ability to rapidly convert certain assets into cash or into the payment of a certain debt.

## M

### Market Approach

valuation method in which multiple comparisons derived from the sales price of similar assets are adopted.

### Market Data

set of information collected on the market related to a particular property.

### Marketing Factor

the ratio between the market value of an

asset and its reproduction cost less depreciation or replacement cost, which may be higher or lower than 1 (one).

### Market Research

set of activities for identification, investigation, collection, selection, processing, analysis and interpretation of results on market data.

### Maximum Insurance Value

maximum value of the property for which it is recommendable to insure it. This criterion establishes that the property whose depreciation is greater than 50% should have its Maximum Insurance Value equivalent to twice as much as the Current Value; and the property whose depreciation is with less than 50% should have its Maximum Insurance Value equivalent to the Replacement Value.

### Multiple

market value of a company, share or invested capital, divided by a valuation measurement of the company (EBITDA, income, customer volume, etc...).

## N

### Net Debt

cash and cash equivalents, net position in derivatives, short-term and long-term financial debts, dividends receivable and payable, receivables and payables related to debentures, short-term and long-term deficits with pension funds, provisions, and other credits and obligations to related parties, including subscription bonus.

### Non-Operating Assets

those not directly related to the company's operations (may or may not generate revenue) and that can be disposed of without detriment to its business.

### Null hypothesis in a regression model

hypothesis in which one or a set of independent variables involved in the regression model are not important to explain the variation of the phenomenon in relation to a pre-established significance level.



### Operating Assets

assets that are basic to the company's operations.

### Operating Lease

that which does not substantially transfer all the risks and benefits incidental to the ownership of the asset. Leases that are not operating leases are classified as financial leases.



### Parent Company

an entity that has one or more subsidiaries.

### Perpetual Value

value at the end of the projective period to be added on the cash flow.

### Point of Sale

intangible asset that adds value to commercial property, due to its location and expected commercial exploitation.

### Population

total market data of the segment to be analyzed.

### Premium for Expected Future Profitability (goodwill)

future economic benefits arising from assets not capable of being individually identified or separately recognized.

### Present Value

the estimated present value of discounted net cash flows in the normal course of business.

### Price

the amount by which a transaction is performed involving a property, a product or the right thereto.

### Private Area

useful area plus building blocks (such as walls, pillars, etc.) and elevator hallway (in specific cases).

### Property

something of value, subject to use, or that may be the object of a right, which integrates an equity.



### Qualitative Variables

variables that cannot be measured or counted, only ordered or ranked, according to attributes inherent to

the property (e.g., building standard, conservation status and quality of the soil).

### Quantitative Variables

variables that can be measured or counted (e.g., private area, number of bedrooms and parking spaces).



### Range for Real Estate Valuations

range in the vicinity of the point estimator adopted in the valuation within which to arbitrate the value of the property, provided it is justified by the existence of features that are not contemplated in the model.

### Re (Cost of Equity)

return required by shareholders for the capital invested.

**Real Estate** - property, consisting of land and any improvements incorporated thereto. Can be classified as urban or rural, depending on its location, use or to its highest and best use.

### Recoverable Value

the highest fair value of an asset (or cash-generating unit) minus the cost of sales compared with its value in use.

### Rd (Cost of Debt)

a measure of the amount paid for the capital earned from third parties, in the form of loans, financing, market funding, among others.

### Reference Real Estate

market data with features comparable to the property assessed.

### Regression Model

the model used to represent a specific phenomenon, based on a sample, considering the various influencing characteristics.

### Remaining Life

a property's remaining life.

### Replacement Cost

a property's reproduction cost less depreciation, with the same function and features comparable to the property assessed.

### Replacement Value for New

value based on what the property would cost (usually in relation to current market prices) to be replaced with or substituted by a new, equal or similar property.

### Reproduction Cost

expense required for the exact duplication of a property, regardless of any depreciation.

### Reproduction Cost Less Depreciation

a property's reproduction cost less depreciation, considering the state it is in.

### Residual Value

value of new or used asset projected for a date limited to that in which it becomes scrap, considering its being in operation during the period.

## Residual Value of an Asset

estimated value that the entity would obtain at present with the sale of the asset, after deducting the estimated costs thereof, if the asset were already at the expected age and condition at the end of its useful life.

# S

## Sample

set of market data representative of a population.

## Scrap Value

market value of a property's reusable materials in disabling conditions, without their being used for production purposes.

## Shareholders' Equity at Market Prices

see Assets Approach.

## Statistical Inference

part of statistical science that allows drawing conclusions about the population from a sample.

## Subsidiary

entity, including that with no legal character, such as an association, controlled by another entity (known as the parent company).

## Supporting Documentation

documentation raised and provided by the client on which the report premises are based.

## Survey

evidence of local events through insightful

observations in a property and of the factors and conditions that constitute or influence it.

# T

## Tangible Asset

physically existing asset, such as land, building, machinery, equipment, furniture and tools.

## Technical Report

detailed report or technical clarification issued by a legally qualified and trained professional on a specific subject.

## Total Construction Area

resulting from the sum of the real private area and the common area allocated to an independent unit, defined according to ABNT.

# U

## Urbanizable Land

land eligible to receive urban infrastructure works aiming at its efficient use, by means of the subdivision, split or implementation of a business.

## Useful Area

real private area subtracted from the area occupied by walls and other building blocks that prevent or hinder its use.

## Useful Economic Life

the period in which an asset is expected to be available for use, or

the number of production or similar units expected to be obtained from the asset by the entity.

# V

## Valuation

act or process of determining the value of an asset.

## Valuation Methodology

one or more approaches used in developing evaluative calculations for the indication of the value of an asset.

## Value at Risk

representative value of the share of the property one wishes to insure and that may correspond to the maximum insurable value.

## Value in Use

value of a property in operating conditions in its present state, such as the useful part of an industry, including, where relevant, the costs of design, packaging, taxes, freight and installation.

## Value Plan

the graphic representation or listing of generic square meter values of land or of the real estate on the same date.

# W

## WACC (Weighted Average Cost of Capital)

model in which capital cost is determined by the weighted average of the market

value of capital structure components (own and others).

## MAIN SERVICES

### Business Appraisal

Compliance with legal standards: The Brazilian Corporate Law (Lei das Sociedades Anônimas) The Accounting Ruling Council (Comitê de Pronunciamento Contábil) The Judicial Reorganization Law Corporate Restructuring Public Share Offering (OPA) BACEN Circular Letter; Carta Circular BACEN
Economic and financial feasibility analysis;
Appraisal of intangible assets, biological Assets, Properties for Investment, among others;
Appraisal for Purchase and Sale purposes;
Premium Allocation Law # 12,973;
Intangible Asset appraisals;
Technical Assistance and Forensic Inspection;
Pre-PPA in business merging operations; PPA - Purchase Price Allocation.

### Fixed Asset Management

Inventory with tagging (RFID/Bar Code);
Physical vs. Book Reconciliation;
Bookkeeping and maintenance integration;
Bookkeeping registry collection (Component Management);
Fixed Asset Appraisal for various purposes;
Accounting Requirements (IFRS/CPC/CFC);
Asset allocation equity control during project execution;
Equity Outsourcing;
Specialized Projects / Services for the Telecommunications, Energy and Broadcasting Segments.

### Sustainability

Basic Environmental Plan (PBA);
Environmental expert inspection and Due Diligences;
Environmental appraisals to meet Ecuador Principles;
Mine Shutdown Plan;
Industrial Plant Decommissioning Plans;
Environmental Projects and Plans for specific purposes;
ISC (Corporate Sustainability Index).

### Corporate Transactions

Mergers & Acquisitions (M&A's);
Full or partial sales;
<i>Fundraising from Private Equity funds;</i>
Strategic growth advisory through the "M&A - Buy-Side" scope;
<i>Joint Ventures;</i>
Strategic alliances;
Financial restructuring;
<i>Finance and real estate: purchase, sale, sale &amp; lease back and build to suit.</i>

### Real Estate Consultancy

Study of project economic and financial feasibility;
Highest & best use study for potential properties;
<b>Real Estate Management System - Cubus;</b>
Financial lifespan, residual value, and replacement value;
Real estate portfolio profitability analysis;
<i>Lease vs. buy and stay vs. go analysis;</i>
Forensic Inspection;
Execution of projects dedicated to values blueprint review for cities/municipalities;
Appraisals for various purposes: Insurance, Bank Guarantees/Dation in Payment, Purchase and Sale Value;
Contract renegotiation and revenue portfolio management;
Construction Inspection and Measurements;
<i>Site Hunter.</i>

### Corporate Governance

Consultancy in corporate governance for the alignment with the best practices;
Implementation of governance bodies through board of directors and consulting board, including recruitment and selection of independent members;
Corporate governance preparation to structure long-term debt (BNDES) and/or Mergers & Acquisitions (M&A);
Consultancy for Board Secretariat structuring;
Strategic restructuring of active boards.

## FOR OVER 37 YEARS

Value is what moves the world and determining precisely 'how much it is worth' is our business. Apsis is a consulting firm driven by the constant motivation of understanding the value of things. How much are your company, your property, or your business intangible assets worth.

## OUR CLIENTS

Algar	Concal	Mattos Filho Advogados
Aliance Shopping Centers	CSN	Michelin
ALL - América Latina Logística	CVC	Oi
Ambev	Duff & Phelps	Pátria Investimentos
Andrade Gutierrez	Embratel	Petrobras
AmstedMaxion	Eneva	Pinheiro Neto Advogados
Angra Partners	Energia Sustentável do Brasil	Procter & Gamble
Arcelor Mittal Brasil	Estácio Participações	Profarma
Artesia	Femsa	Prumo Logística Global
Banco Modal	FGV	Restoque
BHG - Brazil Hospitality Group	FGV Projetos	Rexam
Bio Ritmo	FIS Global	Rio Bravo Investimentos
BMA - Barbosa Müssnig Aragão	Gávea Investimentos	Samsung
BNY Mellon	Gerdau	Supergasbras
Bolsa De Mulher	Getnet	The Carlyle Group
BRMALLS	Gol Linhas Aéreas	Totvs
BR Properties	Ideiasnet	Ultrapar
Braskem	Inbrands	Unimed Rio
Brasil Pharma	Infoglobo	Veirano Advogados
Brasil Brokers	JBS	Via Varejo
BTG Pactual	Laureate	Vinci Partners
Carrefour	Lavazza	Votorantim
CEG	Light	Yamana Gold
Cielo	Magnesita	Warburg Pincus
Claro	Marfrig	

### RIO DE JANEIRO

Rua da Assembleia, 35 - 12° floor  
Centro • Rio de Janeiro  
RJ • 20011-001  
Phone: +55 21 2212-6850  
E-mail: [apsis.rj@apsis.com.br](mailto:apsis.rj@apsis.com.br)

### SÃO PAULO

Av. Angélica, 2503, Conj. 101  
Consolação • São Paulo  
SP • 01227-200  
Phone: +55 11 3662-5453  
+55 11 3662-5722  
E-mail: [apsis.sp@apsis.com.br](mailto:apsis.sp@apsis.com.br)