

# RIXML Research Standard Data Dictionary

# **RIXML Research Standard Version 2.5**

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# Preface

# **Copyright and incorporation information**

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# Schema revision history

Date	Version	Comments
21 Sep 2017	2.5	Four new Entitlements sub-types. Ability to express certain elements in
		multiple languages – people names, team names, organization names,
		report titles, abstracts, etc. Better support for events. Expansion of
		enumerated lists for Status Type, Index, Issuer/Security ID, Action. Does
		not break backward-compatibility with version 2.4.
05 Feb 2013	2.4	Added terms and definitions to many enumeration lists; added major
		new element for describing organization expertise (with sub-structure);
		added additional person details; updated structure of Rating element;
		added mirror tags for certain tags to enable formatting; and added two
		new side-car schemas (Roster Updates and Coverage Updates). Does
		not break backward-compatibility with version 2.3.1.
11 Jan 2010	2.3.1	Patch release containing a spelling correction to one of the
		enumerations. Does not break backward-compatibility with version 2.3.
13 Apr 2009	2.3	Improved definitions of more than 120 enumerated values; changed
		some tag cardinalities from required to optional based on real-world
		use cases that demonstrated that some tags formerly marked as
		required did not always apply and should be optional. Does not break
		backward-compatibility with version 2.2.
26 Mar 2005	2.2	Updated Research Standard to facilitate use of XBRL tagging; also
		imposes constraints on the tags covering language, currency, and
		country codes in order to enforce use of corresponding ISO standards.
		Does not break backward-compatibility with version 2.1.
25 Mar 2003	2.1	Major release incorporating updated information regarding tagging of
		ratings. <b>Does</b> break backward-compatibility with 1.0.
20 Jun 2002	2.0	Major release pulling together improvements along five vectors:
		globalization, events, distribution/entitlements, financial data, and
		fixed income. <b>Does</b> break backward-compatibility with 1.0.
20 Jun 2001	1.0	Initial production release of the RIXML Research Standard, focusing on
		support for Equities.

# Section 1: Introduction

# About RIXML.org

RIXML.org is a consortium of buy-side financial services firms, sell-side financial services firms, and technology vendors who provide products and services for creating and distributing investment research and/or capturing interactions between research providers and research consumers. The goals of RIXML.org are to define an open protocol that will improve the process of categorizing, aggregating, comparing, sorting, searching, and distributing global financial research, and to define an open protocol that allows service providers, consumers, and interaction report aggregators to comply with the EU's MiFID II reporting requirements.

The individuals who represent their firms include both IT experts and business-side project managers who represent the analysts, portfolio managers, and others who both produce and consume investment research.

# About the RIXML Research Standard

The primary objective of the RIXML Research Standard is to provide extensive capabilities for enhancing any piece of financial research content, in any form or media, with sufficient tagging (also called metadata) to allow research users to search, sort, commingle, parse, and filter the published research in order to deliver highly relevant information to decision-makers. The RIXML Research Standard is part of the RIXML Research Suite, which is also includes the RIXML Interactions Standard, the RIXML Analyst Roster Standard, and the RIXML Coverage Standard.

# About this data dictionary

This data dictionary provides the full set of tags used in the RIXML Research schema, along with definitions and the object model, formatted in a way that is easier to read than the actual XSD schema files. This document is one component of the RIXML release packet, and is intended to be used in conjunction with the other components of the release. In particular, the *RIXML Implementation Guide* provides critical background information and guidance about implementing the RIXML Research Standard.

This data dictionary also defines some best practices for implementing the RIXML Research Standard.

# **RIXML Research release packet**

This data dictionary is one part of the RIXML Research release packet. Please check the rixml.org website to make sure you are using the most up-to-date release packet, which includes the following components:

- RIXML Research Implementation Guide
- RIXML Research Data Dictionary (this document) human-readable catalog of attributes and elements, with descriptions
- RIXML Research schema files
- RIXML Research Level One addendum
- Release notes for the current version
- A set of sample instance document files

Each of these documents is available in the *Technical* > *Research Standard* section of the RIXML.org website, and contains valuable additional information.

# Where can I get more information?

A wealth of additional information can be found on the RIXML.org website, particularly in the *Technical* section.

Additionally, firms who are working to adopt RIXML will find the support of the RIXML.org organization in assisting to answer any questions:

RIXML Program Office c/o Jordan & Jordan 5 Hanover Square New York, NY 10004 Phone: 212-655-2945 Email: rixml@jandj.com Fax: 212-422-8570

### How can I provide feedback?

You can provide any feedback or suggestions to <u>rixml@jandj.com</u>. A summary of our process for incorporating changes can be found in the "Updates" portion of Section 2 of this document.

# Section 2: Implementing RIXML Research

Please use this *Data Dictionary* in conjunction with the *RIXML Research Implementation Guide*. The *Implementation Guide* outlines the approach taken by RIXML.org in creating the RIXML standard, explains the fundamental concepts regarding tagging and XML, and provides guidance for implementing RIXML. It also explains some of the core principles of the RIXML Research Standard and defines some best practices for implementing RIXML.

# Section 3: Best Practices and Common Mistakes

Below is additional information covering the more technical aspects of the RIXML Research standard. The information here should be used in conjunction with the information in the *Implementation Guide*.

#### **File management**

#### **RIXML file extension is .XML**

RIXML files should have an '.xml' file extension, not '.rixml'

CORRECT: report101.xml INCORRECT: report101.rixml

#### Perform all transactions via RIXML

For any document submitted using RIXML, any other transaction involving that document – including revisions, recalls and deletions – should be achieved by sending a RIXML file. Bypassing this process by manually performing any operation (such as an emergency delete) by phone or e-mail request also bypasses the automated processing, controls, quality checks, and audit trails built into vendor ingestion systems, and will often result in future problems.

#### Do NOT send a PDF file along with a RIXML delete request

New publications require transmitting a content file (typically in PDF format) along with a RIXML file. The same is true when you wish to replace the report with a revised version. However, do not send a PDF when you are recalling or deleting a report.

#### Resource file names are case-sensitive

Make sure the resource file name identified in your <Resource><Name> tag matches exactly (including case) the name of the actual file sent.

#### Filename re-use

File names should not be re-used unless the file being published is a replacement for a previously published file.

CORRECT:	Publishing a daily strategy report with a unique file name each day:
	"Strategy_Daily_20120512.pdf", "Strategy_Daily_20120513.pdf", etc.).
CORRECT:	Submitting a correction for "Strategy_Daily_20120512.pdf" using the same
	filename.
INCORRECT:	Publishing a daily strategy report with file name "Strategy_Daily.pdf" every day.

Note that it is fine for the *title* of the document to be re-used, just not the *file name*.

### Formatting

#### Tags are order-specific

Tags must be placed in your RIXML file in exactly the same order as they are specified in the RIXML schema.

#### Required tags are required

Be sure to include all required tags.

#### Highly recommended tags should be included whenever possible

Technically speaking, a tag that is highly recommended is actually optional; however, the member firms of RIXML.org have determined that it is best practice to use it. Some vendors may choose to reject submissions that do not have the Highly Recommended tags.

#### Tag names are case-sensitive

Tag names must be spelled exactly as documented

CORRECT: <Phone>
INCORRECT: <phone> or <PHONE>

#### Embedding HTML content

Some contributors embed HTML markup in freeform text fields such as title, subtitle, abstract, and synopsis tags in an attempt to control the display formatting of the text on vendor systems. HTML encoding can sometimes impact whether an XML file will be considered well-formed; the text may also not be displayed as expected, particularly when displayed on platforms that don't support the HTML markup.

As a workaround, the RIXML Research Standard includes mirror elements (called TitleFormatted, SubTitleFormatted, AbstractFormatted, and SynopsisFormatted). Basic HTML formatting is permitted in these fields; however, note the following:

- usage of these tags indicates to content aggregation vendors or other recipients that the content within these tags contains HTML formatting
- vendors or other recipients may or may not take advantage of these tags at their discretion
- the content in the mirror elements should be identical to the content in the main tags, aside from the formatting

#### Make sure to escape (but not double-escape) special XML characters

There are several characters that have special meaning in XML. In English, placing a question mark or exclamation point in the middle of a sentence would likely confuse a reader. Likewise, characters like '&' and '<' are used for XML 'punctuation'. If you need to use such characters within your tag data (e.g., your title includes "Property & Casualty"), you need to 'escape' them. You do this by using '& amp;' instead of '&'. These codes are called XML *entities*. A full list can be found in the XML documentation on the W3C.org web site.

CORRECT:	"Property & amp; Casualty" for "Property & Casualty"
CORRECT:	enclose your data within a CDATA section which informs XML parsers that the
	text within the section is to be interpreted literally.
INCORRECT:	not escaping: "Property & Casualty" would not appear correctly; consequences
	would depend on the XML parser and downstream software.
INCORRECT:	double-escaping: "Property '& Casualty" would often be displayed as
	"Property & amp Casualty," although consequences would depend on the XML
	parser and downstream software.

#### Encoding

UTF-8 is the default encoding system for XML, and is the recommended encoding system for RIXML. As with all XML files, the first line in a RIXML file identifies the encoding used. XML files encoded in UTF-8 will begin with the following line: <?xml version="1.0" encoding="UTF-8"?>. If you choose to use another encoding system, such as Windows-1252 or Shift-JIS, you must be sure to indicate this in the first line of your RIXML file, otherwise your content is likely to be displayed partly or entirely as nonsense characters. You will run into similar issues if you mix encodings within your RIXML file or identify the encoding scheme incorrectly.

### **Default values**

Hard-coding text or other values in any XML tag is strongly discouraged.

There are several reasons that it may be tempting to have automated authorship systems simply fill in default values. Contributors' automated authorship systems:

- may not collect all the information about each report that is necessary to fully populate all the RIXML tags
- may use a non-RIXML tagging scheme which doesn't map exactly to the RIXML tagging scheme
- may rely on analysts to fill in the tags, but may leave some tags as optional
- may have determined that some tags are almost always the same for all reports, so provide that as the default, allowing the author to overwrite it if they decide to

However, this will result in numerous reports falsely turning up in search results. When consumers notice a pattern of a particular contributor's reports constantly turning up falsely in their search results, they learn to ignore that contributor's reports, or worse - they actively exclude that contributor's reports in their search filters.

There are some cases in which default values can be accurately applied. For example,

- information in the Organization tag, which provides the information about the report's publisher, will generally be the same for all reports published by that publisher. In that case, it is fine to hard code that information.
- if you only publish equity reports, you can safely automate every report to be tagged with asset class "Equity". Or, if all of your company reports are written by fundamental equity analysts, you can safely automate every company report to be tagged with research approach *Fundamental*.
- if every report authored by a particular analyst is an economics report, you can safely automate every report drafted by that analyst to be tagged with discipline type *Economics*.

Aside from these extremely clear-cut situations, hard-coded values should not be applied. For optional fields, it is preferable to omit tags or leave them blank until your firm's infrastructure can be adjusted to apply these tags accurately.

# **Enumeration lists**

Please make sure to consult the "Enumeration Lists" section of the *Implementation Guide* for critical information regarding RIXML's use of enumeration lists. Below is some additional information on the technical details of the proper use of enumeration lists in RIXML.

#### Enumerated values are case-sensitive

Enumerated tag values must be spelled exactly as documented, including case.

CORRECT: "Yes" or "No" INCORRECT: "YES", "yes", "NO", "no"

#### Enumerated values are exclusive

Enumerated tag values are exclusive – you can't make up your own for tags that the RIXML Research Standard provides a set list of values. Additionally, "" (null) is not valid for enumerated tags. If the tag is included, a valid value must also be included. The way to use your own values is via the enumeration value of "PublisherDefined" where applicable.

CORRECT: "Yes" or "No" INCORRECT: "Maybe" and ""

# Section 3: Recommended tag usage

# Background

The RIXML Research Standard leaves room for differing interpretations. As a result, there is a bit of variance on how certain tags are being populated by RIXML contributors. In this section, we discuss how we believe certain tags should be populated and why.

# Additional information about particular fields

#### Author identification

Identifying authors has historically been difficult. You either had to make sure that each vendor had an up-to-date list of your authors and the codes you assigned them or that you had an up-to-date list of the codes that your vendors assigned them. You had to do this to ensure that when you provided an author code, your vendors could correctly identify the author from the provided code.

RIXML only provides one tag (personID) for author code. However, the PersonLabel element can be used to provide multiple author codes as needed by various distribution channels. This element can be used to include a label by which this person is known in a specific context and is useful for supplying author codes that have meaning on individual vendor platforms.

For example: <Person ...> <PersonLabel personLabelContext="Bloomberg">ABC123</PersonLabel> <PersonLabel personLabelContext="ThomsonReuters">DEF456</PersonLabel> ... </Person>

Because there can only be one personID, but multiple PersonLabel elements, RIXML recommends that the personID be used for the unique identifier used by the author's firm, while PersonLabel elements be added as required by each aggregation vendor or for other distribution channels.

This is one of the rare tags that may be included on a vendor-by-vendor basis.

### Which Analysts to include in the RIXML File

A primary author is the person, persons, group, or groups who primarily drafted the report. Other analysts or groups who have contributed can be included but should not be marked as primary. Other team members who did not directly contribute (such as research assistants or editors) should not be included.

Sometimes, a report will be attributed to a group, such as "Global Equity Research" or "Latin America Strategy Team"; in some cases, the publisher wishes to include the names of the individuals in this group, in other cases, the group is to be considered the name of the author. Either of these options is in compliance with RIXML best practices.

Note that regardless of whether individual(s), group(s), or a combination are used as authors in a RIXML file, group names should appear in the Name element within the PersonGroup element, while the names of individuals should appear in the PersonGroupMember.Person element. That is, groups and people are tagged separately, and a group should never be tagged in the field defined for individuals (nor vice versa).

#### **Bloomberg symbols**

Bloomberg symbols consist of a ticker followed by a single space followed by a country/exchange designation (e.g., "IBM US"). When using a Bloomberg symbol in RIXML, Bloomberg expects a '@" instead of a space. Bloomberg codes are available from Bloomberg, are case-sensitive, and should be exact:

CORRECT:	IBM@US
INCORRECT:	IBM US
INCORRECT:	ibm@us

#### **Reuters (RIC) symbols**

Reuters symbols (also known as RIC codes) consist of a ticker followed by a period followed by an exchange designation. The period and exchange designation may be omitted for U.S.-traded issue. Reuters symbols are available from Reuters, are case-sensitive, and should be exact. They may not omit the exchange designation unless a U.S. issue is intended.

CORRECT:	IBM.N
CORRECT:	IBM
INCORRECT:	ibm.N
INCORRECT:	IBM/N
INCORRECT:	lbm.n

#### Primary versus non-primary issuers

Please see the "Primary vs. non-primary" section of the *Implementation Guide* for guidance.

#### Focus: distinguishing Issuer Focus versus SectorIndustry Focus versus Country Focus

Publishers and consumers can mean two things when they refer to a "sector report" or an "industry report":

- 1. a compilation report with analysis of several companies within that sector or industry
- 2. a report that discusses the sector or industry in general, or concepts or events that affect that sector or industry

A report that discusses the sector or industry should clearly be tagged with SectorIndustry as the focus. However, determining whether a compilation report covering many companies within one sector or industry should be tagged with a focus of Issuer or with a focus of SectorIndustry can get a bit more tricky. RIXML recommends that the publisher of such a report decide using the following criteria:

- 1. If the report provides enough information about the companies discussed that a reader would likely want to see it when searching for information about those companies, it should be tagged with a focus of Issuer
- 2. If the report provides quick summaries of the author's opinions about the companies, pulled together in order to provide comparison within the context of the sector or industry, the focus should be SectorIndustry

Additionally, even if a report is about an industry within a particular country (such as the U.S. auto industry), the focus should still be set to SectorIndustry, not to Country.

#### When to set primaryIndicator to "Yes" and when to set it to "No"

The correct use of primaryIndicator in conjunction with the report focus enables publishers to convey what a report is actually *about* in a way the is extremely meaningful to end users.

The purpose of primaryIndicator is to enable a report's creator to distinguish the tags that identify the entity or concept that a report is mainly about from the entities and/or concepts that are merely discussed. This enables consumers to focus their searches and alerts based on their needs: one analyst might want to see all reports about a particular company, while another might just want to be alerted when a report primarily about a particular company is published.

A point of confusion, however, is whether the various elements related to the primary entity should be marked as primary. For example, if a report is mainly about a particular issuer, then it is fairly obvious that the issuer the report is mainly about would be marked as primary. However, would the primaryIndicator attribute for the sector/industry, region, country, etc. elements be set to Yes (because they are related to the Issuer whose primaryIndicator attribute is set to Yes), or No (because it is the Issuer that the report is primarily about)?

RIXML's best practice is that the primaryIndicator attribute be set to Yes for all elements related to the element that has been identified as the primary entity that the report is discussing. This is because the Focus tag enables the publisher to identify that the report is primarily about an issuer, so setting the primaryIndicator of the additional elements describing that issuer (sector/industry, region, etc.) to Yes indicates which sector/industry, region, etc. tagging refers to the issuer vs. those referring to the non-primary securities mentioned in the report.

Here is additional guidance for particular types of reports:

Company reports (and reports about a single mutual fund, REIT, etc.)

- should have a focus of *Issuer*
- should have one and only one issuer/security marked as primary. (Rare exceptions might include a report discussing the merger of Company A and Company B where the report is truly primarily about two companies.)
- should have the primaryIndicator for elements identifying the primary company's sector/industry, region, country, etc. set to *Yes*
- should include identifiers and related elements for other companies discussed in the report (e.g., competitors, suppliers, customers, vendors), but the primaryIndicator for these identifiers and other elements should be set to *No*
- should not include identifiers for companies mentioned briefly (for example, companies that appear only in tables)

### Sector/Industry reports

- should have a focus of SectorIndustry
- should include identifiers for any issuer/security significantly discussed in the text of the report
- should have the primaryIndicator for all identifiers set to No
- should have the primaryIndicator of the appropriate sector or industry set to Yes

**Compilation reports** (such as morning call / morning note reports)

- should not include a focus
- should include identifiers for any issuer/security significantly discussed in the report
- should have the primaryIndicator set to *No* wherever it appears

#### Synopsis

The Synopsis is a very brief overview of the topics covered in the report. This should be no longer than a few lines and would be appropriate for use in a highly abbreviated display such as when the user's mouse is positioned over the report's headline.

#### Abstract

The Abstract tag should highlight the key points covered in the report and should be no longer than a few paragraphs or bullets. If your report begins with a summary, highlights, or key points section, the simplest way to provide a report summary is to re-use this section of your report in the Abstract tag.

#### Language

The Language tag is used to identify the language in which the report is primarily written. It does not indicate the language of the tagging, which might be different.

#### Sector/Industry

The set of tags covering sectors and industries are in the standard mainly to identify:

- company reports on companies in a particular industry
- reports that give brief overviews on several reports within a single industry
- reports that discuss a particular industry, or topic within an industry, in depth

These are three very different types of reports. However, when planning your tagging strategy, make sure that you provide accurate, detailed sector and industry tagging for *all* of these types of reports. You should then use the other RIXML tags that enable you to identify which of these types of reports an individual report is, particularly ProductFocus.

Note that you may need to tag a sector/industry report with more than one sector/industry when the companies discussed span multiple industries. An example might be a report that discusses both life/health insurance companies and property/casualty insurance companies.

### Subject

The Subject tag identifies the topic(s) primarily discussed in the report. This tag is often an indication of an event that triggered the writing of the report (e.g., a company is about to release its earnings; a merger between two companies is announced; a company is planning to redeem its bonds; the CFO of a company resigns, etc.).

A subject tag should only be added if the subject has "critical mass" in the report; that is, that there is enough information about that subject in the report that someone searching for content covering this subject would find the report useful. More than one subject tag can be applied to a report when applicable.

### Periodicity

A periodical report is one that is published at a regular fixed interval. This tag is not intended to be used on all reports, but *only* on reports that are in fact periodicals. This tag is provided to enable consumers to more easily find and subscribe to periodical research content, or to exclude such content when desired when they are searching for focused, in-depth content.

CORRECT:	tagging "Tech Weekly" report with a Periodicity of "Weekly"
CORRECT:	tagging "Quarterly Coal Review" with a Periodicity of "Quarterly"
CORRECT:	tagging "Today in Tech" with a Periodicity of "Daily"

CORRECT:	omitting the Periodicity tag in most of your publications
INCORRECT:	tagging all of your company reports as "Daily" because you publish company
	reports every day
INCORRECT:	including the Periodicity tag in all of your content, leaving it as null when not
	required

#### **Product Classifications – Asset Class**

The Asset Class classification refers to the broad category of asset that is discussed in the research report. The Asset Class tag will not be used for all reports. For example, economic reports are generally not about any particular asset class. Note that a report analyzing the common stock of a gold mining company would be tagged as an Equity report, whereas a report discussing the commodity market in general would be tagged as a Commodity report.

CORRECT:	omitting the Asset Class tag in most of your publications
CORRECT:	tagging a research report discussing the stock of a particular company with an
	Asset Class of "Equity"
CORRECT:	tagging a research report discussing how a particular stock market is doing in
	general with an Asset Class of "Equity"
CORRECT:	tagging a research report discussing a fixed income topic with an Asset Class of
	"Fixed Income"
CORRECT:	tagging a research report discussing the fixed income market in general with an
	Asset Class of "Fixed Income"
CORRECT:	tagging a research report discussing currency securities (USD futures, currency
	swaps, etc.) with an Asset Class of "Currency"
CORRECT:	tagging a research report discussing gold futures with an Asset Class of
	"Commodity"
INCORRECT:	tagging a research report analyzing the stock of a specific gold mining company
	with an Asset Class of "Commodity"
INCORRECT:	including the Asset Class tag in all of your content, leaving it as null when not
	required

#### **Rating versus Rating Action versus Weighting Action**

In the RIXML Research Standard, the concept of *rating* is the author's current opinion about a security, sector, industry, issuer, country, or region.

The concept of *rating action* is used to describe a change or re-statement of the author's rating on a security, sector, industry, issuer, country, or region. Examples of this include upgrade, revise, drop, affirmed, and negative outlook.

The concept of *weighting action* is used to describe the author's recommendation about whether a portfolio should have more, less, or the same of a particular industry, country, or asset class relative to its weight in the market. Any action with respect to an analyst's weighting on an industry, sector, country, region, or asset class represents a Weighting Action.

Note that in RIXML, Weighting Action is a concept related to asset allocation, and thus, does not cover an analyst's assessment of an individual security, as this is not asset allocation in the strict sense.

#### How to Code Vendor-Specific Entitlement Codes

Most vendors have a way of directing a report to a specific audience (which may be referred to as a user group or distribution group). The audience is assigned a text or numeric code (e.g., NON\_US or 12). Each such code should appear within its own distinct AudienceTypeEntitlement element within its own distinct Entitlement element within its own distinct EntitlementGroup.

#### For example:

Tagging two separate entitlement codes for two different vendors would be done as follows:

<EntitlementGroup> <Entitlement includeExcludeIndicator="Include" primaryIndicator="Yes"> <AudienceTypeEntitlement entitlementContext="Bloomberg" AudienceType="PublisherDefined">BBGCODE1 </AudienceTypeEntitlement> </EntitlementGroup> <EntitlementGroup> <Entitlement includeExcludeIndicator="Include" primaryIndicator="Yes"> <AudienceTypeEntitlement entitlementContext="ThomsonReuters" audienceType="PublisherDefined">REUTERS5 </AudienceTypeEntitlement entitlementContext="ThomsonReuters" audienceType="PublisherDefined">REUTERS5 </AudienceTypeEntitlement> </EntitlementS

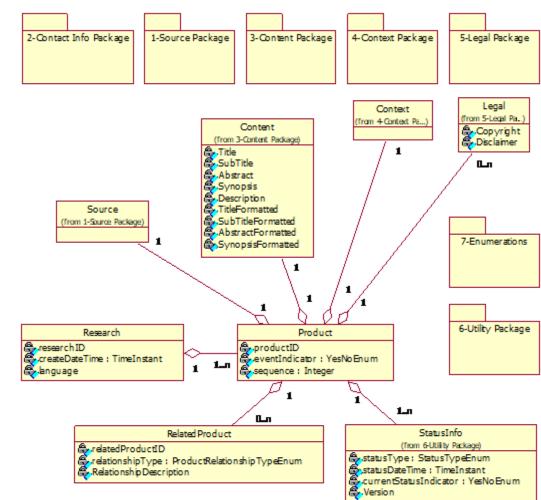
#### **Compilation Reports**

Compilation reports such as morning call reports provide special challenges, because they generally cover numerous securities within numerous sectors/industries, with sections written by different authors. RIXML recommends that publishers bear the following in mind in order to determine how best to tag these types of reports:

- 1. Use the focus of "Unfocused" for this type of report
- 2. Add tags to identify each of the different companies/issuers mentioned, but do not set the PrimaryIndicator to "Yes" for any company unless there is enough information about that company that a person might find critical information about that company in the compilation report that will not also be appearing in a separate report focused on that company or issue. (This is rare; usually, if there is a major piece of news, the analyst will publish a separate report covering the news in depth.) Remember that a report does not need to have PrimaryIndicator set to "Yes" for any individual issuer. It is fine to have the PrimaryIndicators for all securities in a report set to "No."
- 3. Do not add the sector/industry tags for each of the companies mentioned. If the report discusses a sector or industry in general, in enough depth that a person might want to see that information when searching for information about that sector/industry, then feel free to add the appropriate sector or industry tags.
- 4. Do not add author tags for all of the contributors unless the report itself provides guidance regarding which sections were authored by which people. Again, think of the consumer: if a compilation report comes up in a search on a particular author, but the consumer cannot tell which section was written by the author whose research they are trying to find, then that report becomes clutter in the search results.
- 5. In the case of compilation reports (such as a morning call report), in which the various sections are authored by different people, no single person can be deemed to have primarily authored the entire report. On such reports, contributing analysts should be included, but none should be marked as the primary author. Additionally, the editor or compiler of the report should *not* be listed as an author (primary or otherwise), because they did not create the content.

# Section 4: the RIXML Research Data Dictionary

This section provides the list of all elements and attributes in the RIXML Research Standard and the enumeration lists.



# **Class Diagram: High Level Relationships**

# Research

Research is the root tag for bundling research products.

### **Elements and Attributes:**

#### researchID (Required, String)

This is to facilitate the unique identification of a particular bundling of products. This is added with some forward thought to hypothetical research distribution systems that may wish to label and refer to result sets.

To ensure uniqueness it is recommended that a Universal Unique IDentifier (UUID) be used as the productID. UUIDs can be generated on any computer, regardless of platform or operating system. A UUID is a 128-bit (16-byte) integer that is virtually guaranteed to be unique in the world across space and time. The Open Software Foundation (OSF) created UUIDs, as part of their Distributed Computing Environment (DCE).

#### createDateTime (Required, TimeInstant)

This marks the date/time at which this research bundle was formed. It is expressed using ISO 8601 as refined by the World Wide Web Consortium's note http://www.w3.org/TR/NOTE-datetime. In addition, RIXML requires the use of Zulu time or Z-time (GMT +/- n hours:minute:seconds). All times are absolute and easier to compute, rather than using a relative (i.e. 08:30 +5) time.

#### language (Required, String)

Indicates the language of the RIXML document -- i.e. the language of the publisher-supplied tag values contained in the RIXML-based XML file for this research item. Described using the ISO 639-2/T Code.

#### **Aggregations:**

Product (Required, Multiples Allowed)

#### Product

Product refers to a unique "research idea", as opposed to an actual research publication. It is possible to publish multiple documents or other files (called "resources") with the same productID, provided they all refer to the same discrete research idea. Examples of a product include a research note, research report, conference call webcast, and morning meeting compilation. Examples of multiple resources published with the same productID are (1) a document published in English, with exact translations in German, French, and Japanese, (2) an audio file of a presentation and the transcript of the publication or (3) a single report that consists of a PDF and an Excel file.

#### **Elements and Attributes:**

#### productID (Required, String)

This is to facilitate the unique identification of a particular product. To ensure uniqueness it is recommended that a Universal Unique IDentifier (UUID) be used as the productID. UUIDs can be generated on any computer, regardless of platform or operating system. A UUID is a 128-bit (16-byte) integer that is virtually guaranteed to be unique in the world across space and time. The Open Software Foundation (OSF) created UUIDs, as part of their Distributed Computing Environment (DCE).

#### eventIndicator (Strongly Recommended, YesNoEnum)

A cue from the publisher that this product is really about an event, so that a hypothetical downstream parsing process might proceed more effectively and efficiently.

#### sequence (Optional, Integer)

Used to indicate any meaningful ordering of the Products contained in this Research item. Particularly useful in publishing compendium products made up of multiple sub-products. Ordering is ascending.

#### **Aggregations:**

Source (Required) Context (Required) Content (Required) Legal (Optional, Multiples Allowed) RelatedProduct (Optional, Multiples Allowed) StatusInfo (Required, Multiples Allowed)

#### RelatedProduct

Describes how content contained in this product is associated with other products, or how content in other products is associated with this one. Can have none or any number of relationships to other products.

#### **Elements and Attributes:**

**relatedProductID** (Required, String) The unique productID of the product to which this product is related (as stored in Product.productID of the related document)

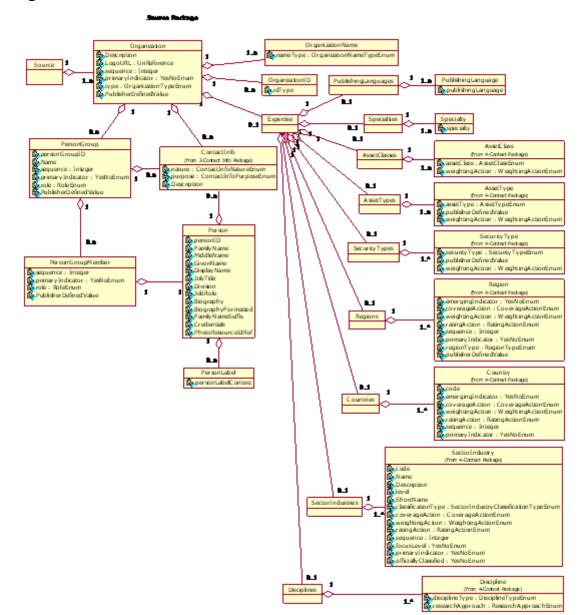
**relationshipType** (Required, ProductRelationshipTypeEnum) Indicates the type of relationship between this product and another product.

#### RelationshipDescription (Optional, String)

The description of the relationship between the current product and the other product to which it is related.

# **Source Package**

The Source section describes the source of the research product, including the publishing firm(s), individual(s), and / or group(s) involved in creating the research. Information about each source is described in the next section, Contact Info Details.



#### **Class Diagram: Source Details**

#### Source

The top-level element of the Source section. Used to specify the organization(s) from which this research item originated. Organizations given here are defined as publishers.

#### Aggregations:

Organization (Required, Multiples Allowed)

### Organization

Describes an organization related to the research item. Multiple organizations may be related to one research item. These organizations can be subsidiaries of the same parent or different organizations (as in a joint venture) working together on a publication or event. However, there can only be one primary publisher organization, which is captured by the primaryIndicator, when contained by the Source element.

#### **Elements and Attributes:**

#### **Description** (Optional, String)

Optional description of the organization. Used to include any additional information about the organization.

# LogoURL (Optional, UriReference)

Indicates the URL location of the logo of the organization.

#### sequence (Optional, Integer)

If there are multiple Organizations, and they should appear in a certain order when the content is published, indicate the desired order by associating the appropriate sequence number to each Organization.

#### primaryIndicator (Required, YesNoEnum)

Indicates the primary organization relative to others that may be specified. When multiple organizations (subsidiaries of the same organization or different organizations) come together on a product, one must be listed as primary (generally the parent organization or the name of the joint venture).

**type** (Required, OrganizationTypeEnum) The type of the organization.

#### PublisherDefinedValue (Optional, String)

For the cases in which the type attribute has the value PublisherDefined, the PublisherDefinedValue element is used to hold the organization's own description of the type.

#### Aggregations:

ContactInfo (Optional, Multiples Allowed) OrganizationID (Optional, Multiples Allowed) OrganizationName (Required, Multiples Allowed) PersonGroup (Optional, Multiples Allowed) Expertise (Optional)

### Expertise

The purpose of the Expertise element within the Organization element is to identify one or more areas of expertise offered by the research-publishing organization. It would not serve to describe the content payload, but rather the expertise areas of the publisher.

#### Aggregations:

PublishingLanguages (Optional) Specialties (Optional) AssetClasses (Optional) AssetTypes (Optional) SecurityTypes (Optional) Regions (Optional) Countries (Optional) SectorIndustries (Optional) Disciplines (Optional)

### OrganizationID

An identifier used to identify the organization -- multiple are possible. For example, for a product distributed via multiple vendors, each vendor may require a different OrganizationID, with the idType for each OrganizationID identifying the name of the vendor in the manner specified by the vendor. The actual ID is stored as free text in the content of the OrganizationID node.

A UUID can also be used as one of the IDs. This is to facilitate the unique identification of a particular organization. To ensure uniqueness it is recommended that a Universal Unique IDentifier (UUID) be used as the productID. UUIDs can be generated on any computer, regardless of platform or operating system. A UUID is a 128-bit (16-byte) integer that is virtually guaranteed to be unique in the world across space and time. The Open Software Foundation (OSF) created UUIDs, as part of their Distributed Computing Environment (DCE).

#### **Elements and Attributes:**

idType (Required, String)
Indicates the type of ID used. Examples: CUSIP, VendorCode.

### OrganizationName

The name of the organization. An organization can have multiple names as enumerated in the Name Types. At least one name is required for the content to be valid. Display name is the preferred name if only one name is provided.

#### **Elements and Attributes:**

nameType (Required, OrganizationNameTypeEnum)

The name can be one of the following types - legal, local, display, or parent. Use Display if using only one nameType, unless one of the other nameTypes is preferred.

#### language (Optional, String)

Indicates the language of the name value given, described using the ISO 639-2/T Code. Overrides the language attribute on the Research element.

#### PersonGroupDetails

Includes name information for a person group in a specific language.

#### **Elements and Attributes:**

#### language (Optional, String)

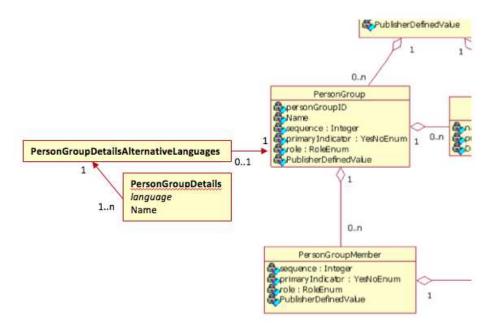
Indicates the language of the Person Group Details. If not specified, default to value of language attribute of top Research element. If language attribute of Research element is not specified, default to English. Described using the ISO 639-2/T Code.

Name (Required, String)

Indicates the name of the person group.

### PersonGroupDetailsAlternativeLanguages

Container element for one or more individual PersonGroupDetails elements meant to offer name information in a specific, non-default language. In order to avoid breaking compatibility with v2.4, we must throw normalization to the wind and add a duplicative construct beneath PersonGroup to house the name data in other languages. We do this via the new PersonGroupDetails construct.



#### **Aggregations:**

PersonGroupDetails (Required, Multiples Allowed)

### PersonGroup

The PersonGroup element is used to hold the name(s) of the individual person(s) and/or the name of the group. In the case of an individual person, the person tag and its associated personID are used (no personGroupID or description is needed). PersonGroups can be formally organized groups or they can be fluid groups that come together to deliver content. If the "group" consists of only one person, there is no need to define a group ID and description; it is sufficient to have the 'person' tag and the associated personID under the 'group' tag.

### **Elements and Attributes:**

**personGroupID** (Optional, String) Some unique label used to reference a particular group of people.

#### Name (Optional, String)

Indicates the name of the group. This is not required, but can be used where groups are formally named or if there is a name created for the group involved with a publication or event.

#### sequence (Optional, Integer)

If there are multiple PersonGroups, and they should appear in a certain order when the content is published, indicate the desired order by associating an appropriate sequence number to each one.

#### primaryIndicator (Optional, YesNoEnum)

Indicates the primary PersonGroup, when more than one are specified.

#### role (Optional, RoleEnum)

The role of the group relative to this research item. This is especially useful if only the group is specified without any members or if all members share the same role -- as in a group of document authors or meeting attendees.

#### PublisherDefinedValue (Optional, String)

If the role attribute has the value PublisherDefined, this element is used to hold the publisher's own description of the role.

#### **Aggregations:**

PersonGroupMember (Optional, Multiples Allowed) ContactInfo (Optional, Multiples Allowed) PersonGroupDetailsAlternativeLanguages (Optional)

#### AssetClasses

A container element for multiple AssetClass elements.

#### **Aggregations:**

AssetClass (Required, Multiples Allowed)

#### AssetTypes

A container element for multiple AssetType elements.

#### **Aggregations:**

AssetType (Required, Multiples Allowed)

#### Countries

A container element for multiple Country elements.

#### **Aggregations:**

Country (Required, Multiples Allowed)

#### Disciplines

A container element for multiple Discipline elements.

#### **Aggregations:**

Discipline (Required, Multiples Allowed)

#### PersonGroupMember

Used to define the members of a group, for example, the author(s) of the product. The PersonGroupMember highlights primary persons, and describes the display order of multiple persons.

#### **Elements and Attributes:**

#### sequence (Optional, Integer)

If there are multiple PersonGroupMembers, and they should appear in a certain order when the content is published, indicate the desired order by associating the appropriate sequence number to each PersonGroupMember.

#### primaryIndicator (Optional, YesNoEnum)

Indicates which member is primary relative to the product. A person group can have more than one primary member.

**role** (Optional, RoleEnum) The role of this individual person relative to this research item.

#### PublisherDefinedValue (Optional, String)

If the role attribute has value PublisherDefined, then the publisher indicates the role in this element.

#### Aggregations:

**Person** (Required)

#### PublishingLanguages

A container element for multiple PublishingLanguage elements.

#### **Aggregations:**

PublishingLanguage (Required, Multiples Allowed)

#### Regions

A container element for multiple Region elements.

#### **Aggregations:**

Region (Required, Multiples Allowed)

#### SectorIndustries

A container element for multiple SectorIndstry elements.

#### Aggregations:

SectorIndustry (Required, Multiples Allowed)

#### SecurityTypes

A container element for multiple SecurityType elements.

#### **Aggregations:**

SecurityType (Required, Multiples Allowed)

#### **Specialties**

A container element for multiple Specialty elements.

#### **Aggregations:**

Specialty (Required, Multiples Allowed)

#### PersonDetails

Describes an individual involved in the product in some capacity. Intended to facilitate expression in multiple languages.

#### **Elements and Attributes:**

#### language (Optional, String)

Indicates the language of the Person Details. If not specified, default to value of language attribute of top Research element. If language attribute of Research element is not specified, default to English. Described using the ISO 639-2/T Code.

**FamilyName** (Required, String) Indicates the family name of the person.

**MiddleName** (Optional, String) Indicates the middle name of the person.

**GivenName** (Optional, String) Indicates the given name of the person.

#### DisplayName (Optional, String)

Strongly Recommended. Indicates how the publisher or person wants the name to be presented, for example: Dr. John Doe Sr. CPA, CFA.

**JobTitle** (Optional, String) Indicates the official title of the person within an organization -- e.g. Managing Director, Vice President, etc.

**Division** (Optional, String) Indicates the division that the person officially works for within an organization.

#### JobRole (Optional, String)

Indicates the functional role played by the person relative to his/her job in the organization, for example, analyst, strategist, economist, etc.

**Biography** (Optional, String) Biographical information about the person. No markup permitted.

#### BiographyFormatted (Optional, String)

Biographical information about the person. Limited markup permitted - HTML code for paragraph, ordered lists and unordered lists with list items, bold, underline, and italics.

#### FamilyNameSuffix (Optional, String)

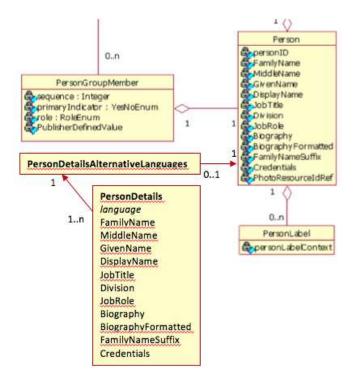
An accommodation for family name modifiers traditionally appearing after the person's name -- e.g. Jr., Sr., III..

#### **Credentials** (Optional, String)

An accommodation for credentials traditionally appearing after the person's name -- e.g. C.F.A., Ph.D., Esq..

### PersonDetailsAlternativeLanguages

Container element for one or more individual PersonDetails elements meant to offer name and job information in a specific, non-default language. In order to avoid breaking compatibility with v2.4, we must throw normalization to the wind and add a duplicative construct beneath Person to house the name data in other languages. We do this via the new PersonDetails construct.



#### **Aggregations:**

PersonDetails (Required, Multiples Allowed)

#### Person

Describes an individual involved in the product in some capacity.

#### **Elements and Attributes:**

#### personID (Required, String)

An identifier used to identify the person. For accurate identification it is required that the personID be unique for a given publisher, but the implementation of the ID is left to the publishers to implement as they deem fit. Examples: combination of LastName and FirstName, combination of internal employee ID and RIXML publisher ID.

**FamilyName** (Required, String) Indicates the family name of the person.

**MiddleName** (Optional, String) Indicates the middle name of the person.

**GivenName** (Optional, String) Indicates the given name of the person.

#### **DisplayName** (Optional, String)

Strongly Recommended. Indicates how the publisher or person wants the name to be presented, for example: Dr. John Doe Sr. CPA, CFA.

JobTitle (Optional, String)

Indicates the official title of the person within an organization -- e.g. Managing Director, Vice President, etc.

#### **Division** (Optional, String)

Indicates the division that the person officially works for within an organization.

#### JobRole (Optional, String)

Indicates the functional role played by the person relative to his/her job in the organization, for example, analyst, strategist, economist, etc.

#### Biography (Optional, String)

Biographical information about the person. No markup permitted.

#### BiographyFormatted (Optional, String)

Biographical information about the person. Limited markup permitted - HTML code for paragraph, ordered lists and unordered lists with list items, bold, underline, and italics.

#### FamilyNameSuffix (Optional, String)

An accommodation for family name modifiers traditionally appearing after the person's name -- e.g. Jr., Sr., III..

#### Credentials (Optional, String)

An accommodation for credentials traditionally appearing after the person's name -- e.g. C.F.A., Ph.D., Esq..

#### PhotoResourceIdRef (Optional, String)

An XML Schema keyref that will link to a Resource element representing a small photograph image of the person. Value must match a Resource.resourceID in this Product.

#### **Aggregations:**

ContactInfo (Optional, Multiples Allowed) PersonLabel (Optional, Multiples Allowed) PersonDetailsAlternativeLanguages (Optional)

#### PublishingLanguage

A specific language in which an organization publishes research with some frequency and fluency.

#### **Elements and Attributes:**

#### publishingLanguage (Required, String)

A specific language in which an organization publishes research with some frequency and fluency.

#### Specialty

Area of specialty associated with an organization that publishes research. When used within a Product parent, it indicates that the named specialty was used to create the product.

#### **Elements and Attributes:**

specialty (Required, String)

The particular area of specialty described by the parent element. Limited to values from the corresponding SpecialtyEnum enumeration.

### PersonLabel

This element can be used to include a label by which this person is known in the context named in the personLabelContext attribute. Useful for supplying author codes that have meaning on specific vendor platforms.

#### **Elements and Attributes:**

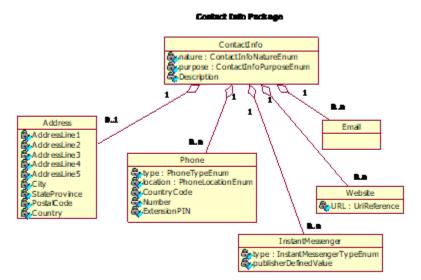
personLabelContext (Optional, String)

This attribute must be used to indicate the specific context for the person label. This would typically be a mnemonic for an individual vendor platform in which the labeled person has a presence. For example, it may be useful for identifying authors of research contributed to a particular vendor platform. Here, a vendor is defined as an organization outside the buy-side and sell-side community of financial services firms which provides platforms or tools used by participants in the investment research economy.

# **Contact Info Package**

The ContactInfo section contains the contact information for an organization, group or person involved in creating a research product as defined in Source Details. Can describe address, phone, email, IM and / or website contact information, at least one of which is required.

### **Class Diagram: Contact Info Details**



### ContactInfo

The top-level element of the ContactInfo section.

#### **Elements and Attributes:**

**nature** (Required, ContactInfoNatureEnum) Used to indicate the nature of the contact information - business or personal.

#### purpose (Optional, ContactInfoPurposeEnum)

Describes the intended purpose of the contact information. Gives the reader an idea of what to expect on the far side.

#### **Description** (Optional, String)

A brief description of the contact information can be included here, if desired. This element is intended to pick up where the purpose attribute leaves off. It offers the ability to provide more detail.

#### Aggregations:

Address (Optional) Email (Optional, Multiples Allowed) Phone (Optional, Multiples Allowed) Website (Optional, Multiples Allowed) InstantMessenger (Optional, Multiples Allowed)

#### Address

Strongly Recommended. Describes the street address.

#### **Elements and Attributes:**

AddressLine1 (Required, String) Indicates the first line of the street address.

AddressLine2 (Optional, String) Indicates the second line of the street address.

AddressLine3 (Optional, String) Indicates the third line of the street address.

AddressLine4 (Optional, String)AddressLine5 (Optional, String)City (Optional, String)Indicates the city where the street address is located.

**StateProvince** (Optional, String) Indicates the State/Province/Canton/County information of the address.

**PostalCode** (Optional, String) Indicates the Postal code, quadrant, zone or Zip code.

**Country** (Required, String) This field indicates the country, as it should be displayed.

#### Email

Strongly Recommended. Indicates the email address.

#### **InstantMessenger**

Describes an Instant Messenger address.

#### **Elements and Attributes:**

**type** (Required, InstantMessengerTypeEnum) Indicates the Instant Messenger protocol type -- i.e. AIM, ICQ, MSN, SMS, Yahoo, etc.

**publisherDefinedValue** (Optional, String) For specifying other IM systems.

#### Phone

Strongly Recommended. Describes the telephone, fax or pager numbers.

#### **Elements and Attributes:**

**type** (Required, PhoneTypeEnum) Phone numbers can be one of the following types - voice, fax, or pager.

**location** (Optional, PhoneLocationEnum) Describes the location of the phone at this number -- i.e. office, home, moblie.

**CountryCode** (Required, String) Telephone country code for the phone number.

**Number** (Required, String) Phone number including area code.

**ExtensionPIN** (Optional, String) Used for extension number for a phone or a PIN. PINs are sometimes associated with pagers.

#### Website

Strongly Recommended. Provides a URI reference for a web site.

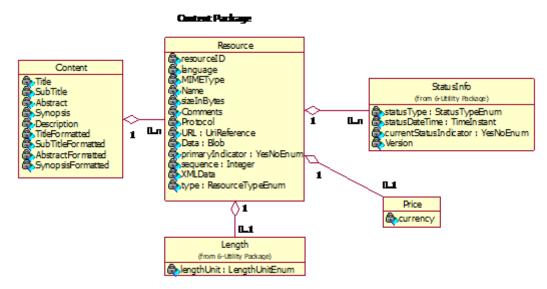
#### **Elements and Attributes:**

**URL** (Required, UriReference)

Web address associated with the person or organization.

# **Content Package**

The ContentPackage is the container for holding the name (title) of the publication (the product) described by the metadata in the context package, along with the URLs, individual files, and/or data contained within the tagging (the resources) associated with this product, and the abstract and synopsis of the publication.



#### **Class Diagram: Content Details**

#### ContentDetails

Includes title, sub-title, synopsis, and abstract information for a Content element in a specific language.

#### **Elements and Attributes:**

#### language (Optional, String)

Indicates the language of the Content Details. If not specified, default to value of language attribute of top Research element. If language attribute of Research element is not specified, default to English. Described using the ISO 639-2/T Code.

Title (Required, String)

This is the primary title of the product. No markup permitted.

SubTitle (Optional, String)

This is the sub title of the product. No markup permitted.

#### Abstract (Optional, String)

A summary of the information contained in the product. Highlights the salient issues in the document or provides a brief description of the event. Suggested maximum length is 3000 characters. No markup permitted.

#### Synopsis (Optional, String)

A very brief statement of the subject addressed in the product. This is typically only a few lines and would be appropriate for highly abbreviated displays. Suggested maximum length is 300 characters. No markup permitted.

# **Description** (Optional, String)

## TitleFormatted (Optional, String)

This is the primary title of the product. Limited markup permitted - HTML code for paragraph, ordered lists and unordered lists with list items, bold, underline, and italics.

## SubTitleFormatted (Optional, String)

This is the sub title of the product. Limited markup permitted - HTML code for paragraph, ordered lists and unordered lists with list items, bold, underline, and italics.

## AbstractFormatted (Optional, String)

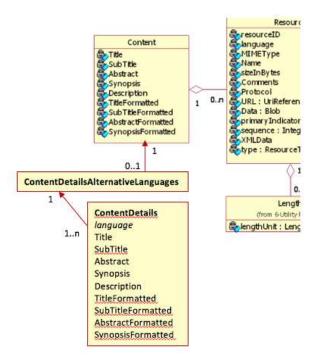
A summary of the information contained in the product. Highlights the salient issues in the document or provides a brief description of the event. Suggested maximum length is 3000 characters. Limited markup permitted - HTML code for paragraph, ordered lists and unordered lists with list items, bold, underline, and italics.

## SynopsisFormatted (Optional, String)

A very brief statement of the subject addressed in the product. This is typically only a few lines and would be appropriate for highly abbreviated displays. Suggested maximum length is 300 characters. Limited markup permitted - HTML code for paragraph, ordered lists and unordered lists with list items, bold, underline, and italics.

## ContentDetailsAlternativeLanguages

Container element for one or more individual ContentDetails elements meant to offer title, sub-title, synopsis, and abstract information in a specific, non-default language. In order to avoid breaking compatibility with v2.4, we must throw normalization to the wind and add a duplicative construct beneath Content to house the title data in other languages. We do this via the new ContentDetails construct.



## **Aggregations:**

#### ContentDetails (Required, Multiples Allowed)

### Content

The top-level element of the Content section.

### **Elements and Attributes:**

#### **Title** (Required, String)

This is the primary title of the product. No markup permitted.

### SubTitle (Optional, String)

This is the sub title of the product. No markup permitted.

## Abstract (Optional, String)

A summary of the information contained in the product. Highlights the salient issues in the document or provides a brief description of the event. Suggested maximum length is 3000 characters. No markup permitted.

### Synopsis (Optional, String)

A very brief statement of the subject addressed in the product. This is typically only a few lines and would be appropriate for highly abbreviated displays. Suggested maximum length is 300 characters. No markup permitted.

### **Description** (Optional, String)

### TitleFormatted (Optional, String)

This is the primary title of the product. Limited markup permitted - HTML code for paragraph, ordered lists and unordered lists with list items, bold, underline, and italics.

## SubTitleFormatted (Optional, String)

This is the sub title of the product. Limited markup permitted - HTML code for paragraph, ordered lists and unordered lists with list items, bold, underline, and italics.

## AbstractFormatted (Optional, String)

A summary of the information contained in the product. Highlights the salient issues in the document or provides a brief description of the event. Suggested maximum length is 3000 characters. Limited markup permitted - HTML code for paragraph, ordered lists and unordered lists with list items, bold, underline, and italics.

## SynopsisFormatted (Optional, String)

A very brief statement of the subject addressed in the product. This is typically only a few lines and would be appropriate for highly abbreviated displays. Suggested maximum length is 300 characters. Limited markup permitted - HTML code for paragraph, ordered lists and unordered lists with list items, bold, underline, and italics.

## Aggregations:

# Resource (Optional, Multiples Allowed) ContentDetailsAlternativeLanguages (Optional)

### Resource

Describes the resource that contains the media representation of the research product. For example, can describe a file, URL, or encoded data that represents the product. There can be any number of Resource elements associated with a product. For example, a product may consist of both a PDF document (one resource) and an Excel spreadsheet (another resource), or there could be multiple language versions of the same document (each one a resource).

### **Elements and Attributes:**

### resourceID (Required, String)

The unique identifier of the resource within the product. The implementation of the resourceID is left for the publishers of content to implement as they deem fit. At a minimum, the resourceID is required to be unique within the product(s) it appears under. The resourceId attribute has also been made an XML Schema key which means it has to be unique within the context of Resource.

### language (Optional, String)

Indicates the language of the resource, described using the ISO 639-2/T Code. Highly recommended, especially when multiple resources are included that are different translations of the same product. Whereas the language attribute of the Research element represents the language of the metadata describing the Research, the language attribute of the Resource element represents the language of the media representation (often a file) of the product. These two language attributes may be different.

### **MIMEType** (Required, String)

Indicates the type of media used to store the content. MIMEType is used to determine the software product(s) that can read the content. MIMETypes are described in RFC 2046.

#### Name (Optional, String)

The Name element is intended to provide a research consumer with a suggestion on how to store the particular resource, whether is comes via an actual file, embedded data or remote URL. If this RIXML file arrives with a companion file (PDF, Word, text, etc.) representing this resource, then the Name value is used to match the resource with right companion file. If a payload file is embedded data, the Name value is used by the publisher to suggest a file name to the consumer, who may choose to store the embedded data locally. If a payload file is referenced via URL, the Name value is similarly used by the publisher to suggest a file name to the consumer for local storage.

#### sizeInBytes (Optional, String)

Indicates the size of the resource in bytes. Could be used by the end user to estimate the download time and storage needs.

## Comments (Optional, String)

Any additional comments that are deemed necessary. For example, which software version is required to open the document? Or, how does this resource relate to the others for this product?

# Protocol (Optional, String)

Indicates the protocol (rules determining format and transmission). This eliminates the need for parsing this information from the URL.

**URL** (Optional, UriReference) Indicates the URL at which the resource can be found.

# Data (Optional, Blob)

Used when the content (data) of the research product needs to be included within the RIXML document. The data must be base64-encoded.

# primaryIndicator (Required, YesNoEnum)

Indicates the primary Resource. At least one Resource must be set to Primary.

# sequence (Optional, Integer)

If there are multiple Resources, and they should appear in a certain order when the content is published, indicate the desired order by associating the appropriate sequence number to each Resource.

# XMLData (Optional, String)

An alternative to the Data element for situations where a base64 encoding is inappropriate. The motiviating use-case is the desire to in-line an XBRL instance document as a RIXML Resource. The XMLData element is currently restricted to containing XML data with the XBRL instance namespace "http://www.xbrl.org/2003/instance".

## type (Optional, ResourceTypeEnum)

A companion to the XMLData element. It is a code used as a clue to the kind of XML data that can be expected. The code value of XBRL allows us to indicate to a consumer of the RIXML document that the XMLData can be read as XBRL content. More codes may be added in the future.

## **Aggregations:**

Length (Optional) StatusInfo (Optional, Multiples Allowed) Price (Optional)

## Price

# **Elements and Attributes:**

## currency (Required, String)

The currency used to express the price value. Represented by the three letter alpha code defined by ISO 4217.

# **Context Package**

The Context section contains information that describes the categorization of the Product. It stores most of the data that will be used by research consumers to search for, filter out and extract research products, such as research discipline, product focus, sectors, regions, issuers, and securities.

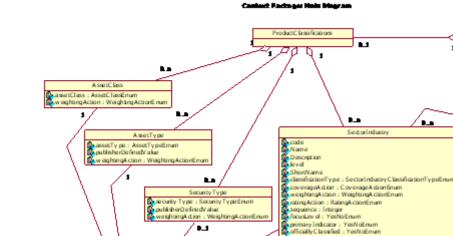
Be priority : PriorityEnum
 Be external : Y esNoEnum

1

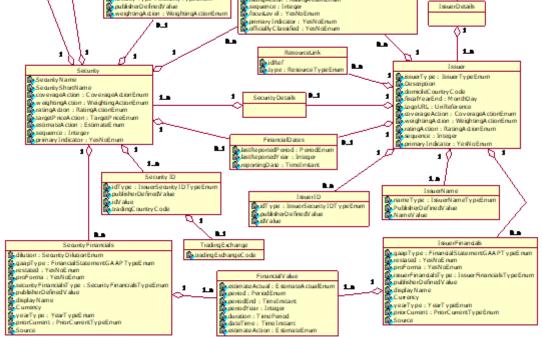
R.a

1

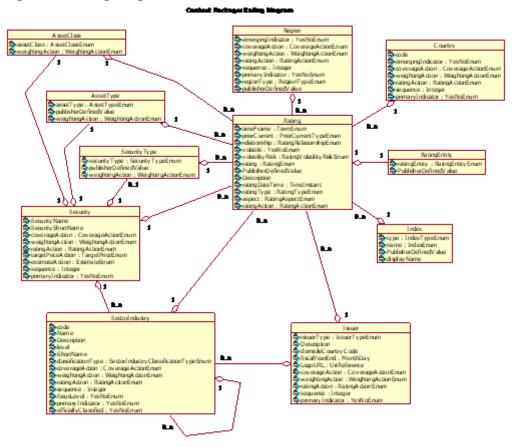
1.1



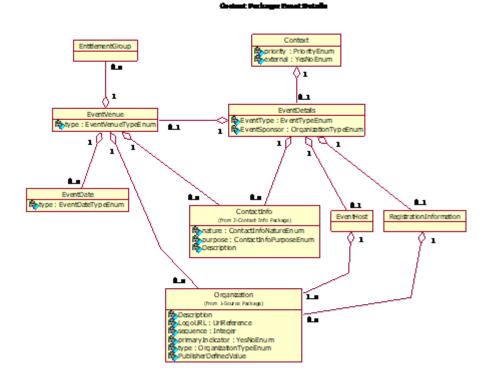
### **Class Diagram: MainDiagram**



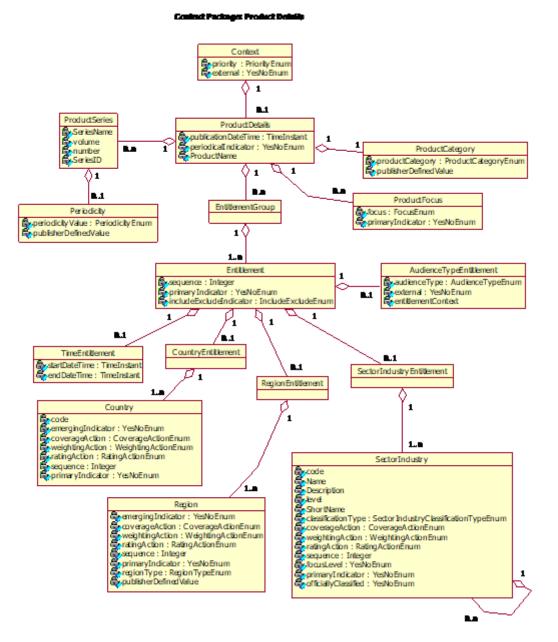
# **Class Diagram: RatingDiagram**



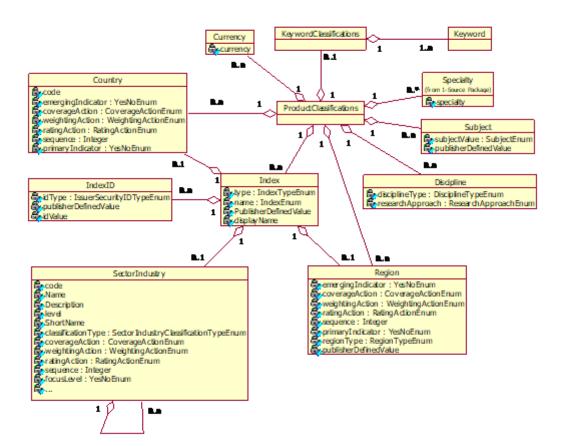
# **Class Diagram: EventDetailsDiagram**



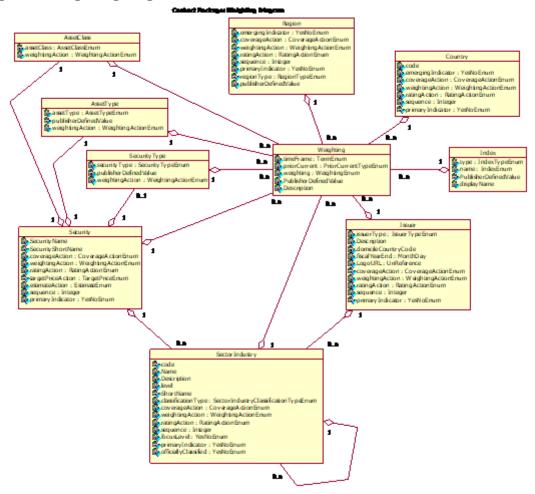
# Class Diagram: ProductDetailsDiagram



#### **Contract Packages Product Complication**



# **Class Diagram: WeightingDiagram**



## Context

The top-level element of the Context section.

#### **Elements and Attributes:**

priority (Optional, PriorityEnum)

Allows the publisher to 'highlight' a specific product, i.e. identify a product as a high priority item.

**external** (Required, YesNoEnum) Indicates whether the content is for internal or external consumption.

#### **Aggregations:**

EventDetails (Optional) IssuerDetails (Optional) ProductDetails (Optional) ProductClassifications (Optional)

# **EventDetails**

Provides the necessary information when the Product is actually about an event.

### **Elements and Attributes:**

**EventType** (Required, EventTypeEnum) Indicates the type of the event.

### EventSponsor (Required, OrganizationTypeEnum)

Aggregations:

EventVenue (Optional) EventHost (Optional) RegistrationInformation (Optional) ContactInfo (Optional, Multiples Allowed)

## **IssuerDetails**

This is the container class for all the tags available for use when describing an Issuer.

#### **Aggregations:**

Issuer (Required, Multiples Allowed)

## ProductClassifications

This is the container class for all the tags available for use when classifying the research product.

# Aggregations:

KeywordClassifications (Optional) Discipline (Optional, Multiples Allowed) Subject (Optional, Multiples Allowed) Index (Optional, Multiples Allowed) Country (Optional, Multiples Allowed) Region (Optional, Multiples Allowed) AssetClass (Optional, Multiples Allowed) AssetType (Optional, Multiples Allowed) SecurityType (Optional, Multiples Allowed) SectorIndustry (Optional, Multiples Allowed) Currency (Optional, Multiples Allowed) Specialty (Optional)

## ProductDetails

This is the container class for all the tags available for use when describing any research product.

## **Elements and Attributes:**

# publicationDateTime (Required, TimeInstant)

Indicates the date and time at which the product was officially published. This is the date and time that would appear on the product itself, or be displayed to a reader. It is expressed using ISO 8601 as refined by the World Wide Web Consortium's note http://www.w3.org/TR/NOTE-datetime. In addition, RIXML requires the use of Zulu time or Z-time (GMT +/- n hours:minute:seconds). All times are absolute and easier to compute, rather than using a relative (i.e. 08:30 +5) time.

## periodicalIndicator (Optional, YesNoEnum)

Indicates whether or not the content is a periodical.

# ProductName (Optional, String)

The proprietary name of the product as defined by the research provider. This can be used to express a brand name. Examples of product names are "ABC Investment Bank's Tech Weekly", or "From the Floor in Asia".

# Aggregations:

ProductCategory (Required) ProductFocus (Optional, Multiples Allowed) ProductSeries (Optional, Multiples Allowed) EntitlementGroup (Optional, Multiples Allowed)

## Currency

Some research products discuss financial values without mapping to any issuers or securities. Having currency as a possible product classification enables more accurate tagging in those cases. This element requires that a specific currency is indicated. For products discussing currencies in general, publishers should tag the asset class as currencies.

## **Elements and Attributes:**

**currency** (Required, String) Represented by the three letter alpha code defined by ISO 4217.

## Discipline

Describes the high level content classification of a research product based on its intellectual and analytical approach.

### **Elements and Attributes:**

**disciplineType** (Required, DisciplineTypeEnum) Indicates the high level discipline of the research product.

## researchApproach (Optional, ResearchApproachEnum)

Indicates the analytical technique used to create the content of the research product. Required when disciplineType is Strategy or Investment.

## **EventHost**

Describes the organization hosting the event. Multiple hosts of one event are possible. However, there can be only one primary host, which is captured by the Organizatoin primaryIndicator.

## **Aggregations:**

Organization (Required, Multiples Allowed)

# **EventVenue**

Indicates the venue -- can by physical (one-on-one meeting) or virtual (conference call or webcast). Strongly recommended for a location-based event. Required when Product.eventIndicator=Yes or Product.Context.ProductDetails.ProductCategory.productCategory=Event. **Elements and Attributes:** 

type (Required, EventVenueTypeEnum) Aggregations: Organization (Optional, Multiples Allowed) EventDate (Optional, Multiples Allowed) ContactInfo (Optional, Multiples Allowed) EntitlementGroup (Optional, Multiples Allowed)

### Index

Indicates an index mentioned in the product.

### **Elements and Attributes:**

**type** (Optional, IndexTypeEnum) An indication of the type of index. Typically market, industry or country.

**name** (Optional, IndexEnum) (DEPRECATED. Use IndexID instead.) This is the index name.

### PublisherDefinedValue (Optional, String)

(DEPRECATED. Use IndexID instead.) Used to indicate the index name, when the name attribute is PublisherDefined. This is for cases where the relevant index is not already on the enumeration list.

**displayName** (Optional, String) A descriptive name of the index suitable for display purposes.

#### **Aggregations:**

Country (Optional) Region (Optional) SectorIndustry (Optional) Weighting (Optional, Multiples Allowed) Rating (Optional, Multiples Allowed) IndexID (Optional, Multiples Allowed)

#### Issuer

Describes the Issuer of a security.

#### **Elements and Attributes:**

**issuerType** (Required, IssuerTypeEnum) Indicates the type of Issuer. For example, can be agency, government or corporate.

**Description** (Optional, String) A text description (name) of the Issuer. Strongly Recommended element.

**domicileCountryCode** (Optional, String) Indicates the country where the Issuer is domiciled, represented by the ISO 3166-1 country code.

**fiscalYearEnd** (Optional, MonthDay) Combination of Day and Month that indicates the fiscal year end of the Issuer.

### **LogoURL** (Optional, UriReference)

Indicates the URL where the Issuer's logo may be found.

## coverageAction (Optional, CoverageActionEnum)

Highlights an action taken by the publisher. Indicates that the publisher is changing coverage status of an Issuer. Example: a publisher initiates coverage of Company XYZ.

# weightingAction (Optional, WeightingActionEnum)

Highlights an action taken by the publisher. Indicates that the publisher is changing the weighting of the issuer.

# ratingAction (Optional, RatingActionEnum)

Highlights an action taken by the publisher. Indicates that the publisher is changing their rating on an Issuer. Example: a publisher downgrades Company XYZ.

## sequence (Optional, Integer)

If there are multiple Issuers, and they should appear in a certain order when the content is published, indicate the desired order by associating the appropriate sequence number to each Issuer.

## primaryIndicator (Required, YesNoEnum)

Indicates the primary Issuer(s) discussed in the research product. If the product is focused at the Issuer level (i.e. the ProductFocus tag is set to Issuer), then at least one Issuer must be marked as primary.

## Aggregations:

Rating (Optional, Multiples Allowed) IssuerID (Optional, Multiples Allowed) IssuerName (Required, Multiples Allowed) FinancialDates (Optional) IssuerFinancials (Optional, Multiples Allowed) SectorIndustry (Optional, Multiples Allowed) SecurityDetails (Optional) Weighting (Optional, Multiples Allowed) ResourceLink (Optional, Multiples Allowed)

# KeywordClassifications

KeywordClassifications grouping element that groups or bounds multiple keyword elements.

## **Aggregations:**

Keyword (Required, Multiples Allowed)

# ProductCategory

Describes the manner or format that information is presented within the product. Product categories include Comment, Report, Model, Chart, etc.

## **Elements and Attributes:**

**productCategory** (Required, ProductCategoryEnum) The category that the product fits into.

## publisherDefinedValue (Optional, String)

If productCategory is PublisherDefined, then the publisher can indicate what type of product this is.

# ProductFocus

Indicates the primary focus of the product. This tag is used in conjunction with the primaryIndicator fields in SectorIndustry, Discipline, Issuer, Region, Country, AssetClass, AssetType, SecurityType, Index to indicate the primary topic of the product.

EXAMPLE 1:	
a report that is	an overview of French securities, with a few brief comments about the household
	nsurance industries would have
ProductFocus.f	ocus = Country
Produc	tFocus.primaryIndicator = Yes
Contex	xt.Country.countryCode = FR
Contex	xt.Country.countryName = France
	xt.Country.primaryIndicator = Yes
these would be	roduct only briefly mentions the household durables and insurance industries, oth have the Context.sectorIndustry.primaryIndicator set to No. If other countries, these additional Context.Country.countryCodes can be listed, with the respective or set to No.
EXAMPLE 2:	
	ort on a bank that briefly discusses how changes in the banking industry may
	of the real estate industry, would have
	tFocus.focus = Issuer
	tFocus.primaryIndicator = Yes
	t.SectorIndustry.sectorIndustryCode = 4010
	t. SectorIndustry.Name = Banks
	t. SectorIndustry.primaryIndicator = Yes
	kt.SectorIndustry.sectorIndustryCode = 4040
	t. SectorIndustry.Name = Real Estate
Contex	xt. SectorIndustry.primaryIndicator = No.

# Elemen

**focus** (Required, FocusEnum)

Focus indicates whether the product discusses any of certain attributes (such as SectorIndustry, Issuer, Country, etc.). A report primarily about one company would have a focus of Issuer, while a country overview would have a focus of Country.

#### primaryIndicator (Required, YesNoEnum)

Used to indicate which of various focus attributes in the product is the primary topic of the product.

### **ProductSeries**

Used for publications issued as a series / periodical.

#### **Elements and Attributes:**

## SeriesName (Required, String)

Indicates the name of the publication series. The series name should appear in the same way for all items in the series.

volume (Optional, String) Volume number.

number (Optional, String) Publication number in a volume.

### SeriesID (Optional, String)

Since the name of a series may change over its lifetime, the SeriesID can be used to uniquely identify it. This tag gives the publisher the opportunity to maintain continuity in the series across name changes.

#### **Aggregations:**

Periodicity (Optional)

## RegistrationInformation

Registration information relating to an event.

#### **Aggregations:**

**Organization** (Optional, Multiples Allowed)

#### Subject

Strongly recommended. Indicates the subject of the product. There is a standard set of subjects defined by RIXML including market opening comments, accounting and tax policy, and earnings surprise. If these do not fully represent the subject, the publisher may use a publisher defined Subject value.

#### **Elements and Attributes:**

subjectValue (Required, SubjectEnum)
The main topic covered in the product.

### publisherDefinedValue (Optional, String)

If the Subject.Value = PublisherDefined, then the publisher can indicate a subject not in the SubjectEnum list.

### EntitlementGroup

A composite restriction on the use of the product. Each individual entitlement specification inside a single EntitlementGroup applies conjuctively with the others in the group -- i.e. they are AND-ed together. For example, you could limit readership to American press agencies by including a LocationEntitlement (containing a Country element with the U.S. country code) and an AudienceTypeEntitlement (containing the Media audience type code). Each EntitlementGroup applies disjunctively with the other EntitlementGroups -- i.e. they are OR-ed together.

#### **Aggregations:**

**Entitlement** (Required, Multiples Allowed)

### **EventDate**

Describes a date/time relevant to the event, and relative to the type attribute. It is expressed using ISO 8601 as refined by the World Wide Web Consortium's note http://www.w3.org/TR/NOTE-datetime. In addition, RIXML requires the use of Zulu time or Z-time (GMT +/- n hours:minute:seconds). All times are absolute and easier to compute, rather than using a relative (i.e. 08:30 +5) time.

#### **Elements and Attributes:**

**type** (Required, EventDateTypeEnum) Describes the relevance of the date/time to the event.

### IndexID

Identifies an index mentioned in the product via an ID symbol of type specified in the idType attribute.

## **Elements and Attributes:**

### idType (Required, IssuerSecurityIDTypeEnum)

Indicates the protocol used for the index identifier (i.e. the classification scheme). Examples include CUSIP, RIC, BloombergCode, etc.

# publisherDefinedValue (Optional, String)

If the IndexID.idType = PublisherDefined, then the publisher can indicate a type of index identifier not in the IssuerSecurityIDTypeEnum list.

**idValue** (Required, String) The actual symbol identifying the index.

# **IssuerFinancials**

Financial data related to the issuer of a security.

### **Elements and Attributes:**

**gaapType** (Optional, FinancialStatementGAAPTypeEnum) Generally Accepted Accounting Principles.

## restated (Optional, YesNoEnum)

To state in a new form a company's financial statements, perhaps to reflect a current period item back through prior periods.

**proForma** (Optional, YesNoEnum) A hypothetical financial model based on a set of assumptions.

**issuerFinancialsType** (Required, IssuerFinancialsTypeEnum) Used to indicate what type of financial metrics are being represented here.

# publisherDefinedValue (Optional, String)

## displayName (Optional, String)

If a publisher-defined value, or a value defined by RIXML but the publisher wishes to call the value by another name (e.g., Turnover instead of Sales), this attribute should be used to provide the desired value name.

## **Currency** (Optional, String)

Indicates the currency of the issuer financials. Represented by the three letter alpha code defined by ISO 4217.

**yearType** (Optional, YearTypeEnum) Indicates whether the year specified is a fiscal year or calendar year

## priorCurrent (Optional, PriorCurrentTypeEnum)

Indicates whether the financials are current or prior. Defaulted to currentPrior is used to indicate what the prior figure was for the period specified in order to give context to the current figure, not to provide the figure for a prior time period.

## Source (Optional, String)

Free-text tag to indicate the source of the numbers. Example: the name of the company that provides the consensus figures.

#### FinancialValue (Required, Multiples Allowed)

### IssuerID

Used to uniquely identify the issuer.

#### **Elements and Attributes:**

#### idType (Required, IssuerSecurityIDTypeEnum)

Indicates the organization or company's protocol used for the issuer identifier (i.e. the Issuer classification scheme). Note that since their is no universally accepted means of identifying an Issuer (as opposed to a specific security), IssuerID allows the use of what are technically security identifiers as a means of identifying an Issuer (CUSIP, SEDOL, etc).

### publisherDefinedValue (Optional, String)

If the IssuerID.idType = PublisherDefined, then the publisher can indicate what type of identifier has been used.

idValue (Required, String)The actual identifier for this issuer.

### IssuerName

This is the name of the issuer related to the IssuerID.idValue.

### **Elements and Attributes:**

#### nameType (Required, IssuerNameTypeEnum)

An issuer can have multiple names. The names can be one or more of the following types: legal, local, display, parent, trading. Use Display if using only one nameType, unless one of the other nameTypes is preferred.

#### PublisherDefinedValue (Optional, String)

If the IssuerName.NameType = PublisherDefined, then the publisher can indicate what type of name has been used.

### NameValue (Required, String)

The name that is associated with the IssuerID.idValue above.

#### Keyword

Free-text keywords relevant to the product, which the consumers may want to search on. There is no maximum length, but should only be populated with terms that would help users locate relevant research products. These keywords, like all other metadata, will be in the language of the Research.Language.

### Periodicity

Indicates the frequency with which the publication is published or the event occurs.

### **Elements and Attributes:**

**periodicityValue** (Required, PeriodicityEnum) This is the frequency with which this product is published or this event is held.

# publisherDefinedValue (Optional, String)

If Periodicity.Value = PublisherDefined, then the publisher can indicate a frequency not in the PeriodicityEnum list.

## ResourceLink

In the case where a publisher incorporates multiple XBRL Resources into a RIXML instance document, the ResourceLink element associates a particular Issuer element with its corresponding XBRL Resource element.

### **Elements and Attributes:**

### idRef (Required, String)

The idRef attribute is an XML Schema keyref that will link to a Resource element resourceID attribute.

# type (Required, ResourceTypeEnum)

This attribute is a code used as a clue to the kind of XML data that can be expected. The code value of XBRL allows us to indicate to a consumer of the RIXML document that the XMLData can be read as XBRL content. More codes may be added in the future.

## **SecurityDetails**

This is the container class for all the tags available for use when describing an Security.

### Aggregations:

Security (Required, Multiples Allowed)

### Entitlement

A container for more specific entitlement types. Mostly used as a convenient receptacle for attributes that apply to all lower entitlement types.

## **Elements and Attributes:**

sequence (Optional, Integer)

If there are multiple Entitlements, and they should take precedence in a certain order when the content is published, indicate the desired order by associating the appropriate sequence number to each Entitlement.

**primaryIndicator** (Required, YesNoEnum) If necessary, indicates which entitlement is primary. includeExcludeIndicator (Required, IncludeExcludeEnum)

## **Aggregations:**

AudienceTypeEntitlement (Optional) CountryEntitlement (Optional) SectorIndustryEntitlement (Optional) TimeEntitlement (Optional) RegionEntitlement (Optional) ProductCategoryEntitlement (Optional) AssetClassEntitlement (Optional) OrganizationTypeEntitlement (Optional) ActionEntitlement (Optional)

### Security

Information about a particular security that describes the type of security and how to identify it. A security is always issued by an issuer, therefore, if a security is being mentioned, it must be attached to an Issuer element.

#### **Elements and Attributes:**

**SecurityName** (Optional, String) The name of the Security.

## **SecurityShortName** (Optional, String) Optional short name commonly used to identify the Security.

## coverageAction (Optional, CoverageActionEnum)

Highlights an action taken by the publisher. Indicates that the publisher is changing the coverage status of a Security. Example: a publisher initiates coverage of Security ABC.

## weightingAction (Optional, WeightingActionEnum)

Highlights an action taken by the publisher. Indicates that the publisher is changing the weighting of the security.

#### **ratingAction** (Optional, RatingActionEnum)

Highlights an action taken by the publisher. Indicates that the publisher is changing their rating on a Security. Example: a publisher downgrades Security ABC.

## targetPriceAction (Optional, TargetPriceEnum)

Highlights an action taken by the publisher. Indicates that the publisher is changing their target price estimate for a Security. Example: a publisher increases a target price for Security ABC to \$100.

### estimateAction (Optional, EstimateEnum)

Highlights an action taken by the publisher. Indicates that the publisher is changing their earnings estimates for a Security. Example: a publisher lowers all their earnings estimates for Security ABC.

### sequence (Optional, Integer)

If there are multiple Securities, and they should appear in a certain order when the content is published, indicate the desired order by associating the appropriate sequence number to each Security.

### primaryIndicator (Required, YesNoEnum)

Indicates the primary Security or Securities discussed in the research product. If the product is focused at the Security level (i.e. the ProductFocus tag is set to Security), then at least one Security must be marked as primary. Otherwise primaryIndicator is optional.

### Aggregations:

Rating (Optional, Multiples Allowed) SecurityID (Required, Multiples Allowed) FinancialDates (Optional) SecurityFinancials (Optional, Multiples Allowed) AssetClass (Required) AssetType (Required) SecurityType (Optional) SectorIndustry (Optional, Multiples Allowed) Weighting (Optional, Multiples Allowed)

## AssetClass

When attached to a Context element, indicates the asset class that the research product focuses on. When attached to a Security element, indicates the asset class of the security. Typically used in conjunction with AssetType and SecurityType. One of the following: equity, fixed income, commodity or currency.

#### **Elements and Attributes:**

**assetClass** (Required, AssetClassEnum) Indicates the asset class.

#### weightingAction (Optional, WeightingActionEnum)

Highlights an action taken by the publisher. Indicates that the publisher is changing the weighting of the asset class.

#### **Aggregations:**

Rating (Optional, Multiples Allowed) Weighting (Optional, Multiples Allowed)

## AssetType

Indicates the asset type. Typically used in conjunction with AssetClass and SecurityType. Can be attached to a Context element or to a Security element. For equities, examples include stocks, convertibles, warrants and preferred stocks. For bonds, examples include the major fixed income sectors typically used in major fixed income index benchmarks. These include U.S. Treasuries, Corporate High Yield and Municipals, among others.

#### **Elements and Attributes:**

**assetType** (Required, AssetTypeEnum) Indicates the asset type.

### publisherDefinedValue (Optional, String)

Used when AssetType.Value = PublisherDefined to indicate a type of asset not in the AssetTypeEnum list.

# weightingAction (Optional, WeightingActionEnum)

Highlights an action taken by the publisher. Indicates that the publisher is changing the weighting of the asset type.

### **Aggregations:**

Rating (Optional, Multiples Allowed) Weighting (Optional, Multiples Allowed)

## AudienceTypeEntitlement

An entitlement based on the type of audience.

### **Elements and Attributes:**

**audienceType** (Required, AudienceTypeEnum) Indicates the audience type that the author intended to address with the product.

### external (Optional, YesNoEnum)

Indicates whether the audience described by the audienceType attribute is internal to the publisher's organization or external.

### entitlementContext (Optional, String)

Indicates the context in which the entitlement applies -- typically given as a mnemonic for an individual vendor platform. Here, a vendor is defined as an organization outside the buy-side and sell-side community of financial services firms which provides platforms or tools used by participants in the investment research economy.

### CountryEntitlement

An entitlement based on the country in which the research consumer is located.

### Aggregations:

**Country** (Required, Multiples Allowed)

## **FinancialDates**

Relevant dates related to Issuer and/or Security financial data.

#### **Elements and Attributes:**

### lastReportedPeriod (Optional, PeriodEnum)

Used together with lastReportedYear to indicate the period when the financials were last reported. For example, Q1 2000.

#### lastReportedYear (Optional, Integer)

Used together with lastReportedPeriod to indicate the period when the financials were last reported. For example, Q1 2000.

## reportingDate (Optional, TimeInstant)

Represents the date the numbers were actually published. Expressed using ISO 8601 (as refined by the World Wide Web Consortium's note http://www.w3.org/TR/NOTE-datetime). In addition, RIXML requires the use of Zulu time or Z-time (GMT +/- n hours:minute:seconds). All times are absolute and easier to compute, rather than using a relative (i.e. 08:30 +5) time.

# RegionEntitlement

An entitlement based on the region in which the research consumer is located.

#### **Aggregations:**

Region (Required, Multiples Allowed)

#### ProductCategoryEntitlement

An entitlement based on the product category of the research.

#### **Aggregations:**

ProductCategory (Required, Multiples Allowed)

# AssetClassEntitlement

An entitlement based on the asset class of the research.

#### Aggregations:

AssetClass (Required, Multiples Allowed)

## OrganizationTypeEntitlement

An entitlement based on the organization type of the research consumer.

### **Elements and Attributes:**

**organizationType** (Required, OrganizationTypeEnum) Indicates the organization type that the author intended to address with the product.

## ActionEntitlement

An entitlement based on the actions of the research consumer permitted by the research publisher.

#### **Elements and Attributes:**

action (Required, ActionEnum)

Indicates the specific action to be performed by the research consumer on the research product.

### SectorIndustryEntitlement

An entitlement based on the industry classification of the research consumer.

#### Aggregations:

SectorIndustry (Required, Multiples Allowed)

# SecurityFinancials

Describes the financials associated with a security.

#### **Elements and Attributes:**

**dilution** (Optional, SecurityDilutionEnum) Indicates whether the financials are basic, primary, or diluted.

**gaapType** (Optional, FinancialStatementGAAPTypeEnum) Generally Accepted Accounting Principles.

#### restated (Optional, YesNoEnum)

To state in a new form a company's financial statements, perhaps to reflect a current period item back through prior periods.

**proForma** (Optional, YesNoEnum) A hypothetical financial model based on a set of assumptions.

**securityFinancialsType** (Required, SecurityFinancialsTypeEnum) Used to indicate what type of financial metrics are being represented here.

**publisherDefinedValue** (Optional, String) Actual value as provided by the Publisher.

# displayName (Optional, String)

If a publisher-defined value, or a value defined by RIXML but the publisher wishes to call the value by another name (e.g., Turnover instead of Sales), this attribute should be used to provide the desired value name.

## **Currency** (Optional, String)

Indicates the currency of the security financials. Represented by the three letter alpha code defined by ISO 4217.

**yearType** (Optional, YearTypeEnum) Indicates whether the year specified is a fiscal year or calendar year

# priorCurrent (Optional, PriorCurrentTypeEnum)

Indicates whether the financials are current or prior. Defaulted to current. Prior is used to indicate what the prior figure was for the period specified in order to give context to the current figure, not to provide the figure for a prior time period.

## **Source** (Optional, String)

Free-text tag to indicate the source of the numbers. Example: the name of the company that provides the consensus figures.

## **Aggregations:**

FinancialValue (Required, Multiples Allowed)

## SecurityID

Used to uniquely identify the security.

## **Elements and Attributes:**

idType (Required, IssuerSecurityIDTypeEnum)

Indicates the organization or company's protocol used for the security identifier (i.e. the Security classification scheme). Examples include CUSIP, RIC, BloombergCode, etc.

## publisherDefinedValue (Optional, String)

If the SecurityID.idType = PublisherDefined, then the publisher can indicate a type of security identifier not in the IssuerSecurityIDTypeEnum list.

## idValue (Required, String)

The actual unique identifier for this security. Example: MSFT.O is correct idValue for Microsoft Common Shares using the Reuters RIC scheme.

### tradingCountryCode (Optional, String)

The ISO 3166-1 Country code for the country in which the exchange operates.

### **Aggregations:**

TradingExchange (Optional)

# SecurityType

Indicates the type of security. Typically used in conjunction with AssetClass and AssetType. Can be attached to a Context element or to a Security element. Example values include stock, convertible, high yield credit, investment grade credit.

### **Elements and Attributes:**

**securityType** (Required, SecurityTypeEnum) Indicates the security type.

# publisherDefinedValue (Optional, String)

Used when SecurityType.Value = PublisherDefined to indicate a type of security not in the SecurityTypeEnum list.

## weightingAction (Optional, WeightingActionEnum)

Highlights an action taken by the publisher. Indicates that the publisher is changing the weighting of the security type.

### **Aggregations:**

Rating (Optional, Multiples Allowed) Weighting (Optional, Multiples Allowed)

## TimeEntitlement

Indicates the time during which this product should be read.

#### **Elements and Attributes:**

#### startDateTime (Optional, TimeInstant)

The date and time after which the product should be read. It is optional because using only an endDateTime is also a meaningful use-case for products that are immediately readable, but expire at a certain time. The startDateTime must be later on the time scale than the value of Product.publicationDateTime.

#### endDateTime (Optional, TimeInstant)

The date and time after which the product should not be read. It is optional because using only a startDateTime is also a meaningful use-case for products that are only readable after a time embargo, but never expire. The endDateTime must be later on the time scale than the value of Product.publicationDateTime.

# Country

Strongly recommended. Indicates the country or countries that are discussed in a research product.

### **Elements and Attributes:**

**code** (Required, String) The ISO 3166-1 code for the country.

### emergingIndicator (Optional, YesNoEnum)

Indicates whether the publisher defines this country as an emerging market.

## coverageAction (Optional, CoverageActionEnum)

Highlights an action taken by the publisher. Indicates that the publisher is changing coverage status of a country. Example: a publisher initiates coverage of country A.

## weightingAction (Optional, WeightingActionEnum)

Highlights an actoin taken by the publisher. Indicates that the publisher is changing the weighting of the country. Example: A publisher maintaining an overweight position of country ABC compared with a particular index.

## ratingAction (Optional, RatingActionEnum)

Highlights an action taken by the publisher. Indicates that the publisher is changing their rating on an Country. Example: a publisher downgrades country A.

# sequence (Optional, Integer)

If there are multiple Countries, and they should appear in a certain order when the content is published, indicate the desired order by associating the appropriate sequence number to each Country.

## primaryIndicator (Required, YesNoEnum)

Indicates the primary country or countries discussed in the research product. If the product is focused on the Country level (i.e. the ProductFocus tag is set to Country), then at least one Country must be marked as primary.

## Aggregations:

Rating (Optional, Multiples Allowed) Weighting (Optional, Multiples Allowed)

## **FinancialValue**

Stores a specific financial data item for an issuer or a security.

## **Elements and Attributes:**

**estimateActual** (Required, EstimateActualEnum) Indicates whether a financial figure is actual or estimated.

## period (Optional, PeriodEnum)

Used together with periodYear and periodEnd to indicate the applicable period for a financial value. Example: Q4 2000 ending 31 December.

## periodEnd (Optional, TimeInstant)

Used together with period and periodYear to indicate the applicable period for a financial value. Example: Q4 2000 ending 31 December.

# periodYear (Optional, Integer)

The four-digit year used together with period and periodEnd to indicate the applicable period for a financial value. Example: Q4 2000 ending 31 December.

**duration** (Optional, TimePeriod) Time duration that is being addressed.

### dateTime (Optional, TimeInstant)

Exact date and time applicable to a financial data item, expressed using ISO 8601 (as refined by the World Wide Web Consortium's note http://www.w3.org/TR/NOTE-datetime). In addition, RIXML requires the use of Zulu time or Z-time (GMT +/- n hours:minute:seconds). All times are absolute and easier to compute, rather than using a relative (i.e. 08:30 +5) time. Generally dateTime is used instead of period, periodYear and periodEnd when a specific date can be assigned to a financial data item, for example, Total Assets as of 31 January 2000.

## estimateAction (Optional, EstimateEnum)

If this financial value is an estimate, the estimateAction attribute can be used to indicate an action, such as reiterate or upgrade, that applies to this estimate. Intended to provide support for the case where an author is including more than one estimate action in the same report -- for example, reiterating his current fiscal year estimate and upgrading his next fiscal year estimate.

# Region

Indicates a region discussed in the product.

## **Elements and Attributes:**

## emergingIndicator (Optional, YesNoEnum)

Indicates whether this Region is defined by the publisher as an emerging market.

# coverageAction (Optional, CoverageActionEnum)

Highlights an action taken by the publisher. Indicates that the publisher is changing coverage status of a Region. Example: a publisher initiates coverage of the Latin American region.

# weightingAction (Optional, WeightingActionEnum)

Highlights an actoin taken by the publisher. Indicates that the publisher is changing the weighting of the region. Example: A publisher maintaining an overweight position of region ABC compared with a particular index.

## ratingAction (Optional, RatingActionEnum)

Highlights an action taken by the publisher. Indicates that the publisher is changing their rating on an Country. Example: a publisher downgrades country A.

## sequence (Optional, Integer)

If there are multiple Regions, and they should appear in a certain order when the content is published, indicate the desired order by associating the appropriate sequence number to each Region.

## primaryIndicator (Required, YesNoEnum)

Indicates the primary Region(s) discussed in the product. If the product is focused on the Region level (i.e. the ProductFocus tag is set to Region), then at least one Region must be marked as primary.

regionType (Required, RegionTypeEnum)
publisherDefinedValue (Optional, String)
Aggregations:

Rating (Optional, Multiples Allowed) Weighting (Optional, Multiples Allowed)

# SectorIndustry

Strongly recommended. The sector or industry classification to which a security belongs, or about which the research product is written.

GICS has been accepted as the official RIXML sector / industry classification scheme . Publishers are required to use this classification scheme to provide the correct GICS sector / industry for a research product. This gives consumers a standardized means of determining the sector / industry that a research product is written about.

The GICS sector / industry classification must be provided for each primary security mentioned in the product. Should the product be focused on the sector / industry level, publishers must provide the GICS sector / industry classification that most closely matches what the product is written about.

Publishers are also able to provide publisher defined sector / industry tags, giving them the flexibility to tag their research using their own industry classification scheme. However, should they do so, they must also provide the closest match from the GICS scheme to ensure consistency on the consumption side.

# **Elements and Attributes:**

code (Required, String)

Identifies the sector under consideration. Refer to the RIXML sector-industry code document for a valid list of RIXML-defined codes. Publisher defined codes can be used in addition to, but not instead of, the RIXML-defined codes.

**Name** (Required, String) Indicates the name of the sector.

**Description** (Optional, String) A textual description of the sector.

# level (Required, String)

Since sectors are organized in a hierarchical fashion, the level element indicates the level that a specific SectorIndustry element is at in this hierarchy. There are four levels within the GICS classification scheme, with level 1 referring to Sectors, level 2 to Industry Groups, level 3 to Industries and level 4 to Sub Industries.

**ShortName** (Optional, String) A short name for the sector. Example: Pharma may be used for Major Pharmaceuticals.

**classificationType** (Required, SectorIndustryClassificationTypeEnum) Name of the classification method used. Options are GICS, ICB, or PublisherDefined.

# coverageAction (Optional, CoverageActionEnum)

Highlights an action taken by the publisher. Indicates that the publisher is changing coverage status of a SectorIndustry. Example: a publisher initiates coverage of the Entertainment sector.

# weightingAction (Optional, WeightingActionEnum)

Highlights an action taken by the publisher. Indicates that the publisher is changing the weighting of the sector/industry. Example: A publisher recommends having an overweight position in the Energy sector and an underweight position in the Technology sector.

# ratingAction (Optional, RatingActionEnum)

Highlights an action taken by the publisher. Indicates that the publisher is changing their rating on an SectorIndustry. Example: a publisher downgrades the Technology sector.

# sequence (Optional, Integer)

If there are multiple Sectors and/or Industries, and they should appear in a certain order when the content is published, indicate the desired order by associating the appropriate sequence number to each Sector or Industry.

# focusLevel (Required, YesNoEnum)

Indicates whether the current level is the main focus of the product being published. This tag is used in conjunction with the ProductFocus tag to determine the focus of a product.

## Example:

a product focusing on the Entertainment sub-industry would have the ProductFocus.focus tag set to SectorIndustry, and in the correct SectorIndustry element the following values would be set: SectorIndustry.classificationType = GICS SectorIndustry.level = 4 SectorIndustry.focusLevel = Yes SectorIndustry.primaryIndicator = Yes SectorIndustry.name = Entertainment. This allows a consumer to determine the exact focus of the product.

## primaryIndicator (Required, YesNoEnum)

Indicates the primary SectorIndustry or SectorIndustries discussed in the product. If the product is focused on the SectorIndustry level (i.e. the ProductFocus tag is set to SectorIndustry), then at least one SectorIndustry must be marked as primary.

## officiallyClassified (Optional, YesNoEnum)

Indicates whether the specified SectorIndustry is an official classification. Specifically, if the classificationType is "GICS", then this value must be supplied and set to "Yes" to indicate a mapping that complies with the official GICS classification. Likewise, this value must be supplied and set to "No" if the related Issuer or Security is mapped only on a best-guess basis and is not part of the official GICS classification. If this optional attribute is not supplied and the classificationType is "GICS", the consumer should assume a value of "No".

## Aggregations:

Rating (Optional, Multiples Allowed)
Weighting (Optional, Multiples Allowed)
SectorIndustry (Optional, Multiples Allowed)
Strongly Recommended.

## TradingExchange

Used to identify the exchange upon which the security trades.

### **Elements and Attributes:**

### tradingExchangeCode (Optional, String)

ISO 10383 Market Identifier Code (MIC) used to precisely identify the exchange upon which the security trades.

# Rating

This is information regarding ratings. These can be about the issuer of a security or a security itself, an industry, a country, or other entities.

## **Elements and Attributes:**

timeFrame (Optional, TermEnum)

This is the period for which the rating is relevant, as of the date it was established by the authoring entity.

priorCurrent (Optional, PriorCurrentTypeEnum)

Used to indicate whether the rating is current or prior (current is the default). Prior is only used to give reference for a change from a prior rating. Prior is used to indicate what the prior figure was for the period specified in order to give context to the current figure, not to provide the figure for a prior time period.

**relationship** (Optional, RatingRelationshipEnum) Provides a context for the rating.

**volatile** (Optional, YesNoEnum) Indicates the volatility of the rated entity.

**volatilityRisk** (Optional, RatingVolatilityRiskEnum) An indication of the potential price fluctuation of the rated entity.

**rating** (Required, RatingEnum) The actual rating as issued by the authoring entity.

PublisherDefinedValue (Optional, String)

Used when the rating value is PublisherDefined.

**Description** (Optional, String) A description of the rating. May include time horizon.

## ratingDateTime (Optional, TimeInstant)

Permits tagging a rating with the publication date/time, in case it differs from the publicaton date/time of the research payload. It is expressed using ISO 8601 as refined by the World Wide Web Consortium's note http://www.w3.org/TR/NOTE-datetime. In addition, RIXML requires the use of Zulu time or Z-time (GMT +/- n hours:minute:seconds). All times are absolute and easier to compute, rather than using a relative (i.e. 08:30 +5) time.

ratingType (Optional, RatingTypeEnum)

Permits tagging a rating with an additional type that provides more information about the meaning behind the rating.

aspect (Optional, RatingAspectEnum)

Permits tagging a rating with the aspect of the rated entity addressed by the rating itself.

### ratingAction (Optional, RatingActionEnum)

Highlights an action taken by the publisher. Indicates that the publisher is changing their rating on the entity enclosing this Rating element. This is the preferred location for ratingAction specifiers, as opposed to within the corresponding attributes of the enclosing rated entity. In this manner, a ratingAction specifier applies to the rating element itself, permitting multiple ratings of the same entity to have independent corresponding actions.

### **Aggregations:**

## RatingEntity (Required)

# Weighting

This is information regarding weightings. These can be about the country, region, asset type, or other entities.

## Elements and Attributes:

timeFrame (Optional, TermEnum)

This is the period for which the weighting is relevant, as of the date it was established by the authoring entity.

## priorCurrent (Optional, PriorCurrentTypeEnum)

Used to indicate whether the weighting is current or prior (current is the default). Prior is only used to give reference for a change from a prior weighting. Prior is used to indicate what the prior figure was for the period specified in order to give context to the current figure, not to provide the figure for a prior time period.

weighting (Required, WeightingEnum) The actual weighting as issued by the authoring entity.

**PublisherDefinedValue** (Optional, String) Used when the weighting value is PublisherDefined.

**Description** (Optional, String) A description of the weighting. May include time horizon.

## RatingEntity

The rating entity featured in the research item. This may be a publisher or an independent agency.

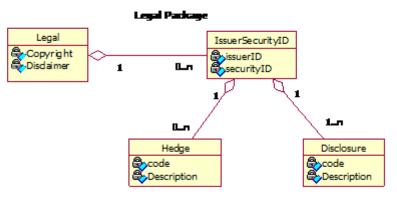
## **Elements and Attributes:**

ratingEntity (Required, RatingEntityEnum)PublisherDefinedValue (Optional, String)Used when the ratingEntity value is PublisherDefined.

# Legal Package

The Legal section deals with legal information that is required to accompany a research product.

# **Class Diagram: Legal Details**



## Legal

The top-level element of the Legal section.

# **Elements and Attributes:**

# Copyright (Optional, String)

Copyright information relating to the product.

### Disclaimer (Optional, String)

Disclaimer is the long generic legalese that automatically gets pasted into a note/report that 'disclaims' against liabilities for losses associated with buying/selling stocks etc. This could also include generic disclaimers when a report discusses MSCI indexes. This section changes infrequently.

#### **Aggregations:**

IssuerSecurityID (Optional, Multiples Allowed)

## **IssuerSecurityID**

Links disclaimer information to specific issuers and securities. This allows consumers to determine the nature of disclosures and to which issuers and/or securities they apply.

## **Elements and Attributes:**

### issuerID (Optional, String)

An IssuerID that also appears elsewhere in the metadata of the product, enabling the consumer to uniquely identify the issuer that is being referred to.

## securityID (Optional, String)

A SecurityID that also appears elsewhere in the metadata of the product, enabling the consumer to uniquely identify the security that is being referred to.

#### **Aggregations:**

**Disclosure** (Required, Multiples Allowed) **Hedge (Optional, Multiples Allowed)** 

# Disclosure

Disclosure information from the publisher that is required to accompany a research product. Disclosure is 'proactive' in that it discloses current involvement and role in an offering or M&A. This would also include disclosures of analyst holdings in stock mentioned, etc. This section changes relatively frequently.

## **Elements and Attributes:**

# **code** (Optional, String)

Indicates the publisher defined disclosure code for a specific disclosure. For example, a publisher may need to disclose a banking relationship with a company, and may call this disclosure code A.

**Description** (Required, String) A description of the disclosure.

## Hedge

Hedge is a clause that notes if firm acted as manager or co-manager of a public offering of a company within the past three years, or some other stock-specific clause. This section changes less frequently.

### **Elements and Attributes:**

# code (Optional, String)

Indicates the publisher defined hedge code for a specific hedge. For example, a publisher may need to disclose a banking relationship with a company, and may call this hedge code A.

**Description** (Required, String) A description of the hedge.

# **Utility Package**

Any utilities that will be useful in various places in the RIXML document

# Length

Indicates the length of the product. For example, if the product were a PDF file, the length would be in pages.

# **Elements and Attributes:**

**lengthUnit** (Required, LengthUnitEnum) Indicates the unit of length. For example pages, seconds, minutes.

# StatusInfo

Describes the status of the product. Multiple StatusInfo elements are permitted. Each time the product status changes, and the publisher adds a StatusInfo element, the statusDateTime must be set to reflect the point of change, and the currentStatusIndicator must be updated so that only one StatusInfo is marked as current.

### **Elements and Attributes:**

**statusType** (Required, StatusTypeEnum) Indicates the status of the product or resource.

## statusDateTime (Required, TimeInstant)

Indicates the date and time at which the status was assigned. It is expressed using ISO 8601 as refined by the World Wide Web Consortium's note http://www.w3.org/TR/NOTE-datetime. In addition, RIXML requires the use of Zulu time or Z-time (GMT +/- n hours:minute:seconds). All times are absolute and easier to compute, rather than using a relative (i.e. 08:30 +5) time.

## currentStatusIndicator (Required, YesNoEnum)

Indicates whether or not the statusType is current -- i.e. the most recent. Note that while a product can have multiple statuses, only one of them can be current.

**Version** (Optional, String) Support for internal versioning of a given product.

# **Enumerations**

Listing of all the enumerated values.

# ActionEnum

Defines the specific actions to be performed by the research consumer on the research product.

### **Enumeration Values:**

### View

The ability to view or read the research product, or have it displayed for viewing within a research vending platform.

## ViewOffline

Like the **View** action, but including any capability to maintain access when the research consumer has lost all network connectivity from his or her viewing device. Intended to cover use-cases involving storage of the research product on the viewing device for reading in offline mode.

## Save

The ability to save or store the research product by the research consumer on his or her viewing device. Intended to permit the consumer to access the research product as a standalone file without tether to any research vending platform.

## Download

The ability to pull a copy of the research product from a research vending platform for local use on the viewing device of the research consumer.

### BatchDownload

The ability to **Download** as part of a batch or grouping of research products.

## Print

The ability to print or create a hardcopy rendering of the research product.

## BatchPrint

The ability to **Print** as part of a batch or grouping of research products.

## AssetClassEnum

Defines the highest level of asset classification.

#### **Enumeration Values:**

### Equity

Stocks and other non-debt securities.

### FixedIncome

Debt-based assets.

#### Currency

Monetary currency equivalents.

# Commodity

Usually pertains to an article of trade or commerce that can be transported. Among the numerous commodities that are traded, examples are: gold, cotton and orange juice.

# RealEstate

Property consisting of land and the buildings on it, along with its natural resources such as crops, minerals, or water; immovable property of this nature; an interest vested in this; (also) an item of real property; (more generally) buildings or housing in general. Also: the business of real estate; the profession of buying, selling, or renting land, buildings or housing.

# AssetTypeEnum

Defines the type of security.

## **Enumeration Values:**

### Stock

A type of security that signifies ownership in a corporation and represents a claim on part of the corporation's assets and earnings. There are two main types of stock: common and preferred. A Common stock usually entitles the owner to vote at shareholders' meetings and to receive dividends. A Preferred stock generally does not have voting rights, but has a higher claim on assets and earnings than the common shares. For example, owners of preferred stock receive dividends before common shareholders and have priority in the event that a company goes bankrupt and is liquidated.

## Convertible

A Convertible security is a security that can be converted into another security. Convertible securities are usually bonds or preferred shares that can be converted into common stock. A Convertible bond is a type of bond that can be converted into shares of stock in the issuing company, usually at some preannounced ratio (i.e., conversion ratio). A Convertible preferred stock is a preferred stock that includes an option for the holder to convert the preferred shares into a fixed number of common shares, usually anytime after a predetermined date.

## USTreasuries

Government securities are government debt obligations issued by a nation's government and denominated in the country's local currency. These securities are guaranteed by the "full faith and credit" of the issuing country's government, meaning that they are extremely low-risk investments. U.S. Treasury securities are closely followed by research analysts, although other governments securities like the British government bonds (Gilts), the German government bonds (Bunds), Japan government bonds (JGB), etc. are also followed.

The U.S. government sells Treasury Securities by auction (i.e., Treasury Auctions) in the primary market, but they are marketable securities and therefore can be purchased through a broker in the very active secondary market. There are four types of U.S. Treasury securities (often referred to simply as Treasuries): Treasury bills (or T-bills), Treasury notes (or TNotes), Treasury bonds (or T-Bonds), Treasury Inflation Protected securities (i.e., TIPS), and STRIPS (i.e., Separate Trading of Registered Interest and Principal Securities).

Treasury bills (or T-bills) mature in one year or less. They are like zero coupon bonds in that they do not pay interest prior to maturity; instead they are sold at a discount of the par value to create a positive yield to maturity.

Treasury bills are considered by many to be the most risk free investment. Treasury Bills are commonly issued with maturity dates of 28 days (~1 month), 91 days (~3 months), and 182 days (~6 months).

Treasury Notes (or T-Notes) mature in two to ten years. They have a coupon payment every six months, and are commonly issued with maturities dates of 2, 3, 5 or 10 years.

Treasury Bonds (or T-Bonds) mature in ten years or longer. They have coupon payment every six months like T-Notes, and are commonly issued with maturity dates of ten and thirty years.

Treasury Inflation Protection Securities (or TIPS) are the inflation indexed bonds issued by the U.S. Treasury. The principal is adjusted to the Consumer Price Index, the commonly used measure of inflation. The coupon rate is constant, but generates a different amount of interest when multiplied by the inflation-adjusted principal, thus protecting the holder against inflation. TIPS are currently offered in 5-year, 10-year and 20-year maturities.

T-Notes, T-Bonds and TIPS may be "stripped", separating the interest and principal portions of the security; these may then be sold separately (in units of \$1000 face value) in the secondary market. Such securities are known as STRIPS. The government does not directly issue STRIPS; they are formed by investment banks or brokerage firms, but the government does register STRIPS in its book-entry system.

# SovereignCredit

Sovereign Bonds are debt securities issued by a national government within a given country and denominated in a foreign currency (often referred to as Sovereigns).

# AgencyCredit

Agency Bonds are debt securities issued by various agencies and organizations of the U.S. Government such as the Federal Home Loan Mortgage Corporation (FHLMC or Freddie Mac), Federal National Mortgage Association (FNMA or Fannie Mae), Federal Home Loan Bank (FHLB), Federal Farm Credit Bank (FFCB), Government National Mortgage Association (GNMA or Ginnie Mae), etc. Agency bonds are backed by the U.S. Government, but not guaranteed by the government since the agencies are private entities.

# MoneyMarketCredit

Money Market Securities are short-term debt securities, the most common being banker's acceptances, commercial paper (or CPs), and certificates of deposit (or CDs) with a maturity of one year or less and often 30 days or less.

Banker's Acceptance is a short-term credit investment which is created by a non-financial firm and whose payment is guaranteed by a bank. A banker's acceptance starts as an order to a bank by a bank's customer to pay a sum of money at a future date, typically within six months. At this stage, it is like a postdated check. When the bank endorses the order for payment as "accepted", it assumes responsibility for ultimate payment to the holder of the acceptance. At this point, the acceptance may be traded in secondary markets much like any other claim on the bank. Banker's acceptances are essentially guarantees by a bank that a loan will be repaid.

Commercial Paper is a money market security issued by large banks and corporations. It is a short-term unsecured debt instrument issued with maturity of 270 days or less. It is generally not used to finance long-term investments but rather for purchases of inventory or to manage working capital.

Certificates of Deposit are issued by banks and sold to their customers. They represent a promise by the bank to repay a certain amount plus interest at maturity.

## CorporateInvestmentGradeCredit

Corporate Investment Grade Securities are relatively safe debt securities with high credit ratings (i.e., investment grade credit rating) of BBB or higher by Standard & Poor's or Baa3 or higher by Moody's. High-grade bonds are also included in this asset type. These are bonds that have the highest credit ratings - usually AAA or AA by Standard & Poor's.

## CorporateHighYieldCredit

A High-yield Bond (non-investment grade bond or junk bond) is a bond that is rated below investment grade (i.e., BB or lower by Standard & Poor's). These bonds have a higher risk of defaulting, but typically pay high yields in order to make them attractive to investors.

## MortgageBackedCredit

A Mortgage-Backed Security (MBS) is an investment instrument that represents ownership of an undivided interest in a group of mortgages. Principal and interest from the individual mortgages are used to pay investors' principal and interest on the MBS. MBSs are backed (secured) by pools of mortgage loans, which not only provide collateral but also the cash flow to service the debt. A mortgage-backed security is any security where the collateral for the issued security is a pool of mortgages. This asset type includes: Commercial Mortgage-Backed Securities (or CMBS), Residential Mortgage-Backed Securities (or RMBS), Collateralized Mortgage Obligations (or CMO), Planned Amortization Class (PAC) bonds, Target Amortization Class (TAC) bonds, Mortgage Pass-Through Securities, etc.

Commercial Mortgage-Backed Securities (or CMBS) are a type of mortgage-backed securities that are secured by loans on commercial property.

Residential Mortgage-Backed Securities (or RMBS) are a type of mortgage-backed securities whose cash flows come from residential mortgages, home-equity loans and sub-prime mortgages. This is a type of mortgage-backed securities that focuses on residential instead of commercial debt.

Mortgage Pass-Through Securities (often referred to as pass-throughs) are created by pooling a number of mortgages together. Shares of such mortgage pools are sold in the form of participation certificates representing ownership of a fractional share of the pool of underlying mortgages. The interest and principal made by the homeowners whose mortgages are in the pool are collected and passed thorough to investors after deducting administrative and servicing fees.

Collateralized Mortgage Obligations (or CMO) are created from mortgage pass-through certificates and referred to as derivative mortgagebacked securities, since they are derived from a simpler MBS structure. A CMO issue has different tranches, each of which has a different type of claims on the cash flow from the pool of mortgages (i.e., their claims are not just a fractional claim on the total cash flows from the pool). The motivation for creating a CMO is to redistribute the prepayment risk inherent in mortgage pass-through securities and/or create securities with various maturity ranges. The CMO structure takes the cash flows from the mortgage pool and allocates any principle payments (both scheduled payments and prepayments) sequentially over time to holders of different CMO tranches, rather than equally to all security holders.

A Planned Amortization Class bond (PAC) is a type of tranche in a CMO that receives a primary payment schedule. As long as the actual prepayment rate is within a designated range of prepayment speeds, the cash flow pattern is known and the life of the PAC tranche will remain relatively stable. Therefore, it is said that PACs provide two-sided prepayment protection.

A Target Amortization Class bond (TAC) is a type of tranche in a CMO structure that is similar to a planned amortization class (PAC) in that it protects investors from prepayment; however, it is structured differently than a PAC. TACs protect investors from a rise in the prepayment rate. They do not protect from a fall in the prepayment rate like PACs. Under a TAC, the principal is paid on a predetermined schedule. Any prepayment that occurs is amortized in order to maintain the schedule. TACs are inferior to PACs because they only provide one-sided prepayment protection.

## MunicipalCredit

Municipal Bonds (or Munis) are debt securities issued by a state, municipality, or county, in order to finance its capital expenditures. Municipalities issue bonds to raise capital for their day-to-day activities and for specific projects that they might be undertaking (usually pertaining to development of local infrastructure such as roads, sewerage, hospitals etc). There are two common types of municipal bonds: general obligation (GO) bonds and revenue bonds.

General Obligation (GO) Bonds promise to repay based on the full faith, credit, and taxing power of the issuer; these bonds are typically considered the most secure type of municipal bond, and therefore carry the lowest interest rate. General obligation bonds are issued with the belief that a municipality will be able to repay its debt obligation through taxation or revenue from projects. No assets are used as collateral.

Revenue Bonds promise repayment from a specified stream of future income, such as a toll bridge, highway, a local stadium, income generated by a water utility from payments by customers, etc. Principal and interest on a revenue bond is payable only if a sufficient level of revenue is generated by the project.

## AssetBackedCredit

An Asset-Backed Security (or ABS) is a debt security backed by a loan, lease or receivables against assets other than real estate and mortgagebacked securities. An ABS is essentially the same as a mortgagebacked security, except that it is backed by assets such as loans, leases, credit card debt, a company's receivables, royalties and so on, rather than mortgages.

## **EmergingMarketsSovereign**

Sovereign bonds are issued by the governments of emerging market countries (often referred to as Emerging Market Sovereigns). See Sovereign Credit for a definition of Sovereign bonds.

## **EmergingMarketsCredit**

Emerging market credit refers to debt securities issued by emerging market companies, governments, etc.

## SupranationalCredit

Supranational credit refers to debt securities issued by supranational organizations (sometimes referred to as Supranationals). A supranational organization is an international organization, or union, whose member states transcend national boundaries or interests to share in the decisionmaking and vote on issues pertaining to the wider grouping. Popular Supranational Organizations are: African Development Bank (AFDB), Asian Development Bank (ADB), Corporation Andina de Fomento (CAF), EUROFIMA, European Bank for Reconstruction and Development (EBRD), European Investment Bank (EIB), Inter-American Development Bank (IADB), International Bank for Reconstruction and Development (BRD), International Finance Corporation, Nordic Investment Bank (NIB), European Community (EC), European Coal and Steel Community, EURATOM, European Central Bank, etc.

## CollateralizedDebtObligations

Collateralized Debt Obligation (or CDO) is a debt instrument backed by a pool of other debt obligations and even other CDOs. These other debt obligations can be bonds, loans and asset-backed securities. CDOs do not specialize in one type of debt but are often non-mortgage loans or bonds. Tranches of the CDO are created based on the seniority of the claims to the cash flows of the underlying assets. The tranches are given separate credit ratings depending on the seniority of the claims as well as the creditworthiness of the underlying pool of debt securities. The term CDO is often used as a generic term that includes: 1) Collateralized bond obligations (CBOs) -- CDOs backed primarily by bonds; 2) Collateralized loan obligations (CLOs) -- CDOs backed primarily by loans; 3) Structured finance CDOs (SFCDOs) -- CDOs backed primarily by asset-backed securities; 4) CDO-Squared -- CDOs backed primarily by securities issued by other CDO vehicles.

## Credit

Credit refers to research reports that discuss the credit market in general rather than discussing particular securities.

## ProvincialRegionalCredit

Provincial Bonds are debt obligations issued by a provincial government. It is equivalent to municipal bonds for countries that have provinces instead of municipalities.

## Loans

A Loan is a type of debt when a lender gives money to a borrower, and the borrower agrees to repay the money, usually along with interest, at some future point(s) in time. Usually, there is a predetermined time for repaying a loan, and generally the lender has to bear the risk that the borrower may not repay the loan.

## EuropeanCoveredBond

European Covered Bonds are debt securities backed by cash flows from mortgages or public sector loans. They are similar in many ways to assetbacked securities created via securitization but covered bond assets remain on the issuer's balance sheet. Essentially, a Covered Bond is a corporate bond with one important enhancement: recourse to a pool of assets that secures or "covers" the bond if the originator (usually a financial institution) becomes insolvent. European Covered bonds are called Pfandbriefe in Germany, Obligations de Foncieres in France, Lettres de Gage in Luxembourg, Cedulas in Spain, Irish Asset Covered Bonds in Ireland, etc.

## Derivatives

A Derivative is a security whose price is dependent upon or derived from one or more underlying assets. The derivative itself is merely a contract between two or more parties. Its value is determined by fluctuations in the underlying asset. The most common underlying assets include stocks, bonds, commodities, currencies, interest rates and market indexes. Futures contracts, forward contracts, options and swaps are the most common types of derivatives.

## **FinancialFutures**

The Financial Futures market trades financial commodities in the same way consumable commodities such as corn and oil are traded. The key difference between financial futures and other futures is the intangibility of most of the underlying products. Stock indexes and interest rates have no actual physical or accountable existence, which means there is nothing to deliver if the contract is not offset. Instead, these contracts are settled in cash if they're not offset. There are four categories of financial futures: foreign currency futures, equity index futures, interest rate futures, and single stock futures.

Interest Rate Futures are futures contracts which have interest-bearing instruments as the underlying assets (e.g., Treasury-bill futures, Treasurybond futures and Eurodollar futures).

Equity Index Futures are futures contracts on stock indexes (e.g., a futures contract on the S&P 500 Index). They are securities that use composite stock indexes to allow investors to speculate on the performance of the entire market, or to hedge against losses in long or short positions. The settlement of the contracts is in cash.

A Single-Stock Futures contract is an agreement to buy or sell shares of stock such as Microsoft, Intel, GE, or Amgen at a point in the future. The buyer has an obligation to purchase shares of stock and the seller has an obligation to sell shares of stock at a specific price at a specific date in the future.

Currency Futures (also FX future or foreign exchange future) are futures contract to exchange one currency for another at a specified date in the future at a predetermined price.

## EquityFunds

Equity Funds (also known as stock funds) invest primarily in stocks, usually common stocks. The objectives of an equity fund are usually longterm growth through capital appreciation (e.g, growth fund), income through dividends (e.g., income fund), or a combination of growth and income (i.e., balanced fund). Specific equity funds may focus on a certain sector of the market or may be geared toward a certain level of risk. Stock funds can be distinguished by several properties. Funds may have a specific style, for example, value or growth. Funds may invest in solely the securities from one country, or from many countries. Funds may focus on size of company, that is, small-cap, large-cap, mid-cap, etc.

## BondFunds

A Bond Fund is a mutual fund that invests in income-producing debt instruments, which may include corporate, government or municipal bonds. Its investment objective is to provide stable income while taking on minimal risk.

## MoneyMarketFunds

Money Market Funds are mutual funds that invest only in money market instruments. These funds invest in short-term (one day to one year) debt obligations such as Treasury bills, certificates of deposit, and commercial paper. (See Money Market Credit and US Treasury for definitions of these financial instruments.)

## CountryFunds

A Country Fund is a fund that confines its investment to a single country which is usually stipulated in the fund's name.

## BalancedFunds

A Balanced Fund is a mutual fund that invests its assets into common stock, preferred stock, bonds, and short-term bonds (money market instruments), to provide both income and capital appreciation while avoiding excessive risk. The purpose of balanced funds is to provide investors with a single mutual fund that combines both growth and income objectives, by investing in both stocks (for growth) and bonds (for income).

## CurrencyCash

Currency Cash refers to the spot currency market.

## CurrencyDerivatives

A Currency Derivative is a derivative financial instrument whose underlying asset is a foreign currency. Currency Derivatives are: currency futures, currency forwards, currency swaps, currency options, currency swaptions etc.

## CurrencyFutures

Currency Futures (also FX futures or foreign exchange futures) are futures contracts to exchange one currency for another at a specified date in the future at a predetermined price.

#### CommodityFunds

A Commodity Fund is a fund that invests in commodity securities (usually commodity derivatives - futures, options, etc.)

#### InterestRates

An interest rate is the rate at which interest is paid by a borrower for the use of money that they borrow from a lender. For example, a small company borrows capital from a bank to buy new assets for their business, and in return the lender receives interest at a predetermined interest rate for deferring the use of funds and instead lending it to the borrower. Interest rates are normally expressed as a percentage of the principal for a period of one year.

Interest rates targets are also a vital tool of monetary policy and are taken into account when dealing with variables like investment, inflation, and unemployment.

#### PublisherDefined

An enumeration value that is not provided by RIXML.

## IslamicFinancing

A banking system that is based on the principles of Islamic law (also known Shariah) and guided by Islamic economics. Two basic principles behind Islamic banking are the sharing of profit and loss and, significantly, the prohibition of the collection and payment of interest. Collecting interest is not permitted under Islamic law.

## StructuredProducts

In finance, a structured product, also known as a market linked investment, is generally a pre-packaged investment strategy based on derivatives, such as a single security, a basket of securities, options, indices, commodities, debt issuance and/or foreign currencies, and to a lesser extent, swaps. The variety of products just described is demonstrative of the fact that there is no single, uniform definition of a structured product. A feature of some structured products is a "principal guarantee" function, which offers protection of principal if held to maturity. For example, an investor invests 100 dollars, the issuer simply invests in a risk free bond that has sufficient interest to grow to 100 after the five-year period. This bond might cost 80 dollars today and after five years it will grow to 100 dollars. With the leftover funds the issuer purchases the options and swaps needed to perform whatever the investment strategy is. Theoretically an investor can just do this themselves, but the costs and transaction volume requirements of many options and swaps are beyond many individual investors.

As such, structured products were created to meet specific needs that cannot be met from the standardized financial instruments available in the markets. Structured products can be used as an alternative to a direct investment, as part of the asset allocation process to reduce risk exposure of a portfolio, or to utilize the current market trend.

U.S. Securities and Exchange Commission (SEC) Rule 434 (regarding certain prospectus deliveries) defines structured securities as "securities whose cash flow characteristics depend upon one or more indices or that have embedded forwards or options or securities where an investor's investment return and the issuer's payment obligations are contingent on, or highly sensitive to, changes in the value of underlying assets, indices, interest rates or cash flows."

The Pacific Stock Exchange defines structured products as "products that are derived from and/or based on a single security or securities, a basket of stocks, an index, a commodity, debt issuance and/or a foreign currency, among other things" and include "index and equity linked notes, term notes and units generally consisting of a contract to purchase equity and/or debt securities at a specific time."

## Energy

A category of traded commodities that includes oil, ethanol, natural gas, gasoline, and propane.

## **Precious**Metals

A category of traded commodities that includes gold, silver, platinum, and palladium.

## IndustrialMetals

A category of traded commodities that includes copper, lead, zinc, tin, aluminium, aluminium alloy, nickel, cobalt, molybdenum, and recycled steel.

## Agriculture

A category of traded commodities that includes grains, food, and fiber, such as corn, oats, rough rice, soybeans, wheat, milk, cocoa, coffee, cotton, sugar, and frozen concentrated orange juice.

## Environment

A category of commodities that includes carbon offsets, Renewable Energy Certificates, and white certificates.

## Livestock

A category of traded commodities that includes hogs, pork bellies, and cattle. (Promoted from SecurityType in v2.4.)

## AudienceTypeEnum

#### **Enumeration Values:**

## Institutional

Mutual funds, banks, insurance companies, pension funds, or other organizations that trade large volumes of securities.

## PrivateClient

High-net-worth Individuals investing their own or their family's funds, and not the funds of a company.

## Corporate

Corporations not in the business of managing other people's assets.

## Government

Self-governing, independent state.

## Educational

Institution whose main purpose is higher learning.

#### Retail

General public that may be interested in products offered by the publisher.

### Press

Journalists that are usually employed by a media organization. Information tagged in this manner will usually be distributed to the general public.

## Prospect

Potential customer to one of the publisher's lines of business.

## Trading

Trading personnel at publisher's organization.

## SalesForce

Sales personnel at publisher's organization.

## PublisherDefined

An enumeration value that is not provided by RIXML.

Shareholder BuySide Public QualifiedInstitutionalBuyer CorrespondentBroker SellSide Client InvitationOnly

## ContactInfoNatureEnum

Describes the nature of the contact information -- i.e. business or personal.

#### **Enumeration Values:**

Personal

Contact's non-business data.

## Business

Contact's business data.

## ContactInfoPurposeEnum

Describes the purpose of the contact information. Gives the reader an idea of what to expect on the far end.

## **Enumeration Values:**

## Participation

Participation -- as in a conference call or on-line forum.

#### Replay

Replay -- as in a replay capability for a past conference call or transcript of an on-line forum.

## Operator

## QuestionAnswer

For the purpose of a question and answer session, as in a conference call.

#### Registration

Contact information to be used to register for an event.

## CoverageActionEnum

## **Enumeration Values:**

## Initiate

Publisher is commencing coverage of this topic.

## Suspend

Publisher is suspending coverage. They may subsequently choose to "drop" or "resume" coverage.

#### Drop

Coverage is being dropped. Publisher will no longer publish research on this topic.

#### Resume

Publisher is resuming coverage of this topic.

## DisciplineTypeEnum

**Enumeration Values:** 

## Investment

Content that has been generated using a systematic, detailed examination of a particular topic. A very focused and detailed viewpoint or advice on a topic that is normally based on specific facts. (Bottom-up approach).

## Strategy

Content published with a viewpoint that is primarily derived using the science of strategy. A high level viewpoint or advice on a particular subject (Top-down approach).

This process includes the "relative value" approach in which undervalued securities are identified for purchase and overpriced securities are identified for sale.

## Economics

Content published with a viewpoint that is primarily derived using economic science.

## **EstimateActualEnum**

## **Enumeration Values:**

## Actual

Historical, publicly disseminated figures.

## Estimate

Proprietary, calculated figures provided by the publisher.

## Consensus

Figures based upon the consensus of the market.

## EstimateEnum

Enumeration Values: Revision Upgrade Reiterate Downgrade

## EventDateTypeEnum

This is used to indicate the start date, end date, and all other date-related information pertinent to the event. Each venue can have a different set of dates (different start date, different end date, etc.).

#### **Enumeration Values:**

StartDate EndDate RegistrationDeadlineDate ExpirationDate PricingDate For IPOs.

FilingDate For IPOs.

#### LockupDate

For IPOs.

#### WithdrawalDate

For IPOs.

## QuietPeriodEndDate

For IPOs.

## **EventTypeEnum**

Indicates the type of the event. Each type is either conference, corporate event, government meeting, or sellside firm event.

## **Enumeration Values:**

IndustryConference CountryRegionConference SeminarConference ThematicConference TradeShowConference Conference AnnualShareholderMeeting IPO EarningsRelease EarningsRelease EarningsReleaseDiscussion EarningsGuidancePreliminaryDiscussion SpecialShareholdersMeeting CorporateActionCommentary RoadShow GovernmentMeeting

# EventVenueTypeEnum

Describes the venue of an event.

## **Enumeration Values:**

ConferenceCall OneOnOneMeeting GroupMeeting Webcast WrittenRelease InternetAudio InternetVideo MediaAppearance Transcript Brief

Short synopsis of transcript taking key points.

## Podcast

A podcast is a type of digital media consisting of an episodic series of audio, video, PDF, or ePub files subscribed to and downloaded through web syndication or streamed online to a computer or mobile device.

## Interview

An interview is a conversation between two people (the interviewer and the interviewee) where questions are asked by the interviewer to obtain information from the interviewee.

## Panel

A discussion forum in which a moderator directs questions from an audience or other sources to a group of speakers with expertise or other valued perspectives on the topic at hand.

## FinancialStatementGAAPTypeEnum

Generally Accepted Accounting Principles used in Financial Statements.

#### **Enumeration Values:**

## GAAPUS

Generally Accepted Accounting Principles (GAAP) in the United States.

#### GAAPLocal

Generally Accepted Accounting Principles (GAAP) in the home country of the issuer.

## GAAPIAS

Generally Accepted Accounting Principles (GAAP) promulgated by the International Accounting Standards Board (IASB).

#### AnalystAdjustedNonGAAP

Revised security (issue) financials, which, in the opinion of the analyst/publisher, need modifying to reflect material financial events for the issuer (company). By definition, not according to any GAAP.

## FocusEnum

## **Enumeration Values:**

#### SectorIndustry

The focus of the report is a sector or industry, not the individual securities mentioned in the report.

#### Discipline

The focus of the report is a discipline.

#### Issuer

The focus of the report is an issuer.

## Region

The focus of the report is a region, not individual countries.

### Country

The focus of the report is a country.

#### AssetClass

The focus of the report is an asset class.

## AssetType

The focus of the report is an asset type.

### SecurityType

The focus of the report is a particular security type.

### Index

The focus of the report is an index.

## Exchange

The focus of the report is an exchange.

## Market

For some products, the focus is not on any particular security or country or sector, but rather on a specific market or markets, providing summaries, highlights, or commentaries.

## Unfocused

The report has been evaluated for a specific focus, and has been found to be an unfocused report. Example: A Morning Call report.

## IncludeExcludeEnum

An enumeration used to specify whether a given entitlement is inclusive or exclusive. An exclusion always takes priority over an inclusion.

#### **Enumeration Values:**

Include Exclude

#### IndexEnum

List of major market indexes.

#### **Enumeration Values:**

## DowJonesIndustrial

U.S. market.

SP500 U.S. market.

## Wilshire 5000

U.S. market.

Nasdaq U.S. market.

# RussellTech

U.S. market.

## **CSE-COMPOSITE**

Canadian market.

#### SPTSX-COMPOSITE

Canadian market.

**ASX-200** Asian market. Australia.

HSMLCI Asian market. China.

HSCEI Asian market. China.

HSCCI Asian market. China.

**HSI** Asian market. Hong Kong.

**BSE-30** Asian market. India.

JCI Asian market. Indonesia.

**KOSPI** Asian market. Korea.

**KLCI** Asian market. Malaysia.

NZSE-40 Asian market. New Zealand.

**PCI** Asian market. Philippines.

**STI** Asian market. Singapore.

**TWI** Asian market. Taiwan.

**SET** Asian market. Thailand.

**TOPIX** Asian market. Japan.

Nikkei225 Asian market. Japan. Nikkei300

Asian market. Japan.

WIENERBOERSE European market. Austria.

**BEL20** European market. Belgium.

**PRAGUEPX50** European market. Czech Republic.

**KBX** European market. Denmark.

**HEXGENERAL** European market. Finland.

**CAC40** European market. France.

**SBF120** European market. France.

**DAX** European market. Germany.

ATHENSGENERAL European market. Greece.

**BUDAPESTBUX** European market. Hungary.

**SEOVERALL** European market. Ireland.

**COMITGENERAL** European market. Italy.

**SELUXX** European market. Luxembourg.

**AEX** European market. Netherlands.

**OSLOBENCHMARK** European market. Norway.

WARSAWGENERAL European market. Poland. **PSI30** European market. Portugal.

**BET** European market. Romania.

**RSFEEMT** European market. Russia.

IBEX35 European market. Spain.

AFFARSVARLDEN European market. Sweden.

**SMI** European market. Switzerland.

**ISENATIONAL100** European market. Turkey.

**FTSEALLSHARE** European market. U.K.

**EUROSTOXX50** European market. EuroZone.

**BURCAP** Latin American market. Argentina.

**BOVESPA** Latin American market. Brazil.

**GENERAL** Latin American market. Chile.

**BOLSADEVALORES** Latin American market. Columbia.

IPCBOLSA Latin American market. Mexico.

LIMASEGENERAL Latin American market. Peru.

**SEGENERAL** Latin American market. Venezuela.

## PublisherDefined

**IndexTypeEnum** Indicates whether an index is related to an industry, country or market, etc.

DATA DICTIONARY

#### **Enumeration Values:**

Market Industry

Country

Region

## **InstantMessengerTypeEnum**

Describes the sort of Instant Messenger contact information provided.

#### **Enumeration Values:**

#### AIM

America On-Line Instant Messenger.

### ICQ

I-seek-you.

## MSN

The Microsoft Network.

## SMS

Short Message Service.

#### Yahoo

Yahoo! Messenger.

#### PublisherDefined

Allows for IM systems not captured in the existing enumeration list. Use the corresponding publisherDefinedValue attribute.

## **IssuerFinancialsTypeEnum**

## **Enumeration Values:**

## Revenue

Total amount collected for goods and services provided.

#### Earnings

Revenues less cost of sales, operating expenses, and taxes, over a given period of time.

## MarketCap

The market price of a public corporation, calculated by multiplying the number of shares outstanding by the price per share.

#### AfterTaxCashFlow

A measure of a company's financial health. Equals cash receipts less cash payments over a given period of time; or equivalently, net profit plus amounts charged off for depreciation, depletion and amortization.

## EBITDA

Net income + depreciation + amortization.

## NetOperatingIncome

A measure of a company's earning power from ongoing operations, equal to earnings before deduction of interest payments and income taxes.

## ReturnOnEquity

A measure of how well a company used reinvested earnings to generate additional earnings, equal to a fiscal year's after-tax income (after preferred stock dividends but before common stock dividends) divided by book value. Expressed as a percentage.

## PublisherDefined

An enumeration value that is not provided by RIXML.

## CapitalExpenditure

Funds used by a company to acquire or upgrade physical assets such as property, industrial buildings, or equipment, or the amount used during a particular period to acquire or improve long term assets such as property, plant, or equipment.

## EnterpriseValue

Calculated as market capitalization plus debt, minority interests and preferred shares, minus total cash and cash equivalents. Cash equivalents are defined as an item on the balance sheet that reports the value of a company's assets which can be converted into cash immediately. Examples of cash and equivalents are bank accounts, marketable securities and Treasury bills.

#### GrossProfitMargin

Revenue minus cost of goods sold, divided by total revenue, expressed as a percentage.

#### LongTermGrowthRate

A measure of the expected annual increase in operating earnings over the company's next full business cycle. This measure refers to a period between three and five years, and is expressed as a percentage.

#### NetAssetValue

The total book value of a company's securities. It is calculated in general form by taking the total assets of a company and subtracting the value of the company's intangible assets (goodwill, patents, etc.) minus current and long-term liabilities.

#### NetDebt

Calculated as short- and long-term interest-bearing debt minus cash (and equivalents).

#### PreTaxEarnings

Earnings before taxes, over a given period of time.

## ReturnOnAssets

A measure of a company's return on investment, equal to a fiscal year's after-tax income (prior to financing costs) divided by total assets.

## **IssuerNameTypeEnum**

Enumeration Values: Legal The legal name of an organization.

## Local

The local name of an organization.

## Display

The name that is commonly associated with the company.

## Trading

The trading name of the company.

## Parent

The name of the parent company, which may aid in searching and sorting of information.

## **IssuerSecurityIDTypeEnum**

## **Enumeration Values:**

## CUSIP

A CUSIP is an 8 or 9-digit alphanumeric string thart identifies an issuer and its financial instrument (issue). CUSIPs are created by Standard and Poor's Cusip Bureau. They are issued for all U.S. and Canadian securities, and should NOT be considered a valid universal identifier.

## SEDOL

Stock Exchange Daily Official List. British Securities identification code. Has built in check digit system.

## ISIN

This code consists of 12 characters. The first two characters indicate the country as issued in accordance with the ISO 3166 standard. The next 9 characters indicate the type of security, as designated by the national numbering agency (e.g. CUSIP for US and Canada). Where the national number consists of fewer than 9 characters, zeroes are inserted to utilize all spaces. The final character in the ISIN is a check digit.

## Bloomberg

Security identifier and country identifier assigned by the Bloomberg Company.

## RIC

Reuters Identification Code. Used in all Reuters products to identify a particular security (issue).

## QUIK

Security identifier issued by the QUICK Financial Company in Japan.

## Valoren

Identifier for Swiss securities. No check digit system.

## CINS

Every North-American international equity and debt instrument is assigned a Cusip Int'l Number by Standard and Poor's and Telekurs. The CINS uses the same construction as the CUSIP with the addition of a country indicator. The first position of a CINS code is always an alpha character, indicating the Issuer's country code or geographic location.

## Sicovam

Identifier for French securities (issues). Societe Interprofessional Pour La Compensation des Valeurs Mobiliers.

## IBES

Worldscope FirstCall WPKDE This code is 6 digits, used in Germany (DE) to identify securities.

## WPKAT

This code is 6 digits, used in Austria (AT) to identify securities.

## CommonCode

Used by EuroClear (XS) and also forms the root of some ISINs.

## PublisherDefined

An enumeration value that is not provided by RIXML.

## ThomsonPermId

For contributing research to Thomson Financial platforms.

## ExchangeTicker

The symbol used to represent the issuer or security on an exchange on which it trades.

## DUNS

The Dun & Bradstreet DUNS Number, which stands for Data Universal Number System, is a unique ninedigit identifier for businesses. It is used to establish a business credit file, which is often referenced by lenders and potential business partners to help predict the reliability and/or financial stability of the company in question.

## **IssuerTypeEnum**

## **Enumeration Values:**

## Agency

Corporation or quasi-government entity that borrows money through the issue of debt obligations. In most cases, they are exempt from state and local taxes. Examples of Agency issuers in the US are: the Federal Home Loan Bank Board (FHLB) and Ginnie Mae (GNMA).

## Municipality

States, their political subdivisions (such as counties and cities) and certain agencies and authorities that borrow money through the issue of debt obligations.

## Sovereign

A government or national entity that borrows money through the issue of debt obligations. The funds borrowed are secured by the pledge of the issuer's full faith, credit and usually taxing power.

## Corporate

The most common form of business organization, and one that is chartered by a state and given many legal rights as an entity separate from its owners.

## MutualFund

An open-ended fund operated by an investment company which raises money from shareholders and invests in a group of assets, in accordance with a stated set of objectives.

## REIT

Real estate investment trust. A corporation or trust that uses the pooled capital of many investors to purchase and manage income property (equity REIT) and/or mortgage loans (mortgage REIT); often publicly held.

## Exchange

Any organization, association or group, which provides or maintains a marketplace where securities, options, futures, or commodities can be traded; or the marketplace itself.

## SupranationalOrganizations

Organizations, whose members are comprised of sovereign governments. These members are levied assessments or fees. Ultimately, it is this support and the taxation power of the underlying sovereign governments that allow these organizations to make payments on their debts.

## LengthUnitEnum

**Enumeration Values:** 

### Pages

#### TimeUnit

In the following format - Hours: Minutes: Seconds.

## **OrganizationNameTypeEnum**

**Enumeration Values:** 

#### Legal

The legal name of an organization.

Local

The local name of an organization.

#### Display

The name that is commonly associated with the company.

#### Parent

The name of the parent company, which may aid in searching and sorting of information.

## OrganizationTypeEnum

Indicates the type of the organization -- i.e. sell-side firm, buy-side firm, government, etc.

#### **Enumeration Values:**

SellSideFirm

**BuySideFirm** 

Corporation

#### IndustryAssociation

An organization founded and funded by businesses that operate in a specific industry to promote common goals or foster collaboration or standardization between companies.

## AcademicInstitution

An educational institution dedicated to education and research, which grants academic degrees.

#### Government

#### PublisherDefined

## RatingAgency

A rating agency is a company that assigns ratings for issuers of certain types of securities as well as the securities themselves.

## MarketResearchFirm

A market research firm is one that gathers information about markets or customers.

## IndependentResearchProvider

An investment research provider that does not engage in investment banking, company consulting or research-for-hire.

## Consultancy

An entity that provides professional or expert advice in a particular area.

## Regulatory

A public authority or government agency responsible for exercising autonomous authority over some area of human activity in a regulatory or supervisory capacity.

## MarketingAgency

An organization created by producers to try to market their product and increase consumption and thus prices.

## WealthManager

A credentialed financial advisory professional that provides financial planning, investment portfolio management and other financial services to affluent long-term investors.

## PeriodEnum

## **Enumeration Values:**

## Q1

First quarter of the company's fiscal year.

## Q2

Second quarter of the company's fiscal year.

## Q3

Third quarter of the company's fiscal year.

## Q4

Fourth quarter of the company's fiscal year.

## H1

First half of the company's fiscal year.

## H2

Second half of the company's fiscal year.

## T1

First trimester of the company's fiscal year.

## Т2

Second trimester of the company's fiscal year.

## Т3

Third trimester of the company's fiscal year.

### Annual

Data for the full fiscal year.

## Stub

Reflects a partial year in the event of fiscal year changes.

## PeriodicityEnum

**Enumeration Values:** 

Hourly IntraDay Daily Weekly EveryTwoWeeks Monthly Quarterly SemiAnnually Annually PublisherDefined

### PhoneLocationEnum

Describes the physical location of the phone device -- i.e. office, home, mobile.

Enumeration	Values:
-------------	---------

Office Home

Mobile

## PhoneTypeEnum

Describes the type of the phone at this number. Indicates the phone technology -- i.e. voice, fax, pager, etc.

## **Enumeration Values:**

## Fax

Facsimile number.

## Voice

Voice telephone number.

#### Pager

Pager number.

## PriorCurrentTypeEnum

**Enumeration Values:** 

## Current

Denotes a financial estimate or datum currently in effect with the publication of the present product.

## Prior

Denotes a financial estimate or datum in effect prior to the publication of the present product.

## PriorityEnum

Enumeration Values: High Medium Low

## ProductCategoryEnum

**Enumeration Values:** 

## Comment

Comments usually have very short shelf life, and are often created in response to events taking place within the previous 24 hours.

## Report

A narrative form that is more in-depth than a Comment, with a perceived longer shelf life. Can be any media type.

## Model

A mathematical model used for analysis.

#### Charts

Graphs and other pictorial representations of data.

#### Compilation

Content that combines the work of many analysts, multiple disciplines, and/or multiple product types, and that is not easily classified in any of the other product categories.

#### Presentation

Content originally designed for (or in the format of) a presentation to an audience - usually in "slide" format, with abbreviated bullet points as opposed to a full text narrative.

#### Event

Meeting notification or pre-event announcement.

#### Primer

Overview or introduction to a subject or methodology.

#### Directory

An alphabetical or classified listing of analysts, departments, etc. with relevant information (phone number, email, companies covered, etc.).

## Glossary

A collection of brief textual explanations or of specialized terms with their respective meanings. Glossaries are usually created by Sector, Industry, Asset Class, or Asset Types.

## Overview

A short, single industry/company piece.

## EventInvitation

Invitiation to an event.

## PostEventSummary

Summary of an event after it has concluded.

## PublisherDefined

For use with products that cannot fit into any of the RIXML categories.

## ProductRelationshipTypeEnum

## **Enumeration Values:**

## BasedOn

A product's content is based on another product. Example: A report that is published is based on a morning call note.

## PartOf

A product is part of another product. Examples: (1) A Portfolio Manager's Summary of a report, given to PMs, is part of the whole report. (2) An HSBC company report is 'part of' a Hong Kong banks industry initiation.

## References

A product references another product. Examples: (1) A notation in a periodical (or weekly report) makes a 'reference' to a company report. (2) A company report 'references' an earlier company report on the same subject.

#### Replaces

This product is intended to directly replace the related product. Example: A company report issued in the afternoon corrects an error in an earlier publication. It 'replaces' the earlier report.

## Requires

A product requires another product in order to make sense. Example: A chart may not make any sense without the accompanying text.

## TranslationOf

A product that is a language translation of another product. Example: A report written originally in English is translated into Japanese language.

## RelatedTo

A product that relates to another product or subject type, but is not necessary to understand this product. Example: An analyst writes more than one report on 'CAMELOT' valuation over a period of 1 year. The reports are 'related to' each other. They are not 'referenced' to each other per se, as they can be stand alone items on their own, and you do not need to read one before the other to understand what is being said.

## RatingActionEnum

## **Enumeration Values:**

## Upgrade

Publisher is upgrading its rating.

## Reiterate

Publisher has reviewed its rating and is maintaining, or reiterating, their opinion.

## Downgrade

The publisher is downgrading its rating.

## Initiate

The publisher is issuing its first rating for this specific topic.

## Drop

The publisher is dropping and will no longer update its rating for this topic.

## Revise

If you change the actual rating, you will be upgrading or downgrading, for which we have values. However, if you are changing the risk or volatility part of a rating, for which we don't have explicit fields, and it would not be considered either an upgrade or downgrade, we may still want to flag that as something that has changed in the rating.

## NewRating

New rating has been assigned.

## Affirmed

Rating has been reviewed and affirmed.

## PositiveOutlook

Rating may improve.

# NegativeOutlook

Rating may decline.

## ReviewForUpgrade

Rating under review for upgrade.

## ReviewForDowngrade

Rating under review for downgrade.

## ReviewDirectionUncertain

Rating under review but direction is uncertain.

## RatingWithdrawn

Rating has been removed.

### RatingRestored

Rating has been restored.

## Refresh

Used to indicate when the supporting financial data - prices, charts, etc. - in the associated research publication has been revised, but the actual rating remains unchanged and un-reviewed. This is to differentiate from the current value of Affirmed.

## Restricted

Used when the subject issuer of a research publication is under restriction for distribution.

## RatingAspectEnum

Permits tagging a rating with the aspect of the rated entity addressed by the rating itself.

#### **Enumeration Values:**

## Investment

A rating that indicates the investment-worthiness of an investment. (Default value.)

#### Credit

A rating that indicates the credit-worthiness of a debtor.

## Risk

A rating that indicates the riskiness of an investment.

#### Volatility

A rating that indicates the variation in price of a financial instrument over time.

#### Valuation

A rating that indicates how the current price relates to the underlying value of an investment.

## Management

A rating that indicates the quality and effectiveness of an entity's management.

#### ESG

A rating that indicates how an entity measures up with regard to environmental, social, and governance concerns.

#### Environmental

A rating that indicates how an entity measures up with regard to environmental concerns, such as climate change, hazardous waste, nuclear energy, and sustainability.

## Social

A rating that indicates how an entity measures up with regard to social concerns such as diversity, human rights, consumer protection, and animal welfare.

#### Governance

A rating that indicates how an entity measures up with regard to governance concerns such as management structure, employee relations, and executive compensation.

## **Fundamentals**

A rating that indicates how an entity measures up on fundamental factors such as key financials.

### Technical

A rating that indicates how an investment measures up with respect to trading (price, volume, and related metrics) history.

## Strategy

A rating that indicates how an investment measures up with respect to risk versus return characteristics.

## Quantitative

A rating that indicates how an investment measures up with respect to quantitative metrics.

## Moat

A rating that indicates the ability to maintain a competitive advantage. Describes how well the competitive niche of the rated entity is protected -- i.e. barriers to entry. (Also known as: Competitive Moat or Economic Moat.)

## RatingEntityEnum

Rating entity featured in research publication.

#### **Enumeration Values:**

Moodys	
SandP	
Fitch	
AMBestCompanyUSA	
Publisher	
PublisherDefined	
Where possible, please use agency name spelling as found at this link:	
http://www.defaultrisk.com/rating_agencies.htm	

## RatingEnum

A rating assigned by a publisher or agency to a security, issuer, sector/industry, country, etc. This enumeration contains a mixture of values applicable to equity and fixed income instruments. This is indicated in the individual value descriptions.

This is intended to provide a common basis for readers to gauge ratings, since rating entities use different rating scales. We expect that a publisher will typically provide two ratings -- first, one normalized to the reference list given here, second, one from the publisher's own scale, indicated by the PublisherDefined value.

When the normalized ratings appear in a document, they should be construed only as a best guess match to the actual rating as issued by the authoring entity.

#### **Enumeration Values:**

## **PositiveSentiment** EQUITIES:

The rating entity indicates a positive sentiment.

#### NeutralSentiment

EQUITIES:

The rating entity indicates a neutral sentiment.

# NegativeSentiment

EQUITIES:

The rating entity indicates a negative sentiment.

## NoRating

Explicit indication that no rating is made by the publisher. Since the Rating element is optional in this schema, its absence from an instance document does not imply that no rating is available anywhere.

## TopRating

FIXED INCOME:

Top Rating denotes the lowest expectation of credit risk (i.e. AAA and AA). This is assigned only in cases of exceptionally strong capacity for timely payment of financial commitments. This capacity is highly unlikely to be adversely affected by foreseeable events.

## VirtuallyCertain

FIXED INCOME:

Virtually Certain ratings denote a low expectation of credit risk (i.e. A). They indicate very strong capacity for timely payment of financial commitments. This capacity may, nevertheless, be somewhat vulnerable to changes in circumstances or in economic conditions.

## GoodAbility

FIXED INCOME:

Good Ability ratings indicate that there is currently a low expectation of credit risk (i.e. BBB). The capacity for timely payment of financial commitments is considered adequate, but adverse changes in circumstances and in economic conditions are more likely to impair this capacity. This is the lowest investment-grade category.

## Satisfactory

FIXED INCOME:

Satisfactory ratings indicate that there is a possibility of credit risk developing (i.e. BB), particularly as the result of adverse economic change over time; however, business or financial alternatives may be available to allow financial commitments to be met. Securities in this category are not investment grade.

IncreasingSpeculative FIXED INCOME: Increasing Speculative ratings indicate that significant credit risk is present (i.e. B), but a limited margin of safety remains. Financial commitments are currently being met; however, capacity for continued payment is contingent upon a sustained, favorable business and economic environment.

### Doubtful

FIXED INCOME:

Doubtful ratings suggest that default is a real possibility (i.e. C). Capacity for meeting financial commitments is solely reliant upon sustained, favorable business or economic developments.

## InDefault

FIXED INCOME:

Entities rated in this category have defaulted on some or all of their obligations (i.e. D).

## PublisherDefined

Publishers may use this value to specify ratings from their own proprietary scales.

## RatingRelationshipEnum

Indicating a context for the rating.

## **Enumeration Values:**

## CoverageUniverse

Rating is relative to an industry coverage universe.

## SectorIndustry

Rating is relative to an entire sector or industry.

#### Market

Rating is relative to the broad market.

#### ExpectedTotalReturn

Expected Total Return (price appreciation plus yield).

#### AbsoluteReturn

Absolute return.

## RatingTypeEnum

Permits tagging a rating with an additional type taht provides more information about the meaning of the behind the rating.

#### **Enumeration Values:**

## Rating

A rating tagged as Rating would typically indicate the current opinion, as compared with Watch or Outlook, as of the rating date. (Default value.)

## Watch

A rating tagged as Watch would typically indicate that a near-term change in the rating is likely.

## Outlook

A rating tagged as Outlook would typically indicate the likely rating direction over a medium-term time horizon.

## RatingVolatilityRiskEnum

Provides an indication of the potential price fluctuation of the rated entity.

### **Enumeration Values:**

**High** High risk.

#### Medium

Medium risk.

#### Low

Low risk.

## RegionTypeEnum

This is a list of geographical (and therefore mostly undisputed) regions. We felt that the list should not include the political regions because it would be difficult to come up with a complete list, or be difficult to prioritize if the list was to be kept small. In addition, political regions come and go, meaning more list maintenance as these regions change.

#### **Enumeration Values:**

Africa	
AsiaExJapan	
Australasia	
Europe	
Japan	
LatinAmerica	
MiddleEast	
NorthAmerica	
Global	
PublisherDefined	
Americas	
The Americas region is defined as NorthAmerica + LatinAmerica.	

### EMEA

The EMEA region is defined as Europe + MiddleEast + Africa.

#### AsiaPacific

The AsiaPacific region is defined as AsiaExJapan + Japan + Australasia.

Oceania Caribbean

## ResearchApproachEnum

**Enumeration Values:** 

#### Fundamental

Analysis of the company considering past records of assets, earnings, sales, products, management, and markets.

## Quantitative

Analysis dealing with measurable factors, such as value of assets, cost of capital, historical and projected patterns of sales, costs, and profitability.

## Technical

Research into the demand and supply for securities and commodities based on trading volume and price studies.

#### ResourceTypeEnum

**Enumeration Values:** 

#### XBRL

## RoleEnum

Describes the role of the organization, group or person relative to this product -- e.g. author, coordinator, speaker, etc.

#### **Enumeration Values:**

## Author

This person is an author of this product.

#### Publisher

#### Host

This person is acting as a host relative to this product. The product is probably about an event.

## Sponsor

#### Coordinator

This person is acting as a coordinator relative to this product. This might apply to either document products or events.

## Attendee

This person is an attendee at an event.

#### Participant

This person is a participant in an event.

#### Speaker

This person is a speaker at an event.

#### SalesContact

This person is the sales contact for this product or event.

## IRContact

This person is the IR contact for this product or event.

### PublisherDefined

## SectorIndustryClassificationTypeEnum

Enumeration Values:

## GICS

The Global Industry Classification Standard, which is the official classification type of the RIXML Research Standard. When this enumeration is used, it is required that the SectorIndustry.officiallyClassified attribute be included and set to "Yes" to indicate an official GICS classification. See the definition of that attribute for more details.

## PublisherDefined

A classification that is not provided by RIXML.

## ICB

Dow Jones Indexes and FTSE have created a classification system called the Industry Classification Benchmark (ICB). See http://www.icbenchmark.com/.

## TRBC

TRBC is the Thomson Reuters Business Classification.

## FactSet

Industry classification used by FactSet Research Systems.

## SecurityDilutionEnum

## **Enumeration Values:**

## Basic

Share count before impact assumed from conversions of convertibles, preferred stock or options to stocks.

## Primary

Used with earnings per share; denotes inclusion of common stock, stock options, and some convertible debt in the denominator.

## Diluted

Assumes common shares rise by the amount of common stock required to be issued to convert convertibles, preferred stock or options to stocks using the treasury stock method.

## SecurityFinancialsTypeEnum

## **Enumeration Values:**

## EarningsPerShare

Portion of a company's profit allocated to each outstanding share of common stock.

#### CashFlowPerShare

Portion of a company's net income plus depreciation and other noncash charges allocated to each outstanding share of common stock.

## TargetPrice

Price a security is predicted rise/fall to within a specified period of time.

### Price

Price at which a security is trading at the time the report is issued.

## **SupportPrice**

Price level at which a security tends to stop falling because there is more demand than supply.

### ResistancePrice

Price ceiling at which a security tends to stop climbing because there is more supply than demand.

## PriceToEarningsPerShare

Price/earnings ratio. The price of a stock divided by its EPS.

## PriceToBookValuePerShare

The price of a stock divided by its book value per share.

## PriceToSales

The price of a stock divided by its sales per share.

## BookValuePerShare

Total net assets divided by number of bonds or shares of stock.

## GrossYield

## DividendYield

The annual rate of return on an investment, expressed as a percentage. For securities, it is the annual dividends divided by the purchase price.

#### Float

The number of shares of a security that are outstanding and available for trading by the public.

#### SharesOutStanding

Number of shares issued by a company that have not been repurchased by the company.

#### DividendPerShare

Distribution of earnings to shareholders (per share).

#### 52WeekHigh

The highest price at which a security has traded over the past 52 weeks.

### 52WeekLow

The lowest price at which a security has traded over the past 52 weeks.

# **FundsFromOperations**

## PublisherDefined

An enumeration value that is not provided by RIXML.

#### EBITDAPerShare

Portion of EBITDA allocated to each outstanding share of common stock.

## FreeCashFlowPerShare

A measure of financial performance calculated as operating cash flow minus capital expenditures, free cash flow (FCF) represents the cash that a company is able to generate after laying out the money required to maintain or expand its asset base.

## TangibleBookValuePerShare

A measure of the company's shareholders' equity excluding minority interests adjusted for certain items and divided by the shares in issue at year end.

## SecurityTypeEnum

## **Enumeration Values:**

## Bonds

A Bond is a debt security, in which the issuer is indebted to the holders and is obliged to pay interest (coupon) throughout the life of the bond and to repay the principal at maturity. The indebted entity issues investors a certificate, or bond, that states the interest rate (coupon rate) that will be paid and when the loaned funds are to be returned (maturity date). Interest on bonds is usually paid every six months in the US (semiannually) and once a year in Europe (annually). The main types of bonds are Corporate bonds, Municipal bonds, Treasury bonds, Sovereign bonds, Eurobonds, Zero-coupon bonds, Highyield bonds, Investment Grade bonds, etc.

## DiscountNotesAndBills

Discount Notes and Bills are debt securities that are issued at a discount and mature at par. This type of security makes no interest payments, is sold at a deep discount to its face value, and matures at its face value. Maturity dates on discount notes and bills typically range from one day to one year. These securities are also called Zero-coupon notes. Treasury bills are included in this type of security.

Treasury bills (or T-bills) mature in one year or less. They are like zero coupon bonds in that they do not pay interest prior to maturity; instead they are sold at a discount of the par value to create a positive yield to maturity. Treasury bills are considered by many to be the most risk-free investment. Treasury Bills are commonly issued with maturity dates of 28 days (~1 month), 91 days (~3 months), and 182 days (~6 months).

## AssetBackedCommercialPaper

A short-term investment vehicle with a maturity that is typically between 90 and 180 days. The security itself is typically issued by a bank or other financial institution. The notes are backed by physical assets such as trade receivables, and are generally used for short-term financing needs.

#### GeneralObligationBonds

A municipal bond backed by the credit and "taxing power" of the issuing jurisdiction rather than the revenue from a given project.

## FixedRateNotes

A Fixed Rate Note is a debt security which pays a fixed coupon (interest) rate and repays the principle amount at maturity.

## **TaxableMunicipalBonds**

A fixed-income security issued by a local government such as a city or county or related agencies, the income from which is not exempt from tax. Taxable municipal bonds are generally issued to finance a project or activity that does not provide a major benefit to the public. In such cases, the federal government will not permit the tax-exemption that is a prominent feature of most municipal bonds.

## EuroCommercialPaper

An unsecured, short-term loan issued by a bank or corporation in the international money market, denominated in a currency that differs from the corporation's domestic currency.

## NonTaxableMunicipalBonds

An investment (usually a municipal bond) featuring interest payments that are exempt from taxes at the municipal, state and federal levels. Also known as "triple tax-exempt".

## RevenueBonds

A municipal bond supported by the revenue from a specific project, such as a toll bridge, highway, or local stadium.

## CommercialMortgageBackedSecurities

A type of mortgage-backed security that is secured by the loan on a commercial property. A CMBS can provide liquidity to real estate investors and to commercial lenders. As with other types of MBS, the increased use of CMBS can be attributable to the rapid rise in real estate prices over the years.

## CollateralizedMortgageObligations

A type of mortgage-backed security that creates separate pools of pass-through rates for different classes of bondholders with varying maturities, called tranches. The repayments from the pool of pass-through securities are used to retire the bonds in the order specified by the bonds' prospectus.

## ResidentialMortgageBackedSecurities

Residential mortgage-backed securities (RMBS) are a type of bond commonly issued in American security markets. They are a type of mortgage-backed security which is backed by mortgages on residential rather than commercial real estate.

## СМВХ

A group of indexes made up of 25 tranches of commercial mortgage-backed securities (CMBS), each with different credit ratings. The CMBX indexes are the first attempt at letting participants trade risks that closely resemble the current credit health of the commercial mortgage market by investing in credit default swaps, which put specific interest rate spreads on each risk class. The pricing is based on the spreads themselves rather than on a pricing mechanism.

Daily trading involves cash settlements between the two parties to any transaction, and the CMBX indexes are rolled over every six months to bring in new securities and continuously reflect the current health of the commercial mortgage markets. This "pay as you go" settlement process considers three events in the underlying securities as "credit events": principal write-downs, principal shortfalls (failures to pay on an underlying mortgage) and interest shortfalls (when current cash flows pay less than the CMBX coupon).

## PlannedAmortizationClassBonds

A class of tranche in a planned amortization class (PAC) bond that receives a primary payment schedule. As long as the actual prepayment rate is between a designated range of prepayment speeds, the life of the PAC tranche will remain relatively stable. This tranche of the PAC bond receives some measure of protection against prepayment risk.

## **TargetAmortizationClassBonds**

A type of credit derivative that is similar to a planned amortization class (PAC) in that it protects investors from prepayment; however, it is structured differently than a PAC. TACs protect investors from a rise in the prepayment rate or a fall in interest rates. They do not protect from a fall in the prepayment rate like PACs.

## BuildAmericaBonds

Taxable municipal bonds that feature tax credits and/or federal subsidies for bondholders and state and local government bond issuers. Build America Bonds (BABs) were introduced in 2009 as part of President Obama's American Recovery and Reinvestment Act to create jobs and stimulate the economy. BABs attempt to achieve this by lowering the cost of borrowing for state and local governments in financing new projects.

## AgencyPassThroughSecurities

A pool of fixed-income securities backed by a package of assets. A servicing intermediary collects the monthly payments from issuers, and, after deducting a fee, remits or passes them through to the holders of the pass-through security. Also known as a "pass-through certificate" or "pay-through security."

## AgencyMortgageBackedSecurities

Agency Mortgage Backed Securities are securities issued by government-sponsored enterprises such as Ginnie Mae, Fannie Mae or Freddie Mac whose value and income payments are derived from and collateralized (or "backed") by a specified pool of underlying mortgage loans.

## MortgagePassThroughSecurities

A pool of fixed-income securities backed by a package of assets. A servicing intermediary collects the monthly payments from issuers, and, after deducting a fee, remits or passes them through to the holders of the pass-through security. Also known as a "pass-through certificate" or "pay-through security."

## ConsumerAssetBackedSecurities

## TreasuryInflationProtectedSecurities

A treasury security that is indexed to inflation in order to protect investors from the negative effects of inflation. TIPS are considered an extremely low-risk investment since they are backed by the U.S. government and since their par value rises with inflation, as measured by the Consumer Price Index, while their interest rate remains fixed. Interest on TIPS is paid semiannually. TIPS can be purchased directly from the government through the TreasuryDirect system in \$100 increments with a minimum investment of \$100 and are available with 5-, 10-, and 20-year maturities.

# CertificateOfDeposit

A savings certificate entitling the bearer to receive interest. A CD bears a maturity date, a specified fixed interest rate and can be issued in any denomination. CDs are generally issued by commercial banks and are insured by the FDIC. The term of a CD generally ranges from one month to five years.

## TreasuryNotes

A marketable U.S. government debt security with a fixed interest rate and a maturity between one and 10 years. Treasury notes can be bought either directly from the U.S. government or through a bank.

When buying Treasury notes from the government, you can either put in a competitive or noncompetitive bid. With a competitive bid, you specify the yield you want; however, this does not mean that your bid will be approved. With a noncompetitive bid, you accept whatever yield is determined at auction.

# TreasuryBonds

A marketable, fixed-interest U.S. government debt security with a maturity of more than 10 years. Treasury bonds make interest payments semi-annually and the income that holders receive is only taxed at the federal level.

# TreasuryBills

A short-term debt obligation backed by the U.S. government with a maturity of less than one year. Tbills are sold in denominations of \$1,000 up to a maximum purchase of \$5 million and commonly have maturities of one month (four weeks), three months (13 weeks) or six months (26 weeks).

T-bills are issued through a competitive bidding process at a discount from par, which means that rather than paying fixed interest payments like conventional bonds, the appreciation of the bond provides the return to the holder.

# FloatingRateNotes

A Floating Rate Note is a note with a variable interest (coupon) rate. The adjustments to the interest rate are usually made every six months and are tied to a certain money-market index (e.g., LIBOR, federal funds rate, etc.). The coupon rate is equal to a money market reference rate plus a spread. The spread is a rate that remains constant. A coupon rate for a floating rate note looks like: "3 months USD LIBOR + 20 bps" ("bps" stands for basis points, where one basis point equals 1/100th of 1%).

## MediumTermNotes

A Medium-Term Note (or MTN) is a debt security that usually matures (is paid back) in 5-10 years, but the term may be as short as one year. When denominated in Euros they are called "Euro Medium-Term Notes".

## InterbankOfferRateFixings

An interest rate at which banks can borrow funds, in marketable size, from other banks in the London interbank market. The LIBOR is fixed on a daily basis by the British Bankers' Association. The LIBOR is derived from a filtered average of the world's most creditworthy banks' interbank deposit rates for larger loans with maturities between overnight and one full year.

## CommercialPaper

Commercial Paper is a money market security issued by large banks and corporations. It is a short-term unsecured debt instrument issued with maturity of 270 days or less. It is generally not used to finance long-term investments but rather for purchases of inventory or to manage working capital.

#### BankerAcceptances

A Banker's Acceptance is a short-term credit investment which is created by a non-financial firm and whose payment is guaranteed by a bank. A banker's acceptance starts as an order to a bank by a bank's customer to pay a sum of money at a future date, typically within six months. At this stage, it is like a post-dated check. When the bank endorses the order for payment as "accepted", it assumes responsibility for ultimate payment to the holder of the acceptance. At this point, the acceptance may be traded in secondary markets much like any other claim on the bank. Banker's acceptances are essentially guarantees by a bank that a loan will be repaid.

#### Index

A statistical measure of change in an economy or a securities market. In the case of financial markets, an index is an imaginary portfolio of securities representing a particular market or a portion of it. Each index has its own calculation methodology and is usually expressed in terms of a change from a base value. Thus, the percentage change is more important than the actual numeric value.

Stock and bond market indexes are used to construct index mutual funds and exchange-traded funds (ETFs) whose portfolios mirror the components of the index.

#### Deposits

A Deposit is an account at a financial institution (e.g., bank) that allows money to be held on behalf of the account holder. Some banks charge a fee for this service, while others may pay the client interest on the funds deposited.

## EuroBonds

A Eurobond is a bond issued in a currency other than the currency of the country or market in which it is issued. Eurobonds are named after the currency in which they are denominated (e.g., Euroyen bonds, Eurodollar bonds, etc.)

A Euroyen Bond is a Eurobond that is denominated in Japanese yen and issued by a non-Japanese company outside of Japan.

A Eurodollar Bond is a Eurobond that is denominated in U.S. dollars and issued by an overseas company and held in a foreign institution outside both the U.S. and the issuer's home nation.

## EuroDenominatedNotes

Euro-denominated Notes are debt securities with maturity of up to 10 years which are denominated in the Euros. This type of security includes Euro Medium-Term Notes.

## InflationLinkedBonds

Inflation-linked bonds (also called Inflation-indexed bonds or Inflationprotected bonds) are bonds that offer their holders protection against fluctuations in the rate of inflation as measured by the consumer price index (CPI). The yields of these securities adjust monthly with respect to the current rate of inflation.

Treasury Inflation Protection Securities (or TIPS) are inflation-indexed bonds issued by the U.S. Treasury. The principal is adjusted to the Consumer Price Index, the commonly used measure of inflation. The coupon rate is constant, but generates a different amount of interest when multiplied by the inflationadjusted principal, thus protecting the holder against inflation. TIPS are currently offered in 5-year, 10year and 20-year maturities.

## Strips

T-Notes, T-Bonds and TIPS may be "stripped", separating the interest and principal portions of the security; these may then be sold separately (in units of \$1000 face value) in the secondary market. Such securities are known as STRIPS. The government does not directly issue STRIPS; they are formed by investment banks or brokerage firms, but the government does register STRIPS in its book-entry system.

## Repo

A Repurchase Agreement (or Repo) is a financial instrument in which the cash receiver (i.e., repo seller) sells securities now, in return for cash, to the cash provider (i.e., repo buyer), and agrees to repurchase those securities from the cash provider for a greater sum of cash at some later date. The greater sum is all of the cash lent and some extra cash (constituting the implicit interest rate, known as the repo rate). For the party selling the security (and agreeing to repurchase it in the future) it is a repurchase agreement (repo); for the party on the other end of the transaction, the party which is buying the security (and agreeing to sell in the future), it is a reverse repurchase agreement (or a reverse repo).

# SamuraiNotes

Samurai Notes are yen-denominated notes issued in Japan by a non-Japanese company or government and subject to Japanese regulations. This category also includes Samurai Bonds.

# YankeeNotes

Yankee Notes are US Dollar-denominated notes issued in the United States by a foreign institution or government. This category also includes Yankee Bonds.

## ConvertiblePreferred

Convertible Preferred Stocks (also referred to as Convertible Preferred Shares or simply Convertible Preferreds) are preferred stocks that include an option for the holder to convert the preferred shares into a fixed number of common shares, usually anytime after a pre-determined date. Most convertible preferred stocks are exchanged at the request of the shareholder, but sometimes there is a provision that allows the company (or issuer) to force conversion. The value of convertible preferred stock is ultimately based on the performance of the common stock.

## ConvertibleStructured

Convertible Structured Securities are structured financial instruments that involve convertible securities. Note: This Security Type will not be assigned to research reports.

## Warrants

Warrants are securities that give the holder the right, but not the obligation, to buy a certain number of securities (usually the issuer's common stock) at a certain price before a certain time. Warrants are often included in a new debt issue as a "sweetener" to entice investors.

## Futures

Futures are standardized financial contracts, traded on a futures exchange. Futures contracts obligate the buyer to purchase an asset (or the seller to sell an asset), such as a physical commodity or a financial instrument, at a predetermined future date and price. The underlying asset in a futures contract can be a currency, an index, a bond, a single stock, a commodity (e.g., gold), etc. Futures contracts detail the quality and quantity of the underlying asset. Some futures contracts may call for physical delivery of the asset, while others are settled in cash. The futures markets are characterized by the ability to use very high leverage relative to stock markets. Futures can be used either to hedge or to speculate on the price movement of the underlying asset. For example, a producer of corn could use futures to lock in a certain price and reduce risk (hedge). On the other hand, anybody could speculate on the price movement of corn by going long or short using futures.

Forward contracts are similar to futures contracts in that they both obligate the buyer to purchase an asset (or the seller to sell an asset) at a predetermined future date and price. However, futures are distinguished from generic forward contracts in that they contain standardized terms, trade on a formal exchange (forwards are traded over-the-counter), are regulated by overseeing agencies, and are guaranteed by clearinghouses. Also, in order to insure that payment will occur, futures have a margin requirement that must be settled daily. Finally, since futures have standardized terms and are exchange traded, they can be closed via an offsetting trade. Forward contracts can also be closed but it is much harder to find a counterparty to take the other side of the transaction due to the non-standardized terms.

# Swaps

A Swap is an exchange of streams of payments (cash flows) over time according to specified terms. Common types of swaps are: interest rate swap, currency swap, credit default swap, asset swap, equity swap, bond swap, and total return swap.

An Interest Rate Swap is an agreement between two parties (known as counterparties) where one stream of future interest payments is exchanged for another based on a specified principal amount. Interest rate swaps are normally "fixed against floating", but can also be "fixed against fixed" or "floating against floating" rate swaps. Interest rate swaps are often used by companies to alter their exposure to interest-rate fluctuations, by swapping fixed-rate obligations for floating-rate obligations (i.e., the interest rate is linked to a reference rate, most often the LIBOR), or swapping floating-rate obligations for fixed-rate obligations. A company will typically use interest rate swaps to limit, or manage, its exposure to fluctuations in interest rates, or to obtain a marginally lower interest rate than it would have been able to get without the swap.

A Currency Swap is a foreign exchange agreement between two parties to exchange a given amount of one currency for another and after a specified period of time to give back the original amounts swapped.

A Credit Default Swap (or CDS) is a swap designed to transfer the credit exposure of fixed income products between parties. It is the most widely used credit derivative. It is an agreement between a protection buyer and a protection seller whereby the buyer pays a periodic fee in return for a contingent payment by the seller upon a credit event (such as a certain default) happening in the reference entity. A CDS is often used like an insurance policy or a hedge for the holder of a corporate bond.

An Asset Swap is an exchange of two assets. For example, one type of asset swap is the exchange of a fixed asset, such as a Treasury Bond with fixed and guaranteed payments, for a floating asset such as an index fund, which does not have a fixed or guaranteed return. Asset swaps are done most often in order to achieve a more favorable payment stream, and typically involve debt obligations.

An Equity Swap is a swap for which payments on one or both sides are linked to the performance of equities or an equity index. They are used to avoid withholding taxes, obtain leverage, or enjoy the returns from ownership without actually owning equity.

A Bond Swap is the simultaneous sale of one bond and at the same time purchase of a different bond with the proceeds from the sale. There are several reasons why people use a bond swap: to seek tax benefits, to change investment objectives, to stretch out maturities, to upgrade a portfolio's credit quality or to speculate on the performance of a particular bond.

A Total Return Swap is a swap agreement in which one party makes payments based on a set rate, either fixed or variable, while the other party makes payments based on the return of an asset, which includes both the income it generates and any capital gains. The underlying asset that is used can be anything, but is usually an equities index, loan or a basket of assets. For example, two parties may enter into a one-year total return swap where party A receives LIBOR + fixed margin (2%) and party B receives the total return of the S&P 500. If LIBOR is 3.5% and the S&P 500 appreciates by 15%, party A will pay party B 15% and will receive 5.5%.

# Options

Options are derivative securities that trade both on exchanges and in the over-the-counter market. There are two basic types of options: a call option and a put option. A Call Option gives the holder the right but not the obligation to buy the underlying asset by a certain date for a pre-specified price. A Put Option gives the holder the right but not the obligation to sell the underlying asset by a certain date for a pre-specified price. The price in the contract is known as the exercise price or strike price. The date in the contract is known as the expiration date. Options can also be classified as European and American. American Options can be exercised at any time up to the expiration date. European Options can be exercised only on the expiration date.

Options can be at-the-money, in-the money, or out-of-the-money. An in-the money option is one that would give the holder a positive cash flow if it were exercised immediately. An at-the-money (ATM) option would lead to a zero cash flow if were exercised immediately. An out-of-the-money (OTM) option is one that would give the holder a negative cash flow if it were exercised immediately.

The underlying asset can be a bond, a currency, a single stock, a stock index, a commodity, a swap etc. (e.g., Single Stock Option, Currency Option, Bond Option, Stock Index Option, CDS Option, etc.)

Options are sometimes used in trading strategies to hedge against market risk. Some option trading strategies are covered call, protective put, a bull spread, a bear spread, a butterfly spread, a straddle, a strip, a strap, a strangle, etc.

A Covered Call is an option strategy that consists of a long position (i.e., the investor buys) in the underlying asset (e.g., a stock) and a short position (i.e., the investor sells/writes) in a call option.

A Protective Put is an option strategy in which the investor buys a put option on the underlying asset and the underlying asset itself.

A Bull Spread is an option strategy in which the investor buys a call option on the underlying asset with a certain strike price and simultaneously sells a call option on the same asset with a higher strike price. Both options have the same expiration date.

A Bear Spread is an option strategy in which the investor buys a call option on the underlying asset with a certain strike price and simultaneously sells a call option on the same asset with a lower strike price. Both options have the same expiration date.

A Butterfly Spread is an option strategy that involves taking positions in options with three different strike prices. In this strategy the investor buys a call option with a relatively low strike price and a call option with relatively high strike price, and sells two call options with a strike price halfway between the high and the low strike price of the fist two options.

A Straddle is an option strategy in which the investor buys a call and a put option on the same underlying asset with the same strike price and expiration date.

A Strip is an option strategy in which the investor buys one call and two put options with the same strike price and expiration date.

A Strap is an option strategy in which the investor buys two call and one put options with the same strike price and expiration date.

A Strangle is an option strategy in which an investor buys a put and a call options with the same expiration date but different strike prices. The call strike price is higher than the put strike price.

## Swaptions

A Swaption is an option to enter into an interest rate swap. In exchange for an option premium, the buyer gains the right but not the obligation to enter into a specified swap agreement with the issuer on a specified future date.

## StructuredNotes

Unlike straight derivatives whose entire value is dependent on some underlying security, index or rate, Structured Notes are hybrids, having components of straight debt instruments and derivatives intertwined. Rather than paying a straight fixed or floating coupon, these instruments' interest payments are tailored to a myriad of possible indices or rates. In addition to the interest payments, the securities' redemption value and final maturity can also be affected by the derivatives embedded in structured notes. Most structures contain embedded options, generally sold by the investor to the issuer. These options are primarily in the form of caps, floors, or call features. The identification, pricing and analysis of these options give structured notes their complexity. An example of a structured note is a 5-year note which, instead of paying the typical interest payments, will use an index, such as the S&P 500, to determine the amount of the interest payment.

## PrivatePlacements144A

Private Placement refers to capital raising via private rather than public placement. The result is the sale of securities to a relatively small number of investors. Investors involved in private placements are usually large banks, mutual funds, insurance companies, and pension funds. Since a private placement is offered to a few, select individuals, the placement does not have to be registered with the Securities and Exchange Commission. In many cases detailed financial information is not disclosed and the need for a prospectus is waived. Finally, since the placements are private rather than public, the average investor is only made aware of the placement usually after it has occurred. 144A refers to a Securities & Exchange Commission rule modifying a two-year holding period requirement on privately placed securities to permit qualified institutional buyers to trade these positions among themselves.

#### Common

Common Stocks (also referred to as common or ordinary shares) are securities that represent ownership in a corporation. Holders of common stock exercise control by electing a board of directors and voting on corporate policy. In the event of liquidation, common shareholders have rights to company's assets only after bond holders, preferred shareholders, and other debt holders have been paid in full.

## Preferred

A Preferred Stock (also known as a preferred share or simply a preferred) is a type of security that signifies ownership in a corporation and represents a claim on part of the corporation's assets and earnings. A preferred stock generally does not have voting rights, but has a higher claim on assets and earnings than the common shares. For example, owners of preferred stock receive dividends before common shareholders and have priority in the event that a company goes bankrupt and is liquidated.

#### ADRGDR

American Depository Receipts (ADRs) are certificates issued by a U.S. bank representing a specified number of shares (or one share) in a foreign stock that is traded on a U.S. exchange. ADRs are denominated in U.S. dollars, with the underlying security held by a U.S. financial institution overseas. The foreign shares are usually held in custody overseas, but the certificates trade in the U.S. Through this system, a large number of foreignbased companies are actively traded on one of the three major U.S. equity markets (the NYSE, AMEX or NASDAQ).

Global Depository Receipts (GDRs) are receipts denoting ownership of foreign-based corporation stock shares which are traded in numerous capital markets around the world. It is a bank certificate issued in more than one country for shares in a foreign company. The shares are held by a foreign branch of an international bank. The shares trade as domestic shares, but are offered for sale globally through the various bank branches.

## ClosedEndFund

A Closed-End Fund is a type of mutual fund with a fixed number of shares outstanding, and one which does not redeem shares the way a typical mutual fund does. Closed-end funds behave more like stocks than open-end funds: closed-end funds issue a fixed number of shares to the public in an initial public offering, after which time shares in the fund are bought and sold on a stock exchange, and they are not obligated to issue new shares or redeem outstanding shares as open-end funds are. The price of a share in a closedend fund is determined entirely by market demand, so shares can either trade below their net asset value ("at a discount") or above it ("at a premium").

# OpenEndFund

An Open-End Fund is a type of mutual fund where there are no restrictions on the amount of shares the fund will issue. If demand is high enough, the fund will continue to issue shares no matter how many investors there are. Open-end funds also buy back shares when investors wish to sell. Open-end funds are generally managed actively and are priced according to their net asset value (NAV).

## Gold

Gold refers to either a contract to buy or sell gold on the spot market (e.g., the Gold spot market), or a derivative contract which has gold as underlying asset (e.g., Gold Futures contracts, Gold Forward contracts, Options on gold, etc.)

## Silver

Silver refers to either a contract to buy or sell silver on the spot market (e.g., the Silver spot market), or a derivative contract which has silver as underlying asset (e.g., Silver Futures contracts, Silver Forward contracts, Options on silver, etc.)

## Steel

Steel refers to either a contract to buy or sell steel on the spot market (e.g., the Steel spot market), or a derivative contract which has steel as underlying asset (e.g., Steel Futures contracts, Steel Forward contracts, Options on steel, etc.)

## Aluminum

Aluminum refers to either a contract to buy or sell aluminum on the spot market (e.g., the Aluminum spot market), or a derivative contract which has aluminum as underlying asset (e.g., Aluminum Futures contracts, Aluminum Forward contracts, Options on aluminum, etc.)

## Platinum

Platinum refers to either a contract to buy or sell platinum on the spot market (e.g., the Platinum spot market), or a derivative contract which has platinum as underlying asset (e.g., Platinum Futures contracts, Platinum Forward contracts, Options on platinum, etc.)

## Copper

Copper refers to either a contract to buy or sell copper on the spot market (e.g., the Copper spot market), or a derivative contract which has copper as underlying asset (e.g., Copper Futures contracts, Copper Forward contracts, Options on copper, etc.)

## Soybeans

Soybeans refer to either a contract to buy or sell soybeans on the spot market (e.g., the Soybeans spot market), or a derivative contract which has soybeans as underlying asset (e.g., Soybeans Futures contracts, Soybeans Forward contracts, Options on soybeans, etc.)

## Wheat

Wheat refers to either a contract to buy or sell wheat on the spot market (e.g., the Wheat spot market), or a derivative contract which has wheat as underlying asset (e.g., Wheat Futures contracts, Wheat Forward contracts, Options on wheat, etc.)

## Corn

Corn refers to either a contract to buy or sell corn on the spot market (e.g., the Corn spot market), or a derivative contract which has corn as underlying asset (e.g., Corn Futures contracts, Corn Forward contracts, Options on corn, etc.)

## Coffee

Coffee refers to either a contract to buy or sell coffee on the spot market (e.g., the Coffee spot market), or a derivative contract which has coffee as underlying asset (e.g., Coffee Futures contracts, Coffee Forward contracts, Options on coffee, etc.)

#### Cocoa

Cocoa refers to either a contract to buy or sell cocoa on the spot market (e.g., the Cocoa spot market), or a derivative contract which has cocoa as underlying asset (e.g., Cocoa Futures contracts, Cocoa Forward contracts, Options on cocoa, etc.)

#### OrangeJuice

Orange juice refers to either a contract to buy or sell orange juice on the spot market (e.g., the Orange juice spot market), or a derivative contract which has orange juice as underlying asset (e.g., Orange juice Futures contracts, Orange juice Forward contracts, Options on orange juice, etc.)

#### Cotton

Cotton refers to either a contract to buy or sell cotton on the spot market (e.g., the Cotton spot market), or a derivative contract which has cotton as underlying asset (e.g., Cotton Futures contracts, Cotton Forward contracts, Options on Cotton, etc.)

#### Sugar

Sugar refers to either a contract to buy or sell sugar on the spot market (e.g., the Sugar spot market), or a derivative contract which has sugar as underlying asset (e.g., Sugar Futures contracts, Sugar Forward contracts, Options on sugar, etc.)

#### Livestock

Livestock refers to either a contract to buy or sell livestock on the spot market (e.g., the Livestock spot market), or a derivative contract which has livestock as underlying asset (e.g., Livestock Futures contracts, Livestock Forward contracts, Options on livestock, etc.)

#### JetFuel

Jet fuel refers to either a contract to buy or sell jet fuel on the spot market (e.g., the Jet fuel spot market), or a derivative contract which has jet fuel as underlying asset (e.g., Jet fuel Futures contracts, Jet fuel Forward contracts, Options on jet fuel, etc.)

#### Gasoline

Gasoline refers to either a contract to buy or sell gasoline on the spot market (e.g., the Gasoline spot market), or a derivative contract which has gasoline as underlying asset (e.g., Gasoline Futures contracts, Gasoline Forward contracts, Options on gasoline, etc.)

#### Gas

Gas refers to either a contract to buy or sell natural gas on the spot market (e.g., the Gas spot market), or a derivative contract which has gas as underlying asset (e.g., Gas Futures contracts, Gas Forward contracts, Options on gas, etc.)

## Crude

Crude (oil) refers to either a contract to buy or sell crude oil on the spot market (e.g., the Crude oil spot market), or a derivative contract which has crude oil as underlying asset (e.g., Crude oil Futures contracts, Crude oil Forward contracts, Options on crude oil , etc.)

## Electricity

Electricity refers to either a contract to buy or sell electricity on the spot market (e.g., the Electricity spot market), or a derivative contract which has electricity as underlying asset (e.g., Electricity Futures contracts, Electricity Forward contracts, Options on electricity, etc.)

# EuroDollars

Eurodollars are deposits denominated in United States dollars at banks outside the United States (i.e., foreign banks or foreign branches of American banks), and thus are not under the jurisdiction of the Federal Reserve. Since the Eurodollar market is relatively free of regulation, banks in the Eurodollar market can operate on narrower margins than banks in the United States.

# Currency

Currency Securities are financial instruments which have a currency as the underlying asset. Such securities include: Currency Swaps, Currency Options, Currency futures contracts, Currency forward contracts, etc.

## GermanPfandbrief

Pfandbrief(e) refers to a European covered bond issued by a German mortgage bank that is collateralized by long-term assets. These types of bonds represent the largest segment of the German private debt market and are considered to be the safest debt instruments in the private market. The Pfandbriefe class of debt is similar to mortgage-backed securities in the United States.

## FrenchObligationsFoncieres

Obligations Foncières (or French Obligations) is the French term for covered bonds. Obligations Foncières are essentially debt securities backed by highly collateralized or publicly guaranteed debt obligations. Obligations Foncières generally benefit from a very competitive rating from the rating agencies. Also, the amount of Obligations Foncières outstanding, as well as (in most cases) their standardized amortization structure, ensures excellent liquidity. In the event of the bankruptcy of the issuer, Obligations Foncières holders have a preferential right on the cash flow generated by the registered assets.

## SpanishCedulaHipotecaria

Cedula Hipotecaria is the term for covered mortgage bonds in Spain. These mortgage bonds can be backed only by mortgage loans and not by public sector loans. They are collateralized by the issuing entity's entire mortgage pool rather than by a specific pool of mortgage assets. Holders of cédulas hipotecarias enjoy a privileged status and have priority over the mortgage book of the issuer in the event of bankruptcy. Early amortization is not possible. Mortgage valuation is subject to conservative valuation rules (70% loan-to-value ratio) and mortgage certificates can be issued only up to 90% of an individual issuer's eligible mortgages ("overcollateralization").

## LuxembourgLettresDeGage

Lettres de Gage is another term for covered bonds used in Europe. The Lettres de Gage themselves are secured on pools of assets registered as collateral for Lettres de Gage issuance. There is a pool of mortgage assets for issues of mortgage Lettres de Gage (Lettres de Gage hypothécaires) and a pool of public sector assets for issues of public sector Lettres de Gage (Lettres de Gage publiques). Rules governing matching of assets and liabilities are that at all times interest and principal receivable from assets in a collateral pool must be sufficient to meet liabilities on the Lettres de Gage.

# REITS

REITs (or Real Estate Investment Trusts) are corporations or trusts that use the pooled capital of many investors to purchase and manage income property (equity REITs) and/or mortgage loans (mortgage REITs). REITs are traded on major exchanges just like stocks. They are also granted special tax considerations. REITs offer several benefits over actually owning properties. First, they are highly liquid, unlike traditional real estate. Second, REITs enable sharing in non-residential properties as well, such as hotels, malls, and other commercial or industrial properties. Third, there's no minimum investment with REITs. REITs do not necessarily increase and decrease in value along with the broader market. However, they pay yields in the form of dividends no matter how the shares perform.

# ETF

Exchange-Traded Funds (or ETFs) are securities that closely resemble index funds, but can be bought and sold during the day just like common stocks. These investment vehicles allow investors a convenient way to purchase a broad basket of securities in a single transaction. Essentially, ETFs offer the convenience of a stock along with the diversification of a mutual fund. One of the most widely known ETFs is called the SPDR (Spider), which tracks the S&P 500 index. Another popular ETF is the QQQQ which trades on the NASDAQ and tracks the NASDAQ 100 index.

## Genussescheine

Genussscheine is the German term for profit participation certificates. Profit participation certificates (Genussscheine) are securities giving investors the right to participate in the net profit or liquidation proceeds, in particular of stock corporations and limited liability companies. This right is evidenced by a certificate, the so-called "Genussschein". Unlike shares, profit participation certificates do not provide their holders with voting rights at the shareholders' meeting.

## ParticpationCertificates

Participation Certificates (or Certificates of Participation) are a type of financing where an investor purchases a pro rata share in a specific pledged revenue stream of a program rather than the bond being secured by those revenues. The certificate generally entitles the holder to receive a share, or participation, in the lease payments from a particular project. The lease payments are passed through the lessor to the certificate holders. The lessor typically assigns the lease and lease payments to a trustee, which then distributes the lease payments to the certificate holders.

## BulldogBonds

Bulldog Bonds are Sterling-denominated bonds issued in London by a non-British company or government.

# PublisherDefined

An enumeration value that is not provided by RIXML.

# CreditLinkedNotes

A security with an embedded credit default swap allowing the issuer to transfer a specific credit risk to credit investors.

CLNs are created through a Special Purpose Company (SPC), or trust, which is collateralized with AAArated securities. Investors buy securities from a trust that pays a fixed or floating coupon during the life of the note. At maturity, the investors receive par unless the referenced credit defaults or declares bankruptcy, in which case they receive an amount equal to the recovery rate. The trust enters into a default swap with a deal arranger. In case of default, the trust pays the dealer par minus the recovery rate in exchange for an annual fee which is passed on to the investors in the form of a higher yield on the notes.

## VariableRateDemandNotes

A debt instrument that represents borrowed funds that are payable on demand and accrue interest based on a prevailing money market rate, such as the prime rate. The interest rate applicable to the borrowed funds is specified from the outset of the debt, and is typically equal to the specified money market rate plus an extra margin.

## CurrencySwaps

A swap that involves the exchange of principal and interest in one currency for the same in another currency. It is considered to be a foreign exchange transaction and is not required by law to be shown on a company's balance sheet.

# CreditDefaultSwaps

A swap designed to transfer the credit exposure of fixed income products between parties. A credit default swap is also referred to as a credit derivative contract, where the purchaser of the swap makes payments up until the maturity date of a contract. Payments are made to the seller of the swap. In return, the seller agrees to pay off a third party debt if this party defaults on the loan. A CDS is considered insurance against non-payment. A buyer of a CDS might be speculating on the possibility that the third party will indeed default.

## AssetSwaps

Similar in structure to a plain vanilla swap, the key difference is the underlying of the swap contract. Rather than regular fixed and floating loan interest rates being swapped, fixed and floating investments are being exchanged.

#### EquitySwaps

An exchange of cash flows between two parties that allows each party to diversify its income, while still holding its original assets. The two sets of nominally equal cash flows are exchanged as per the terms of the swap, which may involve an equity-based cash flow (such as from a stock asset) that is traded for a fixed-income cash flow (such as a benchmark rate), but this is not necessarily the case. Besides diversification and tax benefits, equity swaps also allow large institutions to hedge specific assets or positions in their portfolios.

#### TotalReturnSwaps

A swap agreement in which one party makes payments based on a set rate, either fixed or variable, while the other party makes payments based on the return of an underlying asset, which includes both the income it generates and any capital gains. In total return swaps, the underlying asset, referred to as the reference asset, is usually an equity index, loans, or bonds. This is owned by the party receiving the set rate payment.

Total return swaps allow the party receiving the total return to gain exposure and benefit from a reference asset without actually having to own it. These swaps are popular with hedge funds because they get the benefit of a large exposure with a minimal cash outlay.

#### InterestRateSwaps

An agreement between two parties (known as counterparties) where one stream of future interest payments is exchanged for another based on a specified principal amount. Interest rate swaps often exchange a fixed payment for a floating payment that is linked to an interest rate (most often the LIBOR). A company will typically use interest rate swaps to limit or manage exposure to fluctuations in interest rates, or to obtain a marginally lower interest rate than it would have been able to get without the swap.

## PropertySwaps

A type of financial product that fluctuates in value depending on the changes in the value of a real estate asset, usually an index. Property derivatives provide investors with exposure to a specific property market without having to buy and sell actual buildings.

#### ForwardRateAgreements

An over-the-counter contract between parties that determines the rate of interest, or the currency exchange rate, to be paid or received on an obligation beginning at a future start date. The contract will determine the rates to be used along with the termination date and notional value. On this type of agreement, it is only the differential that is paid on the notional amount of the contract. Also known as a "future rate agreement".

#### ForeignCurrencyFutures

A transferable futures contract that specifies the price at which a currency can be bought or sold at a future date. Currency future contracts allow investors to hedge against foreign exchange risk.

## EquityIndexFutures

A futures contract on a stock or financial index. For each index there may be a different multiple for determining the price of the futures contract.

# InterestRateFutures

An interest rate future is a financial derivative (a futures contract) with an interest-bearing instrument as the underlying asset.

Examples include Treasury-bill futures, Treasury-bond futures and Eurodollar futures.

The global market for exchange-traded interest rate futures is notionally valued by the Bank for International Settlements at \$5,794,200 million in 2005.

## SingleStockFutures

A futures contract with an underlying of one particular stock, usually in batches of 100. No transmission of share rights or dividends occur.

# SpecialtyEnum

#### **Enumeration Values:**

FundamentalGeneralEquity FundamentalCreditAnalysis **FundamentalSectorSpecialist** EconomicGeneral **EconomicCapitalFlows** EconomicCountryPolitical EconomicGovernmentLegislative InvestmentStrategy Technical Commodity CorporateGovernance DistressedBankruptcy ESG Forensic IndustryConsultant **InsiderAnalysis IPOAnalysis** LitigationAnalysis ManagementQuality MergerRiskArbitrage OutsourcedResearch PatentAnalysis **ShortIdeas SpinoffAnalysis** ChannelChecking DataMining ExpertNetworks Investigative ManagementAccess Surveys Quantitative CreditDefault EVA **FinancialModels** Valuation **SmallCap** MidCap LargeCap IndependentResearch MarketResearch

QualityOfEarnings

#### **StatusTypeEnum**

**Enumeration Values:** 

# Pending

Pending approval for release. For internal use only.

#### Revised

The product is a revision of an existing product.

#### Recalled

The publication has been recalled by the publisher.

#### Deleted

The product is to be deleted from the database.

#### Published

The product is being published for the first time.

#### Rebroadcast

A product, in an identical form, is being distributed again.

#### Released

A published product is being released. This may be used when the publication and release time are not the same.

## BackFilled

Covers the case where a publisher is back-filling (or re-transmitting) a report that has already been published. The intent is to back-fill the report without having it jump to the top of any time line. It should be "inserted" into the time line at its original publication date. For example, re-transmitting a report on January 19 that was originally published on November 17 should NOT cause it to appear at the top of any list of reports on January 19 on any platform.

## TagsUpdated

Covers the case where a publisher is only updating the indexing information (tags) in the RIXML file without updating any payload file (e.g. PDF). This would improve transmission efficiency by eliminating unnecessary re-sending of potentially large payload file(s) in these cases. And it explicitly informs the receiver not to expect the payload file(s), so false failures are also avoided.

#### RevisedMaterialChange

The existing **Revised** value does not distinguish between revisions that contain material changes and those that do not. The two new values **RevisedMaterialChange** and **RevisedNoMaterialChange** are added now so publishers can make that distinction explicit. The intent is to give platforms enough information to make meaningful decisions about jumping the revision to the top of the time line.

## RevisedNoMaterialChange

The existing **Revised** value does not distinguish between revisions that contain material changes and those that do not. The two new values **RevisedMaterialChange** and **RevisedNoMaterialChange** are added now so publishers can make that distinction explicit. The intent is to give platforms enough information to make meaningful decisions about jumping the revision to the top of the time line.

# SubjectEnum

## **Enumeration Values:**

## AccountingAndTaxPolicy

Research reports that primarily discuss accounting or tax policies, practices, standards, etc. should be tagged with Subject Accounting & Tax Policy. Cues: Accounting & Tax, Accounting & Valuation, Accounting Policy, Accounting Standards, Accounting Practices, Accounting Questions, Accounting Reviews, Accounting Issues, Generally Accepted Accounting Principles (GAAP), Financial Accounting Standards Board (FASB), Statements of Financial Accounting Standards (SFAS), International Financial Reporting Standards (IFRS), International Accounting Standards (IAS), etc.

## EarningsReview

Research reports in which the analyst discusses a company's recently released financial results should be tagged with Subject Earnings Review. Cues: Earnings/Results Review, Earnings/Results Summary, Earnings Analysis, Earnings released, Earnings above/below expectation, reported profit better than expected, Company ABS announced stronger than expected net profit, etc.

## EarningsPreview

Earnings Preview reports are usually published a few days before the company releases its financial results. In these reports, the analyst provides his/her expectations for the company's results. Such research reports should be tagged with Subject Earnings Preview. Cues: Earnings/Results Preview, Upcoming earnings, ABC will report (announce, release, post) its quarterly results after the market close, etc.

## MorningCall

A Morning Call report by definition is a compendium of what is hot for the day. In other words, a Morning Call report is almost always about multiple unrelated companies that happen to be newsworthy that day. The purpose of these reports is to provide the reader with brief, actionable information on multiple topics that may include a number of different companies, industries, the economy, breaking news and upcoming events. Morning Call research reports should be tagged with Subject Morning Call. Cues: Morning Call, Morning Note, Morning Research Notes, Morning Research, Morning Call Summary, Morning Call Highlights, AM Call, Before the Open, After the Close, Wake up Call, Sunrise, etc.

## InitialPublicOfferings

The term Initial Public Offering (IPO) refers to a company's first issuance of stock on the open market. IPOs are often issued by small, young companies seeking capital to expand, but can also be done by large privately-owned companies looking to become publicly traded. In an IPO, the issuer obtains the assistance of an underwriting firm, which helps it determine what type of security to issue (e.g., common or preferred), best offering price and time to bring it to market. Research reports that discuss the Initial Public Offering of a company should be tagged with Subject Initial Public Offering. Cues: IPO, Initial Public Offering, Initial Stock Offering, Initial Share Offering, first day of trading, etc.

#### ManagementChange

Research reports in which the analyst communicates a change in the management of a company (e.g., CEO resigns, new CFO hired), should be tagged with Subject Management Change. Cues: CEO (Chief Executive Officer) resigns, new CFO (Chief Financial Officer) hired, COO (Chief Operating Officer) departures, Chairman replaced, CTO (Chief Technology Officer) is stepping down, etc.

## MergerAcquisitionDivestiture

Research reports in which the analyst discusses a merger/acquisition (e.g., the analyst discusses the merger between Company A and Company B, or the analyst discusses that Company A is acquiring or spinning off Company B), should be tagged with Subject Merger/ Acquisition/ Divestiture. Cues: Acquisition, Merger, Divestiture, Spinoffs, takeover target, proposed/hostile takeover, acquired company, target company, etc.

## **FiscalPolicy**

Fiscal policy refers to the set of policies and decisions of a government in setting the level of public expenditure and how that expenditure is funded. Fiscal policy and monetary policy are the macroeconomic tools that governments have at their disposal to manage the economy. Fiscal policies affect tax rates, interest rates and government spending, in an effort to control the economy. When a research report discusses a government's fiscal policy, it should be tagged with Subject Fiscal Policy. Cues: Fiscal Policy, tax reforms, budgetary policy, fiscal discipline, budget restraints, fiscal/budget spending, budget expenditures, etc.

# MonetaryPolicy

Fiscal policy and monetary policy are the macroeconomic tools that governments have at their disposal to manage the economy. Monetary Policy refers to the actions of a central bank, currency board or other regulatory committee, that determine the size and rate of growth of the money supply, which in turn affects interest rates. Monetary policy rests on the relationship between the rates of interest in an economy, that is the price at which money can be borrowed, and the total supply of money. Monetary policy uses a variety of tools to control one or both of these, to influence outcomes like economic growth, inflation, exchange rates with other currencies and unemployment. When a research report discusses a government's monetary policy, it should be tagged with Subject Monetary Policy. Cues: FOMC (The Federal Open Market Committee), Monetary policy, monetary conditions, open market operations, money market operations, etc.

## EconomicForecast

Reports in which the analyst provides economic forecasts (e.g., GDP forecasts) should be tagged with Subject Economic Forecast. Cues: Economic growth forecasts, GNP projections, GDP estimates, CPI forecast, etc.

## SecondaryPublicOfferings

A Secondary/Follow-on Offering refers to the issuance of stock subsequent to the company's Initial Public Offering (IPO). A follow-on offering can be either of two types (or a mixture of both) - dilutive and non-dilutive. In the case of the dilutive offering, the company's board of directors agrees to increase the share float for the purpose of selling more equity in the company. When new shares are created and then sold by the company, the number of shares outstanding increases and this causes dilution of earnings on a per share basis. The non-dilutive type of follow-on offering is when privately held shares are offered for sale by company directors or other insiders (such as venture capitalists) who may be looking to diversify their holdings. Because no new shares are created, the offering is not dilutive to existing shareholders. Research reports that discuss the Secondary

Public Offering of a company should be tagged with Subject Secondary Public Offering. Cues: Secondary (Public, Share or Stock) Offering/Placement, Follow-on (Public, Share or Stock) Offering/Placement, Seasoned (Public, Share or Stock) Offering/Placement, etc.

## Regulations

Companies and industries are often subject to regulations imposed by governments, regulatory agencies or SROs (Self Regulatory Organizations). Research reports that discuss regulations should be tagged with Subject Regulations. An example of such report can be an auto analyst discussing the impact of a recently accepted car emissions regulation on companies in the auto industry. Cues: (De)regulation, regulatory issues, regulatory concerns, regulatory climate, regulatory decisions, regulatory reviews/notes/updates, regulatory woes/difficulties/pressures, regulatory inquiries, regulatory changes, regulatory intervention, regulatory reforms/policy/regime, etc.

#### StockRepurchase

Stock Repurchase is a program by which a company buys back its own shares from the marketplace, reducing the number of outstanding shares. This is usually considered a sign that the company's management is optimistic about the future and believes that the current share price is undervalued. Because a share repurchase reduces the number of shares outstanding, it increases earnings per share and tends to elevate the market value of the remaining shares. Reasons for buybacks include putting unused cash to use, raising earnings per share, increasing internal control of the company, and obtaining stock for employee stock option plans or pension plans. Research reports which discuss or mention a company buying back its shared should be tagged with Subject Stock Repurchase. Cues: Stock repurchase, stock buy-back, stock will be repurchased, shares will be bought back, etc.

#### SurveyAnalysisAndResults

Research reports in which the analyst discusses or analyzes the results of a survey should be tagged with Subject Survey Analysis & Results. Cues: Survey analysis, Survey results, Survey findings, Survey suggests/indicates/shows/confirms, Survey's respondents, Survey's participants, etc.

## Politics

Research reports in which the analyst discusses political conditions in a geographic area such as country or region should be tagged with Subject Politics. Cues: Politics, Political, Pollsters, Republicans, Democrats, Labour Party, liberals, conservatives, national election, parliamentary election, regional election, Prime Minister, Tory, etc.

#### Event

Research reports in which the analyst discusses an event or key points from an event should be tagged with Subject Event. An event can be a meeting, seminar, conference, forum, symposium, etc. Cues: Event, Meeting, Conference, Seminar, Webcast, Teleconference, Forum, Field trip, Symposium, Save the date, Mark your calendar, Breakout sessions/discussions, Panel discussions/debates, Keynote (guest, featured) speakers/presentations, Registration Form, investor lunch/breakfast/dinner, Telecom Conference Highlights, etc.

## AssetAllocation

Asset allocation refers to how an investor distributes his investments among various asset classes (e.g., stocks vs. bonds), sectors (e.g., Technology vs. Consumer Sector), industries (e.g., Steel vs. Semiconductors), geography (i.e., Region and/or Country), or maturity (e.g., 30-year bonds vs. 15 year bonds). Inherent in asset allocation is the concept diversification. Diversification is a risk management technique that allocates investable funds across a variety of investments within a portfolio. The rationale behind this technique contends that a portfolio of different kinds of investments will, on average, maximize return versus risk. Asset Allocation is the process of allocating investments among different kinds of assets (such as stocks, bonds, real estate and cash), sectors, industries, regions, countries, maturities, etc., to optimize the risk/return tradeoff based on an individual's or institution's specific investment horizon, risk

profile and investment goals. Research reports in which the analyst primarily discusses or makes recommendations on how investors should allocate their assets should be tagged with Subject Asset Allocation. Cues: Asset (Sector, Industry, Regional, Equity, Fixed Income, Portfolio, Country) Allocation, Model Portfolio, etc.

# GrowthInvestment

Growth investing is an investment style whereby an investor seeks out investments (e.g., stocks, bonds) with significant potential for price appreciation (i.e., expects the price of the asset to increase significantly). In most cases, a growth stock is defined as a company whose earnings are expected to grow at a greater rate than its industry or the overall market. Growth investors often call growth investing a capital growth strategy, since investors seek to maximize their capital gains. A growth company tends to have very profitable reinvestment opportunities for its own retained earnings. Thus, it typically pays little or no dividends to stockholders. Instead, it retains most of its earnings to finance further expansion. Research reports which primarily discuss investments in growth companies should be tagged with Subject Growth Investment. Cues: Growth stock, Growth investment, a solid (good, outstanding, attractive, true, under-valued, long-term, compelling, profitable, aggressive) growth stock, etc.

## ValueInvestment

Value investing refers to an investment style whereby an investor selects investment vehicles (e.g., stocks, bonds, etc.) that trade for less than their intrinsic value. Value investors actively seek investments that they believe the market has undervalued. They believe the market overreacts to good and bad news, causing investments' price movements to not correspond with long-term fundamentals. The result is an opportunity for value investors to profit by buying when the price is deflated. A value stock is a stock that tends to trade at a lower price relative to its fundamentals (i.e. dividends, earnings, sales, etc.) and is thus considered undervalued by a value investor. Common characteristics of value stocks include a high dividend yield, low price-to-book ratio and/or low price-to-earnings ratio. A value investor believes that the market isn't always efficient and that it's possible to find companies trading for less than their true worth. Research reports which primarily discuss value investments should be tagged with Subject Value Investment. Cues: Value Investment, value stock, value play, a solid (good, outstanding, attractive, true, under-valued, longterm, compelling, profitable, aggressive) value stock, etc.

## DebtTender

Although many debt issues have call (i.e., redemption) provisions which grant the debt issuers the right (but not the obligation) to repurchase their own debt from the market and obligate the debt holders to sell the debt securities to the issuer, other corporate debt issues do not have call provisions (i.e., are noncallable). In the case of non-callable debt securities, the issuer can still repurchase them from the debt holders by placing a debt tender offer. It is then up to the debt holders to decide if they are willing to accept the terms of the issuer's debt tender offer, i.e., the debt holders have the right to accept or reject the tender offer. Research reports which primarily discuss an issuer's debt tender offer should be tagged with Subject Debt Tender. Cues: debt tendered, debt buyback, bonds tendered, etc.

#### BondRedemption

Many bond issues (especially corporate bond issues) have a call (i.e., redemption) provision granting the issuer the option to buy back (i.e., redeem) all or part of the bond issue prior to a stated maturity date. Bond redemption is a program in which an issuer buys back (i.e., redeems) its own bonds from the market before their maturity date. The call option imbedded in the bonds gives the issuer the right (but not the

obligation) to buy them back and obligates the bond holder to sell the bonds to the issuer. Issuers generally want this right because they recognize that at some time in the future the level of interest rates may fall sufficiently below the bond issue's coupon rate that redeeming the bond issue and replacing it with another bond issue with a lower coupon rate would be attractive. While a call provision is advantageous for the debt issuer, it is a disadvantage for the debt holder. Research reports which primarily discuss an issuer's bond redemption should be tagged with Subject Bond Redemption. Cues: Bond Redemption, Bonds were redeemed/retired/repurchased by the company, etc.

#### BuyAndHoldInvestment

Buy & Hold is a long-term investment strategy in which an investor buys investments (e.g., stocks, bonds) and holds them for a long period of time, regardless of fluctuations in the market. An investor who employs a buy-and-hold strategy actively selects stocks, but once in a position, is not concerned with short-term price movements and technical indicators. This viewpoint also holds that market timing, i.e. the concept that one can enter the market on the lows and sell on the highs, does not work or does not work for small investors so it is better to simply buy and hold. Cues: Buy-and-Hold Investment, Long-term stock, a solid (good, outstanding, attractive, true, under-valued, longterm, compelling, profitable, aggressive) long-term investment, etc.

## TotalReturnInvestment

Total return refers to an approach for measuring an investment's performance. It includes interest, capital gains, dividends and distributions realized over a given period of time. Total return accounts for two categories of return: income and capital appreciation. Income includes interest paid by fixed-income investments, distributions or dividends. Capital appreciation represents the change in the market price of an asset. Research reports focused on total return investing should be tagged with Subject Total Return Investment. Cues: Total return investment, a solid (good, outstanding, attractive, true, undervalued, long-term, compelling, profitable, aggressive) total return investment investment/stock/play/opportunity, etc.

# CreditAnalysis

Credit analysis is the method by which one calculates the creditworthiness of a borrower (e.g., a company, an individual, an organization, a government, etc.). Creditworthiness refers to the ability of a borrower to meet its payment obligations (i.e., interest and principle). Credit analysis involves a wide variety of financial analysis techniques, including ratio and trend analysis as well as the creation of projections and a detailed analysis of cash flows. Credit analysis also includes an examination of collateral and other sources of repayment as well as credit history and management ability. Research reports which discuss the creditworthiness of a borrower should be tagged with Subject Credit Analysis. Cues: Credit Analysis, Credit Assessment, Credit Alert, Relative Value, credit (banking, loan) facility, credit capacity, bank debt, bank loan, (un)utilized credit, (un)used lines, (un)drawn loan, term loan, debt load, bank/loan covenants, investment grade credit, high-grade debt, etc.

## ModelPortfolio

Investment portfolios are based on widely-held investment theories that asset allocation is the best means to maximize return for a given level of risk. Analysts sometimes create portfolios (i.e., a model portfolio) which they think will do better than a certain benchmark (e.g., the S&P 500 index). The analyst tracks the portfolio's performance and updates the model portfolio on a periodic basis. A model portfolio usually contains a list of the securities or security groups included in it and their weightings in the portfolio compared to a selected benchmark. Research reports which discuss a model portfolio or make recommendations about an asset mix should be tagged with Subject Model Portfolio. Cues: Model portfolio, recommended asset mix, recommended weighting, recommended portfolio, asset mix, recommended asset (sector, market, industry, maturity) allocation,

recommended asset (sector, market, industry, maturity) mix, recommended asset (sector, market, industry, maturity) weighting, etc.

## PortfolioStrategy

A portfolio is a collection of investments held by an institution or a private individual. In building an investment portfolio, a financial institution will typically conduct its own investment analysis, while a private individual may make use of the services of a financial advisor or a financial institution which offers portfolio management services. Holding a portfolio is part of an investment and risk-limiting strategy called diversification. By owning several assets, certain types of risk (in particular specific risk) can be reduced. The assets in the portfolio could include stocks, bonds, options, warrants, gold certificates, real estate, futures contracts, production facilities, or any other item that is expected to retain its value. Research reports which discuss portfolio strategies should be tagged with Subject Portfolio Strategy. Cues: Portfolio strategy, etc.

## PrepaymentAnalysis

Prepayment refers to the payment of all or part of a debt prior to its due date. Prepayment often specifically refers to the repayment of the total loan amount by a property owner whose mortgage is backing a mortgage-backed security (MBS). Prepayment is perceived as an MBS risk, because mortgage debts are often paid off early in order to incur lower total interest payments through cheaper refinancing. The new financing may be cheaper because the borrower's credit rating has improved or because interest rates have fallen, but in either case, the payments that would have been made to the MBS investor would be above market rates. To compensate for the prepayment risk (which is a reinvestment risk), a prepayment penalty clause is often included in the loan contract. Research reports which discuss/analyze prepayments should be tagged with Subject Prepayment Analysis. Cues: Prepayment, Delinquency, etc.

## ProprietaryIndex

An index is an imaginary portfolio of securities representing a particular market or a portion of it. Each index has its own calculation methodology and is usually expressed in terms of a change from a base value. The Standard & Poor's 500 (contains the stocks of the 500 largecap companies) is one of the world's best known indexes, and is the most commonly used benchmark for the stock market. Other prominent indexes include the DJ Wilshire 5000 (total stock market), the MSCI EAFE (foreign stocks in Europe, Australasia, Far East) and the Lehman Brothers Aggregate Bond Index (total bond market). Because, technically, you can't actually invest in an index, index mutual funds and exchange-traded funds (based on indexes) allow investors to invest in securities representing broad market segments and/or the total market. Research reports which discuss proprietary indexes should be tagged with Subject Proprietary Index. (Economic indexes are not Proprietary indexes.) Cues: Proprietary Index, Custom Indices, etc.

## Recommendations

Research reports in which the analyst makes or changes his recommendations or opinions about a security should be tagged with Subject Recommendations. Cues: Buy (Sell, Accumulate, Reduce, Underweight, Overweight, Outperform, Overperform, Underperform) Recommendation, New ideas, Key/Top Picks, Key Buys, Top Sells, Recommendation changes, Rating/Opinion revisions, etc.

## RelativeValue

Relative value is the attractiveness measured in terms of risk, liquidity, and return of one instrument relative to another, or for a given instrument, of one maturity relative to another. Cues: Relative Value, etc.

# SpreadAnalysis

Spread refers to difference. In finance, the spread can be the difference in the prices of related securities. For example, bid/offer spread refers to the spread between the buying and selling price of a security. Yield spread refers to the difference in percentage rate of return of two investments. The yield spread is often measured between debt instruments of different maturities or credit ratings. Swap spreads refer to the interest rate differentials between the fixed rates on fixed-for-floating swap contracts and the yields-to-maturity on maturity-matched government bonds. Cues: Spread Analysis, Spread Commentary, spreads have widened/tightened/narrowed, narrow spreads, etc.

# Tradeldea

Research reports in which the analyst recommends a trading strategy/idea (e.g., "we recommend Selling France Telecom 5 yr. CDS against Buying Telekom Austria 5yr. CDS"), should be tagged with Subject Trade Idea. Cues: Trade (Equity, Derivatives) Ideas, Trade (Equity, Derivatives) Recommendations, Trade (Equity, Derivatives) Tickets, Ideas & Picks, Ideas of the week, Pair-Trades, Index Plays, Trading Strategy, etc.

## PublisherDefined

# Refunding

Refunding occurs when an entity that has issued callable bonds calls those debt securities from the debt holders with the express purpose of reissuing new debt at a lower coupon rate. In essence, the issue of new, lower-interest debt allows the company to prematurely refund the older, higher-interest debt.

## Privatization

The buying of all outstanding shares of a publicly traded company by a single entity, taking the company private.

# VentureCapital

Venture capital (VC) is financial capital provided to early-stage, high-potential, high risk, growth startup companies. The venture capital fund makes money by owning equity in the companies it invests in, which and usually have a novel technology or business model in high technology industries, such as biotechnology, IT, software, etc. The typical venture capital investment occurs after the seed funding round as growth funding round (also referred to as Series A round) in the interest of generating a return through an eventual realization event, such as an IPO or trade sale of the company. Venture capital is a subset of private equity. Therefore, all venture capital is private equity, but not all private equity is venture capital.

## Yields

Content of research product focuses mainly on an analysis of market/sector yields. Yield being the amount in cash that returns to the owners of a security. Normally it does not include the price variations, at the difference of the total return. Yield applies to various stated rates of return on stocks (common and preferred, and convertible), fixed income instruments (bonds, notes, bills, strips, zero coupon), and some other investment type insurance products (e.g. annuities).

## OutlookShortTerm

Forecast/projection of a specific investment view/insight with a timeframe less than 1 year.

## OutlookLongTerm

Forecast/projection of a specific investment view/insight with a timeframe more than 1 year.

## Covenants

Promises in an indenture, or any other formal debt agreement, that certain activities will or will not be carried out. The purpose of covenants is to give the lender more security. Covenants can cover everything from minimum dividend payments to levels that must be maintained in working capital.

## Inflation

A sustained increase in the general level of prices for goods and services, normally measured as an annual percentage increase. As inflation rises, every dollar owned buys a smaller percentage of a good or service.

## ReleaseAnalysis

Insight provided by a research analyst/economist/strategist of potential opportunities that may be available after the release of specific information to the market. News releases can be of any nature and normally have significant effects on investment portfolios. The can be about company earnings, management changes, etc. or macro in nature such as economic or political events.

## Geopolitics

Normally describes the links and causal relationships between political power and geographic space. It comprises the art and practice of analyzing, proscribing, forecasting, and the using of political power over a given territory. This in turn affects potential investment opportunities of the territory.

# ESG

Environmental, Social and Corporate Governance, also known as ESG, describes the three main areas of concern that have developed as the central factors in measuring the sustainability and ethical impact of an investment in a company or business. Within these three areas are a broad set of concerns that are increasingly being included in the non-financial factors that figure in the valuation of equity, real-estate, corporations and all fixed-income investments. ESG is the catch-all term for the criteria used in what has become known as Socially Responsible Investment.

## SmallCap

Market capitalization (or market cap) is the total value of the tradable shares of a publicly traded company; it is equal to the share price times the number of shares outstanding. As outstanding stock is bought and sold in public markets, capitalization could be used as a proxy for the public opinion of a company's net worth and is a determining factor in some forms of stock valuation.

Companies with a relatively small market capitalization are referred to as small cap companies.

# MidCap

Market capitalization (or market cap) is the total value of the tradable shares of a publicly traded company; it is equal to the share price times the number of shares outstanding. As outstanding stock is bought and sold in public markets, capitalization could be used as a proxy for the public opinion of a company's net worth and is a determining factor in some forms of stock valuation. Companies in the middle are referred to as mid cap companies.

## LargeCap

Market capitalization (or market cap) is the total value of the tradable shares of a publicly traded company; it is equal to the share price times the number of shares outstanding. As outstanding stock is bought and sold in public markets, capitalization could be used as a proxy for the public opinion of a company's net worth and is a determining factor in some forms of stock valuation.

Companies with a relatively large market capitalization are referred to as large cap companies.

# **TargetPriceEnum**

**Enumeration Values:** 

Increase

Decrease

Update

Reiterate

# TermEnum

**Enumeration Values:** 

# ShortTerm

Less than 12 months.

## LongTerm

12 months or longer.

# WeightingActionEnum

Enumeration Values:

Increase Decrease

Update

Reiterate

## WeightingEnum

**Enumeration Values:** 

OverWeight

UnderWeight

EqualWeight

# YearTypeEnum

**Enumeration Values:** 

# Fiscal

The 12 month period during which a business maintains its financial records.

## Calendar

The 12 month period from January through December.

# YesNoEnum

**Enumeration Values:** 

No

Yes

# **Roster Updates Sidecar Schema**

The Roster Updates sidecar provides publishers with a standard vehicle for communicating analyst roster information to clients and aggregator partners. This schema leverages major elements already defined within the RIXML schema proper, but also provides a new top-level element and structure for specifying adds, updates, and deletes for organizations and people. The typical use-case would be creating analyst roster files for a given publisher.

# **RosterUpdates**

RosterUpdates is the root tag for a batch of roster updates. A roster update gives a publisher the ability to communicate changes to the groups of people playing various roles on its behalf in the investment research marketplace. The common case would be a financial services firm updating its roster of research analysts with aggregator partners.

#### **Elements and Attributes**

## rosterUpdatesID (Required, String)

This is to facilitate the unique identification of a particular batch of roster updates. Enables a consumer of this information to keep track of which batches have been applied to its database and which are duplicates. We recommend UUIDs to ensure uniqueness.

## createDateTime (Required, TimeInstant)

This marks the date/time at which this batch of roster updates was formed. It is expressed using ISO 8601 as refined by the World Wide Web Consortium's note http://www.w3.org/TR/NOTE-datetime. In addition, RIXML requires the use of Zulu time or Z-time (GMT +/- n hours:minute:seconds). All times are absolute and easier to compute, rather than using a relative (i.e. 08:30 +5) time.

## language (Required, String)

Indicates the language of the instance document -- i.e. the language of the publisher-supplied tag values contained in the XML file for this roster item. Described using the ISO 639-2/T Code.

## Aggregations

RosterUpdate (Required, Multiples Allowed)

## RosterUpdate

A roster update gives a publisher the ability to communicate changes to the groups of people playing various roles on its behalf in the investment research marketplace. The common case would be a financial services firm updating its roster of research analysts with aggregator partners.

## **Elements and Attributes**

## rosterUpdateID (Optional, String)

This is to facilitate the unique identification of a particular individual roster update. Enables a consumer of this information to keep track of which updates have been applied to its database and which are duplicates. We recommend UUIDs to ensure uniqueness.

#### Aggregations

StatusInfo (Required, Multiples Allowed) Organization (Choice, Multiples Allowed) PersonGroup (Choice, Multiples Allowed) PersonGroupMember (Choice, Multiples Allowed) Person (Choice, Multiples Allowed)

# **Coverage Updates Sidecar Schema**

The Coverage Updates sidecar provides publishers with a standard vehicle for communicating coverage information to clients and aggregator partners. This schema leverages major elements already defined within the RIXML schema proper, but also provides a new top-level element and structure for specifying adds, updates, and deletes for pairings of covering entities (organizations and people) and covered entities (asset classes, asset types, security types, issuers, securities, sector/industries, regions, countries, indices, and disciplines).

# CoverageUpdates

CoverageUpdates is the root tag for a batch of coverage updates. A coverage update gives a publisher the ability to communicate changes to its coverage universe. The common case would be a financial services firm updating the list of companies covered by a particular analyst.

#### **Elements and Attributes**

## coverageUpdatesID (Required, String)

This is to facilitate the unique identification of a particular batch of coverage updates. Enables a consumer of this information to keep track of which batches have been applied to its database and which are duplicates. We recommend UUIDs to ensure uniqueness.

## createDateTime (Required, TimeInstant)

This marks the date/time at which this batch of coverage updates was formed. It is expressed using ISO 8601 as refined by the World Wide Web Consortium's note http://www.w3.org/TR/NOTE-datetime. In addition, RIXML requires the use of Zulu time or Z-time (GMT +/- n hours:minute:seconds). All times are absolute and easier to compute, rather than using a relative (i.e. 08:30 +5) time.

## language (Required, String)

Indicates the language of the instance document -- i.e. the language of the publisher-supplied tag values contained in the XML file for this coverage item. Described using the ISO 639-2/T Code.

## Aggregations

CoverageUpdate (Required, Multiples Allowed)

## CoverageUpdate

A coverage update gives a publisher the ability to communicate changes to its coverage universe. The common case would be a financial services firm updating the list of companies covered by a particular analyst.

#### **Elements and Attributes**

## coverageUpdateID (Optional, String)

This is to facilitate the unique identification of a particular individual coverage update. Enables a consumer of this information to keep track of which updates have been applied to its database and which are duplicates. We recommend UUIDs to ensure uniqueness.

#### Aggregations

# StatusInfo (Required, Multiples Allowed) CoveragePairing (Required, Multiples Allowed)

## CoveragePairing

An element to pair coverers with the covered. Interpretted to mean that each of the covering entities covers all of the covered entities.

#### Aggregations

CoveringEntities (Required) CoveredEntities (Required)

#### CoveringEntities

One or more organizations, or teams of people, or individual persons can cover companies, sectors, etc.

#### Aggregations

Organization (Choice, Multiples Allowed) PersonGroup (Choice, Multiples Allowed) PersonGroupMember (Choice, Multiples Allowed) Person (Choice, Multiples Allowed)

#### CoveredEntities

One or more companies, sectors, etc., can be covered.

#### Aggregations

AssetClass (Choice, Multiples Allowed) AssetType (Choice, Multiples Allowed) SecurityType (Choice, Multiples Allowed) Issuer (Choice, Multiples Allowed) Security (Choice, Multiples Allowed) SectorIndustry (Choice, Multiples Allowed) Region (Choice, Multiples Allowed) Country (Choice, Multiples Allowed) Index (Choice, Multiples Allowed) Discipline (Choice, Multiples Allowed) Specialty (Choice, Multiples Allowed)