

LEI and FIGI

Introduction and Bloomberg involvement

Richard C Robinson
rrobinson57@bloomberg.net
Data Strategy, Standards and Open Symbology, Bloomberg L.P.

Bloomberg and LEI

- LEI; lei.Bloomberg.com
 - LEI is a standard of ISO (International Organization for Standardization – based in Geneva)
 - ROC – Regulatory Oversight Committee; group of regulators that provide advisory input to the GLEIF
 - GLEIF – Global LEI Foundation; the entity that operates the LEI system and central registry
 - LOU – Local Operating Unit; entity that meets and maintains certain qualifications and functionality in order to issue LEI's (either for a specific region, regions, or globally)
 - Bloomberg is a Local Operating Unit, operating globally
- LEI allows a cost recovery model.
 - LOU's individually are allowed to create their own cost model, and charges for issuance, and for yearly renewal fees. "Cost recovery" allows markup (even in excess of 100% of cost)
 - LEI's, once issued, can be shared and used without further fees or restrictions
 - Bloomberg has consistently led in transparent costing and lowest price
- LEI identifies entities (not individual people, and different offices a single entity may occupy)
 - Individual that is 'incorporated'
 - 'branches'; does not refer to traditional meaning of 'branch'; specifically refers to an office of a legal entity established outside the legal entity's jurisdiction that isn't doing business independently

FIGI governance roles

- Object Management Group owns the standard and trademark for FIGI (not Bloomberg)
- Registration Agent; responsible for integrity of standard, promotion of standard, central registry
 - Single RA; Bloomberg appointed by OMG governance group
- Certified Provider; entity that can issue FIGI's, based on the standard
 - Required to meet qualifications set by OMG governance group
 - Needs to coordinate with RA; ensure no duplications, etc
 - Bloomberg currently only CP; have sought other CP's in past, but issuers and exchanges have preferred to just send issuance detail and receive back FIGI instead

What FIGI is / is not

- FIGI is
 - <https://vimeo.com/340213147>
 - A standard of the Object Management Group (omg.org)
 - A methodology that includes descriptive data AND a primary key identifier (i.e. FIGI is not just the FIGI ID – it includes the metadata and mapping to other FIGIs)
 - Open data; using the MIT Open Source language, unfettered by any licensing or cost restrictions. There is no requirement to have a contract or buy 'extra' data. Any firm or individual can access all open data via OpenFIGI.com.
 - Focused purely on foundation-level identification
- FIGI is NOT
 - A corporate action or other kind of product (i.e. pricing, entity identification or ownership structures, etc)
 - A replacement of current identifiers like ticker, national ID's, etc

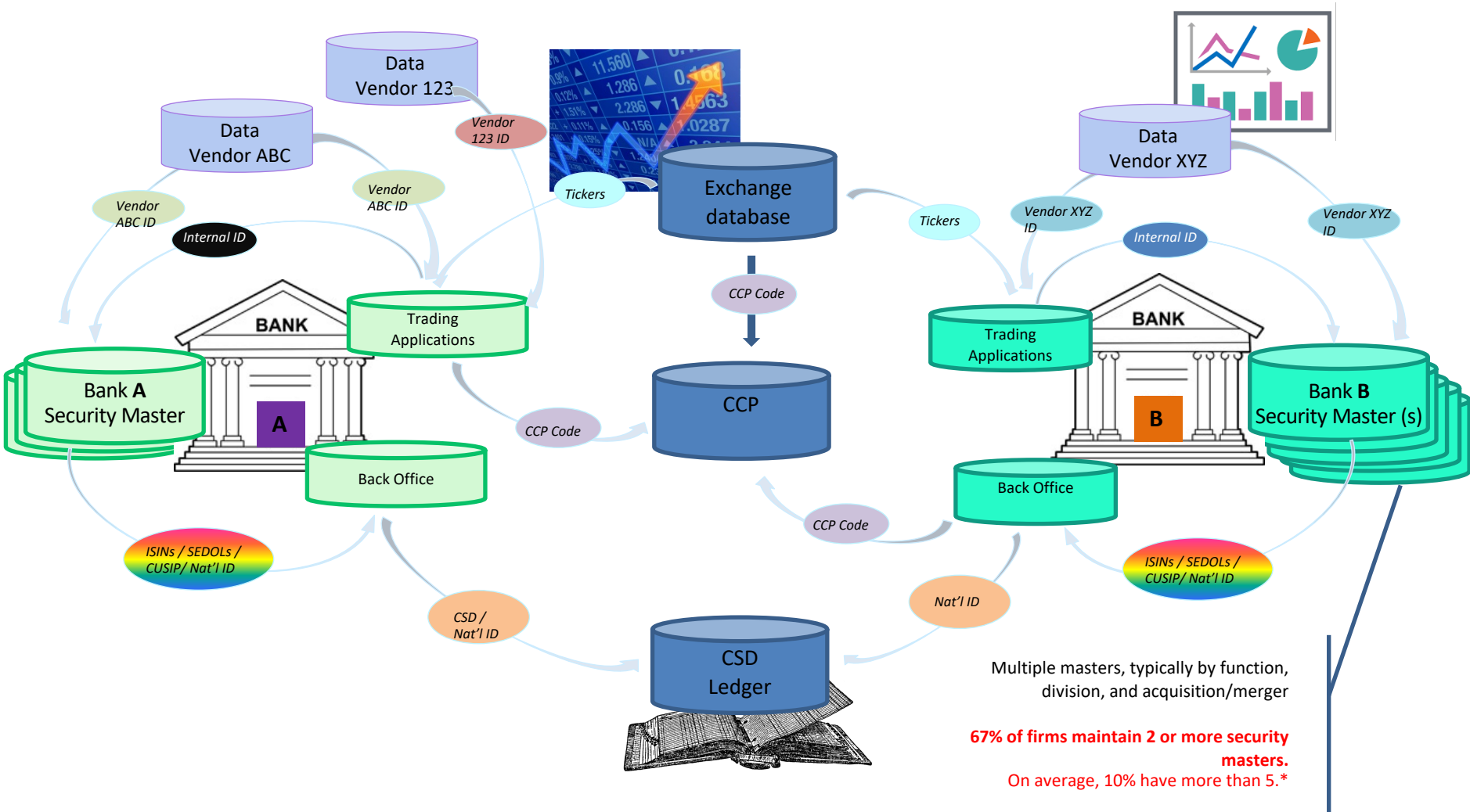
Challenge

- Global, cross-jurisdictional, cross-functional view
- Multiple identifiers exist for a single financial instrument and differ based on;
 - Asset type
 - Legacy embeddedness
 - Exchange/Venue
 - Vendor
 - Market / jurisdiction
 - Functional use (front/mid/back office)
 -and so on, most on organic generation/growth

What does this challenge look like?

data interchange complexity

Simplified example (equity, single exchange & market) of data flow in trading and settlement

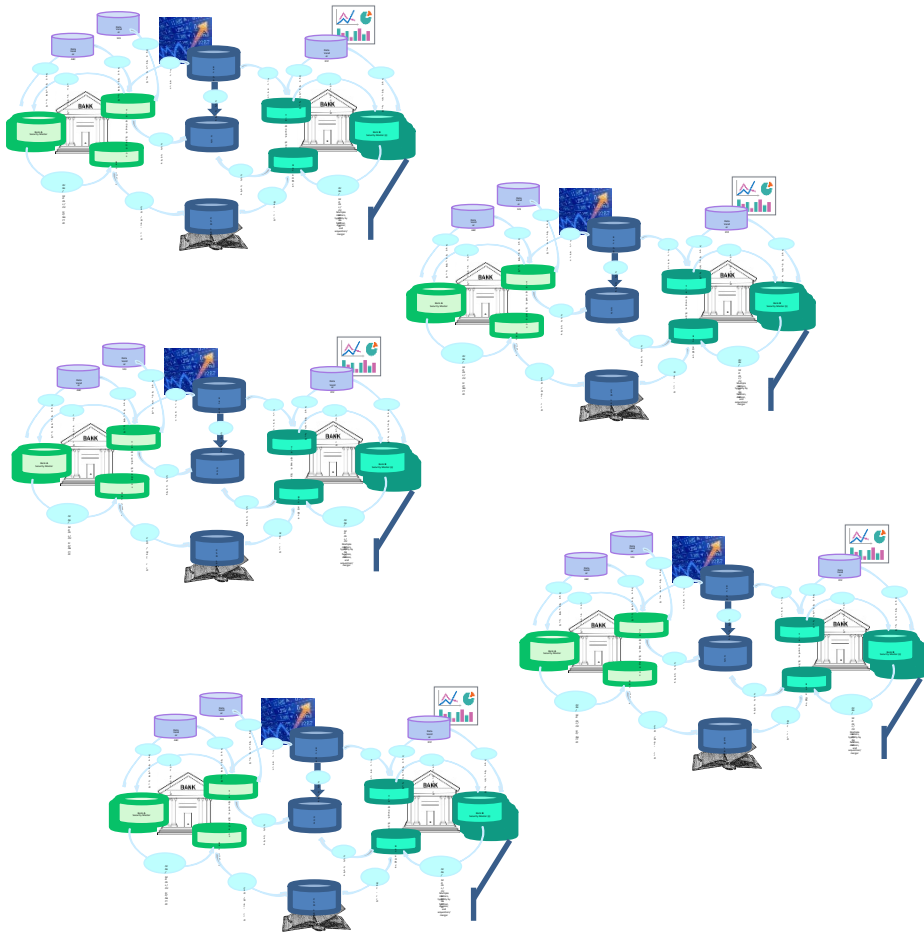


*TABB Group report; "Building a Framework for Innovation and Interoperability," March 2017 (survey of over 200 global data professionals)

simple answer....

“Just use one ID...”

Not so simple....

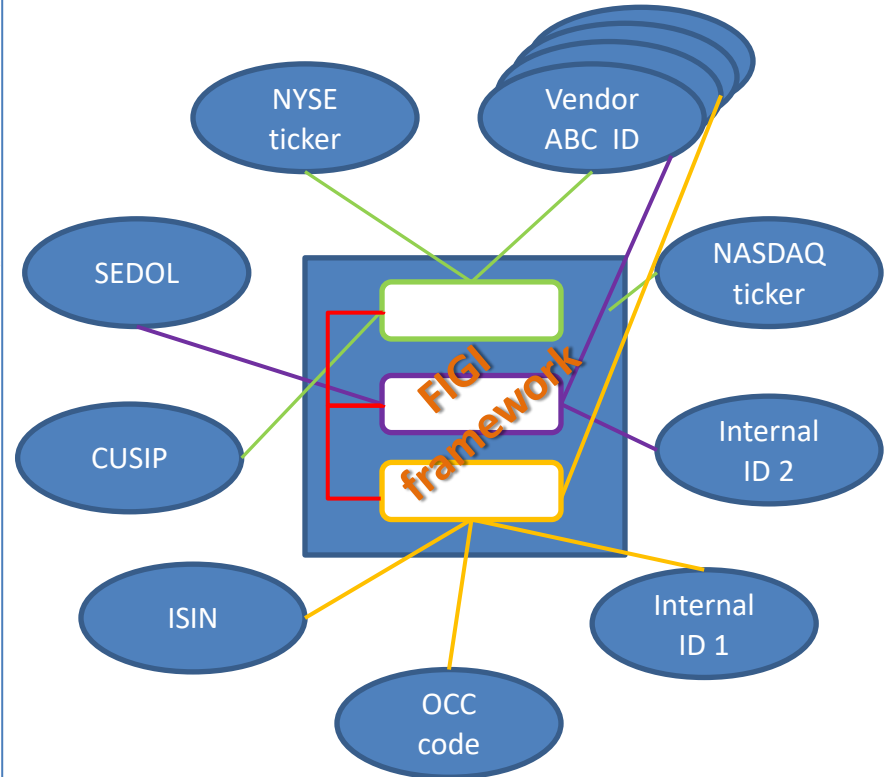
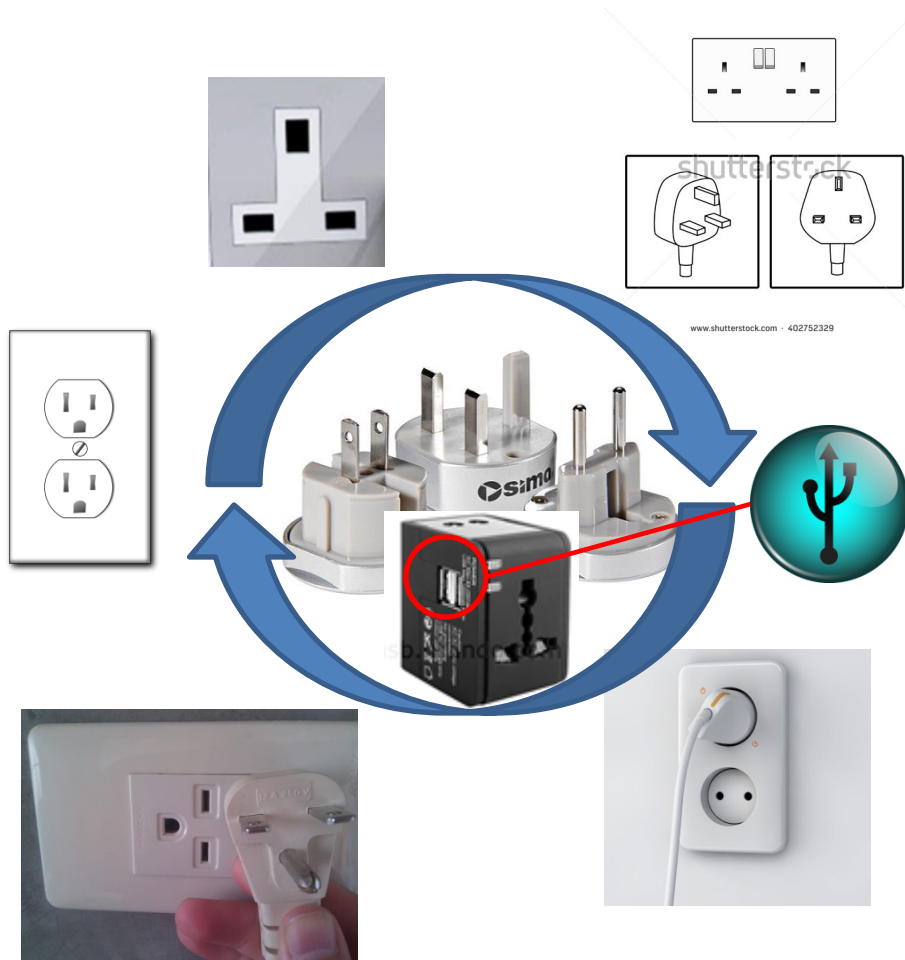


- Multiple contexts; some ID's infer more (i.e. 'tickers' typically specific to one exchange, national ID to one market, international ID's non-specific)
 - Specific inferred data drives different processes and routing
- Multiple markets, all with different national standards (both by venue and jurisdiction)
- Embedded codes in different legacy systems (i.e. Trading systems built around specific 'tickers')
- Akin to trying to solve multiple electrical plug standards by converting to single plug standard;
 - Good, *in theory*, but practical implications:
 - Embedded manufacturer and consumer base (legacy)
 - Significant 'conversion cost'
 - Politics – which one 'wins'?

How to address?

Use a framework

A **metadata** framework can act as an adapter, and is **extensible** for new innovations



FIGI in use as a framework

Example; Thai Beverage PCL Common Stock

'Primary' issued in Singapore as foreign share

*Exists in **33** different tradeable forms*

*Quoted on global venues in **5** different currencies*

*Tradeable in **14** different jurisdictions/countries (on and off-exchange inclusive)*

Deutsche Borse-specific listing also traded on Tradegate (MTF)

Symbology;

33 different unique exchange-based tickers

3 different ISINs (due to some uniqueness of Thailand issuance)

4 different SEDOLs

Plus; CINS, Singapore ID (Y92), Common Code, WPK ID, other vendor codes, internal codes, and other national IDs

*In all, between **50-100 different identifiers** for the "same" common stock, with **no** specific relationship between any two identifiers or the associated descriptive data (i.e. each identifier is effectively its own 'island')*

Data related to Thai Beverage PCL; Singapore Exchange ID Y92

Name	Ticker	Bloomberg Exchange Code	MIC	Operating MIC	country	Exchange name or description	FIGI	FIGI Composite	Share Class	Quote currency	ISIN	SEDOL	Common Code
THAI BEVERAGE PCL	THBEV	SP	XSES	XSES	SG	SINGAPORE EXCHANGE	BBG000BQ6ZNO	BBG000BQ6Z96	BBG001S7LTY7	SGD	TH0902010014	B15F664	025638794
THAI BEVERAGE PCL	TBVPF	US				Composite to tie all US listings to	BBG000R7J995	BBG000R7J995	BBG001S7LTY7	USD	TH0902010014	B18R1R3	025638794
THAI BEVERAGE PCL	TBVPF	PQ	OTCM	OTCM	US	OTC PINK MARKETPLACE	BBG000R7JFW5	BBG000R7J995	BBG001S7LTY7	USD	TH0902010014	B18R1R3	025638794
THAI BEVERAGE PCL	TBVPF	UV	OTC	FINR	US	OTC BULLETIN BOARD - OTHER OTC	BBG000R7JGH0	BBG000R7J995	BBG001S7LTY7	USD	TH0902010014	B18R1R3	025638794
THAI BEVERAGE PCL	T6W	GR				Composite to tie all German listings to	BBG000RJ6W38	BBG000RJ6W38	BBG001S7LTY7	EUR	TH0902010014	B15T6J9	025638794
THAI BEVERAGE PCL	T6W	GD	XFRA	XFRA	DE	DEUTSCHE BOERSE AG	BBG000RJ6WQ4	BBG000RJ6W38	BBG001S7LTY7	EUR	TH0902010014	B15T6J9	025638794
THAI BEVERAGE PCL	T6W	GF	XDUS	XDUS	DE	BOERSE DUESSELDORF	BBG000RJ6WQ3	BBG000RJ6W38	BBG001S7LTY7	EUR	TH0902010014	B15T6J9	025638794
THAI BEVERAGE PCL	T6W	GS	XSTU	XSTU	DE	BOERSE STUTT GART	BBG000RJ6X63	BBG000RJ6W38	BBG001S7LTY7	EUR	TH0902010014	B15T6J9	025638794
THAI BEVERAGE PCL	T6W	GM	XMUN	XMUN	DE	BOERSE MUENCHEN	BBG000RJ6XJ9	BBG000RJ6W38	BBG001S7LTY7	EUR	TH0902010014	B15T6J9	025638794
THAI BEVERAGE PCL	T6W	GB	XBER	XBER	DE	BOERSE BERLIN	BBG000RJ6XM5	BBG000RJ6W38	BBG001S7LTY7	EUR	TH0902010014	B15T6J9	025638794
THAI BEVERAGE PCL	T6W	TH	XGAT	TGAT	DE	Tradegate BBG000RJ6WQ4 Ref FIGI BBG000RJ6W38 REF Composite	BBG00H300Z64	BBG00H300Z55	BBG001S7LTY7	EUR	TH0902010014	B15T6J9	025638794
THAI BEVERAGE PCL	THBEV	SW				Composite to tie Swiss legacy listings	BBG006TLWKM4	BBG006TLWKM4	BBG001S7LTY7	CHF	TH0902010014	B1054Z0	025638794
THAI BEVERAGE PCL	THBEV	BW	XBRN	XBRN	CH	BX SWISS AG	BBG006TLWK77	BBG006TLWKM4	BBG001S7LTY7	CHF	TH0902010014	B1054Z0	025638794
THAI BEVERAGE PCL	THBEVEUR	XB	BOAT	BOAT	GB	CINNOBER BOAT	BBG007254XH5	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XI			IT	BORSAITALOTC	BBG007254XJ3	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XH			HU	BUDAPEST OTC	BBG007254XK1	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XF			IE	DUBLIN SE OTC	BBG007254XM9	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XD			DE	DEUTSCHE OTC	BBG007254XN8	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XE	XSMP	XSMP	GB	SMARTPOOL	BBG007254XP6	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XJ			SI	LJUB SE OTC	BBG007254XQ5	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XL			GB	LONDON SE OTC	BBG007254XR4	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XG			SE	NGM OTC	BBG007254XS3	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XO	XOPV	XSTO	SE	OTC PUBLICATION VENUE	BBG007254XT2	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XN			NO	OSLO OTC	BBG007254XV9	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XP			GB	PLUS MKT OTC	BBG007254XW8	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XS			DE	STUTTGRT OTC	BBG007254XY6	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XA			AT	CEESEG OTC	BBG007254XZ5	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XT	HOTC	ASEX	GR	HELLENIC EXCHANGE OTC MARKET	BBG007254Y10	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XW			CH	SIX Off-exchange	BBG007254Y29	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XU				Bulgaria OTC	BBG007254Y38	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XV	BOTC	BCXE	GB	OFF EXCHANGE IDENTIFIER FOR OTC TRADES REPORTED TO BATS EUROPE	BBG007254Y56	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	EU			GB	EUROPEAN Composite for any potential Eurozone listings	BBG007254Y74	BBG007254Y65	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	T6W	GZ	MUND	XMUN	DE	BOERSE MUENCHEN - MARKET MAKER MUNICH - FREIVERKEHR MARKT	BBG00FGX08K6	BBG00FGX08G1	BBG001S7LTY7	EUR	TH0902010014	B15T6J9	025638794
THAI BEVERAGE PCL	T6W	QT	XQTX	XDUS	DE	BOERSE DUESSELDORF - QUOTRIX	BBG00G7BW612	BBG00G7BW5Z7	BBG001S7LTY7	EUR	TH0902010014	B15T6J9	025638794
THAI BEVERAGE PCL	TB	XBKK	XBKK		TH	STOCK EXCHANGE OF THAILAND	BBG000BFYD61	BBG000BFYD61	BBG001S7LTY7	THB	TH0902010006		
THAI BEVERAGE PCL-NVDR	TB	XBKK	XBKK		TH	STOCK EXCHANGE OF THAILAND	BBG000BX8K01	BBG000BX8K01	BBG001S7LTY7	THB	TH0902010R15		
THAI BEVERAGE PCL-FOREIGN	TB	XBKK	XBKK		TH	STOCK EXCHANGE OF THAILAND	BBG000BX8JR5	BBG000R7J995	BBG001S7LTY7	THB	TH0902010014		10

Data related to Thai Beverage PCL; Singapore Exchange ID Y92

Name	Ticker	Bloomberg Exchange Code	MIC	Operating MIC	country	Exchange name or description	FIGI	FIGI Composite	Share Class	Quote currency	ISIN	SEDOL	Common Code
THAI BEVERAGE PCL	THBEV	SP	XSES	XSES	SG	SINGAPORE EXCHANGE	BBG000BQ6ZN0	BBG000BQ6Z96	BBG001S7LTY7	SGD	TH0902010014	B15F664	025638794
THAI BEVERAGE PCL	TBVPF	US				Composite to tie all US listings to	BBG000R7J995	BBG000R7J995	BBG001S7LTY7	USD	TH0902010014	B18R1R3	025638794
THAI BEVERAGE PCL	TBVPF	PQ	OTCM	OTCM	US	OTC PINK MARKETPLACE	BBG000R7JFW5	BBG000R7J995	BBG001S7LTY7	USD	TH0902010014	B18R1R3	025638794
THAI BEVERAGE PCL	TBVPF	UV	OTC	FINR	US	OTC BULLETIN BOARD - OTHER OTC	BBG000R7JGH0	BBG000R7J995	BBG001S7LTY7	USD	TH0902010014	B18R1R3	025638794
THAI BEVERAGE PCL	T6W	GR				Composite to tie all German listings to	BBG000RJ6W38	BBG000RJ6W38	BBG001S7LTY7	EUR	TH0902010014	B15T6J9	025638794
THAI BEVERAGE PCL	T6W	GF	XFRA	XFRA	DE	DEUTSCHE BOERSE AG	BBG000RJ6W4	BBG000RJ6W38	BBG001S7LTY7	EUR	TH0902010014	B15T6J9	025638794
THAI BEVERAGE PCL	T6W	GD	XDUS	XDUS	DE	BOERSE DUESSELDORF	BBG000RJ6WQ3	BBG000RJ6W38	BBG001S7LTY7	EUR	TH0902010014	B15T6J9	025638794
THAI BEVERAGE PCL	T6W	GS	XSTU	XSTU	DE	BOERSE STUTT GART	BBG000RJ6X63	BBG000RJ6W38	BBG001S7LTY7	EUR	TH0902010014	B15T6J9	025638794
THAI BEVERAGE PCL	T6W	GM	XMUN	XMUN	DE	BOERSE MUENCHEN	BBG000RJ6XJ9	BBG000RJ6W38	BBG001S7LTY7	EUR	TH0902010014	B15T6J9	025638794
THAI BEVERAGE PCL	T6W	GB	XBER	XBER	DE	BOERSE BERLIN	BBG000RJ6XM5	BBG000RJ6W38	BBG001S7LTY7	EUR	TH0902010014	B15T6J9	025638794
THAI BEVERAGE PCL	T6W	TH	XGAT	TGAT	DE	Tradegate	BBG000RJ6WG4 Ref FIGI BBG000RJ6W38 REF Composite	BBG000H300Z64	BBG000H300Z55	EUR	TH0902010014	B15T6J9	025638794
THAI BEVERAGE PCL	THBEV	SW				Composite to tie Swiss legacy listings	BBG006TLWKM4	BBG006TLWKM4	BBG001S7LTY7	CHF	TH0902010014	B1054Z0	025638794
THAI BEVERAGE PCL	THBEV	BW	XBRN	XBRN	CH	BX SWISS AG	BBG006TLWKT7	BBG006TLWKM4	BBG001S7LTY7	CHF	TH0902010014	B1054Z0	025638794
THAI BEVERAGE PCL	THBEVEUR	XB	ROAT	ROAT	GB	CINNOBER BOAT	BBG007254XH5	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XI			IT	BORSAITALOTC	BBG007254XJ3	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XH			HU	BUDAPEST OTC	BBG007254XK1	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XF			IE	DUBLIN SE OTC	BBG007254XM9	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XD			DE	DEUTSCHE OTC	BBG007254XN8	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XE	XSMF	XSMF	GB	SMARTPOOL	BBG007254XP6	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XJ			SI	LJUB SE OTC	BBG007254XQ5	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XL			GB	LONDON SE OTC	BBG007254XR9	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XG			SE	NGM OTC	BBG007254XS6	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XO	XOPV	XSTO	SE	OTC PUBLICATION VENUE	BBG007254XT2	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XN			NO	OSLO OTC	BBG007254XJ9	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XP			GB	PLUS MKT OTC	BBG007254XW8	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XS			DE	STUTT GART OTC	BBG007254XV6	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XA			AT	CEESEG OTC	BBG007254XZ5	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XT	HOTC	ASEX	GR	HELLENIC EXCHANGE OTC MARKET	BBG007254XW0	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XW			CH	SIX Off-exchange	BBG007254XZ2	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XU				Bulgaria OTC	BBG007254Y38	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XV	BOTC	BCXE	GB	OFF EXCHANGE IDENTIFIED REPORTED TO BATS EUROPE	BBG007254Y56	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	EU			GB	EUROPEAN Composite for any potential Eurozone listings	BBG007254Y74	BBG007254Y65	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	OT	XQTX	XDUS	DE	BOERSE DUESSELDORF QUOTRIX	BBG00G7BW612	BBG00G7BW5Z7	BBG001S7LTY7	EUR	TH0902010014	B15T6J9	025638794
THAI BEVERAGE PCL	THBEVEUR	TB	XBKK	XBKK	TH	STOCK EXCHANGE OF THAILAND	BBG000BFYD61	BBG000BFYD61	BBG001S7LTY7	THB	TH0902010014	B15T6J9	025638794
THAI BEVERAGE PCL-NVDR		TB	XBKK	XBKK	TH	STOCK EXCHANGE OF THAILAND	BBG000BX8K01	BBG000BX8K01	BBG001S7LTY7	THB	TH0902010R15		
THAI BEVERAGE PCL-FOREIGN		TB	XBKK	XBKK	TH	STOCK EXCHANGE OF THAILAND	BBG000BX8JR5	BBG000R7J995	BBG001S7LTY7	THB	TH0902010014		

SEDOLs, mostly by market/currency, but gaps exist and still need to relate to each other

Challenges a result of methodology (identifier vs framework). Does not mean that identifier methodology is wrong! Needed and useful, but more limited.

Data related to Thai Beverage PCL; Singapore Exchange ID Y92

Name	Ticker	Bloomberg Exchange Code	MIC	Operating MIC	country	Exchange name or description	FIGI	FIGI Composite	Share Class	Quote currency	ISIN	SEDOL	Common Code
THAI BEVERAGE PCL	THBEV	SP	XSES	XSES	SG	SINGAPORE EXCHANGE	BBG000BQ6Z0	BBG000BQ6Z96	BBG001S7LTY7	SGD	TH0902010014	B15F664	025638794
THAI BEVERAGE PCL	TBVPF	US				Composite to tie all US listings to	BBG000R7J995	BBG000R7J995	BBG001S7LTY7	USD	TH0902010014	B18R1R3	025638794
THAI BEVERAGE PCL	TBVPF	PQ	OTCM	OTCM	US	OTC PINK MARKETPLACE	BBG000R7JFW5	BBG000R7J995	BBG001S7LTY7	USD	TH0902010014	B18R1R3	025638794
THAI BEVERAGE PCL	TBVPF	UV	OTC	FINR	US	OTC BULLETIN BOARD - OTHER OTC	BBG000R7JGH0	BBG000R7J995	BBG001S7LTY7	USD	TH0902010014	B18R1R3	025638794
THAI BEVERAGE PCL	T6W	GR				Composite to tie all German listings to	BBG000RJ6W38	BBG000RJ6W38	BBG001S7LTY7	EUR	TH0902010014	B15T6J9	025638794
THAI BEVERAGE PCL	T6W	GF	XFRA	XFRA	DE	DEUTSCHE BOERSE AG	BBG000RJ6WG4	BBG000RJ6W38	BBG001S7LTY7	EUR	TH0902010014	B15T6J9	025638794
THAI BEVERAGE PCL	T6W	GD	XDUS	XDUS	DE	BOERSE DUESSELDORF	BBG000RJ6WQ3	BBG000RJ6W38	BBG001S7LTY7	EUR	TH0902010014	B15T6J9	025638794
THAI BEVERAGE PCL	T6W	GS	XSTU	XSTU	DE	BOERSE STUTT GART	BBG000RJ6X63	BBG000RJ6W38	BBG001S7LTY7	EUR	TH0902010014	B15T6J9	025638794
THAI BEVERAGE PCL	T6W	GM	XMUN	XMUN	DE	BOERSE MUENCHEN	BBG000RJ6XJ9	BBG000RJ6W38	BBG001S7LTY7	EUR	TH0902010014	B15T6J9	025638794
THAI BEVERAGE PCL	T6W	GB	XBER	XBER	DE	BOERSE BERLIN	BBG000RJ6XM5	BBG000RJ6W38	BBG001S7LTY7	EUR	TH0902010014	B15T6J9	025638794
THAI BEVERAGE PCL	T6W	TH	XGAT	TGAT	DE	Tradegate	BBG000RJ6WG4 Ref FIGI BBG000RJ6W38 REF Composite	BBG000H300Z64	BBG000H300Z55	EUR	TH0902010014	B15T6J9	025638794
THAI BEVERAGE PCL	THBEV	SW				Composite to tie Swiss legacy listings	BBG006TLWKM4	BBG006TLWKM4	BBG001S7LTY7	CHF	TH0902010014	BJ05420	025638794
THAI BEVERAGE PCL	THBEV	BW	XBRN	XBRN	CH	BX SWISS AG	BBG006TLWKT7	BBG006TLWKM4	BBG001S7LTY7	CHF	TH0902010014	BJ05420	025638794
THAI BEVERAGE PCL	THBEVEUR	XB	ROAT	ROAT	GB	CINNOBER BOAT	BBG007254XH5	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XI			IT	BORSAITALOTC	BBG007254XJ3	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XH			HU	BUDAPEST OTC	BBG007254XK1	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XF			IE	DUBLIN SE OTC	BBG007254XM9	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XD			DE	DEUTSCHE OTC	BBG007254XN8	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XE	XSMP	XSMP	GB	SMARTPOOL	BBG007254XP6	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XJ			SI	LJUB SE OTC	BBG007254XQ5	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XL			GB	LONDON SE OTC	BBG007254XR4	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XG			SE	NGM OTC	BBG007254XS3	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XO	XOPV	XSTO	SE	OTC PUBLICATION VENUE	BBG007254XT2	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XN			NO	OSLO OTC	BBG007254XV9	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XP			GB	PLUS MKT OTC	BBG007254XW8	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XS			DE	STUTTGRT OTC	BBG007254XY6	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XA			AT	CEESEG OTC	BBG007254XZ5	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XT	HOTC	ASEX	GR	HELLENIC EXCHANGE OTC MARKET	BBG007254Y10	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XW			CH	SIX Off-exchange	BBG007254Y29	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XU				Bulgaria OTC	BBG007254Y38	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XV	BOTC	BCXE	GB	OFF EXCHANGE IDENTIFIER FOR OTC TRADES REPORTED TO BATS EUROPE	BBG007254Y56	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	EU			GB	EUROPEAN Composite for any notation Eurozone listings	BBG007254Y74	BBG007254Y65	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	T6W	GZ	MUND	XMUN	DE	BOERSE MUENCHEN - MARKET MAKER MUNICH - FREIHEIT KEHR, IS	BBG00FGX08K6	BBG00FGX08G1	BBG001S7LTY7	EUR	TH0902010014	B15T6J9	025638794
THAI BEVERAGE PCL	T6W	QT	XQTX	XDUS	DE	BOERSE DUESSELDORF - QUOTRIX	BBG00G7BW612	BBG00G7BW5Z7	BBG001S7LTY7	EUR	TH0902010014	B15T6J9	025638794
THAI BEVERAGE PCL		TB	XBKK	XBKK	TH	STOCK EXCHANGE OF THAILAND	BBG000BFYD61	BBG000BFYD61	BBG001S7LTY7	THB	TH0902010006		
THAI BEVERAGE PCL-NVDR		TB	XBKK	XBKK	TH	STOCK EXCHANGE OF THAILAND	BBG000BX8K01	BBG000BX8K01	BBG001S7LTY7	THB	TH0902010R15		
THAI BEVERAGE PCL-FOREIGN		TB	XBKK	XBKK	TH	STOCK EXCHANGE OF THAILAND	BBG000BX8JR5	BBG000R7J995	BBG001S7LTY7	THB	TH0902010014		12

Multiple ISINs, not tied together

Data related to Thai Beverage PCL; Singapore Exchange ID Y92

Name	Ticker	Bloomberg Exchange Code	MIC	Operating MIC	country	Exchange name or description	FIGI	FIGI Composite	Share Class	Quote currency	ISIN	SEDOL	Common Code
THAI BEVERAGE PCL	THBEV	SP	XSES	XSES	SG	SINGAPORE EXCHANGE	BBG000BQ6ZN0	BBG000BQ6Z96	BBG001S7LTY7	SGD	TH0902010014	B15F664	025638794
THAI BEVERAGE PCL	TBVPF	US				Composite to tie all US listings to	BBG000R7J995	BBG000R7J995	BBG001S7LTY7	USD	TH0902010014	B18R1R3	025638794
THAI BEVERAGE PCL	TBVPF	PQ	OTCM	OTCM	US	OTC PINK MARKETPLACE	BBG000R7JFW5	BBG000R7J995	BBG001S7LTY7	USD	TH0902010014	B18R1R3	025638794
THAI BEVERAGE PCL	TBVPF	UV	OTC	FINR	US	OTC BULLETIN BOARD - OTHER OTC	BBG000R7JGH0	BBG000R7J995	BBG001S7LTY7	USD	TH0902010014	B18R1R3	025638794
THAI BEVERAGE PCL	T6W	GR				Composite to tie all German listings to	BBG000RJ6W38	BBG000RJ6W38	BBG001S7LTY7	EUR	TH0902010014	B15T6J9	025638794
THAI BEVERAGE PCL	T6W	GD	XFRA	XFRA	DE	DEUTSCHE BOERSE AG	BBG000RJ6WG4	BBG000RJ6W38	BBG001S7LTY7	EUR	TH0902010014	B15T6J9	025638794
THAI BEVERAGE PCL	T6W	GF	XDUS	XDUS	DE	BOERSE DUESSELDORF	BBG000RJ6WQ3	BBG000RJ6W38	BBG001S7LTY7	EUR	TH0902010014	B15T6J9	025638794
THAI BEVERAGE PCL	T6W	GS	XSTU	XSTU	DE	BOERSE STUTT GART	BBG000RJ6X63	BBG000RJ6W38	BBG001S7LTY7	EUR	TH0902010014	B15T6J9	025638794
THAI BEVERAGE PCL	T6W	GM	XMUN	XMUN	DE	BOERSE MUENCHEN	BBG000RJ6XJ9	BBG000RJ6W38	BBG001S7LTY7	EUR	TH0902010014	B15T6J9	025638794
THAI BEVERAGE PCL	T6W	GB	XBER	XBER	DE	BOERSE BERLIN	BBG000RJ6XM5	BBG000RJ6W38	BBG001S7LTY7	EUR	TH0902010014	B15T6J9	025638794
THAI BEVERAGE PCL	T6W	TH	XGAT	TGAT	DE	Tradegate	BBG000RJ6WG4 Ref FIGI BBG000RJ6W38 REF Composite	BBG000RJ6W38	BBG001S7LTY7	EUR	TH0902010014	B15T6J9	025638794
THAI BEVERAGE PCL	THBEV	SW				Composite to tie Swiss legacy listings	BBG006TLWKM4	BBG006TLWKM4	BBG001S7LTY7	CHF	TH0902010014	BJ05420	025638794
THAI BEVERAGE PCL	THBEV	BW	XBRN	XBRN	CH	BX SWISS AG	BBG006TLWKT7	BBG006TLWKM4	BBG001S7LTY7	CHF	TH0902010014	BJ05420	025638794
THAI BEVERAGE PCL	THBEVEUR	XB	BOAT	BOAT	GB	CINNOBER BOAT	BBG007254XH5	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XI			IT	BORSAITALOTC	BBG007254XJ3	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XH			HU	BUDAPEST OTC	BBG007254XK1	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XF			IE	DUBLIN SE OTC	BBG007254XM9	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XD			DE	DEUTSCHE OTC	BBG007254XN8	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XE	XSMP	XSMP	GB	SMARTPOOL	BBG007254XP6	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XJ			SI	LJUB SE OTC	BBG007254XR4	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XL			SE	LONDON SE OTC	BBG007254XS3	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XG			SE	NGM OTC	BBG007254XS3	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XO	XOPV	XSTO	SE	OTC PUBLICATION VENUE	BBG007254XS3	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XN			NO	OSLO OTC	BBG007254XV9	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XP			GB	PLUS MKT OTC	BBG007254XW8	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XS			DE	STUTTGRT OTC	BBG007254XY6	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XA			AT	CEESEG OTC	BBG007254XZ5	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XT	HOTC	ASEX	GR	HELLENIC EXCHANGE OTC MARKET	BBG007254Y10	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XW			CH	SIX Off-exchange	BBG007254Y29	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XU				Bulgaria OTC	BBG007254Y38	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XV	BOTC	BCXE	GB	OFF EXCHANGE IDENTIFIER FOR OTC TRADES REPORTED TO BATS EUROPE	BBG007254Y56	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	EU			GB	EUROPEAN Composite for any potention Eurozone listings	BBG007254Y74	BBG007254Y65	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	T6W	GZ	MUND	XMUN	DE	BOERSE MUENCHEN - MARKET MAKER MUNICH - FREIVERKEHR MARKT	BBG00FGX08K6	BBG00FGX08G1	BBG001S7LTY7	EUR	TH0902010014	B15T6J9	025638794
THAI BEVERAGE PCL	T6W	QT	XQTX	XDUS	DE	BOERSE DUESSELDORF - QUOTRIX	BBG00G7BW612	BBG00G7BW5Z7	BBG001S7LTY7	EUR	TH0902010014	B15T6J9	025638794
THAI BEVERAGE PCL	TB	XBKK	XBKK	XBKK	TH	STOCK EXCHANGE OF THAILAND	BBG000BFYD61	BBG000BFYD61	BBG001S7LTY7	THB	TH0902010006		
THAI BEVERAGE PCL-NVDR	TB	XBKK	XBKK	XBKK	TH	STOCK EXCHANGE OF THAILAND	BBG000BX8K01	BBG000BX8K01	BBG001S7LTY7	THB	TH0902010R15		
THAI BEVERAGE PCL-FOREIGN	TB	XBKK	XBKK	XBKK	TH	STOCK EXCHANGE OF THAILAND	BBG000BX8JR5	BBG000R7J995	BBG001S7LTY7	THB	TH0902010014		13

Gaps in MIC coverage

Red boxes highlighting missing MIC data for various countries and exchange codes.

Red box highlighting missing SEDOL data for several rows.

Red box highlighting missing Common Code data for the THAI BEVERAGE PCL-TB row.

Data related to Thai Beverage PCL; Singapore Exchange ID Y92

Name	Ticker	Bloomberg Exchange Code	MIC	Operating MIC	country	Exchange name or description	FIGI	FIGI Composite	Share Class	Quote currency	ISIN	SEDOL	Common Code
THAI BEVERAGE PCL	THBEV	SP	XSES	XSES	SG	SINGAPORE EXCHANGE	BBG000BQ6ZNO	BBG000BQ6Z96	BBG001S7LTY7	SGD	TH0902010014	B15F664	025638794
THAI BEVERAGE PCL	TBVPF	US				Composite to tie all US listings to	BBG000R7J995	BBG000R7J995	BBG001S7LTY7	USD	TH0902010014	B18R1R3	025638794
THAI BEVERAGE PCL	TBVPF	PQ	OTCM	OTCM	US	OTC PINK MARKETPLACE	BBG000R7JFW6	BBG000R7J995	BBG001S7LTY7	USD	TH0902010014	B18R1R3	025638794
THAI BEVERAGE PCL	TBVPF	UV	OTC	FINR	US	OTC BULLETIN BOARD - OTHER OTC	BBG000R7JGH0	BBG000R7J995	BBG001S7LTY7	USD	TH0902010014	B18R1R3	025638794
THAI BEVERAGE PCL	T6W	GR				Composite to tie all German listings to	BBG000RJ6W38	BBG000RJ6W38	BBG001S7LTY7	EUR	TH0902010014	B15T6J9	025638794
THAI BEVERAGE PCL	T6W	GD	XFRA	XFRA	DE	DEUTSCHE BOERSE AG	BBG000RJ6W38	BBG000RJ6W38	BBG001S7LTY7	EUR	TH0902010014	B15T6J9	025638794
THAI BEVERAGE PCL	T6W	GF	XDUS	XDUS	DE	BOERSE DUESSELDORF	BBG000RJ6W38	BBG000RJ6W38	BBG001S7LTY7	EUR	TH0902010014	B15T6J9	025638794
THAI BEVERAGE PCL	T6W	GS	XSTU	XSTU	DE	BOERSE STUTT GART	BBG000RJ6W38	BBG000RJ6W38	BBG001S7LTY7	EUR	TH0902010014	B15T6J9	025638794
THAI BEVERAGE PCL	T6W	GM	XMUN	XMUN	DE	BOERSE MUENCHEN	BBG000RJ6W38	BBG000RJ6W38	BBG001S7LTY7	EUR	TH0902010014	B15T6J9	025638794
THAI BEVERAGE PCL	T6W	GB	XBER	XBER	DE	BOERSE BERLIN	BBG000RJ6W38	BBG000RJ6W38	BBG001S7LTY7	EUR	TH0902010014	B15T6J9	025638794
THAI BEVERAGE PCL	T6W	TH	XGAT	TGAT	DE	Tradegate	BBG000RJ6W38 Ref FIGI BBG000RJ6W38 Ref Composite	BBG00H300Z64	BBG00H300Z55	EUR	TH0902010014	B15T6J9	025638794
THAI BEVERAGE PCL	THBEV	SW				Composite to tie Swiss legacy listings to	BBG006TLWKM4	BBG006TLWKM4	BBG001S7LTY7	CHF	TH0902010014	B1054Z0	025638794
THAI BEVERAGE PCL	THBEV	BW	XBRN	XBRN	CH	BX SWISS AG	BBG006TLWKT7	BBG006TLWKM4	BBG001S7LTY7	CHF	TH0902010014	B1054Z0	025638794
THAI BEVERAGE PCL	THBEVEUR	XB	BOAT	BOAT	GB	CINNOBER BOAT	BBG007254XH5	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XI			IT	BORSAITALOTC	BBG007254XJ3	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XH			HU	BUDAPEST OTC	BBG007254XK1	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XF			IE	DUBLIN SE OTC	BBG007254XM9	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XD			DE	DEUTSCH OTC	BBG007254XN8	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XE	XSMP	XSMP	GB	SMARTPOOL	BBG007254XP6	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XJ			SI	LJUB SE OTC	BBG007254XQ5	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XL			GB	LONDON SE OTC	BBG007254XR4	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XG			SE	NGM OTC	BBG007254XS3	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XO	XOPV	XSTO	SE	OTC PUBLIC MARKET	BBG007254XT2	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XN			NO	OSLO OTC	BBG007254XV9	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XP			GB	PLUS MKT OTC	BBG007254XW8	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XS			DE	STUTT GART OTC	BBG007254XY6	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XA			AT	CEESEG OTC	BBG007254XZ5	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XT	HOTC	ASEX	GR	HELLENIC OTC	BBG007254Y10	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XW			CH	SIX Off-exchange	BBG007254Y29	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XU				Bulgaria OTC	BBG007254Y38	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	XV	BOTC	BCXE	GB	OFF EXCHANGE IDENTIFIER FOR OTC TRADES REPORTED TO BATS EUROPE	BBG007254Y56	BBG007254XG6	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	THBEVEUR	EU			GB	EUROPEAN Composite for any potential Eurozone listings	BBG007254Y74	BBG007254Y65	BBG001S7LTY7	EUR	TH0902010014		025638794
THAI BEVERAGE PCL	T6W	GZ	MUND	XMUN	DE	BOERSE MUENCHEN - MARKET MAKER MUNICH - FREIVERKEHR MARKT	BBG00FGX08K6	BBG00FGX08G1	BBG001S7LTY7	EUR	TH0902010014	B15T6J9	025638794
THAI BEVERAGE PCL	T6W	QT	XQTX	XDUS	DE	BOERSE DUESSELDORF - QUOTRIX	BBG00G7BW612	BBG00G7BW5Z7	BBG001S7LTY7	EUR	TH0902010014	B15T6J9	025638794
THAI BEVERAGE PCL	TB	XBKK	XBKK	XBKK	TH	STOCK EXCHANGE OF THAILAND	BBG000BFYD61	BBG000BFYD61	BBG001S7LTY7	THB	TH0902010006		
THAI BEVERAGE PCL-NVDR	TB	XBKK	XBKK	XBKK	TH	STOCK EXCHANGE OF THAILAND	BBG000BX8K01	BBG000BX8K01	BBG001S7LTY7	THB	TH0902010R15		
THAI BEVERAGE PCL-FOREIGN	TB	XBKK	XBKK	XBKK	TH	STOCK EXCHANGE OF THAILAND	BBG000BX8JR5	BBG000R7J995	BBG001S7LTY7	THB	TH0902010014		14

Different FIGIs
by context, tied
together by
metadata
references

Regulatory and Industry Benefits

- Data **Management** and Quality
 - Ability to properly associate different legacy identification systems based on different sets of metadata without individually mapping every dataset
 - Provides methodology for aggregation of data across jurisdictions, silos, functional areas
 - Provides methodology for ‘apples to apples’ comparison of financial instruments based on context
- System **interoperability**
 - Enables integration of legacy systems to new development through use of metadata extensions without requiring data model changes in legacy systems or enforcing legacy models on new development
 - Metadata management of multiple security masters within a single firm (see TABB Group Report; “Building a Framework for Innovation and Interoperability” – May 8, 2017; <http://tabbforum.com/opinions/standards-would-ease-market-data-pain-spur-innovation>)
- **Standards** interoperability
 - Can incorporate any data points within metadata, regardless of origin
 - Can be utilized in ISO15022/ISO20022, FIX, FIBO, etc
 - standard and jurisdictionally independent
- Quickly **adapt** to market changes via metadata extensions without need to update the standard
- Based in **Open Data**
 - Freely available, no direct cost recovery on identifier and primary related metadata or services to access that data
 - Expectation that data is output of normal course of business for a provider, but allows for value-add services as long as core data is available separately and remains open
 - Provide Regulators a non-fee liable methodology for collecting financial instrument related data
- Open **governance** framework
 - Any firm can seek to become a Certified Provider (akin to an LOU in the GLEIF model), OMG open membership
 - Especially relevant for ‘specialists’ in specific, more esoteric asset types (such as commodities)
- Adoption and maturity
 - Included by 137 data vendors worldwide, but with varying levels of support/promotion
 - Over 400 non-Bloomberg financial firms have adopted and use to varying levels, in addition to direct Bloomberg clients