

FactSet - CRSP Linking Table by WRDS

FactSet - CRSP linking table provides the historical matching between various *FactSet* Identifiers and *CRSP* PERMNO/PERMCO.

Linking Procedures

FactSet maintains various identifiers across the products. **FSYM_ID** is the most fundamental one that is used across the *FactSet* products, such as *FactSet Fundamental* and *Lionshares*. FSYM_ID is associated with a security, and there are three types of FSYM_ID, Security, Regional, and Listing.

The historical mapping is established between **FSYM_ID** (Security, Regional, and Listing) and **PERMNO** via public identifiers (CUSIP, TICKER). In addition, **FACTSET_Entity_ID** is included in the linking table for firm-level linkages with **PERMCO**.

Also, the legacy id, **FS_PERM_SEC_ID** is included in the table for users who want to use legacy data or some current products that are still using legacy id instead of **FSYM_ID**.

Linking is done based on 8-digit historical CUSIP and stock ticker symbols. Linkages are established with **CUSIP** matching. **Ticker**-based matching also add a few more linkages.

Because there are several different date ranges (between **CUSIP** and **FSYM_ID**, between **CUSIP** and **PERMNO**, between **FSYM_ID** and **FACTSET_Entity_ID**), we choose the **link_bdate** and **link_edate** with a conservative method. Only the commonly overlapped period among the date ranges are chosen to be the effective link period.

WRDS FactSet - CRSP Linking Table is provided to users who subscribe *CRSP* and either *FactSet Fundamental* or *Lionshares*. It will be updated annually.

Notes

We add FSYM_ID_KIND variable as an FSYM_ID type variable since *FactSet* uses different types of FSYM_ID in each product but with the same variable name, 'FSYM_ID'.

The FSYM_ID_KIND variable helps to resolve an issue that often users are not able to note which type of FSYM_ID is being used without reading the data manual. Users can filter the linking table by choosing the type of FSYM_ID in need before merging it to other *FactSet* products.

For the security FSYM_ID, the value of FSYM_ID_KIND is "S", for the regional FSYM_ID, the value is "R", and for the listing FSYM_ID, the value is "L". This follows the *FactSet's* rule that security FSYM_ID ends with "S", regional FSYM_ID ends with "R", and listing FSYM_ID ends with "L".

- **Security FSYM_ID**

When utilizing the complex linkages across **FSYM_ID**, **FACTSET_Entity_ID**, **PERMNO**, and **PERMCO**, users should choose **FSYM_ID_KIND = "S"** to have uniquely identified linkages because the linking between **FACTSET_Entity_ID** and **FSYM_ID** is established based on **security FSYM_ID**.

- **Regional FSYM_ID**

FactSet Fundamental uses **regional FSYM_ID**. Occasionally, **security FSYM_ID** is also used. Users can keep only “R” and “S” type linkages and use them to merge *FactSet Fundamental* with *CRSP*.

- **Listing FSYM_ID**

The listing FSYM_ID is used to identify active/inactive security listings. The listing FSYM_ID always ends with ‘L’. Therefore, if the *FactSet* data table you are working on has FSYM_ID ending with ‘L’, you need to choose **FSYM_ID_KIND = “L”** in order to link the *FactSet* data with *CRSP* data.

As briefly mentioned in the beginning, in *FactSet*’s legacy data, the unique security-level identifier is not **FSYM_ID** but **FS_PERM_SEC_ID**. In addition, some of the datasets in the current version of *FactSet* still have **FS_PERM_SEC_ID** as a unique security-level identifier.

- **FS_PERM_SEC_ID**

FactSet Fundamental’s price data keep **FS_PERM_SEC_ID** instead of new **FSYM_ID**. Also, the **h_security** series in *FactSet* Common library also keep **FS_PERM_SEC_ID**. In this linking table, we integrate the mapping between FSYM_ID and FS_PERM_SEC_ID for *CRSP* securities (North America) for our users’ convenience. If you want to have the entire mapping between FSYM_ID and FS_PERM_SEC_ID, you can use **sym_legacy_perm_id.sas7bdat** located in **/wrds/factset/sasdata/common/**

Data Items

For more detailed definition of the variables, please refer to *FactSet* manuals and *CRSP* manual.

Variable	Description
FSYM_ID	A unique <i>FactSet</i> identifier assigned to a security (v3)
FSYM_ID_KIND	Type of FSYM_ID. S represents Security, R represents Regional, L represents Listing
PROPER_NAME	Name of the security associated with the identifier
FSYM_REGIONAL_ID	A Regional-level <i>FactSet</i> identifier
FSYM_SECURITY_ID	A Security-level <i>FactSet</i> identifier
FS_PERM_SEC_ID	Legacy security id still being kept in several data tables
FACTSET_ENTITY_ID	Unique <i>FactSet</i> identifier representing an entity
ENTITY_PROPER_NAME	Name that the entity is commonly referred to as, normalized and in proper case
cusip_fs	9-digit CUSIP number retained in <i>FactSet</i>
TICKER_EXCHANGE	<i>FactSet</i> ticker symbol appended with exchange code. This is a HEADER variable, not historical.
PERMNO	<i>CRSP</i> Permanent Number

PERMCO	CRSP Permanent Company Number
CUSIP	CRSP Header CUSIP Number
NCUSIP	CRSP Historical CUSIP Number
TICKER	CRSP Historical Ticker Symbol
COMNAM	CRSP Historical Company Name
link_bdate	Effective link start date
link_edate	Effective link end date

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