

This dataset links regulatory identification numbers (RSSD ID) from the National Information Center (NIC) to the permanent company number (PERMCO) used in the Center for Research in Security Prices (CRSP) from January 1, 1990 to September 30, 2011. The RSSD ID¹ is a unique identifier assigned to commercial banks or bank holding companies by the Federal Reserve and is the primary identifier of entities in regulatory reports such as the Call Report (FFIEC031) and Y9-C. The PERMCO is a unique and permanent company identification number assigned to publicly-traded institutions in the CRSP database. While a company may change its name, ticker, exchange or CUSIP, the PERMCO will remain the same. In CRSP, companies with multiple tranches of publicly traded stock will be assigned to multiple PERMNOs. These PERMNOs will be linked back to a single PERMCO. Linking the RSSD ID to PERMCO allows researchers to match bank regulatory data with financial market data².

Variable Definitions

- *name*: The most recent institution name
- *inst_type*: The institution type (commercial bank or bank holding company)
- *entity*: RSSD ID (RSSD9001) identifier
- *permco*: CRSP PERMCO identifier
- *dt_start*: Start date of link (YYYYMMDD format)
- *dt_end*: End date of link (YYYYMMDD format)

Matching Methodology 1990Q1-2007Q4

The matching methodology until 2007q4 is based on the December volume of the *SNL Bank Quarterly* for the years 1990-2006. The *SNL Bank Quarterly* contains geographic and financial data for publicly-traded banks and bank-holding companies on a quarterly basis. It provides market data on banks traded on the NYSE, AMEX and NASDAQ exchanges as well as entities traded on the OTC Bulletin Board and Pink Sheets beginning in 2001.

FRBNY researchers used the bank name and state location from the *Bank Quarterly* and regulatory data to match banks from these two datasets so that each RSSD ID is mapped to a ticker symbol. Finally, each RSSD ID-ticker pair is manually matched to a PERMNO/PERMCO by inputting the company name or ticker information into the CRSP code lookup web interface.

Current update (February 2012)

The *SNL Bank Quarterly* was discontinued in 2006³. The previous PERMCO-RSSD dataset released by the FRBNY verified links as of 2007q4. In this current update dated February 2012, FRBNY researchers

¹ The RSSD ID is also known as the “entity code” or by its mnemonic RSSD9001.

² Financial market data identifiers include a stock ticker (which are reassigned and not unique), a six-digit CUSIP (the first six digits of the eight- or nine-digit S&P issuance identifier identify the issuer company), a PERMNO (the permanent security identification number assigned by CRSP), or the PERMCO (the permanent company identification number assigned by CRSP). The file links RSSD ID and PERMCO since both refer to an entity at the company-level rather than at the security-level. The link between PERMCO and PERMNO is maintained by CRSP and can be found through the CODE_LOOKUP tables.

³ Some of the data is replicated through the web SNL interface, namely as part of the “Tearsheet”, but this information is not kept on a historical basis.

have verified and updated matches from the last published dataset, and have also included new PERMCO-RSSD links since 2006.

FRBNY researchers begin with all entities filing regulatory reports and match these banks to the universe of financial services companies in Compustat⁴. Although Compustat uniquely identifies companies with a GVKEY identifier, the Wharton Research Data Services (WRDS) maintains a database of links between GVKEYs and PERMCOs. Researchers use the CCM Linking table (ccmxpf_linktable) from the CRSP/Compustat Merged Database in WRDS to link PERMCO identifiers to each GVKEY.

In order to link RSSD IDs to PERMCOs, researchers match banks on name, city and state, and balance sheet variables (total assets, total liabilities, and common stock outstanding). Due to reporting discrepancies, balance sheet variables can occasionally differ between Compustat and regulatory filings; as a result, a difference threshold of one percent is used to match balance sheet variables. Following this methodology, new and old PERMCO-RSSD links are updated until 2011q3.

Method to determine the last date of a link:

- If the match runs through 2011q3, then researchers assume the link remains valid;
- If the match stops after a particular quarter, researchers manually research the institution history of the entity through NIC to determine if the entity was merged, acquired or taken under government receivership and/or closed⁵. The link end date is updated in these cases. If the entity continues to exist but the PERMCO link fails to match, then researchers use the STOCKNAMES table in CRSP to research changes in the company's security. The STOCKNAMES table provides a historical record of the start and end dates for PERMCO-company name links.⁶

The PERMCO generally accounts for all mergers and acquisitions over time. However in some cases such as the conversion of a publicly traded bank into a publicly traded bank holding company, or the acquisition of a public bank or bank holding company by a private one, the entity id and/or the PERMCO may change. This information is updated in the date ranges in the file. The date ranges for these links refer to the exact regulatory entity not necessarily the regulatory high-holder. RSSD and PERMCO links may not be unique in the dataset due to mergers and legal entity changes, although they are unique in a date range⁷.

⁴ Entities in Compustat have a four-digit SIC code. We take the two-digit major group numbers 60-67 as finance, insurance and real estate entities. We use two regulatory reports: the FFIEC 031 and the FR-Y9C filed by banks and bank holding companies respectively.

⁵ National Information Center (NIC) is a data repository of institution characteristics collected by the Federal Reserve System. NIC Institution Search is available at <http://www.ffiec.gov/nicpubweb/nicweb/SearchForm.aspx>.

⁶ WRDS through the UNIX environment allows access to the SAS table *STOCKNAMES* in the directory (/wrds/crsp/sasdata/ and /wrds/compustat/sasdata). More information on access is available through WRDS Support (<http://wrds-web.wharton.upenn.edu/wrds/support/>).

⁷ Generally, in a merger, both PERMCOs and RSSDs remain with the acquirer. However, an example of a multiple match due to a merger is when Chemical Banking Corp (PERMCO 20436 and entity code 1039502) acquired Chase Manhattan Bank (with PERMCO 20432 and entity code 1040795) in 1996, but changed its name to Chase Manhattan Bank (the acquired firm). In the regulatory data, the entity code 1039502 continues past March 1996, but the name changes to *Chase Manhattan Bank*, and the NIC data confirms that *Chemical Banking Corp* acquired *Chase Manhattan*. Chase Manhattan Bank (ticker CMB) is associated with the PERMCO 20432 through March 1996, but is then associated with the PERMCO 20436 until January 2001. We link PERMCO 20436 and entity code

Because the matching methodology uses balance sheet items, it requires a company to be in Compustat. Although the Compustat and CRSP link maintained by WRDS is highly accurate, the two datasets have slightly different company coverage. The methodology will thus match most large banks as these large banks appear in both Compustat and CRSP⁸. Small banks may be missed because they are not large enough to be in Compustat or because they do not file consolidated regulatory reports (Y9-C)⁹.

In order to identify smaller banks not covered in the Compustat universe, we use Standard & Poor's Capital IQ database to collect information on all bank initial public offerings from 1990q1 to the present, and subsequently match the bank PERMCOs from CRSP to company identifiers from Capital IQ based on exchange-tickers. From Capital IQ, researchers are able to find geographic information that is used in addition to bank names to match PERMCOs to RSSDs.

Finally, researchers then take the universe of all banks in CRSP and attempt to name-match any remaining banks to RSSD IDs.¹⁰ By using the name history in CRSP and NIC, researchers add a measure of robustness to this final name-matching method.

The result of the above matching techniques yields 1,174 PERMCO-RSSD links from January 1, 1990 to September 30, 2011.

This version of the data does not include a match for Savings and Loan companies, thrifts or foreign banks.

1039502 from January 1, 1990 to September 20, 2011 and also between PERMCO 20432 and entity code 1040795 from January 1, 1990 to March 31, 1996. Another example of non-unique PERMCOs arises from the merger of Mellon Financial Corporation and the Bank of New York Company, Inc. on July 1, 2007 to create the Bank of New York Mellon Corp. In CRSP, both the Bank of New York Company, Inc. and the resulting entity after the merger, Bank of New York Mellon Corporation, are given the same PERMCO 20265. However, following the merger of Bank of New York (entity code 1033470) and Mellon Financial Corporation (entity code 1068762), Bank of New York Mellon Corp is given a newly created entity code 3587146. As a result, the PERMCO 20265 is matched to entity code 1033470 from January 1, 1990 to July 1, 2007 and to entity code 3587146 from July 2, 2007 to September 30, 2011.

⁸ CRSP covers stock market data on companies listed on major stock exchanges (NYSE, AMEX, NASDAQ); Compustat includes large companies on the NYSE, AMEX and NASDAQ, including companies comprising the S&P Industrial Index. The companies that we fail to capture will typically be smaller banks and/or banks that are listed on OTC markets.

⁹ Another way in which we may fail to match small banks is due to consolidation. The respondent panel for the FR Y9-C is Bank Holding Companies with total consolidated assets of \$500 million or more. Smaller BHCs and banks file only the FFIEC 031. In order to match small banks' assets to Compustat, we sum across entities. As a result, balance sheet variables may not match those of the consolidated company in Compustat and comparisons of their balance sheet variables will exceed our matching threshold.

¹⁰ Researchers subset the bank universe in CRSP by applying the following industry filters: three-digit SIC equal to 602 or 671 and/or NAICS code equal to 522110 or 551111.