**Data and programs for “Asset Specificity of Nonfinancial Firms”**

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**Clean**

* capitaliq\_bridge.do: CapitalIQ company ID to gvkey
* oplease.do: collects operating lease data to correct for Compustat assets, liabilities, debt, PPENT after the lease accounting change in 2019. See here for more information: <https://www.dropbox.com/s/w7vuu1wi62grqmy/lease.pdf?dl=0>
* compustat\_ann.do: cleans annual Compustat data
* compustat\_qtr.do: cleans quarterly Compustat data
* vol.do: calculates stock return volatility
* transportationIO.do: constructs transportation cost from 1997 BEA Input-Output table; also constructs value and weight from Commodity Flow Survey
* customizationIO.do: constructs design cost share from 1997 BEA Input-Output table; also constructs the share of shipment from retailers/wholesalers from Commodity Flow Survey
* indoutput.do: cleans industry output and value added data from BEA
* fixed asset composition.do: cleans BEA fixed asset tables
* physical attribute fixed asset.do: construct fixed asset physical attribute for each industry (two-digit SIC codes and BEA sectors)
* physical attribute inventory.do: construct inventory physical attribute for each industry (two-digit SIC codes)
* orbis.do: cleans ORBIS data on subsidiary structure
* ciq\_summary.do: clean CapitalIQ firm-level debt summary data
* categorize master.do: firm-level debt classification

Run in the order listed above.

**Main**

* Listing.do: generates Table II, Table IA1, Table IA3, and Table IA21
* Sumstat.do: generates Table III
* Physical Attribute.do: generates Table IV Panel A, Table IA4, Table IA15, Table IA16, Table IA17, Table IA18, Table IA19, and Table IA20
* IndustryCondition.do: generates Table IV Panel B
* Investment.do: generates Figure I, Table V, Table VI, Table VII, Table IA6, Table IA7, and Table IA8
* Intangibles.do: generates Figure II, Figure III, Figure IV, Figure IA1, and Table IA9
* Others.do: generates Figure IA2, Figure IA3, Table IA10, and Table IA11
* VerticalIntegration.do: generates Table IA12
* DepreciationCheck.do: compares depreciation rate in BEA data vs. Compustat data; generates Figure IA14
* EquipmentWatch.do: uses data on auctions of construction equipment to calculate the auction recovery rate and test the sensitivity of the auction recovery rate to economic conditions; generates Table IA6
* Ch7.do: compare estimated total liquidation value from Chapter 11 liquidation analysis with Chapter 7 total liquidation receipts; generates Table IA2

**Data**

* PacerRecovery: industry-average liquidation recovery rates
* PacerRecovery\_detail: case-level liquidation recovery rates and background information
* PacerRecovery\_detail\_private: additional case-level liquidation recovery rates and background information from large private companies’ filings
* RecoveryPhysicsFA97\_sic2: final result of PPE liquidation recovery rate and fixed asset physical attributes at the two-digit SIC code level
* RecoveryPhysicsFA97\_bea: final result of PPE liquidation recovery rate and fixed asset physical attributes at the BEA sector level

BEA

* NAICSUseDetail: 1997 input-output use table
* IO-CodeDetail: 1997 input-output table industries
* detailnonres\_stk1: BEA fixed asset table stock by asset type and industry
* detailnonres\_dep1: BEA fixed asset table depreciation by asset type and industry
* GrossOutput\_Ind\_post97: industry gross output after 1997
* ValueAdded\_Ind\_post97: industry value added after 1997
* GrossOutput\_Ind\_pre98: industry gross output before 1998
* ValueAdded\_Ind\_pre98: industry value added before 1998
* BEAFixedAssetCategory: mapping between BEA sectors (in BEA fixed asset tables) and two-digit SIC codes (worksheet “Industry”). Also mapping between asset types in BEA fixed asset tables and in 1997 input-output tables, and mapping between asset types in BEA fixed asset tables and in asset types in commodity flow survey (worksheet “IO”).
* PACERSIC: mapping between industry code in Chapter 11 data (SIC codes) and BEA sectors (in BEA fixed asset tables)
* BEA\_NAICS: mapping between industries in 1997 BEA input-output table and NAICS
* IOCOMMODITIES: mapping between Rauch data and BEA input-output table
* IOUse\_After\_Redefinitions\_PRO\_DET: 2012 and 2007 BEA input-output table
* naics4\_IO\_match: map between NAICS code and 2012 BEA input-output industry codes
* BEAFixedAsset: panel of BEA fixed asset tables for equipment and structures by sector and year (stock of fixed asset)
* BEAIP: panel of BEA fixed asset tables for intellectual property by sector and year (stock of intellectual property)
* BEAFixedAssetDep: panel of BEA fixed asset tables for equipment and structures by sector and year (depreciation of fixed asset)
* BEAIPDep: panel of BEA fixed asset tables for intellectual property by sector and year (depreciation of intellectual property)
* transportation\_BEA4/5/6: transportation cost measure at 4/5/6 digit 1997 BEA input-ouput industry level
* designshr\_BEA4/5/6: design intensity measure at 4/5/6 digit 1997 BEA input-ouput industry level
* OutputbyInd\_out: panel of gross output and value added by industry-year
* UseDetail: 1997 input-output use table
* Rauch\_BEA4/5/6: Rauch data per 4/5/6 digit 1997 BEA input-ouput industry
* beafixedasset: processed fixed asset physical attributes (transportation cost and design intensity) at the BEA sector-asset type level
* beafixedassetout: processed fixed asset physical attributes (transportation cost and design intensity) at the BEA sector level
* beafixedassetout\_sic2: processed fixed asset physical attributes (transportation cost and design intensity) at the two-digit SIC code level

CapitalIQ

* capitaliq\_debt\_2020: CapitalIQ debt detail data (from WRDS)
* debt detail USA: CapitalIQ debt detail data (from WRDS)
* cpst\_bridge\_raw.dta: original bridge between CapitalIQ identifier and Compustat gvkey (from WRDS)
* ciqdt: CapitalIQ debt summary (from WRDS)
* g\_exrtUSD\_mth: exchange rate (from WRDS)
* cpst\_bridge\_qtr: bridge between CapitalIQ identifier and Compustat gvkey
* oplease: operating lease data from CapitalIQ
* ciqdt\_short\_out\_pub.dta: cleaned debt summary data
* debttype\_detail: debt classification at the debt level
* debttype\_out: debt classification at the firm level

CFS

* 3DCommodity: shipment value and weight by asset type in 1997 CFS data for 3-digit SCTG codes
* 4DCommodity: shipment value and weight by asset type in 1997 CFS data for 4-digit SCTG codes
* cfs\_2012\_pumf\_csv: shipment-level data for 2012 CFS
* BEAFixedAsset\_ValueWeight: value/weight ratio in 1997 CFS data by asset type in BEA fixed asset tables
* wholesaleshr: shipment share from retailers/wholesalers in 2012 CFS micro data by asset type in BEA fixed asset tables

Compustat

* compustat\_ann: original Compustat annual file (from WRDS)
* compustat\_qtr: original Compustat quarterly file (from WRDS)
* rouant\_qtr: original operating lease data from Compustat Snapshot (from WRDS)
* compustat\_segment: original Compustat segment file (from WRDS)
* PetersTaylor: Peters-Taylor data on estimated off balance sheet intangibles (from WRDS)
* compustat\_rouant\_qtr: Compustat data with operating lease from Compustat Snapshot
* lease\_firm\_noindustry: Compustat data with operating lease from Compustat Snapshot and CapitalIQ
* lease\_firm: Compustat data with operating lease (final)
* compustat\_ann\_out: cleaned Compustat annual file
* compustat\_qtr\_out: cleaned Compustat quarterly file

CRSP

* crsp\_mon: CRSP monthly stock file (from WRDS)
* crsp\_daily: CRSP daily stock file (from WRDS)
* factors\_1970-2020: Fama-French factor data <https://wrds-www.wharton.upenn.edu/pages/get-data/fama-french-portfolios-and-factors/fama-french-portfolios/factors-daily-frequency/>
* crsp\_qtr\_out: quarterly stock returns and volatility

EquipmentWatch

* original\_price: original price by equipment model and year. Proprietary data.
* auctions\_full: equipment auction data from Murfin and Pratt (2019). Proprietary data.

International

* GDPPC: World Bank GDP per capita data
* wgidataset: rule of law index from World Bank Governance Indicators
* isocode: country codes
* governance\_data: World Economic Forum business sophistication index

Macro

* SIC2\_price\_change\_freq: Price rigidity data from Nakamura and Steinsson (2008) aggregated to two-digit SIC level
* FrequencyNaics2/3/4/5/6d: Price rigidity data from Gorodnichenko and Weber (2016) at 2/3//4/5/6 digit NAICS level

ORBIS

* ob\_industry\_classifications\_l/m/s: ORBIS industry dataset (from WRDS)
* orbis\_sub: ORBIS first-level subsidiary dataset (from WRDS)
* orbis\_background\_2018: list of firms in 2018 (from WRDS)
* industry\_large/medium/small\_out: cleaned ORBIS industry dataset
* orbis\_sub\_out: ORBIS data with industries matched to parents and subsidiaries
* orbis\_parent\_sub\_io12: ORBIS data at the parent-subsidiary industry pair level
* orbis\_parent\_sub\_io12\_out: ORBIS data at the parent-subsidiary industry pair level, matched with input-output share data
* orbis\_background\_2018\_entity: list of firms in 2018 with background information

PACER

* bankruptcy\_filing: list of bankruptcy filings from New Generation Research BankruptcyData

**Model**

* model.R: Code for model in Internet Appendix Section IA3.