

---

# COMPONENTS OF U.S. FINANCIAL-SECTOR GROWTH, 1950-2013

---

Samuel Antill, David Hou, and Asani Sarkar

---

## APPENDIXES A–D: ADDITIONAL MATERIALS

---

### CONTENTS

Appendix A: Data

Appendix B: Classifications

Appendix C: Additional Subsector Tables

Appendix D: Equity Tables and Charts



## APPENDIX A: DATA

### CRSP and Compustat

The market value of equity is computed as the market price of shares times the shares outstanding. The data on public equity prices and shares outstanding comes from the Center for Research in Security Prices (CRSP). We pull the universe of public equity data from January 1, 1950, to March 31, 2013. Data on prices and shares outstanding are adjusted for dividends, stock splits, and other capital actions using the cumulative factors to adjust prices and shares, respectively. We also correct for the convention of entering the negative bid ask spread for price on days with no trading activity. We drop observations for which there are neither SIC nor NAICS data, since we can not reliably classify such a firm-day as finance or nonfinance. Finally, we exclude from our sample dates that are well-known outliers (Black Monday 1987; September 11 2001; Hurricane Sandy, October 29 2012).

The data on book value of equity and debt comes from the Compustat database. All data are collected at the consolidated balance-sheet level and not at the level of firm subsidiaries. We similarly drop observations for which there are neither SIC nor NAICS data. Our measure of total book value of debt is calculated as the total book value of assets (ATQ) minus the total book value of stockholder equity or book equity (SEQQ). The quarterly balance-sheet data from Compustat begin in 1961, but coverage of firms in Compustat for the earlier years (prior to 1975) is incomplete. As an example, our liabilities variable is missing for over 85 percent of observations prior to 1975. Since the data are incomplete and the NAICS and SIC coverage is far more sparse, we begin our Compustat series from 1975 rather than 1961. Fortunately, coverage is fairly complete for recent data. To the best of our knowledge, CRSP coverage does not suffer substantially from gaps for our sample period.<sup>1</sup>

Identification of sectors is performed using two systems: the Standard Industrial Classification (SIC) and the North American Industry Classification System (NAICS). SIC served as the standard from its origination in 1937 to 1997, when NAICS was developed as its eventual successor. However, NAICS codes are not available in the CRSP database prior to August 24, 2001. Therefore, we rely on a combination of SIC and NAICS codes to group firms. Where discrepancies arise, we take NAICS as the standard. Both classification systems break out institutions at a level of granularity sufficient to allow us to distinguish between financial and nonfinancial firms and to define our specific sector categories such as shadow banking, DCIs, securities, and insurance firms. We have discovered no discrepancies in the classification systems of SIC and NAICS that would materially affect our results. The classification of sectors in our paper is described in appendix B.

---

<sup>1</sup>As a precautionary measure, we also used supplementary data sources to verify our metrics. The SEC EDGAR database indicates that the total number of firms filing 10-K forms is roughly in line with our CRSP calculations.

## Flow-of-Funds

We use liability data from the Flow-of-Funds (FOF) Accounts of the United States (Z.1) database released by the Federal Reserve Board of Governors which reports the book value of liabilities of various sectors. To classify subsectors within FOF, we use the levels dataset within the FOF data. We match the categories in this dataset as closely as possible with the same finance subsectors that we defined using SIC and NAICS data. The FOF sector classifications are described in appendix B.

## Call Reports

For banks, we supplement our previously described measures with additional data from the Consolidated Reports of Condition and Income (call reports). The advantage of these data is that it covers private and publicly listed commercial banks and is available at the bank level. The banks required to file this report include all national banks, state member banks, and nonmember insured banks. In particular, we use the book value of liabilities and the book value of equity for all commercial banks that are required to file the call report regulatory form.

## APPENDIX B: CLASSIFICATIONS

Financial firms according to the SIC system are taken as those in *Division H: Finance, Insurance, and Real Estate* but outside of *Major Group 65: Real Estate*. Financial firms according to NAICS are those in *Sector 52: Finance and Insurance*. Tables B.1 and B.2 show the NAICS and SIC codes corresponding to each financial subsector.

Within financial firms, **depository credit institutions** are firms involved in “the activities typically associated with traditional banking — lending to consumers and corporations, deposit taking, and processing financial transactions” Greenwood and Scharfstein (2013, 6). **Shadow banks**, also referred to as nondepository credit institutions (NDCI), are of particular interest as a subsector. They can be broadly defined as firms that conduct “credit intermediation involving entities and activities outside the regular banking system” (FSB 2011, 1). In classifying shadow banking, FSB (2011, 3) has the philosophy that “authorities should cast the net wide, looking at all nonbank credit intermediation to ensure that data gathering and surveillance cover all areas where shadow banking-related risks to the financial system might potentially arise.”

In its definition of shadow banking, FSB (2012) includes hedge funds, finance companies, structured finance vehicles, financial holding companies, broker dealers, MMMFs, U.S. funding corporations, and other investment funds. In a similar vein, we consider several subsectors of shadow banking. **Securities firms** are those involved in “securities trading and market making, securities underwriting” Greenwood and Scharfstein (2013, 6). **Asset management firms** are firms involved in portfolio management and investment management. Poszar et al. (2013, 14) describe the shadow banking sector as containing an “internal shadow banking subsystem ... the credit intermediation process of a global network of banks, finance companies, broker-dealers, and asset managers.” In light of this, we include a subset of asset management and securities firms in our definition of shadow banking (see tables B.1 and B.2). We also include a **real estate** section in our definition of shadow banking, which contains real estate credit firms and mortgage loan brokers.

Outside of shadow banking, **insurance firms** are firms that provide or facilitate the provision of a type of insurance or pension. All other financial firms not classified as asset management, securities firms, depository credit, shadow banks, or insurance are aggregated in the **others** category. Nonfinancial firms are all firms not classified as financials.

One area of discrepancy between SIC and NAICS is in the treatment of financial holding companies. Bank and other financial holding companies are lumped in *Division H* in SIC, but are broken out into *Sector 55: Management of Companies and Enterprises* in NAICS. We treat NAICS code 551111 *Offices of Bank Holding Companies* as a direct indicator of a financial firm. Firms with codes 551112 *Offices of Other Holding Companies* and 551114 *Corporate, Subsidiary, and Regional Managing Offices* are treated as finance only if their SIC code also meet the criteria listed above.

It is worth noting that both SIC and NAICS classify firms based on their primary type of economic activity. Publicly owned conglomerates with significant concentration in multiple lines of business will necessarily be funneled into one category. The same phenomenon occurs with financial firms; JPMorgan Chase, for example, is treated as depository credit (6021) despite having a nonnegligible securities arm.

In cases where there were partial NAICS codes available that were nonambiguous (e.g., 524 is always an insurance prefix), we classify them as the relevant subsector. In particular, for old SIC codes that we were not able to find the names of, we classified them according to the two digit prefix: 60 for DCI, 61 for NDCI, 62 for Securities, and 63 and 64 for Insurance. All SIC codes beginning in 67 that we were not able to identify were called Other. SIC code 6711 is in some cases a Bank Holding Company while in other cases it is a nonbank holding company. To remedy this, we consider 6711 to be Other, except for any firms that correspond to banks that appear in the call reports data, we call them DCI.

For FOF data, table B.3 shows how the FOF categories correspond to each financial subsector. In the FOF data, we consider **depository credit institutions** to be those companies listed in L.109, representing private depository institutions. This category encompasses L.110 through L.113, which are U.S. Chartered Depository Institutions, Foreign Banking Offices in the U.S., Banks in U.S.-Affiliated Areas, and Credit Unions, respectively, as well as L.128, Holding companies. We consider **asset management** to be those companies listed in L.119 through L.121, which are Money Market Mutual Funds, Mutual Funds, and Closed-End and Exchange Traded Funds (ETFs), respectively. We consider **securities firms** to be those companies listed in L.127, Security Brokers and Dealers. **Real estate** firms are those companies listed in L.122, L.123, and L.126, Government-Sponsored Enterprises (GSE), Agency and GSE backed Mortgage, and Real Estate Investment Trusts, respectively. Since we were unable to replicate the shadow banking classification used by FSB (2011), we follow our CRSP/Compustat classification and consider **shadow banks** to include all those firms considered **asset management**, **real estate**, or **securities firms**, as well as L.124, Issuers of Asset Backed Securities, and L.125, Finance Companies. We consider **insurance** to be those companies listed in L.115 through L.118, which are Life Insurance Companies, Private Pension Funds, State and Local Government Employee Retirement Funds, and Federal Government Retirement Funds, respectively. Finally, we categorize **other** as those firms listed in L.129, Funding Corporations, and L.108, Monetary Authority.<sup>2</sup>

---

<sup>2</sup>Because Monetary Authority, GSE, and Agency and GSE backed Mortgage are government sectors, including them in the Finance category might distort our inference on the effect of the crisis. We explain the effect of excluding GSEs in the main text. Excluding Monetary Authority had little to no effect on our results— it is virtually nonexistent in the publicly-listed measures, and it is a small portion of finance by *Fsize*.

Table B.1: Financial and Shadow Banking Categorization, by NAICS code

NAICS	Name	Financial Subsector	SB Subsector?	Type of SB CI
521110	Monetary Authorities-Central Bank	Other	No	-
522110	Commercial Banking	DCI	No	-
522120	Savings Institutions	DCI	No	-
522130	Credit Unions	DCI	No	-
522190	Other Depository Credit Intermediation	DCI	No	-
522210	Credit Card Issuing	NDCI	Yes	OCI
522220	Sales Financing	NDCI	Yes	OCI
522291	Consumer Lending	NDCI	Yes	OCI
522292	Real Estate Credit	NDCI	Yes	RECI
522293	International Trade Financing	NDCI	Yes	OCI
522294	Secondary Market Financing	NDCI	Yes	OCI
522298	All Other Nondepository Credit Intermediation	NDCI	Yes	OCI
522310	Mortgage and Nonmortgage Loan Brokers	NDCI	Yes	OCI
522320	Financial Transactions Processing, Reserve, and Clearinghouse Activities	Other	No	-
522390	Other Activities Related to Credit Intermediation	Other	No	-
523110	Investment Banking and Securities Dealing	Sec	Yes	SCI
523120	Securities Brokerage	Sec	Yes	SCI
523130	Commodity Contracts Dealing	Sec	Yes	SCI
523140	Commodity Contracts Brokerage	Sec	Yes	SCI
523210	Securities and Commodity Exchanges	Other	No	-
523910	Miscellaneous Intermediation	AM	No	-
523920	Portfolio Management	AM	No	-
523930	Investment Advice	AM	No	-
523991	Trust, Fiduciary, and Custody Activities	AM	No	-
523999	Miscellaneous Financial Investment Activities	AM	No	-
524113	Direct Life Insurance Carriers	Ins	No	-
524114	Direct Health and Medical Insurance Carriers	Ins	No	-
524126	Direct Property and Casualty Insurance Carriers	Ins	No	-
524127	Direct Title Insurance Carriers	Ins	No	-
524128	Other Direct Insurance (except Life, Health, and Medical) Carriers	Ins	No	-
524130	Reinsurance Carriers	Ins	No	-
524210	Insurance Agencies and Brokerages	Ins	No	-
524291	Claims Adjusting	Ins	No	-
524292	Third Party Administration of Insurance and Pension Funds	Ins	No	-
524298	All Other Insurance Related Activities	Ins	No	-
525110	Pension Funds	Ins	No	-
525120	Health and Welfare Funds	Ins	No	-
525190	Other Insurance Funds	Ins	No	-
525910	Open-End Investment Funds	AM	Yes	AMCI
525920	Trusts, Estates, and Agency Accounts	AM	No	-
525930	Real Estate Trusts	NDCI	Yes	RECI
525990	Other Financial Vehicles	AM	Yes	AMCI
551111	Offices of Bank Holding Companies	DCI	No	-

This table reports classifications by NAICS code. We abbreviate Shadow Banking as SB and Credit Intermediation as CI.

AM is Asset Management, AMCI is Asset Management Credit Intermediation, Sec is Securities, and SCI is Securities Credit Intermediation.

DCI is Depository Credit Intermediation, NDCI is Nondepository Credit Intermediation, and OCI is Other Nondepository Credit Intermediation.

RECI is Real Estate Credit Intermediation, Ins is Insurance, and Other is our catchall for financial firms that do not fit into the above categories.

Table B.2: Financial and Shadow Banking Categorization, by SIC code

SIC	Name	Financial Sector	SB Subsector?	Type of SB CI
5932	Used Merchandise Stores	NDCI	Yes	OCI
6011	Federal Reserve Banks	Other	No	-
6019	Central Reserve Depository, Nec	NDCI	Yes	OCI
6021	National Commercial Banks	DCI	No	-
6022	State Commercial Banks	DCI	No	-
6029	Commercial Banks, Nec	DCI	No	-
6035	Federal Savings Institutions	DCI	No	-
6036	Savings Institutions, Except Federal	DCI	No	-
6061	Federal Credit Unions	DCI	No	-
6062	State Credit Unions	DCI	No	-
6081	Foreign Bank and Branches and Agencies	NDCI	Yes	OCI
6082	Foreign Trade and International Banks	NDCI	Yes	OCI
6091	Nondeposit Trust Facilities	AM	Yes	AMCI
6099	Functions Related To Depository Banking	DCI	No	-
6111	Federal and Federally Sponsored Credit	NDCI	Yes	OCI
6141	Personal Credit Institutions	NDCI	Yes	OCI
6153	Short-term Business Credit	NDCI	Yes	OCI
6159	Miscellaneous Business Credit	NDCI	Yes	OCI
6162	Mortgage Bankers and Correspondents	NDCI	Yes	RECI
6221	Security Brokers and Dealers	Sec	Yes	SCI
6231	Security and Commodity Exchanges	Other	No	-
6282	Investment Advice	AM	No	-
6289	Security and Commodity Service	AM	No	-
6311	Life Insurance	Ins	No	-
6321	Accident and Health Insurance	Ins	No	-
6324	Hospital and Medical Service Plans	Ins	No	-
6331	Fire, Marine, and Casualty Insurance	Ins	No	-
6351	Surety Insurance	Ins	No	-
6361	Title Insurance	Ins	No	-
6371	Pension, Health, and Welfare Funds	Ins	No	-
6399	Insurance Carriers, Nec	Ins	No	-
6411	Insurance Agents, Brokers, and Service	Ins	No	-
6711	Financial Holding Companies	Other	No	-
6712	Bank Holding Companies	DCI	No	-
6719	Holding Companies, Nec	Other	No	-
6722	Management Investment, Open-ended	AM	Yes	AMCI
6726	Investment Offices, Nec	AM	Yes	AMCI
6733	Trusts, Nec	AM	No	-
6792	Oil Royalty Traders	AM	No	-
6798	Real Estate Investment Trusts	NDCI	Yes	RECI
6799	Investors, Nec	Sec	Yes	SCI
7389	Business Services, Nec	Other	No	-

This table reports classifications by SIC code. We abbreviate Shadow Banking as SB and Credit Intermediation as CI.

AM is Asset Management, AMCI is Asset Management Credit Intermediation, Sec is Securities, and SCI is Securities Credit Intermediation.

DCI is Depository Credit Intermediation, NDCI is Nondepository Credit Intermediation, and OCI is Other Nondepository Credit Intermediation.

RECI is Real Estate Credit Intermediation, Ins is Insurance, and Other is our catchall for financial firms that do not fit into the above categories.



Table B.3: Financial and Shadow Banking Subsector Categorization, by Flow-of-Funds Category

Flow-of-Funds Category	Financial Sector	SB Subsector?	Type of SB CI
L.108 Monetary Authority	Other	No	-
L.110 US Chartered Depository Institutions, ex. Credit Unions	DCI	No	-
L.111 Foreign Banking Offices in U.S.	DCI	No	-
L.112 Banks in U.S.-Affiliated Areas	DCI	No	-
L.113 Credit Unions	DCI	No	-
L.114 Property-Casualty Insurance Companies	Ins	No	-
L.115 Life Insurance Companies	Ins	No	-
L.116 Private Pension Funds	Ins	No	-
L.117 State and Local Government Employee Retirement Funds	Ins	No	-
L.118 Federal Government Retirement Funds	Ins	No	-
L.119 MMMF	AM	Yes	AMCI
L.120 Mutual Funds	AM	Yes	AMCI
L.121 Closed-End and ETF	AM	Yes	AMCI
L.122 GSE	NDCI	Yes	RECI
L.123 Agency and GSE backed Mortgage	NDCI	Yes	RECI
L.124 Issuers of ABS	NDCI	Yes	OCI
L.125 Finance Companies	NDCI	Yes	OCI
L.126 REITs	NDCI	Yes	RECI
L.127 Security Brokers and Dealers	Sec	Yes	SCI
L.128 Holding Companies	DCI	No	-
L.129 Funding Corporations	Other	No	-

This table reports classifications by flow-of-funds category. We abbreviate Shadow Banking as SB and Credit Intermediation as CI. AM is Asset Management, AMCI is Asset Management Credit Intermediation, Sec is Securities, and SCI is Securities Credit Intermediation. DCI is Depository Credit Intermediation, NDCI is Nondepository Credit Intermediation, and OCI is Other Nondepository Credit Intermediation. RECI is Real Estate Credit Intermediation, Ins is Insurance, and Other is our catchall for financial firms that do not fit into the above categories.

## APPENDIX C: ADDITIONAL SUBSECTOR TABLES

Table C.1: The Relative Size of Asset Management

Full Sample			
	<b>Tsize-qmv</b>	<b>Esize-mv</b>	<b>Fsize</b>
Observations	612,792	5,696,913	245
Mean	1.96	2.67	5.73
Median	1.89	2.08	3.05
Min/Min quarter	0.51/2000q1	0.74 / 1981q3	0.65 / 1953q3
Max/Max quarter	3.59 / 2013q1	8.23 / 2013q1	15.73 / 2013q1
Precrisis: 1980Q1-2007Q3			
	<b>Tsize-qmv</b>	<b>Esize-mv</b>	<b>Fsize</b>
Observations	458,254	3,159,196	111
Mean	1.78	2.13	8.17
Median	1.72	2.05	8.09
Min/Min quarter	0.51 / 2000q1	0.74 / 1981q3	1.66 / 1980q1
Max/Max quarter	3.59 / 2007q1	4.96 / 2007q1	14.45 / 2007q3
Crisis: 2007Q4-2013Q1			
	<b>Tsize-qmv</b>	<b>Esize-mv</b>	<b>Fsize</b>
Observations	124,399	2,268,862	22
Mean	2.88	6.9	13.99
Median	2.85	7.02	14.04
Min/Min quarter	2.47 / 2010q1	5.19 / 2007q4	11.97 / 2009q1
Max/Max quarter	3.34 / 2008q1	8.23 / 2013q1	15.73 / 2013q1

This table reports summary statistics of measures of the size of asset management, relative to the financial and nonfinancial sectors (in percent).

Observation units are firm-days for  $Tsize - qmv$  and  $Esize - mv$ , and quarters for  $Fsize$ . Units for all other statistics are percentages.

For  $Tsize - qmv$  and  $Esize - mv$  we first sum over firms, then average across days for each quarter, and finally take means and medians of quarterly averages.

See table 1 for variable definitions.

Min (Max) quarter refers to the quarter in which the measure achieves its minimum (maximum) value in the sample.

Table C.2: The Relative Size of Securities

Full Sample			
	<b>Tsize-qmv</b>	<b>Esize-mv</b>	<b>Fsize</b>
Observations	359,077	670,854	245
Mean	3.86	0.99	1.34
Median	4.12	0.96	0.81
Min/Min quarter	0.59 / 1975q1	0.32 / 1978q1	0.36 / 1975q3
Max/Max quarter	7.91 / 2007q3	1.96 / 2007q2	4.07 / 2007q2
Precrisis: 1980Q1-2007Q3			
	<b>Tsize-qmv</b>	<b>Esize-mv</b>	<b>Fsize</b>
Observations	274,723	424,656	111
Mean	4.17	1.04	1.75
Median	4.12	0.95	1.73
Min/Min quarter	1.06 / 1981q3	0.39 / 1980q2	0.50 / 1980q1
Max/Max quarter	7.91 / 2007q3	1.96 / 2007q2	4.07 / 2007q2
Crisis: 2007Q4-2013Q1			
	<b>Tsize-qmv</b>	<b>Esize-mv</b>	<b>Fsize</b>
Observations	55,456	64,997	22
Mean	5.01	1.27	2.65
Median	4.58	1.27	2.43
Min/Min quarter	4.25 / 2012q4	0.96 / 2009q1	2.2 / 2013q1
Max/Max quarter	7.47 / 2008q1	1.62 / 2007q4	4.00 / 2008q1

This table reports summary statistics of measures of the size of securities, relative to the financial and nonfinancial sectors (in percent).

Observation units are firm-days for *Tsize - qmv* and *Esize - mv*, and quarters for *Fsize*. Units for all other statistics are percentages.

For *Tsize - qmv* and *Esize - mv* we first sum over firms, then average across days for each quarter, and finally take means and medians of quarterly averages.

See table 1 for variable definitions.

Min (Max) quarter refers to the quarter in which the measure achieves its minimum (maximum) value in the sample.

Table C.3: The Relative Size of Real Estate

Full Sample			
	<b>Tsize-qmv</b>	<b>Esize-mv</b>	<b>Fsize</b>
Observations	682,763	739,939	245
Mean	0.25	0.31	5.43
Median	0.19	0.32	4.71
Min/Min quarter	0.10 / 1982q2	0.09 / 2008q2	0.63 / 1952q4
Max/Max quarter	0.54 / 2013q1	0.60 / 1997q4	11.93 / 2003q1
Precrisis: 1980Q1-2007Q3			
	<b>Tsize-qmv</b>	<b>Esize-mv</b>	<b>Fsize</b>
Observations	589,998	613,617	111
Mean	0.26	0.37	8.04
Median	0.22	0.39	8.39
Min/Min quarter	0.10 / 1982q2	0.14 / 1981q3	4.21 / 1980q1
Max/Max quarter	0.48 / 1998q2	0.60 / 1997q4	11.93 2003q1
Crisis: 2007Q4-2013Q1			
	<b>Tsize-qmv</b>	<b>Esize-mv</b>	<b>Fsize</b>
Observations	41,905	49,711	22
Mean	0.28	0.19	10.44
Median	0.20	0.16	10.32
Min/Min quarter	0.15 / 2008q4	0.09 / 2008q2	9.53 / 2013q1
Max/Max quarter	0.54 / 2013q1	0.32 / 2013q1	11.46 / 2009q1

This table reports summary statistics of measures of the size of real estate, relative to the financial and nonfinancial sectors (in percent).

Observation units are firm-days for  $Tsize - qmv$  and  $Esize - mv$ , and quarters for  $Fsize$ . Units for all other statistics are percentages.

For  $Tsize - qmv$  and  $Esize - mv$  we first sum over firms, then average across days for each quarter, and finally take means and medians of quarterly averages.

See table 1 for variable definitions.

Min (Max) quarter refers to the quarter in which the measure achieves its minimum (maximum) value in the sample.

Table C.4: The Relative Size of Insurance

Full Sample			
	<b>Tsize-qmv</b>	<b>Esize-mv</b>	<b>Fsize</b>
Observations	1,480,709	2,055,054	245
Mean	8.70	4.50	21.14
Median	7.84	4.48	20.99
Min/Min quarter	3.77 / 1975q1	2.43 / 1976q2	16.45 / 2009q1
Max/Max quarter	14.81 / 2004q3	6.67 / 2005q4	26.78 / 1998q1
Precrisis: 1980Q1-2007Q3			
	<b>Tsize-qmv</b>	<b>Esize-mv</b>	<b>Fsize</b>
Observations	1,190,676	1,475,086	111
Mean	8.81	4.70	22.45
Median	7.74	4.71	21.91
Min/Min quarter	4.63 / 1980q4	2.82 / 1980q4	18.29 / 1981q3
Max/Max quarter	14.81 / 2004q3	6.67 / 2005q4	26.78 / 1998q1
Crisis: 2007Q4-2013Q1			
	<b>Tsize-qmv</b>	<b>Esize-mv</b>	<b>Fsize</b>
Observations	225,982	233,403	22
Mean	11.86	4.74	19.41
Median	11.30	4.59	19.72
Min/Min quarter	9.94 / 2013q1	4.34 / 2011q3	16.45 / 2009q1
Max/Max quarter	13.6 / 2008q2	5.87 / 2007q4	20.58 / 2012q3

This table reports summary statistics of measures of the size of insurance, relative to the financial and nonfinancial sectors (in percent).

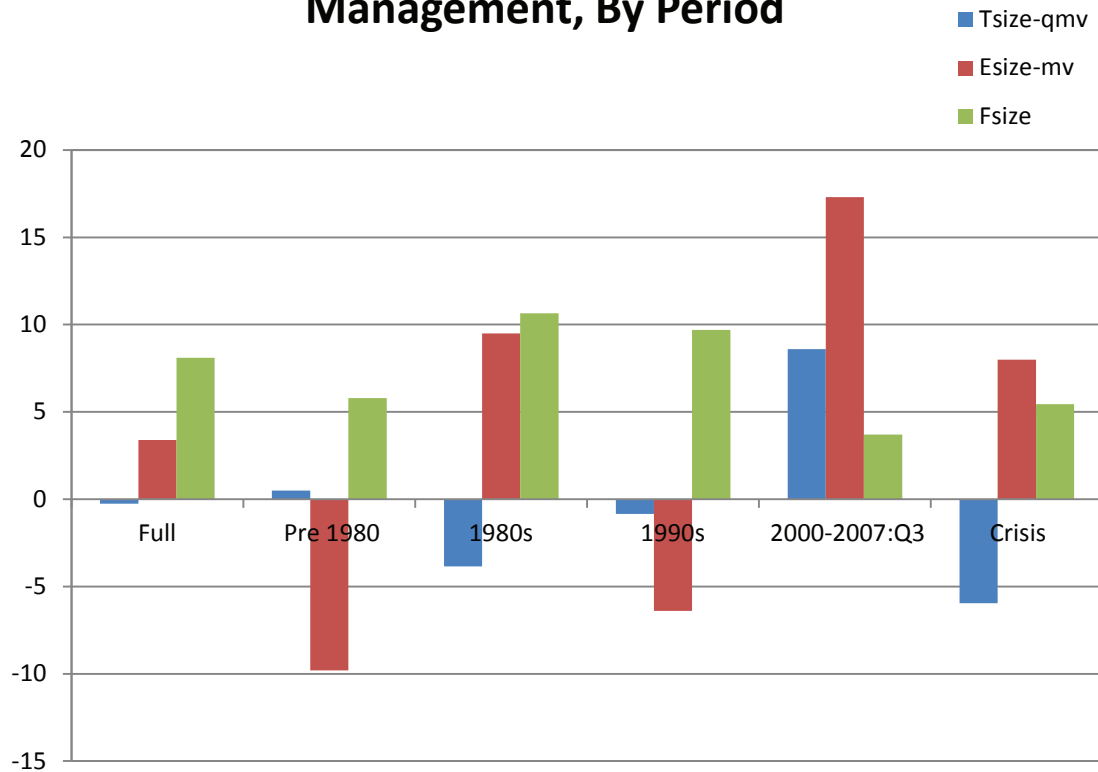
Observation units are firm-days for *Tsize - qmv* and *Esize - mv*, and quarters for *Fsize*. Units for all other statistics are percentages.

For *Tsize - qmv* and *Esize - mv* we first sum over firms, then average across days for each quarter, and finally take means and medians of quarterly averages.

See table 1 for variable definitions.

Min (Max) quarter refers to the quarter in which the measure achieves its minimum (maximum) value in the sample.

**Figure C.1: Median Percent Change in the Relative Size of Asset Management, By Period**



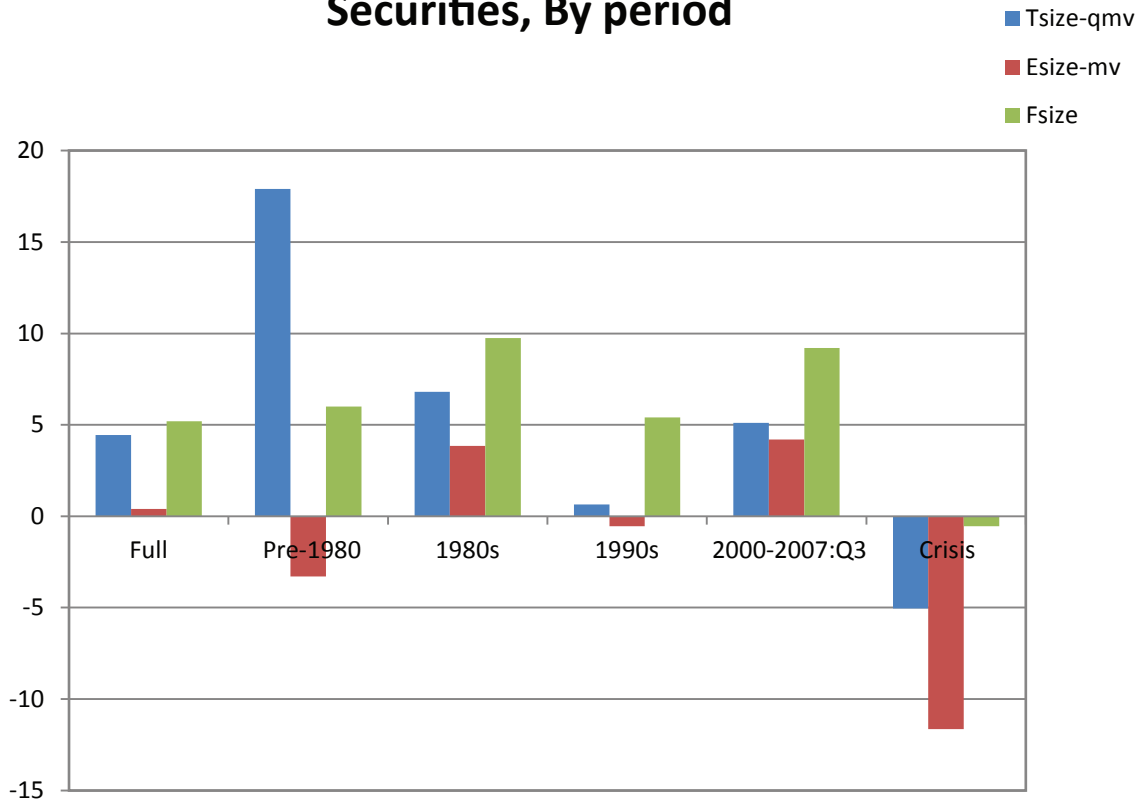
The figure shows median quarter to quarter annualized changes (in percent) in the relative size of asset management firms for each measure for specific periods.

Size is relative to the financial and nonfinancial sectors.

For Tsize-qmv and Esize-mv, we first aggregate from the firm level to the sector level, then calculate quarterly changes.

See table 1 for variable definitions.

**Figure C.2: Median Percent Change in the Relative Size of Securities, By period**



The figure shows median quarter to quarter annualized changes (in percent) in the relative size of securities firms for each measure for specific periods. Size is relative to the financial and nonfinancial sectors. For Tsize-qmv and Esize-mv, we first aggregate from the firm level to the sector level, then calculate quarterly changes. See table 1 for variable definitions.

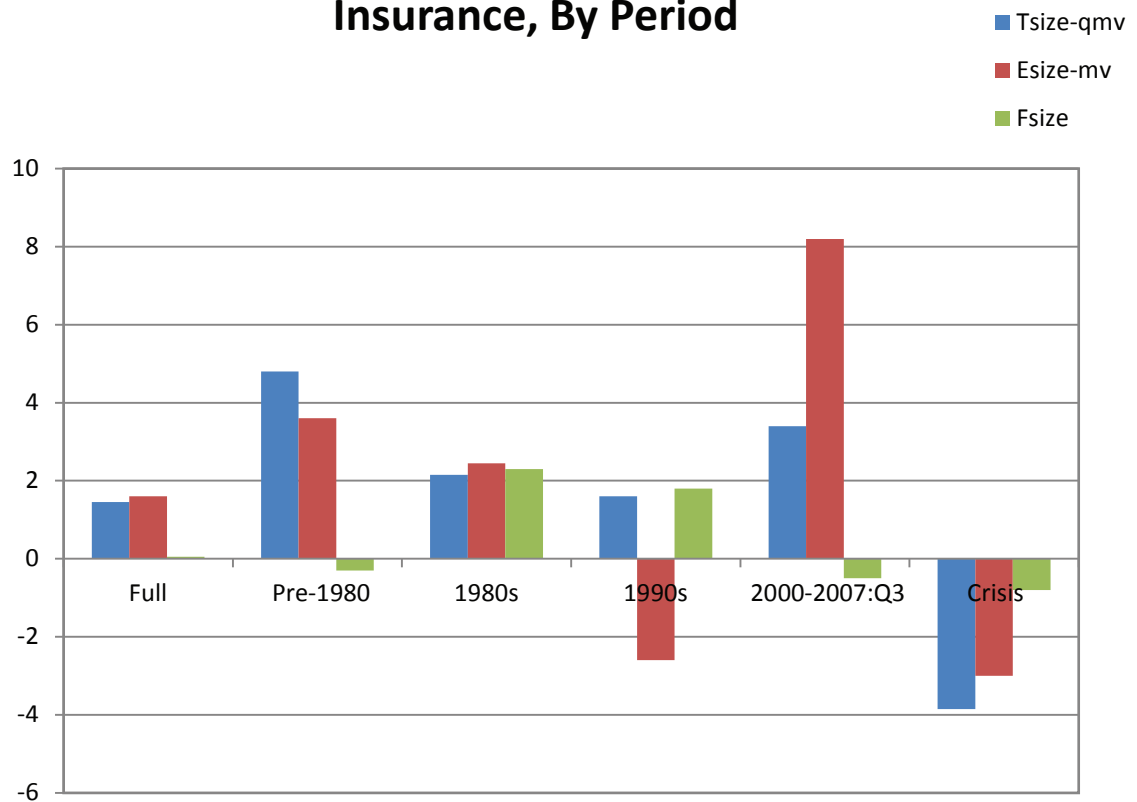
**Figure C.3: Median Percent Change in the Relative Size of Real Estate, By Period**



The figure shows median quarter to quarter annualized changes (in percent) in the relative size of real estate firms for each measure for specific periods. Size is relative to the financial and nonfinancial sectors. For Tsize-qmv and Esize-mv, we first aggregate from the firm level to the sector level, then calculate quarterly changes. See table 1 for variable definitions.



**Figure C.4: Median Percent Change in the Relative Size of Insurance, By Period**



The figure shows median quarter to quarter annualized changes (in percent) in the relative size of insurance firms for each measure for specific periods. Size is relative to the financial and nonfinancial sectors. For Tsize-qmv and Esize-mv, we first aggregate from the firm level to the sector level, then calculate quarterly changes. See table 1 for variable definitions.

## APPENDIX D: EQUITY TABLES AND CHARTS

Table D.1: Finance, % of business sector (F+NF)

Full Sample		
	<b>Tsize-bv</b>	<b>Esize-bv</b>
Observations	127,707	127,707
Mean	53.15	19.23
Min/Min quarter	38.74/1976q1	9.04/1975q4
Max/Max quarter	72.08/2008q1	32.02/2013q1
Precrisis: 1980Q1-2007Q3		
	<b>Tsize-bv</b>	<b>Esize-bv</b>
Observations	99,663	99,663
Mean	52.39	18.94
Min/Min quarter	39.92/1981q1	9.39/1980q1
Max/Max quarter	70.54/2007q3	28.77/2007q3
Crisis: 2007Q4-2013Q1		
	<b>Tsize-bv</b>	<b>Esize-bv</b>
Observations	20,271	20,271
Mean	69.02	29.66
Min/Min quarter	66.74/2012q4	27.13/2008q3
Max/Max quarter	72.08/2008q1	32.02/2013q1

This table reports summary statistics of measures of the size of finance, relative to the financial and nonfinancial sectors (in percent).

Observation units are firm-quarters for *Tsize - bv* and *Esize - bv*. Units for all other statistics are percentages.

For *Tsize - bv* and *Esize - bv* we first sum over firms, then take means and medians of quarterly values.

See table 1 for variable definitions.

Min (Max) quarter refers to the quarter in which the measure achieves its minimum (maximum) value in the sample.

Table D.2: Shadow Banking, % of business sector (F+NF)

Full Sample		
	<b>Tsize-bv</b>	<b>Esize-bv</b>
Observations	24,304	24,304
Mean	8.39	2.66
Min/Min quarter	2.90/1975q2	0.95/1982q2
Max/Max quarter	16.19/2010q2	5.14/2005q2
Precrisis: 1980Q1-2007Q3		
	<b>Tsize-bv</b>	<b>Esize-bv</b>
Observations	19,873	19,873
Mean	8.86	2.70
Min/Min quarter	3.17/1981q3	0.95/1982q2
Max/Max quarter	15.76/2007q3	5.14/2005q2
Crisis: 2007Q4-2013Q1		
	<b>Tsize-bv</b>	<b>Esize-bv</b>
Observations	2,599	2,599
Mean	10.91	3.97
Min/Min quarter	8.59/2012q4	3.68/2010q1
Max/Max quarter	16.19/2010q2	4.44/2007q4

This table reports summary statistics of measures of the size of shadow banking, relative to the financial and nonfinancial sectors (in percent).

Observation units are firm-quarters for *Tsize - bv* and *Esize - bv*. Units for all other statistics are percentages.

For *Tsize - bv* and *Esize - bv* we first sum over firms, then take means and medians of quarterly values.

See table 1 for variable definitions.

Min (Max) quarter refers to the quarter in which the measure achieves its minimum (maximum) value in the sample.

Table D.3: Depository Credit Institutions, % of business sector (F+NF)

Full Sample		
	<b>Tsize-bv</b>	<b>Esize-bv</b>
Observations	67,700	67,700
Mean	32.71	9.31
Min/Min quarter	26.13/2001q1	4.71/1976q3
Max/Max quarter	43.82/2011q3	16.17/2013q1
Precrisis: 1980Q1-2007Q3		
	<b>Tsize-bv</b>	<b>Esize-bv</b>
Observations	51,619	51,619
Mean	31.40	8.98
Min/Min quarter	26.13/2001q1	4.77/1980q1
Max/Max quarter	35.07/2007q3	12.25/2007q3
Crisis: 2007Q4-2013Q1		
	<b>Tsize-bv</b>	<b>Esize-bv</b>
Observations	11,739	11,739
Mean	42.03	15.02
Min/Min quarter	38.62/2007q4	13.32/2008q2
Max/Max quarter	43.82 / 2011q3	16.17/2013q1

This table reports summary statistics of measures of the size of depository credit institutions, relative to the financial and nonfinancial sectors (in percent).

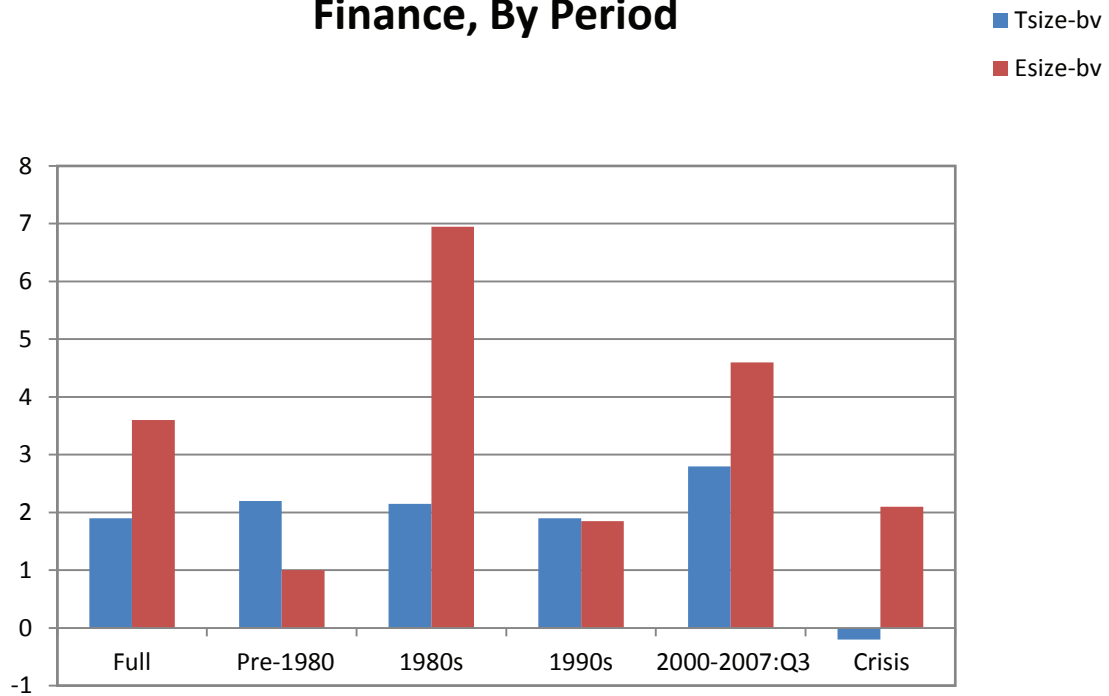
Observation units are firm-quarters for *Tsize - bv* and *Esize - bv*. Units for all other statistics are percentages.

For *Tsize - bv* and *Esize - bv* we first sum over firms, then take means and medians of quarterly values.

See table 1 for variable definitions.

Min (Max) quarter refers to the quarter in which the measure achieves its minimum (maximum) value in the sample.

**Figure D.1: Median Percent Change in the Relative Size of Finance, By Period**



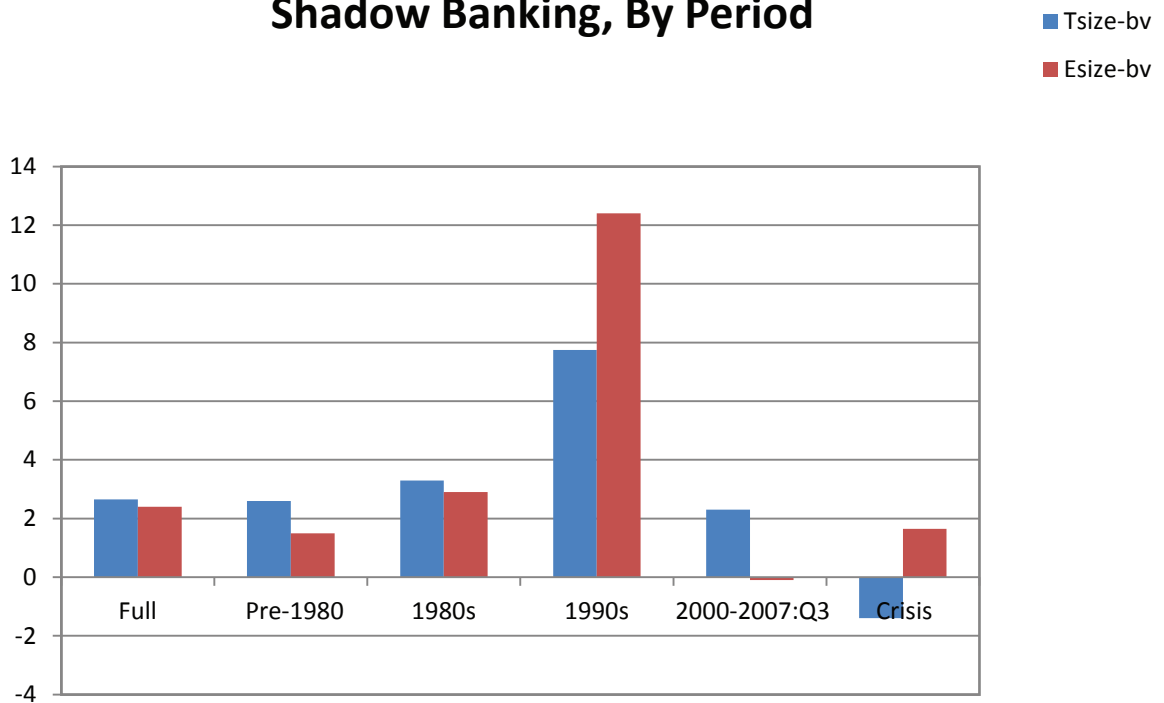
The figure shows median quarter to quarter annualized changes (in percent) in the relative size of finance for each measure for specific periods.

Size is relative to the financial and nonfinancial sectors.

For Tsize-bv and Esize-bv, we first aggregate from the firm level to the sector level, then calculate quarterly changes.

See table 1 for variable definitions.

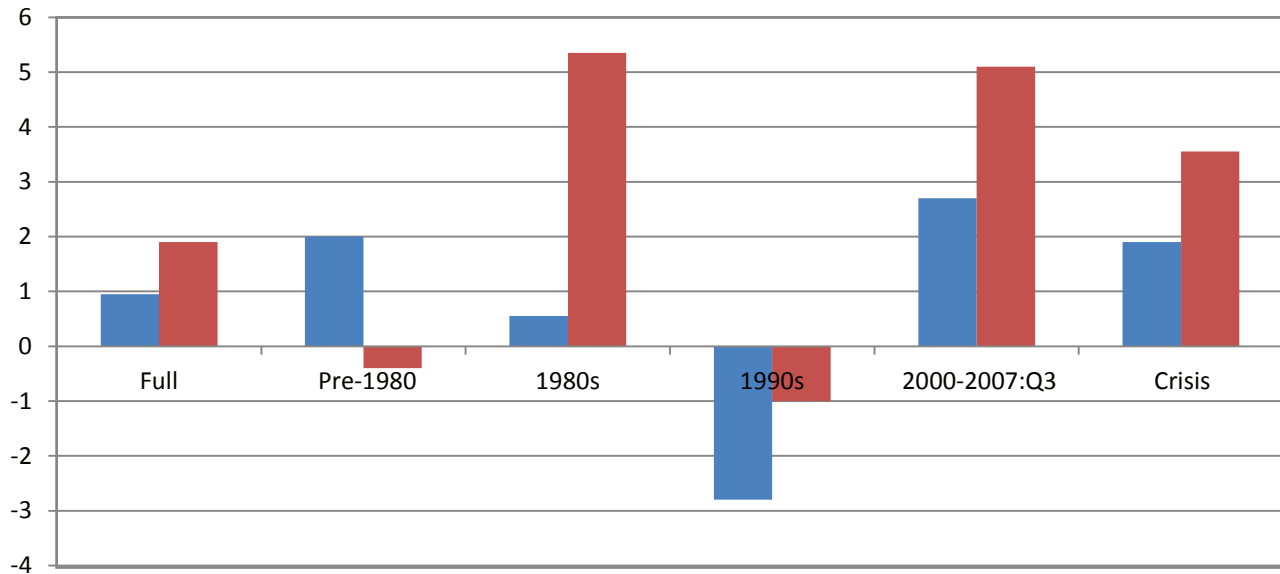
**Figure D.2: Median Percent Change in the Relative Size of Shadow Banking, By Period**



The figure shows median quarter to quarter annualized changes (in percent) in the relative size of shadow banking for each measure for specific periods. Size is relative to the financial and nonfinancial sectors. For Tsize-bv and Esize-bv, we first aggregate from the firm level to the sector level, then calculate quarterly changes. See table 1 for variable definitions.

**Figure D.3: Median Percent Change in the Relative Size of Depository Credit Intermediation, By Period**

■ Tsize-bv  
 ■ Esize-bv



The figure shows median quarter to quarter annualized changes (in percent) in the relative size of depository credit institutions for each measure for specific periods. Size is relative to the financial and nonfinancial sectors. For Tsize-bv and Esize-bv, we first aggregate from the firm level to the sector level, then calculate quarterly changes. See table 1 for variable definitions.