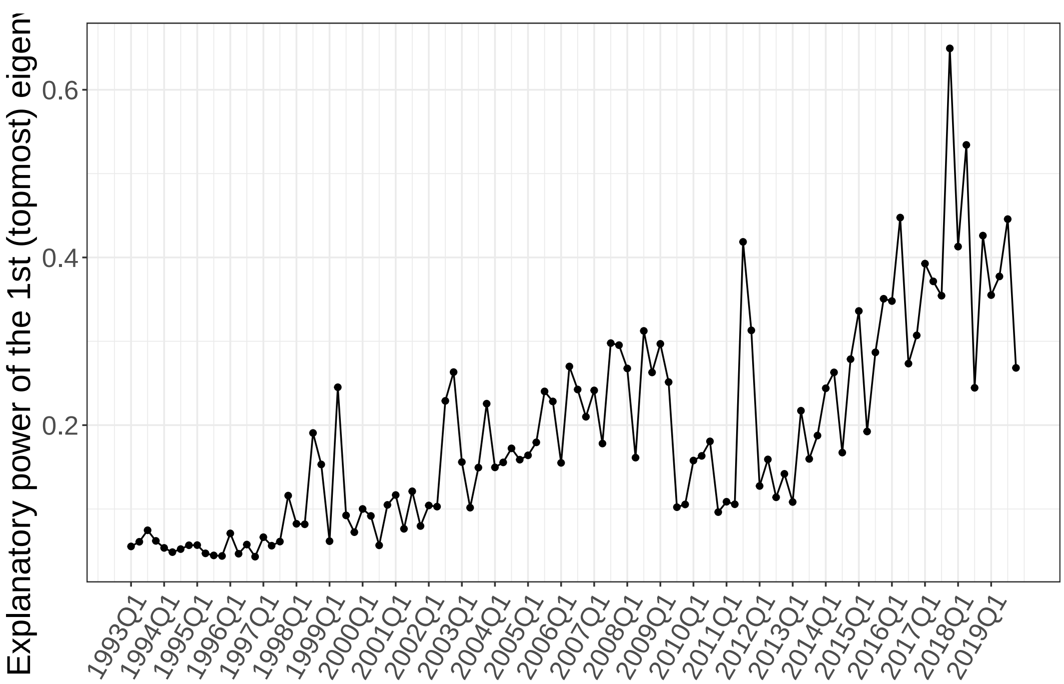
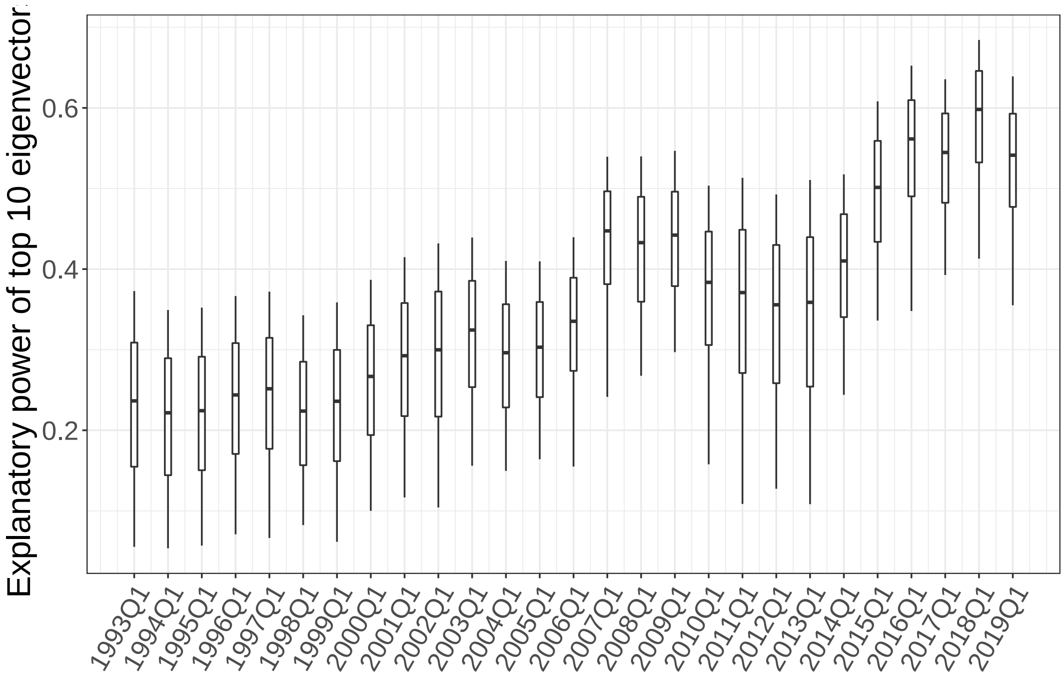
US Banks' Exposure to Systematic Risk

Recreating the plots and tables of the previous draft

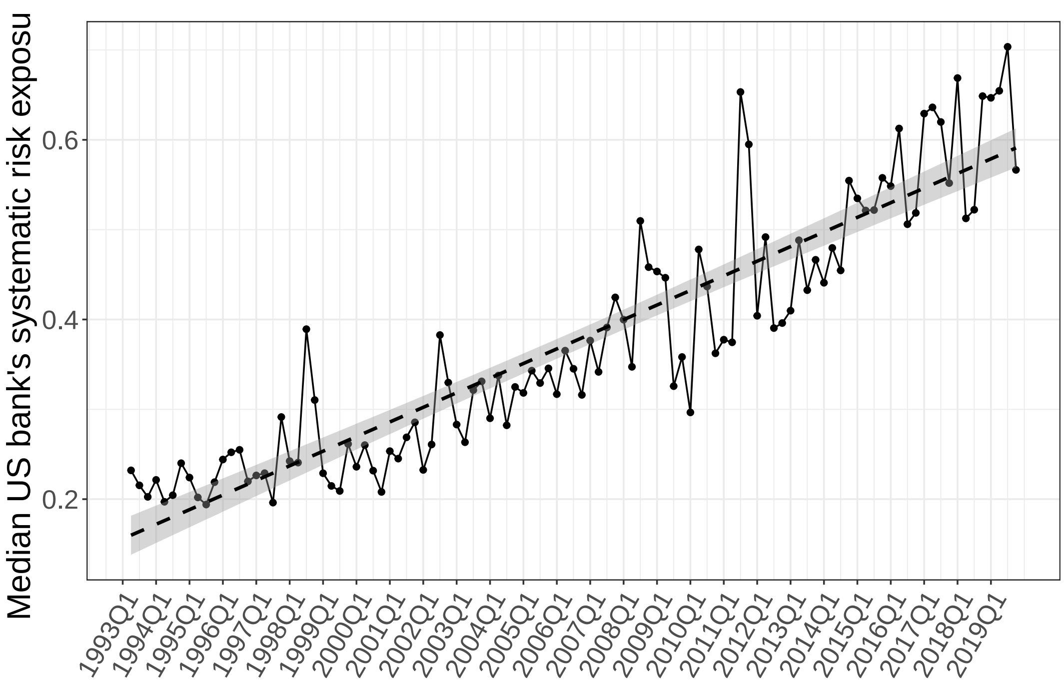
Overall, to explain 90% of the variance, we need between 17 to 49 eigenvectors.

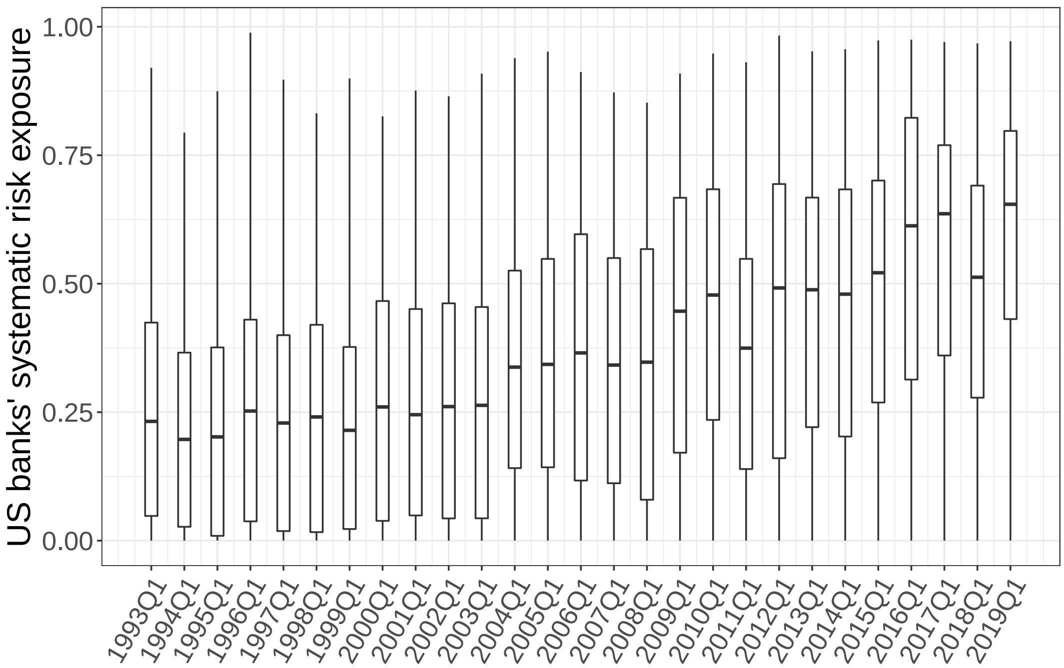
Share of the top eigenvector and share distribution of the top 10 eigenvectors.





For the median US bank, its exposure to systematic risk is as follows




US banks' systematic risk exposure
1.00
0.75
0.50
0.25
0.00
1993Q1
1994Q1
1995Q1
1996Q1
1997Q1
1998Q1
1999Q1
2000Q1
2001Q1
2002Q1
2003Q1
2004Q1
2005Q1
2006Q1
2007Q1
2008Q1
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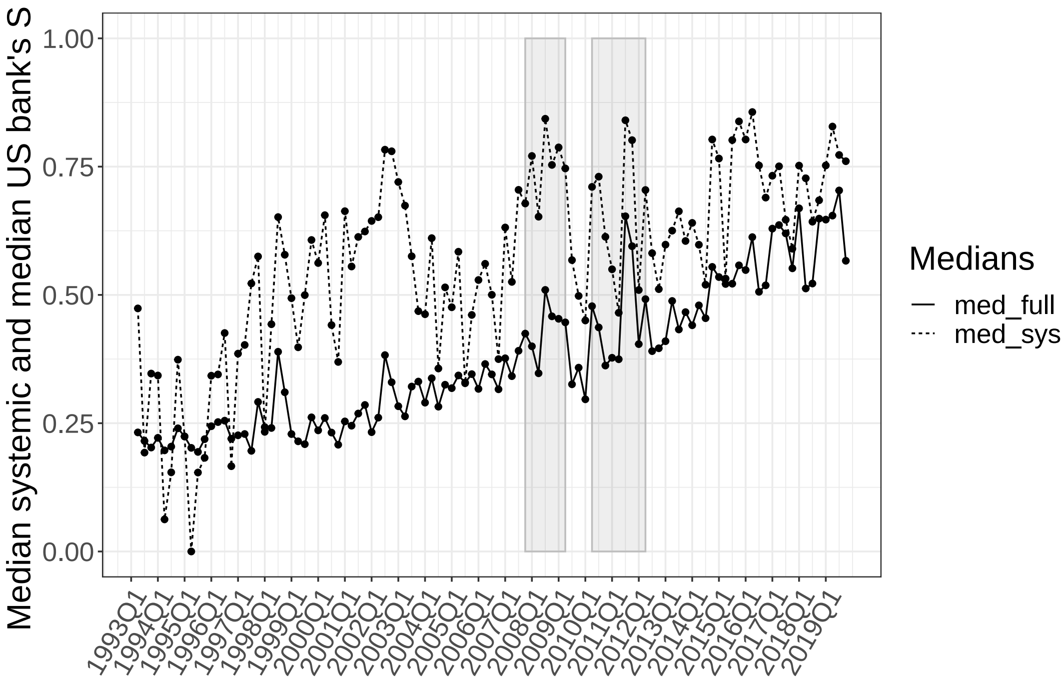
2011Q1
2012Q1
2013Q1
2014Q1
2015Q1
2016Q1
2017Q1
2018Q1
2019Q1


Median systemic and median US bank's S
1.00
0.75
0.50
0.25
0.00
1993Q1
1994Q1
1995Q1
1996Q1
1997Q1
1998Q1
1999Q1
2000Q1
2001Q1
2002Q1
2003Q1
2004Q1
2005Q1
2006Q1
2007Q1
2008Q1
2009Q1
2010Q1
2011Q1
2012Q1
2013Q1
2014Q1
2015Q1
2016Q1
2017Q1
2018Q1
2019Q1
Medians
med_full
med_sys

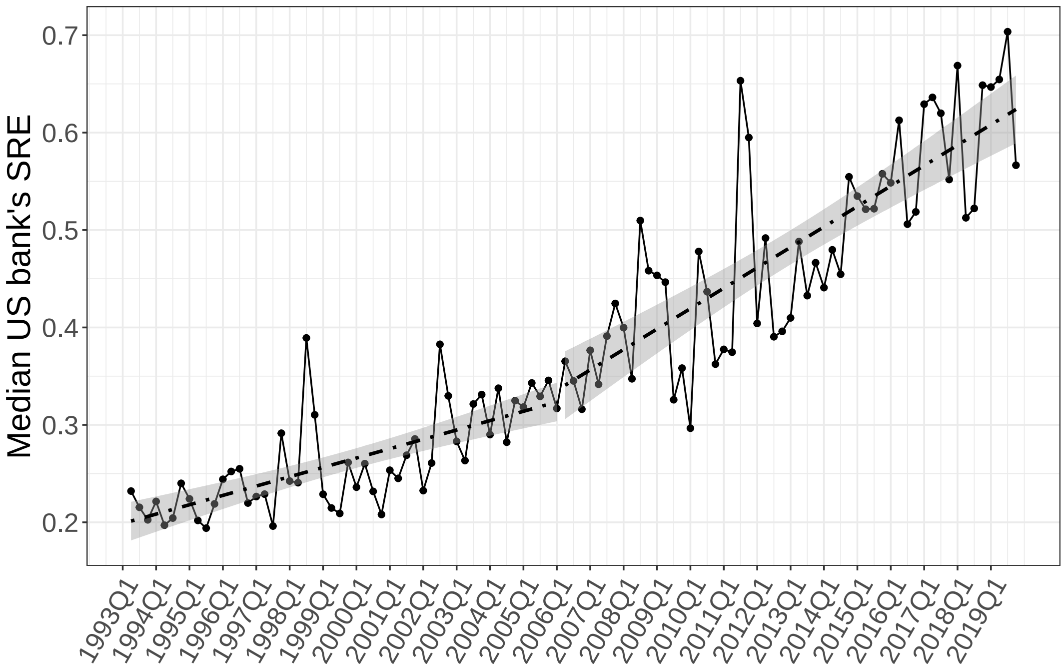


Table 1 of descriptive statistics recomputed. The rows correspond to the full sample, the systemic banks and the first and second halves of the sample duration.

Min	Max	Mean	Med	Std_Dev	IQR	Skew	Kurt
0	0.9990	0.3394	0.3221	0.2615	0.4439	0.2930	1.9891
0	0.9676	0.5462	0.5887	0.2335	0.3248	-0.6788	2.7108
0	0.9884	0.2747	0.2577	0.2283	0.3995	0.4189	2.1641
0	0.9990	0.4394	0.4584	0.2775	0.4733	-0.1136	1.8164

Table 2 recomputed from the last draft. The rows correspond to respectively the full sample, the systemic banks, the first and second halves and the median systemic bank in the first and second halves of the sample.

Estimate	Std. Error	t value	Pr(>|t|)
0.0041	0.0002	18.3801	0.0000
0.0042	0.0005	7.8022	0.0000

Estimate	Std. Error	t value	Pr(>|t|)
0.0024	0.0002	10.8285	0.0000
0.0052	0.0005	10.9053	0.0000
0.0073	0.0019	3.7512	0.0005
0.0027	0.0011	2.4251	0.0187

The following is the list of systemic banks' trends

ALLY FINANCIAL INC	0.0189	0.0042	4.4587	0.0002
AMERICAN EXPRESS CO	0.0011	0.0007	1.5446	0.1255
BNY	0.0030	0.0009	3.4660	0.0008
BofA	0.0034	0.0007	5.1017	0.0000
CAPITAL ONE FINANCIAL CORP	0.0032	0.0007	4.3137	0.0000
CITI	0.0024	0.0006	4.2664	0.0000
COMERICA INC	0.0049	0.0006	7.6741	0.0000
DISCOVER FINANCIAL SERVICES	0.0205	0.0079	2.5895	0.0270
FIFTH THIRD BANCORP	0.0048	0.0006	7.7192	0.0000
GOLDMAN SACHS GROUP INC	-0.0446	0.0129	-3.4647	0.0071
HUNTINGTON BANCSHARES INC	0.0053	0.0006	8.4670	0.0000
JPM	0.0032	0.0006	4.9825	0.0000
KEYCORP NEW	0.0039	0.0006	6.2181	0.0000
M & T BANK CORP	0.0036	0.0009	4.1257	0.0001
MORGAN STANLEY DEAN WITTER & CO	0.0098	0.0040	2.4707	0.0311
NORTHERN TRUST CORP	0.0044	0.0007	5.9868	0.0000
PNC	0.0042	0.0007	6.2517	0.0000
REGIONS	0.0054	0.0008	6.5347	0.0000
STT	0.0039	0.0007	5.6808	0.0000
SUNTRUST BANKS INC	0.0039	0.0006	6.3303	0.0000
UNION BANK SAN FRANCISCO CA	0.0036	0.0139	0.2581	0.8016
UNITED STATES BANCORP	-0.0083	0.0067	-1.2371	0.2351
WELLS FARGO & CO NEW	0.0034	0.0007	5.1758	0.0000

ZIONS BANCORPORATION	0.0058	0.0007	8.8663	0.0000