

Business Groups in the United States: A Revised History of Corporate Ownership, Pyramids and Regulation, 1930-1950

Eugene Kandel (Hebrew University, CEPR and ECGI)

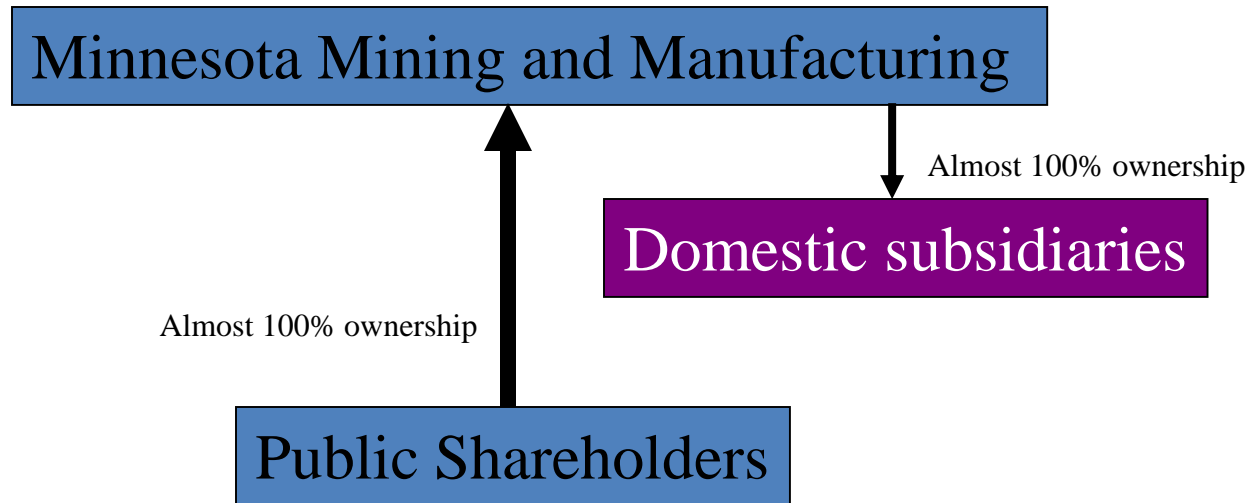
Konstantin Kosenko (Bank of Israel)

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Yishay Yafeh (Hebrew University, CEPR and ECGI)



A Typical Large US Corporation Today



- ❑ **Widely held**
 - No controlling shareholder
- ❑ **Freestanding**
 - Listed firms typically do not hold control blocks in other listed firms

EDWARD BRONFMAN TRUST

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EDPER INVESTMENT LTD.

BRONCORP INC.

EDPER HOLDINGS INC.

EVEREST LTD.

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BRASCAN HOLDINGS INC.

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BRASCAN HOLDINGS LTD.

HEES HOLDINGS INC.

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BROOKFIELD PROPERTIES CORP.

EDPER RESOURCES LTD.

CARENA HOLDINGS CORP.

HEES INTERNATIONAL BANCORP INC.

EDPER HOLDINGS CORP.

EVEREST INVESTMENT LTD.

HECO SECURITIES LTD.

WESTCHESTER ESTATE LTD.

Bronfman Group (Canada)

100

50

50

19.5

74.2

50.1

49.9

0

50.1

75

25

50.1

61.5

97.8

51

47

100

100

19.6

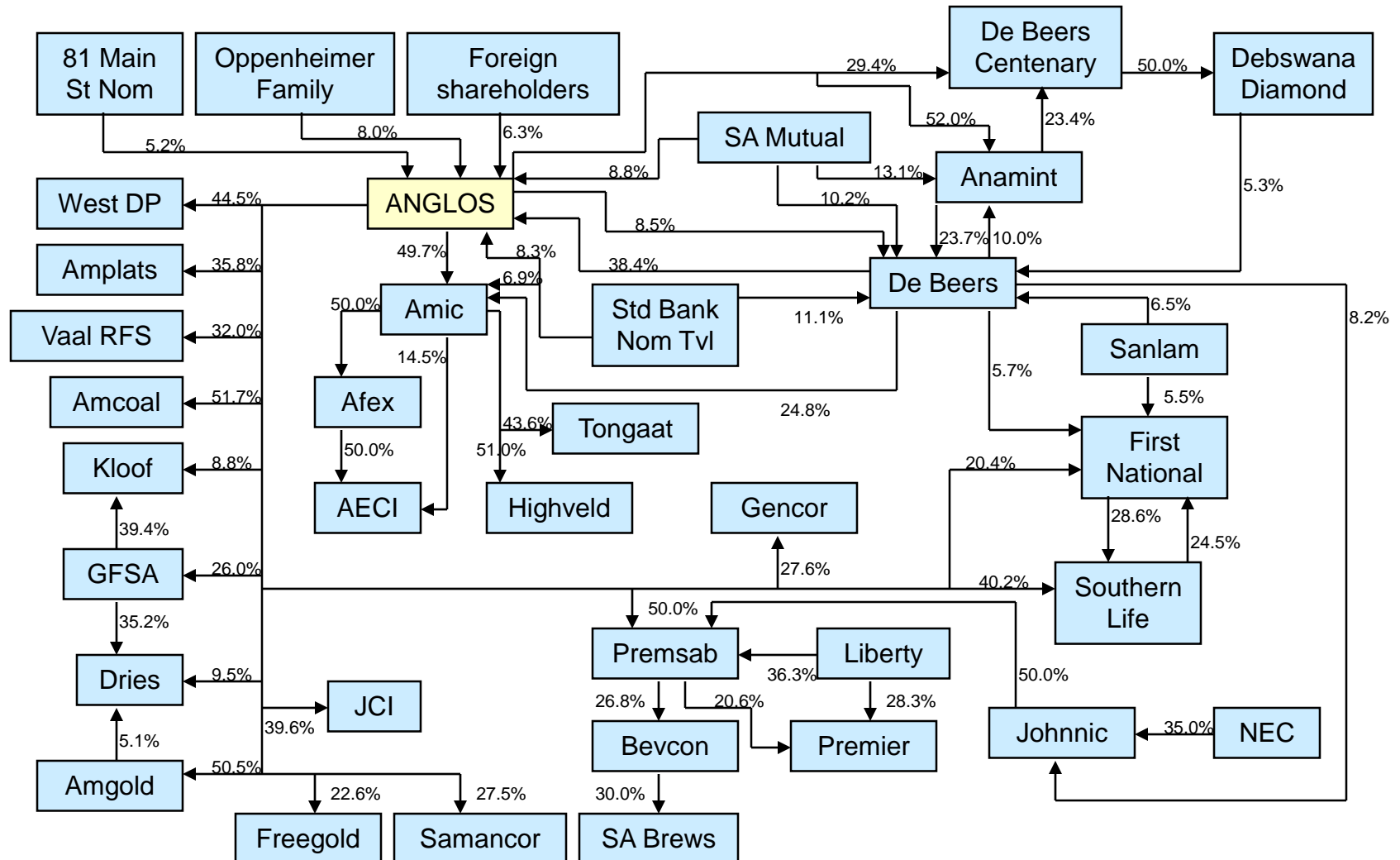
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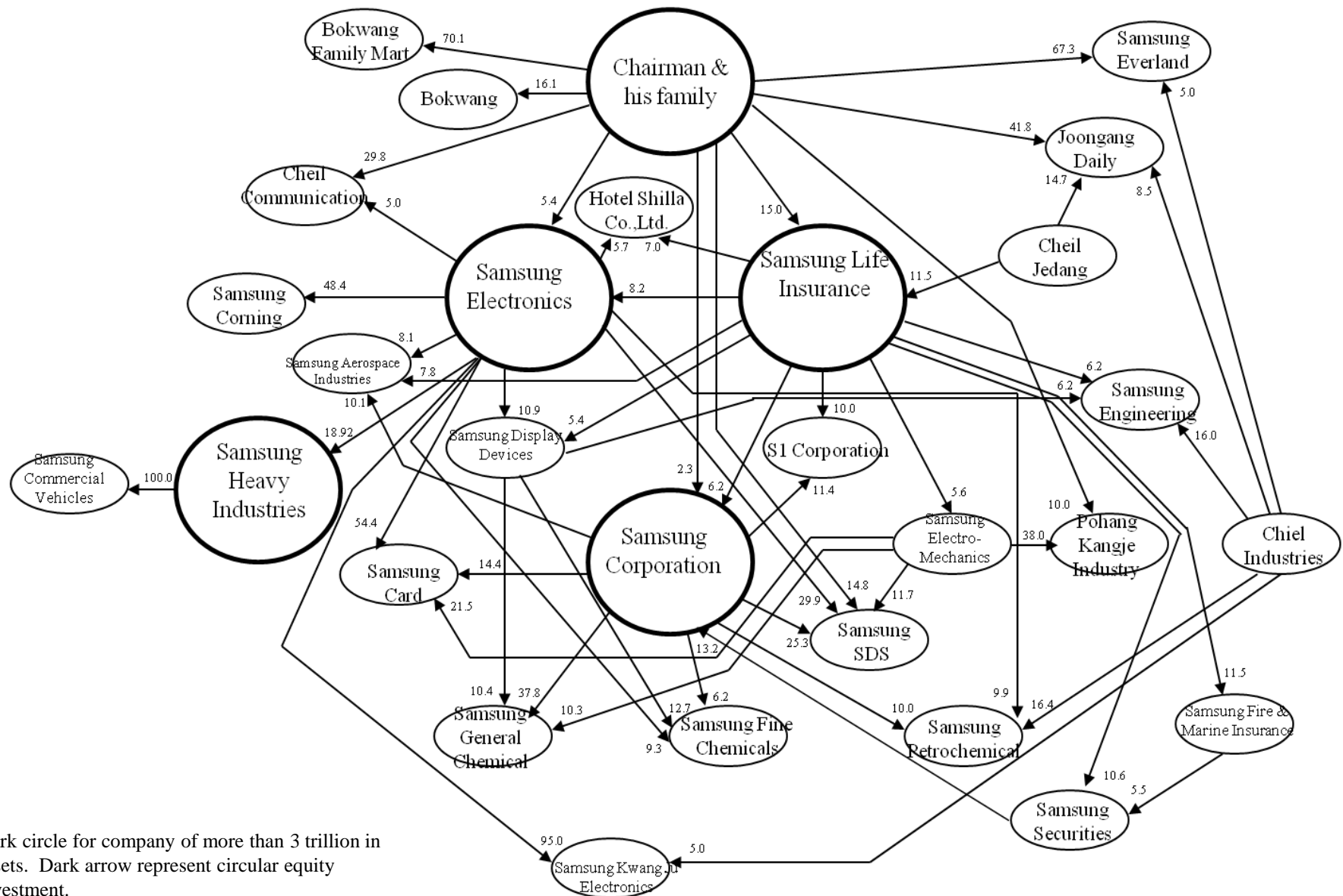
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Anglo American Group (South Africa)

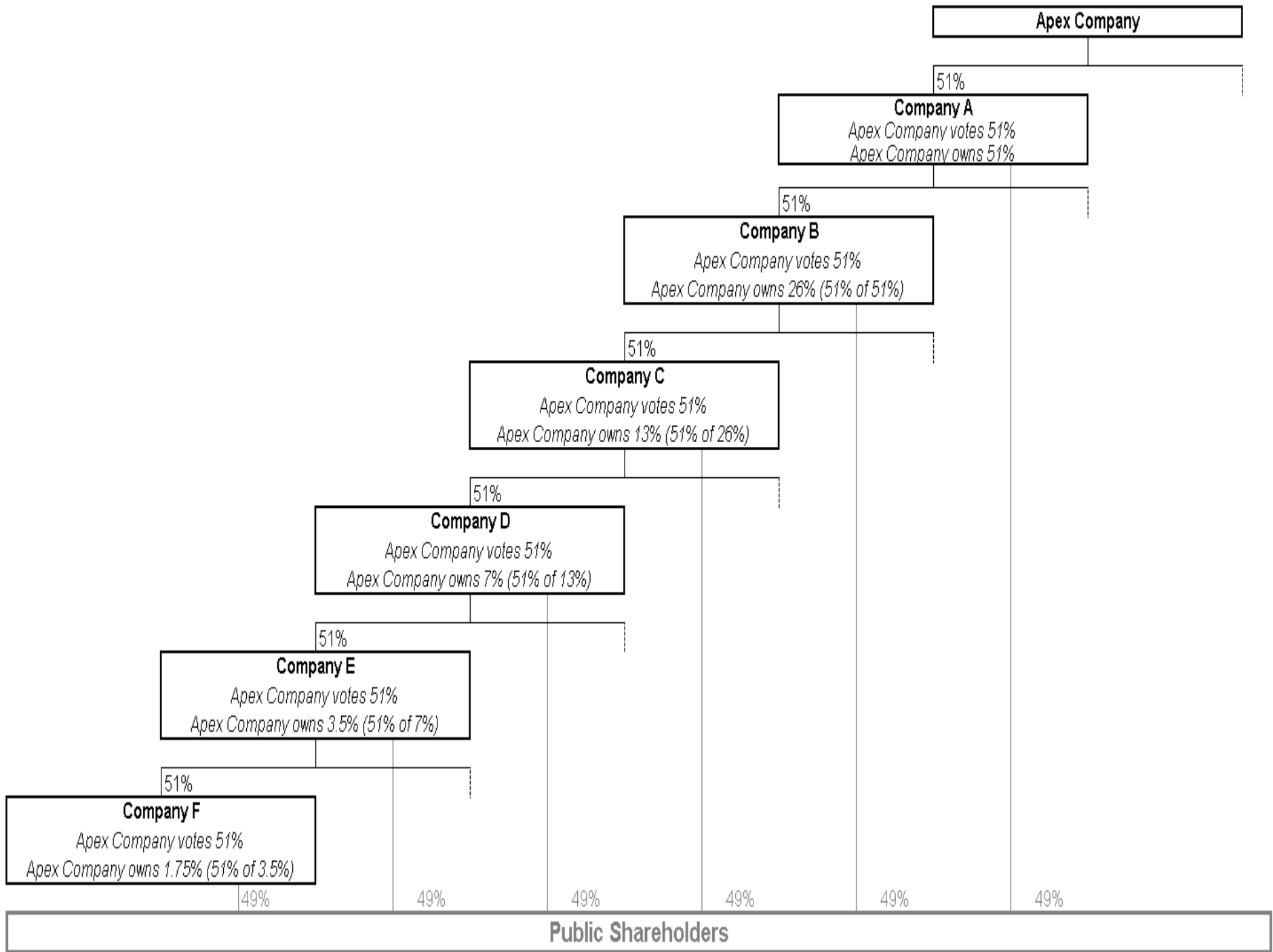


The Samsung Group



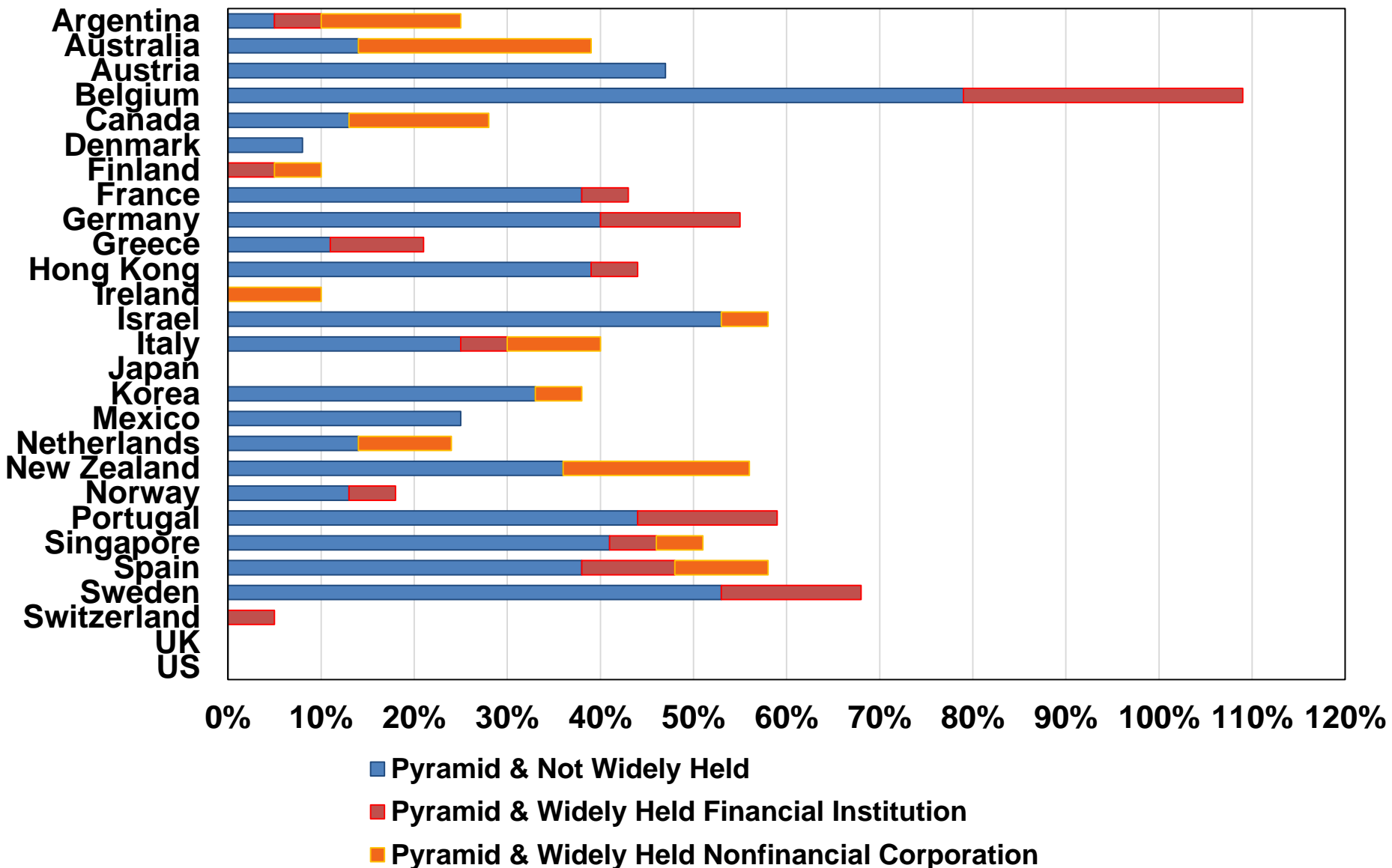
Dark circle for company of more than 3 trillion in assets. Dark arrow represent circular equity investment.

Source: Korea Investor's Service, reproduced from Chang (2003)



The US Today Is Different

LLS (1999) "Corporate Ownership around the World"



Why is the US “Exceptional” Today?

- ❑ Was the US always like this? Is common law inconsistent with pyramidal ownership structures?
- ❑ Regulation 1: Did investor protection/the SEC limit the growth of business groups?
- ❑ Regulation 2: Was it the taxation of inter-corporate dividends?
- ❑ Regulation 3: Was it the Public Utility Holding Company Act, 1935 (PUHCA)?
- ❑ Other regulatory forces: Glass-Steagall Act, 1933; Investment Company Act, 1940; Antitrust enforcement, Tax policy?
- ❑ Did the “natural erosion” of family-controlled groups through succession cause this?
- ❑ Did Economic forces (the Great Depression)/ geopolitical shocks (WW-II) do it?

Claim: None of these provides a complete explanation

Specific Questions Addressed in this Study

(late 1920s - 1950s)

- ❑ Did business groups ever exist in the US?**
- ❑ How many, how large?**
- ❑ What were their characteristics?**
- ❑ What do we actually know about their demise?**
- ❑ What did contemporaries think about them?**

Stylized facts (descriptive) and tentative conclusions:

- ❑ Agenda for future research on specific hypotheses**
- ❑ Modification of the existing historical accounts (mono-causal)**
- ❑ Policy relevant**

Documented Stylized Facts

- ❑ **As in many countries today, business groups existed in the US, holding (at the peak of their activity) about 50% of all non-financial corporate assets**
- ❑ **As in many countries today, some groups were family-controlled, pyramidal and diversified**
- ❑ **Unlike most groups today, many US groups were focused (undiversified) in one sector: public utilities, transportation and communications**
- ❑ **Unlike most groups today, the holding (apex) company of many US groups was diffusely held**
- ❑ **Unlike most groups today, “tunneling” (conflicts between controlling and minority shareholders) were probably not a major issue in US groups**

What Led to the Absence of Groups in the US?

None of the “Suspects” Did It Alone...

- ❑ Groups existed - not inconsistent with US common law
- ❑ Groups continued to exist in the 1940s; 18 survived until 1950, some survived even later – their disappearance was gradual
- ❑ Group demise was not an *immediate* response to the introduction of major anti-group (and other?) regulatory measures in the 1930s
- ❑ WW-II period – was not especially bad for groups
- ❑ Diversified family-controlled groups disappeared first – Could this provide a clue? More affected by Glass-Steagall? More affected by estate taxes (in conjunction with other pressures)?

Additional Observations

- ❑ **No evidence that dual-class shares replaced pyramids (co-existed with pyramids in early years; became unpopular/ prohibited in the late 1920s)**
- ❑ **No clear link between business groups and the rise of conglomerates/multidivisional firms in the 1960s (group “alumni” firms were not involved in the conglomerate merger wave because of anti-trust enforcement?)**
- ❑ **The academic and public discourse of groups in the 1930s: primarily anti-trust based in contrast with the modern focus on investor protection**

Implications

- ❑ Very long evolution making US corporate ownership what we know today; for much of its history, US corporate ownership resembled what's common in emerging markets today (in contrast with E. Hilt?)
- ❑ Delay associated with the effect of regulatory reforms (Sussman and Yafeh, 2013 provide 300 years of evidence on this)
- ❑ Certain types of groups can co-exist with common law/ investor protection and developed equity markets (related to Franks-Mayer-Miyajima on Japan)
- ❑ The historical link/sequence between reforms in the US and the *zaibatsu* dissolution in Japan

Historical Background

- ❑ Use of holding companies becomes common towards the end of the 19th century (legal reform in NJ; replaces previous collusive arrangements, not inconsistent with common law)
- ❑ Antitrust legislation starting in the late 19th century (Sherman Act, Clayton Act and more)
- ❑ Proliferation of business groups: 1915-1928 (outside the scope of antitrust regulation; competition for firm incorporation across States; limited regulation; also – “missing institutions” arguments for the formation of business groups)
- ❑ Different types of groups emerge: widely held groups focused in utilities (and railroads); and diversified family-controlled groups in other sectors
- ❑ Concerns emerge in the late 1920s: groups hamper competition; groups are risky to investors (collapse of the Insull Group); groups over-expand

Anti-Group Measures of the 1930s

- ❑ Emergency Railroad Transportation Act (1933) regulates mergers and securities issues in this sector
- ❑ **Investor Protection: Establishment of the SEC 1933-4 (disclosure requirements, restricted use of consolidated financial reports)**
- ❑ New Deal Legislation (The Glass-Steagall/ Banking Act of 1933), more on this in the next draft...
- ❑ Several investigating committees
- ❑ Politics: F. D. Roosevelt's rhetoric
- ❑ **Direct measure 1: Inter-corporate dividend tax (gradual increase in rate, 10% in 1935, 15% in 1936)**
- ❑ **Direct measure 2: PUHCA (initially of 1935, "Death Sentence Clause" in 1940, legal battles end in a 1946 Supreme Court confirmation)**
- ❑ Antitrust enforcement – weak until around mid-1940s (Celler-Kefauver Amendment, 1950)

Contemporary Research and Commentary

- ❑ **Extensive literature (on holding companies) in the 1930s (Bonbright and Means, 1932, as the ultimate source; many others who describe the formation or growth of business groups in the United States)**
- ❑ **Mostly antitrust language, limited reference to investor protection issues**

Evaluation of anti-group reforms:

- ❑ **Mixed - regarding inter-corporate taxation**
- ❑ **Very mixed - regarding the effectiveness of the PUHCA (Anderson vs. the SEC Chairman)**

Extremely Limited (modern) Research

- ❑ Literature on the history of corporate ownership in the US and elsewhere (especially related – Becht and DeLong (2005) and other chapters in the Morck edited volume of 2005)**
- ❑ Roe (1994, 2003) – the importance of politics for US “exceptionalism”**
- ❑ History of executive compensation (e.g., Frydman and Saks, 2010)**
- ❑ Block holders in the US (Holderness et al., 1999)**

Specifically on Groups in the US

- ❑ Legal scholars such as Bank and Cheffins (2010) under-estimate their importance, especially outside public utilities**
- ❑ Mahoney (2012) – negative effect of anti-group legislation (uses an event study methodology, not suitable for gauging welfare effects)**
- ❑ Morck & Yeung (2005) – taxation of inter-corporate dividends as a crucial policy tool**
- ❑ Perez Gonzales (Stanford WP, 2013): PUHCA affected the structure of utility groups and improved the performance of affiliates which became standalone entities**

Data: Sources and Construction

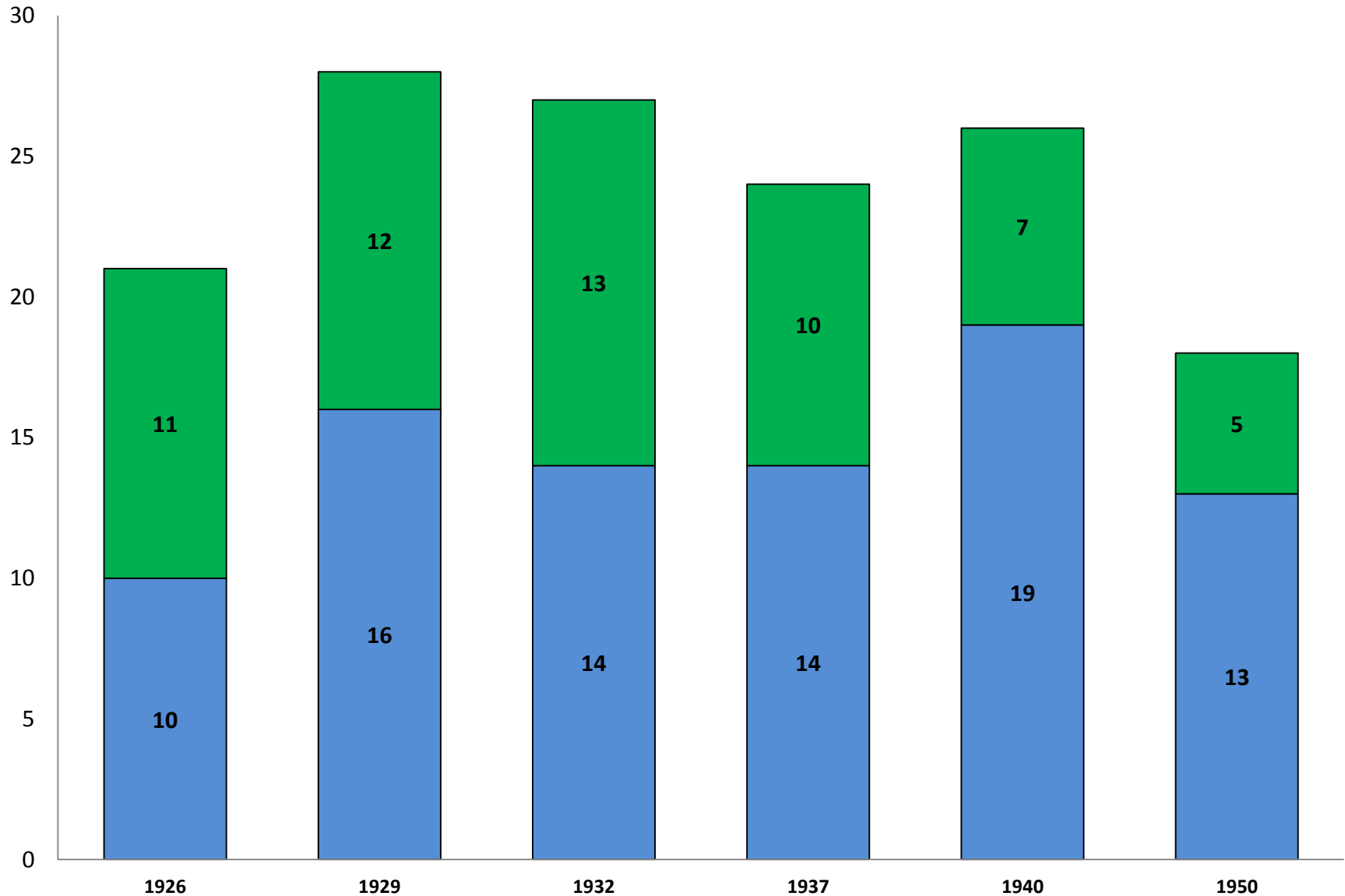
- ❑ **Berle and Means'(1932) original list of the 200 largest non-financial corporations**
- ❑ **Track the evolution and structure of ownership using periodic reports from Moody's manuals (Industrial, Public Utilities, Railroads) at six points in time: *1926, 1929, 1932, 1937, 1940 and 1950***
- ❑ **Unbalanced panel ~ 2500 firms, 15,000 firm-years**
- ❑ **Financial reports/statements (incomplete)**
- ❑ **SEC annual reports (PUHCA Administration)**
- ❑ **Various other historical sources, newspaper archives and more...**

Data (contd.)

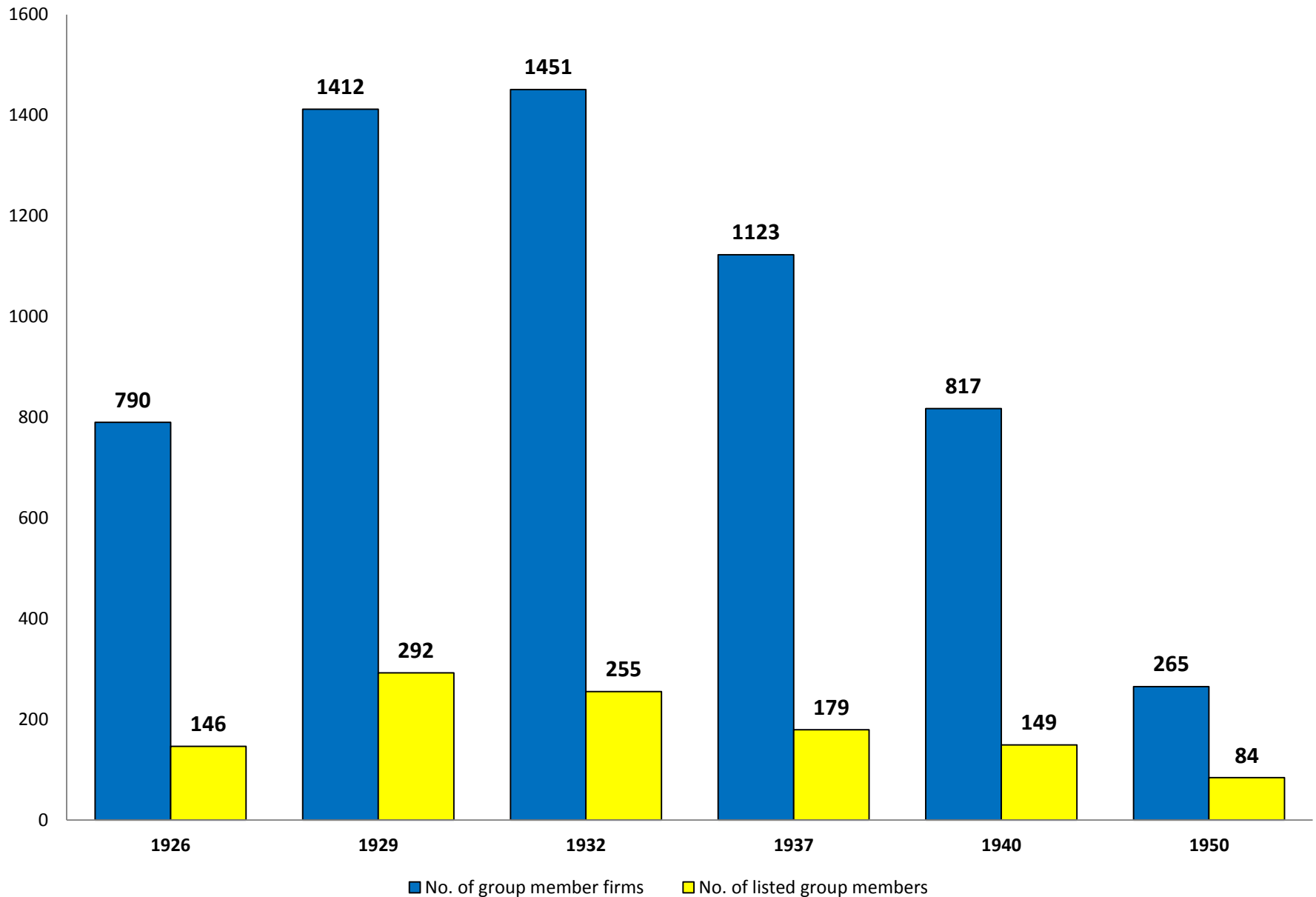
- ❑ Tests for sample selection do not reveal any serious bias: various contemporary sources with alternative lists of large companies vs. the list in Berle and Means**
- ❑ Definition of a group: same ultimate owner, at least three publicly listed companies (stake < 95%)**
- ❑ Ignore non-voting shares (but there seems to be no serious bias: ultimate owner's holdings in preferred stocks \approx holdings in common stocks (TNEC, 1940))**

US Business Groups

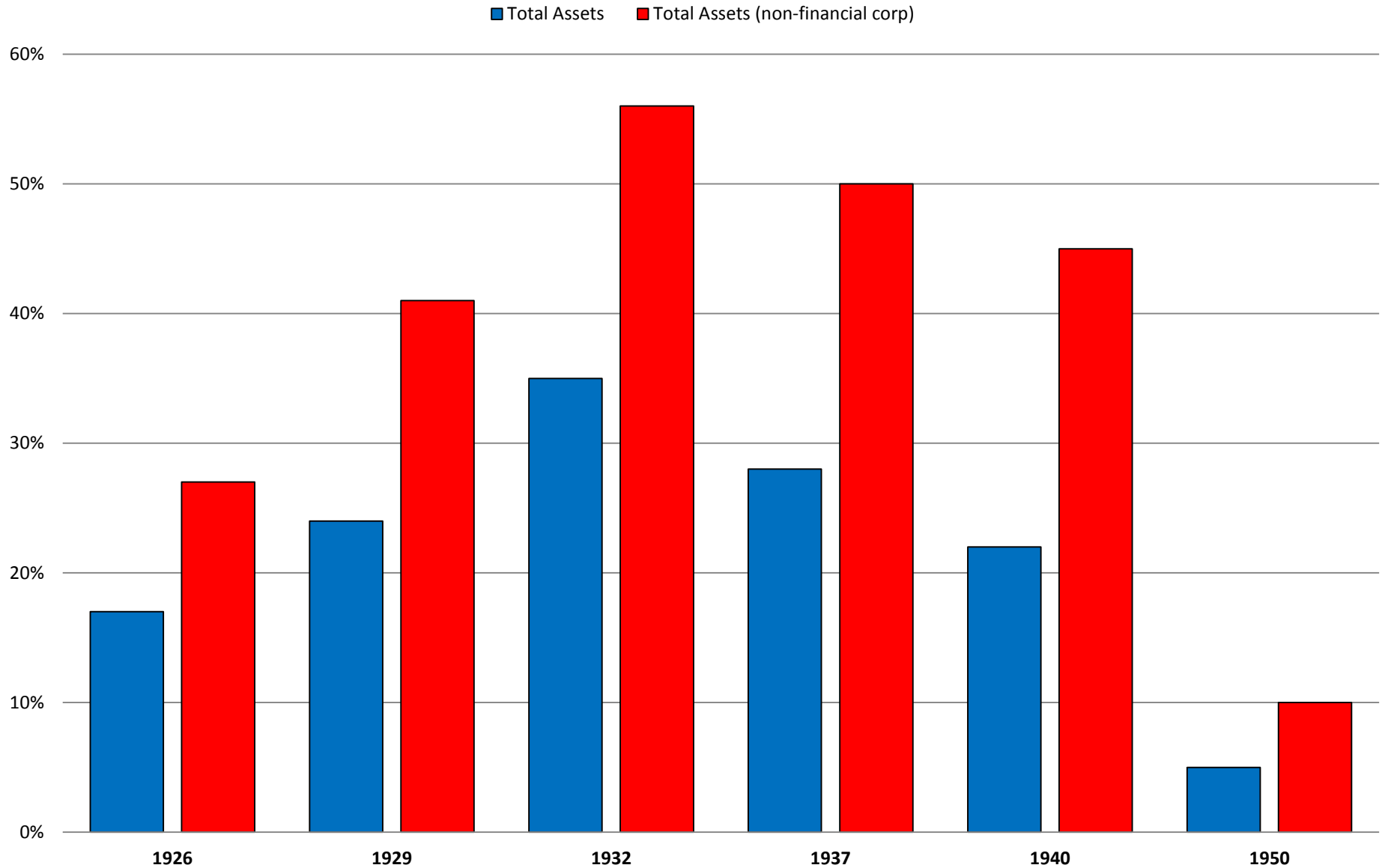
No. of Family-controlled Groups (green) vs. Widely-held Groups (blue)



Number of Group-affiliated Firms



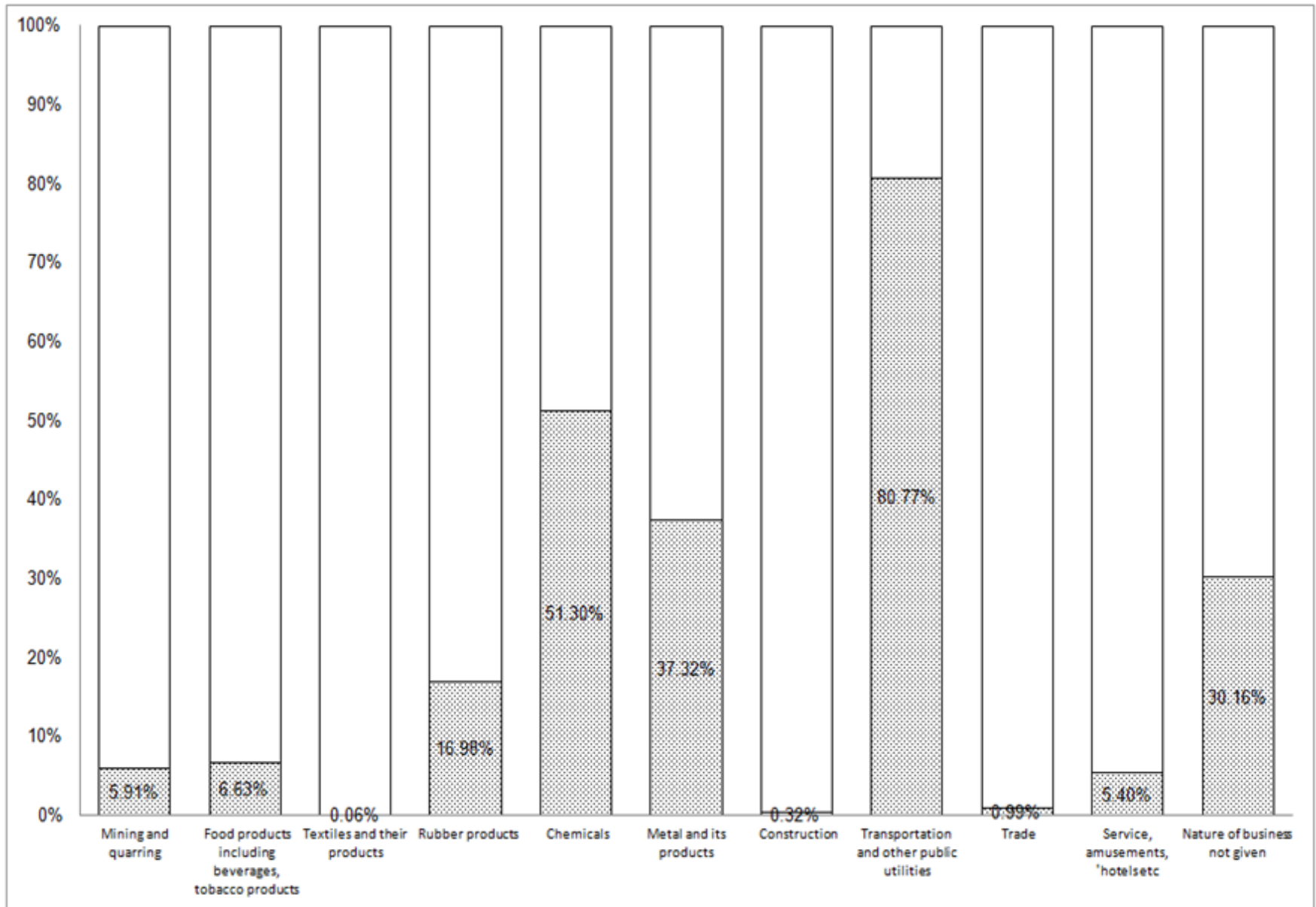
Group Size - % of Total Corporate Assets



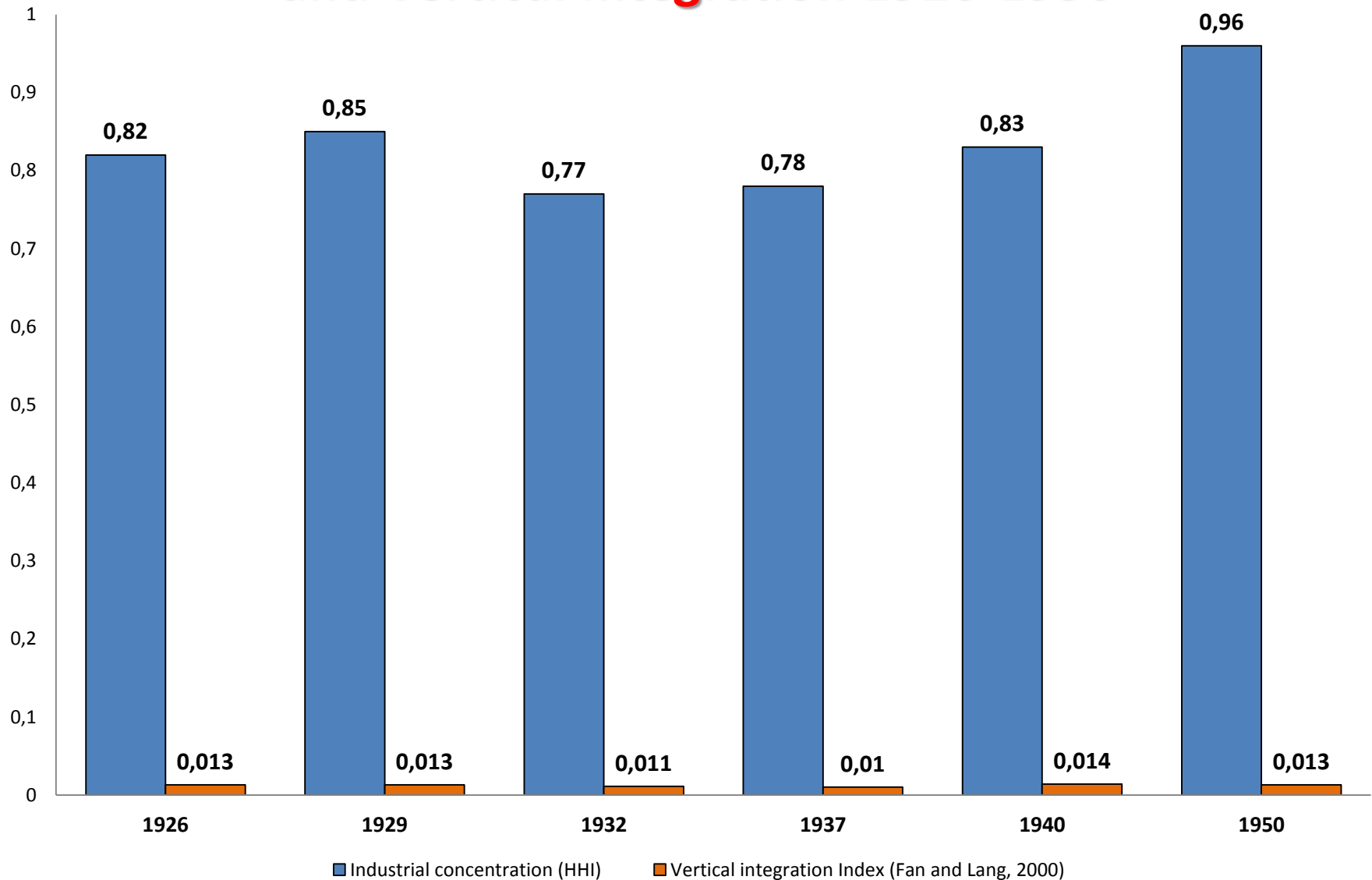
Distribution of Business Groups by Industry, 1932

	Business Group/industry	Wholesale and retail trade	Amusements	Repair Construction	Transportation and warehousing	Communications	Electric, gas, water and sanitary services	Finance and Insurance	Coal mining	Other	Primary iron and steel manufacturing	Electric industrial equipment	Construction	Textile	Chemicals & selected chemical products	Rubber and miscellaneous plastics	Motor vehicles and equipment	Tobacco manufactures	Petroleum refining & related industries	Other fabricated metal products	Metalworking machinery and equipment	Food and kindred products
Widely-Held Groups	American Telephone & Telegraph Co.				48(8)	1(0)					2(0)	9(6)	1(1)									
	Anaconda Copper Mining Co.																					
	Atlantic Coast Line Co.				36(5)																	
	Central States Elec. Corp.				2(0)	2(2)	29(2)						1(0)									
	Delaware Lackawanna & Western Rd. Co.				20(3)																	
	Inter. Tel. & Tel. Corp.					11(5)																
	Kennecott Copper Corp.				1(0)						6(4)											
	Loew's Inc.	1(1)	8(3)																			
	Middle West Utilities Co.			1(0)	10(0)	4(3)	100(8)	1(0)														
	Pacific Lighting Corp.					1(1)	5(3)															
	Paramount Publix Corp.		8(4)																			
	Pennsylvania Rd. Co.				237(43)				2(0)													
Family Groups	Southern Ry. Co.				38(5)																	
	Stone & Webster, Inc.				3(0)	1(1)	35(6)															
	Doherty family					1(1)	48(4)						1(0)									
	Du Pont family				1(0)		1(1)	2(0)				1(0)		1(0)	1(1)	5(4)	3(1)					
	Harriman family				26(4)																	
	Hill family				25(5)													4(4)				
	Hopson				6(0)	1(0)	50(6)	1(0)														
	Kuhn-Loeb				17(4)	4(3)																
	Mellon family	1(0)			7(0)	2(2)	60(15)		9(1)	1(0)	1(1)	2(1)	2(0)		3(0)		1(0)		2(0)	5(2)	2(0)	
	Rockefeller family								1(1)										38(13)			
	Sinclair																		11(6)			
	Van Sweringen				100(11)				1(0)													1(0)
	Vanderbilt				72(13)																	
	Morgan*	1(1)			49(1)	8(8)	235(19)	4(1)	4(1)		2(2)	4(1)			1(0)		3(1)		1(0)	2(0)	3(0)	

The Share of US Business Groups in Selected Industries, 1932



Group Diversification (mean HHI) and Vertical Integration 1926-1950



Sources: Statistics of Income, Moody's manuals and Authors' calculations

How the VI Measure is Calculated

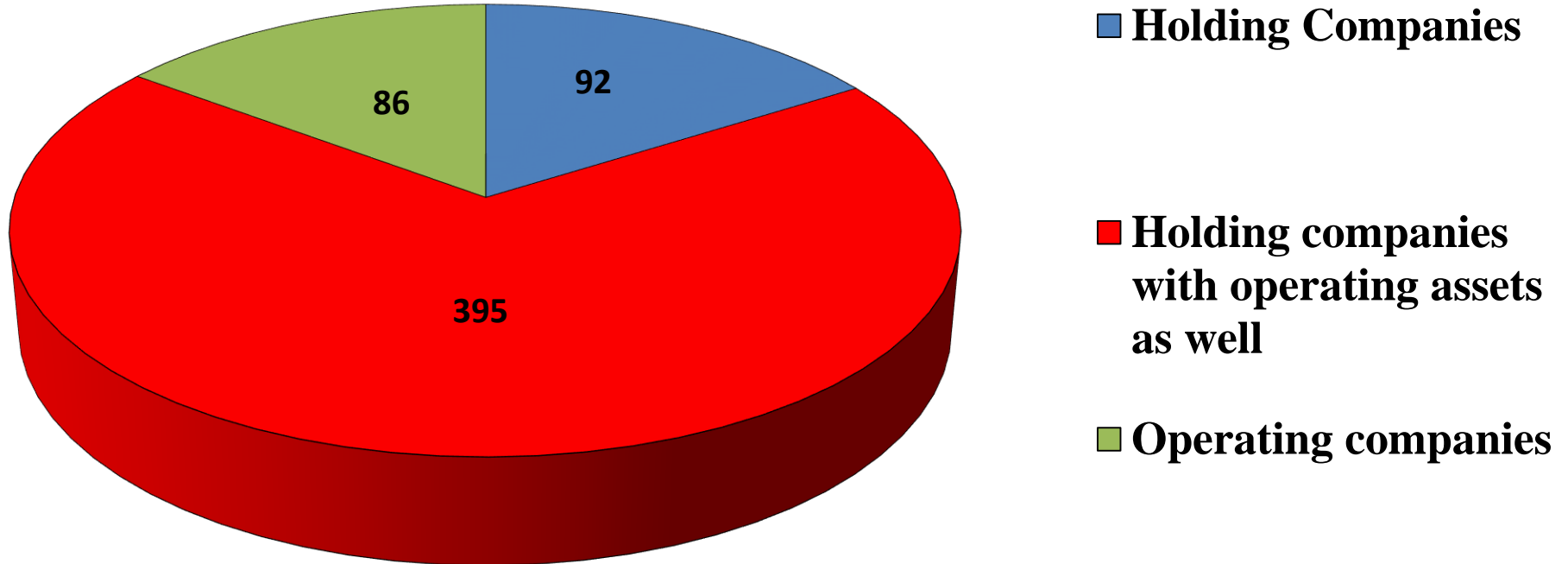
(Fan and Lang, 2000)

Group Vertical integration Index (VI) - a proxy for the opportunity for vertical integration (based on IO matrix coefficients) between group member firms

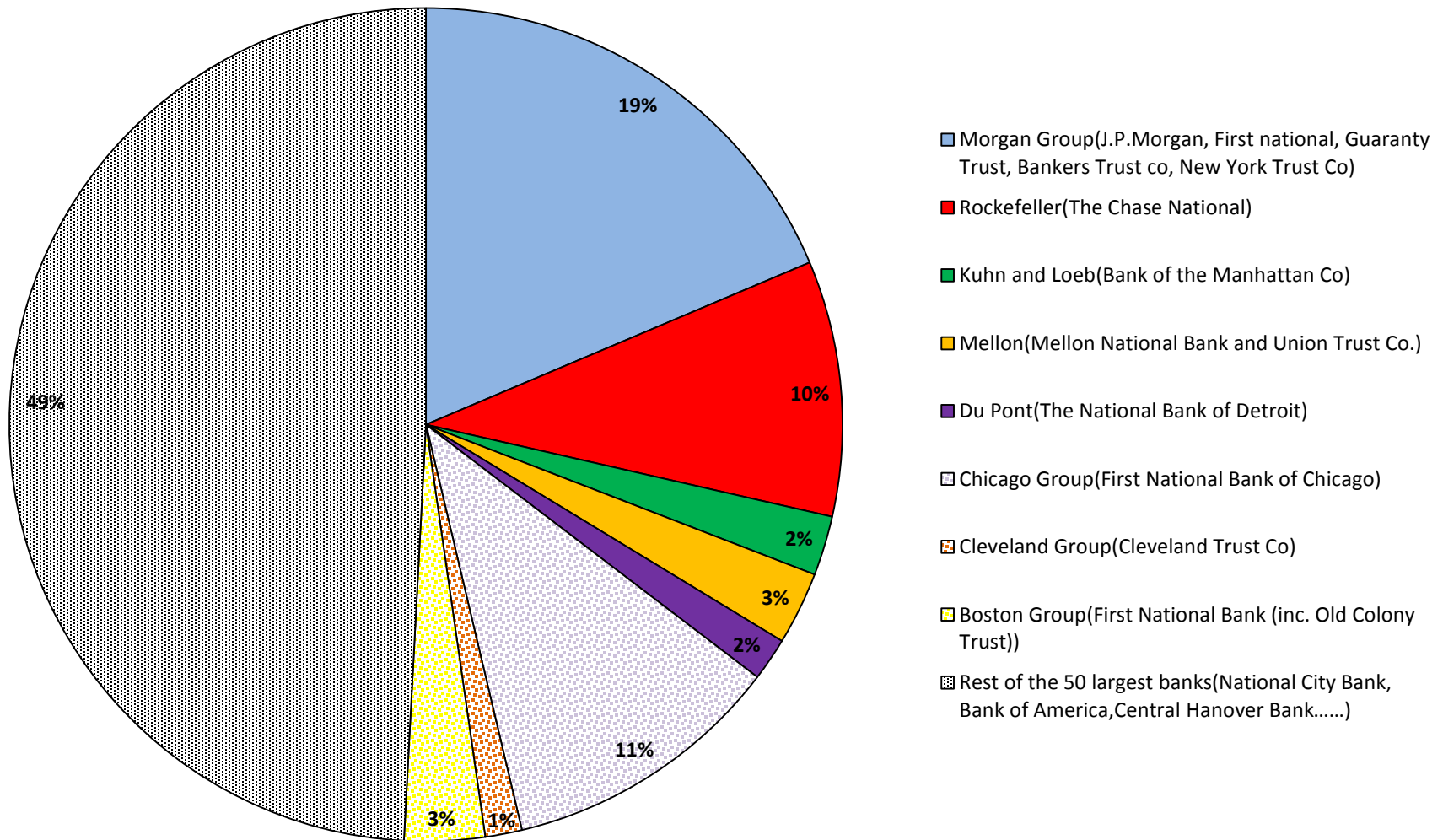
“In 1992, the total plastics output was \$31,502 million. The total output of bags was worth \$8,389 million. The bags industry consumed \$1,259 million worth of plastics (a_{ij}), whereas the plastics industry employed \$10 million worth of bags (a_{ji}) as an input. On a per-dollar basis, the bag industry consumed \$0.15 ($= 1,259/8,389$) worth of plastics for each dollar of bags produced (v_{ij}), whereas the plastics industry consumed \$0.0003 ($=10/31,502$) worth of bags for each dollar of plastics produced (v_{ji}). The vertical relatedness between the two industries is 0.0751 ($V_{ij}=1/2(v_{ij}+v_{ji})$), the average input transfer between the two industries on a per dollar basis”.

In 1928, ...

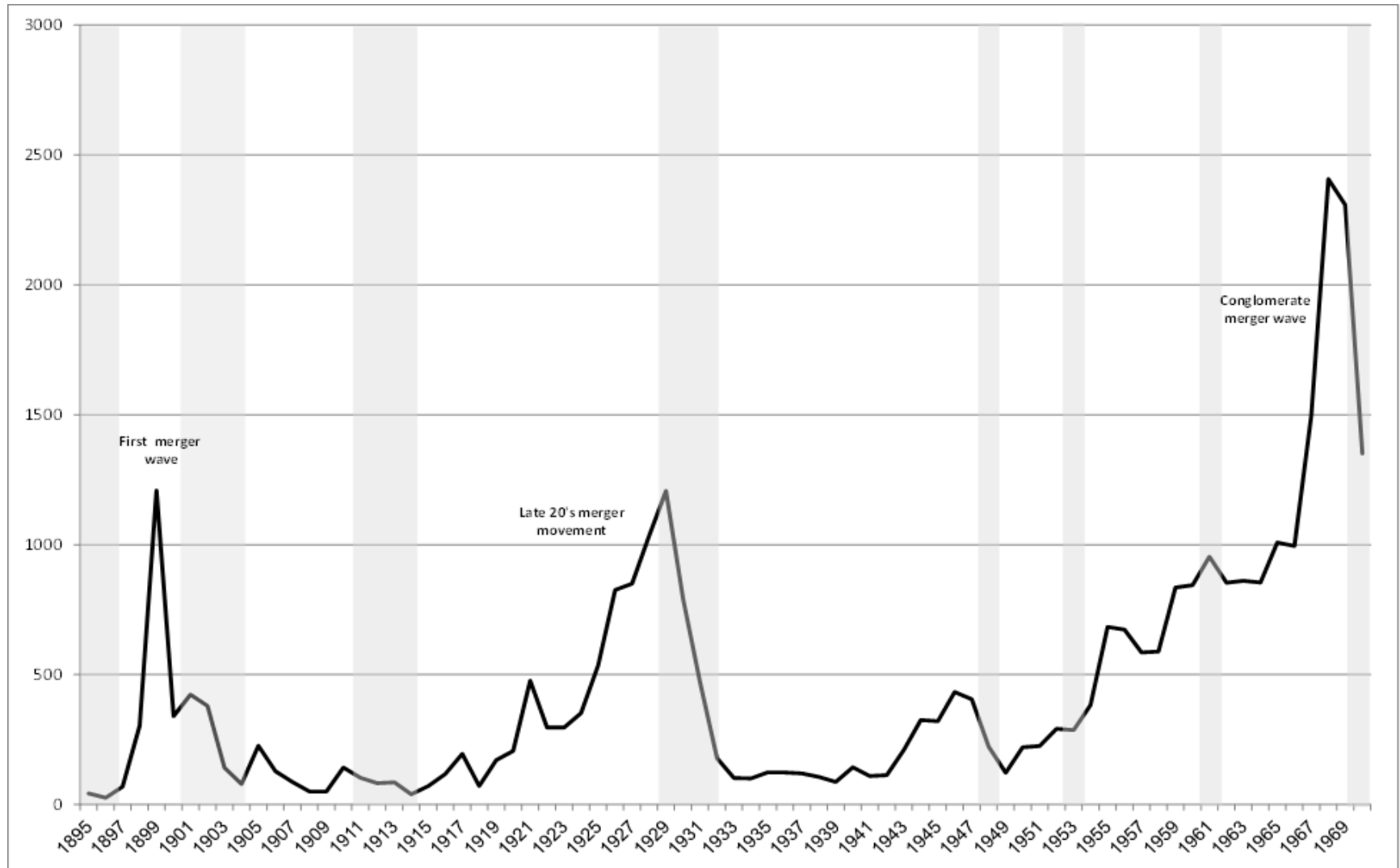
➤ **Holding Companies (group-affiliated and controllers of fully-owned subsidiaries) out of 573 Listed Companies on the NYSE**



Group-affiliated Financial Institutions: Total Assets of the 50 Largest Commercial Banks, 1933



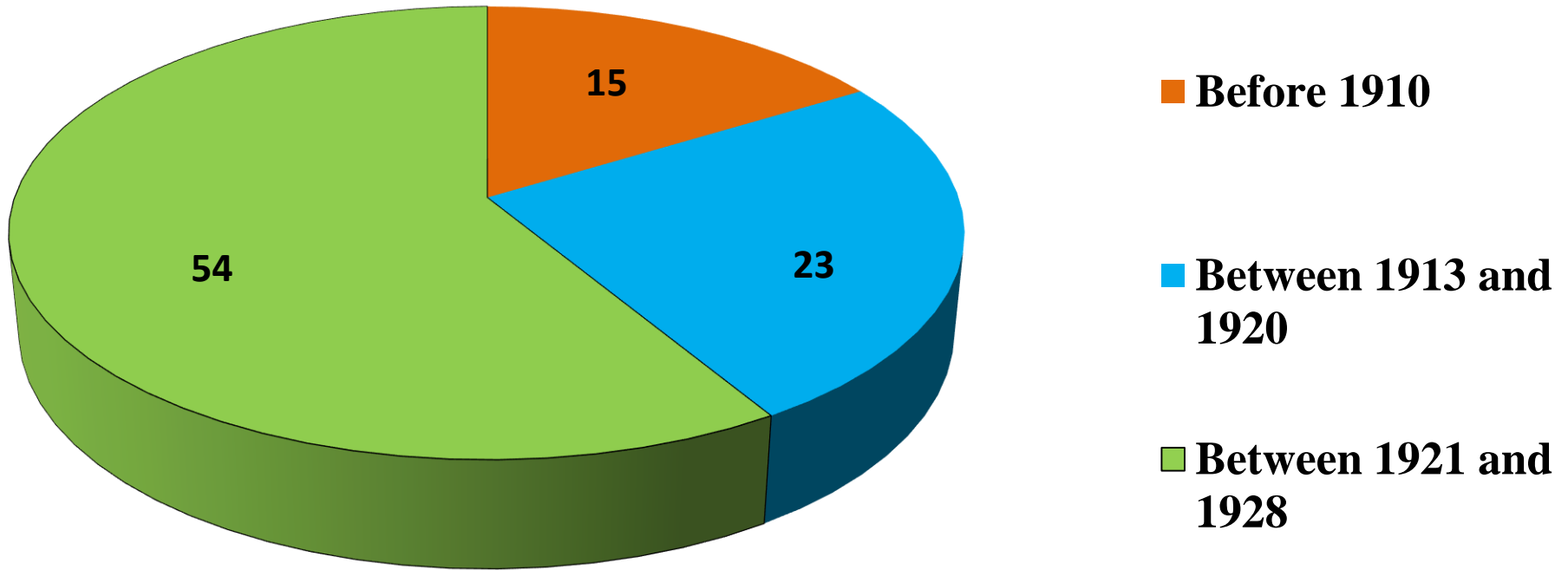
M&A Activity (Group and Conglomerate Formation), 1895 -1970



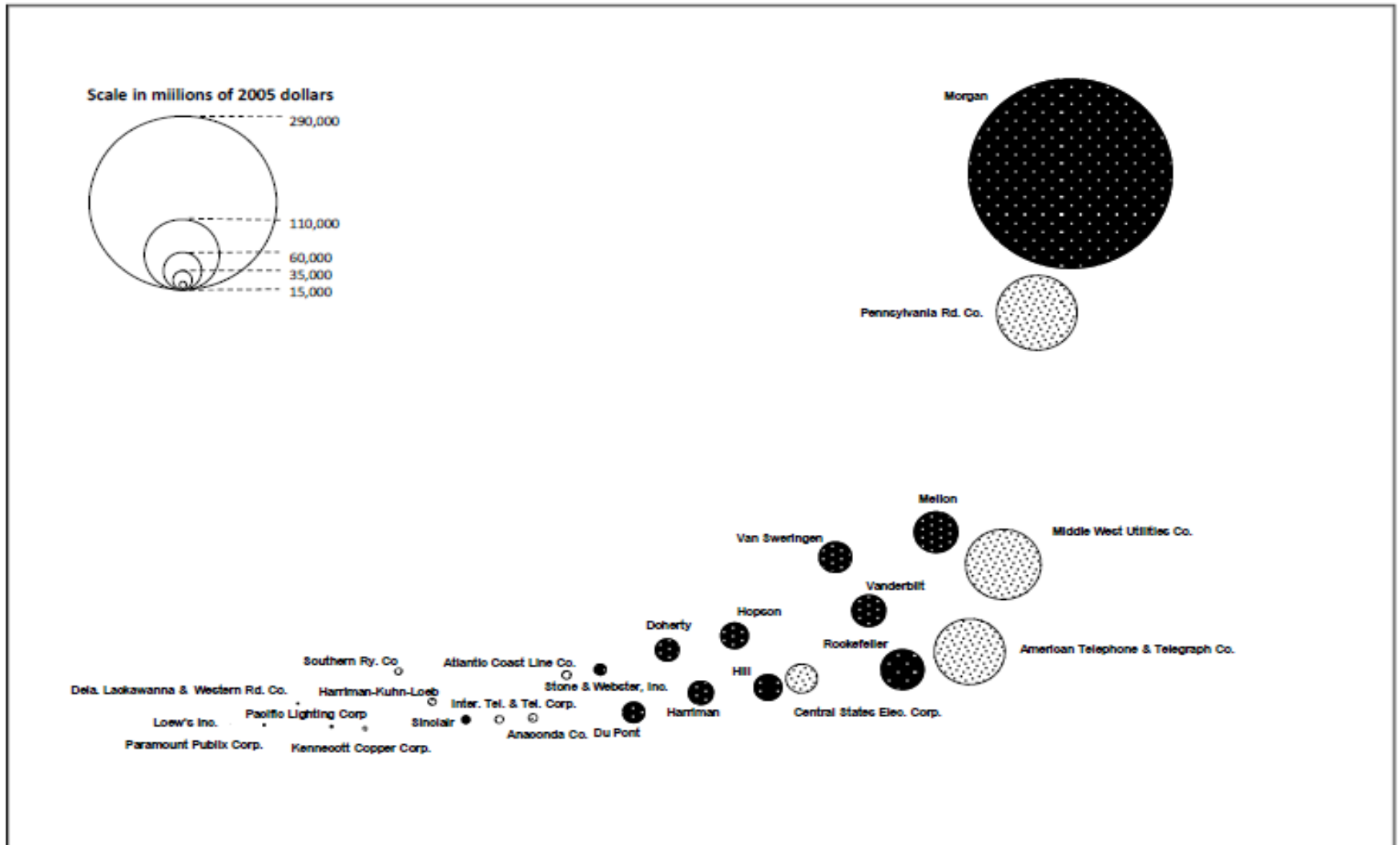
Sources: Nelson (1959), Historical Statistics of the United States (1970), NBER

In 1928, ...

➤ Of the 92 pure holding companies listed on NYSE



The Relative Size (total assets) of Business Groups, 1932








Group Revenues in comparison with the Largest US Firms Today

- ❑ The largest group - the Morgan Group - had revenues of \$46 billion in 1932 (2005 prices)**
- ❑ About 1/10 of today's largest American corporations such as Wall-Mart or Exxon-Mobil**
- ❑ But the size of the US economy is about 15 times larger today than it was in the early 1930s in real terms, so relative to the size of the economy, the Morgan Group was bigger**

3/5/2014

Fortune 500 2013: Annual ranking of America's largest corporations from Fortune Magazine

Rank	Company Name		Revenues (\$b)	Profits (\$mm)
1		Wal-Mart Stores	469.2	16,999
2		Exxon Mobil	449.9	44,880
3		Chevron	233.9	26,179
4		Phillips 66	169.6	4,124
5		Berkshire Hathaway	162.5	14,824

Size relative to Groups in Emerging Markets Today

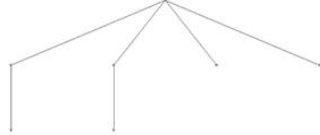
- ❑ The Morgan Group in 1932 was comparable in size to today's Formosa Group, the largest in Taiwan (in real terms, not relative to the size of the economy)**
- ❑ Smaller than the largest Korean groups (Samsung's 2005 revenues were in the order of \$80 billion and Hyundai's about \$60 billion)**

US Pyramids, 1932

Paramount Publix Corp.



Kennecott Copper Corp.



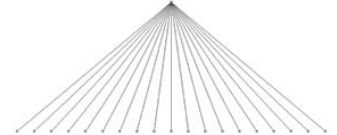
Loew's Inc.



Pacific Lighting Corp.



Dela. Lackawanna & Western Rd. Co.



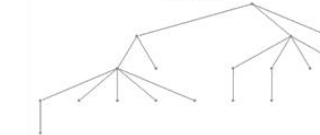
Inter. Tel. & Tel. Corp.



Harriman



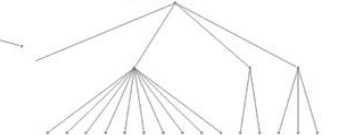
Du Pont



Anaconda Copper Mining Co.



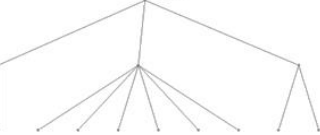
Kuhn-Loeb



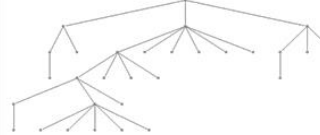
Southern Ry. Co.



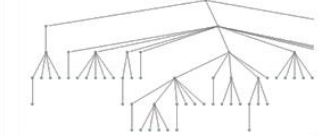
Sinclair



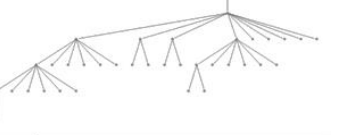
Hill



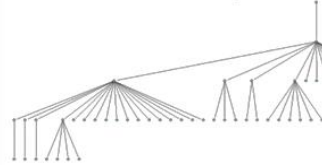
Hopson



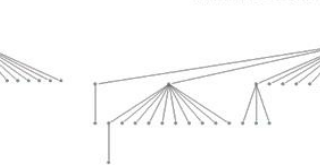
Central States Elec. Corp.



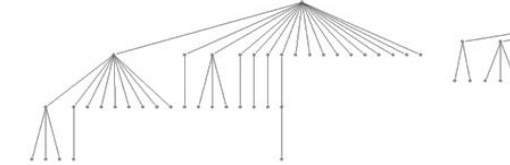
Doherty



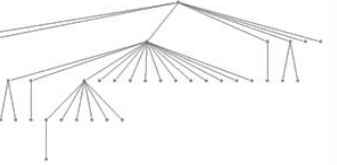
Atlantic Coast Line Co.



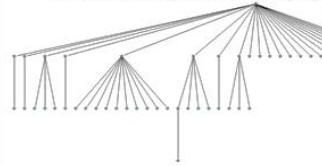
Stone & Webster, Inc.



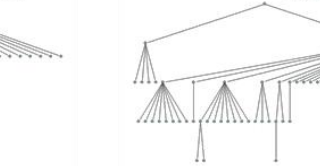
Rockefeller



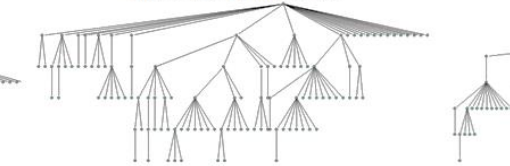
American Telephone & Telegraph Co.



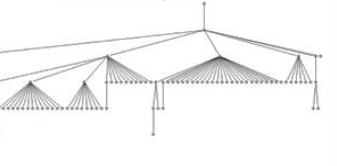
Vanderbilt



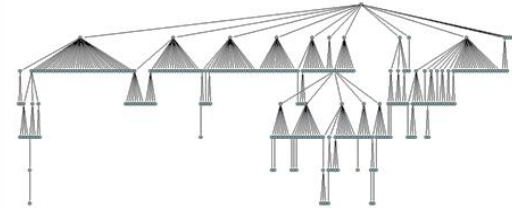
Middle West Utilities Co.



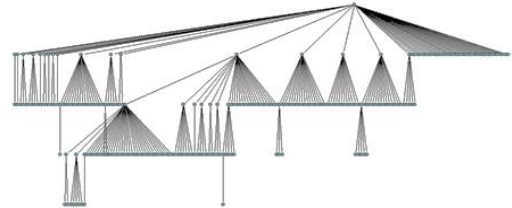
Van Sweringen



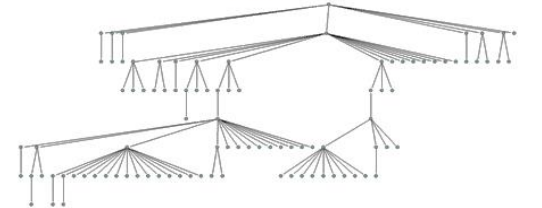
Morgan



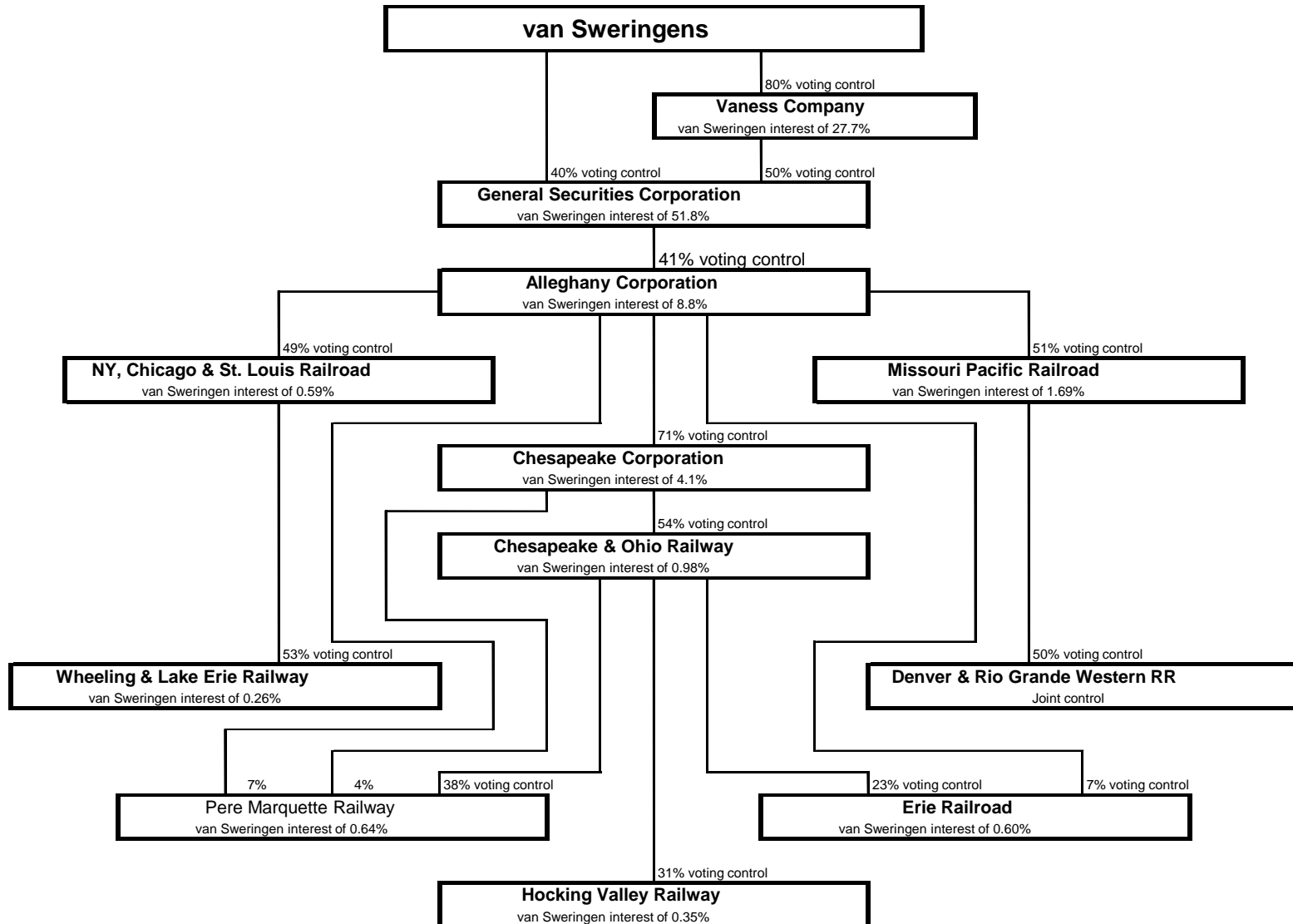
Pennsylvania Rd. Co.



Mellon

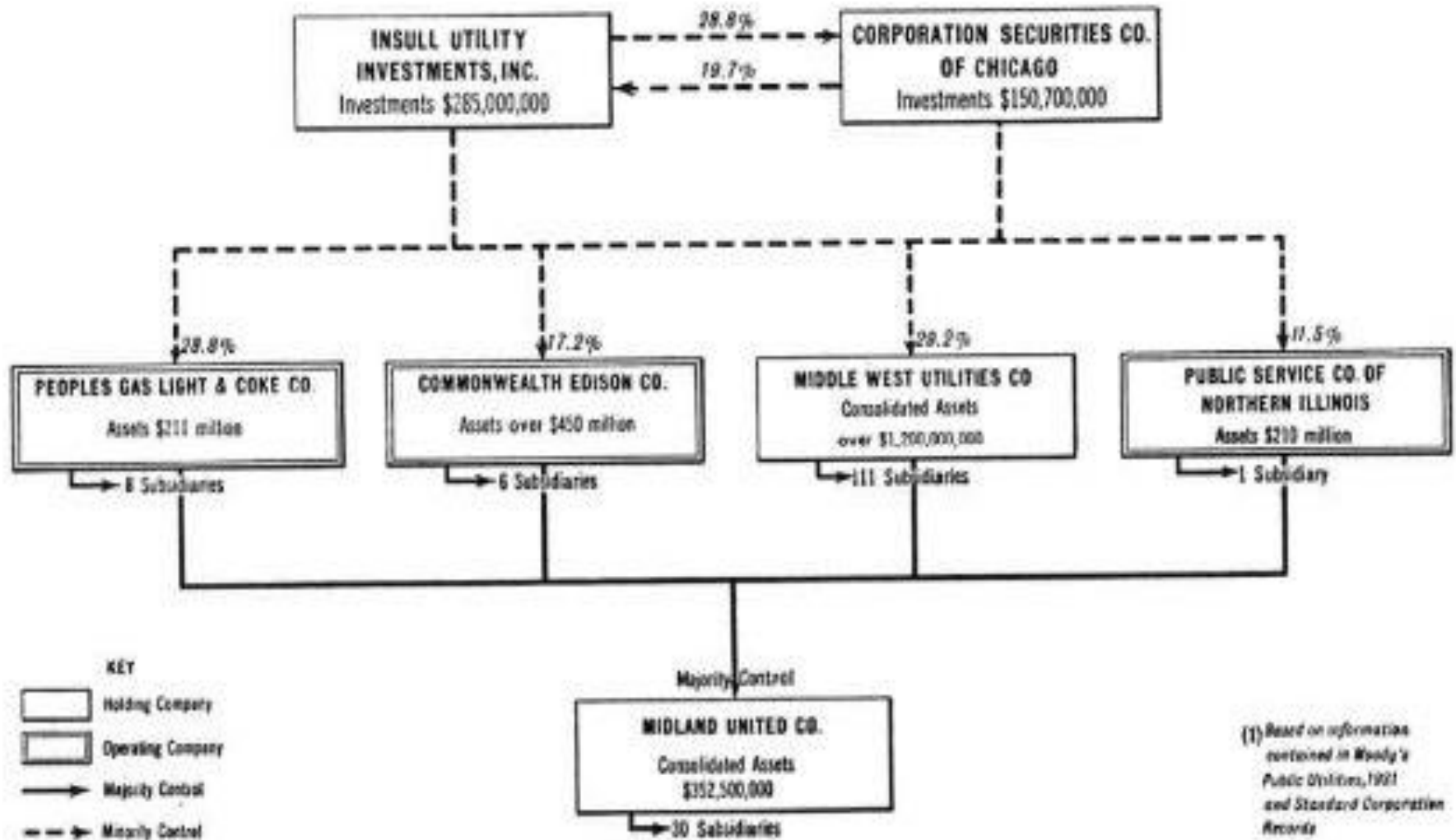


Alleghany (Van-Sweringen) Group



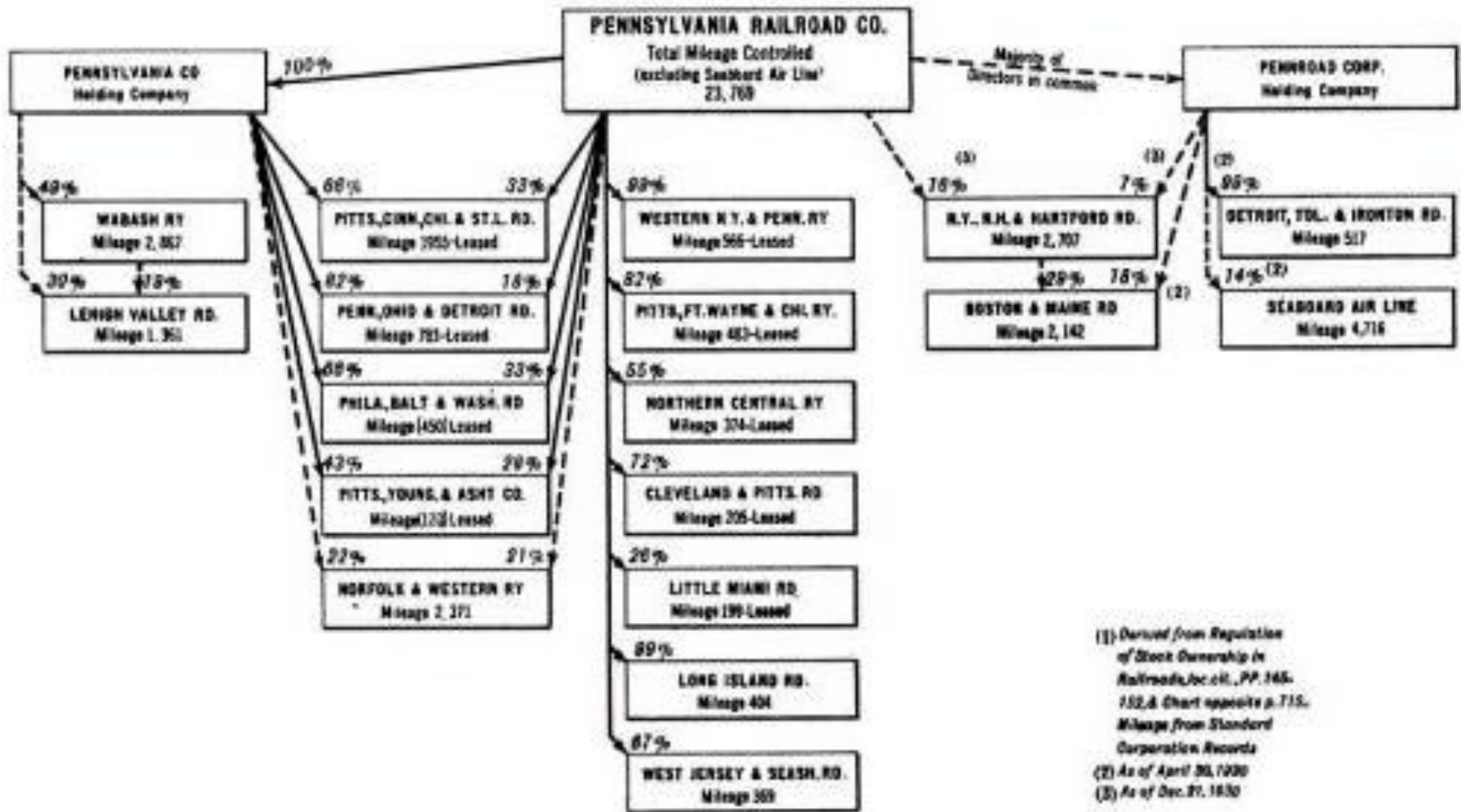
(Major elements only)

Insull Group (USA)



(Major elements only)

Pennsylvania RR Group (USA)



(Major elements only)

Average Ownership Stake Held by Controlling Shareholders

<i>Population</i>	<i>Number of companies</i>	<i>Mean</i>	<i>T-value (diff.)</i>
Publicly-traded	923	76%	
Group-affiliates	614	72%	7.47***
Stand-alone (non-affiliated)	309	85%	
Family-controlled groups	285	73.1%	-1.32
Widely-held groups	329	70.3%	

Geographic Distribution of US Business Groups, 1932

Holding Companies (N=143)



Operating Companies (N=1681)



US Exceptionalism - 1

Business groups in the 1930s USA	Business groups in most countries in the 2000s	America exceptional?
Commonplace	Commonplace	<i>No</i>
Pyramidal structure	Pyramidal structure	<i>No</i>
Large firms	Large firms	<i>No</i>
Small control wedge	Large control wedge	<i>Yes</i>
Industrially concentrated Geographically diversified?	Industrially diversified Geographically concentrated	<i>Yes</i>
Many with widely held apex firm	Apex firm is generally a family firm	<i>Yes</i>

The Evolution of US Business Groups 1926 – 1950

	Business Group/Year		1926		1929		1932		1937		1940		1950	
	Total	Public affiliates	Total	Public affiliates	Total	Public affiliates	Total	Public affiliates	Total	Public affiliates	Total	Public affiliates	Total	Public affiliates
Widely-Held Groups	American Gas & Electric Co.*												8	7
	American Radiator & St. San. Corp.			6	4									
	American Telephone & Telegraph Co.	45	6	48	8	49	8	39	6	35	7	29	8	
	American Tobacco Co.			5	3					4	3	4	4	
	Anaconda Copper Mining Co.					12	7			11	6	10	5	
	Atlantic Coast Line Co.	35	4	36	5	36	5			38	4			
	Baltimore & Ohio R.R. Co.									39	4	25	4	
	Baltimore & Ohio R.R. Co.+New York Central									36	3			
	Central States Elec. Corp.	27	5	49	15	34	4	57	5	22	7			
	Commonwealth Edison Co.							34	4					
	Dela. Lackawanna & Western Rd. Co.	21	3			20	3	20	4					
	Delaware & Hudson Co.	14	3	13	3			14	3	14	3			
	Delaware & Hudson Co. + Union Pacific Rd. Co.									61	11			
	Electric Bond & Share Co.*									61	9	24	11	
	General Electric Co.							87	15					
	General Theatre Equipment, Inc			10	4									
	Great Northern Ry. Co							20	3					
	Inter. Tel. & Tel. Corp.			14	6	11	5	10	3	12	4	8	3	
	Kennecott Copper Corp.	5	4	7	4	7	4							
	Loew's Inc.					9	4	10	5	9	3	6	3	
	Middle West Utilities Co.					116	11							
	Milbank interests			36	5									
	National Dairy Products Corp.			11	3									
	New York, New Haven & Hartford R.R Co.											13	3	
	Pacific Lighting Corp			7	3	6	4	5	3					
	Paramount Publix Corp.			7	3	8	4			8	3	4	3	
	Pennsylvania Rd. Co.	170	32	206	40	239	43	123	17	84	13	35	9	
	Prince trust			5	3									
	Radio Corp. of America									10	4			
	Southern Pacific Co.							59	3	37	3			
	Southern Ry. Co	40	5			38	5	40	5	39	5	31	6	
	Stone & Webster, Inc.			39	8	39	7	34	8	36	7			
	Tide Water Associated Oil Co.	11	5											
	United Gas Improvement Co.	50	4											
	Western Union Tel. Co.									4	3	4	3	
Family owned groups	Broes and Grosman trust							17	11					
	Crawford interests	15	3											
	Cyrus S. Eaton & Assoc.	20	6	30	9									
	Doherty family*	41	3	45	3	50	5	32	4					
	Du Pont family	8	3	11	6	15	7	13	5	16	4	9	4	
	Harriman family	29	4	30	4	26	4	26	4			50	11	
	Harriman-Kuhn-Loeb					21	7							
	Hill family	27	3	26	4	29	9							
	Hopson			67	6	58	6							
	Insull	68	6	115	27									
	Mather family									4	3	3	3	
	Mellon Family			82	10	98	22	34	14	26	10			
	Morgan*	28	9	259	43	317	35	193	17	97	8			
	Rockefeller	30	19	46	27	39	14	72	13	37	10	15	6	
	Sinclair					11	6	10	3	9	3			
	Stone & Webster families	35	7											
	Van Sweringen			105	13	102	11							
	Vanderbilt	68	12	91	20	72	13	66	12					
	Warner family			6	3									
	Young and Kirby							103	12	71	9	50	5	

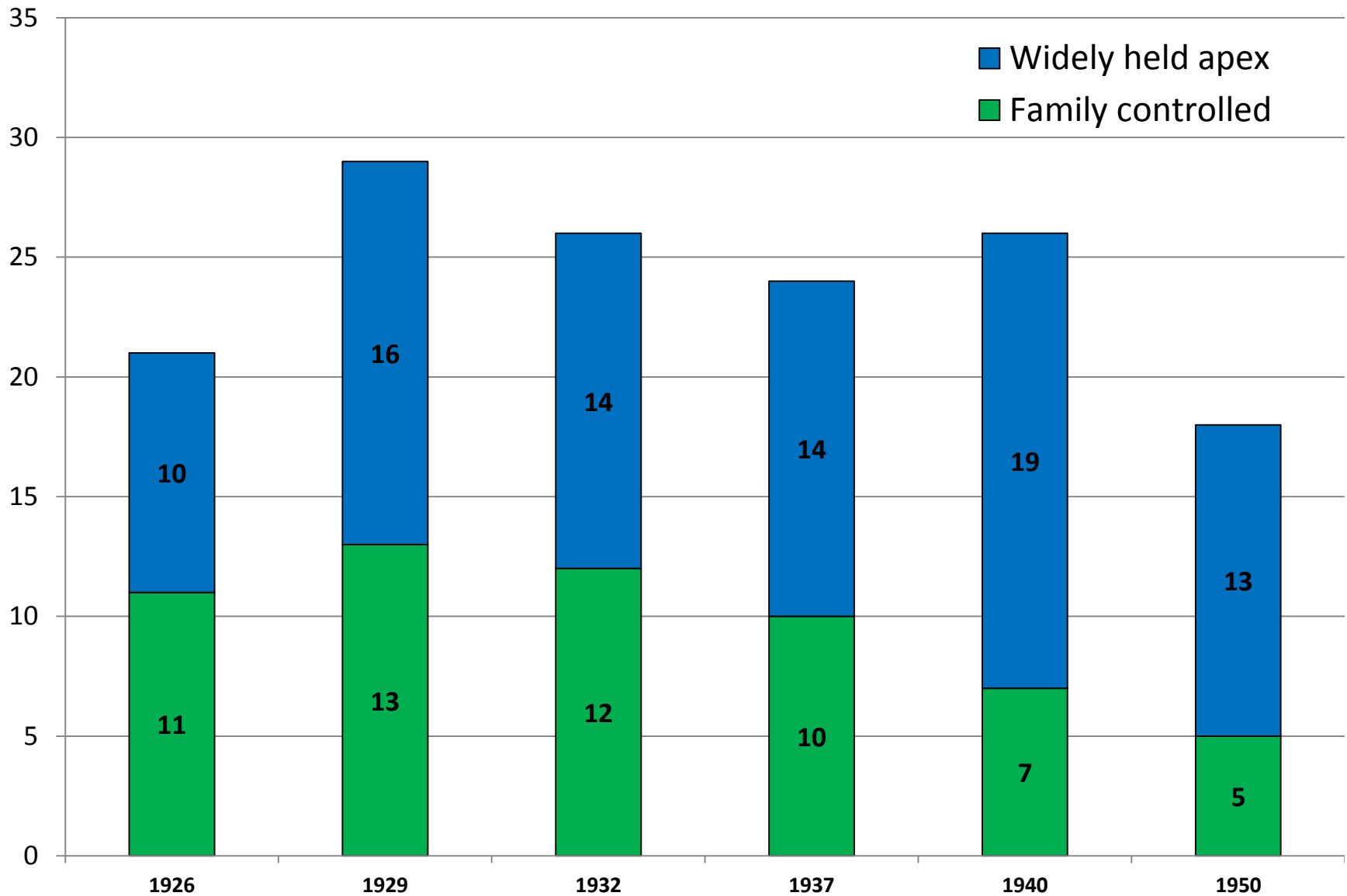
US Exceptionalism - 2

Business groups in the 1930s USA	Business groups in most countries in the 2000s	America exceptional?
Commonplace	Commonplace	No
Pyramidal structure	Pyramidal structure	No
Large firms	Large firms	No
Small control wedge	Large control wedge	Yes
Industrially concentrated Geographically diversified?	Industrially diversified Geographically concentrated	Yes
Many with widely held apex firm	Apex firm is generally a family firm	Yes
Gone	Still there	Yes

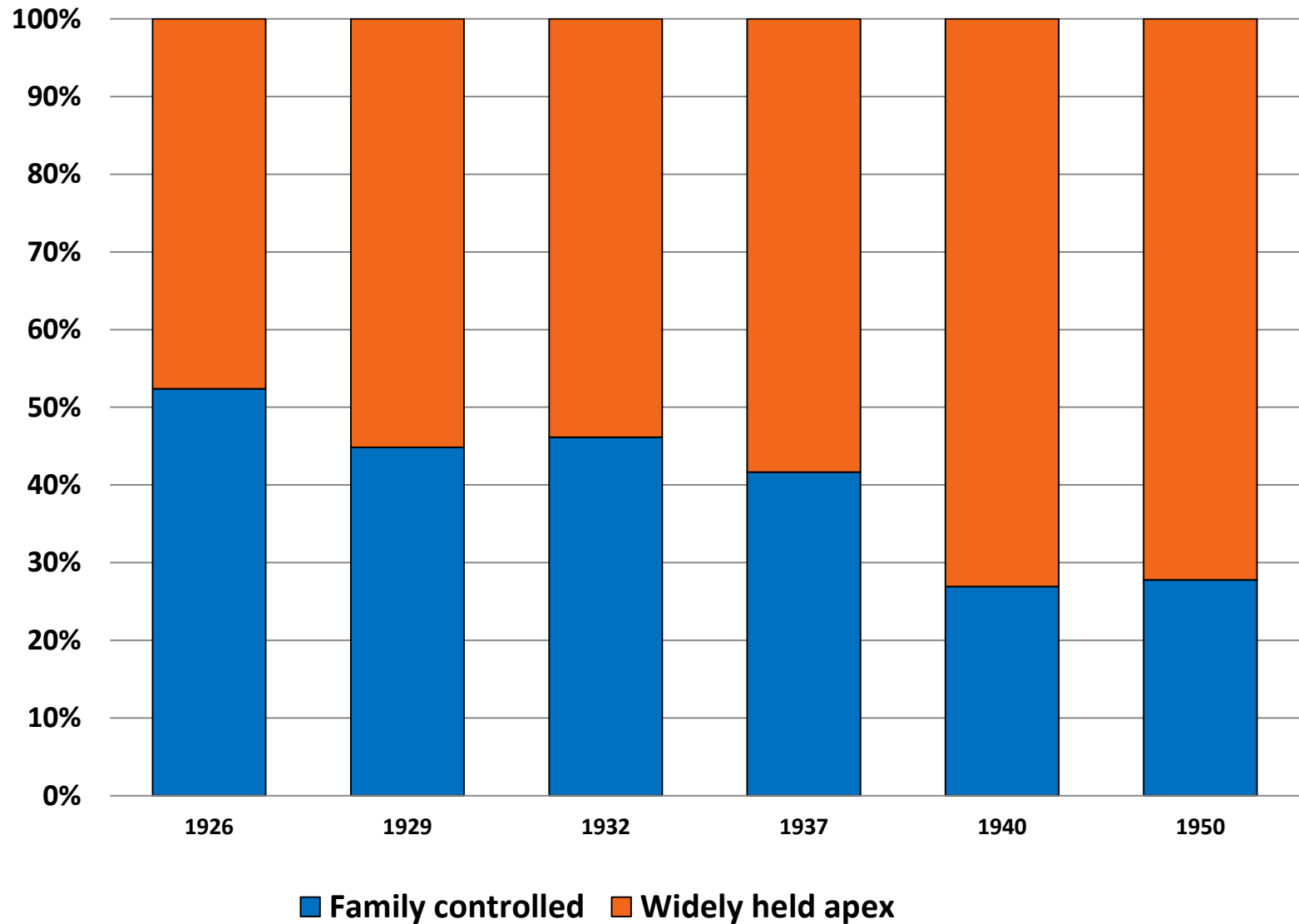
Survivor Groups vs. Groups which Disappeared

	Number of Groups	Age	Total Assets (\$mil)	Herfindahl Index	Public Level	Pyramidal level	Ownership	Family controlled	Vertical integration
<i>Survived</i>	18	30	21,238	0.9	1.7	2.6	83%	28%	0.015
<i>Disappeared</i>	35	27	16,694	0.8	2.0	3.1	68%	51%	0.011
<i>T-test differences significance</i>		-	***	-	-	-	**	**	-

The Disappearance of (Family) Groups



Proportion of Family-controlled vs. Widely-held Groups



Survival Analysis

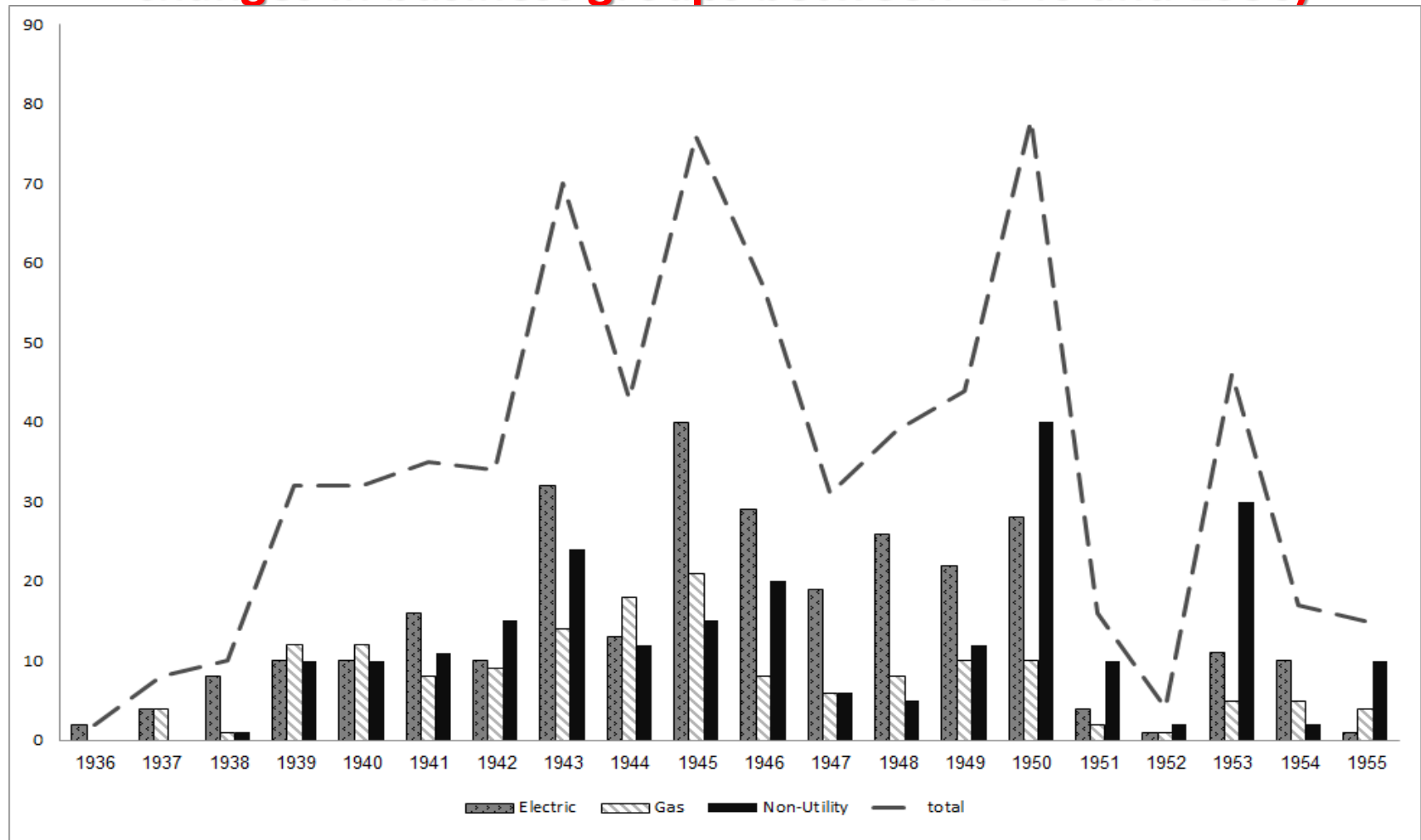
- ❑ Probit regressions where the dependent variable is survived/disappeared by 1950 dummy
- ❑ Confirm the effect of size and ownership
- ❑ In addition, focused (non-diversified) groups and groups with a small number of pyramidal levels (or a small control-cash flow wedge) were more likely to survive (but the “wedge” is not very large in groups which disappeared also)

Survivor Groups vs. Groups which Disappeared

	(1)	(2)	(3)	(4)	(5) Pre- Depression Groups	(6) PUHCA era (1935-1950)	(7) PUHCA era (1935-1950)
Family controlled	-1.03* (0.61)	-0.65 (0.44)	-0.45 (0.8)	-0.74* (0.43)	-1.74** (0.86)		-0.47 (0.59)
Depression dummy		-0.41 (0.45)	-2.51** (1.29)				
Earnings	0.85* (0.46)	0.45* (0.25)	1.61* (0.84)	0.63** (0.27)	1.32*** (0.49)	0.63* (0.35)	0.74* (0.38)
Industrial Concentration	5.12** (2.05)	2.12* (1.14)	9.6* (4.31)	1.9* (1.03)	3.24* (1.97)	2.58** (1.28)	2.47* (1.32)
Geographic Diversification				2.04* (1.09)		3.37* (1.77)	3.6** (1.82)
Vertical Integration	0.45 (0.5)		0.37 (0.66)				
Ownership stake	6.7* (3.48)	3.63** (1.6)	11* (6.35)		4.56* (2.72)	5*** (1.96)	4.9*** (1.91)
<i>Intercept</i>	+	+	+	+	+	+	+
<i>Observations</i>	53	53	34	53	33	36	36
<i>R-square</i>	0.26	0.29	0.55	0.21	0.46	0.4	0.42
<i>Hosmer-Lemeshov (pr>chisq)</i>	0.58	0.25	0.64	0.64	0.96	0.65	0.3

Properties Sold/Divested by Public Utilities Holding Companies, 1936-1955

(but apparently PUHCA accounts for only ~10% of all ownership changes in business groups between 1940 and 1950)

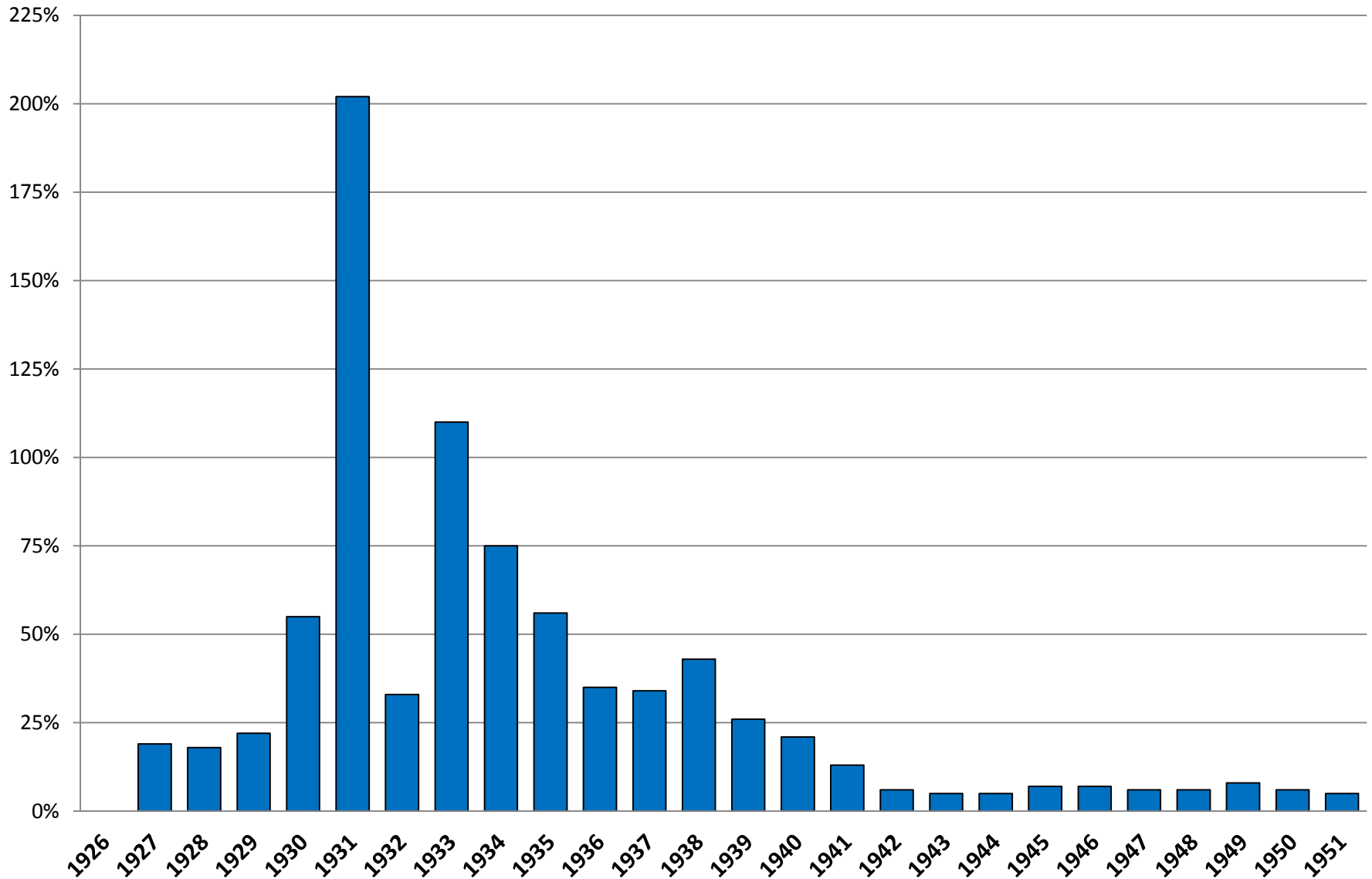


The Prevalence of Inter-corporate Dividends

Taxable year	Total all corporations (\$mil)	Compiled Net Profits (CNP) (\$mil)	% of CNP	Agriculture and related	Mining and Quarrying	Manufacturing	Construction	Transportation and other public utilities	Trade	Services	Finance, banking, insurance, real estate, holding companies, stock and bond brokers	
											Total	Holding Companies
1926	1506	9510	16%	7	76	428	12	447	54	20	461	na
1927	1658	8669	19%	8	52	377	26	547	58	27	559	na
1928	1916	10667	18%	9	58	475	12	581	62	35	682	na
1929	2593	11870	22%	9	60	584	14	832	59	60	972	na
1930	2571	4649	55%	10	54	548	25	740	64	53	1076	na
1931	1569	777	202%	5	35	392	21	615	47	42	809	na
1932	1259	3829	33%	5	21	211	18	429	36	18	521	na
1933	1025	930	110%	4	16	160	10	311	34	8	481	na
1934	2217	2970	75%	6	76	389	5	324	60	12	1346	177
1935	3013	5423	56%	10	72	613	6	268	72	17	1955	229
1936	2676	7618	35%	13	68	546	7	341	81	45	1575	na
1937	2682	7777	34%	13	86	524	6	324	94	36	1602	na
1938	1791	4144	43%	7	41	261	4	268	60	21	1065	589
1939	1906	7236	26%	7	41	367	6	293	53	21	1116	655
1940	2021	9472	21%	7	43	373	8	130	49	23	1264	996
1941	2235	16592	13%	9	55	502	6	139	61	25	1306	1034
1942	1344	23280	6%	4	31	305	9	301	40	22	631	297
1943	1334	27933	5%	4	25	312	8	323	47	23	591	264
1944	1429	26547	5%	7	32	394	5	306	47	32	605	274
1945	1418	21345	7%	13	22	358	11	323	48	39	604	268
1946	1713	25399	7%	4	30	464	8	367	91	56	693	311
1947	1837	31615	6%	6	54	590	7	340	92	42	749	300
1948	2194	34588	6%	6	102	716	11	390	102	28	877	581
1949	2162	28387	8%	5	82	674	8	195	85	25	1086	807
1950	2460	42831	6%	45	97	920	12	244	100	31	1010	666
1951	2377	43800	5%	35	94	902	12	238	99	25	972	611

Inter-corporate Dividend Income

(as % of corporate earnings of the recipient company)



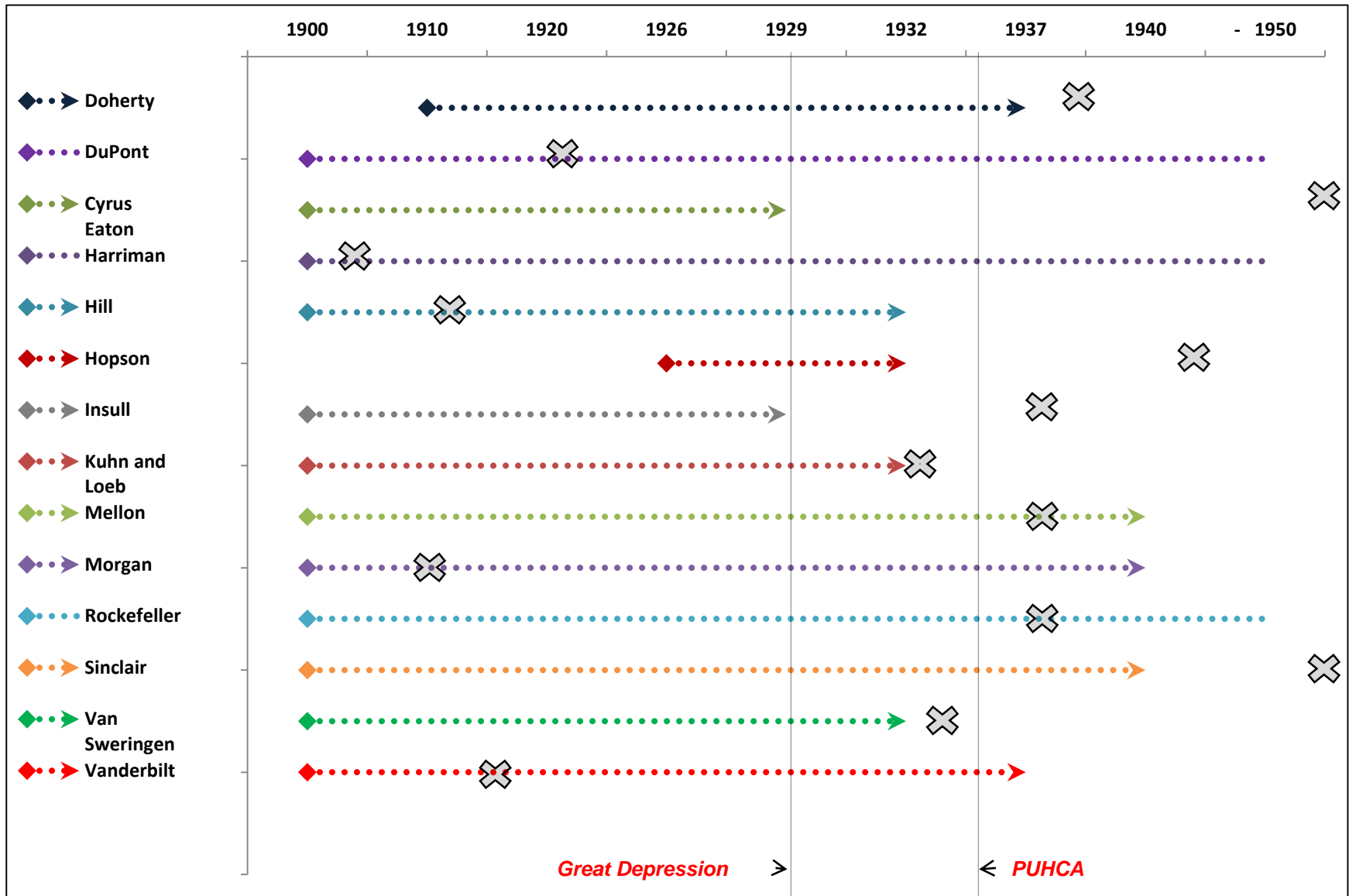
WW-II period

- ☐ **Revenue Acts 1940-1943 (increased taxation; Frydman's work shows this did not affect exec compensation)**
- ☐ **SEC Administration of PUHCA**
- ☐ **Investment Act of 1940 (disclosure)**
- ☐ **Decline in the importance of investment banks**

VS.

- ☐ **Reinforcement of the power of Big Business (War Production Board)**
- ☐ **War-time delay in anti-trust enforcement and increased concentration**

Family Groups and Succession



- Founder succession/death



- Group life-period

The Demise of Groups

- ❑ The demise of business groups in America was a slow process, not an immediate response to the legislative measures of the 1930s**
- ❑ While the phenomenon of family-controlled groups nearly disappeared, widely-held groups, a rarity outside the US, continued to exist until 1950 and in some cases even later than that**
- ❑ The disappearing groups were the ones more affected by the rise of the SEC? (control-cash flow “wedge” was higher in groups which disappeared, but differences were not very large by today’s standards)**
- ❑ What did the Americans know when they dissolved the zaibatsu in Japan?**

The Demise of Family-Controlled Groups

- ❑ Were they more susceptible to investor protection measures such as the rise of the SEC?
 - *Not sure, because control-cash flow wedges were not very different than in non-family controlled groups (average holdings of about 70% in affiliated firms)*
- ❑ Were they more dependent on dividends?
 - *Not sure if the dividend tax was effective (contemporary observers)*
 - *On the one hand, losing companies did not always pay the tax; on the other hand, restrictions on consolidated financial statements made the tax more effective*
- ❑ Were they more sensitive to the PUHCA? *Unlikely*
- ❑ Demise not clearly related due to succession

The Demise of Family-Controlled Groups (2)

- ❑ **Other factors exerting pressure on family-controlled groups? (to be explored)**
- ❑ **Glass-Steagall Act affected investment banking/ internal K markets within family-controlled group? Not all were equally affected (Morgan vs. the Rockefeller and Harriman families)**
- ❑ **Estate tax (which was flat throughout the period) in combination with other factors implied that family-controlled groups faced more pressure?**
- ❑ **Rise in antitrust enforcement in the 1940s affected family-controlled groups more than others? Why? (To be explored...)**

Pyramids & Conglomerates

- It doesn't look like pyramids converted themselves into conglomerates
- The conglomerate merger wave was primarily a 1960s phenomenon. By then, pyramids were gone
- We find only one example of members of a pyramidal group reforming into a conglomerate (ITT)

The Rise of Stock Markets?

- ❑ **No clear evidence to suggest that the demise of business groups led to an immediate rise in market-based financial development**
- ❑ **The dissolution of groups was an essential prerequisite for financial development, but the effect was slow/ delayed/ materialized only in conjunction with other regulatory changes which made a difference (e.g. ERISA)?**
- ❑ **Groups and developed stock markets need not be mutually exclusive?**

Conclusions, Version 1: Demise of US Pyramids (It's not exactly what you thought)

Inter-corporate dividend taxes?

- ❖ Not immediate, but inter-corporate dividends declined in the 1940s
- ❖ Not clear if the tax was effective
- ❖ Family groups disappeared faster than widely-held groups because families wanted dividends more? Why were widely-held groups more tenacious?

Public Utilities Holding Companies Act?

- ❖ Not immediate
- ❖ SEC administration affected directly a relatively small number of groups?
- ❖ What could explain the stronger effect on family-controlled groups?

Shareholder rights and the SEC?

- ❖ Not immediate
- ❖ Affected family-controlled groups more than others?
- ❖ Not clearly linked to institutional investor pressure and financial development

Antitrust enforcement?

- ❖ Becomes stronger in the early 1950s and may have played a role?

Populism?

- ❖ Dissolution not obviously precipitated by any single reform but the political climate was “right?”

Conclusions, Version 2:

- ❑ BGs (of certain types) are not incompatible with common law and investor protection**
- ❑ BGs need not always involve a large “wedge” between the controlling shareholder’s control and cash flow rights**
- ❑ The public discourse about them need not focus on minority shareholder expropriation**
- ❑ In an institutionally developed democracy, anti-group regulation is unlikely to yield immediate results due to legal (and political) challenges**

Conclusions, Version 2 - contd.

- ❑ Once groups disappear, benefits in the form of financial development are uncertain/ may take a long time to materialize**
- ❑ Disappearance of groups in the US was a result of a combination of factors which cannot be easily separated?**

Outline of a Future Research Agenda

Next steps:

- **Immediate:** Try to measure the effects of the Glass-Steagall Act and antitrust enforcement on groups
- **Firm-level analysis:** What happened to firms formerly affiliated with groups between 1940 and 1950? About 750 (out of 1600) changed ownership during this decade, probably less than 100 due to PUHCA
- **Robustness of the group definition?**

Longer-run extensions:

- ❖ **Did the elimination of groups foster competition in the US (or in specific industries)?**
- ❖ **Did the demise of groups affect financial development at the industry level (external financial dependence in industries without groups?)**