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RATINGS PERFORMANCE, REGULATION AND THE GREAT DEPRESSION: LESSONS FROM FOREIGN GOVERNMENT SECURITIES

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Agenda

Introduction &
The Rise of Rating's Regulatory License in the Interwar

Regulatory environment and performance &
The Provision of Ratings in the Interwar Era

Sovereign Rating Outlook in the Interwar Era &
Ratings and Defaults

Performance and Accuracy Ratios &
Ratings vs. Bankers

Conflicts of interest, legal franchise and regulatory license &
Conclusions

Basic Questions

Financial crises seem to have remained a constant in the long run …

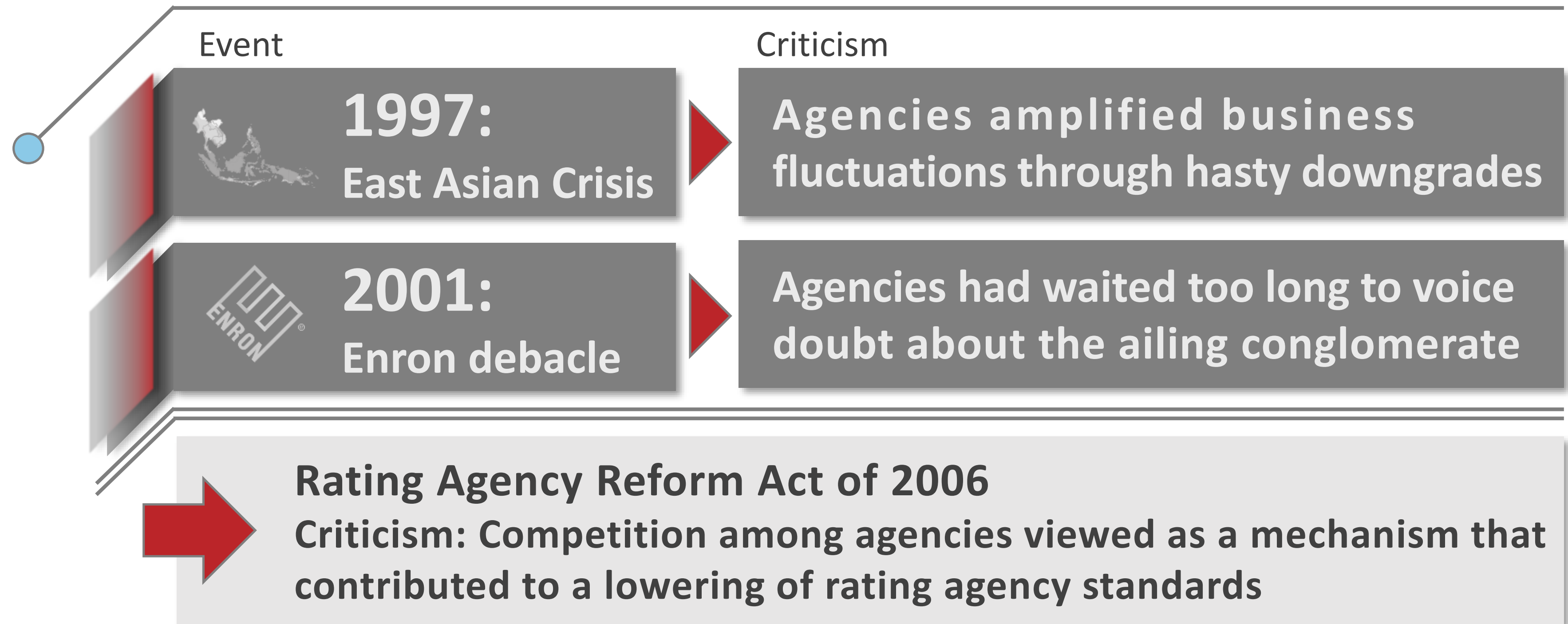
How to explain financial crises?

STANDARD &POOR'S
MOODY'S
FitchRatings

Which is the role of rating agencies?

Introduction

Credit rating agencies have long been a lightning rod for criticism when financial markets were perceived to have failed ...



How and why came rating agencies to be used as a basis of regulatory frameworks in the first place?

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The Rise of Rating's Regulatory License

OCC[1] ruling:

- All Federal, State and Municipal US securities as well as other domestic or foreign securities belonging to any of the top four categories of ratings can be booked by banks at face value
- Other securities and defaulted bonds continue to be marked to market

Heavily dependend on rating agency judgements

Banking Act:

- OCC was vested with the power to identify "investment securities" that institutions under its supervision would be enabled to buy → similar arrangement was made for State banks

Increase of the power of OCC

OCC ruling:

- National banks were now prevented from buying securities viewed as "distinctly and predominantly speculative"
- Significant new constraint → Increase of securities falling below the agencies' fourth category

Banks: greater freedom over the identification of speculative securities

1929: Great Crash
Bankterism

1931: OCC ruling
Important event

1935: Banking Act

1936: OCC ruling
Triggered protest

The financial crisis of the 1930s led regulators to start depending on rating agencies

[1] Office of the Comptroller of the Currency

Regulatory environment and performance

- Some argue that the regulatory license rating obtained in 1930's modified the set of incentives facing rating agencies
- Goodhart (2008) "in the early 1930s, incentives to produce reliable information for investors were complicated by introducing ratings into the regulatory process."
- Importance of reputation mechanism and low barriers at entry
- Bolton, Freixas and Shapiro (2008) suggest that rating agencies have an incentive to inflate ratings when there are naive investors or when reputation costs are lower

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The Provision of Ratings in the Interwar Era

- Innovation on securities analyses came when Moody’s began rating railroad securities in 1909. Poor’s followed in 1916
- New entrants in 1920’s: Fitch and Standard Statistics
- Gradual increase on the frequency of updates of manuals and letters
- This can be taken as an indicator of the increased demand for the agency products. This process didn’t began only in 1930’s with the OCC regulation
- In general Moody’s was the leader, Fitch and Poor’s were followers.

The Provision of Ratings in the Interwar Era

Symbology

Moody's	Fitch Ratings	Poor's	Standard
AAA	Aaa	A**	A1+
AA	Aa	A*	A1
A	A	A	A

Complications when Moody's lacked of letter D, and Poor's usage of super rating category above A**

This situation is consistent with models predicting that agencies with a reputation yet to establish may not favor overly precise information. Because more information may increase investor's payoff's, it could also ruin their reputation in case of errors

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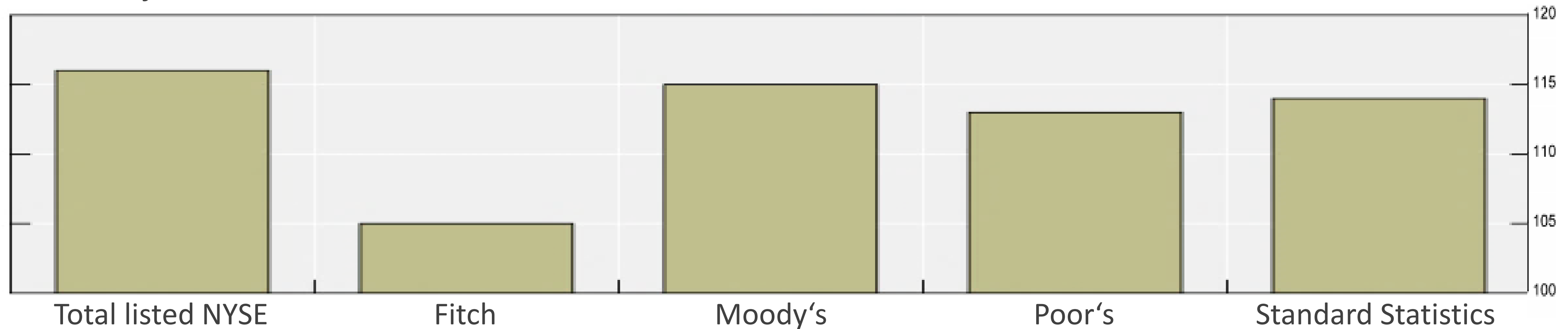
Sovereign Rating Outlook in the Interwar Era

AAA

Listed NYSE sovereign securities and rating agency coverage
Number of securities



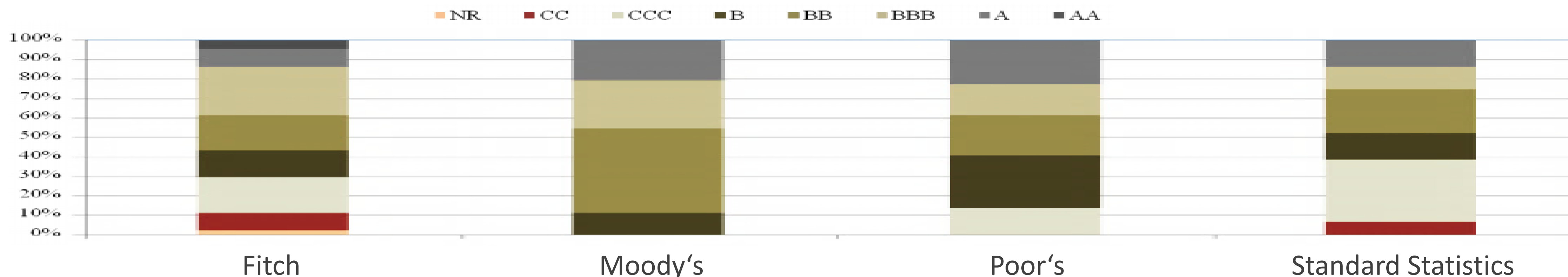
Shows the number of sovereign securities listed on the NYSE in 1929 and the number of these securities that were covered by the agencies' publications during that year (1929)

Coverage of instruments listed in the NYSE by Moody's, Poor's and Standard Statistics was close to exhaustive

Ratings and Defaults

Ratings composition at the time of default

(1920 - 1939, 44 defaulted issues)



AAA

The composition of the (last observed) ratings for the four rating agencies at the time of default for the 41 defaults of the sample

More than one-half of all defaulted bonds are observed to have a high-grade rating (the equivalent of BBB or higher) from at least one agency

Individual agencies

the last observed ratings for 39% of the defaulting issues are high-grade

Fitch and Poor's

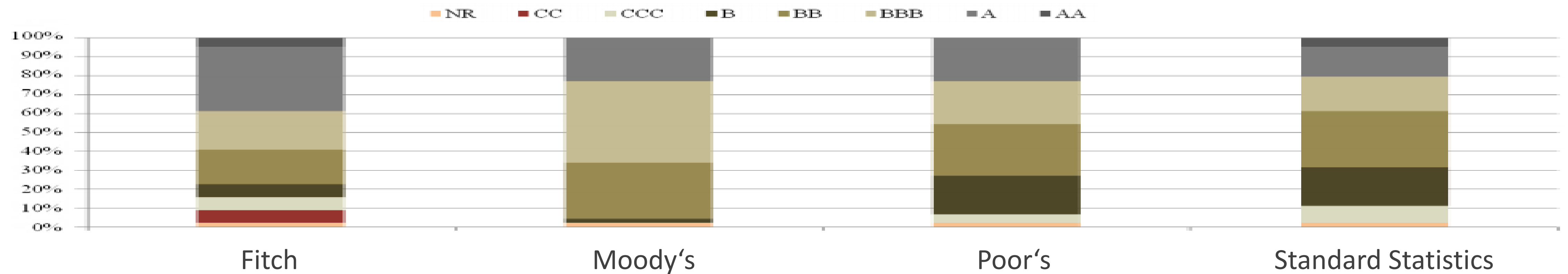
fully 45% were rated high-grade

Standard Statistics has "only" 25% of the defaulting issues rated high-grade

Ratings and Defaults

AAA

Ratings composition one year before the default
(1920 - 1939, 44 defaulted issues)



Between 39% (Standard Statistics) and 66% (Moody's) of the defaulting bonds are observed to have a high-grade rating one-year ahead of default

This compares to an average Moody's rating one-year prior to default of B in the 1983-2001 sample mentioned above

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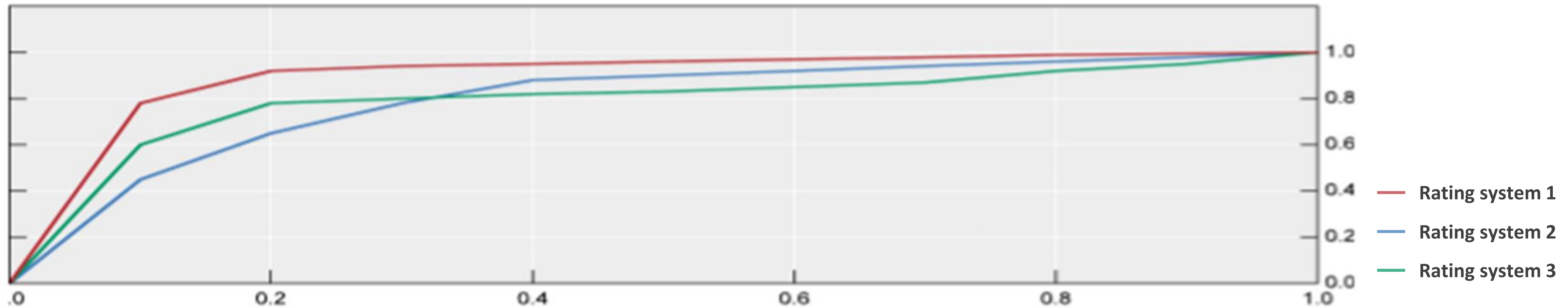
Performance and Accuracy Ratios

Cumulative Accuracy Profiles: 3 Cases



- The degree to which default rates tend to increase as ratings decline is an indicator of the ability of rating agencies to order relative risks
- The so-called cumulative accuracy profile (CAP) and associated accuracy ratio are a more precise assessment of a rating system
- CAP and accuracy ratios can be calculated for any group of securities at a single point in time for any given time horizon
- CAP curve indicates the share of total defaults among the borrowers as a function of the share of the lowest-rated borrowers in the sample
- The more the CAP curve veers towards the upper-left hand corner close to the vertical and horizontal axes, the greater the proportion of defaults that occurs in the lowest rating categories

Performance and Accuracy Ratios

The accuracy ratios for agency ratings and average rating

	Fitch	Moody's	Poor's	Standard	Average rating
1-year horizon					
1931	0.30	0.49	0.27	0.46	0.45
1932	0.74	0.77	0.58	0.69	0.72
1933	0.70	0.63	0.58	0.63	0.64
1934	0.52	0.51	0.75	0.76	0.83
1936	0.85	0.61	0.71	0.85	0.72
Mean (1931-36)	0.62	0.60	0.58	0.68	0.67
Median (1931-36)	0.70	0.61	0.58	0.69	0.72
3-year horizon					
1929	0.40	0.54	0.31	0.41	0.51
1932	0.40	0.54	0.38	0.43	0.47
1935	0.70	0.70	0.80	0.84	0.85
Mean (1929-36)	0.53	0.60	0.54	0.59	0.63
Median (1929-36)	0.46	0.61	0.49	0.58	0.60
5-year horizon					
1929	0.49	0.57	0.48	0.51	0.57
1934	0.58	0.66	0.71	0.72	0.77
Mean (1928-36)	0.52	0.59	0.55	0.60	0.61
Median (1928-36)	0.55	0.57	0.54	0.61	0.58

Difference between the accuracy ratios for agency ratings and for yield-implied ratings

	Fitch	Moody's	Poor's	Standard	Average rating
1-year horizon					
1931	-0.18	-0.08	-0.37	-0.20	-0.18
1932	0.17	0.20	-0.07	0.00	0.05
1933	-0.05	-0.17	-0.18	-0.16	-0.13
1934	0.00	0.01	0.13	0.19	0.28
1936	-0.04	-0.12	-0.17	-0.02	-0.17
Mean (1931-36)	-0.02	-0.03	-0.13	-0.04	-0.03
Median (1931-36)	0.13	0.03	-0.06	0.00	0.05
3-year horizon					
1929	0.09	0.29	0.03	0.18	0.20
1932	-0.17	-0.04	-0.23	-0.16	-0.13
1935	-0.24	-0.12	-0.03	-0.03	-0.09
Mean (1929-36)	-0.09	0.03	-0.08	-0.02	-0.01
Median (1929-36)	-0.15	0.03	-0.14	-0.05	-0.01
5-year horizon					
1929	0.05	0.19	0.08	0.11	0.12
1934	-0.08	0.06	0.05	0.02	0.12
Mean (1928-36)	-0.08	0.02	-0.05	0.00	0.00
Median (1928-36)	-0.02	0.01	-0.05	0.02	-0.01

%

- Moody's and Standard had the highest accuracy ratios in 50% and 40% of the cohorts examined respectively
- The accuracy ratios of the consolidated ratings were often superior to those of the single agencies which indicates, the individual rating agencies might be getting separate, valuable signals about the creditworthiness of sovereign borrowers
- In sum, it does not seem to be anything exceptional bout the performance of rating agencies in assessing relative credit risk over the interwar period compared to what could have been inferred from market prices

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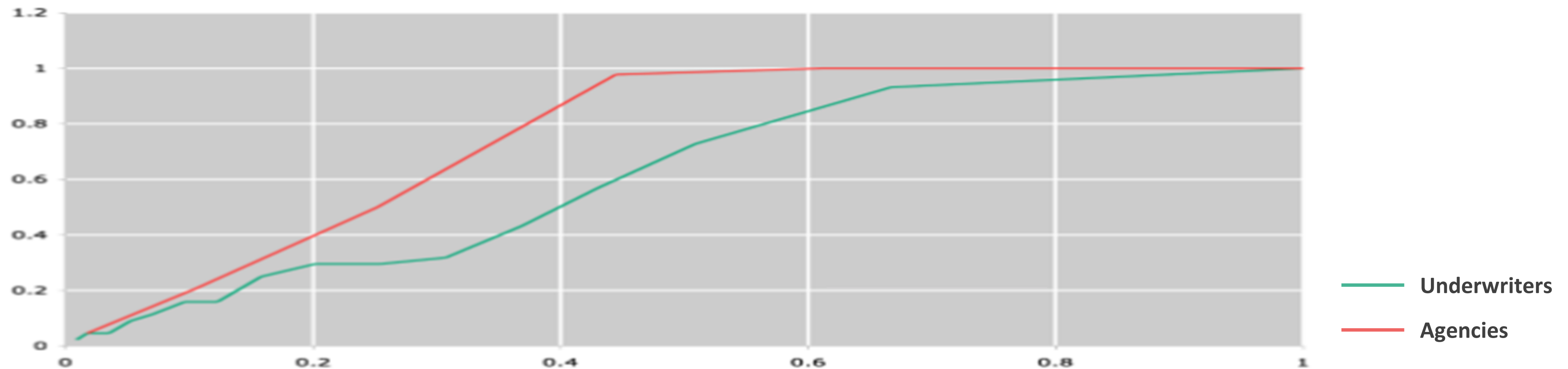
Ratings vs. Bankers



- Before rating existed, bankers assumed an important role as providers of certifying services for the benefit of investors
- Vast majority of the foreign government securities marked in NY during the 1920s had one of the top four rating grades
- All measures are roughly concave but the cumulative accuracy for bankers display a less smooth profile with default rates accelerating for prestigious houses
- The accuracy profile for the agency ratings dominates the market-share based reputation for underwriting banks
- The driving force behind the emergence of rating agencies at the forefront of the new regulatory regime may not have been the high performance of rating agencies, but rather a crisis of confidence in the credibility of bank based signals of credit quality

Conflicts of interest, legal franchise and regulatory license

- Serious financial turmoil is characterized by failure of the price discovery mechanism
- A solution is to provide support to good securities under two conditions: It has to be socially and politically acceptable
- In 1920s model, whereby underwriting firms were receiving fees from concerns whose bonds they floated, was criticized

Conclusions

1. Main empirical finding is that the performance of rating agencies during the interwar era was not particularly exceptional. Agencies, like many other players in the financial industry did not see the interwar debacle coming

2. The discredit in which market economy found itself in the interwar years may well be related to the subsequent embracing of extreme ideologies, which sold themselves as an alternative

3. World where agency conflicts of interest are less pronounced is neither a world where crises are absent nor one where they are more predictable

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THANK YOU!

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