Florida (Un)Chained

Charles W. Calomiris, Columbia, UATX, and NBER
Matthew Jaremski, Utah State and NBER
“The Florida land boom was the first indication of the mood of the Twenties, the conviction that God intended the American class to be rich.” - Galbraith (1955)

“Dead subdivisions line the highways, their pompous names half-obliterated on crumbling stucco gates. Lonely street lights stand guard over miles of cement sidewalks, where grass and palmetto take the place of homes that were to be.” - Villard (1928)
Florida Land Boom of the 1920s

- 20+ million lots were for sale in Florida
- Anecdotes of land prices rising by 1000-fold
- Nearly $900 million in deposits flowed into Florida from investors throughout the nation
- Crescendo of the nation-wide housing boom that decreased investment during the Great Depression
  - e.g., Gordon (1951); Field (1992); Brocker and Hanes (2014)
- Over 10% of Florida’s banks suspended or failed in 1926
  - Almost all associated with Manley-Anthony chain
Notable authors argue booms are result of irrational cycles of greed and fear
- e.g., Minsky (1975); Kindleberger and Aliber (2011)
- Also recent literature on cycles of risk tolerance/pricing

However, many scholars have shown that booms often have distinctive aspects that suggest different causal mechanisms (limited information, shocks)
- e.g., Garber (2000), Nicholas (2008), Carey (1990), Temin and Voth (2013)

Crucial to pay attention to who has information and when, the incentives lenders face in fueling boom, changes in risk pricing, and whether people ignored observable risk
Miami Beach, Florida
America's Winter Playground

Carl G. Fisher Hotels

Florida's foremost resort hotels

The Nautilus
Geo. S. Krom, Mgr.
Opens Jan. 2nd

The Flamingo
C. S. Krom, Mgr.
Opens Dec. 15th

The Lincoln
B. Lundberg
Mgr.
Opens Nov. 1st

The King Cole
Wm. M. Gale, Mgr.
Opens Dec. 15th

Go by Train
Pennsylvania Railroad
Our Paper

- Seeks to understand the boom’s foundation using a range of narrative and empirical evidence
- Determine whether people acted reasonably (under incomplete information) or increased their tolerance for observable risk?
- Focus on how and why banking market fueled the boom and concealed risk
Conclusions

- Evidence consistent with bounded rationality
- Land was often sold sight unseen and aggregate amount of building was unknowable
- Risk taking seems concentrated in Manley-Anthony chain
  - Developers bought into the chain to obtain loans
  - Bank regulators allowed undiversified lending and tunneling of assets to insiders
  - Key: Maintained low observable risk characteristics
Southern Florida devoid of large cities until the 1910s

Henry Flagler financed Florida East Coast Railway and built a series of grand hotels along the route
- Stretched from Jacksonville to Key West by 1912

Developers planned new communities around lavish hotels, nightclubs, golf courses, etc.
- Names evoked tropical images, foreign destinations, and fantastical settings
- Miami Beach, Coral Gables, Boca Raton, West Palm Beach, etc.
Advertising

- Marketed high society luxury to the middle class
- Elaborate ads and special sections ran in nationwide newspapers
  - Journalists were often wined and dined in Florida
- Billboards highlighted the sun, leisure, and fun of Florida in northern cities during winter
- Many people bought land through the mail
INDRIO to Open September 12th
First unit of "America's Most Beautiful Home Town" to be placed on sale

AFTER months of planning and preparation, the first unit of Indrio is about to be offered to an expectant public. Promptly at 10 o'clock next Saturday morning, September 12th, will occur the formal opening of America's most beautiful home town.

Since our initial announcement, which appeared only one week ago, Indrio has become the sensation of Florida and the country at large. From all over the state and America as well as from inquiries regarding the remarkable downtown development.

The public has been quick to assume that the first unit of Indrio is in a class apart from any other development in Florida today. Consistently named the largest city with millions at their command, it is destined to surpass all similar projects in the magnitude and beauty of its improvements.

So sturdy have been the reservations to date that some blocks of property have been spoken for. From present indications it is clearly evident that the first unit of Indrio will be sold out. Therefore, for your own protection, we urge immediate action.

A Location Without Equal
Indrio's location on the Indian River is one of unrivaled beauty. The country abounds with tropical delights, and deer still haunt the untrammeled woods. Gone hills are found in the Indian River, along which there also is a plentiful bank of oysters. The climate, of course, is delightful. In summer cool breezes sweep in from the sea, while winter days are made balmy by the nearby Gulf Stream. Perhaps the in Florida can be found no enchanting a spot.

Advantages that Assure a Sound Investment
Indrio is situated on an unimpeachable site. Large one-story homes and small buildings, spaced far apart, will be the order of the day. The town is planned for easy living, with wide streets and ample reserves of water and other natural resources.

The project is offered at a time when prices for land and building are at their lowest. By investing now, you are assured of a sound investment.

Avoid Disappointment by Acting at Once!
Make Reservations NOW at 10% Discount
Although no lots will be sold prior to the formal opening, reservations are now being accepted at our various sales offices.

Reservations made now will be subject to the introductory discount which will apply only to the opening day.

Should the first unit of Indrio be oversold, those who made reservations too late to be accommodated will have their deposit checks returned to them at once. They will, however, be given first chance of any in the additional units to be opened shortly.

If you desire to visit Indrio, call at our nearest sales office and make known your wish. Should you prefer to come by yourself, either the Indian River Highway or the East Coast Railroad will carry you directly here. Representatives will be on hand.

PHELPS-HENDRICKSON COMPANY
Exclusively Selling Agency for East Coast Development Co., John L. Rogers, President

INDIANS
1313 W. 8th St. W. 
5316 N. Main 
1313 E. Roberts Ave.

SAINTS
219 S. Washington 
5102 N. Main 
413 E. Roberts Ave.

SUNSET
219 S. Washington 
5102 N. Main 
413 E. Roberts Ave.

SUNRISE
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413 E. Roberts Ave.

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Immense Building Activity Is Now in Progress at

Lakewood Terraces at Sebring

Nature Laid Out This Location for a City

On the shores of Florida's second largest lake—at the top of the wonderfylly beautiful Ridge—where in every direction an enchanting picture meets your gaze—there we are building, building, building—creating a city of magnificient size, a city of charm and beauty.

 Millions of dollar worth of construction is under way at this minute. Contracts already let call for the completion of the following ambitious building program by January, 1926.

Harder Hall, a $3,000,000 hotel. 40 Modern Homes to rent from $300 to $25,000 each.
Numerous Business Buildings.
A Country Club.
A Community House.
20 miles of Pavement.
An 18-hole Golf Course.
Miles of Water Fusing.
More Miles of Hard Surface Roads.
More Miles of Electric Wiring.

An army of men is busy, working energetically to make Lakewood Terraces the City Beautiful of the famous Seaside Highlands.

Come to Lakewood Terraces as Our Guest

Come and see the active building operations that are making this city out of the shores of Lake Jesup. Call at any of our offices and reservations will be made for you to come and see for yourselves the marvel of the year's greatest development in Florida.

Lakewood Development Corporation
SEBRING, FLORIDA

West Palm Beach
Orlando
Daytona
Miami
St. Petersburg
Hills and Dunes
W. J. Williams, Mgr.

If you haven't seen Sebring— you haven't seen Florida!
Reasons for Villa Rica's Values

ALL these wonderful things are a part of your investment in Villa Rica at Boca Raton. They substantiate your investment in a manner that nothing else could do. There are many other excellent features in this beautiful new city by the sea, but if it possessed to others than the first five mentioned in this advertisement, that would be sufficient to make Villa Rica a truly superior investment opportunity as well as a truly delightful home site opportunity. Villa Rica is supremely accessible. It is endowed lavishly with superb natural advantages, but this is not all. A wonderfully complete improvement program has been adopted and is now being carried out. You see why those who know the real, dominating causes of true values, and profits incident thereto, have insisted upon buying properties in Villa Rica at Boca Raton.

1. The Atlantic Ocean
2. Ocean Boulevard
3. Florida Coast Line Waterway
4. Dixie Highway
5. Florida East Coast Railway
6. Midway between Palm Beach and Miami
7. Private beach for residents
8. Beautiful Casino on Ocean Front
9. Famous Townend Studios
10. Magnificent Villa Rica Inn
11. Broad Avenues and Boulevards
12. Complete City White Ways
13. Its Own Railway Passenger Station
14. Program of Beautification
15. Improvements now under way
PROCRSTINATION is the THIEF of TIME---

Eyes of World Watching Florida

The United States of America—Yes, Europe, Asia, and every country in the world is watching with eyes wide open—with mouths gaping for breath—watching the development of Florida—Where and when it is all going to stop. There is no stopping the State of Florida. Just when you begin to think that buying has slowed up a little. The news begins to spread that a few million more dollars has just been appropriated for a big development.

Play with Big Boys

You are in the big man's game. The man that knows how to make money. You are in the midst of the richest territory in Florida. Your profits will be judged strictly by the amount of your investment. You cannot go wrong if you close your eyes—touch your finger on the map of Florida—say, "I want a piece of property right in this vicinity. Let me have some." It would probably make you money.

Opportunity to Speculate

Okeechobee—How many people know what we are offering? Are you standing idly by and letting one of the biggest projects in the state go unnoticed of your own personal investigation? They bought property on Flagler Street in Miami for a few hundred dollars a foot—Today this same property is selling for Forty Thousand Dollars—Within the past week a sale was registered on Flagler Street in Miami, Florida, for Fifty Thousand Dollars. We don't look for this big advance in Okeechobee, but we have every reason to believe that your money will make you more money.

Development Program

OKEECHOBEE COUNTRY CLUB DISTRICT—That's where much of the big money will be made in Florida. Improvements are to include eighty miles of streets and boulevards through the sub-division.

OKEECHOBEE COUNTRY CLUB DISTRICT—That's where the opportunity of real speculation lies. A contract to construct a Golf Course and Club House in the center of the sub-division.

OKEECHOBEE COUNTRY CLUB DISTRICT—What will the next year do for you and every other person who wisely invests in or near the city. The spot that is going to be the big money maker of Florida.

Okeechobee will not wait for you—you will have to get on your feet and go right to the office. Talk to any of our salesmen. Men who are familiar with the facts. They will treat you with courtesy and tell you about an opportunity to invest in real Florida Land.

Money Does Not Grow on Trees

Thousands of people in America are wondering—they are asking—they say DOES MONEY GROW ON TREES IN FLORIDA?—NO. You can make money here by wise investment. You can make money by investing in Florida land from the East Coast to the West Coast. The opportunities are right within your reach.

Development Program Involves Millions

Stand right facing the front of the street. Watch the wealth in Florida, in Miami, in Palm Beach, in St. Petersburg, in Jacksonville, in Tampa—yes, in every nook and corner of the state. Several Hundred Million dollars would not take care of the development programs that are planned for this big land buying boom.

This is the Time to Buy

This is a buyer's paradise. Buyers are becoming rich. Dozens of people are sick worrying over the eagerness to sell—a small profit. Those people have lost money. This is no time to think about disposing of your property. Of selling—this is buying time and the moment you get on the Band Wagon with the rest of the Florida land owners you are going to cash in more money—you can't sell anything that doesn't belong to you—Buy Okeechobee Lots right now.

Okeechobee Offers an Abundance of Wealth

Okeechobee is destined to be one of the greatest cities in the State of Florida. Okeechobee has the natural resources to support a population of a half-million. The most vital necessity to the staff of life is right at Okeechobee. There is no use talking, more will make Okeechobee one of the richest parts of the entire state of Florida. You have the one real opportunity to participate—get in on the ground floor of some real development and be part of it that you see in for your share of money.
The Magic Touch

FOR countless centuries, Florida lay hidden, peopled only by a few breach-clad savages. It was a waste, a place for alligators. Its thousand miles of winding crystal beach, which soon will be the chief playground of millions of Americans, lay silent except for the rustle of the surf, bathed in a seeming eternity of monotonous sunshine.

Then came the early settlers—later, the tourists—and finally the men of genius and enterprise whose magic touch Florida awakened to fulfill her destiny.

These men, the magicians of art and commerce, are the men who will create the really beautiful and convenient cities which will attract wealth, power, brains, energy and the millions of people who, finally, will make up the population of Florida.

Watch where these men go! They are as important as climate, soil and transportation. They wield the powers of brain, muscle and money. They have the vision that inspires and the energy that builds armies. They have the magic touch that pulls cities from the earth and draws people from all parts of the world to fill them.

Just as surely as Jim Hill made the Northwest, so will Addison Mizner and the men of national prominence associated with him establish in Boca Raton one of the most beautiful and world-renowned— a credit to America.

Mizner Development Corporation

Developers of Boca Raton
Unique Advertising

- Joseph Wesley Young purchased buses to collect sales for Hollywood-by-the-Sea across the nation
- Carl Fisher staged sports events such as boat races and polo tournaments in Miami Beach
  - Purchased a baby elephant for photo ops
- George Merrick had William Jennings Bryan give Bible lessons at the Coral Gables’ Venetian Pool
Florida’s Slow Bust

- Negative press begins to grow in late 1925
- Events raised costs and questions of sustainability
  - Railroad moratorium on non-perishable goods in Oct. 1925
  - *Prinz Valdemar* overturned in Miami harbor in Jan. 1926
- Symbolic end: a category-4 hurricane caused $100 million in damages to Miami-area in Sept. 1926
Florida Land Market Conclusions

- Development was often in new areas, and few visited their lot before purchase
- No aggregate data on lots for sale or prices
  - Construction data only available for a few cities but no land price data
- Developers sold land that was under water
  - Soil was dredged up to create beach front property
  - Land was being drained of water to allow building
  - Hard to know what version supply/demand to believe
Market For Land

Determinants of land value:
(1) Quality of the land
(2) Elasticity of land supply
(3) Elasticity of land demand
Depositors price risk and demand very low perceived default risk
- e.g., Gorton and Pennacchi (1990), Calomiris et al. (1995), Martinez Peria and Schmukler (2001), etc.

Bank regulators and examiners are expected to ensure prudent lending, honest disclosure

Were banks observably becoming riskier?
- Loans / Assets
- Cash + Due from Banks / Total Deposits
- Capital + Surplus / Assets
- Surplus / Capital + Surplus
- Loans-to-Buffer = Loans / (Capital + Surplus + Cash + Due from Banks)
Total Deposits in Commercial Banks

[Graph showing a trend in total deposits from December 1920 to June 1927, with a peak in December 1925 and a subsequent decline.]
Change in Deposits (1924-1925)
Manley-Anthony Chain

- Chain of banks run by W.D. Manley and J.R. Anthony at heart of the risk-taking
- Banks had managerial autonomy, but given investment opportunities by chain
  - Chain managers used funds to make loans to their companies, purchase stocks of other banks, and invest in speculative activities
- Developers often started chain banks or bought interest in them
  - Access to the flood of deposits and lower loan standards
Seem to have been immersed in the chain scheme

- Florida Comptroller received “policy” loans
  - Allowed banks to increase loan risk and the concentration of their lending to developers
  - Appointed receivers of closed banks that allowed tunneling of assets back to developers

- Comptroller of the Currency and the Federal Reserve Bank of Atlanta also supported chain (Vice President Dawes was heavily invested in Florida)
<table>
<thead>
<tr>
<th>Statement</th>
<th>Non-Chain Members</th>
<th>Chain Members</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did not Close</td>
<td>168</td>
<td>19</td>
<td>187</td>
</tr>
<tr>
<td>Suspended but Reopened in 1926</td>
<td>0</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>Closed in December 31, 1926</td>
<td>7</td>
<td>12</td>
<td>19</td>
</tr>
<tr>
<td>Closed or Suspended in July 1927</td>
<td>12</td>
<td>5</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Non-Chain</td>
<td>Chain</td>
<td></td>
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<td>--------------------------------</td>
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<td></td>
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<tr>
<td></td>
<td>Surviving 1926</td>
<td>Surviving 1926</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Closed or Suspended in 1926</td>
<td>Closed or Suspended in 1926</td>
<td></td>
</tr>
<tr>
<td># of Banks</td>
<td>180</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>Ln(Assets)</td>
<td>10.6</td>
<td>11.3</td>
<td></td>
</tr>
<tr>
<td>Loans/Assets</td>
<td>57.6%</td>
<td>57.1%</td>
<td></td>
</tr>
<tr>
<td>Cash+Due from Banks/Deposits</td>
<td>32.5%</td>
<td>32.0%</td>
<td></td>
</tr>
<tr>
<td>Capital+Surplus/Assets</td>
<td>14.6%</td>
<td>9.9%</td>
<td></td>
</tr>
<tr>
<td>Surplus/Capital+Surplus</td>
<td>30.7%</td>
<td>31.1%</td>
<td></td>
</tr>
<tr>
<td>Loans to Buffer</td>
<td>159.0%</td>
<td>177.1%</td>
<td></td>
</tr>
<tr>
<td>Fraction Any Due To Banks</td>
<td>13.9%</td>
<td>37.5%</td>
<td></td>
</tr>
<tr>
<td>Fraction Any Bills Payable</td>
<td>23.9%</td>
<td>33.3%</td>
<td></td>
</tr>
</tbody>
</table>
Linear Probability Model

- Dependent Variable: Indicator for whether bank suspended or closed by December 1926
- Explanatory Variables:
  - Indicator for chain membership
  - Balance sheet predictors of risk in December 1924
  - County-level controls: population, urbanization, crop value, manufacturing output value, and farm value
- Standard errors clustered by town
<table>
<thead>
<tr>
<th></th>
<th>All Banks</th>
<th>Non-Chain Banks</th>
<th>Chain Banks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Closed or Suspended Before December 1926</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chain Bank</td>
<td><strong>0.546</strong>*</td>
<td><strong>0.546</strong>*</td>
<td></td>
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<tr>
<td></td>
<td>[0.068]</td>
<td>[0.067]</td>
<td></td>
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<tr>
<td>Ln(Assets) in 1924</td>
<td>-0.035*</td>
<td>-0.029*</td>
<td>-0.001</td>
</tr>
<tr>
<td></td>
<td>[0.021]</td>
<td>[0.016]</td>
<td>[0.014]</td>
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<tr>
<td>Loans/Assets in 1924</td>
<td>0.192</td>
<td>-0.187</td>
<td>1.787</td>
</tr>
<tr>
<td></td>
<td>[0.244]</td>
<td>[0.183]</td>
<td>[1.074]</td>
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<tr>
<td>(Due from Banks + Cash)/</td>
<td>-0.025</td>
<td>-0.369*</td>
<td>1.085</td>
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<tr>
<td>Total Deposits in 1924</td>
<td>[0.244]</td>
<td>[0.194]</td>
<td>[1.026]</td>
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<tr>
<td>Due from Banks/(Cash +</td>
<td>-0.046</td>
<td>0.001</td>
<td>-0.290</td>
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<tr>
<td>Due from Banks) in 1924</td>
<td>[0.146]</td>
<td>[0.086]</td>
<td>[0.772]</td>
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<tr>
<td>(Capital+ Profits)/ Assets</td>
<td>-0.139</td>
<td>-0.035</td>
<td>-0.119</td>
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<tr>
<td>in 1924</td>
<td>[0.274]</td>
<td>[0.172]</td>
<td>[1.614]</td>
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<tr>
<td>Any Bills Payable in 1924</td>
<td>-0.039</td>
<td>0.052</td>
<td>-0.229</td>
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<td></td>
<td>[0.048]</td>
<td>[0.038]</td>
<td>[0.199]</td>
</tr>
<tr>
<td>Loans to Buffer in 1924</td>
<td>0.024</td>
<td><strong>0.050</strong>**</td>
<td>-0.069</td>
</tr>
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<td></td>
<td>[0.031]</td>
<td>[0.025]</td>
<td>[0.110]</td>
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<td>County-Level Controls</td>
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<td>Yes</td>
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<tr>
<td>Observations</td>
<td>241</td>
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<td>187</td>
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<td></td>
<td>54</td>
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<tr>
<td>R-squared</td>
<td>0.394</td>
<td>0.391</td>
<td>0.119</td>
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<td>0.102</td>
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<td>0.331</td>
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<td></td>
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<td></td>
<td>0.276</td>
</tr>
</tbody>
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Loan Portfolio Differences

- Comptroller breaks out type of loans in June 1926
- Three types reported:
  - Real Estate Loans (26.5%) *lower* for chain banks
  - Other Collateralized Loans (28.5%)
  - All Other Loans (45%) – in chain, real estate loans in disguise without being collateralized
Real Estate Loans / Total Loans in June 1926

- Less than 20%
- 20 to 24%
- 24 to 28%
- 28 to 32%
- Over 32%
Looking deeper at balance sheets, we find that closed chain banks had:

- More funds invested in either loans or due from banks
- Charged much lower interest rates on loans
Aggregate bank statistics suggest less risk-taking.

But, Manley-Anthony chain seems to have manipulated observable data while increasing unobservable risk.

Bank regulators allowed undiversified loans that made depositors junior claimants as well as tunneling during bank liquidation.

Depositors who followed traditional investment rules would have been led astray.
Evidence consistent with limited information in land and banking markets, fraud at banks.

Land was sold sight unseen and aggregate amount of development was unknowable.

Most bank failures involved the Manley-Anthony chain
- Developers often bought into the chain to obtain loans
- Maintained low observable risk characteristics
  - Even comparing failed and surviving banks
- Made loans to bank regulators who allowed undiversified lending and tunneling of assets to insiders
  - Loans were on other collateral which lowered seniority of depositors