

NOTE: WOLVERINES, RAZORBACKS, AND SKYSCRAPERS

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ABSTRACT: The Cantillon effects cited in Thornton (2005) are a consequence of the central bank, and result in entrepreneurial errors during expansions in the NBER's U.S. business cycle chronology. Completion of the Woolworth Building and other skyscrapers coincide with NBER-identified contractions when the errors are revealed. Effects are also evident at the non-national level, including the sister states of Arkansas and Michigan, where the Dime, Penobscot, Renaissance Tower, Pyramid Life, Union Life, Donaghey, Tower, Bank of America and Region's Bank buildings were completed around contractions. The tallest or once-tallest buildings in 40 states were completed in NBER-identified contractions.

KEYWORDS: business cycle, Cantillon effects

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Thornton (2005) notes “important exceptions” in the ability of the Skyscraper index¹ to predict financial crises, but explains the key role Cantillon effects play in contributing to entrepreneurial error. For example, the Woolworth Building’s 1913 completion is cited as a possible exception to the relationship. The relationship also appears to be absent in economic contractions including the 1981–82 U.S. recession. There are two purposes for this note: first, to apply the NBER business cycle chronology to the skyscraper index, and second, to examine evidence of the relationship at the state level.

Rather than an exception, the Woolworth Building’s completion could be considered an example of “a skyscraper effect” because it coincides with a contraction in the NBER’s cycle chronology.

The Woolworth Building’s opening ceremonies in New York occurred April 24, 1913. Thornton writes, “The economy peaked and began its contraction in the first quarter of 1913 and continued to contract until the fourth quarter of 1914.” The NBER, using broader indicators including employment, found that a 23-month contraction occurred in the U.S. economy between January 1913 and December 1914. Burns and Mitchell (1946, p. 78) also identify a contraction in the period. Therefore, the Woolworth Building’s completion should be considered an example of a skyscraper effect because it coincided with a contraction. And, as Thornton suggests, the beginning of World War I in Europe brought the contraction to a premature end.

Completion of the other world’s tallest buildings cited by Lawrence also coincides with contraction years in the NBER chronology. These include the Singer Building, completed in 1908 around the May 1907–June 1908 contraction; 40 Wall Street (1929), the Chrysler Building (1930) and the Empire State Building (1931), all finished around the Great Depression (August 1929–March 1933); and part of the World Trade Center (1972–73) and Sears Tower (1974), completed around the November 1973–March 1975 contraction. Exceptions are the Metropolitan Life Building, finished in 1909 during the 1908–10 expansion; and part of the World Trade Center, completed in 1972 during the 1970–73 expansion.

¹ Lawrence (1999) identifies an apparent relationship between construction of the world’s tallest buildings and the onset of financial crises.

Lawrence's definition is too narrow; it focuses on financial crises, not economic contractions. The skyscraper effect is not a predictor of contractions. Rather, it suggests, per Cantillon, Thornton, and the Austrian tradition, that entrepreneurs are not immune to errors later revealed in contractions.² The skyscraper effect takes place during the cycle's boom phase. The entrepreneurial errors (i.e. record setting skyscrapers) are started in the boom and are revealed in the bust.

U.S. metropolitan areas of various sizes provide additional evidence of skyscraper effects at the state levels. Consider the sister states of Michigan and Arkansas. The University of Michigan and University of Arkansas mascots are respectively, the wolverine and razorback. Michigan's tallest skyscrapers in the early 20th century, Detroit's Dime Building and Penobscot Annex, were completed in 1913, a recession year. Detroit's Guardian and Penobscot buildings were finished in 1928–29 on the Great Depression's eve. Today, Michigan's tallest building is the Detroit Marriott at the Renaissance Center, completed in an expansion (1977). Its final tower, however, was finished in the July 1981–November 1982 contraction.

A similar effect can be observed in Arkansas. Little Rock's Pyramid Life Building (1907), Union Life Building (1913), Donaghey Building

² The Austrian-influenced economist Joseph A. Schumpeter (1939) termed entrepreneurial errors "malinvestment" in his discussion of the 1920s economic boom. Schumpeter's vivid description of this credit-induced boom included a discussion of skyscrapers:

Interest on urban mortgages was, though failing, not particularly cheap as compared with other long-term rates, except where building was financed by bond issues. But under the circumstances of that period and in the glow of its uncritical optimism neither costs nor interest charges mattered much. It seemed more important to get quickly the home one wanted—or the skyscraper the prospective rents of which in any case compared favorably with the rate on mortgage bonds—than to bother whether it would cost a few thousand dollars—or in the case of the skyscraper, a million or so—more or less, provided money was readily forthcoming at those rates. And it was. (p. 746)

The steel-skeleton structure, made cheaper by steadily increasing use of reinforced concrete and workable by the electric elevator, had created new possibilities ever since the nineties.... One of them, commercial building, is perhaps still more than apartment houses and hotels exposed to the suspicion of speculative overdoing. (p. 747, 749)

(1926), Tower Building (1960), Bank of America Building (1970) and Region's Bank Building (1975) were all completed around NBER contractions. The lone exception, Metropolitan Tower (formerly the TCBY Building) was completed in 1986, a year of expansion.

In fact, the tallest buildings in 20 states³ were completed in years of NBER contractions: (Alabama) RSA Battle House Tower,

³ (Alabama) "The Tale of Two Towers," <http://www.rsa-al.gov/Real%20Estate/real-estate.html>; (California) http://www.pbs.org/wgbh/buildingbig/wonder/structure/first_interstate_world.html; (Connecticut) "Visit World's Newest Tallest Building, And You'll Ride Otis Elevators." *Hartford Courant*. January 5, 2010; (Illinois) <http://www.willistower.com/propertyprofile.html>; (Indiana) "Chase Tower owners exploring sale." *Indy.com*. January 20, 2009. "For sale: Indiana's tallest building, the 48-story Chase Tower." *Indianapolis Star*. January 21, 2009; (Iowa) <http://www.principal.com/about/history/didyouknow.htm>; (Maine) "Past its prime, still filling a need." *Portland Press Herald*. March 4, 2009; (Maryland) "Renovations at 100 Light Street to be unveiled." *Baltimore Sun*. June 9, 2010; Lexington Realty Trust, <http://www.lxp.com>; (Minnesota) <http://www.ids-center.com/>; (New Mexico) <http://www.allegiancerealestate.com/data/brochures/9.pdf>; (New York) <http://www.esbnyc.com>; (Ohio) <http://www.wellsreitii.com/index.jsp>; (Pennsylvania) "Comcast Center topped off." *Philadelphia Inquirer*. June 18, 2007; (Rhode Island) "Downtown Providence landmark sold." *Providence Journal*. January 29, 2008; (Texas) <http://www.chasetower.com/buildinghistory.htm>; (Utah) "The New General Church Office Building," *Ensign*. January 1973. LDS.org; (Vermont) <http://www.historicvermont.org/bennington/bennington3.html>; (Virginia) "Fixing Va. Beach Westin a tall order." *The Virginian Pilot*. May 27, 2010; (West Virginia) <http://www.wvculture.org/agency/capitol.html>; (Wisconsin) "Two men who influenced Milwaukee's skyline." *Milwaukee Journal Sentinel*. March 17, 2010.

The once-tallest buildings in 20 other states were completed in a contraction year. These are: (Alaska) Robert Atwood Building, Anchorage (1982), State of Alaska Division of General Services [http://notes4.state.ak.us/pn/pubnotic.nsf/0/2e227340cd1dbe43892567f60066161c/\\$FILE/Rfp_1441.pdf](http://notes4.state.ak.us/pn/pubnotic.nsf/0/2e227340cd1dbe43892567f60066161c/$FILE/Rfp_1441.pdf); (Arizona) Phoenix Corporate Tower (1960), <http://www.krauszcompanies.com/>; (Colorado) 707 17th Street, Denver (1982), "Marriott City Center Finds Buyer." *Denver Business Journal*. March 15, 2007; (Florida) Biltmore Coral Gables (1926) <http://www.biltmorehotel.com/resort/history.php>; (Georgia) One Park Tower, Atlanta (1961), "Bargain' building ready to sell again." *Atlanta Business Chronicle*. October 10, 1997, <http://atlanta.bizjournals.com/atlanta/stories/1997/10/13/story8.html>, http://www.novaregroup.com/portfolio_one_park_tower.html; (Hawaii) Ala Moana Hotel, Honolulu (1970), "Ala Moana Hotel Bought." *Honolulu Advertiser*. July 21, 2004, <http://the.honoluluadvertiser.com/article/2004/Jul/21/bz/bz01a.html>; (Idaho) One Capital Center, Boise (1975), <http://www.wrighttrunstad.com/properties-and-services/property-portfolio/OCC.pdf>; (Kansas) Lassen Hotel, Wichita (1918), http://www.kshs.org/resource/national_register/search.php?page=6&county=SG; (Kentucky) Columbia Building, Louisville (1890), <http://www.louisvillehistoricalleague.org/uploads/>

Mobile (2007); (California) U.S. Bank Tower, Los Angeles (1990); (Connecticut) City Place I, Hartford (1980); (Illinois) Willis Tower, formerly the Sears Tower, Chicago (1973); (Indiana) Chase Tower, Indianapolis (1990); (Iowa) 801 Grand, Des Moines (1991); (Maine) Franklin Towers, Portland (1969); (Maryland) 100 Light Street, Baltimore (1973); (Minnesota) IDS Center, Minneapolis (1973); (New Mexico) Albuquerque Plaza (1990); (New York) Empire State Building, New York (1930); (Ohio) Key Center, Cleveland (1991); (Pennsylvania) Comcast Center, Philadelphia (2007); (Rhode Island) Bank of America Building, Providence (1927); (Texas) J.P. Morgan Chase Tower, Houston (1982); (Utah) Church Office Building, Salt Lake City (1973); (Vermont) Bennington Battle Monument (1891); (Virginia) The Westin Virginia Beach Town Center, Virginia Beach (2007); (West Virginia) State Capitol, Charleston (1932); and (Wisconsin) U.S. Bank Tower, Milwaukee (1973).

Many significant skyscrapers were completed in years of expansion, but of course, the skyscraper effect—of setting a world, national or regional record height—is not meant to be a predictor of either economic contraction or financial crisis. It is meant to be a powerful illustration of the role that Cantillon effects, aptly described by Thornton, play in the process of artificial economic

Important_Dates_in_Louisville_History__12-23-06.pdf; (Louisiana) Crescent City Towers, New Orleans (1969), "Plaza Tower is sold to mortgage holder." *The Times-Picayune*. July 27, 2007; (Massachusetts) Custom House Tower, Boston (1913), <http://www.celebrateboston.com/architecture/custom-house.htm>; (Missouri) Kansas City Power & Light Building, Kansas City (1931), <http://www.kclibrary.org/kchistory/construction-area>; (Nebraska) Woodmen Tower, Omaha (1969), "A Tall, Proud Moment First National Tower Today Will Surpass The Woodmen." *Omaha World-Herald*, January 23, 2001; (New Jersey) National Newark Building, Newark (1931), "Proposed Newark high-rise would become city's tallest building" and chart, "New Jersey's Tallest Skyscrapers." *The Star Ledger*. February 28, 2010; (North Carolina) Bank of America Plaza, Charlotte (1974), "About Our Building," <http://boa-plaza.com>; (Oklahoma) Mid-Continent Tower, Tulsa (1918), <http://www.midcontinenttower.com/about.aspx>; (Oregon) Standard Insurance Center, Portland (1970), "Law firm's exodus challenges building's owners." *Portland Business Journal*. October 24, 2008; (South Carolina) Tower at 1301 Gervais, Columbia (1973), <http://www.pky.com/leasing/south-carolina/columbia/tower-at-1301-gervais.aspx>; (Tennessee) L&C Tower, Nashville (1957), <http://nashville.bizjournals.com/nashville/stories/2005/06/20/daily34.html>, <http://www.lctower.com/pages/buildingprofile.html>; and (Washington) Safeco Plaza (1001 4th Avenue Plaza), Seattle (1969), <http://seattle.bizjournals.com/seattle/stories/2006/05/08/story1.html>.

stimulation by the central bank and the resulting pattern of entrepreneurial error that is revealed in the aftermath.

REFERENCES

- Burns, Arthur F. and Wesley C. Mitchell. 1946. *Measuring Business Cycles*. NBER Studies in Business Cycles, no. 2.
- Lawrence, Andrew. 1999. "The Curse Bites: Skyscraper Index Strikes." *Property Report, Dresdner Kleinwort Benson Research*, 3 March.
- Rothbard, Murray N. 1962. *The Panic of 1819*. New York: Columbia University Press.
- . 1988. "The National Bureau and Business Cycles." In Llewellyn H. Rockwell, ed., *The Free Market Reader*. Burlingame, Calif.: Ludwig von Mises Institute.
- Thornton, Mark. 2005. "Skyscrapers and Business Cycles." *Quarterly Journal of Austrian Economics* 8, no. 1: 51–74.