

# Talking Tall: The Skyscraper Index



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 Andrew Lawrence, originator of the Skyscraper Index, is a director at Barclays Capital Hong Kong and is responsible for regional property sector research in Asia, excluding Japan. Based in Hong Kong, Mr. Lawrence joined Barclays Capital in August 2010 from Samsung Securities where he was regional head of property research. Prior to that he was head of regional property research in Asia for Deutsche Bank.

Mr. Lawrence tracks many of the biggest property companies and funds in Asia, including Henderson Land Development, the Champion REIT and Sun Hung Kai Properties.

“We took the index as far as back as the late 1800s and found that even going back that distance we could still find correlations between economic crises and completion of the world’s tallest building.”

An interview with Andrew Lawrence (Barclays Capital Hong Kong) with Kevin Brass, CTBUH Public Affairs Manager/Journal Editor

For 13 years Andrew Lawrence has generated international headlines with the Skyscraper Index, which links tall building construction to economic cycles (see Figure 1). The Index, developed by Mr. Lawrence, the head of property research for Barclays Capital in Hong Kong, is based on a relatively simple thesis – the completion of the world’s tallest building is inevitably a marker for the start of a global economic crisis. The Empire State Building was completed on the eve of the Great Depression, in the same way Burj Khalifa was finished at the height of the market collapse in Dubai, Mr. Lawrence notes in his report.

If nothing else, the Skyscraper Index is media catnip. Publications gobble it up. But is the Index accurate – or relevant? Some critics would argue that there are some notable exceptions to the connection between the tallest buildings and economic collapse. There was no widespread economic downturn when the Woolworth Building was unveiled in New York in 1913, for example. And doesn’t it simply make sense that a surge in tall building construction would be fueled by a strong economic client and readily available credit?

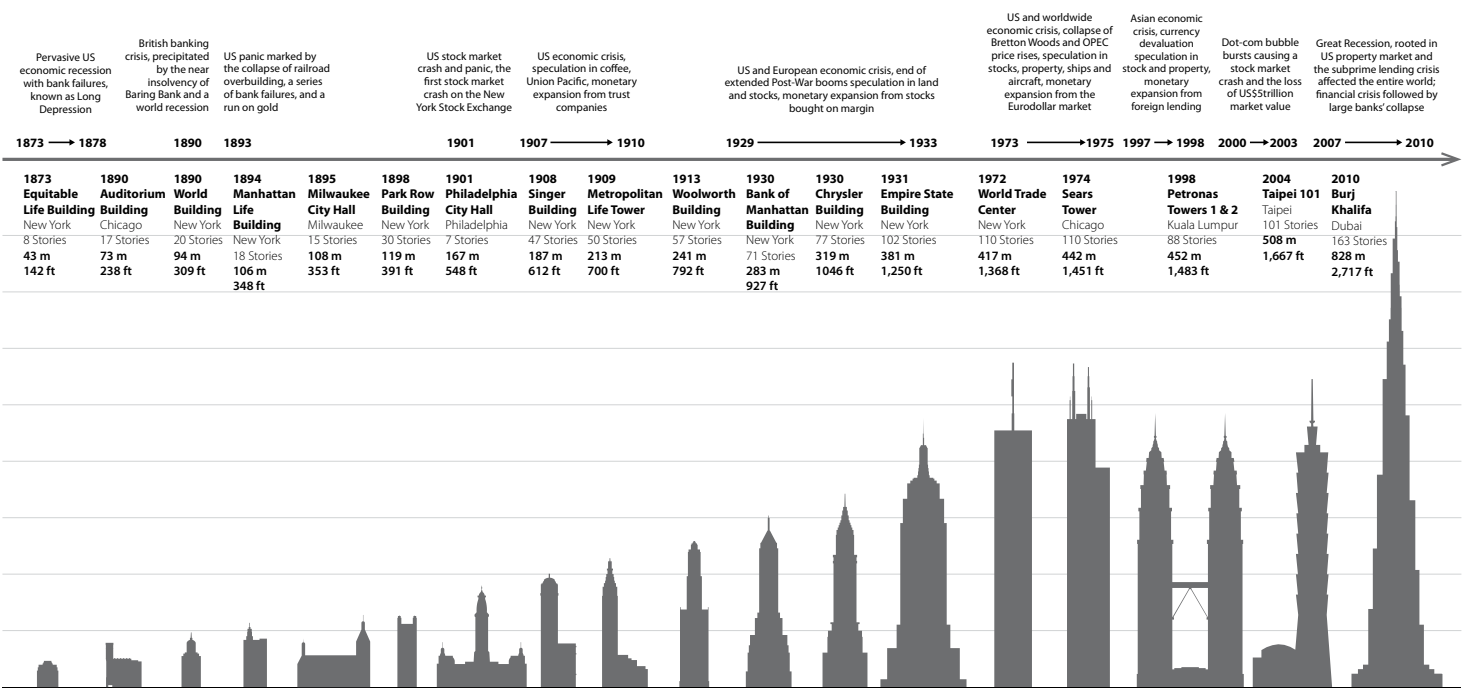


Figure 1. The Skyscraper Index © Barclays Capital, with CTBUH building silhouettes

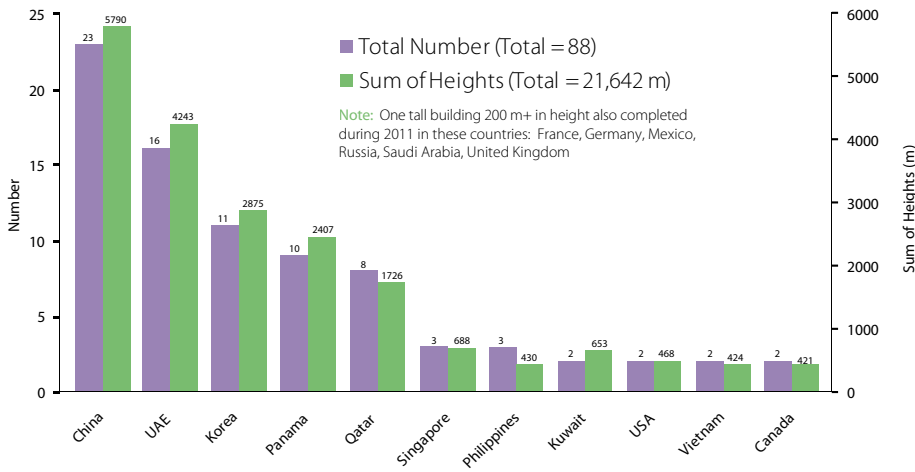


Figure 2. Tall Buildings 200 meters or Taller Completed in 2011: by Country © CTBUH

**What are the origins of the Index?**

I inaugurated it in 1999. I was working for Kleinwort Benson and I came up with the Index, just by looking at various tall buildings that were being built, especially in Hong Kong. Then I broadened it out to look globally to see if the Index might be a good guide as to whether we would see peak in economic cycle. The Index obviously played out very well against major economic cycles and completion of the world's tallest building.

I think probably what surprised us at first is how far back it went. We took the index as far as back as the late 1800s and found that even going back that distance we could still find correlations between economic crises and completion of the world's tallest building.

What was interesting as well was the geographic change taking place, in particular coming out of North America and going to Asia in 1997 and Dubai being the last one.

**You talk of an "unhealthy correlation." What is the unhealthy part?**

In the sense that skyscrapers seem to mark a very large economic boom that typically ends in large recession. And they tend to be associated with bigger economic cycles. They [skyscrapers] seem to start in upswing and finish the recession. The unhealthy part is they tend to mark the top of the cycle.

**Do you see the concentration of construction as more telling than the overall number of towers constructed?**

When you look at Japan, obviously it doesn't tend to build large skyscrapers. But if you go back and look at it in a building boom context, Japan had its own building boom in the late '80s, early '90s. So you can find underlying these skyscrapers very strong building bubbles which are associated with the credit cycle

**How do you respond to those who say this is nothing more than a gimmick?**

I would say the correlation has lasted for such a long time and just from a general economic concept it would make sense to think that funding and construction of world's tallest buildings really do come at the top of cycles when people are most optimistic.

**Is it always readily available credit, or are there other factors fueling these cycles?**

There is certainly always an element of people wanting to put down a monument to the building boom going on and the growth in the city. So it always comes through a willingness on the political side to see large buildings built, and the opportunity of developers.

**Was there anything that surprised you from the research?**

**You use the term "misallocation" in the report. Do these towers represent a "misallocation" of funds?**

Not so much a misallocation into property – we can argue that many of these tall buildings certainly leased up at the time, although some have clearly struggled in the past. So I think it tends to be a misallocation of timing, as well.

**Are you saying that skyscrapers are bad investments?**

I think they tend to reflect a number of things going on in the economy at the time – such as very high land prices. They tend to come through and be a reflection of those sort of situations in the cycle.

**Does anything going on now suggest a change in the cycle?**

Not at the moment. Top of our list has been China, in terms of building boom. And I think what we see is a change in the geographic distribution of tall buildings. Having been in North America for most of 1900s it now has moved to Asia and China, more particularly (see Figure 2).

**Does that suggest that China and India might be due for tough economic times?**

I think at the moment we are seeing a big building boom in China. Certainly we have given that the correlation. It is certainly ↗

...\$500

“Only in New York can you sell air for \$500 a square foot.”

Writer Annie Karni, *New York Post*, explaining the city's program for selling air rights around buildings. From "The Sky's the Limit," *New York Post*, March 5, 2012.

something to bear in mind when looking at China's real estate markets.

### Is there more relevance to the Index beyond the simple correlation?

It's been a very interesting and useful process to see where markets are heating up in the building cycle. So perhaps not necessarily looking entirely for just the world's tallest building, but looking at particular building bubbles and the amount of construction going on has been an interesting indicator of certain markets.

### Is it the property cycle in general? Or the tall building in particular that is the real indicator?

When building booms... expand into the world's tallest building being built, it can simply happen that you get the tallest building in the biggest economic up cycles. They tend to cap the building boom.

But there are exceptions; Taipei 101 for example. Taiwan is very tech-centric in terms of industry base. Taipei 101 did come around at the time of the tech boom. There wasn't a large global recession around 2001, but there was that whole tech boom slide. I think 101 did provide some indication of what was going on globally.

I did think Woolworth Building wasn't going to fit into the cycle, but further evidence and work someone did for a PhD thesis proved that the Woolworth also crossed with an economic downturn in the United States.

### How would you rate the reliability of the index as an economic indicator compared to other commonly used indicators?

I believe the Index is a useful anecdotal guide to the cycle. It is not intended to identify the turn in cycles, but simply to highlight the extent of the cycle – a bubble or no bubble?

### What does this say for people investing in skyscraper projects?

If we look at it from an investor's point of view, it's more to recognize that the tall building

itself is not a problem, but when we get a significant cluster at the same time.

### So it's not that you feel skyscrapers are a bad investment?

They just happen to come at a very end of economic cycle, it's not that tall buildings are a bad investment, they just happen to cap off what is a large building boom.

### Do you feel like urban property is a good sector for international investment these days?

Property is a very local investment. It really depends on market to market. In certain markets we see limited supply. In other markets there is an oversupply. It's very specific to the local market situation.

### Do you think the cycle is playing out in China and India?

Certainly we've seen a pickup in China in terms of building constructions post 2008 and the bank-lending expansion.

### But there are other drivers of skyscraper construction beyond cheap credit – urbanization, cities and nations wanting to create iconic buildings, for example. Are these factors changing the cycle?

That is certainly something we will have to watch as we go forward. But if we are really talking about the tallest building then we think that the Skyscraper Index will play out even if we have a broader building boom or multiple buildings being built.

### As you look at the year ahead, anything you will be watching in particular?

We are watching more closely the Chinese market, both on the residential and commercial side, given the building boom we have seen.

### In the past projects announced were announced and built, but now buildings are

### started and may never finish. Does that change the formula?

No that's right. And we continually monitor those that start and are put on hold for awhile. But that's right, a lot more get planned that don't go through.

### What's your reaction that construction may start soon on Kingdom Tower and four or five years from now we may have a new tallest building?

We are looking at which country might take the title of world's building. It will be very interesting to see who does comes through and whether we see them actually completed to the height originally planned or get scaled down over the next couple of years. But certainly as the correlation shows, if we have another (tallest) skyscraper that tends to mean that's the area where the center of the downturn is likely to emerge.

### If Kingdom Tower is next, would that affect your outlook?

We would certainly have to have a good look at what is going on with the building boom around that time and where we are seeing a significant amount of construction. ■



Figure 3. Kingdom Tower, Jeddah © AS+GG