# U.S. Income Inequality and Commercial Property Investment

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Awareness of inequality is likely as old as humanity itself. In recent years, however, the extent and continuing increase in income inequality in the United States has become a growing concern and there has been much discussion about why this is happening and what it might mean for the U.S. economy going forward. In 2014, French economist Thomas Picketty published *Capital in the 21st Century*, an exhaustive examination of the relationship between capitalism and income distribution in modern developed economies. While income inequality in the U.S. has been becoming more pronounced for years, Picketty's book catapulted the discussion of the causes and implications of income inequality to a much broader audience and has forced the issue onto the front burner of American politics and policy. Emmanuel Saez, an academic colleague of Picketty and creator of the World Top Incomes Database, estimates that 95 percent of all economic gains since the recovery began in 2009 have gone to the top one percent.[1]

### Why Care About Income Inequality?

Leaving aside philosophical or moral considerations, there are many pragmatic reasons to care about growing income inequality. Politically, history is rife with examples of growing instability and even revolution in response to extreme inequality. Today, the U.S. is widely viewed as one of the world's truly stable democracies and is viewed by many investors as one of the world's few "safe harbors." In other words, there is essentially no sovereign risk premia imbedded in asset pricing in the U.S. and the cost of capital is lower as a result. The cost of capital (i.e. required returns on U.S. assets) would certainly be higher today if investors perceived there to be growing social unrest or mounting political instability arising from an increasingly skewed income distribution. Everything else held equal, this would mean that asset values would have to fall to produce higher required returns.

Additionally, one of the most vexing problems facing western democracies today is the facilitation of faster aggregate growth. Roughly 70% of total U.S. economic activity (i.e. GDP) is consumption based. In terms of propensity to consume, it is generally accepted that a lower income person will be more likely to spend an additional dollar of income than a higher income person. Given that, steadily increasing income inequality implies slower aggregate consumption growth as a

[1] *The Christian Science Monitor* "What America Can Do to Stop Income Inequality" May 2014

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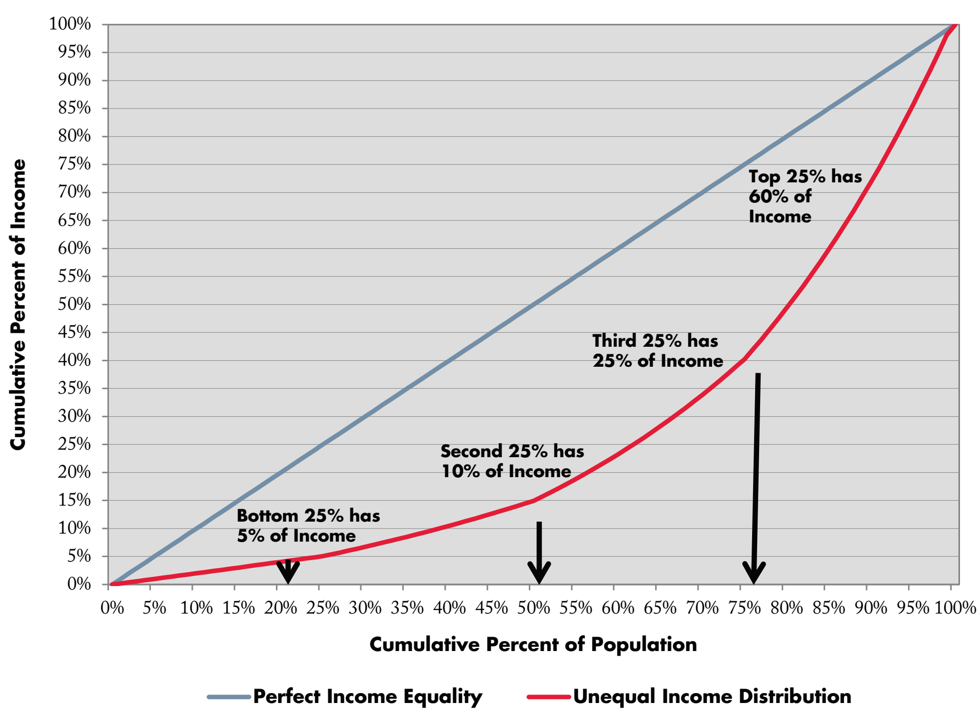
greater percentage of the nation's total income accrues to fewer and fewer hands. Indeed, one simple approach to drive more growth in consumption (and by extension stronger GDP growth) is to place more income in the hands of lower income consumers, who are, in turn, more likely to spend it. This simple observation was the foundation of the policy decision to cut the payroll withholding tax during the financial crisis, typically the highest tax paid by low income workers.

For property investors, we have long adhered to a simple adage that properties can only perform as well as the tenants they serve. If growing income inequality limits the amount of rent that tenants can pay, either broadly through a generally weaker economic environment or narrowly because more of the population is at the lower end of the income spectrum, aggregate property performance is likely to suffer. Additionally, if the risk premia for U.S. assets were to rise because of a change in investor attitudes toward U.S. stability, property investment performance (indeed, all U.S. assets performance) would suffer.

## How Do We Measure Income Inequality?

The most widely used measure of income inequality is called a "Gini Coefficient" or "Gini Ratio" and was first introduced in 1912 by Italian statistician Corrado Gini[2]. Briefly, the Gini Coefficient measures the relationship between a completely equal income distribution (i.e. everyone has the same income) and the actual income distribution. A Gini value of zero indicates a completely equal distribution and a Gini value of 100% represents a situation where only one person (or household) receives all income. The higher the Gini Coefficient the greater the income inequality is. In Figure 1 the Gini Coefficient can be visualized as the ratio of the area between the equal income distribution line (i.e. the 45% degree line) and the actual income distribution curve to the entire area below the equal distribution line. The more unequal the actual income distribution is, the larger the area between the two curves will be.

**FIGURE 1: Example of Gini Curves**




*Source: AEW Research and Corrado Gini*

[2]Gini, C. (1912). 'Variability and Mutability'

## Changing Income Equality over Time

Federal Reserve Chairwoman Janet Yellen, speaking at a recent conference on income inequality, was quoted as saying "the past few decades of widening inequality can be summed up as significant income and wealth gains for those at the very top and stagnant living standards for the majority".[3] Yellen further noted that "after adjusting for inflation, the average income of the top 5% of households grew by 38% from 1989 to 2013. By comparison, the average real income of the other 95% of households grew less than 10%."

There are a number of different ways to look at the U.S. income distribution over time. If we examine the Gini Coefficient, it is very clear that U.S. income distribution has been becoming less equal since at least 1968, the earliest year that figures are available from the U.S. Census Bureau (see Figure 2).

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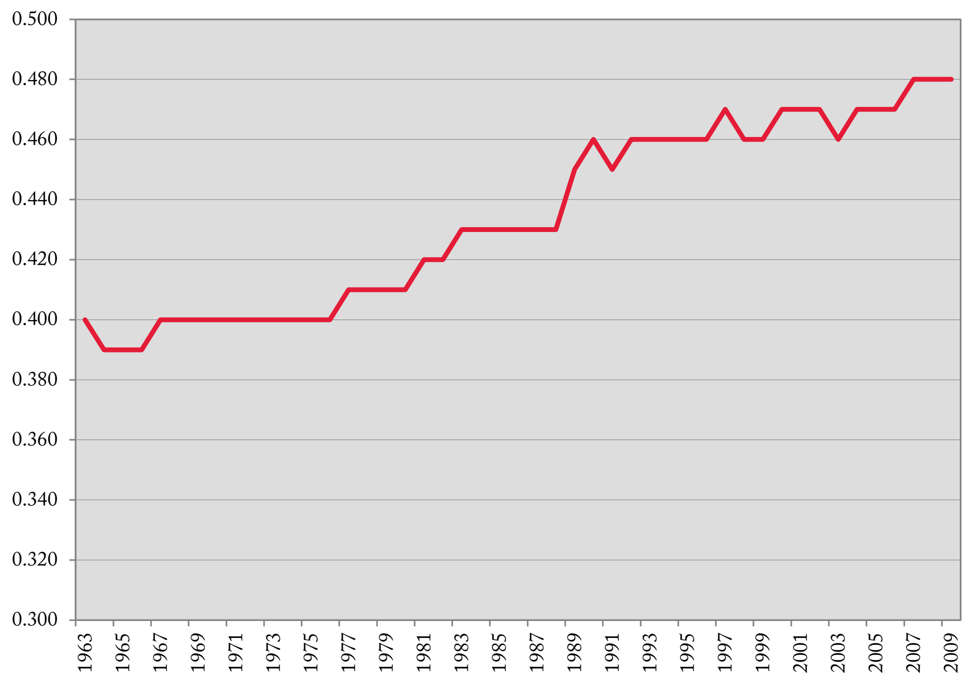
**FIGURE 2: U.S. Gini Coefficient 1968-2013**



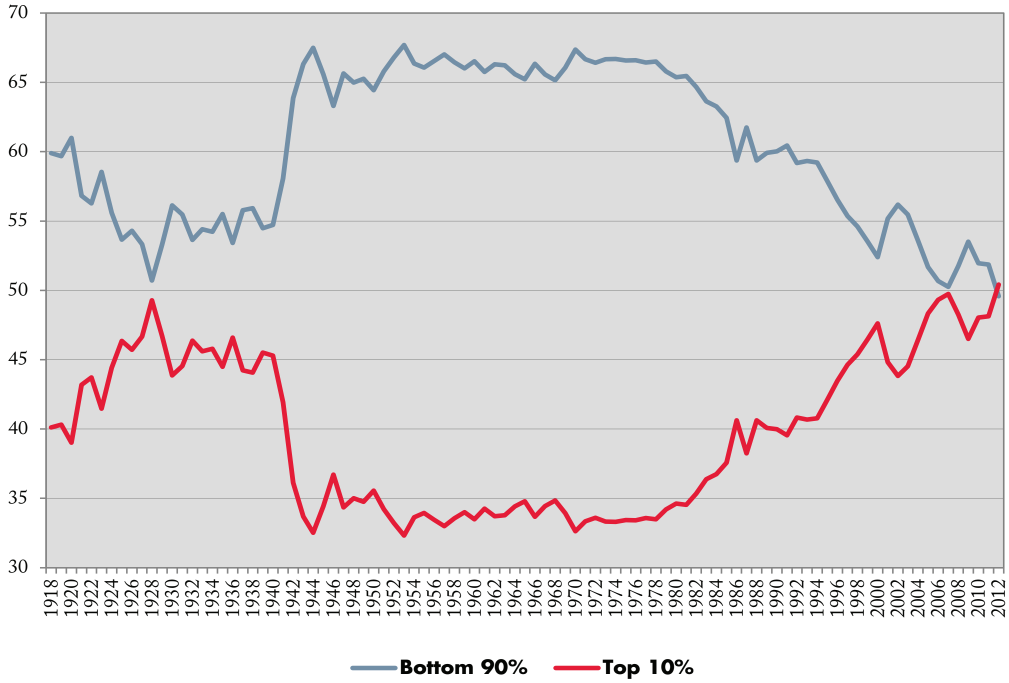

*Source: U.S. Census Bureau*

Picketty and Saez also provide more detailed income data that shows that the income distribution in the United States has changed significantly over the past century. In the period leading up to the economic depression of the 1930s, the top 10% of Americans captured a rising share of total income, peaking at roughly 50% in 1928 and remaining near this level through much of the next decade. This reversed dramatically during World War II as the country mobilized for war, unemployment fell to near zero, female labor force participation soared, millions of workers were retrained and were relocated from rural settings to urban areas.

This "golden period" of relative income equality in the U.S. lasted from the end of World War II through the early 1970s, and during this time period the bottom 90% of the U.S. income distribution regularly captured between 65% and 70% of total income. Since the early 1970s, however, the income share of this 90% of the population has declined steadily back towards the 50% mark cited above. Today, the top 10% of the U.S. population (as measured by income) and the bottom 90% of the population each receive roughly half of total U.S. income.

[3] *Wall Street Journal* October 17, 2014

**FIGURE 3: Share of U.S. Income received by the Top 10% and Bottom 90%**




*Source: Emmanuel Saez, World Top Incomes Database, http://topincomes.gmond.parisschoolofeconomics.eu*

It is interesting to note that the two peak years of inequality over the past century occurred immediately prior to significant economic contractions (1928 and 2007) with the top 10% of the population capturing 50% of total income. While certainly not causal, each of these prior peaks in inequality was immediately followed by a significant financial crisis. So far, since the end of the most recent financial crisis, there has been no reversal in the nation's income distribution and there is growing evidence that virtually none of the growth in total income has accrued to the lower half of the income distribution.

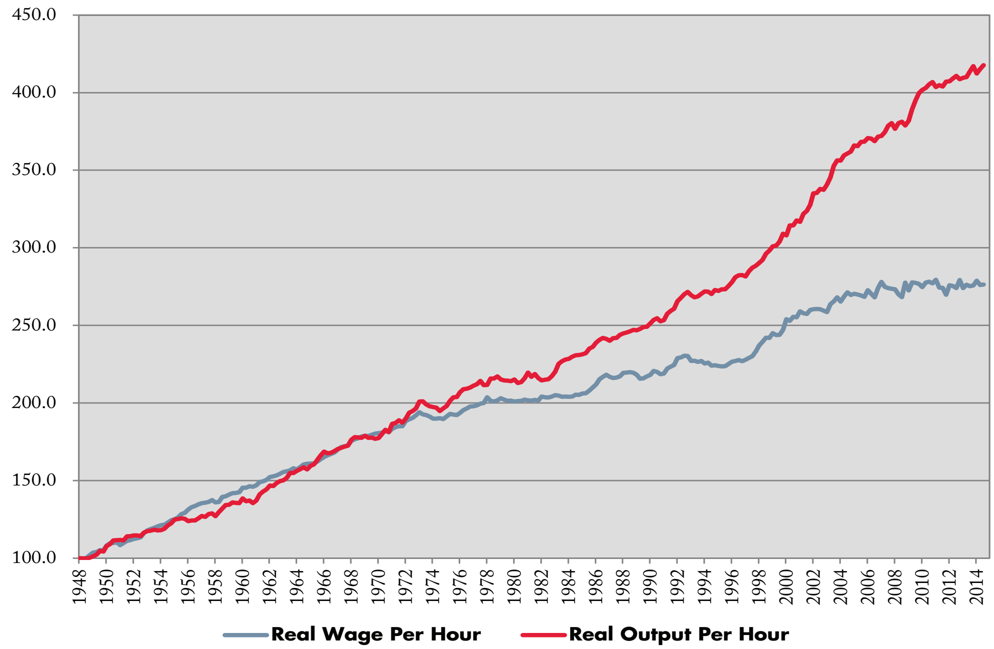
## Why Has U.S. Income Inequality Changed Over Time?

There are many possible causes of growing income inequality in the U.S. since 1970. In the immediate aftermath of the World War II, the U.S. enjoyed a position of broad industrial hegemony reflecting a rapid expansion of the U.S. industrial base during the war and the simultaneous destruction of much of the world's competing industrial capacity. During this unique historical period, U.S. workers thrived, armed with war time training, expanded access to a college education (e.g. GI Bill) and large scale relocation from rural to urban areas, and the country enjoyed rapid middle class consumer expansion. This unique competitive position began to erode during the 1970s as restrictions on global trade were relaxed and foreign competition expanded. At the same time, the U.S. labor market was saturated with new entrants as the post-war baby boom generation began to mature into the labor force.

Figure 4 illustrates a key development resulting from this confluence of events – real wage growth in the U.S. decoupled from real output growth for the first time in the post war period. Until the early 1970s, the median wage grew in tandem with productivity. Since then, real output per hour in the U.S. has more than doubled while real wages per hour has increased by roughly one-third. Given that the return to labor, i.e. an increase in wages, has not kept pace with total output, it is logical to conclude that most of this growth in real output has accrued instead to capital. Picketty (and others) argue that increasing returns to capital also accelerate the growth in income and wealth inequality as capital holders are more likely to be found among the higher income portion of the distribution.

**The lower half of households by wealth held just 3% of wealth in 1989 and only 1% in 2013.**

**FIGURE 4: Growth in Output and Wages**

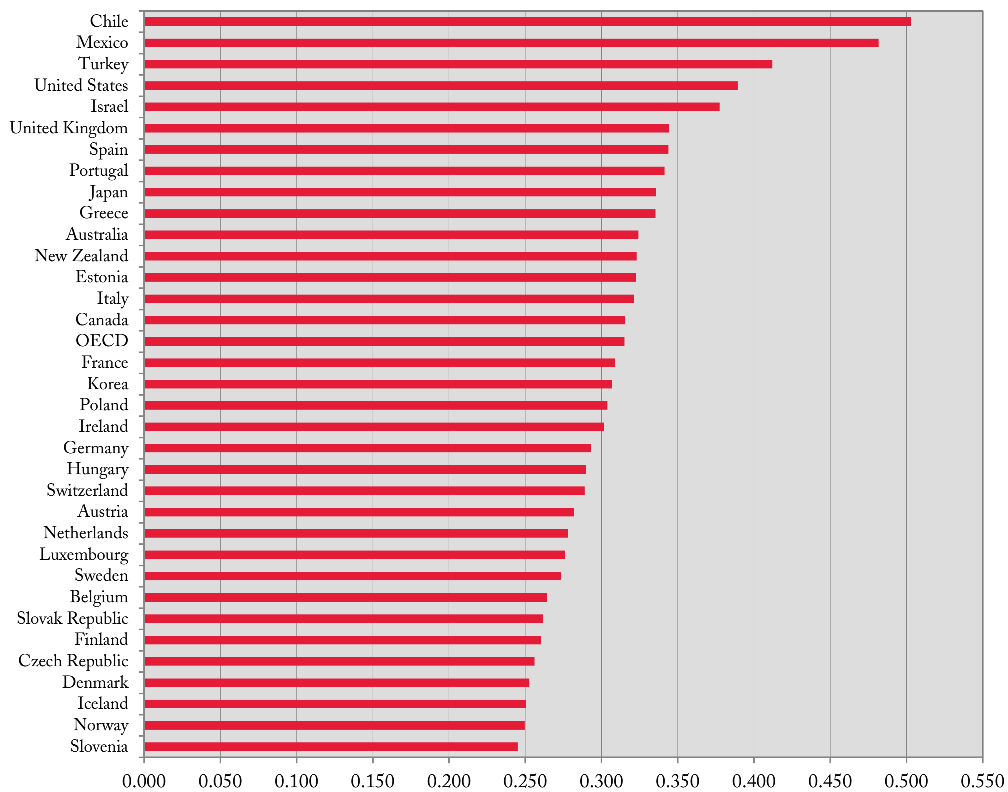



*Sources: Bureau of Labor Statistics, Bureau of Economic Analysis*

## Geographic Variation in Income Inequality

Globally and within the U.S. there is significant geographic variation in income distribution. Among the OECD countries[4], the most recent Gini Coefficient measures of income in equality range from a low of less than 0.25 in Slovenia and Norway to a high of nearly 0.50 in Chile. For its part, the United States ranks as the fourth most unequal income distribution among these peer nations, trailing only Chile, Mexico and Turkey and ranking only slightly ahead of Israel and the United Kingdom (see Figure 5).

**FIGURE 5: Gini Coefficient by OECD Country**

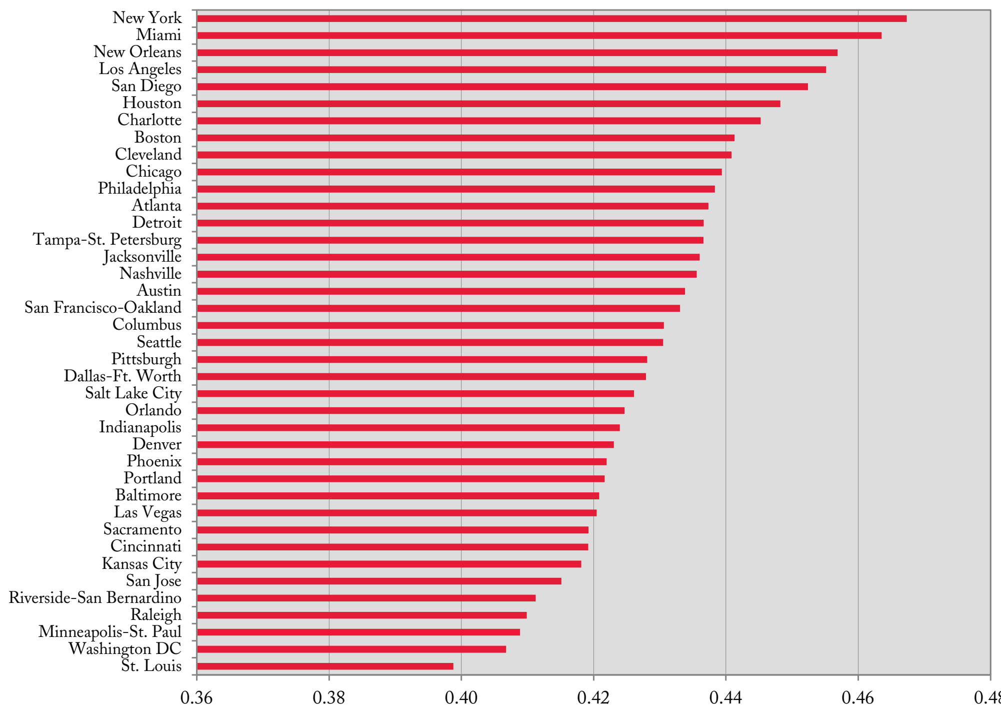



*Source: OECD*

[4]Organization for Economic Cooperation and Development (OECD)

Similarly, there also exists significant variation in income inequality across major metropolitan areas within the U.S., but the degree of variation among metropolitan areas is less than the degree of variation across countries. Within the U.S., the metropolitan area with the least equal income distribution is in New York followed closely by Miami, New Orleans and Los Angeles. Among the major U.S. metropolitan areas, the lowest levels of income inequality are observed in St. Louis, Washington, D.C. and Minneapolis. Finally, where the difference between the highest and lowest Gini Coefficients by country ranged from 0.25 to 0.50, the difference between highest and lowest among U.S. metro areas ranged from 0.46 in New York to 0.39 in St. Louis.

**FIGURE 6: Gini Coefficient by U.S. Metropolitan Area**



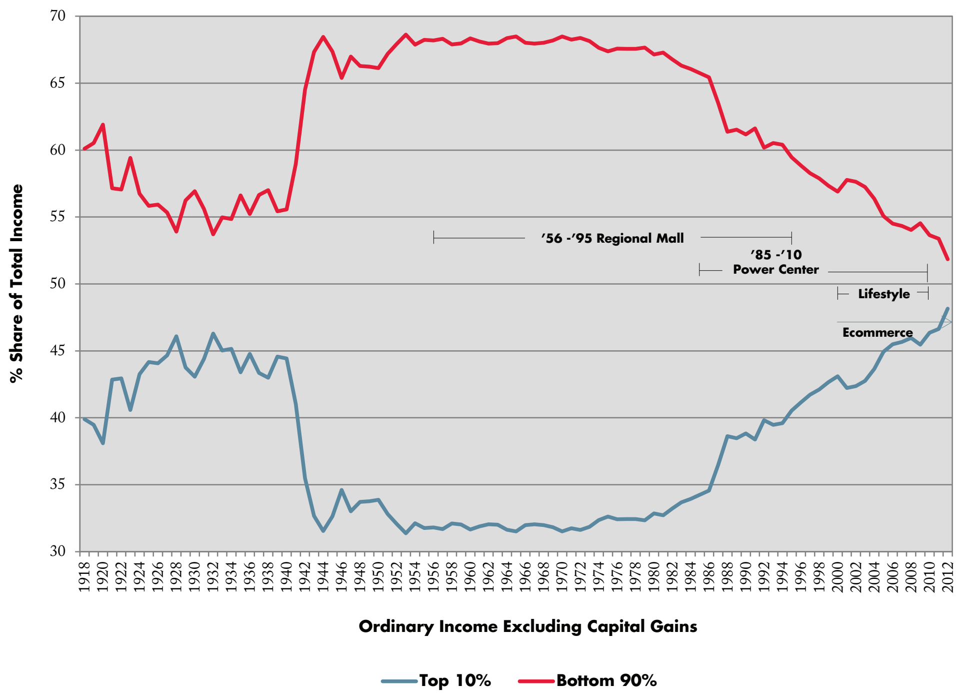

*Source: Metro Insight*

## Should Property Owners Be Concerned About Growing U.S. Income Inequality?

Income inequality in the United States has been growing for decades. Despite this, commercial property has consistently delivered strong and competitive returns for investors. Similarly, some of the metropolitan areas within the U.S. with the highest levels of income inequality (e.g. New York) are also markets with consistently strong property investment performance. Why then, should property investors be concerned about this growing income in equality?

Commercial property creates cash flow (and value) for its investors through the leasing of space to tenants. If tenants are not able to pay increasingly higher rents, they will respond, initially, by leasing less space or by seeking less expensive alternatives (e.g. less desirable locations or lower quality property), and there is evidence that this is happening. Micro apartment units are now common in the most expensive markets, office tenants have been shrinking space per worker for years and cost-sensitive retailers have been migrating out of malls and into properties with lower occupancy costs such as power centers, lifestyle centers and e-commerce for decades.

**FIGURE 7: U.S. Income Distribution 1918-2012**
**Shopping Center Development Trends 1946-2012**




*Source: World Top Incomes Database*

Tenants can seemingly make adjustments such as these for a long time, but like the proverbial frog slowly boiling in the pot, there comes a point where the imbalance between income and expense growth must be closed through other means. One such development that is very much in its infancy is the development of what some are calling the "sharing economy". Reflecting both the lack of broad income growth and the rapid development of enabling technology, a wide range of offerings have emerged to satisfy unmet consumer and tenant demand. Newer companies such as Uber and Lyft along with older players such as Zip Car are redefining the need to own an automobile and revolutionizing the livery industry. Similarly, hospitality companies such as Airbnb are turning thousands of homes into virtual hotels. At the same time, office space companies such as WeWork are redefining the relationship between landlord and tenant by offering space in bite size increments to a tenant base largely unserved by current models.

For property investors, there are many reasons to be concerned about growing income inequality, including a decline in consumer spending which affects aggregate growth and business investment, potential increase in the cost of capital as the result of economic instability and increased investor competition for properties serving the segment of the population that is enjoying rising prosperity.

Throughout history, the risk from growing income inequality has typically been revolutionary. In the past, revolution was largely a political and military event. Today, the revolutionary changes are more likely to come from a radical change in technology and tenant behavior and preferences that could turn some of today's most desirable properties into tomorrow's left behinds.

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