



THE GEOGRAPHY OF THE GLOBAL SUPER-RICH

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THE GEOGRAPHY OF THE GLOBAL SUPER-RICH

Richard Florida
Charlotta Mellander
Isabel Ritchie

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Executive Summary

Recent years have seen increasing apprehension over rising inequality and the growth of the so-called “1 percent.” For all the concern expressed about the rise of the global super-rich, there is very little empirical research related to them, especially regarding their location across the cities and metro areas. Our research uses detailed data from *Forbes* on the more than 1,800 billionaires across the globe to examine the location of the super-rich across the world’s cities and metro areas. Our key findings are as follows:

- The super-rich are concentrated in a small number of metros around the world. The top 50 metros account for nearly two-thirds of all billionaires, while making up just 7 percent of the world’s population. The top 20 account for more than 40 percent, while making up just 3.5 percent of the world’s population. And just the top 10 account for more than 30 percent, while making up less than 2 percent of the world’s population.
- Super-rich wealth is even more concentrated. The top 10 metros are home to 36 percent of total billionaire wealth, the top 20 account for nearly half and the top 50 hold over 70 percent of billionaire wealth. The United States has five metros in the top 10 and nine in the top 20 metros for billionaire wealth.

- New York tops the list with \$537 billion or 7.6 percent of all billionaire wealth. San Francisco is second with \$365 billion or 5.2 percent; Moscow third with \$290 billion; Hong Kong fourth with \$274 billion; and London is fifth with \$213 billion. Los Angeles, Beijing, Paris, Seattle, and Dallas each have between \$150 and \$175 billion in billionaire wealth.
- All told, the United States is home to almost a third of the world's billionaires; China follows with 12.2 percent; India and Russia are next with 4.5 percent each; and Germany has 4.3 percent.
- The geographic distribution of billionaires is spiky; it follows from the size and economic and financial power of global cities. That said, many of the world's most competitive and financially powerful cities actually have fewer billionaires than their economic and financial power would suggest, while smaller places and some of the world's most livable cities have relatively more billionaires than their economic size or competitiveness and financial power would predict.
- There is a substantial difference in the geography of self-made versus inherited billionaires. Metros in the United States and Asia, especially China, have the largest shares of self-made billionaires, while those in Europe and South America have more inherited wealth.
- The leading industries for super-rich wealth are Fashion and Retail (with 13 percent of total billionaire wealth); Technology and Telecom (\$989 billion), Finance and Investment (\$962 billion), Energy and Resources (\$623 billion), and Automotive and Manufacturing (\$561 billion). Milan tops the list on Fashion and Retail, followed by New York, Paris, and London, all well-established fashion capitals. The San Francisco Bay Area tops the list on Technology and Telecom, followed by Beijing, Los Angeles, Bangalore, Seoul, Shenzhen, and Seattle. New York tops the list on Finance and Investment, followed by the San Francisco Bay Area, Moscow, Los Angeles, and Miami.
- The gap between the super-rich and the rest of society is staggering, based on our measure of the Super-Rich Wealth Gap, which compares billionaire wealth to the economic situation of the average person based on metro economic output per person. This gap is the most pronounced in the poorer and less developed cities of the Global South like Bangalore, Mumbai, Mexico City, Manila, Jakarta, Delhi, Bangkok, Hangzhou, Beijing, Shanghai, Rio de Janeiro, Sao Paulo, and Santiago. But, it is also quite pronounced in advanced cities like Seattle, Dallas, Paris, Stockholm, Toronto, and Tokyo.

Introduction

Over the past decade or so, there has been increasing concern over rising inequality and the growth of “the 1 percent” of super-rich people who sit atop the global economy.¹ For all the consternation expressed about their rise, there is very little empirical research on them. While several recent studies have charted their location by nation, there is very little research on their location by city or metro area.

Our research uses detailed data from *Forbes* on the world’s billionaires to examine the geography of the super-rich across cities and metro areas.² The world’s 1,826 billionaires make up just 0.00003 percent of the global population, but wield incredible purchasing power. With a combined wealth of more than \$7 trillion in 2015, their fortunes are comparable to Japan’s entire economy, the world’s the third largest, and make up nearly 10 percent of the total economic output of the entire world.³ The 50 wealthiest billionaires control \$1.6 trillion, more than Canada’s economy, while the top 10 control \$556 billion, roughly the economic size of Algeria or the United Arab Emirates.

This report examines the geography of the super-rich across the world's cities and metro areas. It looks in detail at the source of that wealth — the degree to which it is self-made versus inherited — and maps the major industries and sectors that define the super-rich across these global metros. It also explores the concentration of wealth within global metros, charting the share of total economic output they control and comparing the wealth of the super-rich to the economic status of the average person across global cities. We summarize our main findings and discuss some of their implications in the concluding section. The Appendix provides details on our data, measures, and methodology.

Mapping the Global Super-Rich

We start by mapping the super-rich by country (see *Exhibit 1*).

Exhibit 2 ranks the top 20 nations by their number of billionaires. The United States is home the world's largest number of billionaires, with 541, 30 percent of the total. China is second with 223 or 12 percent. Next in line are India and Russia, with 82 billionaires (4.5 percent)

each. Germany is fifth with 78 billionaires (4.3 percent). The United Kingdom is sixth with 71 (3.9 percent). Switzerland has 58 (4.3 percent), Brazil 50 (2.7 percent), France 39 (2.1 percent), and Italy 35 (1.9 percent). A 2016 report from the Peterson Institute for International Economics notes the sharp rise in billionaires in the emerging economies between 1996 and 2014.⁴

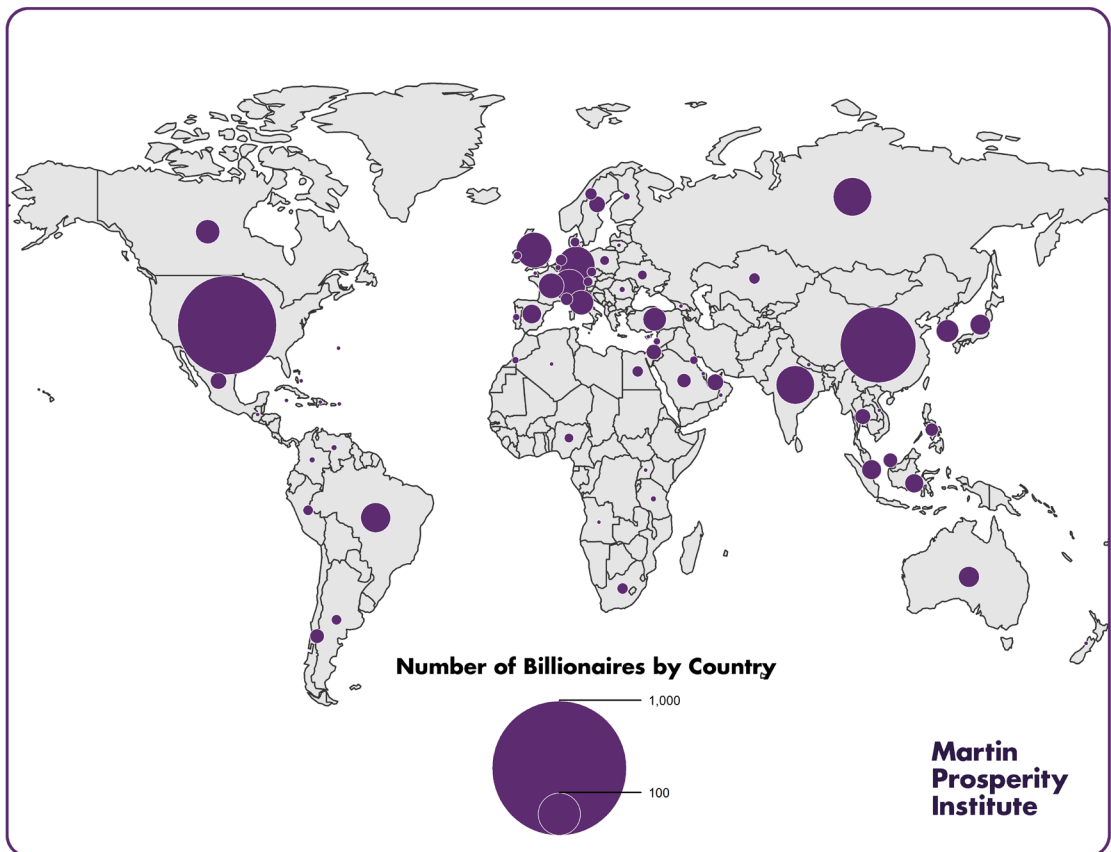


Exhibit 1: Billionaires by Country

Country	Total Wealth (billions)	Share of Total Wealth	No. of Billionaires	Share of World's Billionaires
United States	\$2,575	36.5%	541	29.6%
China	\$589	8.4%	223	12.2%
Germany	\$327	4.6%	78	4.3%
Russia	\$318	4.5%	82	4.5%
India	\$281	4.0%	82	4.5%
United Kingdom	\$279	4.0%	71	3.9%
Hong Kong	\$274	3.9%	64	3.5%
Switzerland	\$226	3.2%	59	3.2%
France	\$195	2.8%	39	2.1%
Brazil	\$173	2.5%	50	2.7%
Mexico	\$140	2.0%	15	0.8%
Spain	\$117	1.7%	21	1.2%
Canada	\$113	1.6%	33	1.8%
Italy	\$109	1.6%	35	1.9%
Japan	\$98	1.4%	24	1.3%
South Korea	\$76	1.1%	29	1.6%
Sweden	\$74	1.1%	15	0.8%
Taiwan	\$72	1.0%	31	1.7%
Australia	\$72	1.0%	25	1.4%
Singapore	\$62	0.9%	22	1.2%

Exhibit 2: Top 20 Countries for the Super-Rich

Predictably, the world's billionaires are overwhelmingly male. Women make up roughly 10 percent (10.8 percent) of billionaires and control a similar share (10.9 percent) of their total wealth. Billionaires are, on average, 61 years of age. More than forty percent (43.9 percent) are 65 or older. Just 2.5 percent (45 of them) are under forty years of age, and just 0.2 percent (three of them) are under thirty. Nearly three-quarters of billionaires (1,367) are married, while

just 3 percent (3.5 percent, 63) are single. A further 7 percent (6.7 percent, 123) are divorced or separated.

Next, we chart the location of the global super-rich by global city or metro area (*Exhibit 3*). Billionaires are concentrated in a small number of metros around the world. The top 50 metros are home to nearly two-thirds (63.6 percent) of the total; the top 20 account for more than 40

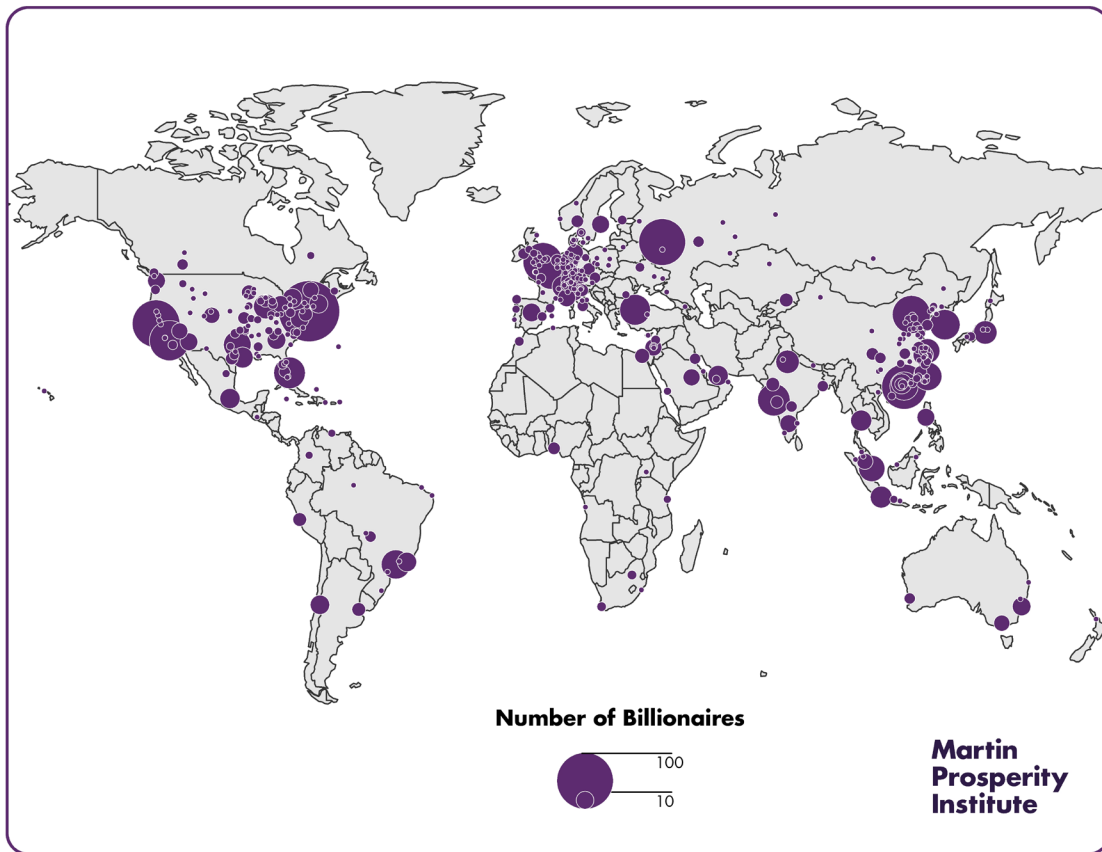


Exhibit 3: The Global Super-Rich by Major Global City and Metro

percent (43.5 percent), and just the top 10 account for nearly a third (30.7 percent). Although some billionaires choose to live in smaller metros, like Warren Buffett in Omaha, Nebraska, the majority cluster in a relatively small number of major metropolitan areas around the globe.

New York tops the list with 116 or 6.4 percent of the world's billionaires. The San Francisco Bay Area is second with 3.9 percent (71), Mos-

cow third with 3.7 percent (68), and Hong Kong fourth with 3.5 percent (65). Three additional metros have between two and three percent of the global super-rich: Los Angeles (2.8 percent), London (2.7 percent), and Beijing (2.5 percent). Each remaining city in the top 20 accounts for between one and two percent of the world's billionaires. Four of the top 10 global cities for the super-rich and six of the top 20 are in the United States.

Rank	Metro	Number	Share
1	New York	116	6.4%
2	San Francisco Bay Area	71	3.9%
3	Moscow	68	3.7%
4	Hong Kong	64	3.5%
5	Los Angeles	51	2.8%
6	London	50	2.7%
7	Beijing	46	2.5%
8	Mumbai	33	1.8%
9	Miami	31	1.7%
10	Istanbul	30	1.6%
11	Seoul	29	1.6%
12	Paris	27	1.5%
12	Sao Paulo	27	1.5%
14	Shenzhen	25	1.4%
14	Taipei	25	1.4%
16	Dallas	24	1.3%
17	Singapore	22	1.2%
18	Chicago	19	1.0%
18	Shanghai	19	1.0%
20	Zurich	18	1.0%

Exhibit 4: Top 20 Metros of the Global Super-Rich

Mapping the Wealth of the Global Super-Rich

Charting the number of billionaires across the world is one thing, but we can also look at the extent of their wealth. *Exhibit 5* charts the total wealth held by the super-rich across the cities and metros of the world.

Again, we see the pronounced concentration of billionaire wealth in the United States, Europe, and China.

Exhibit 6 lists world's top 20 metros by the total net worth controlled by billionaires who are located there.

New York again tops the list with \$537 billion or 7.6 percent of all global billionaire wealth. San Francisco is second with \$365 billion or 5.2 percent; Moscow third with \$290 billion or 4.1 percent; Hong Kong fourth with \$274 billion or

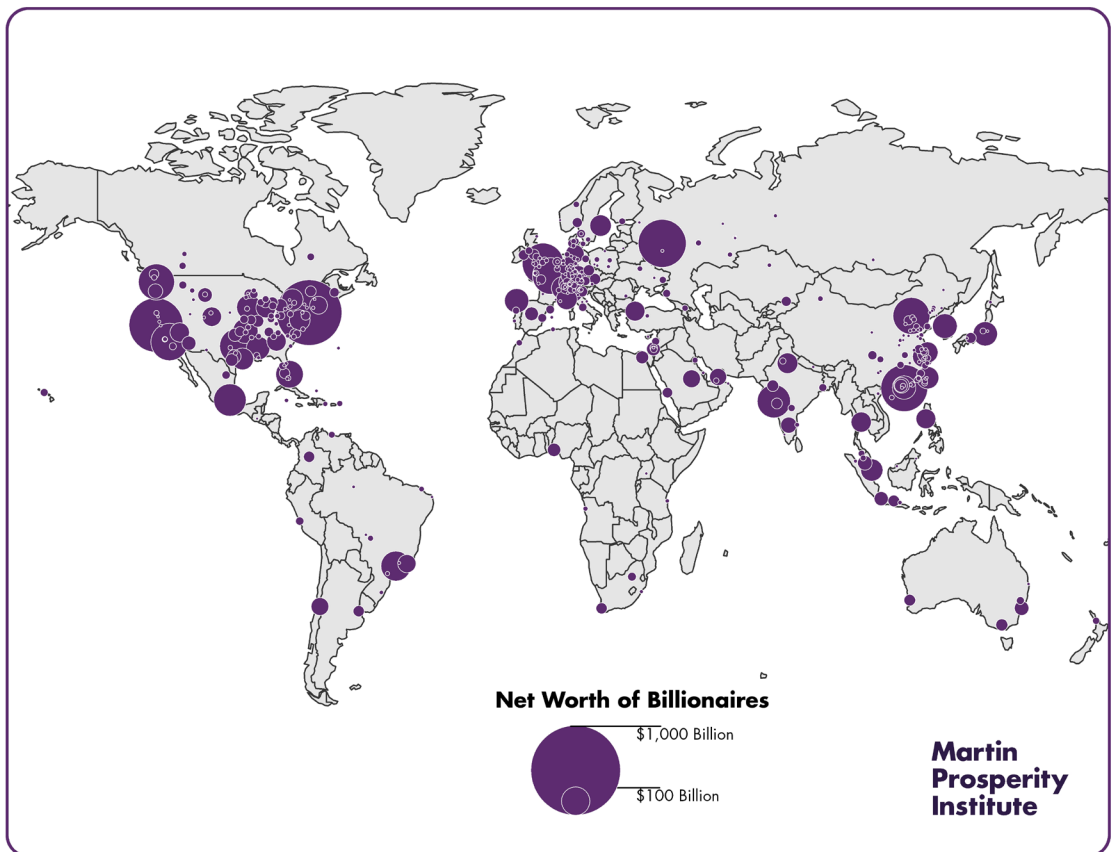


Exhibit 5: Super-Rich Fortunes by Global City or Metro

Rank	Metro	Total Billionaire Wealth (billions)	Share of Global Billionaire Wealth
1	New York	\$537	7.6%
2	San Francisco Bay Area	\$365	5.2%
3	Moscow	\$290	4.1%
4	Hong Kong	\$274	3.9%
5	London	\$213	3.0%
6	Los Angeles	\$175	2.5%
7	Beijing	\$171	2.4%
8	Paris	\$167	2.4%
9	Seattle	\$164	2.3%
10	Dallas	\$156	2.2%
11	Mumbai	\$139	2.0%
12	Mexico City	\$131	1.9%
13	Sao Paulo	\$113	1.6%
14	Miami	\$94	1.3%
15	Bentonville, Arkansas	\$80	1.1%
16	Omaha	\$76	1.1%
17	Seoul	\$76	1.1%
18	Tokyo	\$74	1.1%
19	A Coruña, Spain	\$73	1.0%
20	Jackson, Wyoming	\$70	1.0%

Exhibit 6: Top Ten Global Cities for Billionaire Wealth

3.9 percent; and London is fifth with \$213 billion or 3.0 percent. Los Angeles (\$175 billion, 2.5 percent), Beijing (\$171 billion, 2.4 percent), Paris (\$167 billion, 2.4 percent), Seattle (\$164 billion, 2.3 percent), and Dallas (\$156 billion, 2.2 percent) complete the top 10. The United States has five metros in the top 10 and nine in the top 20 on this metric.

Mapping the Average Net Worth of the Super-Rich

So far, we have looked at the total number billionaires and the amount of their wealth. But, what happens when we control for the size of global cities and metro areas? To get at this, *Exhibit 7* charts the average net worth of billionaires by global city or metro. Now the pattern starts to change. The largest numbers of dots remain in the United States and Europe but the average size of those dots is quite a bit smaller.

Exhibit 8 shows the top 10 global metros by billionaire net worth. Now many smaller cities pop up on the list.

Bentonville, Arkansas, home to two members of the Walton family, who own and control Wal-Mart, tops the list, with an average billionaire net worth just shy of \$40 billion dollars. Next is Omaha, Nebraska with to \$38.2

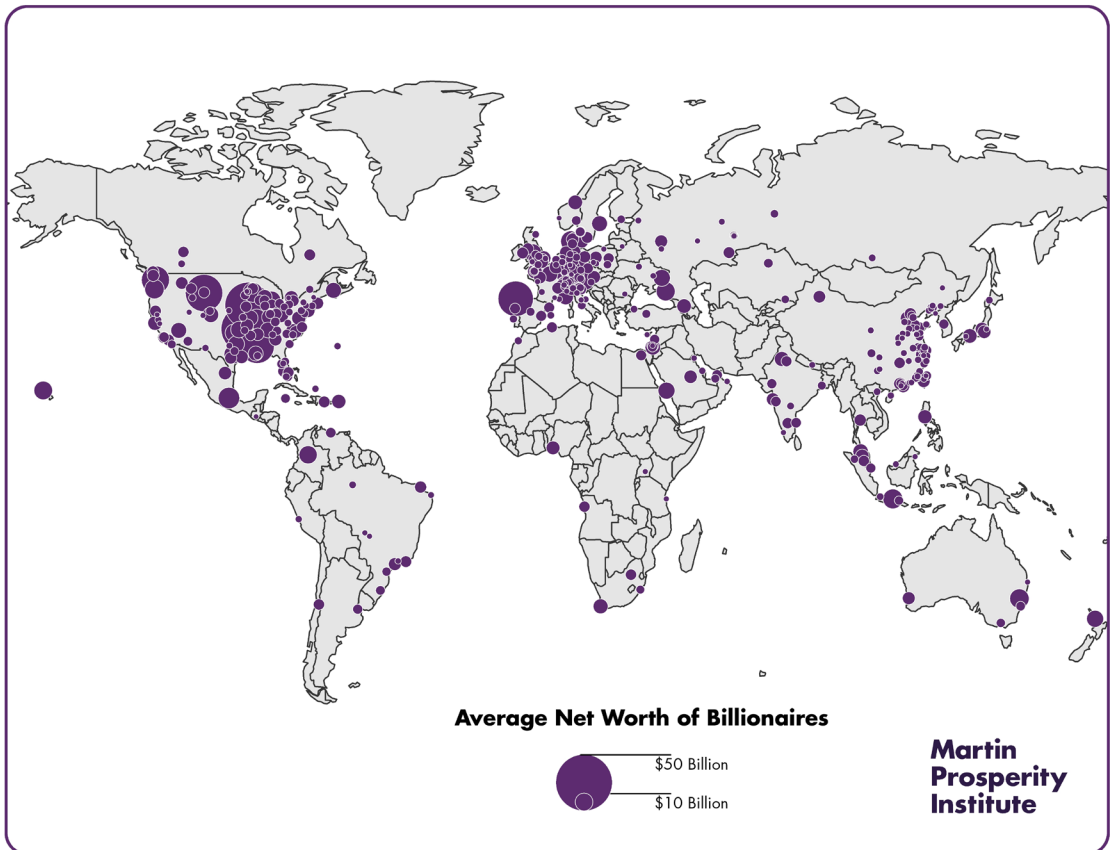


Exhibit 7: Average Billionaire Net Worth by Global City or Metro

Rank	Metro	Average Net Worth (billions)	Number of Billionaires
1	Bentonville, Arkansas	\$39.9	2
2	Omaha, Nebraska,	\$38.2	2
3	Big Horn, Wyoming	\$26.6	1
4	La Coruna, Spain	\$24.3	3
5	Jackson, Wyoming	\$23.2	3
6	Neckarsul, Germany	\$19.4	1
7	Seattle	\$16.4	10
8	Nurnberg-Furth, Germany	\$11.6	3
9	Fuschl am See, Austria	\$10.8	1
10	Mexico City	\$10.1	13

Exhibit 8: Top 10 Global Cities by Average Billionaire Net Worth

billion in average billionaire net worth. Omaha is home to Warren Buffett, the third richest billionaire on our list with \$72.7 billion. Big Horn, Wyoming is third with average billionaire net worth of \$26.6 billion thanks to candy scion Forrest Mars. La Coruña, Spain is fourth and Jackson, Wyoming is fifth, the second of two Wyoming cities in the top five. (In total, eight billionaires call Wyoming home, perhaps a result of its favorable tax policies.) Neckarsulm and Nurnberg, Germany and Fuschl am See, Austria also number among the top 10. Seattle and Mexico City are the only two larger metros on the list.

The Spiky Geography of the Super-Rich

The geography of the super-rich is spiky, as *Exhibit 9* shows. The top 10 metros account for nearly a third (30.7 percent) of the world's super-rich, while making up just 1.8 percent of the world's population. The top 20 account for more than 40 percent (43.5 percent), while making up just 3.5 percent of the world's population. And the top 50 metros account for nearly two-thirds (63.6 percent) of the world's billionaires, while making up just 7 percent (7.2 percent) of the world's population.

The wealth of the super-rich is even spikier than their numbers. The top 10 metros control \$2.5 trillion dollars, more than the total GDP of Brazil, Italy, or India. The top 20 metros account for \$3.4 trillion, equivalent to the GDP of Germany, the world's fourth largest economy. And the top 50 account for almost \$5 trillion, a total that would make their combined wealth the equivalent of the world's third largest economy, after the United States and China, and accounting for more than 70 percent of all billionaire wealth. Ultimately, the number of billionaires and their total wealth is closely associated across global metros, with a correlation of 0.87.

Exhibit 10 provides another angle on this, comparing the wealth held by the super-rich to the total economic output of the metros where they are located. (We limit this analysis to metros with more than 10 billionaires).

There are dots of relatively equal sizes displayed across the map from the advanced nations of

the United States and Europe to the emerging economies of South America, Asia, and the Middle East. Across the world, the fortunes of the super-rich are equivalent to a significant portion of the total economic output of the entire cities and metro areas in which they reside.

Exhibit 11 lists the 20 global metros where the fortunes of the super-rich are equivalent to the highest shares of total annual economic output. The wealth held by the super-rich in London or Sao Paolo is equivalent to about a quarter of their total annual economic output. In Mexico City and Beijing it is equivalent to about a third of annual economic output. In New York and Stockholm, it is about 40 percent and in Seattle it is around half. In Hong Kong it is 70 percent and in San Francisco roughly three-quarters. And in Geneva, a small city with a lot of wealthy people, the fortunes of the super-rich are equivalent to more than 150 percent of annual economic output. Ultimately, this ratio tends to reflect the wealth of billionaires with correlation of 0.47.

Top 10 Metros

(ranked by number of Billionaires)

👤 = 100 Billionaires 💰 = \$100B USD



560 Billionaires makes
up 30.7% of all Billionaires

Top 20 Metros



795 Billionaires is
43.5% of all Billionaires

Top 50 Metros



1,152 Billionaires is
63.1% of all Billionaires



\$2,307B of Billionaire wealth
is 32.7% of all Billionaire wealth



\$3,183B of Billionaire wealth
is 45.1% of all Billionaire wealth



\$4,710B of Billionaire wealth
is 66.8% of all Billionaire wealth

Top 10 Metros: Billionaires are 1.8% of the World's Total Population

Top 20 Metros: Billionaires are 3.5% of the World's Total Population

Top 50 Metros: Billionaires are 7.2% of the World's Total Population



Top 10 Metros

(ranked by Billionaire wealth)



527 Billionaires makes
up 28.8% of all Billionaires

Top 20 Metros



687 Billionaires is
37.6% of all Billionaires

Top 50 Metros



1,096 Billionaires is
60.0% of all Billionaires



\$2,511B of Billionaire wealth
is 35.6% of all Billionaire wealth



\$3,437B of Billionaire wealth
is 48.7% of all Billionaire wealth



\$4,983B of Billionaire wealth
is 70.6% of all Billionaire wealth

Top 10 Metros: Billionaires are 1.6% of the World's Total Population

Top 20 Metros: Billionaires are 3.5% of the World's Total Population

Top 50 Metros: Billionaires are 6.9% of the World's Total Population



Exhibit 9: Concentration of the Super-Rich

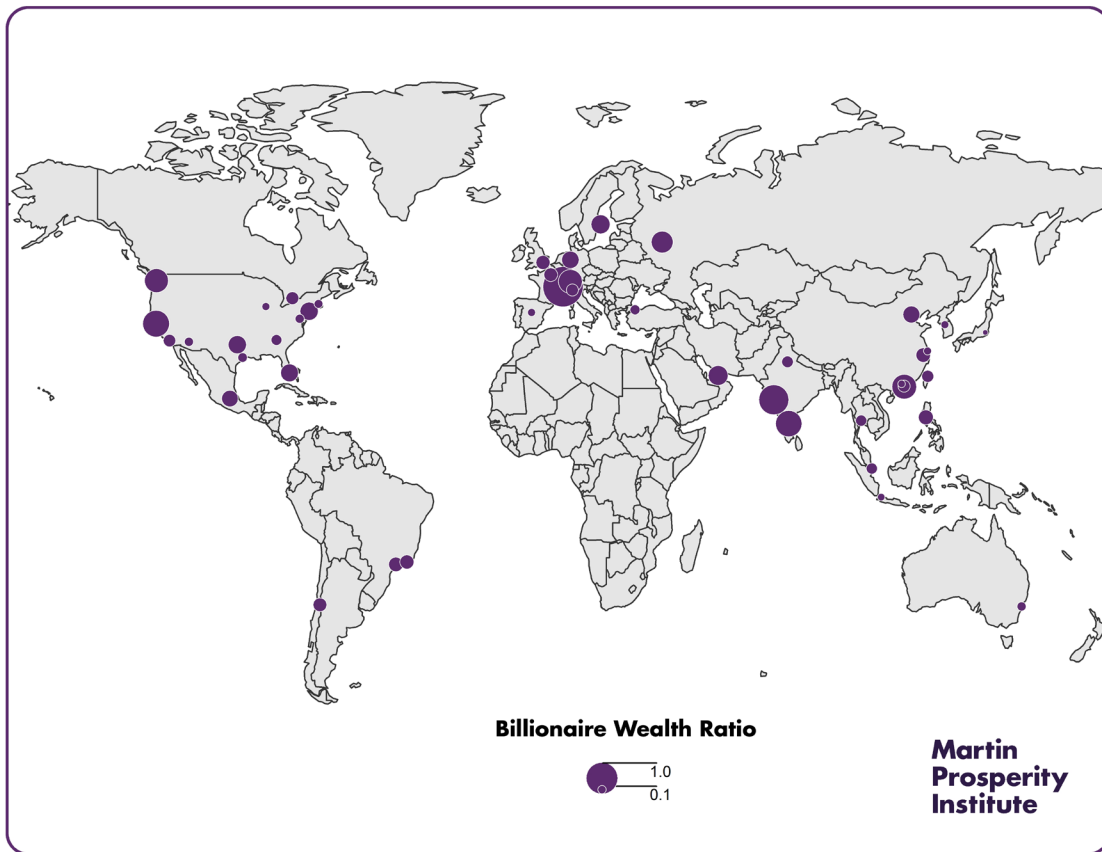


Exhibit 10: Super-Rich Wealth as a Share of Metropolitan Economies

Rank	Metro	Super-Rich Wealth to Metro Output
1	Geneva	1.53
2	Mumbai	0.92
3	San Francisco Bay Area	0.74
4	Bangalore	0.72
5	Hong Kong	0.70
6	Zurich	0.61
7	Seattle	0.61
8	Moscow	0.52
9	Dubai	0.45
10	Stockholm	0.41
11	New York	0.38
12	Dallas	0.38
13	Miami	0.36
14	Bielefeld-Detmold, Germany	0.35
15	Beijing	0.34
16	Mexico City	0.33
17	Manila	0.27
18	Sao Paulo	0.26
19	Hangzhou, China	0.26
20	London	0.25

Exhibit 11: Ratio of Super-Rich Wealth to Metro Economic Output

What Factors Account for the Geography of the Super-Rich

We have now seen which global cities and metros have the most billionaires, the most billionaire wealth, and the highest average billionaire net worth. But, in what kind of metros are billionaires most likely to reside? One would think they would be more likely to be born or become rich in larger, denser, more economically and financially powerful cities, with larger firms, industries, and markets. To get at this, we ran a basic correlation analysis comparing the number of billionaires and their total wealth to key characteristics of global metros such as the size of their population, density, economic output, productivity, and a series of measures of their financial power and global competitiveness. Here, we point out that correlation does not equal causation or imply causality. It only highlights associations between variables. Still, a number of interesting findings flow from this analysis.

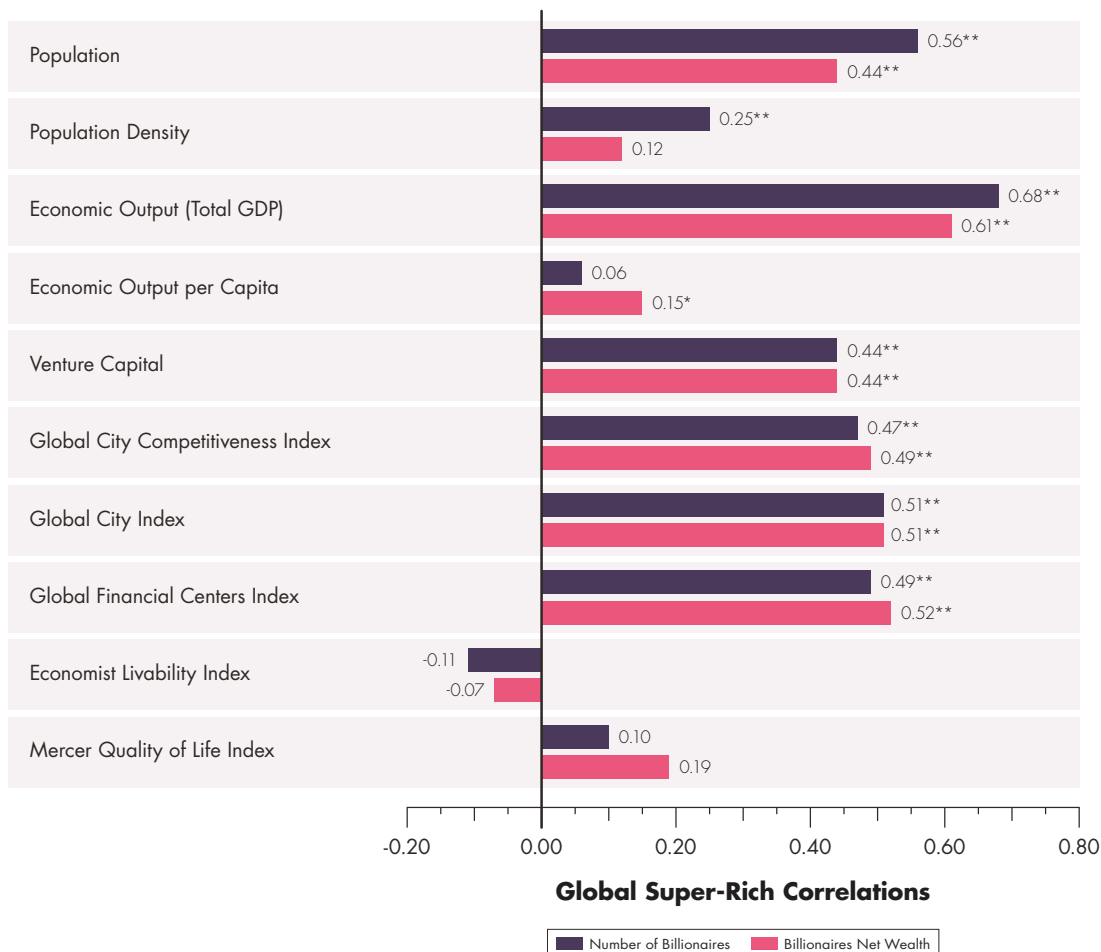
The geography of the super-rich is a function of larger cities. Both the number of billionaires and their net worth are positively associated with the population of global cities, with correlations of 0.56 for the number of billionaires and 0.44 to their net worth.

Exhibit 13 illustrates this, comparing billionaires to the populations of global metros. The line slopes upward and to the right, indicating the positive association between billionaires and population. Metros which sit above the fitted line, like Geneva, Singapore, San Francisco, Hong Kong, Moscow, and New York, have more billionaires than their populations would

predict. The metros that lie below the fitted line, like Osaka-Kobe, Tianjin, and Bogota, have fewer billionaires than we would expect given their populations. Tokyo, Rome, Cairo, Rio de Janeiro, and Frankfurt are essentially on the line, suggesting that the number of billionaires who live in these metros is in line with their overall populations.

But, economic size matters even more than population, as the concentration of billionaires is more closely associated with the economic size of global cities and metros. Both the number of billionaires and their net worth are closely correlated to the total economic output of global metros, with correlations of .68 between economic output and the number of billionaires and .61 between it and their total wealth. Again, this does not imply causality. It may be that billionaires are more likely to emerge in larger economies, or it may be that their activities make those economies larger; most likely, both are occurring to some degree.

Exhibit 14 plots the connection between economic output of global metros and their number of billionaires. Again, the line slopes sharply upward and to the right signaling a close correlation. Metros above the fitted line — like San Francisco, Miami, Mumbai, and a number of smaller cities to the upper left — have more billionaires than the size of their regional economies would predict. There is an additional cluster of large metros — including New York, London, Hong Kong, and Moscow — that are home to more billionaires than their economic



**indicates significance at the 1 percent level, *significance at the 5 percent level

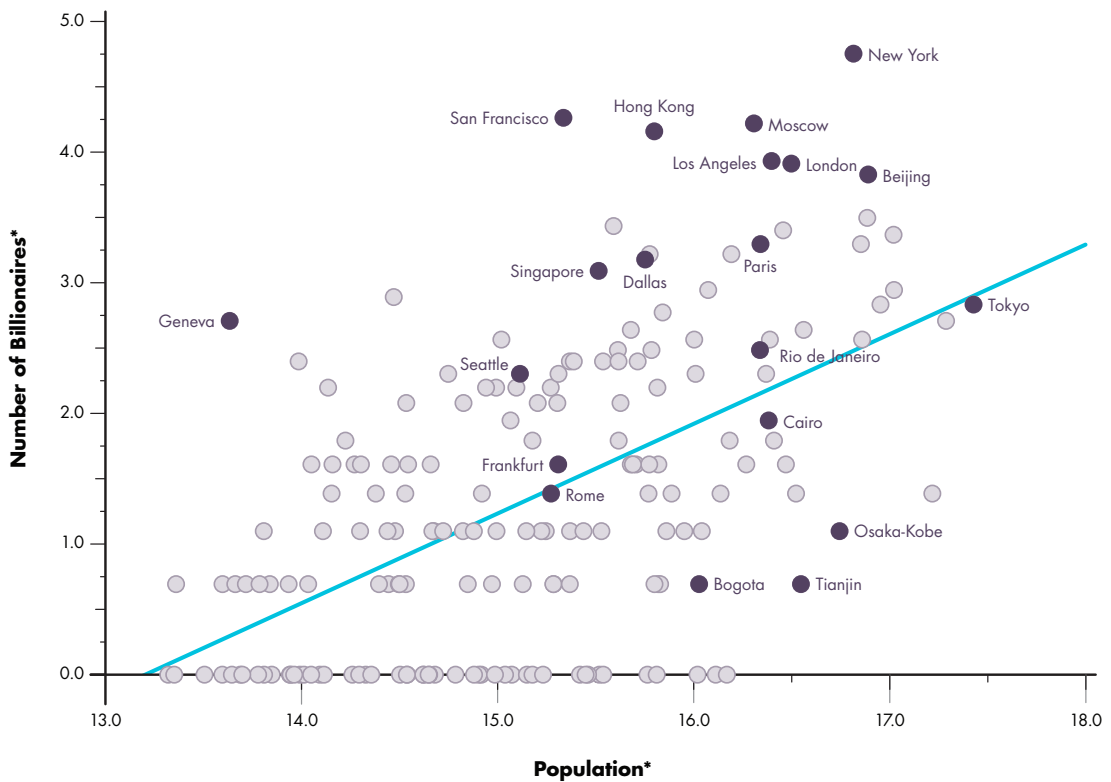
Exhibit 12: Global Super-Rich Correlations

size would suggest. Conversely, Brussels, Barcelona, Frankfurt, and Amsterdam are home to fewer billionaires than the size of their economies would predict.

A huge body of urban theory suggests that density (not just size) is a key factor in the wealth of cities.⁵ However, our analysis shows that density is more modestly associated with the global super-rich. The correlation between density and the number of billionaires is 0.25, while the correlation between density and total bil-

lionaire wealth is statistically insignificant. The concentration of billionaires is more closely associated with the economic and population size of metros than their density.

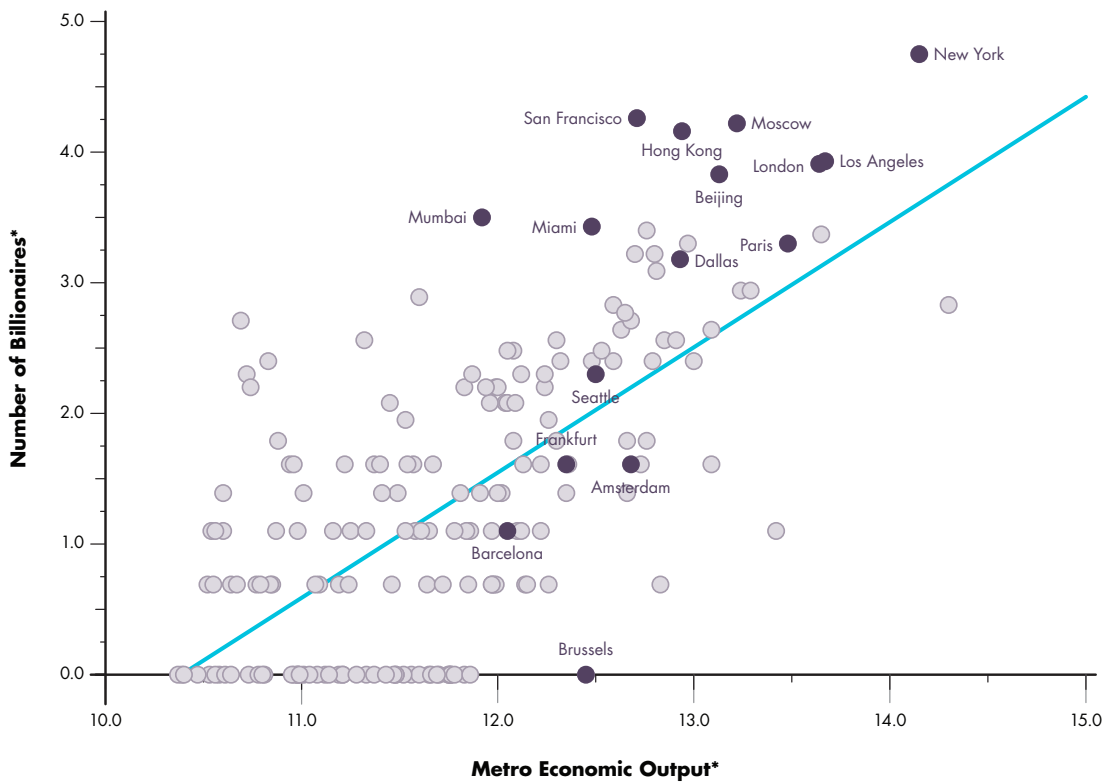
As we have seen, the concentration of billionaires is associated with the size of cities. But, to what extent is it associated with higher or lower living standards? One would assume that the concentration of billionaires is higher in places with higher incomes or living standards, as they would likely have more sophisticated markets



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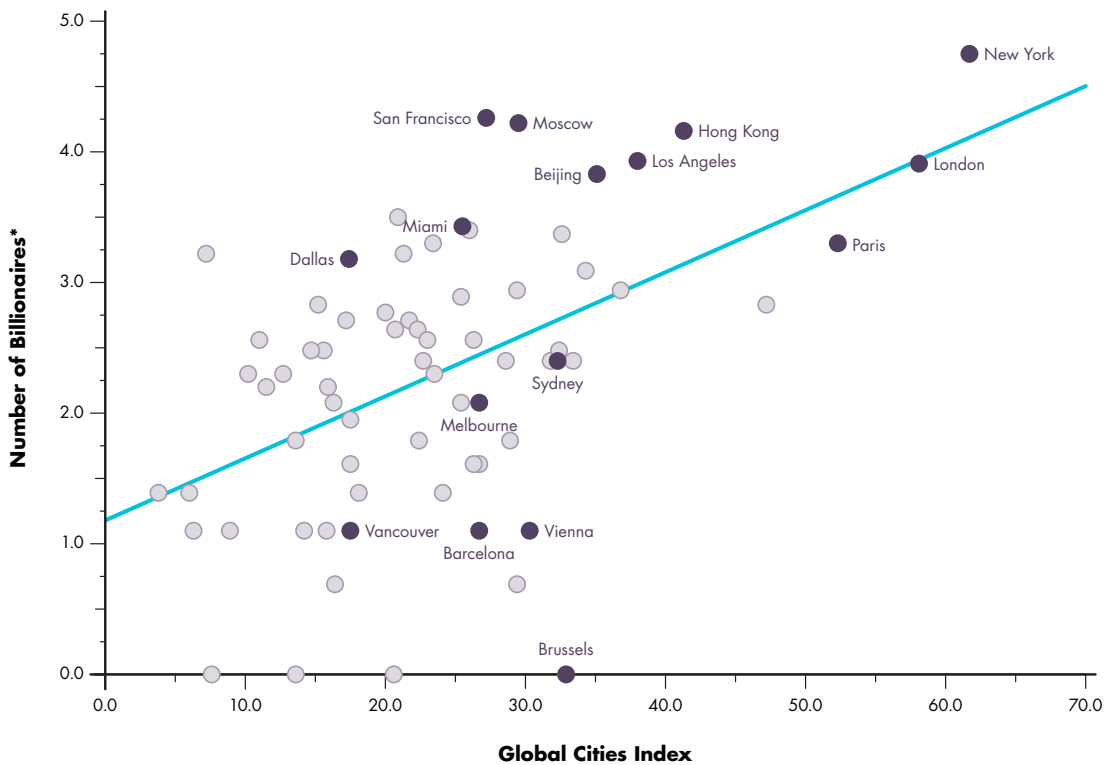
Exhibit 13: The Super-Rich and the Size of Cities

and more highly educated workforces. To get at this, we look at the connection between the super-rich and economic output per person, a straightforward indicator of the wealth of the average person. Surprisingly though, there is no statistically significant association between economic output per capita and the number of billionaires, and only a very weak association between it and their total wealth (0.15). There are many relatively poor metros with low levels of economic output per capita, like Mumbai, Bangalore, Kolkata, and Hyderabad, that are home to quite a few billionaires. There are also relatively affluent cities that have relatively fewer billionaires.



*Logged

Exhibit 14: The Super-Rich and Economic Output



*Logged

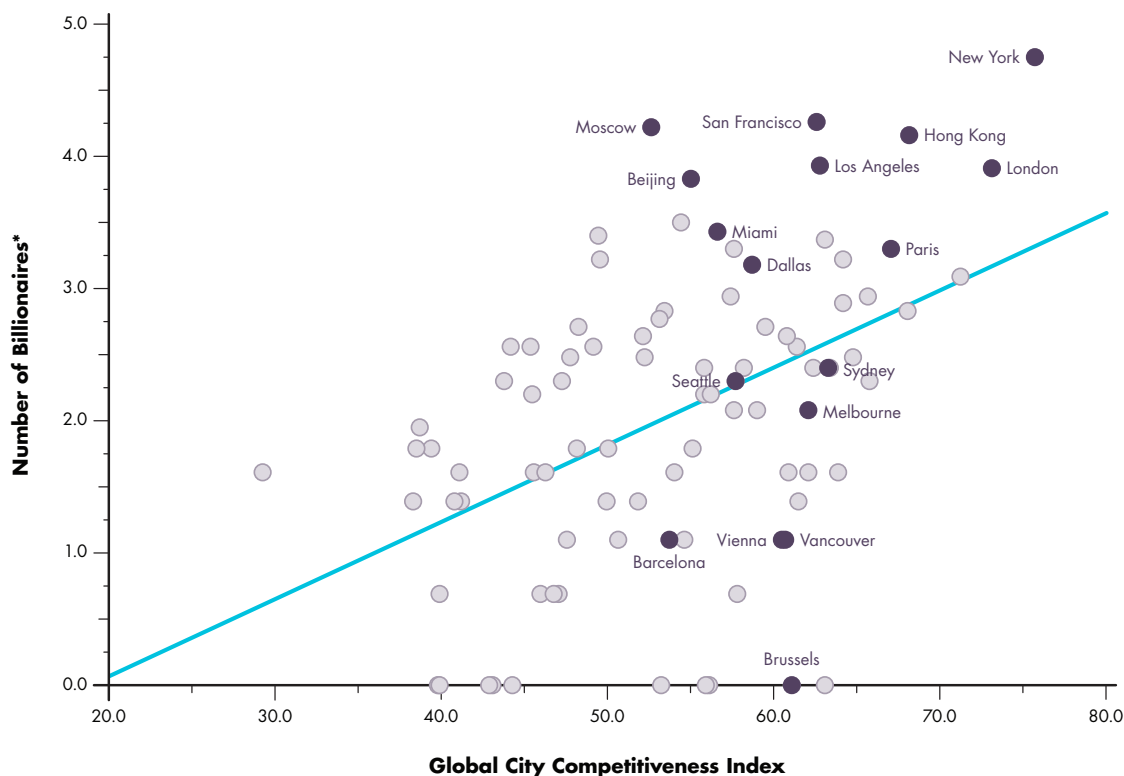
Exhibit 15: The Super-Rich and Global Cities

We now turn to the connection between the global super-rich and the economic competitiveness of global cities. To get at this, we utilize two relatively well-known measures of economic competitiveness: the Global City Index developed by A.T. Kearney (*Exhibit 14*) and the Global City Competitiveness Index developed by The Economist and Citigroup (*Exhibit 15*).

One would think that greater concentrations of the super-rich would either be produced by or attracted to more economically competitive cities. By definition, these places offer more attractive conditions for investment and busi-

ness growth. The correlations between both of these global city competitiveness measures and both the number and wealth of billionaires are positive and significant, in the range of 0.50.

Exhibits 15 and 16 show where global metros fall on the relationship between their number of billionaires and these two global city competitiveness measures. In both cases, the fitted lines slope upward and to the right, indicating a positive association and that the relation is significant. Metros like New York, Los Angeles, San Francisco, Miami, and Moscow are above the line with more billionaires than their competitiveness scores would predict. Smaller



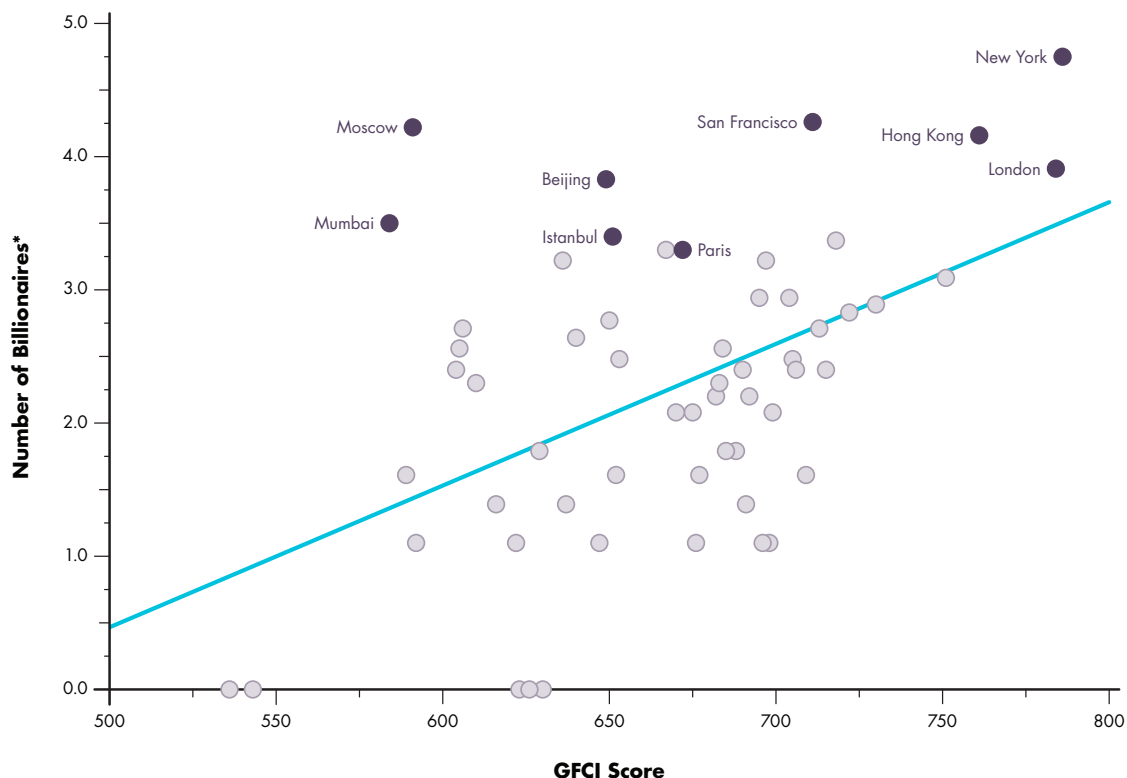
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Exhibit 16: The Super-Rich and Global Competitiveness

metros, including many that rank highly on livability indexes like Vancouver, Melbourne, Sydney, and Vienna, as well as Barcelona, Brussels, and others, are below the line with fewer billionaires than their economic competitiveness scores would suggest. That said, we found no statistically significant association between both the number of billionaires and billionaire wealth and two measures of livability or quality of life, by The Economist and Mercer.

We next consider the connection between the super-rich and banking and financial power.

We would expect a close correlation especially since numerous studies have found finance and banking to account for a large and growing share of profits and wealth in contemporary capitalism.⁶ The Peterson Institute report finds that financial institutions have played a key role in the recent growth of billionaire wealth. To get at this, we utilize the rankings of global cities on Global Financial Centres Index, a measure of the financial power of global cities. We find it to be closely correlated with both the number (0.49) and overall wealth of billionaires (0.52).



*Logged

Exhibit 17: The Super-Rich and Global Financial Centers

Exhibit 17 charts the relationship between the Global Financial Centres Index and the number of billionaires in a metro. Here we find the most financially powerful cities — New York, Hong Kong, and to a certain extent London — actually have more billionaires than their financial power alone would predict. San Francisco, Mumbai, Moscow, Beijing, Paris, Istanbul, and many others are also in this same category. On the flip side, we again find smaller metros and many of the most highly ranked cities on livability, like Vancouver and Vienna, below the line with more billionaires than their financial power alone would predict.

In sum, our analysis suggests that the geographic distribution of billionaires is spiky and that it follows from the size, and economic and financial power of global cities. That said, most of the world's most competitive and financially powerful cities actually have fewer billionaires than their economic and financial power would suggest, while smaller places and some of the world's most livable cities have relatively more billionaires than their economic size or competitiveness and financial power would predict.

Finally, we look at the connection between the global super-rich and a proxy for high-tech



*Logged

Exhibit 18: The Super-Rich and Venture Capital Investment in Tech Startups

startups, the amount of venture capital investment flowing to tech startups in metros around the world. The 2016 Peterson Institute report suggests that tech startups, alongside financial institutions, have played a key factor in the recent rise in global billionaire wealth. The scattergraph in *Exhibit 18* illustrates the connection between the two. There is a positive association between venture capital investment and both the number and wealth of global billionaires by metro, with correlations of 0.44 to both.

Self-Made versus Inherited Wealth

To what degree are the super-rich self-made versus those who have inherited their fortunes? Thomas Piketty has argued that growing wealth inequality stems from the high returns on inherited wealth.⁷ Interestingly enough, nearly two-thirds (65 percent) of billionaires are self-made compared to 35 percent who inherited their wealth. The 2016 Peterson Institute report notes that the share of self-made billionaires increased

from less than half (45 percent) in 1996 to 70 percent by 2014. It attributes this to the rise in tech billionaires in the United States and the rapid rise in billionaires in emerging economies.⁸

As the map in *Exhibit 19* shows, this varies considerably by metro. The blue bars indicate the percentage of billionaires whose wealth is self-made, while the purple bars show those bil-

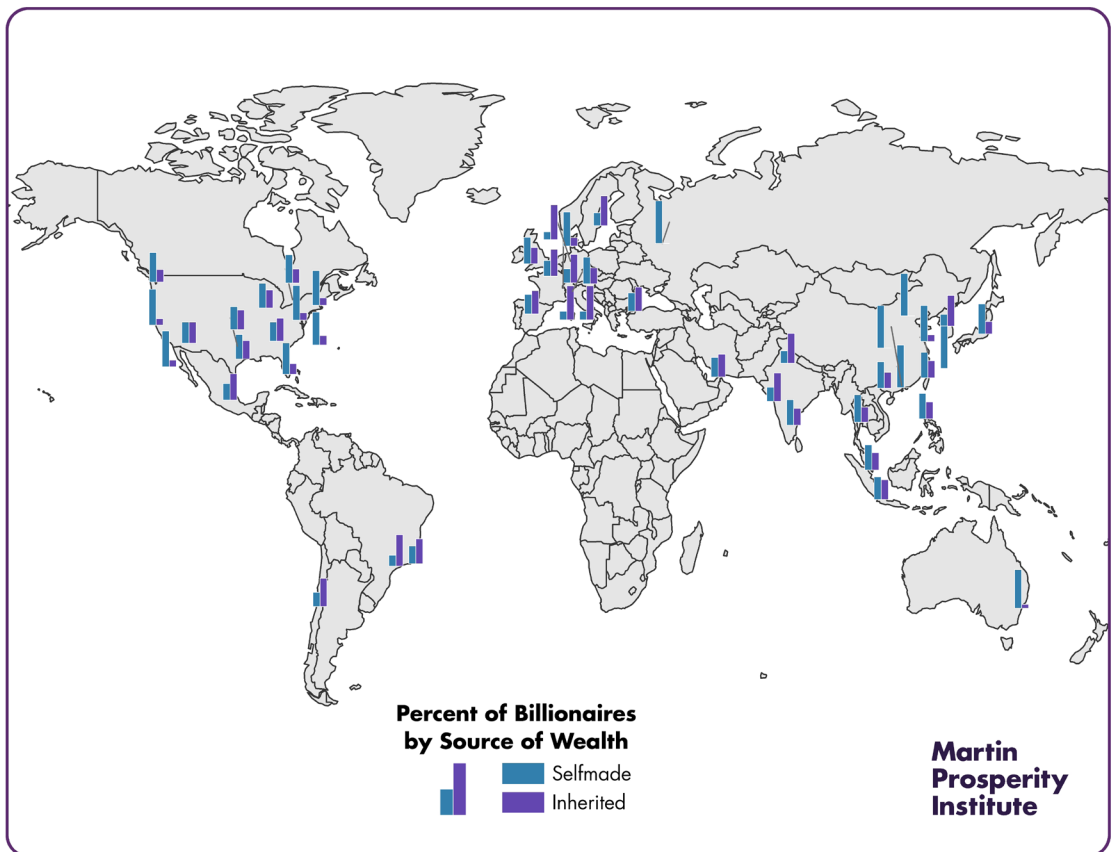


Exhibit 19: Global Cities by Inherited versus Self-Made Wealth

lionaires whose wealth is either completely or partially inherited.

Metros in the United States and Asia, especially China, have the largest shares of self-made wealth, while those in Europe and South America have more inherited wealth. This is in line with the broader trend from 1996 to 2014 identified by the Peterson Institute report, which notes that: “Among advanced countries, the share of self-made billionaires has been expanding most rapidly in the United States. In Europe, despite a sizable drop from 1996 to 2001, inheritances still account for over half of all fortunes in 2014. In other advanced countries the share of inherited fortunes has fallen somewhat over the last decade.”⁹

Exhibit 20 lists the top 10 global cities with the largest shares of self-made wealth.

Reflecting their recent transition from state controlled economies, 100 percent of billionaires are self-made in Chinese metros Beijing, Shenzhen, Guangzhou, and Hangzhou, as well as Moscow. San Francisco, Los Angeles, Boston, and Sydney are also home to large shares of self-made billionaires.

Exhibit 21 lists the global cities where the largest shares of billionaires have inherited their wealth.

Bielefeld-Detmold in Germany tops the list (due to six members of the same family calling the metro home). Monaco is second, Sao Paulo third, Seoul fourth, and Delhi fifth. Stockholm, Mumbai, Zurich, Santiago, and Paris round out the top 10.

Rank	Metro	Self-Made Share	Number Self-Made
1	Moscow	100%	68
2	Beijing	100%	46
3	Shenzhen	100%	25
4	Guangzhou	100%	13
5	Hangzhou	100%	13
6	Sydney	91%	11
7	San Francisco Bay Area	85%	71
8	Los Angeles	84%	51
9	Shanghai	84%	19
10	Boston	82%	11

Exhibit 20: Global Cities with the Largest Shares of Self-Made Billionaires

Rank	Metro	Share Inherited	Number Inherited
1	Bielefeld-Detmold	82%	9
2	Nice, Monaco	80%	8
3	Sao Paulo	74%	20
4	Seoul	72%	21
5	Delhi	71%	12
6	Stockholm	70%	7
7	Mumbai	67%	22
8	Zurich	67%	12
9	Santiago	67%	8
10	Paris	63%	17

Exhibit 21: Global Cities with the Largest Shares of Billionaires Who Inherited Their Wealth

Mapping the Super-Rich by Industry

Now that we understand the overall geography of the super-rich, we turn to their geography by leading industry. *Exhibit 22* lists the top 10 industries where the super-rich derive their fortunes.

Most people think of finance, high-tech, and energy as leading sources of wealth. But, Fashion and Retail tops the list with over a \$1 trillion, more than 15.6 percent of total billionaire wealth. This sector includes billionaires associated with companies like Wal-Mart, H&M, Nike, L’Oreal, and Chanel. Technology and Telecom is second, with \$989 billion, 14 percent of the total. Finance and Investment is third with \$962 billion, (13.6 percent). Energy

and Resources is fourth with \$623 billion (8.8 percent) and Automotive and Manufacturing is fifth, with \$561 billion (7.7 percent). The top four sectors account for over half of all billionaires, while the top five account for 60 percent.

Exhibit 23 breaks down the top 10 metros for billionaire wealth by industry.

Some cities align nicely with our expectations. New York is dominated by Finance and Investment; San Francisco Bay Area and Seattle are all about Technology and Telecom; Paris is led by Fashion and Retail; Resources are tops in Moscow. Surprisingly, finance plays less of a role that we might expect in Hong Kong and

Industry	Total Billionaire Wealth*	Share of Total Billionaire Wealth
Fashion and Retail	\$1,100	15.6%
Technology and Telecom	\$989	14.0%
Finance and Investment	\$962	13.6%
Resources (Oil, Energy, Metals and Mining)	\$623	8.8%
Automotive and Manufacturing	\$561	7.9%
Food and Beverage	\$542	7.7%
Diversified	\$539	7.6%
Real Estate	\$526	7.5%
Media	\$355	5.0%
Medicine and Health care	\$308	4.4%

*billion dollar

Exhibit 22: Leading Industries for Billionaire Wealth

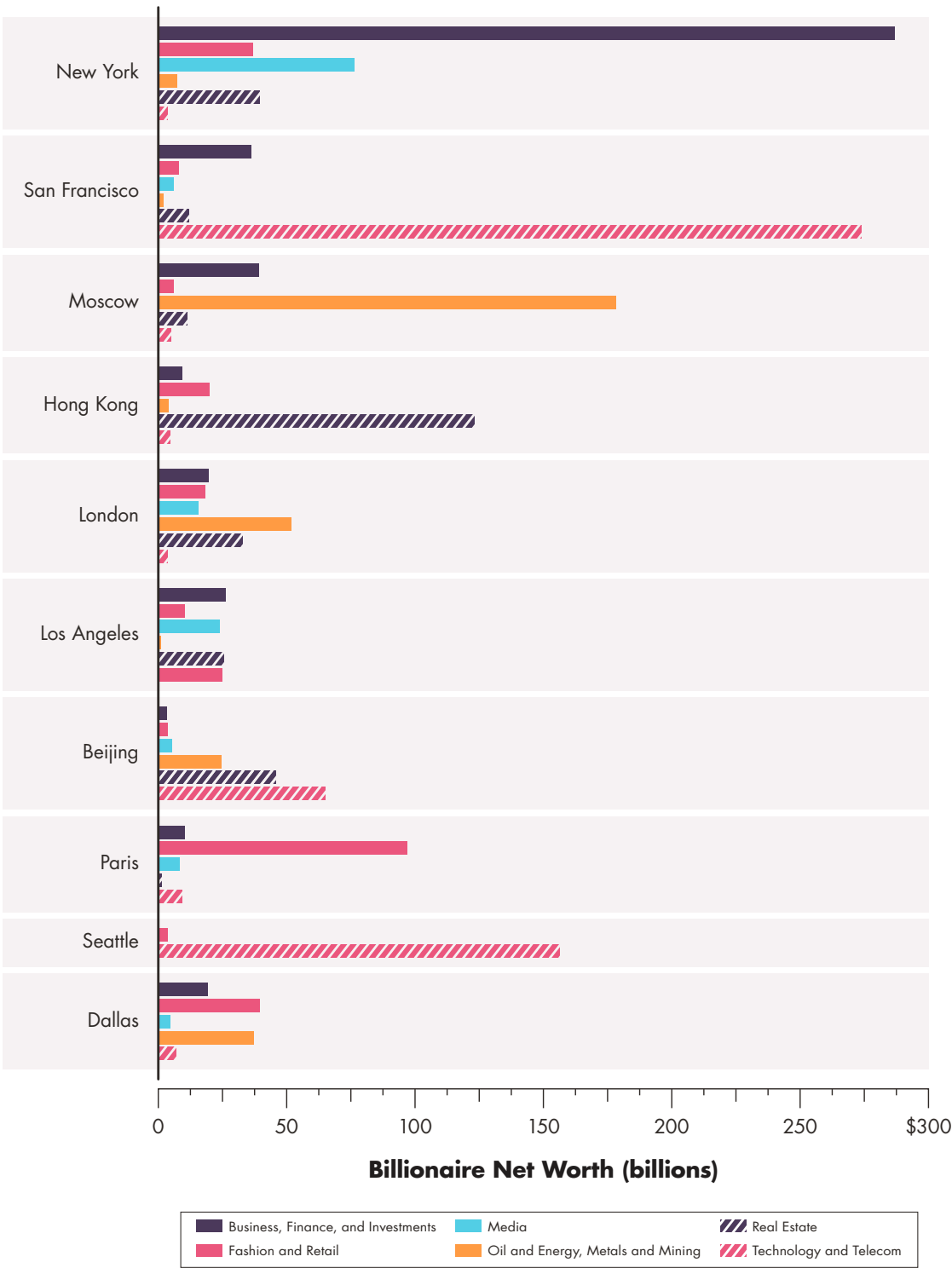


Exhibit 23: Leading Industries of the Super-Rich by Global City

London. Hong Kong reflects Real Estate and Manufacturing. London is diversified, with billionaire wealth found across many industries. Los Angeles spans business, technology, and media. Dallas too has its wealth spread across several industries.

The following maps dive deeper into how billionaires break out across the three major industries: Fashion and Retail; Technology and Telecom; and Finance and Investment.

Exhibit 24 charts the pattern for Fashion and Retail.

There are large dots across the United States and much of Europe and much smaller dots in Asia, the Middle East, and South America.

Exhibit 25 lists the top 10 global cities for Fashion and Retail billionaires. Paris tops the list, followed by Bentonville (home to Wal-Mart), Milan, Jackson, Wyoming (home to one of the members of the Walton/Wal-Mart family), Dallas (also home to one of the members of the Wal-Mart/ Walton family), New York, Tokyo, Hamburg, and Dusseldorf. London ranks 15th with seven Fashion and Retail billionaires worth \$18.2 billion dollars.

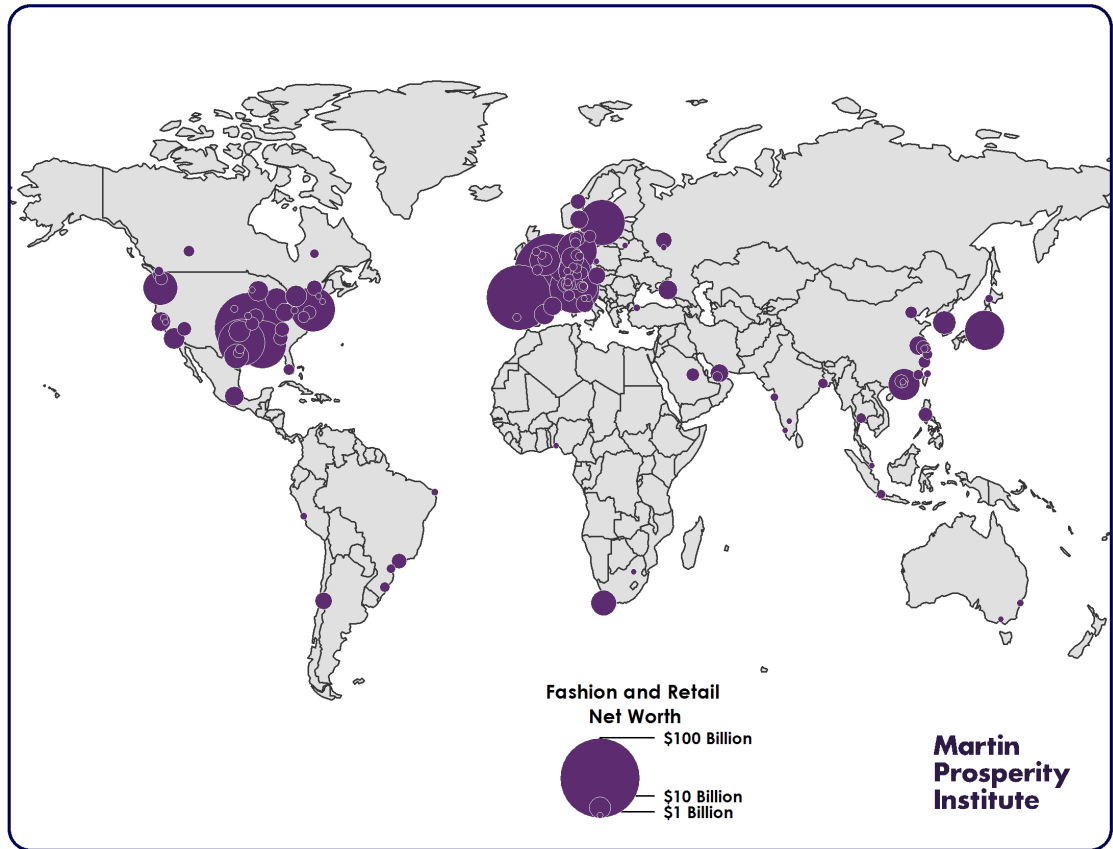


Exhibit 24: The Geography of Fashion and Retail Billionaires

Metro	Total Wealth*	No. of Billionaires
Paris	\$97	6
Bentonville	\$80	2
Milan	\$44	10
Jackson, Wyoming	\$42	1
Dallas	\$39	1
Stockholm	\$38	5
New York	\$37	9
Tokyo	\$30	5
Hamburg	\$30	4
Koln-Dusseldorf	\$27	3

*billion dollar

Exhibit 25: Leading Cities for Fashion and Retail Billionaires

Exhibit 26 charts the pattern for Technology and Telecom. There are large dots in the United States, especially the West Coast, and Asia, particularly in China, and much smaller dots in Europe and the Middle East. There is virtually nothing in South America.

Exhibit 27 lists the top 10 global cities for Technology and Telecom billionaires. Not surprisingly, San Francisco tops the list, followed by Seattle, home to Microsoft, Amazon, and other leading tech companies. Mexico City is next, the result of one fortune: Carlos Slim who is ranked second among global billionaires. Beijing is fourth and Tokyo fifth. Shenzhen, Hangzhou, Bangalore, Karlsruhe, and Los Angeles round out the top 10.

Exhibit 28 maps the geography of billionaire wealth in Finance and Investment. There are large dots in the United States, especially on the East Coast, but there are also dots spread across the world from Western Europe and South America to Asia and the Middle East.

Exhibit 29 lists the top 10 global cities for billionaires in Finance and Investment. Unsurprisingly, New York is far out in front, followed by Omaha (home to Warren Buffett), Moscow, the San Francisco Bay Area (a reflection of the high level of venture capital investment there), Sao Paulo, Riyadh, Los Angeles, Boston, Miami (home to a large volume of foreign investment capital, especially from Latin America), and Chicago round out the top 10. London ranks 11th and Hong Kong is 22nd. The 2016 Peterson Institute report notes that finance has played a disproportionate role in the growth in extreme wealth in America, pointing out that more than 80 percent of all hedge fund billionaires are from the United States. “Over 40 percent of the growth in the total US billionaire population is attributable to growth in financial sector billionaires, as compared with 14 percent in Europe and 12 percent in other advanced economies,” according to the report. “Within the US financial industry, hedge funds have played an especially large role in creating extreme wealth. This group made up less than 10 percent of American financial sector wealth in 2000 and 22 percent in 2015.”¹⁰

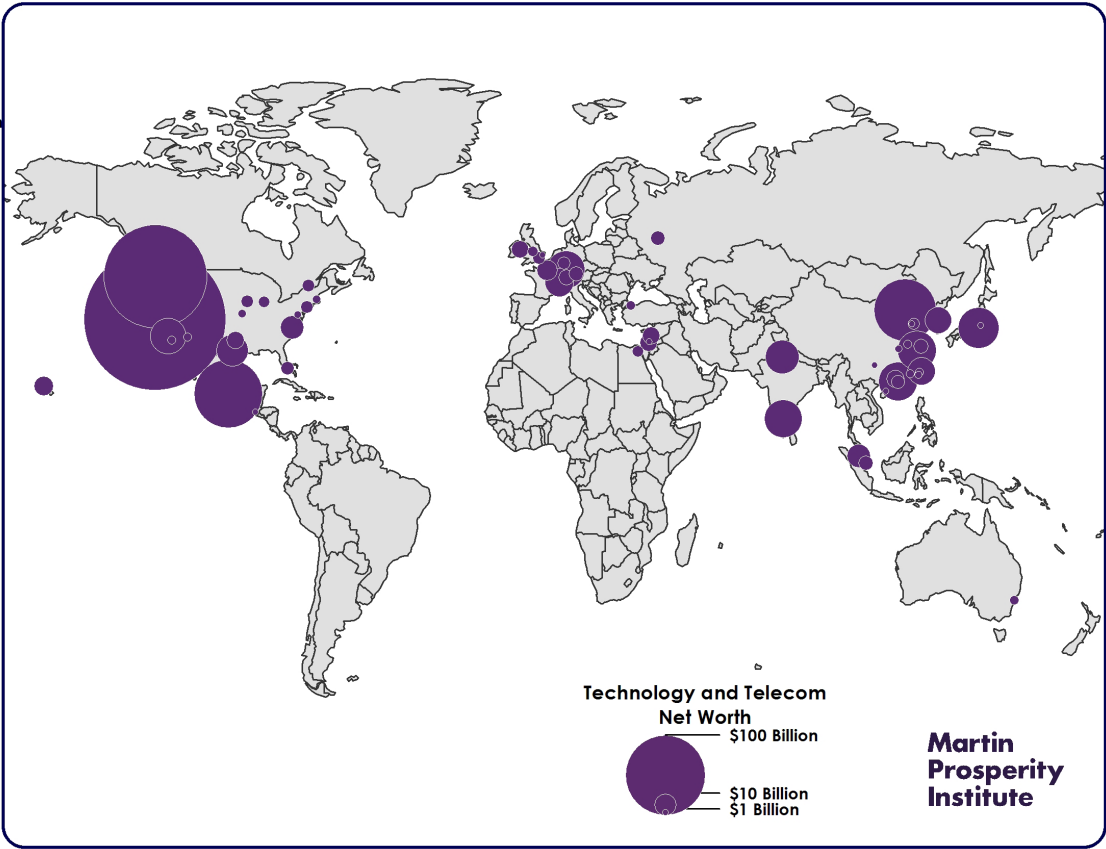


Exhibit 26: The Geography of Technology and Telecom Billionaires

Metro	Total Wealth*	No. of Billionaires
San Francisco Bay Area	\$274	37
Seattle	\$156	6
Mexico City	\$77	1
Beijing	\$65	16
Tokyo	\$30	7
Shenzhen	\$28	7
Hangzhou	\$28	4
Bangalore	\$27	6
Karlsruhe	\$27	4
Los Angeles	\$25	9

*billion dollar

Exhibit 27: Leading Cities for Technology and Telecom Billionaires

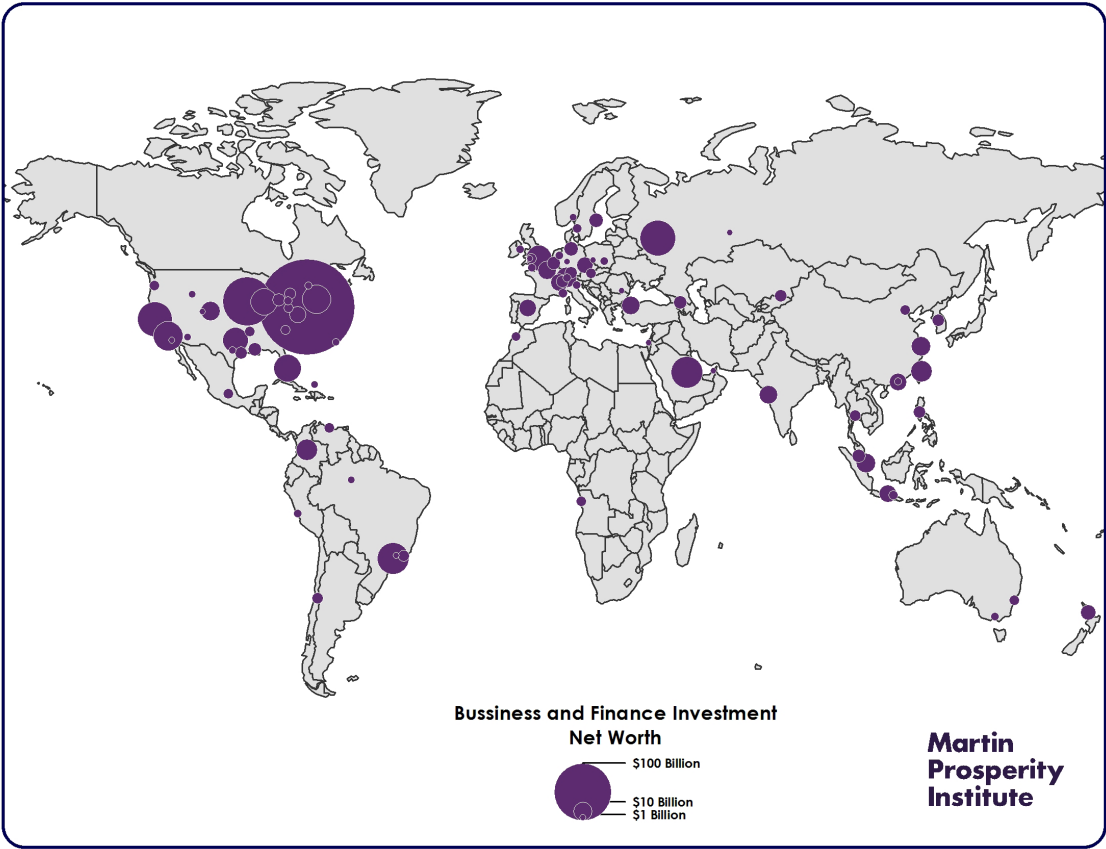


Exhibit 28: The Geography of Finance and Investment Billionaires

Metro	Total Wealth*	No. of Billionaires
New York	\$287	67
Omaha	\$73	1
Moscow	\$39	15
San Francisco Bay Area	\$36	12
Sao Paulo	\$31	8
Riyadh	\$30	4
Los Angeles	\$26	11
Boston	\$24	4
Miami	\$24	6
Chicago	\$22	7

*billion dollar

Exhibit 29: Leading Cities for Finance and Investment Billionaires

The Super-Rich and Inequality

The rise of “the 1 percent” and the growing inequality of wealth between them and rest of society are of increasing concern to social scientists, policy-makers, and the general population. Many have charted the gap between the super-rich and the rest of society across nations, but there has been little analysis of the extent of this gap across global cities and metros. To get at this, we calculate a simple measure we call the “Super-Rich Wealth Gap” that compares

billionaire wealth to the economic situation of the average person based on metro economic output per person. (We limit this analysis to metros with 10 or more billionaires.)

Exhibit 30 charts the Super-Rich Wealth Gap Ratio for cities and metros around the world.

There are dots spread across the world, from the United States, Mexico and into South America

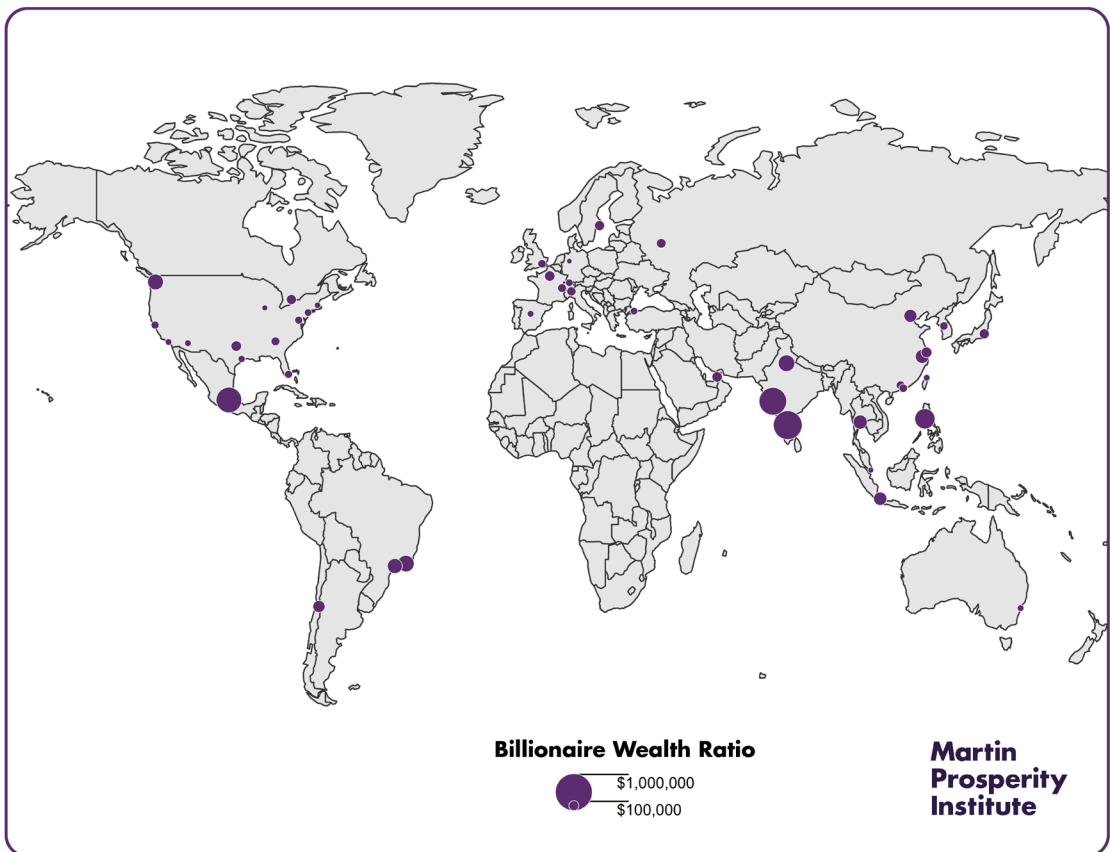


Exhibit 30: The Super-Rich Wealth Gap for Global Cities

Rank	Metro	Super-Rich Wealth Gap
1	Bangalore	646,407
2	Mumbai	602,816
3	Mexico City	524,975
4	Manila	349,459
5	Delhi	248,732
6	Rio de Janeiro	245,720
7	Seattle	224,073
8	Sao Paulo	201,955
9	Bangkok	187,226
10	Hangzhou	177,032
11	Jakarta	166,600
12	Beijing	158,513
13	Santiago	138,779
14	Shanghai	122,147
15	Dubai	114,150
16	Dallas	109,065
17	Paris	108,282
18	Stockholm	104,356
19	Toronto	103,140
20	Tokyo	100,298

Exhibit 31: Global Cities with the Largest Gaps between Billionaires and the Average Person

to Europe, the Middle East, and Asia. But the largest dots appear to be in the Global South.

Exhibit 31 lists the 20 global cities with the largest Super-Rich Wealth Gaps. The magnitude of is staggering, with the fortunes of the super-rich ranging from 100,000 to more than 600,000 times greater than the economic condition of the average person in the these 20.

Most of these cities are in the relatively less developed nations of the Global South where the

middle class is much smaller, poverty substantially greater, and average incomes lower than in advanced economies. In fact, 14 of these 20 cities are in this region. Bangalore tops the list followed by Mumbai and Mexico City. Manila, Jakarta, Delhi, Bangkok, Hangzhou, Beijing, Shanghai, Rio de Janeiro, Sao Paulo, Santiago, and Dubai all number among the top 20 cities with the largest super-rich wealth gaps. There are six cities in advanced nations that number among the top 20 as well: Seattle, Dallas, Paris, Stockholm, Toronto, and Tokyo.

Conclusion

Our research has examined the location of the super-rich across world's cities and metro areas based on detailed data from *Forbes* on more than 1,800 billionaires across the globe. Our research, maps, and analysis inform the following key findings.

The super-rich are concentrated in a small number of metros around the world. The top 50 metros account for nearly two-thirds of the total; the top 20 account for more than 40 percent, and just the top 10 account for more than 30 percent.

The wealth of the super-rich is even more concentrated than their numbers. The top 10 metros are home to 36 percent of total billionaire wealth, the top 20 account for nearly half and the top 50 hold over 70 percent of billionaire wealth. New York tops the list on billionaire wealth, followed by the San Francisco Bay Area, Moscow, Hong Kong, London, Los Angeles, Beijing, Paris, and Dallas. The United States has five metros in the top 10 and nine in the top 20 metros for billionaire wealth.

The geographic distribution of billionaires is spiky; it follows from the size and economic and financial power of global cities. That said, most of the world's most competitive and financially powerful cities actually have fewer billionaires than their economic and financial power would suggest, while smaller places and some of the world's most livable cities have relatively more billionaires than their economic size or competitiveness and financial power would predict.

There is a substantial difference in the geography of self-made versus inherited billionaires. Metros in the United States and Asia, especially China, have the largest shares of self-made billionaires, while those in Europe and South America have more inherited wealth.

The leading industries for super-rich wealth are Fashion and Retail, Technology and Telecom, Finance and Investment, Energy and Resources, and Automotive and Manufacturing. Milan tops the list on Fashion and Retail, followed by New York, Paris, and London, all well-established fashion capitals. San Francisco tops the list on Technology and Telecom, followed by Beijing, with Los Angeles, Bangalore, Seoul, Shenzhen, and Seattle. New York tops the list on Finance and Investment, followed by the San Francisco Bay Area, Moscow, Los Angeles, and Miami.

The gap between the super-rich and the rest of society is staggering, based on our measure of the Super Rich Wealth Gap, which compares billionaire wealth to the economic situation of the average person based on metro economic output per person. This gap is the most pronounced in the poorer and less developed cities of the Global South like Bangalore, Mumbai, Mexico City, Manila, Jakarta, Delhi, Bangkok, Hangzhou, Beijing, Shanghai, Rio de Janeiro, Sao Paulo, and Santiago. But, it is also quite pronounced in advanced cities like Seattle, Dallas, Paris, Stockholm, Toronto, and Tokyo.

Appendix: Data, Variables and Methodology

The data are from [Forbes 2015 Billionaires List](#). It covers 1,826 billionaires across the world and includes data on their net worth, country of origin, citizenship location of primary residence, age, marital status, industry, if their fortunes are inherited or self-made among other information. The *Forbes* data excludes billionaires whose fortunes are tied to government corruption, drugs, or other similar illegal activity.

Geographic Matching: We matched the billionaires to the global cities or metropolitan areas based on their primary residence. To do so, we used the global metro definitions identified by [Brookings Institution](#) for the world's 300 largest metros including their primary cities and surrounding suburbs. If the city of primary residence fell within a [Brookings metro](#), it was assigned to that metro. If it fell outside any known metro boundary it was kept as the initial city of residence.¹¹

We were able to match 99 percent of the billionaires in the database (1,809 of 1,826). We were unable to match 17 billionaires to a specific location or primary residence. These 17 billionaires account for one percent of total billionaire wealth or \$67.7 billion dollars. Three reside in France, two in Finland, and one each in Germany, Italy, Switzerland, and the Philippines. We could not definitively identify countries of residence for eight others, although their citizenship is German. Ultimately, we matched and mapped these 1,809 billionaires across 395 metros.

Billionaires and Billionaire Wealth: We chart the geography of the global super-rich by their number and by their total wealth. We also examine their average net worth across global metros. Furthermore, our data allow us to examine the extent to which their wealth is self-made versus inherited.

Billionaires by Major Industry Sector: We also chart the geography of the global super-rich by major industry sector. Here we aggregated some of the industry categories in the *Forbes* data, combining finance and investments; technology and telecom; oil and energy; metals and mining; automotive and manufacturing; medicine and health care; fashion and retail; and sports and gaming.

Super-Rich Wealth Gap: We developed a basic measure of the gap between the wealth of the super-rich and the rest of society. We refer to this as the Super-Rich Wealth Gap. It is a ratio that compares billionaire wealth to the economic situation of the average person based on metro economic output per person. We limit this analysis to metros with 10 or more billionaires. It is also important to note that this measure compares the level of super-rich wealth, which may have accrued over long periods of time, to the economic conditions of the rest of society at one point in time. Also, since the super-rich are mobile, their wealth may have been brought with them from other places.

Correlation Analysis: We also ran a correlation analysis to examine the characteristics of global

cities that might be associated with greater concentrations of the super-rich, such as population, density, economic output, economic output per capita, and measures of global city competitiveness and financial power. We include scattergraphs for some of these correlations. As usual, we point out that correlation does not equal causation and simply point to associations between variables. There are several additional caveats to this analysis. Since not all variables are available for the full set of metros, the various correlations cover different numbers of global cities and metros. In our correlation analysis, we only include metros with billionaires present, in other words, metros without billionaires are excluded from the analyses. We use logged variables in the correlation analysis to adjust for the skewed distribution of billionaires across metros.

These are the key variable and measures used in this correlation analysis.

Population: Population data is from [Brookings](#) and covers 300 metros. We are able to match this data with 184 metros where billionaires live.¹²

Density: Our measure of density is population per square km and is from [Demographia](#). The Demographia dataset covers 992 metros and we are able to match with 207 metros where we have billionaires present.¹³

Economic Output: Economic output is measure is metropolitan gross product. It is from the Brookings Institution's [Global Metro Monitor](#) and covers 184 metros.¹⁴

Economic Output per Person: We also examine economic output per capita, a measure of the average wealth or standard of living of a metro.

These data are also from Brookings Global Metro Monitor and cover 184 metros.

Global Financial Centres Index: This index includes factors related to the financial power of global cities including their overall business environment, financial sector development, financial infrastructure, talent base, reputation, and more. It is compiled annually by [Z/Yen](#).¹⁵ We were able to match these data to 59 global cities.

Global City Competiveness Index: This [index](#) by The Economist and Citigroup includes indicators of economic strength, physical capital, financial maturity, institutional character, human capital, global appeal, social and cultural character, and environment and natural hazards.¹⁶ We matched these data for 87 global cities.

Global Cities Index: This [index](#) developed by A.T. Kearney is based on business activity, human capital, information exchange, cultural experience, and political engagement in metros.¹⁷ We were able to match these data to 71 global cities.

The Economist's Quality of Life Index: This [index](#) includes aspects such as stability, healthcare, culture and environment, education, and infrastructure. It also includes information about spatial characteristics of the cities. In total, this list includes 140 cities.¹⁸

Mercer's Quality of Life Index: [Mercer's index](#) builds on 39 factors related to living conditions, grouped in 10 categories: political and social environment; economic environment; socio-cultural environment; medical and health considerations; school and education; public services and transportation; recreation; consumer goods; housing; and natural environment. 50 cities are included in the ranking.¹⁹

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About the Authors

Richard Florida

Richard is Director of Cities at the Martin Prosperity Institute at the University of Toronto's Rotman School of Management. He is also Global Research Professor at New York University, and a senior editor for *The Atlantic*, where he co-founded and serves as Editor-at-Large for *CityLab*.

Charlotta Mellander

Long term collaborator of the Martin Prosperity Institute and visiting faculty at the MPI since 2009. Studies location patterns of creative individuals and firms to determine how they shape regional development. Charlotta has more than 150 invited, external speeches, both nationally and internationally, including the EU and the UN, and companies like IBM.

Isabel Ritchie

Leverages spatial and statistical data to support research reports. Creates maps and charts to communicate and illustrate data. Isabel holds a Masters of Spatial Analysis from Ryerson University and an Honours Bachelor's of Science in Urban Studies, Archaeology, and Geographic Information Systems (GIS) from the University of Toronto.

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Martin Prosperity Institute
Rotman School of Management
University of Toronto
105 St. George St., Ste. 9000
Toronto, ON M5S 3E6

w martinprosperity.org
e assistant@martinprosperity.org
t 416.946.7300
f 416.946.7606

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