Superentrepreneurs

2022 Index

Nima Sanandaji

European Centre for Entrepreneurship and Policy Reform, ECEPR, with financing by Nordic Capital Educational Foundation

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By measuring the tip of the iceberg, we can better understand entrepreneurship

Foreword, Kristoffer Melinder and Klas Tikkanen

In the world today there is a need to create value through business growth, rather than financial engineering. The superentrepreneurs project is about studying high-end entrepreneurship, throughout the world. The project focuses on the close to 2 500 individuals in the world who have built up billion-dollar fortunes, by creating new companies or growing small businesses into large successful ventures.

While it is interesting to look at the very most successful entrepreneurs, and how they are spread out in the world, this project is mainly about measuring the tip of the iceberg. By looking at superentrepreneurs, we can understand which countries are more conducive to free enterprise in general.

Entrepreneurship happens in the market ecosystem, where companies of different sizes, and in different fields, interact and often grow together. Those superentrepreneurs who create large successful companies, often create thousands of jobs in this process. For each entrepreneur that reaches this level of success, there might be ten others who create other successful ventures, which individually might not be worth as much, but together create thousands of other jobs. And there might be hundreds of smaller entrepreneurial businesses, which together create even more jobs.

When we compare the countries of the world, it becomes evident that those countries which have the highest concentration of high-end entrepreneurs, also have lower unemployment levels. In general, countries that have one more superentrepreneur per million adults, have almost 0.9 percentage points lower unemployment. But for middle-class jobs (people who have an average education level) this link is even stronger—one more superentrepreneur per million is linked to more than one percentage point lower unemployment. Encouraging entrepreneurship is clearly a recipe for job growth.

This is because countries that have market systems conducive to entrepreneurship, and solid economic policy, ecourage the creation of prosperity through new businesses. A systematic global measure of high-impact entrepreneurship is useful to help us gain a better understanding of how countries can become more encouraging to entrepreneurship.

Another important lesson from this index is that while Europe is economically and technologically well developed, it does lag other parts of the world when it comes to high-end entrepreneurship. Europe has in fact a big shortcoming of women's entrepreneurship, which reflects the lack of entrepreneurial possibilities in the European welfare sector. There is good reason to open Europe more for entrepreneurship, not least in the female-dominated parts of the economy.

Entrepreneurship is a process that creates economic value, drives innovation, and fosters job growth. We hope that the superentrepreneurs project will increase understanding of the importance of entrepreneurship and how highend entrepreneurship is spread throughout the world.



Klas Tikkanen is COO of Nordic Capital. He has helped drive Nordic Capital's transformation the past decade, including the development of its strategy, governance, culture, and operations. Klas has six years' experience management as а consultant with McKinsev & Company, followed by two decades in senior management functions, mostly as a CFO in private equity or bank-owned portfolio companies. Klas holds an MSc in Business Administration and Economics from the Stockholm School of Economics, with an international exchange programme major in Finance from the Wharton Business School at the University of Pennsylvania.

Kristoffer Melinder has over 20 years of private equity experience. In 2010 he was appointed Co-Managing Partner for NC Advisory. Since 2016 he has been the sole Managing Partner for the firm. Kristoffer previously worked in the Leveraged Finance and Advisory group at JP Morgan in London (1996– 1998). He has also attended the Swedish Army Language School and spent time in Bosnia as a UN officer. Kristoffer holds an MSc in Economics from the Stockholm School of Economics and the University of Cologne.



Key findings of the superentrepreneurs project

USA and Canada are the two large economies with the highest rate of superentrepreneurs

In the USA, there are 3.1 superentrepreneurs (self-made billionaire entrepreneurs) per million adults, far outpacing other large economies. This can be compared to 1.7 superentrepreneurs per million adults in Canada, and 1.1 in Oceania. China has a higher concentration of new high-impact entrepreneurs (0.9) compared to Europe (0.8). Given the level of economic development in Europe, this part of the world is lagging in high-impact entrepreneurship (see figure 1). The lack of superentrepreneurs reflects that Europe still largely relies on old fortunes, rather than new ones founded through new companies.

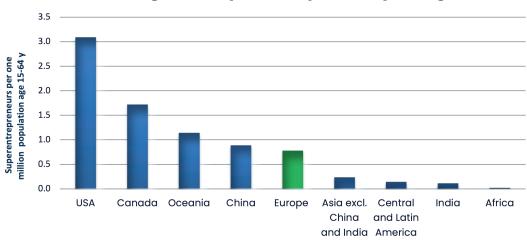


Figure 1. Superent reprenurs per region

Source: Forbes, WDI, own analysis. Superentrepreneurs are individuals who have amassed

Singapore, Switzerland, and Cyprus outpace even the USA

Including medium-sized countries, this study finds that Singapore (4.7 superentrepreneurs per million adults), and Switzerland (4.1), have the highest rates of superentrepreneurs per capita in the world. Also, Cyprus (3.6) is slightly

ahead of the USA. The top-10 list also includes Israel, Sweden, Ireland, Australia, UK, and Canada. Sweden, Ireland, and Switzerland are the countries in Europe with the highest concentration of knowledge-intensive jobs (brain business jobs) per capita¹, which seems linked to their strong position in high-end entrepreneurship.

Table 1. Top-10 countries with highest concentration superentrepreneursper capita				
		Total superentrepreneurs per million 15-64 y population, both sexes		
1	Singapore	4.7		
2	Switzerland	4.1		
3	Cyprus	3.6		
4	USA	3.1		
5	Israel	2.6		
6	Sweden	2.0		
7	Ireland	1.9		
8	Australia	1.8		
9	UK	1.8		
10	Canada	1.7		

Luxembourg and Bahamas have been excluded since they have populations below one million. These small countries that attract wealthy entrepreneurs otherwise top the list.

Countries with more superentrepreneurs have lower unemployment

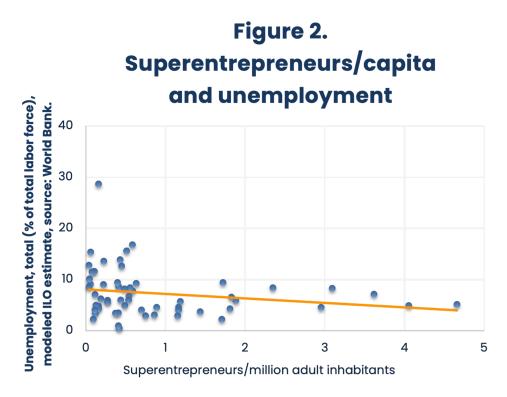
There is a clear link between superentrepreneurs per capita and the level of unemployment. One more superentrepreneur per million adult inhabitants is linked to 0.88 percentage points lower unemployment (see figure 2). While part of the explanation lies in that high-impact entrepreneurs are important job

¹ ECEPR & Nordic Capital (2021).

creators, it is also a top of the iceberg effect. Countries that have systems that encourage free enterprise, have good education systems, and low corruption, tend to have more high-end entrepreneurs. The same countries also have many other entrepreneurs, who together contribute to prosperity and job creation, in smaller and medium-sized companies. Measuring superentrepreneurs per capita is like looking at the tip of the iceberg, as it gives insight into which countries are open to entrepreneurship in general.

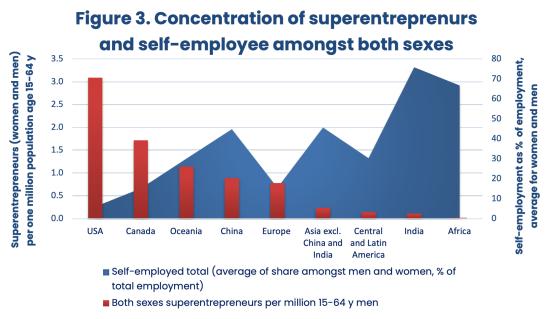
High-end entrepreneurship is particularly strongly linked to middle-class jobs

The link between high rates of superentrepreneurs per capita and lower unemployment, seems to be broad – as it is evident for the unemployment rate of people with different education levels. The effect is strongest for those with intermediate education, for whom one more superentrepreneur per million adults is linked to 1.1 percentage points lower unemployment.



Countries that have many superentrepreneurs have fewer self-employees

Sometimes the rate of self-employment is used as a measure for entrepreneurship, but the two concepts are quite different. As shown in figure 3, the global trend is that those countries which have a lower level of economic advancement have many self-employees, but few superentrepreneurs. In India, for example, 76 percent of adults are self-employed, and merely 0.1 per million adults are superentrepreneurs. In the US on the other hand, 6 percent of the adult population is self-employed, while there are as many as 3.1 superentrepreneurs per million inhabitants. In countries with well-functioning market economies, entrepreneurs create jobs for large groups of people, while in countries with limitations on free enterprise, many become self-employed out of necessity.



Source: Forbes, WDI, own analysis.

Small but rising share of superentrepreneurs are women

In all regions of the world, most superentrepreneurs are men. In fact, only 5 percent of the close to 2 500 superentrepreneurs of the world are women. Of the Chinese high-impact entrepreneurs, as much as 8 percent are women (see figure 4). Africa, as well as Central and Latin America, have few superentrepreneurs, but a quite high share of them are women. In the US, 4 percent of the superentrepreneurs are women and the figure is below 3 percent in Europe as well as in Canada. In Oceania, all superentrepreneurs are men.

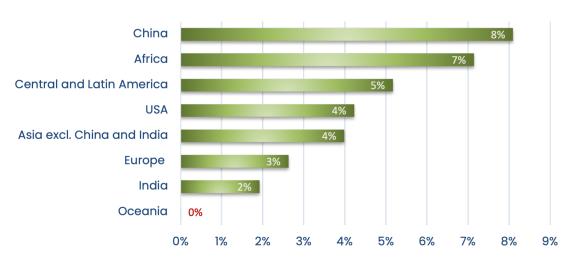


Figure 4. Share of superentrepreneurs who are women

European welfare regulation linked to a deficit of women's high-impact entrepreneurship

In Europe there are 1.5 male superentrepreneurs per million adult men, but the rate for women is only 0.04 superentrepreneurs per million adult women. In comparison, in China, there are 1.6 men superentrepreneurs per million adult men, and 0.15 female superentrepreneurs per million adult women. In the USA there are 5.9 male superentrepreneurs for each million adult men and 0.26 female superentrepreneurs per million adult women. Europe has a clear deficit of women's entrepreneurship.² The lack of women amongst European high-impact entrepreneurs is in part because education, health, and elderly care in Europe, women-dominated parts of the economy, therefore, offer limited opportunities for high-impact entrepreneurship. In places such as China, India, Asia, and Africa, the economic systems are more open to entrepreneurship in welfare sectors³, which can explain why there are more female superentrepreneurs.

² See also Global Entrepreneurship Monitor (2019).

³ See for example Sanandaji (2020) about health entrepreneurship in Asia compared with Europe.

About the superentrepreneurs project

The superentrepreneurs project is about measuring and better understanding high-impact entrepreneurship. In 2014 economists Tino Sanandaji and Magnus Henrekson published the study *Small business activity does not measure entrepreneurship.*⁴ The same year Tino Sanandaji and his brother Nima Sanandaji published the short book *Superentrepreneurs: And how your country can get them,* with a foreword by professor Magnus Henrekson and an afterword by professor Stefan Fölster.⁵ The book gained substantial international attention, while the study was spread well in the academic world. Additional research studies were published in the coming years.⁶

The current superentrepreneurs project is published in cooperation between ECEPR, European Centre for Entrepreneurship and Policy Reform, and Nordic Capital, a leading private equity investor with a focus on the Nordic countries. ECEPR and Nordic Capital have since 2017 published the annual *The Geography of Europe's Brain Business Jobs study*, where the knowledge-intensive jobs of 31 European countries and 280 European regions are mapped.⁷ Through these two sister projects, ECEPR and Nordic Capital hope to enhance the understanding of high-impact entrepreneurship and knowledge-intensive firms' growth.

The basic idea of the superentrepreneurs project is that there is a big difference between high-impact entrepreneurship and self-employment. Yet, entrepreneurship is often measured by the rate of business ownership. The problem with this is that self-employment is common in countries such as Afghanistan, where 92 percent of the women and 80 percent of the men who are employed are self-employed. The reason is not the entrepreneurial spirit, but rather that in the dysfunctional economy of Afghanistan, employment opportunities are limited. In comparison, in the USA 5 percent of the women and 7 percent of the men are self-employed, while the same numbers for Europe is 12 percent amongst women and 19 percent amongst men.⁸

⁴ Henrekson & Sanandaji (2014a).

⁵ Sanandaji & Sanandaji (2014).

⁶ Henrekson & Sanandaji (2014b, 2015).

⁷ See for example ECEPR & Nordic Capital (2021).

⁸ WDI, World Development Indicators, for 2019, and own calculations.

Countries that are more economically developed, and allow for free enterprise, experience the growth of large companies. Some of the companies grow so large so that their creators manage to become superentrepreneurs, by amassing at least \$1 billion in fortune through their companies. In the process of becoming rich, high-impact entrepreneurs contribute to job and wealth creation. Large successful companies offer employment opportunities, sometimes to thousands or even hundreds of thousands of individuals. In countries such as Afghanistan, there is limited opportunity to work for large and medium-sized businesses, and even small businesses rarely offer employment. Out of necessity, people must rely on self-employment to survive. Thus, self-employment tends to be very high in economically undeveloped regions, and low in economically developed regions.

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In the superentrepreneurs project, high-impact entrepreneurship is quantified by looking at the creators of the most successful companies around the world.

High-impact entrepreneurship needs to be measured differently than by looking at self-employment figures. Following the economist Joseph Schumpeter, entrepreneurship can be defined as the creation of innovative and growthoriented firms.⁹In the superentrepreneurs project, high-impact entrepreneurship is quantified by looking at the founders of the most successful companies around the world. The data is based on a detailed investigation of the source of wealth of all the billionaires included in Forbes Magazine's comprehensive list of the world's richest people between 1987 and 2021.

Using this method, the backgrounds, and careers of several thousand of the most successful entrepreneurs in the world over the last two decades have been analyzed. The criteria are self-made men and women who founded new firms or

9 See for example Hagedoorn (1996), who explains the link between entrepreneurial activities and the dynamics of innovation, through Schumpeter's theory.

developed existing firms and earned at least one billion dollars and gained a place in the Forbes ranking. Those individuals who have amassed wealth through crime are excluded from the list, as are those who have lost their fortunes. Territories that are not countries, such as Bermuda, are excluded from this study.

Superentrepreneurs are individuals who become rich by founding a successful enterprise, which grows large and rises in value. The location of superentrepreneurs is in this index is defined as the country in which their companies are founded, as this is where jobs and prosperity are created. For example, Tesla CEO Elon Musk was born in South Africa but is counted as an American superentrepreneur, since the USA is the country in which Elon Musk has founded his companies. Through this methodology, a better understanding can be gained of high-impact entrepreneurship throughout the world.

Which countries have most superentrepreneurs per capita?

Superentrepreneurs are found in 64 different countries, and the rate greatly differs. In countries such as Algeria, Nigeria, and Venezuela there are only a few high-impact entrepreneurs who have managed to amass \$1 billion through entrepreneurship. The population of the countries is however so large that the rate of superentrepreneurs per million inhabitants in the ages 15 to 64 years, is less than 0.1. The top-50 countries with the highest concentration of superentrepreneurs are shown in table 2 below. Luxembourg and the Bahamas have been excluded from the analysis since they have fewer than one million inhabitants.

When focusing on middle-sized countries, it becomes clear that Singapore has the highest concentration of superentrepreneurs, 4.7 per million adults. One example is Choo Chong Ngen, a Singaporean superentrepreneur who has founded Hotel 81, a chain of budget-friendly hotels. Switzerland has 4.1 superentrepreneurs per million adults and follows in second place. Some of the superentrepreneurs who have founded companies in Switzerland are domestic, such as Martin Ebner, the founder of BZ Bank, and investment firm BZ Group. Others, such as Swedish Bertil Eric Hult, founder of EF Education First, have placed the head office of their companies in Switzerland. Cyprus, another country with tax-friendly policies, follows in third place with 3.6 superentrepreneurs per million adults.

The USA has the highest concentration of superentrepreneurs amongst large countries and is ranked 4th internationally when also medium-sized (above one million inhabitants) countries are included. The USA also has the world's most famous superentrepreneurs, such as Amazon founder Jeffrey Bezos, Tesla CEO Elon Musk, and Microsoft founder Bill Gates. Out of these three, two are domestically born, while Musk originates from South Africa.

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The USA, Ireland, Australia, the UK, and Canada have in common that they have an Anglo-Saxon legal system, which seems to be particularly supportive of high-impact entrepreneurship.

There are 3.1 superentrepreneurs in the USA per million inhabitants in workingage. This is slightly higher than the 2.6 in Israel. Sweden follows on 6th place (2.0), followed by Ireland (1.9) and Australia (1.8). Sweden, Ireland, and Switzerland are the countries in Europe that have the highest concentration of knowledgeintensive jobs (brain business jobs) per capita.¹⁰ There seems to be a clear link between this metric and the rate of superentrepreneurs. Sweden is home to several high-impact innovative entrepreneurs, such as Swedish Martin Lorentzon and Daniel Ek, who made their fortunes by co-founding Spotify, a leading audio streaming provider. Israel similarly is a successful innovation country, with superentrepreneurs such as Stef Wertheimer, who founded Blades Technology, a major global manufacturer of blades and vanes for industrial gas turbines and jet engines. The UK and Canada rank in 9th and 10th place respectively. The USA, Ireland, Australia, the UK, and Canada have in common that they have an Anglo-Saxon legal system, which seems to be particularly supportive of high-impact entrepreneurship.¹¹

In terms of concentration of superentrepreneurs China ranks on the 18^h place. Despite the country having the greatest total number of superentrepreneurs, due to its large population, it only has 0.9 superentrepreneurs per million adults. In comparison, India is just outside of the top-50 list with 0.1 superentrepreneurs per million adults. Due to its large market size, and increasing development in education and business, it is likely that India will gradually catch up, and make it into the top-50 list.

¹⁰ ECEPR & Nordic Capital (2021).

¹¹ Sanandaji & Sanandaji (2014)

firm that is source of wealth is located				
Ranking	Country	Total superentrepreneurs per million 15-64 population, both sexes		
1	Singapore	4.7		
2	Switzerland	4.1		
3	Cyprus	3.6		
4	USA	3.1		
5	Israel	2.6		
6	Sweden	2.0		
7	Ireland	1.9		
8	Australia	1.8		
9	UK	1.8		
10	Canada	1.7		
11	UEA	1.7		
12	Norway	1.4		
13	Taiwan	1.4		
14	Austria	1.2		
15	Czechia	1.2		
16	Netherlands	1.2		
17	Russia	1.2		
18	China	0.9		
19	Germany	0.9		
20	Japan	0.7		
21	South Korea	0.7		
22	Italy	0.6		
23	Finland	0.6		

Table 2. Top-50 countries, superentrepreneurs per capita - based on country in whichfirm that is source of wealth is located

24	Greece	0.6
25	Lithuania	0.6
26	Slovakia	0.5
27	Oman	0.5
28	Kazakhstan	0.5
29	Saudi Arabia	0.5
30	Spain	0.5
31	Uruguay	0.4
32	Lebanon	0.4
33	Turkey	0.4
34	Qatar	0.4
35	France	0.4
36	Myanmar	0.4
37	Thailand	0.4
38	Poland	0.4
39	Ukraine	0.4
40	Belgium	0.3
41	Denmark	0.3
42	Brazil	0.2
43	Serbia	0.2
44	Peru	0.2
45	Romania	0.2
46	South Africa	0.2
47	Hungary	0.2
48	Mexico	0.1
49	Zimbabwe	0.1
50	Philippines	0.1

Superentrepreneurs and employment

Those entrepreneurs who found successful companies contribute to economic prosperity, job creation, and innovation. Out of this, jobs are perhaps the most important contribution to society. High-end entrepreneurs tend to foster employment through several mechanisms. The first mechanism is jobs directly created in the firms founded by the entrepreneurs. The typical superentrepreneur has reached this position by creating a new company or in some cases by expanding an already existing company. The businesses founded or developed by the superentrepreneur often employ thousands, sometimes tens of thousands, of individuals. Adding to this are jobs created in smaller businesses, that supply the large successful companies with different services and products. Businesses created by highly successful entrepreneurs tend to be export-oriented, creating revenues for the regions in which they are located. These revenues stimulate the local job market, leading to broad job growth, particularly so in local trade and services.

Research by US economist Enrico Moretti and Swedish economist Per Thulin has shown that every time a local economy generates a new job, by attracting a new business to the traded sector, a significant number of additional jobs are created in the non-traded sector. The multiplier effect is particularly strong for jobs with high levels of human capital and for high-tech industries. Adding one high-skilled worker, in the tradable sector, generates three new jobs in the non-tradable sector according to the authors.¹² Many of the superentrepreneurs are engaged in the tradable sector, and often so in areas such as the tech sector, where indirect job creation plays a key role.

¹² Moretti & Thulin (2013), from p. 355.

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Measuring superentrepreneurs per capita is like looking at the tip of the iceberg, as it gives insight into which countries are open to free enterprise. The strong link between concentration of superentrepreneurs and unemployment needs to be understood in this context.

As shown previously in figure 1, there is a strong link between superentrepreneurs per capita and the level of unemployment. One more superentrepreneur per million adult inhabitants is linked to 0.88 percentage points lower unemployment. While part of the explanation lies in that high-impact entrepreneurs are important job creators, it is also a top of the iceberg effect. Countries that have systems that encourage free enterprise, good education systems, and low corruption, tend to have more high-end entrepreneurs. The same countries also have many other entrepreneurs, who together contribute to prosperity and job creation, in smaller and medium-sized companies. Measuring superentrepreneurs per capita is like looking at the tip of the iceberg, as it gives insight into which countries are open to free enterprise. The strong link between the concentration of superentrepreneurs and unemployment needs to be understood in this context.

The link between high rates of superentrepreneurs per capita and lower unemployment seems to be broad—as it is evident for the unemployment rate of people with different groups of education. Amongst those with basic education, one more superentrepreneur per million adults is linked to 0.43 percentage points lower unemployment (figure 5). The link is stronger for those with intermediate education, as one more superentrepreneur per million adults is linked to 1.1 percentage points lower unemployment for this group—compared to 0.94 percentage points unemployment amongst those with advanced education (figures 6 and 7). The jobs created by policies that enable high-end entrepreneurship affect society broadly, and the group which benefits most from the lowering of unemployment seems to be the broad middle class, with intermediate education degrees. The jobs created by policies that enable high-end entrepreneurship affect society broadly, and the group which benefits most from the lowering of unemployment seems to be the broad middle class, with intermediate education degrees.

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Unemployment, with basic education,

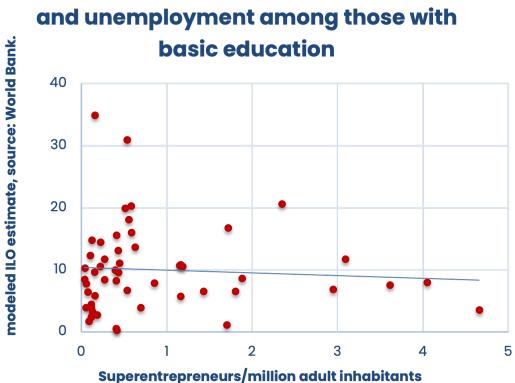
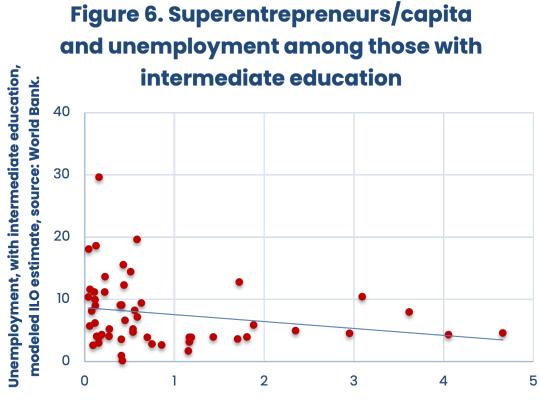
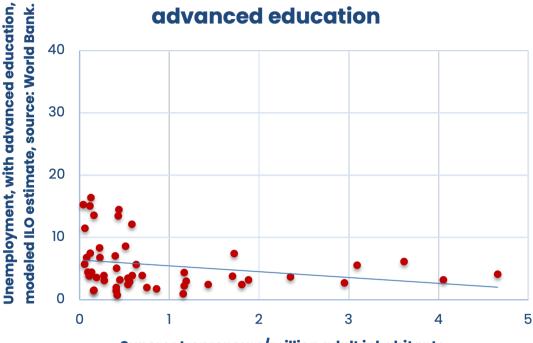


Figure 5. Superentrepreneurs/capita



Superentrepreneurs/million adult inhabitants





Superentrepreneurs/million adult inhabitants

22

Where there are many self-employees, there are few superentrepreneurs

One of the more striking findings of the superentrepreneurs project, is how closely the rate of self-employment is linked to the concentration of high-impact entrepreneurs in the population. Because high rates of self-employment are found in dysfunctional economies, where companies are limited from growing and offering jobs, countries with many superentrepreneurs per capita tend to have a low share of self-employees, and vice versa. Superentrepreneurs are job creators, and in parts of the world with few high-impact entrepreneurs, it is common that people rely on necessity-driven self-employment since they cannot find regular employment. Figure 8 shows the relationship for men.

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Superentrepreneurs are job creators, and in parts of the world with few high-impact entrepreneurs, it is common that people rely on necessity driven self-employment since they cannot find regular employment.

Among men, the US has the highest concentration of superentrepreneurs when compared to other large countries and regions of the world. There are 5.9 male superentrepreneurs per million adult men in the USA. At the same time, the self-employment rate of men in the USA is only 7 percent. Canada has 3.3 male superentrepreneurs per million adult men and 18 percent selfemployment amongst the men employed in the country. This can be compared with China, which has 44 percent of the men being self-employed, and 1.6 male superentrepreneurs per million adult men. India on the other hand has fully 76 percent self-employees amongst the men and only 0.2 superentrepreneurs per million adult men. Figure 9 shows the level of superentrepreneurs per capita, as well as women's self-employment. Here we also see the trend that countries with high rates of high-impact entrepreneurs in fact are those with low rates of self-employees. The US has 0.26 female superentrepreneurs per million adult age women, which is still higher than 0.15 in China. Oceania has no female superentrepreneurs at all. Europe has as few as 0.04 female superentrepreneurs per million adult women. One of the most striking findings of the superentrepreneurs project is indeed, as discussed further in the next segment, the entrepreneurial deficit of Europe, particularly amongst women.

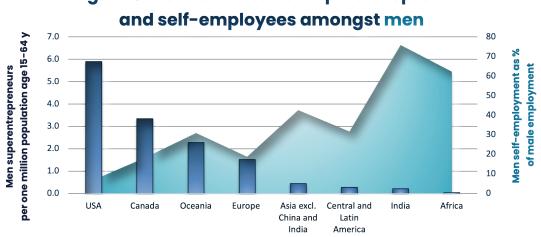
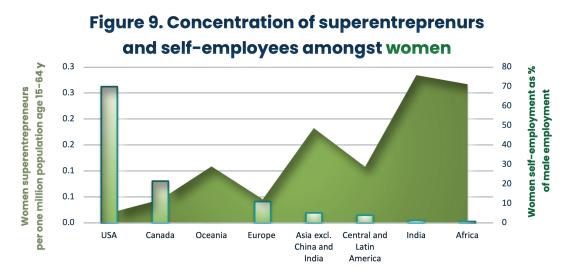


Figure 8. Concentration of superentreprenurs

Source: Forbes, WDI, own analysis.



Source: Forbes, WDI, own analysis.

Europe's entrepreneurial deficit

Many European countries are on a comparable level with the USA and Canada when it comes to economic as well as technological development. Yet there are far fewer superentrepreneurs per capita in Europe. There are numerous possible explanations for why this is the case, such as taxes and the regulatory burden being a greater obstacle in Europe, and that European countries individually have smaller markets than for example the USA and China, which limits the potential for entrepreneurial growth.¹³

To better understand the European deficit of high-impact entrepreneurs, we can look at figure 10, where the concentration of male superentrepreneurs per capita has been standardized to 1 for Europe. Here we can see that China has the same concentration of male superentrepreneurs as Europe. Canada has more than twice the concentration, and the USA has nearly four times the concentration of superentrepreneurs, compared to Europe.

China has more than three times higher level of women superentrepreneurs per capita than Europe, while the USA has more than six times higher level.

Looking at female superentrepreneurs, we can see that Europe's entrepreneurial deficit is even larger. Figure 11 shows the concentration of female superentrepreneurs per capita, which has been standardized to 1 for Europe. Here we see that Canada has about double the concentration of women superentrepreneur compared to Europe. China has more than three times higher level of women superentrepreneurs per capita than Europe, while the USA has more than six times higher level.

¹³ See further discussion in Henrekson & Sanandaji (2017).

It has been shown previously that Europe has a lower share of female highimpact entrepreneurs.¹⁴ An explanation for this is that education, health, and elderly care throughout Europe are limited by public sector oligopolies and regulations. The opportunities for high-impact entrepreneurship are therefore limited in the sectors of the economy that employ many women, reducing their entrepreneurship potential.¹⁵ In places such as China, India, Africa, and other countries in Asia, the economic systems are open to entrepreneurship also in women-dominated welfare services.¹⁶ In these parts of the world, the share of women amongst superentrepreneurs is indeed higher than in Europe (figure 3).

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In comparison with China and the USA, Europe relies more on old wealth, and has more limited opportunities for new entrepreneurial firms to grow.

Europe needs to encourage more high-impact entrepreneurship, by leveraging the benefits of the common market in the European Union, and the trade with the European nations that are not part of the union. China has many superentrepreneurs per capita, as much of the wealth in the country has been created during the past generation, and since the economic policies and geography of the country is well suited for successful companies to grow large. The USA is still a dominant economic force in the world, with a much higher level of average economic productivity per citizen than China. While parts of the USA's wealth are inherited from previous generations, much is still new. In comparison with China and the USA, Europe relies to a higher degree on old wealth and the opportunities for new entrepreneurial firms to grow are more limited. The European union's Lisbon Strategy has aimed to increase high-impact entrepreneurship in Europe, but any success is yet to materialize.

¹⁴ Global Entrepreneurship Monitor (2019).

¹⁵ Sanandaji (2016, 2018).

¹⁶ Sanandaji (2020).

Figure 10. Europes deficit of men superentrepreneurs Concentration compared to Europe = 1

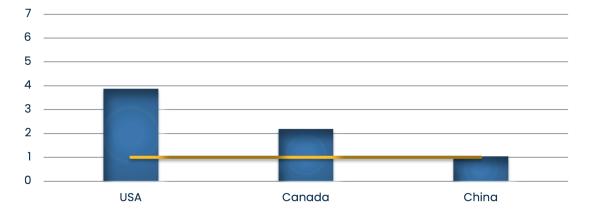
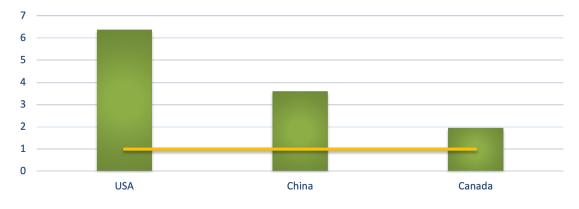


Figure 11. Europes deficit of women superentrepreneurs

Concentration compared to Europe = 1



The conditions for fostering superentrepreneurs

Which conditions are needed to foster high-impact entrepreneurship? The superentrepreneurs project has previously shown that countries with business-friendly taxation, strong property rights, and a higher ease of doing business have higher rates of high-impact entrepreneurs per capita.¹⁷ In this section, the relationship between superentrepreneurs per capita and relevant factors are again studied, based on the latest available data.¹⁸

As shown in figure 12, there is a clear link between the protection of property rights and the rate of high-impact entrepreneurship. Countries that are ranked as having stronger property rights on average also have a higher share of superentrepreneurs per million adults. Similarly, as shown in figures 13 and 14, countries with lower profit taxes and lower capital gains taxes, have higher rates of superentrepreneurs per capita. Figure 15 shows that countries with higher ease of doing business, also have a higher share of superentrepreneurs. Lastly, figure 16 shows a positive relationship between education results in schools, as measured by the international PISA 2018 study and superentrepreneurs.

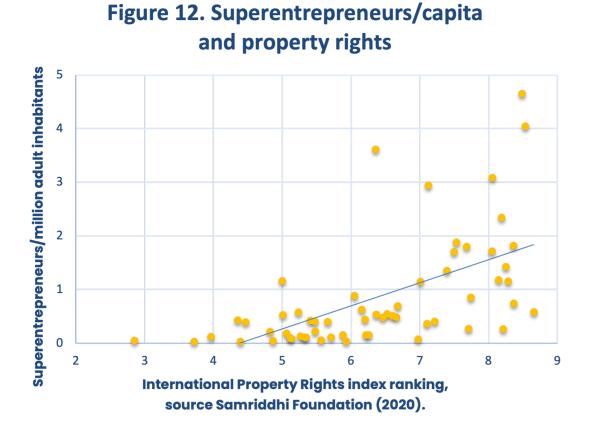
66

Fostering knowledge, strengthening property rights, making it easier to run a business, and reducing taxes on profits and capital gains are strategies for encouraging more high-impact entrepreneurship.

¹⁷ Sanandaji & Sanandaji (2014).

¹⁸ Luxembourg and the Bahamas are outliers, as these wealth-friendly countries attract the businesses founded by many foreign superentrepreneurs and have therefore a much higher per capita rate of high-impact entrepreneurship compared to the rest of the world. To better understand the data, without major interference from one single country, Luxembourg and the Bahamas have been excluded from the comparisons. All other countries for which data exists are included.

Fostering knowledge, strengthening property rights, making it easier to run a business, and reducing taxes on profits and capital gains are strategies for encouraging more high-impact entrepreneurship. A combination of these policies leads to a better business environment, higher knowledge level in society, greater reward for entrepreneurship, and more funds invested in entrepreneurial ventures.



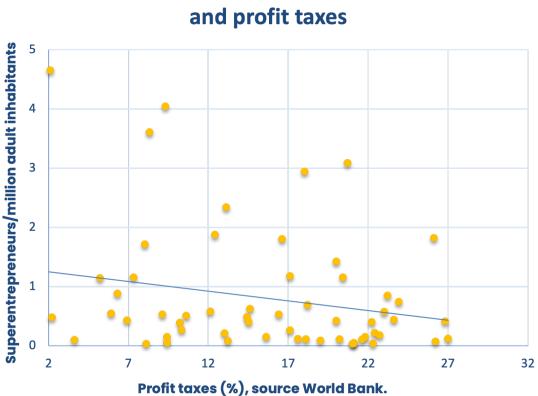
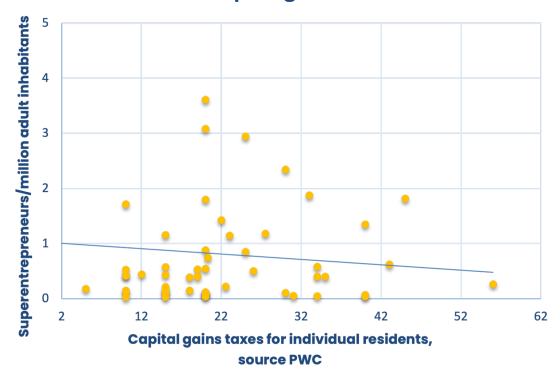


Figure 13. Superentrepreneurs/capita and profit taxes





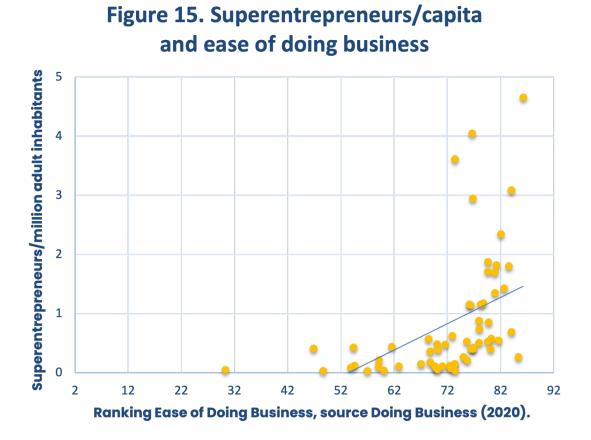
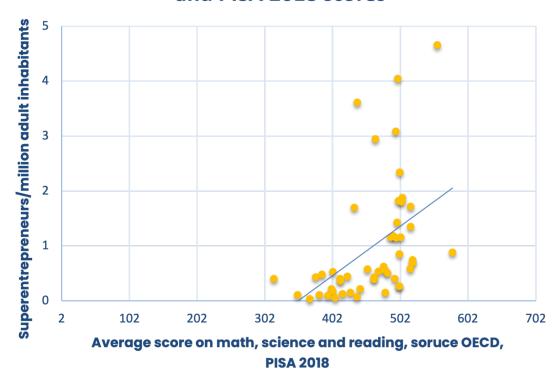


Figure 16. Superentrepreneurs/capita and PISA 2018 scores



Superentrepreneurs of Singapore

Singapore has the highest level of superentrepreneurs per capita in the world, in comparison of countries with one million population or more. There are in total 20 male superentrepreneurs and one female superentrepreneur who have founded their companies in Singapore. This amounts to 4.7 superentrepreneurs per million adults. Divided by gender, it is 8.3 male superentrepreneurs per million adult men, and 0.5 female superentrepreneurs per million adult women.

Examples of superentrepreneurs from Singapore include Goh Cheng Liang, who founded Wuthelam Holdings, a manufacturer of paint and coatings. Liang grew up in poverty, selling rubber tappers and fishnets for income. After the second world war, he began buying paint at low cost from the British army and selling it, laying the foundations for a successful business. Later, with the help of his son Goh Hup Jin, he took over Japanese Nippon Paint. Another example is Forrest Li, born in China, who founded Garena, a Singaporean digital games developer, and Shopee, a Singaporean e-commerce technology firm.

Christina Ong is a businesswoman from Singapore who owns the COMO Group conglomerate. She originally founded a clothing store in 1972, before developing it into COMO Group, which included Club 21 fashion stores, as well as COMO Hotels and Resorts. Christina has become a superentrepreneur together with her husband Ong Beng Seng.

On average, the superentrepreneurs of Singapore are 65 years old, which is indicative of a reliance on old fortunes. Singapore has strong property rights protection and a low-profit tax. There is no capital gains tax in Singapore. It is one of the best countries to do business in, according to the ease of doing business ranking. Together with China, Singapore has the highest PISA scores in the world. The combination of being a globally important trade hub, having excellent schools, low taxes, and a high ease of doing business, is the reason why Singapore has so many superentrepreneurs per capita.

Superentrepreneurs of Switzerland

Switzerland has the second highest rate of superentrepreneurs per capita in the world, excluding countries with less than one million inhabitants. There are in total 22 male superentrepreneurs and one female superentrepreneur who have founded their companies in Switzerland. This amounts to 4.1 superentrepreneurs per million adults. Divided by gender, it is 7.7 male superentrepreneurs per million adult men, and 0.4 female superentrepreneurs per million adult women.

Examples of superentrepreneurs from Switzerland include the couple Gianluigi and Rafaela Aponte, both originally from Italy, who founded the Mediterranean Shipping Company. The couple entered the shipping industry together in 1970, with a company owning a single vessel, and have since expanded the operation significantly. Mediterranean Shipping Company is one of the largest container shipping lines in the world, second only after Danish Mærsk. Another example is Martin Ebner, the founder of BZ Bank and investment firm BZ Group.

On average, the superentrepreneurs of Switzerland are 73 years old, which is indicative of a high reliance on old fortunes. Switzerland has very strong property rights protection, low company taxes, and no capital gains tax. Wealth taxes do exist in some cantons of the country. The country scores relatively well in the category of ease of doing business and has medium-high scores in the international PISA tests of 15-year-old pupils knowledge levels. Improving the performance of the education system could help Switzerland foster innovative entrepreneurship further, reducing the reliance on old money.

Superentrepreneurs of Cyprus

Cyprus has the third highest level of superentrepreneurs per capita in the world, among countries with more than one million population. There are in total 3 male and no female superentrepreneurs, who have founded their companies in Cyprus. This amounts to 3.6 superentrepreneurs per million adults. Divided by gender, it is 7.2 male superentrepreneurs per million adult men, while the rate is zero for women as there are no female superentrepreneurs of Cyprus.

The superentrepreneurs of Cyprus are Boris Mints, a Russian entrepreneur who founded the O1 Group investment company, which owns and manages assets in real estate and finance, as well as Suat Gunsel, a Turkish Cypriot property developer, who is the founder and sole owner of Cyprus's private Near East University. The third high-impact entrepreneur of Cyprus is Oleg Bakhmatyuk, from Ukraine, who is the founder and head of egg producer Avangardco Investments Public, with its head office in Cyprus.

On average, the superentrepreneurs of Cyprus are below 60 years old, which indicates that it relies to a relative degree on new fortunes. Cyprus has mediocre protection of property rights and favorable taxes on company profits. Capital gains tax rate is 20 percent, but there are exceptions from it. Cyprus does well in ease of doing business but has relatively low education results. The PISA test, of 15-year-old pupils knowledge levels, shows that Cyprus could do much in improving education results. Knowledge is important to encourage the domestic superentrepreneurs of the future, but also to make the island nation more attractive for international firms.

Superentrepreneurs of USA

The USA has the fourth highest concentration of superentrepreneurs per capita in the world, among countries with at least one million population. Compared to larger countries, however, the USA is by far the world leader in terms of concentration of high-impactent repreneurs. The USA is second only to China when it comes to the number of superent repreneurs. In total there are 634 male and 28 female superent repreneurs in the USA. This amounts to 3.1 superent repreneurs per million adults. Divided by gender, it is 5.9 male superent repreneurs per million adult men, while the rate is 0.3 female superent repreneurs.

The USA also has the world's most famous superentrepreneurs, such as Amazon founder Jeffrey Bezos, Tesla CEO Elon Musk, and Microsoft founder Bill Gates. Out of these three, two are domestically born, while Musk originates from South Africa. An example of a female SuperEntrepreneur is Diane Hendricks, who was selling custom-built homes when she married Ken Hendricks, who was a roofing contractor. The couple became business partners and established ABC Supply, a company that sells roofing, gutters, and widows. The company grew successful and Diane, now a widow, has become a self-made billionaire entrepreneur, as well as a movie producer. Another example of a female SuperEntrepreneur from the USA is Judy Faulkner. After university studies in mathematics and computer science, she co-founded Human Services Computing, together with Dr. John Greist. The health care software company which later changed its name to Epic Systems began in a basement with an investment from friends and family, and has grown successful without receiving private equity, and remains privately held.

On average, the superentrepreneurs of USA are 66 years old, meaning that to a quite high degree it relies on old fortunes. The USA has relatively strong protection of property rights, a relatively high tax on commercial profits, and capital gains tax up to 20 percent. The USA scores well in ease of doing business, but has a relatively mediocre school system, as measured by the international PISA test. Then again, the USA has many of the world's leading higher education facilities, and millions of talented students from around the world travel for higher learning, including Ph.D. studies, to the USA. Improving the school system, is important for the USA to encourage more domestic superentrepreneurs of the future.

Superentrepreneurs of Israel

Israel has the fifth highest concentration of superentrepreneurs per capita in the world. In total there are 13 male and 1 female superentrepreneurs in Israel. This amounts to 2.6 superentrepreneurs per million adults. Divided by gender, it is 4.8 male superentrepreneurs per million adult men, while the rate is 0.4 female superentrepreneurs.

Examples include Stef Wertheimer, who founded Blades Technology, a major global manufacturer of blades and vanes for industrial gas turbines and jet engines. Shaul Shani has founded and co-founded multiple successful technology firms, including Oshap Technologies, Sapiens International Corporation, Tecnomatix, and Global Village Telecom. Judith Richter is an Israeli women entrepreneur who founded Medinol Ltd., a healthcare company specialized in development and manufacture of cardiovascular intervention solutions.

On average, the superentrepreneurs of Israel are close to 68 years old, which indicates that they to a quite high degree rely on old fortunes. The protection of property rights is relatively strong in Israel. Company taxation is relatively high, and the capital gains tax is also relatively high at 25 percent. Israel scores well in ease of doing business. The country has a relatively mediocre score on the PISA test, showing that there is potential for improvement in the education system. At the same time, Israel is also a very strong country in terms of innovation. While Israel is already a globally leading innovation country, improvements are thus possible both in the education system and in terms of taxation and regulation, to foster the superentrepreneurs of the future.

Superentrepreneurs of Sweden

Sweden has the sixth highest concentration of superentrepreneurs per capita in the world. In total there are 13 male and no female superentrepreneurs in Sweden. This amounts to 2.0 superentrepreneurs per million adults. Divided by gender, it is 4.6 male superentrepreneurs per million adult men, while the rate is zero for women as there no female superentrepreneurs in Sweden.

Sweden is together with Ireland the country in the EU which has the highest concentration of knowledge-intensive jobs (brain business jobs) per capita.¹⁹ The country has given rise to several high-impact innovative entrepreneurs, such as Swedish Martin Lorentzon and Daniel Ek, who made their fortunes by co-founding Spotify, a leading audio streaming provider. Another example is Gustaf Douglas, who after attaining an MBA from Harvard Business School worked as CEO of newspapers Expressen and Dagens Nyheter, before founding Investment AB Latour, through which he controls security firm Securitas AB, as well as lock producer Assa Abloy and other investments.

On average, the superentrepreneurs of Sweden are 58 years old, pointing to a relative reliance on new fortunes. Sweden has strong property rights protection, a medium level of commercial profits taxation, and relatively high capital gains tax rate. Sweden scores highly on ease of doing business and has relatively good performance in the international PISA study.

While being one of the most gender equal countries in the world, there is a lack of female superentrepreneurs in Sweden. One reason is that femaledominated sectors such as education, health, pharmacies, and elderly care were monopolized by the public system during the second half of the 20th century. Since the 1990s, privatizations have taken place, but the opportunities for highimpact entrepreneurship remain limited in these segments of the economy.

¹⁹ ECEPR & Nordic Capital (2021).

Superentrepreneurs of Ireland

Ireland has the seventh highest concentration of superentrepreneurs per capita in the world. In total there are 6 male and no female superentrepreneurs in Ireland. This amounts to 1.9 superentrepreneurs per million adults. Divided by gender, it is 3.8 male superentrepreneurs per million adult men and zero for women.

An example is Martin Naughton, who founded a small manufacturing facility employing just ten people, in Northern Ireland. The operation gradually evolved, with acquisitions, to become Glen Dimplex, a consumer electrical goods firm with headquarters in Dublin.

On average, the superentrepreneurs of Ireland are below 62 years old, which is a relatively medium age given that entrepreneurs typically become billionaires late in life. Ireland has strong protection of property and medium profit taxes. The capital gains tax is high, but there are favorable tax systems for larger companies. Ireland is one of the most business-friendly countries in Europe, with a good score in the rankings over ease of doing business. Also, the PISA results are good. Ireland has good conditions for fostering the superentrepreneurs of the future.



Superentrepreneurs of Australia

Australia has the eight highest concentration of superentrepreneurs per capita in the world. In total there are 30 male and no female superentrepreneurs in the country. This amounts to 1.8 superentrepreneurs per million adults. Divided by gender, it is 3.7 male superentrepreneurs per million adult men, while the rate is zero for women as there are no female superentrepreneurs in Australia.

A pair of Australian superentrepreneurs is Mike Cannon-Brookes and Scott Faraquahar. The pair worked together to found software company Atlassian, with the aim of making a graduate starting salary at a big corporation, without having to work for someone else. However, the company proved so successful that the pair became accidental billionaires. Another example is Harry Triguboff. His parents, due to their Jewish origins, fled from Russia to China after the rise of Lenin, and Harry spend some childhood years in the Jewish community in Tianjin, before moving to Australia. He graduated with a degree in textile studies from the University of Leeds in England, worked in the Israeli and South African textile industries, before moving to Australia where he became citizen. After spending time in different careers, Harry built apartments in Meriton street of Sydney, which became the starting point of Meriton, Australia's largest apartment developer.

On average, the superentrepreneurs of Australia are below 72 years old, pointing to reliance on old money. Australia has strong protection of private property, relatively high taxes on commercial profits and capital gains (which is part of the income tax and taxed at the marginal rate). The country scores highly on ease of doing business and has a relatively strong performance in the PISA study, which assesses the knowledge of 15-year-old pupils in schools around the world. Australia also has a strong university system, with many foreign students moving to the nation to study. The education system brings talents to the country, but in order to foster the superentrepreneurs of the future, Australia needs to create a more favorable tax system. The lack of female superentrepreneurs is evident in Australia, and it remains to be seen if this situation will change during coming years.

Superentrepreneurs of UK

The UK has the ninth highest concentration of superentrepreneurs per capita in the world. In total there are 73 male and 4 female superentrepreneurs in the country. This amounts to 1.8 superentrepreneurs per million adults. Divided by gender, it is 3.4 male superentrepreneurs per million adult men, while the rate is 0,2 female superentrepreneurs per million women.

An example of a British SuperEntrepreneur is James Ratcliffe, the son of a father who was a jointer and a mother who was an accountant office worker, who grew up in a council house as a child. He studied chemical engineering, worked for oil giant Esso, before taking an MSc in finance at London Business School, and then joined US private equity group Avent International. With a skill set in chemistry and finance, he co-founded Ineos Group Ltd, a British multinational chemicals company.

Denise Coates, who is the founder and joint chief executive of online gambling firm Bet365, is an example of a British female SuperEntrepreneur. Her family owned a bookmaking firm, in which Coates worked initially, before founding her own company. Another example is Maritsa Lazari, born in Cyprus, who was married to Chris Lazari, a Cyprus-born British billionaire property developer. Chris founded Drendie Girl, a successful fashion business, and the couple used the profits from it to invest in commercial property. Maritsa was the director of the property investment company, Lazari Investments, from its founding—and is listed as the founder of the business.

On average, the superentrepreneurs of the UK are close to 66 years old, which tells us that it relies on old money to a quite high degree. The UK has strong protection of private property and an average level of taxes on commercial profits as well as on capital gains. The UK scores well on ease of doing business, and in the PISA international test, which assesses the knowledge level of 15-year-old pupils around the world. In addition, Cambridge, Oxford, and several other world leading universities reside in the UK, attracting talented students—including PhD students—from around the world. The UK can, however, improve its taxation levels, to foster more superentrepreneurs and reduce the reliance on old wealth.

Superentrepreneurs of Canada

Canada has the tenth highest concentration of superentrepreneurs per capita in the world. In total there are 42 male superentrepreneurs and one female SuperEntrepreneur in the country. This amounts to 1.7 superentrepreneurs per million adults. Divided by gender, it is 3.3 male superentrepreneurs per million adult men, while the rate is 0,1 female superentrepreneurs per million women.

An example of Canadian superentrepreneurs is Tobi Lutke, born in Germany, who founded Shopify, a Canadian multinational e-commerce company headquartered in Ottawa. Catherine Phillips, the only SuperEntrepreneur woman of Canada, is a psychologist who specializes in helping cancer patients deal with stress. She invested together with her husband early on in Shopify, earning a fortune through this investment.

Jim Pattison is another example. He was born in a rural town and worked already as a child. Later on in life he worked in a cannery, a packing house, and built bridges in the mountains. While working with washing cars, by chance when the regular salesman was away, Pattison sold his first car. Later he borrowed money to start a car dealership, which became the foundation for a successful business empire. The Jim Pattison Group has businesses in many different fields, including motor vehicles, media, entertainment as well as packaging.

On average, the superentrepreneurs of Canada are 70 years old, pointing to a high reliance on old money. Canada has strong property rights protection and relatively low business taxes. The capital gains taxation in Canada is complex, but with wise decisions can be relatively favorable. The country scores well on ease of doing business, as well as in PISA, pointing to good results amongst pupils in the school system. Canada also has a quite good higher education system and attracts foreign students as well as foreign PhD students. While reliant on old fortunes, Canada has good opportunities for fostering a new generation of superentrepreneurs.

Superentrepreneurs of China

China including Hong Kong has the highest total number of superentrepreneurs in the world. China including Hong Kong has in total 806 male superentrepreneurs and 71 female superentrepreneurs. With such a high amount, China has more superentrepreneurs than the USA and Europe.

That China has more superentrepreneurs in total than even the USA, reflects the strong economic growth in China, but also that the wealth of the country has been created in the latest generation, while parts of USA wealth is from previous generations. China is particularly strong when it comes to female superentrepreneurs—in this regard, the gap is significant to the USA, and even more so compared to Europe. At the same time, China has a massive population. In terms of per capita, it ranks at 20th place internationally, with 0.9 superentrepreneurs per million adults. Divided by gender, 1.6 male superentrepreneurs per million adult men, while the rate is 0,15 for female superentrepreneurs per million women.

An example is Zhong Shanshan, Chinas richest man. Shanshan dropped out of primary school during the cultural revolution and started working in construction. He studied to become a journalist, and later worked at Wahaha beverage company as sales agent. He later founded a bottled water company in Hangzhou, which developed into Nogfu Spring. It gradually developed into one of the largest beverage companies of the world. Zhong Huijuan is the world's richest self-made woman. She initially studied chemistry and worked as a chemistry teacher. Her husband Sun Piaoyang started a new pharmaceutical company, but because he worked on a state-owned company, were not able to manage it. Instead, Zhong left her teaching job to run the fledgling company. She managed to grow it into the successful Hansoh Pharmaceuticals.

China has mediocre protection of private property, low taxes on business profits and an average capital gains tax. China scores relatively well on ease of doing business and has the highest PISA score in the world. This score is based on 15-year-old pupils in the four cities of Beijing, Shanghai, Jiangsu, and Zhejiang, and might be somewhat inflated due to the selection of regions. Still, China is a world leader in knowledge as well as entrepreneurship, giving rise to many new superentrepreneurs. Chinese superentrepreneurs are on average 57 years old, showing that China relies on new rather than old money.

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Superentrepreneurs of India

Indiahasintotal102malesuperentrepreneursandtwofemalesuperentrepreneurs. In total, India has a high amount of superentrepreneurs, at least compared to developing parts of the world. As comparison, in all of Africa there are 13 male superentrepreneurs and one female SuperEntrepreneur, while the number for Central and Latin America is 3 woman and 55 male superentrepreneurs. Because India has such a large population, it has only in total 0.1 superentrepreneurs per million adults. Divided by gender, the figure is 0.2 male superentrepreneurs per million adult men, while the number for women is approximately 0.0. In terms of concentration, India ranks on 54th place internationally, amongst the countries that have superentrepreneurs.

One example is Gautam Adani. Born in a family with seven siblings, his father was a textile merchant, and he started working as a diamond sorter. He later established his own diamond brokerage firm in Mumbai, and after that started working in the plastics trade together with his older brother Mansukhbhai. Gradually, the business developed into Adani Group, a multinational conglomerate, originally focused on commodity trading, but also involved in port development and operations. Another example is Shiv Nadar, who studied for a degree in electrical and electronics engineering, before co-founding Microcomp, a company focused on selling digital calculators. This was the start of HCL Technologies, an Indian multinational IT services and consulting company.

The average SuperEntrepreneur of India is 68 years old, which indicates that it to a high degree relies on old wealth. The protection of property rights in India is mediocre and the taxes on company profits are quite high. However, the capital gains taxes are relatively low. India receives a relatively good score in the ease of doing business, although corruption remains a problem throughout the country. India dropped out of the international PISA program in 2009, after coming in at rank 72 out of 74 countries. The government has decided to rejoin the PISA system in the coming years. Compared to China, India is far behind in the number of superentrepreneurs, which is strongly linked to the fact that China received the top rank in the world in PISA 2018, which India thus was not even a part of. Improving India's education system is a key for fostering the superentrepreneurs of the future.

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WDI, World Development Indicators. Unemployment with advanced education (% of total labor force with advanced education); Unemployment with basic education (% of total labor force with basic education); Unemployment with intermediate education (% of total labor force with intermediate education); Unemployment, total (% of total labor force) (modeled ILO estimate).

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