

# Investigating the right tail of wealth: Education, cognitive ability, giving, network power, gender, ethnicity, leadership, and other characteristics



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## ABSTRACT

The extent to which people in the right tail of wealth are highly educated and cognitively able was examined in a sample of 18,245 ultra high net worth (UHNW) individuals with net worth's of USD \$30 million plus. How education and ability related to religion, ethnicity, political affiliation, relationship status, country, industry, leadership, gender, net worth, giving, and network power was assessed. And whether gender, religion, ethnicity, or network power differences existed in the right tail of wealth was examined. Overall, these people were highly educated and cognitively able, and smarter (more educated) people were wealthier, gave more, and had more powerful social networks (but when controlling for multiple confounds the association between education/ability and wealth was found to be quite small). Females were underrepresented, and female CEOs needed to be more select to reach the top of a company. Males and billionaires gave the most, but females and UHNW individuals gave more of what they had. U.S. Blacks and self-made females had the highest network power. U.S. Blacks and Caucasians were similarly educated and cognitively able. Democrats had a higher education and cognitive ability level than Republicans. Married people dominated and were the most educated and cognitively able, but least likely to have inherited their money and give. The finance, banking, investment, and internet sectors dominated. Jewish individuals were overrepresented by a factor of about 234. Today, the typical UHNW individual profile includes U.S. married (Christian and Jewish) men who are largely Chairman and CEO, Republican, and earned their money in finance, banking and investments. This study provides evidence for the clustering of brains, wealth and power, and suggests that elite education may matter in the trajectory of developing expertise in wealth and power generation.

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## 1. Introduction

There are many interlocking individual and societal factors that contribute to the development of expertise or high achievement in any domain (Detterman, 2014; Epstein, 2013; Kaufman, 2013; Macnamara, Hambrick, & Oswald, 2014). Major individual factors include extraordinary practice (Ericsson, Krampe, & Tesch-Romer, 1993), but also extraordinary talent (Kell, Lubinski, & Benbow, 2013; Subotnik, Olszewski-Kubilius, & Worrell, 2011; Wai, 2014a). A large body of research has demonstrated a strong link between cognitive ability and educational and occupational success (Kuncel, Hezlett, & Ones, 2004; Nyborg & Jensen, 2001; Schmidt & Hunter, 2004; Wai, 2014a), including the accumulation of wealth (Kaplan & Rauh, 2013; Wai, 2013, 2014b).

One way to empirically investigate whether education and cognitive ability level of the individual might impact the eventual accrual of extreme wealth is to examine right tail wealth groups and retrospectively assess to what degree these individuals were educated and cognitively

able at an earlier point in time (Cox, 1926; Simonton, 2009). In prior studies examining people who have accumulated fortunes that placed them in the extreme right tail of wealth (billionaires: 0.000001%) according to net worth calculations by *Forbes* magazine, Wai (2013, 2014b) uncovered that 33.9% of the world and 45.0% U.S. billionaires were likely in the top 1% of cognitive ability, and even within these extreme right tail samples, higher education selectivity and ability was associated with higher net worth.

This study draws upon the Wealth-X database which tracks not only billionaires but also the wider right tail of wealth (USD \$30 million or higher). Wealth-X has a different method than *Forbes* of calculating net worth,<sup>1</sup> so this study can both attempt to replicate the findings from the *Forbes* database and also examine to what extent elite education and brainpower is connected to wealth in the broader right tail,

<sup>1</sup> Wealth-X reviews hundreds of wealth identifiers from over 1100 intelligence sources which include both paid and open source, as well as online and in print. An assessment of all asset holdings including privately and publicly held businesses and investible assets which include real estate, aircraft, yachts, artwork, and collectibles are combined to assess an individual's net worth (for more information see *Wealth-X* and UBS, 2013, 2014).

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as well as the degree to which these populations are intellectually gifted.

## 2. Sample

### 2.1. Ultra high net worth (UHNW) individuals: USD \$30 million plus

The data for this study was drawn from the Wealth-X database (Wealth-X and UBS, 2013, 2014; Morrison, Lincoln, Kinnard, & Ng, 2013), which included individuals who had a net worth of USD \$30 million or higher and systematic education (undergraduate and/or graduate school) and baseline demographic data. This resulted in a total sample of 18,245 people (Male = 16,430, Female = 1,772, Unknown = 43; Average age = 60.76). Other information included in the database constructed for this study apart from net worth, education, and gender were source of wealth, religion, political affiliation, relationship status, ethnicity, country, industry, title, giving sum, number of known associates also in the Wealth-X database, the net worth of those known associates, and age. Throughout the paper, the term *billionaires* refers to people with a net worth of USD \$1 billion or higher and the term *ultra high net worth (UHNW) individuals* refers to people with a net worth of USD \$30 million or higher.

## 3. Method

### 3.1. Assessing education and ability level

The method for the current study is an extension of that used by Wai (2013) for the U.S. alone and is detailed in Wai (2014b). Gaining admission to a top U.S. college, university, or graduate school requires for the large majority to score at or above a certain highly select level on standardized tests such as the Scholastic Assessment Test (SAT), American College Test (ACT), Graduate Record Examination (GRE), Law School Admissions Test (LSAT) or Graduate Management Admission Test (GMAT), among others. Student assessment tests are regarded as being good measures of cognitive ability highly correlated with the results of psychometric IQ tests and showing similar cognitive demands (e.g. Rindermann & Baumeister, 2015; Rindermann & Thompson, 2013). The SAT and ACT have been shown to measure general intelligence (g) or IQ to a large degree (Frey & Detterman, 2004; Koenig, Frey, & Detterman, 2008), and it is reasonable to think other tests (e.g. international standardized exams) also measure intelligence due to Spearman's (1927) *indifference of the indicator*—the idea that “g enters into any and every mental task” (Jensen, 1998, p. 33). Murray (2012, p. 366) concluded: “the average graduate of an elite [U.S.] college is at the 99th [per]centile of IQ of the entire population of seventeen-year-olds,” and defined an elite college to be roughly one of the top dozen schools in the U.S. *News & World Report* rankings (America's Best Colleges, 2013).

The list of colleges, universities, and graduate schools indicating top 1% in cognitive ability status within the U.S. can be found in Table 1 of Wai (2013). The criteria for selection of these schools was based on the average scores of an institution indicating roughly the top 1% in ability compared to the general U.S. population.<sup>2</sup> However, many

<sup>2</sup> Attendance at a national university or liberal arts college that had median combined SAT Critical Reading and Math scores of 1400 or greater according to *U.S. News & World Report* (America's Best Colleges's, 2013) was used as a reasonable indicator that the individual was in the top 1% in cognitive ability compared to the general U.S. population. This resulted in 29 schools which can be found in Table 1 of Wai (2013). Additionally, similar cut scores on the LSAT (12 schools) and GMAT (12 schools) were used as a reasonable indicator that the individual was in the top 1% in cognitive ability. Finally, for students who had graduate degrees outside of law and business, attendance at one of the 29 schools in Table 1 was used as a reasonable indicator that their GRE scores placed them in the top 1% in cognitive ability compared to the general U.S. population. For specific details on the population level statistical calculations that led to these selection criteria, see Wai (2013) and Murray (2012).

individuals attended colleges and universities within their home countries, therefore the *QS World University Rankings* (2012) were used to determine elite school status within each country. As a reasonably select cut point, up to the top 10 schools within each country were considered elite and included. In many cases there were fewer than 10 schools within each country that made it onto the *QS* world rankings, and only the schools on the *QS* rankings were used. Although the method in Wai (2013) reasonably isolated the schools that required standardized test scores indicating top 1% in cognitive ability status, the same method cannot be directly applied for countries worldwide due to varying criteria for university admissions and lack of publicly reported standardized test scores. However, it is reasonable to think the top colleges and universities within each country would attract a large fraction of the brightest individuals. Therefore, admission to one of these schools is a direct measure of elite school status, and also a reasonable but indirect proxy of high cognitive ability relative to the selection pool within each country—likely within the top 1%.

Some students attend an elite school with lower than typical test scores (e.g., due to athletics, legacy status, political connections, affirmative action; Espenshade & Radford, 2009; Golden, 2006; Sander, 2004), whereas others who have higher than typical test scores may not have attended an elite school for various reasons (e.g. financial limitations, scholarship, staying close to home). Gender roles are additionally important. This lowers the reliability of the educational measure as an ability indicator, especially at the individual level. However, factors in both directions likely counterbalance one another, which makes the method reasonable for group estimates.

### 3.2. Definition of terms and group inclusion

#### 3.2.1. Source of wealth

Wealth-X designates three independent categories for source of wealth. *Inheritance* included people who entirely inherited their wealth. *Inheritance/self-made* included people who both inherited and created their wealth. *Self-made* included people who entirely created their wealth (see Wai, 2014b, for extended discussion on what it means to be self-made).

#### 3.2.2. Giving

Giving was assessed in two different ways. First was the raw sum of giving. Second was the sum of giving as a percentage of an individual's net worth. Giving is accumulative, or lifetime.

#### 3.2.3. Network power

Two variables were combined to assess overall network power. First was the number of known associates or connections an individual had within the Wealth-X database. Second was the net worth of those known associates. The following formula was used: Network power = (# known associates) × (net worth of known associates). The idea behind this formula is that the network power an individual holds is a function of both the number *and* net worth of their known associates.

#### 3.2.4. Groups included in the present study

As a general rule, a group (e.g. a specific country, political affiliation, or religion) was included in one of the figures, tables, or appendixes when the sample size was 25 or higher.

### 3.3. Research questions

The present study addressed the following questions for the right tail of wealth:

1. How educated and cognitively able are these people?
2. How does education and cognitive ability relate to various factors: religion, ethnicity, political affiliation, relationship status, country, industry, leadership, gender, net worth, giving, and network power?

3. Are there gender, religion, ethnicity, giving, and network power differences?

The present study also expanded the investigations conducted by Wai (2013, 2014b) on *Forbes* billionaires and other global elite groups, simultaneously testing whether findings among billionaires and other groups replicate within an independent database and expanding these investigations to the broader right tail of wealth.

4. Results

4.1. General

Fig. 1 and Appendix A present data on the entire UHNW individuals sample and UHNW billionaires sample as a function of source of wealth, gender, and U.S. vs. non-U.S. *Elite School* indicated the percentage of people who attended one of the top schools (based on cognitive ability scores) in the U.S. (see Wai, 2013, Table 1) according to *U.S. News &*

*World Report (America's Best Colleges, 2013)*, or one of the top schools in the world according to *QS World University Rankings (2012)*, and roughly represented a group likely in the top 1% of ability. *Grad School* indicated the percentage having attended some graduate school independent of the elite school category and roughly represented the top percentiles of ability. *College* indicated the percentage having attended college but not graduate school or an elite school. *NR/NC* indicated the percentage that either did not report their education or had no college. When Wealth-X conducted internet searches, some people did not report educational information in their biographies or it simply could not be found. Therefore in many cases it was unclear whether the person did not go to college or simply did not report this information publicly, hence the NR/NC combined category. These four categories summed to 100%.

Fig. 1 (groups ranked by elite education) and Appendix A shows billionaires had similar elite education than UHNW individuals overall. Within the U.S., however, billionaires had higher elite education than UHNW individuals showing wealthier people tended to have higher

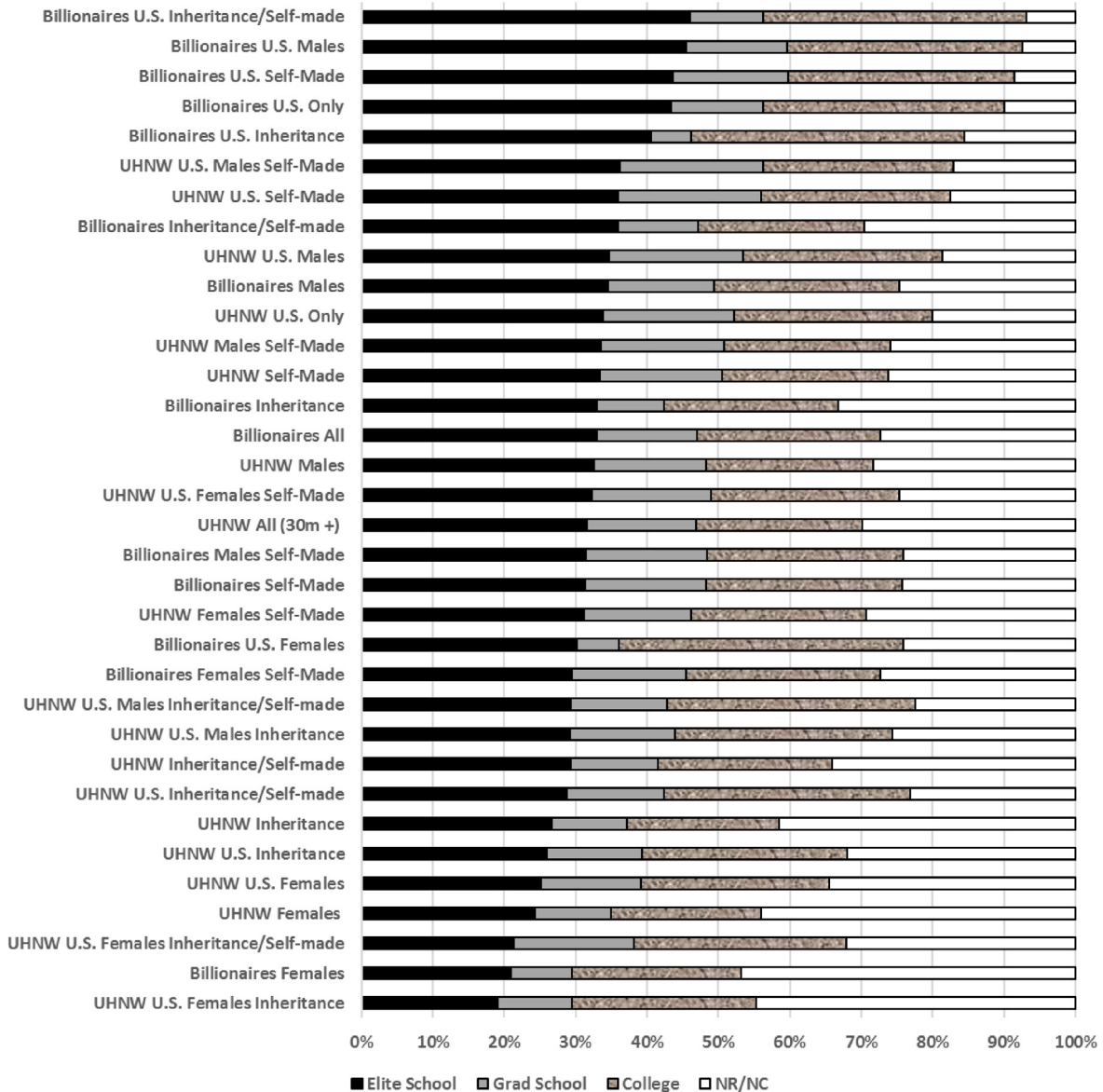


Fig. 1. General findings for 30 millionaires (UHNW) and billionaires: Education and ability level by source of wealth, country, and gender. Note: UHNW = Ultra High Net Worth (\$30 million or higher).

elite school attendance. Within UHNW individuals, U.S. self-made overall, U.S. self-made males, and U.S. males had the highest graduate school attendance, MBA attendance, and Harvard attendance. Within billionaires, U.S. self-made, U.S. males, and U.S. inheritance/self-made had the highest MBA and Harvard attendance, with self-made overall, U.S. self-made, and self-made females having the highest graduate school attendance.

Overall, males had higher education and cognitive ability than females and this pattern held within the U.S. However, self-made males and females were more similar. Overall (see Appendix K), male–female ratios were higher within UHNW individuals compared to billionaires. The lowest male–female ratios were within the inheritance groups and the highest male–female ratios were within the self-made groups. The highest percentage of wealth being fully inherited was from females overall and U.S. females overall (ranging from 44.9% to 67.5%). Generally male–female ratios for self-made were higher than inheritance/self-made were higher than inheritance.

Highest average net worth appeared to be linked to inheritance. For example within UHNW individuals, U.S. female inheritance, U.S. inheritance, inheritance/self-made, and inheritance had the highest average net worth. Within billionaires, U.S. inheritance had the highest average net worth.

For sum of overall giving (see Appendix L), billionaires tended to give the most, especially those from the U.S. overall, U.S. males, and U.S. self-made males, who donated about 20 times more than the lowest giving group, self-made females. However, giving as a percentage of net worth was highest among UHNW subgroups (not billionaires), females overall, and especially U.S. females who inherited their money. Compared to the highest group, giving as a percentage of net worth

was 9 times lower for billionaires who inherited their money, billionaire females, and U.S. self-made females.

The number of known associates was highest for billionaires and lowest for UHNW individuals (see Appendix M). U.S. self-made billionaires and U.S. male billionaires were highest and had about 2.5 times the network size as UHNW individuals who inherited their wealth and U.S. females who inherited their wealth, which were lowest. For average net worth of known associates, the lowest groups were all UHNW subgroups from the U.S. that inherited their money, at least in part. The highest groups were all billionaires, with U.S. males and U.S. self-made overall the highest, but also self-made females having networks with very high net worth. An overall calculation of network power placed self-made females, U.S. overall, U.S. males, and U.S. self-made billionaires at the top and inheritance overall, inheritance males and females, and female inheritance/self-made UHNW individuals at the bottom.

UHNW females (all, U.S., and self-made) tended to be youngest along with billionaire self-made females. UHNW U.S. females who inherited their wealth were oldest along with U.S. inheritance/self-made billionaires.

#### 4.2. Religion

Fig. 2 shows groups from various religious backgrounds in the UHNW sample overall and within the U.S. specifically ranked by elite education. Appendix B provides more detailed data for the full sample as well as the U.S. and non-U.S. specifically. Fig. 2 highlights that U.S. Hindus had the highest elite education, followed by Christian (Episcopalian), and Jewish. The highest groups were about 2 to 3 times as likely to have an elite education compared with the lowest groups, which were Christian (Orthodox), Sikh, and Christian (Methodist). Overall, Harvard and MBA

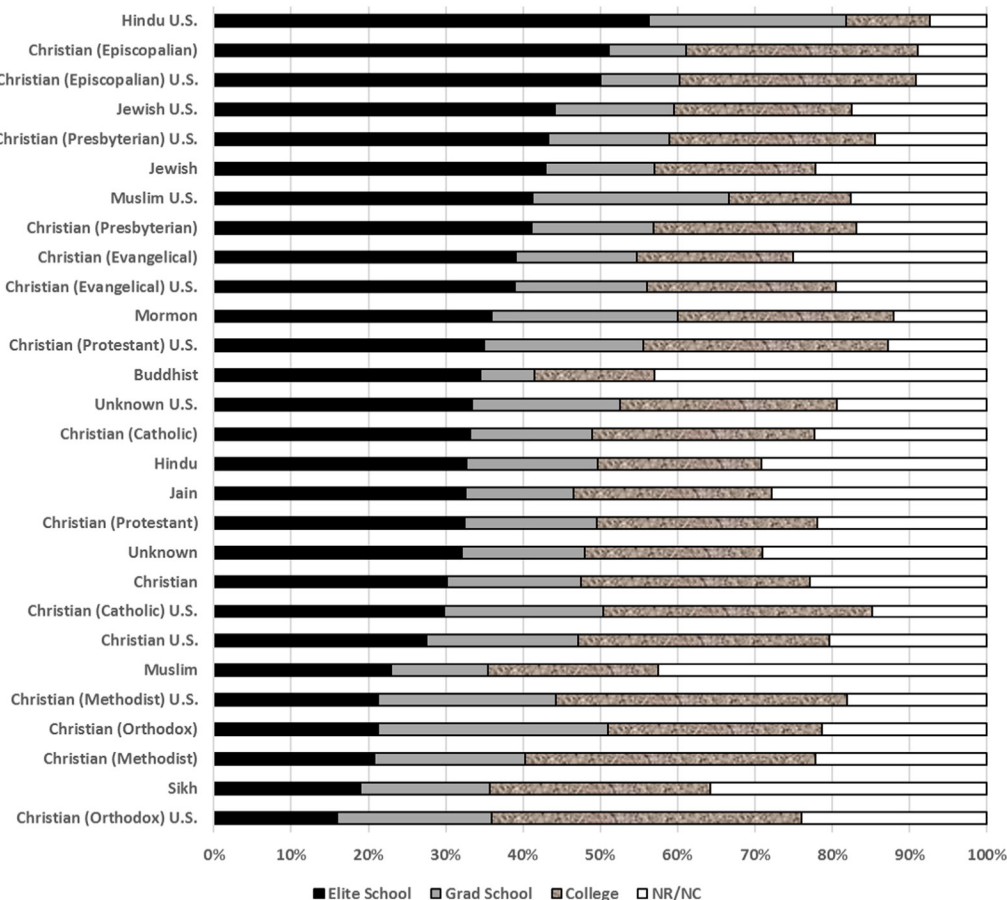


Fig. 2. Education and ability level by religion and country.



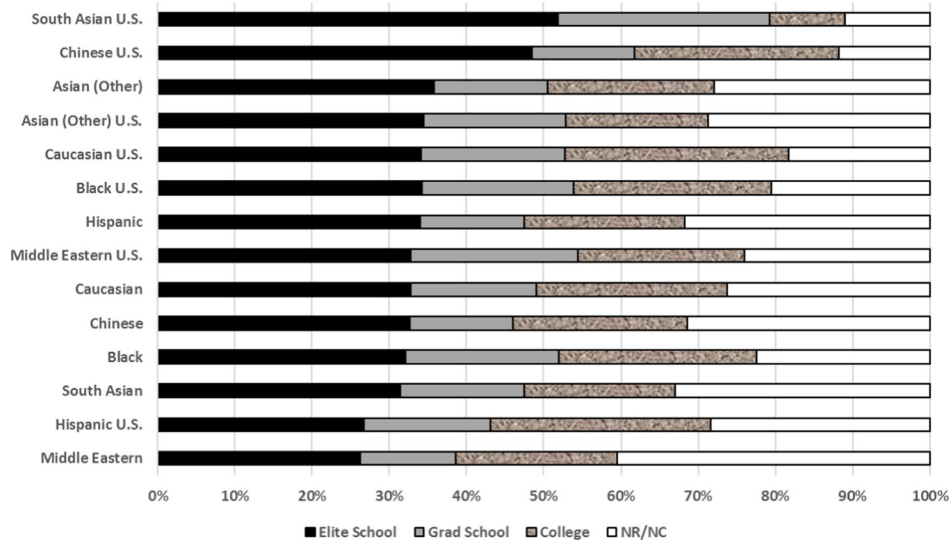


Fig. 3. Education and ability level by ethnicity and country.

attendance was highest for Christian (Episcopalian) and Mormon, with the same pattern found in the U.S. Graduate school attendance was unusually high for Christian (Orthodox) overall and within the U.S. for Hindu and Muslim.

Overall (see Appendix K), male–female ratios for Sikh, Mormon, and Jain were the highest, and Christian (Protestant), Christian (Episcopalian), and Buddhist were the lowest. Within the U.S., Muslim, Hindu, and Christian (Protestant) were highest, and Christian (Methodist, Presbyterian, and Episcopalian) were lowest.

Overall, the highest net worth was among Buddhist, Christian (Orthodox), and Jewish, about 3 to 6 times the lowest groups, Sikh and Jain. However, higher net worth was not necessarily linked to inheritance, with Jain and Christian (Presbyterian) having the highest portion inheriting their money. Within the U.S., Jewish, Christian (Orthodox), and Christian (Presbyterian) had the highest net worth, about 3 times the lowest groups, Hindu and Christian (Protestant).

Giving sum (see Appendix L) was highest among Buddhist and Christian (Episcopalian), about 4 times the lowest groups, Christian (Catholic) overall and U.S. Giving as a percent of net worth, however, was highest for Jewish and Christian (Episcopalian), about 5 times the giving fraction of the lowest groups, Christian (Presbyterian) and Muslim.

Christian (Episcopalian) and Jewish had the highest number of known associates, about 2 times the lowest groups, Jain and U.S. Christian (Protestant) (see Appendix M). Overall network power, however, was highest for U.S. Hindu and Christian (Orthodox and Evangelical) and lowest for Muslim and Christian (Presbyterian).

Overall, Hindu, Muslim and Sikh were the youngest, whereas Mormon and Christian (Methodist) were the oldest. Within the U.S. the same pattern was found.

### 4.3. Ethnicity

Fig. 3 and Appendix C show that overall, Asians (Other)<sup>3</sup> and Hispanics had the highest elite education and Middle Eastern the lowest. U.S. groups tended to have higher elite education (see Fig. 3) with South Asians and Chinese having the highest, at about 2 times the rate of the lowest group, Hispanics. Overall, Blacks had the highest graduate school attendance, Caucasians and Blacks had

the highest Harvard Attendance, and overall Blacks had the highest fraction of MBAs. But within the U.S., MBA attainment was generally much higher with South Asians at the top, followed by Blacks.

Overall (see Appendix K), the male–female ratio for Middle Eastern and South Asians the highest, about 2 times the ratios of the lowest groups, Blacks and Chinese. Within the U.S., South Asians and Middle Eastern were the highest, about 2 to 5 times the ratios of the lowest groups, Blacks and Chinese.

Overall, Chinese and Hispanics had the highest net worth, roughly 2 times the lowest group, Blacks. Within the U.S., Chinese had the highest net worth, which was closely followed by Middle Eastern, Caucasians, and Hispanics, about 2 times the worth of the lowest groups, South Asians and Blacks. Overall, South Asians and Hispanics had the highest percentage of inherited wealth, about 2 times the lowest group, Blacks. Within the U.S., Caucasian had the highest percentage with inherited wealth, about 13 times that of the lowest group, Blacks. Overall, Blacks had the highest percentage of self-made and within the U.S. South Asians and Blacks had the highest percentage of self-made.

Giving sum (see Appendix L) was highest for South Asians and Caucasians, roughly 5 times the sum for the lowest groups, Middle Eastern and Asians (Other). Giving as a percentage of net worth, however, was highest for Caucasians, South Asians, and Chinese, about 3 times the giving fraction as the lowest groups, Middle Eastern and Asians (Other).

U.S. Blacks, Caucasians, Chinese, and Blacks overall had the highest number of known associates, about 2 times the network size as the lowest group, Asian (Other) (see Appendix M). This translated into U.S. (Blacks, Chinese, South Asians) and Blacks overall having the most network power, and Asians (Other) having the least.

Blacks, Chinese, and South Asians were the youngest, and Caucasians were the oldest.

### 4.4. Political affiliation

Fig. 4 and Appendix D presents data on political affiliation by education and cognitive ability (ranked by elite education) for the entire UHNW sample in the U.S. and overall. Overall, Democrats had the highest elite education followed by bipartisan and then Republicans. The highest graduate school attendance came from the United Russia Party. Democrats and bipartisan were also more likely than Republicans to attend Harvard. Bipartisan were the most likely to secure an MBA,

<sup>3</sup> South Asian includes specific ethnicities from Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka. Asian (Other) includes specific ethnicities from Brunei, Cambodia, Indonesia, Japan, Laos, Malaysia, Mongolia, Myanmar, North Korea, Philippines, Singapore, South Korea, Taiwan, Thailand, Timor-Leste, and Vietnam.

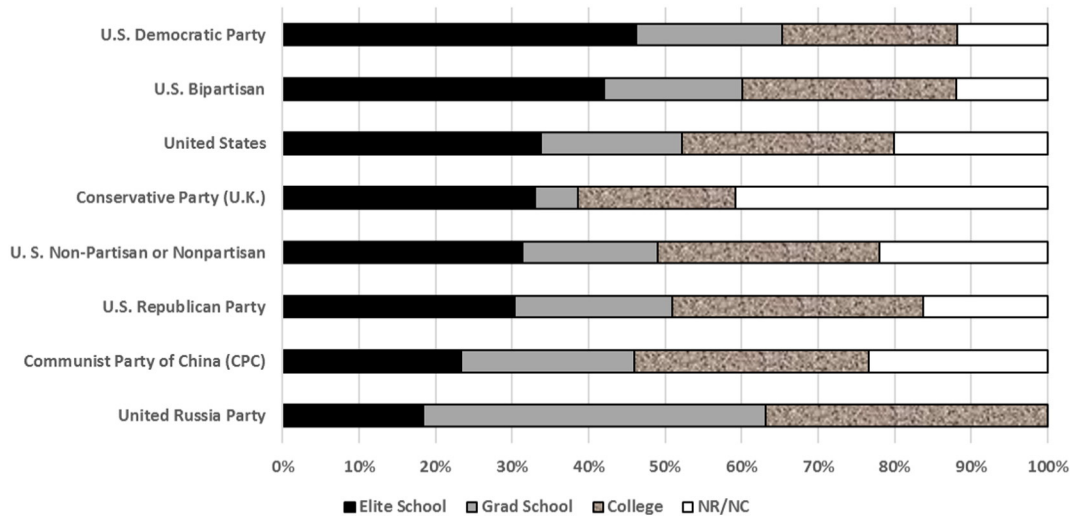


Fig. 4. Education and ability level by political affiliation and country.

with little difference between Democrats and Republicans. All of the United Russia Party had a college education or higher.

The United Russia Party was entirely composed of males, followed by the male–female ratio for the Communist Party of China (CPC), the U.K. Conservative Party, and the U.S. (see Appendix K). Within the U.S. Republicans had roughly double the ratio of Democrats.

The United Russia Party had 10 times and the CPC had 6 times the net worth of the lowest group, nonpartisan, with Democrats and Republicans falling in between. Compared to the other groups, Democrats and Republicans also had the highest percentage of members who inherited their money.

Giving sum (see Appendix L) was highest for Republicans and Democrats, about 3 times the lowest group, nonpartisan. But as a percentage of net worth, giving was highest for Democrats and the U.S. overall and lowest for Republicans and bipartisan.

The United Russia Party had the highest number of known associates, about twice the lowest group, nonpartisan, with Democrats higher than Republicans (see Appendix M). This translated into an overall network power advantage for Democrats vs. Republicans, with the United Russia Party having the strongest networks and the nonpartisan group having the weakest networks.

Within the U.S., Caucasians, Hispanics, and Middle Eastern tended to lean Republican. Black and South Asian tended to lean Democrat. Chinese and Asian (Other) were split between the two parties, but slightly leaned Republican.

The United Russia Party and the Communist Party of China were the youngest, and Republicans and bipartisan were the oldest.

#### 4.5. Relationship status

Fig. 5 and Appendix E show data on relationship status by education and cognitive ability. Excluding the unknown category, married people had the highest elite education, followed by separated, single and divorced, and then widowed, which was about 2 times lower than the married group. Married people were most likely to go to grad school, attend Harvard, and secure an MBA.

Married people had the highest male–female ratio, about 15 times the ratio of the lowest group, widowed, exhibiting greater female representation (see Appendix K). Single and widowed had the highest percentage of inherited wealth, with widowed inheriting wealth at about 2 times the fraction of single people.

Separated people had the highest net worth, followed by divorced, and widowed.

The rank order of giving sum (see Appendix L) was single people at the top followed by widowed, divorced, and married, with single giving about 3 times the rate of married. For giving as a percentage of net worth, U.S. widowed, U.S. single, and widowed overall were highest, giving at about 3 times the rate of the lowest groups, U.S. married and married overall.

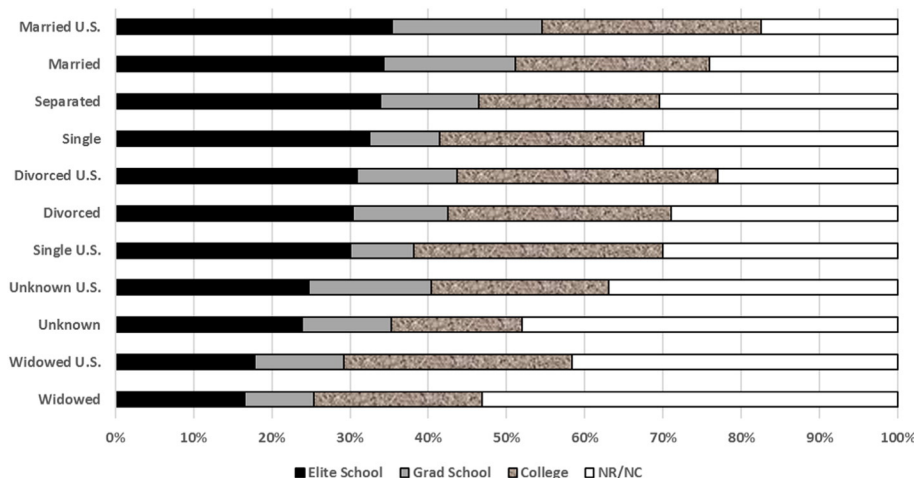


Fig. 5. Education and ability level by relationship status and country.

Separated and divorced people had the most known associates, whereas widowed were near the bottom (see Appendix M). This pattern translated to the greatest network power for single (U.S.), separated, and divorced (all and U.S.) people, and the lowest network power for married and widowed overall.

Single people were the youngest, followed by divorced and married, and with widowed the oldest.

#### 4.6. Country

Fig. 6 and Appendix F show the education and cognitive ability level of countries ranked by elite education. Educational selectivity and cognitive ability varied greatly across countries. South Korea and Chile had the highest elite education, a rate about 11 times that of the lowest countries, Qatar and Ukraine. However, nearly everyone in Kazakhstan, Ukraine, Russia, and South Korea attended college or higher. Ukraine and Kazakhstan had high graduate school attendance, Philippines,

Colombia and the U.S. had high Harvard attendance, and South Korea, Colombia, Thailand, and Norway were the most likely to get an MBA. When countries were grouped by wider geographic region, Oceania was highest on elite education (43.2%), followed by Africa (38.5%), Latin America (37.2%), North America (34.1%), Asia (34.0%), Europe (25.8%), and the Middle East (24.5%).

Countries with the highest male–female ratio (see Appendix K) were Ukraine and Egypt, about 17 to 27 times the ratio of the lowest countries, Vietnam and Austria.

Sweden and Japan had the highest net worth, about 7 times that of the lowest countries, Singapore and Kenya. Austria and Sweden had the highest percentage of UHNW individuals who inherited their wealth, whereas nobody inherited their wealth from Vietnam or Poland.

India had the highest giving sum (see Appendix L), about 14 times that of the lowest groups, followed by the U.K., Hong Kong, and the U.S., about 5 times that of the lowest giving groups, Saudi Arabia and

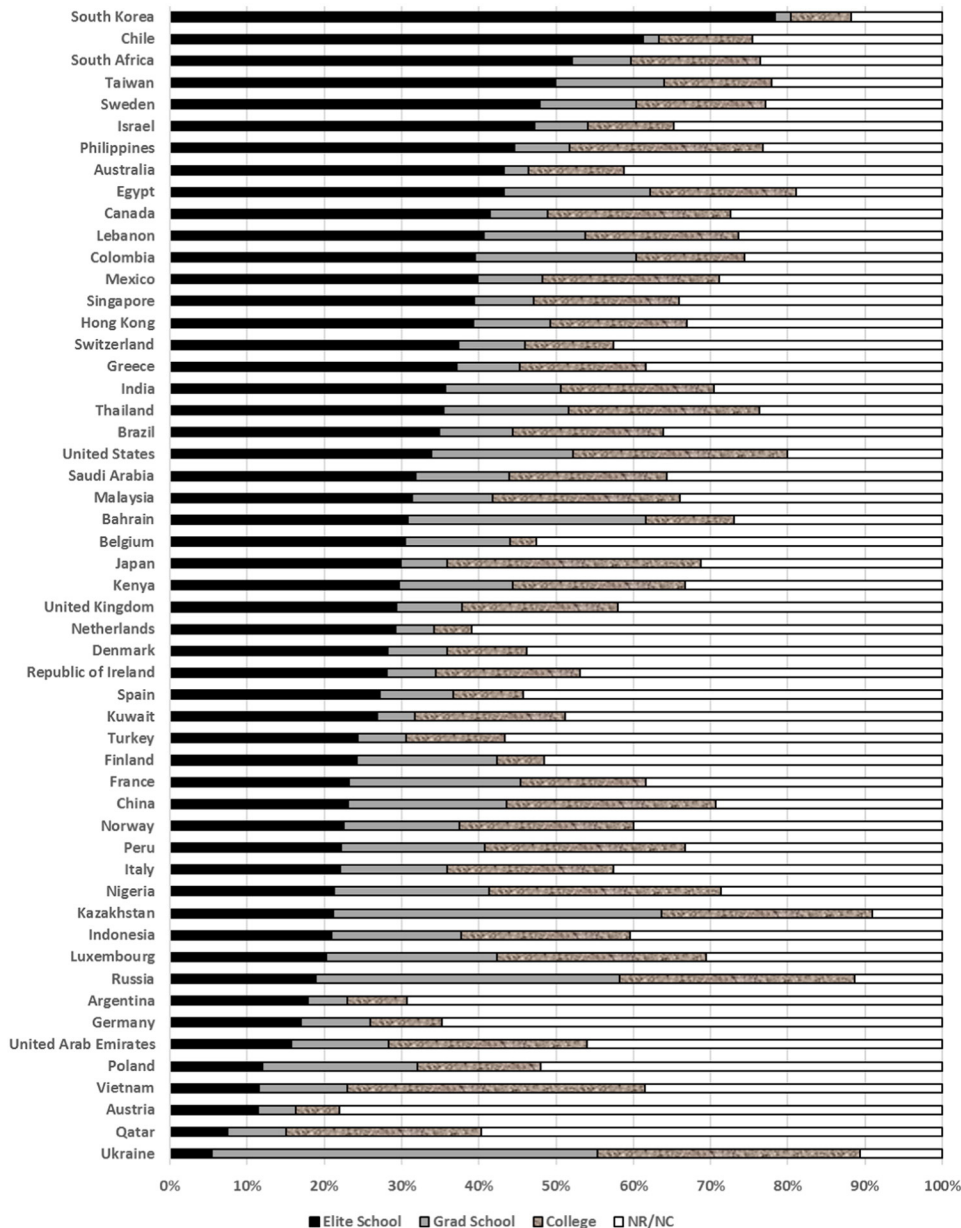


Fig. 6. Education and ability level by country.

Australia. Giving as a percentage of net worth, however, was highest for the U.K. and U.S., roughly 30 times the fraction for the least generous countries, United Arab Emirates and Saudi Arabia.

Greece, Russia, and Italy had the highest number of known associates, over 2 times countries with the smallest networks, Thailand, Nigeria, and Chile (see Appendix M). Countries with the highest network power were Russia, Mexico, and Hong Kong, and those with the lowest network power were Austria, Finland, and Denmark.

Ukraine, Vietnam, and Kazakhstan were the youngest groups and Argentina was the oldest.

4.7. Industry

Fig. 7 and Appendix G show the education and cognitive ability level of industries ranked by elite education, which varied widely. Hedge Funds, Venture Capital, Internet, Legal Services, and Finance/Banking/

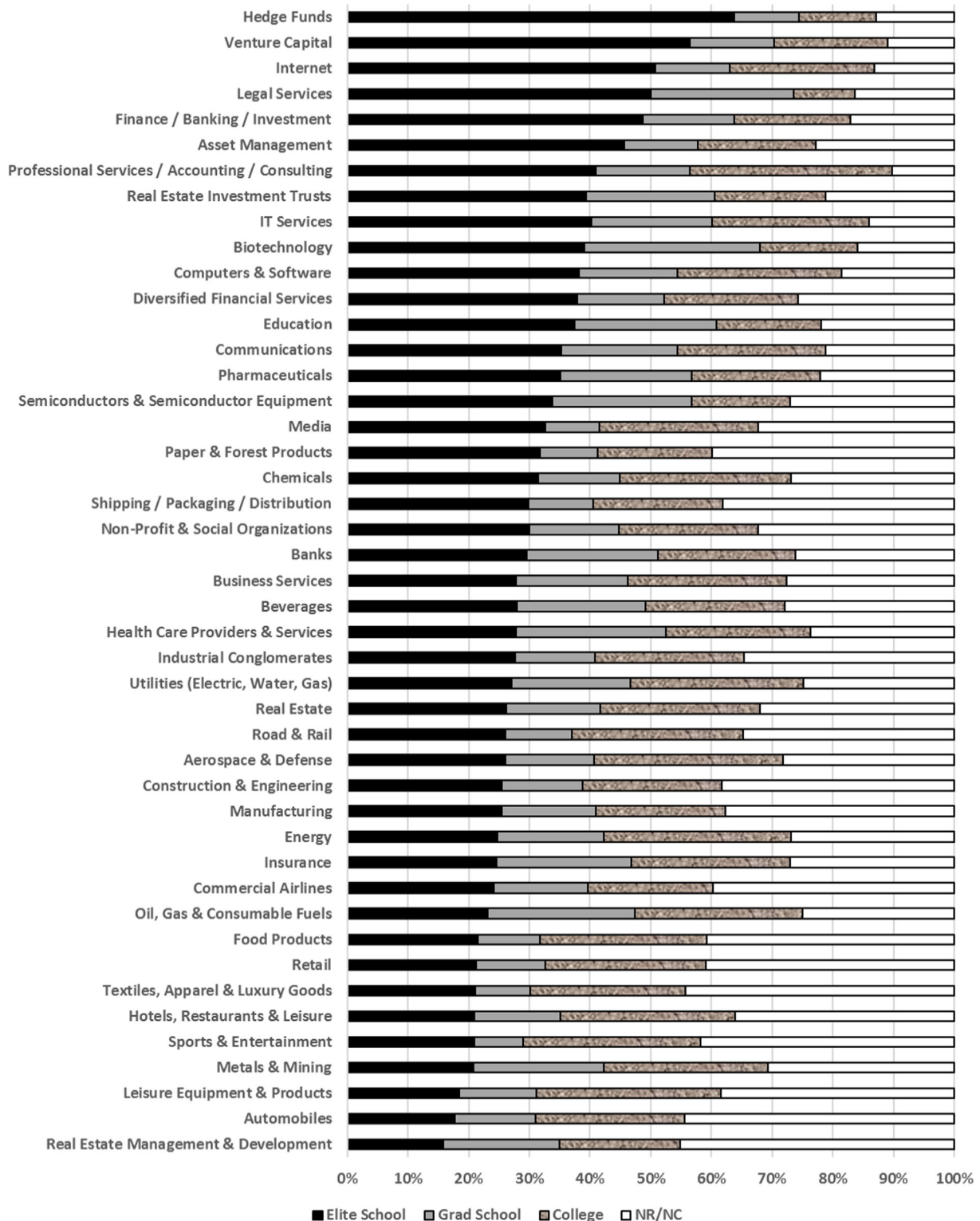


Fig. 7. Education and ability level by industry.



Investment had the highest elite education, at about 2 to 4 times the rate as the lowest groups, which were Hotels, Restaurants & Leisure, Sports & Entertainment, Metals & Mining, Leisure Equipment & Products, Automobiles, and Real Estate Management & Development. For graduate school, Biotechnology, Health Care Providers & Services, and Oil, Gas & Consumable Fuels were the highest. Harvard and MBA attainment were both clustered near the top of the elite education hierarchy among industries, particularly Real Estate Investment Trusts, Venture Capital, and Hedge Funds.

Male–female ratios (see [Appendix K](#)) were highest for Venture Capital, Hedge Funds, and Computers & Software, about 6 to 19 times the ratio of the lowest groups, Media, Textiles, Apparel & Luxury Goods and Non-profit & Social Organizations.

Net worth was highest for Internet, Industrial Conglomerates, and Textiles, Apparel & Luxury Goods, roughly 4 to 5 times that of the lowest groups, Education Aerospace & Defense, and Business Services. Non-profit & Social Organizations had the highest percentage having inherited wealth, 45 times that of the sector with the lowest inherited wealth, Internet.

Giving sum (see [Appendix L](#)) was the highest for IT Services followed by Retail, about 15 to 26 times the sum of the lowest groups, Automobiles and Shipping/Packaging/Distribution. However, giving as a percentage of net worth was highest for Retail and Beverages, about 14 to 48 times the giving fraction of the lowest groups, Industrial Conglomerates and Shipping/Packaging/Distribution.

Real Estate Investment Trusts and Venture Capital had the highest number of known associates, over 2 times that of the lowest sectors, Professional Services/Accounting/Consulting and Food Products (see [Appendix M](#)). Network power was highest for Internet, Venture Capital, and Hedge Funds, and lowest for Health Care Providers & Services, Food Products, and Commercial Airlines.

The industry with the youngest people was by far Internet followed by IT Services, Hedge Funds, and Sports & Entertainment, which were roughly a decade older, on average. The industries with the oldest people were Legal Services, Non-profit & Social Organizations, and Education.

#### 4.8. Company leaders: CEO, Chairman, Founder, and President

[Fig. 8](#) and [Appendix H](#) show data on the education and cognitive ability of various leaders (CEO, Founder, Chairman, and President)<sup>4</sup> of companies ranked by elite education. [Fig. 8](#) shows CEO females were the most highly selected on elite education, roughly 2 times the rate as female Founders and female Presidents. Harvard attendance was highest for CEO self-made females and CEO U.S. females, and the MBA percentage was highest for U.S. Chairmen and U.S. CEOs. Overall, female CEOs had higher education and cognitive ability than their male counterparts. However, males tended to have higher education and cognitive ability for Founders and Presidents. For Chairmen, overall females were higher on elite education, but within the U.S. males were higher.

Overall, male–female ratios (see [Appendix K](#)) were highest for self-made Chairmen and Presidents, about 3 to 4 times the ratio of the lowest groups, Founders and Presidents. Within the U.S., they were highest for Chairmen, about 2 times the ratio of the lowest groups, again Founders and Presidents.

Net worth was highest for Chairmen, followed by Founders, Presidents, and CEOs. For inherited source of wealth, females were highest across the board, however, within females there was a gradient from CEOs up through Presidents—CEOs, Founders, Chairwomen, and Presidents, with Presidents roughly 4 times as likely to inherit their wealth as CEOs.

Giving sum (see [Appendix L](#)) was highest among Chairmen, about 3 to 4 times the giving rate of the lowest groups, CEOs and male Presidents. Giving as a percentage of net worth was highest for Founders, especially female Founders. Whereas males tended to give more as an overall sum, females tended to give more as fraction of their net worth.

Chairmen tended to have the highest number of known associates, specifically self-made females and U.S. females, at roughly 2 times the number of the lowest group, Founders, and specifically female Founders (see [Appendix M](#)). The same pattern was found for network power, with Chairwomen at the top, specifically those self-made, and Founder females at the bottom.

In terms of age, from lowest to highest were CEOs, Presidents, Founders, and then Chairmen. CEO females were the youngest overall, and U.S. Chairmen overall and males were the oldest.

#### 4.9. Female leaders

[Table 1](#) shows an extended analysis of just female leaders, combined across CEO, Founder, Chairman, and President and examined by country and industry. For elite education country comparisons, Singapore was highest, about 2 times the rate of the lowest groups, China and Switzerland. Across industries, Business Services and Finance/Banking/Investment was highest, almost twice that of the lowest groups, Media and Non-profit & Social Organizations. Highest graduate school attendance was for China and Real Estate, only female leaders in the U.S. and United Kingdom attended Harvard, and this attendance was highest for the Finance/Banking/Investment sector. Therefore the pattern within female leaders mirrored overall findings.

For country, net worth was highest for China, 10 times the worth of the lowest country, Singapore. For industry, net worth was highest for Finance/Banking/Investment, almost 3 times the worth of the lowest sector, Food Products. Switzerland and Non-profit & Social Organizations had the highest fraction of inherited wealth, and across the board inherited wealth was quite high for female leaders. There was one country and one industry sector with sufficient data on giving: U.S. (giving sum = \$22.58 m, giving % of net worth = 8.0%) and Non-profit & Social Organizations (giving sum = \$29.05 m, giving % of net worth = 12.9%).

Within industry, the Finance/Banking/Investment sector had the highest number of known associates and Textiles, Apparel & Luxury Goods had the lowest (see [Appendix M](#)). Within country, the U.S. was highest and the U.K. was lowest. This translated into the highest network power for the Finance/Banking/Investment sector and the U.S. and lowest for Industrial Conglomerates and the U.K.

Female leaders in China were the youngest, more than a decade younger than those in the U.S. who were the oldest. By industry, Food Products was youngest, almost a decade younger than Non-profit & Social Organizations, the oldest.

#### 4.10. Association between education/ability level and net worth, giving, and network power

[Table 2](#) and [Appendixes J](#) and [K](#) show the association between elite school vs. non-elite school attendance and net worth, giving, and network power within UHNW individuals and within billionaires. [Table 2](#) shows all general comparisons were significant with the exception of giving as a percent of net worth. However, [Appendix I](#) shows that the

<sup>4</sup> CEO = any person with “Chief Executive Officer” or “CEO” in their title: CEO, CEO and President, Chairman and CEO, Chairman, CEO and President, Chief Executive Officer, Co-CEO, Deputy CEO, Former CEO, Former Chairman and CEO, Group CEO, Interim CEO, Vice Chairman & Co-CEO. Founder = Co-founder or Founder in their title. Chairman = any person with “Chairman, Chairperson, or Chairwoman” in their title: Chairman, Chairman and CEO, Chairman, CEO and President, Chairperson, Chairwoman, Chairman Emeritus, Co-chairman, Deputy Chairman, Executive Chairman, Founding Chairman, Founding Chairman & Senior Partner, Honorary Chairman, Non-executive Chairman, Vice Chairman, Vice Chairman & Co-CEO, and Vice Chairman Emeritus.

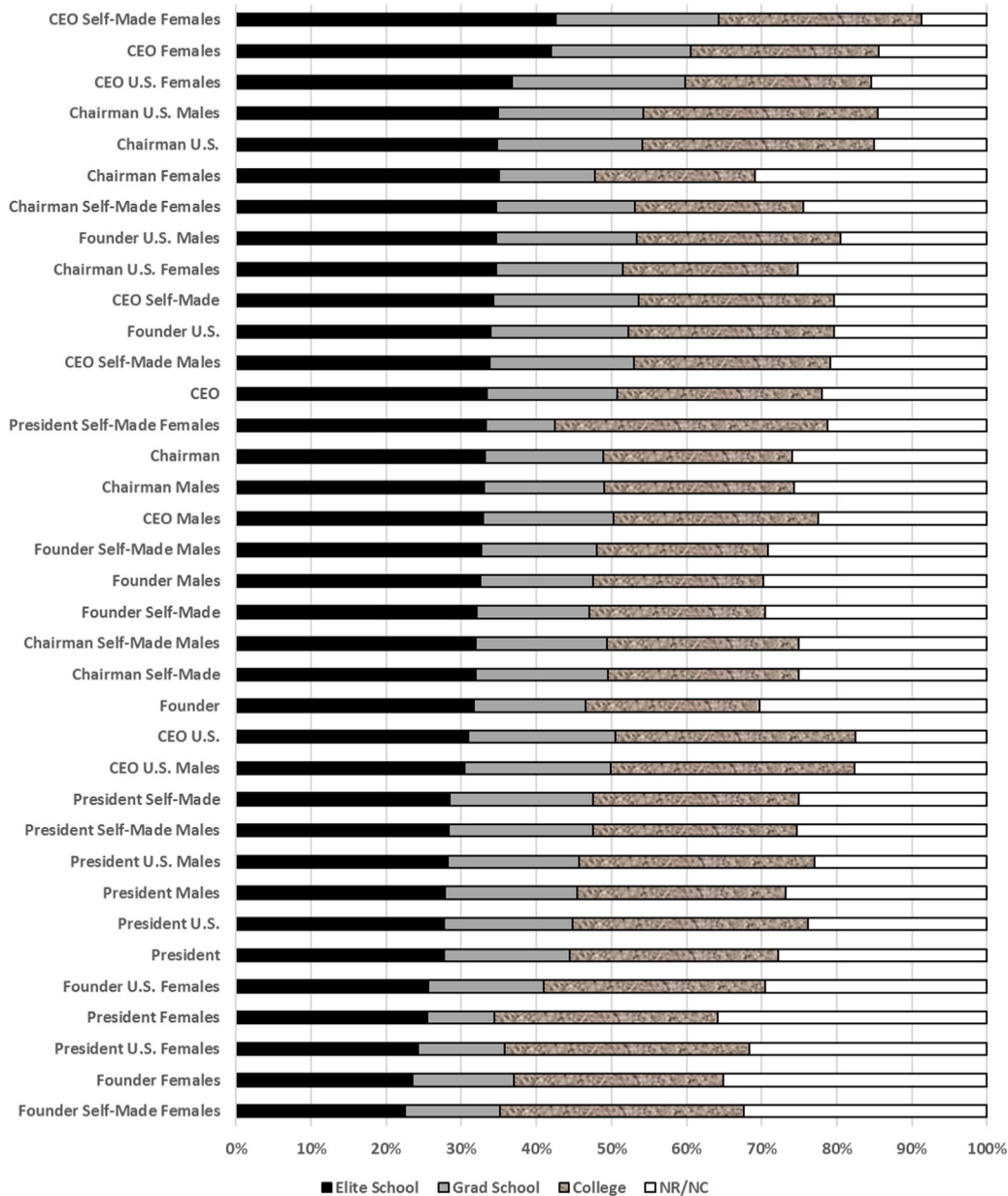


Fig. 8. Education and ability level by leadership role, source of wealth, country, and gender.

pattern of findings was consistent in the direction of higher education being associated with higher giving. Overall, higher education and cognitive ability was associated with higher net worth, giving, and network power (including within the number of people in one's network and the net worth of those people).

Appendixes I and K provide detailed comparisons on individual subgroups. In Appendix I, for net worth, of particular note are comparisons within China where individuals with lower education and cognitive ability were significantly more likely to have a higher net worth, and for Republicans (but not Democrats), where education and cognitive ability was significantly positively associated with higher net worth. In Appendix J examining network power, all comparisons were statistically significant with the exception (again) of two out of three comparisons within China (net worth of known associates, and overall network power).

The results of analyses shown in Table 2 and Appendix J suggests that there is a relationship between education/ability and

net worth, worldwide as well as within the U.S. However, this does not account for potential confounds. In order to examine in more detail whether the relationship between education/ability and net worth holds even after controlling for potential confounds, a series of regressions were conducted within just the U.S. self-made sample.

The full set of variables (37) included in the initial model were limited to those with sufficient initial sample size and included: education/ability, age, gender, position (CEO, Founder, President, Chairman), relationship status (Divorced, Married, Single, Widowed), ethnicity (Asian (Other), Black, Caucasian, Chinese, Hispanic, Middle Eastern, South Asian), religion (Christian, Christian (Catholic), Jewish, Christian (Episcopalian), Hindu), political affiliation (Bipartisan, Democratic Party, Non-Partisan, Republican Party), and industry (Consumer Discretionary, Consumer Staples, Energy, Financials, Health Care, Industrials, IT, Telecom Services, Utilities). Education/ability was transformed into an ordinal

**Table 1**  
Female leaders by country and industry: education and ability level, source of wealth, net worth, giving, network power, and age.

Country	N	Elite school	Grad school	College	NR/NC	Harvard	MBA	Inherited	I/SM	Self-made	Giving sum (m)	Giving % NW	Net worth (m)	# KA	Net worth KA (m)	Network Power	Age
Switzerland	25	20.0%	12.0%	12.0%	56.0%	0%	12.0%	52.0%	40.0%	8.0%			\$1184.00				59.20
China	28	21.4%	17.9%	35.7%	2.5%	0%	10.7%	10.7%	7.1%	82.1%			\$1363.93				49.71
United States	387	30.2%	17.1%	27.6%	24.8%	6.5%	14.2%	33.9%	14.5%	51.7%	\$22.58	8.0%	\$458.57	9.74	\$6832.64	66545.75	61.06
United Kingdom	30	36.7%	16.7%	20.0%	26.7%	6.7%	6.7%	33.3%	10.0%	56.7%			\$219.17	6.82	\$4081.61	27842.39	52.25
Singapore	25	52.0%	8.0%	12.0%	28.0%	0%	4.0%	12.0%	16.0%	72.0%			\$132.40				57.52
<b>Industry</b>																	
Non-profit & Social Organizations	125	25.6%	8.0%	24.0%	41.6%	4.0%	3.2%	66.4%	16.0%	17.6%	\$29.05	12.9%	\$657.36	7.64	\$7954.09	60775.59	64.68
Media	31	25.8%	12.9%	38.7%	22.6%	6.5%	6.5%	29.0%	16.1%	54.8%			\$427.74	9.96	\$5317.25	52982.67	56.90
Textiles, Apparel & Luxury Goods	49	26.5%	8.2%	26.5%	38.8%	2.0%	6.1%	20.4%	14.3%	65.3%			\$733.37	7.63	\$6132.22	46814.26	56.00
Real Estate	29	31.0%	13.8%	37.9%	17.2%	0%	6.9%	27.6%	20.7%	51.7%			\$445.34				57.44
Food Products	27	33.3%	11.1%	18.5%	37.0%	3.7%	14.8%	22.2%	33.3%	44.4%			\$339.07				55.56
Industrial Conglomerates	36	33.3%	2.8%	33.3%	30.6%	0%	8.3%	30.6%	36.1%	33.3%			\$832.78	8.71	\$3913.81	34087.99	58.82
Finance/Banking/Investment	62	41.9%	12.9%	25.8%	19.4%	12.9%	21.0%	25.8%	22.6%	51.6%			\$965.89	11.48	\$11265.89	129356.59	57.28
Business Services	26	42.3%	3.8%	30.8%	23.1%	11.5%	26.9%	34.6%	19.2%	46.2%			\$429.50				59.87

Note: Monetary values are expressed in millions (m). I/SM = Source of wealth was "Inherited/Self-made". Giving % NW = Giving sum as a % of net worth. KA = "known associates". Network power = #KA × net worth KA (m).

variable, ranging from NR/NC, College, Graduate School, up to Elite school. Net worth was transformed to log net worth for analyses as wealth distributions, especially in the extreme right tail, are highly skewed.

As a robustness check, regressions were first run in two random halves of the sample as well as in the full sample with outliers removed, and education/ability along with a limited set of other variables remained significant. This verified that parameter estimates were stable and not unduly influenced by extreme cases. Then, analyses in the full sample (with outliers removed) were conducted. In addition to main effects, interactions between education/ability and Christian, Christian (Catholic), Consumer Discretionary, and Industrials were significant. However, these interactions were small and difficult to interpret, so for ease of interpretation they were removed from the model. Table 3 shows the unstandardized coefficients for Log Net Worth as well as Net Worth along with significance level across a limited number (9) of significant explanatory variables with samples greater than 300 (Adjusted R<sup>2</sup> = 0.077, N = 6,454). Within the sample with outliers removed, adjusted R<sup>2</sup> did not change when adding just education/ability over and above other variables, however within the full sample adjusted R<sup>2</sup> increased by 0.002. The second column of Table 3 is provided to help put these findings in practical terms. For example, within the sample with outliers removed, one step up on the education/ability scale provides a net worth increase of \$7.110 million USD, Jewish religion is associated with an increase of \$262.116 m and being a Chairman is associated with an increase of \$143.183 m (see Table 3). Overall, these findings show that when controlling for other factors, the association between education/ability and net worth appears to be significant, but quite small.

## 5. Discussion

### 5.1. People in the right tail of wealth are highly educated and cognitively able

Overall, people in the right tail of wealth (30 million plus) were highly educated and cognitively able. Billionaires (32.9%) had similar elite education to UHNW individuals overall (31.6%) but had much higher elite education (43.4%) than UHNW individuals within the U.S. (33.8%). These findings replicated those from the *Forbes* billionaires (Wai, 2013, 2014b), which had 33.9% elite school attendance overall and 44.8% in the U.S. Given that top 1% ability individuals are by definition 1% of the population, another perspective on these findings is that top 1% individuals are about 32 to 34 times overrepresented among UHNW individuals and are about 33 to 43 times overrepresented among billionaires. The U.S. alone composed almost half of the entire sample, showing U.S. and elite school graduates are highly overrepresented among UHNW individuals, with the majority at least attending college. Harvard representation was quite high in the Wealth-X U.S. sample (UHNW individuals = 9.0%, billionaires = 12.2%) which matched up with the *Forbes* U.S. sample (billionaires = 11.3%; Wai, 2013, 2014b). These findings link with the discussion about how the U.S. values degrees so much, especially MBAs (Byrne, 2014). Generally, the findings between the Wealth-X and *Forbes* databases on billionaires appeared to be similar and replicated for the variables examined, which suggests the findings for the broader right tail of wealth were accurate. However, highest average net worth appeared to be linked to inheritance, showing the wealthiest people also tended to not have been the ones to have earned their own way, even in part. Additionally, another way of looking at the percentage of UHNW individuals with an elite education is that in relation to other elite occupations in the extreme right tail of achievement 32 to 34% may be relatively low (Wai & Rindermann, 2015).

**Table 2**  
UHNW millionaires and billionaires: association between education and ability level and net worth, giving, and network power.

	N	Net worth (millions)	SD	N	Giving sum	SD	N	Giving % NW	SD
<i>UHNW (30 m +)</i>									
Elite school	5770	\$658.99	2659.65	1384	\$38343732.81	292597043.35	1384	0.10	1.16
Non-elite school	12462	\$536.07	1662.06	1858	\$21592604.75	100754750.71	1862	0.06	0.34
	<b>t = 3.811</b>	<b>p = .000</b>	r = .028	<b>t = 2.298</b>	<b>p = .022</b>	r = .040	t = 1.552	p = .121	r = .027
<i>Billionaires</i>									
Elite school	752	\$3782.93	6543.45	230	\$160420989.23	689578533.26	230	0.030	0.06
Non-elite school	1537	\$2936.91	3935.65	329	\$70123190.92	185898263.35	329	0.026	0.08
	<b>t = 3.844</b>	<b>p = .000</b>	r = .080	<b>t = 2.261</b>	<b>p = .024</b>	r = .095	t = .524	p = .600	r = .027
	N	Known Associates	SD	N	Net Worth KA	SD	N	Network Power	SD
UHNW (30 m +)	5300	10.55	10.11	5300	\$9626290638.94	22052741957.80	5300	225527227391.99	888534879605.06
Elite school	9902	7.17	7.56	9902	\$5771272917.87	14615455634.05	9902	97953554163.26	426073457719.35
Non-elite school	<b>t = 23.292</b>	<b>p = .000</b>	r = .1856	<b>t = 12.892</b>	<b>p = .000</b>	r = .104	<b>t = 11.949</b>	<b>p = .000</b>	r = .0965
<i>Billionaires</i>									
Elite school	720	14.69	14.03	720	\$22166242916.67	36970527541.09	720	655880250416.67	1847526211210.09
Non-elite school	1403	9.43	9.17	1403	\$12675753143.26	23326127366.11	1403	250305896550.25	734809292133.46
	<b>t = 10.387</b>	<b>p = .000</b>	r = .220	<b>t = 7.216</b>	<b>p = .000</b>	r = .155	<b>t = 7.190</b>	<b>p = .000</b>	r = .154

Note: Network power = # of known associates (KA) × net worth of KA.  
Significant differences are in bold.

### 5.2. Religion: Jewish individuals are highly overrepresented

Overall, the most highly educated and cognitively able groups were Episcopalian, Jewish, and Presbyterian (top 1% ability individuals overrepresented about 41 to 51 times), with the lowest being Muslim, Methodist, and Sikh. Within the U.S., Hindu, Episcopalian, Jewish, Presbyterian, and Muslim were highest (top 1% ability individuals overrepresented about 41 to 56 times), and Orthodox and Methodist were lowest. Overall, Mormons had an unusually high percentage attending Harvard (20.0%) and attaining an MBA (28.0%), as did Episcopalians (Harvard = 17.6%, MBA = 24.2%).

According to the *World Fact Book* (2015), Christians make up 33.39% (6.15% Protestant, 3.96% Orthodox), Muslim 22.74%, Hindu 13.8%, Buddhist 6.77%, Sikh 0.35%, and Jewish 0.22% of the world's population. Using all groups with sample sizes 25 or higher in *Appendix B* as the denominator, the percentages for Christians overall (47.36%), Protestant (3.20%), Orthodox (4.30%), Muslim (39.70%), Hindu (12.23%), Buddhist (4.33%), and Sikh (1.28%), tended to follow the broad pattern, but not for Jewish (51.52%) which was the highest UHNW sample with known religion. Given the Jewish world percentage of 0.22%, over half of the right tail of wealth being composed of people who consider themselves religiously Jewish is noteworthy, meaning they are overrepresented among UHNW individuals at about 234 times the base rate. Overall, in addition to being highly overrepresented in the Wealth-X sample, the Jewish group was among the highest on net worth and also gave the most of their wealth in terms of percentage. Jewish individuals have demonstrated

**Table 3**  
Regressions using a limited number of explanatory variables.

	Log net worth (B)	Net worth (B) in millions (m) of \$USD	Significance
Education/ability	0.029	\$7.110 m	*
Christian	0.192	\$71.451 m	***
Christian (Catholic)	0.193	\$93.130 m	**
Jewish	0.523	\$262.116 m	***
Bipartisan	0.267	\$105.147 m	***
Consumer Discretionary	0.270	\$87.326 m	***
Consumer Staples	0.165	\$69.932 m	*
Financials	0.203	\$58.479 m	***
Chairman	0.420	\$143.183 m	***

Note: \*\*\*Significant at the 0.001 or greater level; \*\*at the 0.01 level; and \*at the 0.05 level.

high achievement well beyond wealth accumulation (Lynn, 2011; Murray, 2003), including founding new business ventures (Senor & Singer, 2011).

### 5.3. Ethnicity: U.S. Blacks and Caucasians were similarly educated and cognitively able

Overall, Asians (Other) and Hispanics were the most highly educated and cognitively able (top 1% individuals overrepresented about 34 to 36 times) and Middle Eastern the lowest. Within the U.S., South Asians and Chinese were the highest (top 1% individuals overrepresented about 49 to 52 times) and Hispanics the lowest. Therefore, the pattern for Hispanics was reversed when comparing the overall sample to the U.S. sample, showing Hispanic UHNW individuals outside the U.S. are more educationally and cognitively select. In the U.S. Blacks and Caucasians were very similar in terms of educational selectivity. However, Blacks had the highest proportion of self-made overall. Overall, the Harvard percentages were highest for Caucasian and Black, and within the U.S. highest for Asian (Other) and Chinese. For MBA, the highest was for Caucasians and Hispanics overall, and highest for South Asians and Blacks within the U.S. Overall and within the U.S., Chinese had the highest net worth.

According to the *United States Census* (2013), Caucasians are the majority (77.7%), followed by Hispanic or Latino (17.1%), Black (13.2%), and Asian (5.3%) among comparable groups in this study. Using all U.S. groups with sample sizes 25 or higher in *Appendix C* as the denominator, the percentages for Caucasians (91.83%), Hispanic (1.4%), Black (1.4%), Chinese (0.8%), South Asian (2.0%), Asian (Other) (1.1%), and all Asians combined (3.9%) indicated that Caucasians are highly overrepresented, Asians are slightly underrepresented, and Hispanics and Blacks are highly underrepresented. Despite being underrepresented as a group, the U.S. Black UHNW individuals who made it into the sample may have needed to be more educationally select in order to reach their level of status.

### 5.4. Political affiliation: Democrats have a higher education and cognitive ability level than Republicans

The education and cognitive ability comparison between Democrats and Republicans showed that elite education (and specifically Harvard attendance) was higher for Democrats. This pattern replicated the one found within the U.S. senate and house (Wai, 2013). Research has



shown that individuals who are politically liberal are more likely to have higher ability than those who are political conservative in the U.S. (Kanazawa, 2010) and Britain (Deary, Batty, & Gale, 2008). In the right tail of wealth Democrats have a higher education and ability level, on average, than Republicans. Additionally, the entire United Russia Party had a college education or higher showing higher education is likely a basic requirement for political office and mirroring the high percentage of the Russian elite having attended college in prior research among billionaires and Davos attendees (Wai, 2013) as well as findings in this sample. Within the U.S. the male–female ratio for Republicans was highest (14.26) and for Democrats lowest (7.05) which also mirrored sex difference findings on the U.S. Senate and House (Wai, 2013).

According to Gallup (2012), the percentage of Republicans and Democrats within different ethnic groups were as follows: Caucasians (Republican = 35%, Democrat = 26%), Blacks (R = 5%, D = 32%), Hispanics (R = 13%, D = 32%), and Asians (R = 17%, D = 36%). Within each of these extreme right tail wealth samples, Caucasians leaned Republican to a larger degree, Blacks leaned Democrat to a larger degree, Hispanics had the opposite pattern and leaned Republican, South Asians followed the population level pattern and leaned Democrat, but Chinese and Asian (Other) both slightly leaned Republican. That UHNW Hispanics, Chinese, and Asian (Other) did not follow the general population patterns suggests that wealthier people in these ethnic subgroups are likely more fiscally conservative and perhaps more conservative in other ways than their general population counterparts.

Overall, the Communist Party of China (CPC) and the United Russia Party were youngest, which is similar to the overall findings in the Wealth-X sample for country comparisons (see Appendix F) as well as within prior research on billionaires (Wai, 2014b). In addition to being the youngest, the CPC and United Russia Party also had the highest net worth, followed by Democrats and then Republicans. Notably, the United Russia Party was all male and had the highest average net worth, well above billionaire status. Also the CPC was male dominated and had the second highest net worth. These data points suggest cronyism (especially among men) may be operating in these countries (also see Wai, 2014b).

#### 5.5. Relationship status: married people dominate and are the most educated and cognitively able, but least likely to have inherited their money and give

Overall, the rank order of elite education from highest to lowest was married, separated, single, divorced, and widowed (see Fig. 5 and Appendix E). Roughly the opposite pattern was found for giving. Separated and divorced people also tended to have the highest net worth and the highest network power. Single and especially widowed, perhaps unsurprisingly, were the most likely to have fully inherited their wealth. Married people, therefore tended to be the most educated and cognitively able, least likely to give, and least likely to have inherited their money. Considering separated and divorced people had to split their assets and pay associated legal fees, their high net worth relative to other groups was unexpected. Perhaps they either worked harder to bounce back financially and/or they were already wealthier to start out with to weather the financial setback.

Worldwide in 2011, about 80% of women and men aged 45–59 had ever married (United Nations, 2011). Comparable statistics can be computed from Appendix E as a combination of married, divorced, separated, and widowed. This equated to 77.68% of the sample having ever married and is slightly lower but quite similar to world statistics. This percentage was lower than that found for billionaires (90.5%), powerful males (80.2%), and powerful females (84.0%) uncovered in prior research (Wai, 2014b).

#### 5.6. Country: South Korea, Canada, and Mexico were the most educated and cognitively able

The pattern of elite education by country in the Wealth-X sample (see Fig. 6 and Appendix F) generally replicated patterns found in the *Forbes* billionaires and Davos samples (Wai, 2014b). Across all three samples, South Korea, Canada, and Mexico were consistently high and United Arab Emirates, Germany, Russia, and China were consistently low. The Philippines, Colombia, and the U.S. had the highest Harvard attendance, which is surprising primarily for the non-U.S. countries. The U.S. was high for both billionaires and Davos attendees in prior research, but in the current sample the U.S. was only slightly above average. Additionally, nearly everyone in Kazakhstan, Ukraine, Russia, and South Korea attended college or higher. Therefore South Korea places high importance on education at both the basic and elite level, and in Russia basic higher education is a necessary but not sufficient benchmark for joining the elite (Voronkova, Sidorova, & Kryshatanovskaia, 2012). Finally, a comparison for the NR/NC category across *Forbes* billionaires (28.9%), Wealth-X billionaires (27.3%), Wealth-X UHNW individuals (29.9%), and Davos attendees (9.5%) shows the similar requirement for a college degree across the three wealth groups (roughly 70%), but much higher selectivity for Davos (roughly 90%). This also contradicts media stories emphasizing college drop-out billionaires and other top achievers like Bill Gates and Mark Zuckerberg (e.g., Lin, 2010; Williams, 2012) because they are clearly the exception to the rule (Wai, 2015b).

Sweden had both the highest average net worth and also the highest percentage of people who fully inherited their money. The U.K. and the U.S. were the most generous when it came to giving as a percentage of net worth, whereas the UAE and Saudi Arabia were the least generous.

Countries with the highest male–female ratio (see Appendix K) were Ukraine and Egypt, and the lowest were Vietnam and Austria. These findings also to some degree replicated those found for billionaires and Davos attendees (Wai, 2014b).

#### 5.7. Industry: finance, banking, investment, and internet sectors dominated

The pattern of elite education by industry (see Fig. 7 and Appendix G) also tended to replicate the patterns on billionaires and Davos attendees (Wai, 2013, Fig. 2; Wai, 2014b, Fig. 3), where the investment, banking, and science, technology, engineering, and mathematics (STEM) sectors tended to select heavily on elite education. This also replicated the pattern of occupation and ability levels in Project Talent, a stratified random U.S. sample (Wai, Lubinski, & Benbow, 2009, Fig. B1), as well as findings going back to at least 1946 (Wai, 2015a).

The Finance/Banking/Investment sector dominated in sheer size relative to all other groups, had high elite education (including Harvard and MBA attendance), and high net worth relative to other groups. This supports the idea that smart people from elite schools tend to be choosing only a handful of career paths (Yang, 2014), especially finance (Gudrais, 2008). The Internet sector had the highest average net worth and one of the highest percentages of elite education, but by far the lowest average age, a full 10 years younger than the next oldest group, IT Services. Perhaps unsurprisingly network power and elite education was highest for Internet, Venture Capital, and Hedge Funds, and for the latter two groups the percentages attending Harvard (about 17–19%) and earning an MBA (about 39–45%) were extraordinary. In addition, all three groups were largely self-made (about 96–99%). Across the Finance/Banking/Investment, Internet, Venture Capital, and Hedge Fund sectors, these groups include top 1% in ability individuals at about 49 to 64 times base rates.

Male–female ratios (see Appendix K) were highest for Venture Capital, Hedge Funds, and Computers & Software and lowest for Media, Textiles, Apparel & Luxury Goods and Non-profit & Social Organizations.

These findings mirror those on billionaires and Davos attendees (Wai, 2014b) and also connect with research on male–female differences in interests in people vs. things (Su, Rounds, & Armstrong, 2009).

#### 5.8. Leaders: female CEOs needed to be more select to reach the top of a company

Among leaders who are also UHNW individuals, females were younger than their male counterparts (see Appendix H). Males had much higher education and cognitive ability among Founders, whereas there was a slight female advantage for Chairman and a slight male advantage for Presidents. Overall, female CEOs had much higher education and cognitive ability than their male counterparts, with self-made CEOs having the highest Harvard percentage. Following this, CEOs, Founders, and Chairman had relatively low inherited wealth (about 5 to 11%), with Presidents the highest (18.5%). But within females, inheritance rose from CEOs (16%) up to Presidents (60.0%), showing female CEOs were most likely to have made it to the top on their own, in addition to needing to be smarter and more educated. Despite this, among CEOs, the females were still about twice as likely as males to have inherited wealth. This general finding of females needing to be more select to reach the top of a company was also uncovered among U.S. Fortune 500 CEOs (Wai, 2013). Appendix K shows that despite being underrepresented overall, females were most represented among Presidents and Founders and least represented among CEOs and Chairman. This suggests that although the boardroom may be shifting towards equality in gender balance, the positions of CEO and Chairman remain the most guarded in the old boy network. Whereas male leaders tended to give more as an overall sum, female leaders tended to give more as fraction of their net worth. Appendix M shows females had both the highest and lowest network power, with Chairman at the top and Founders at the bottom. Table 1 summarizes analyses on female leaders alone, which mirrored the overall leader pattern. Female UHNW individuals were most likely to be heads of Non-profit & Social Organizations, followed by Finance/Banking/Investment companies which had the lowest and second highest elite education, respectively.

#### 5.9. The right tail of wealth: smarter and more educated people tend to be wealthier, give more, and have wider, wealthier, and more powerful social networks

These findings on UHNW individuals and billionaires shows that even within these select groups in the right tail of wealth, education and cognitive ability was positively related to higher wealth, giving, and network power (see Table 2 and Appendixes I and J). Smarter and more educated people tended to be wealthier, give more, and have wider, wealthier, and more powerful social networks. However, multivariate analyses controlling for multiple potential confounds within the U.S. self-made sample revealed that the association between education/ability and wealth remained significant, but was quite small. Based on general population analyses, Zagorsky (2007, p. 500) concluded that “While income and IQ test scores are related, results do not suggest a link between IQ scores and wealth.” Using similar methods within just the U.S. self-made sample of the extreme right tail of wealth, a highly range restricted sample, and even after controlling for potential confounds, there remained a small yet significant association between education/ability and wealth among UHNW individuals. For example, one step up on the education/ability scale translated into a wealth increase of \$7.110 million USD. Zagorsky (2007, p. 489) also asked “Do you have to be smart to be rich?” Given that elite educated people in the top 1% of ability are highly overrepresented in the right tail of wealth suggests that brainpower/education is probably a helpful factor in becoming wealthy. However, within the right tail of wealth (after controlling for potential confounds), higher ability/education is only weakly associated with

wealth suggesting it is not as strong a factor as others in predicting wealth generation.

These findings might be exemplified by billionaire Reid Hoffman’s emphasis on what he calls “network intelligence,” essentially that a competitive advantage can flow from information and insight from personal contacts (Feloni, 2015; Hoffman, Casnocha, & Yeh, 2014) and extends the influence of social networks (Pinker, 2014). This study also adds to and expands the literature linking education and ability with income generation (Murray, 1998; Nyborg & Jensen, 2001; Zax & Rees, 2002) and wealth accumulation (Kaplan & Rauh, 2013; Wai, 2013, 2014b). This also provides evidence across new outcome variables (e.g., giving, network power) that does not support an ability threshold hypothesis (Kuncel & Hezlett, 2010; Park, Lubinski, & Benbow, 2007; Wai, Lubinski, & Benbow, 2005)—the idea that more ability does not matter beyond a certain point in predicting real world outcomes. However the new analysis examining the relationship between ability/education and wealth controlling for potential confounds may suggest that factors other than ability/education may be more important in the right tail of wealth (e.g. see some possibilities in Table 3). This also links higher education and brainpower with generosity (Grant, 2013; James, 2011) and networking (e.g. Jensen, 1998, notes positive relationship between social skill and cognitive ability), and extends research from the general population on these variables into the right tail of wealth.

Additionally, analyses of subgroups revealed some interesting counterexamples to the general trend. For example, within China, education and cognitive ability appeared to be negatively related to net worth and weakly related to network power. These findings align with prior research on Chinese billionaires and Davos attendees (Wai, 2014b). Additionally, although relatively high compared to other countries, the U.S. was not the highest in terms of overall giving or giving as a percent of net worth, which doesn’t directly align with the conventional wisdom that Americans are the most generous (Charities Aid Foundation, 2014; Brooks, 2008).

#### 5.10. Gender differences: females are largely underrepresented

Generally males tended to have higher cognitive ability and education than females, but self-made males and females were much more similar. However larger sex differences (9.27 males for each female) were observed within UHNW individuals compared to billionaires (6.89). The male–female ratio for *Forbes* world billionaires was higher, at 9.4 (Wai, 2014b). Smallest sex differences were observed for inherited wealth and largest sex differences were observed for self-made, which was the same pattern found among the global elite broadly (Wai, 2014b). Sex differences were largest among Middle Easterners and South Asians, along with a number of South Asian religions (Hindu, Jain, Sikh), as well as Mormons and Muslims. The Chinese and Russian political parties had larger sex differences than the U.S., and within the U.S. Republicans had higher sex differences than Democrats, replicating prior findings (Wai, 2013). Married people tended to have the highest male–female ratios. Among leaders, the rank order of male–female ratios was Chairmen as highest, followed by CEOs, Founders, and Presidents. Sex differences varied widely by country and industry, with Venture Capital, Hedge Funds, and Computers & Software having the largest male–female ratios, showing a large gender gap among investment groups and those who made their money in a STEM field, an area where there is much discussion about female underrepresentation (Ceci & Williams, 2010; Halpern et al., 2007; Miller & Wai, 2015; Pinker, 2009; Wai, Cacchio, Putallaz, & Makel, 2010). Females are also largely underrepresented in the right tail of wealth. The multifaceted explanations for female underrepresentation among the global elite is likely complex (Pinker, 2009; Sandberg, 2013) and beyond the scope of this paper. Yet despite the general lower numbers of females among UHNW individuals generally, there

was wide variation across different groups. For example, the one child policy in China would suggest a greater baseline number of males, yet despite this the China male–female ratio was 9.28, relatively lower to many other (perhaps less gender biased) countries including the U.S. and U.K., which had male–female ratios of 10.53 and 10.60 respectively.

#### 5.11. Giving differences: males and billionaires give the most, but females and UHNW individuals give more of what they have

One of the most interesting findings about giving was that overall sum was highest among (mostly self-made, male, U.S.) billionaire groups, but was highest among (mostly inheritance, female, U.S.) UHNW groups when shown as a fraction of net worth. Overall, females (11.3%) gave a higher percent of what they had compared to males (7.1%), but there was variance among females where those who were self-made gave less. Among religions, Muslims and Buddhists gave the largest sums, but the Jewish group gave the most of what they had, with Christians overall in middle of the pack. That Buddhists gave the largest amount may be linked to the concept of *bhoga-sukha*, or the happiness of sharing one's wealth (Keown, 2003). Chinese, South Asians, and Caucasians were the most generous, Republicans were slightly higher than Democrats for giving sum, but Democrats were higher than Republicans for giving as a percent of net worth. Married people gave the least, and single and widowed people gave the most. Giving was highest among the U.S., U.K., and India and among Retail, Beverages, and Non-profit & Social Organizations. Finally, Chairmen (mostly males, U.S.) had the highest giving sum, but Founders (mostly females, U.S.) had the highest giving as a percentage of net worth. Overall, giving sum was not always aligned with giving portion of net worth, showing wealthier people are not necessarily more generous, even in the right tail of wealth.

#### 5.12. Network power differences: U.S. Blacks and self-made females had the highest network power

Billionaires generally had the highest network power, with the self-made female billionaires making it near the top. U.S. Hindus, Christians (Evangelical and Orthodox), and Jewish, along with Blacks, Chinese, and South Asians had the highest network power. In particular, U.S. Blacks were by far the highest across the board, showing their extraordinary network power. Perhaps this suggests U.S. Blacks and self-made females needed such power to overcome biases and/or that they were highly select individuals to begin with. The United Russia Party was highest, with Democrats having much higher network power than Republicans. Single, divorced, and separated people had the most network power. China (including Hong Kong), Russia, and Mexico had the most powerful networks, suggesting money may be more connected to social connections there than in other countries. This network power finding within China and Russia also connects to prior research (Wai, 2014b) where political connections may have been more tightly connected to wealth accumulation (Forbes Staff, 2013; Rosen, 2011). The investment sectors (especially Hedge Funds and Venture Capital) were among the highest, with Internet at the top. This shows how connected the investment and tech sectors are, suggesting money is linked to social connections in these industries. Finally, among leaders, Chairman had the strongest networks, with self-made female Chairman at the top.

#### 5.13. The youngest are self-made females, Chinese and Russians, Blacks and South Asians, the internet sector, and single people

Some of the most interesting groups were the youngest, because this suggests they became wealthy in more recent years.

This included self-made females generally, as well as CEO females, and within female leaders, those from China. For ethnicity, Blacks and South Asians were the youngest, and for religion Hindus and Sikhs were the youngest. For political affiliation, the United Russia Party and Communist Party of China were also the youngest, mirroring country findings where these two countries tended to have the youngest UHNW individuals and billionaires in both the Wealth-X and *Forbes* databases (Wai, 2014b). Finally, the Internet sector was by far the youngest, along with single people, perhaps supporting the idea that talented people are increasingly using technology to amplify their performance and accumulate wealth and power (Freeland, 2012; Krueger, 2012; Mankiw, 2013; Wai, 2012). As Frank (2011, p. 67) puts it: “The idle rich are being replaced by the workaholic wealthy.”

#### 5.14. The influence of elite fractions: the typical UHNW profile

A large body of research has linked a nation's average cognitive ability to prosperity (Hunt, 2012; Jones & Schneider, 2006; Lynn & Vanhanen, 2002). Rindermann and Thompson (2011) emphasized the importance of the “smart fraction” of a nation in influencing prosperity. The data here on the right tail of wealth add to prior research among billionaires and Davos attendees (Wai, 2014b) looking at various national *elite fractions* and their retrospective intellectual level through educational attainment. These elite fractions are not representative of the cognitive elite of each country, but they do provide a sense of the influence of particular countries among the global elite, through sample size. For example, similar to prior findings, the U.S. dominated, followed by the U.K. at a distant second, and then China.

Beyond nations, there are a number of notable elite fractions examined in this paper. Here they are for various other groups: Gender = males; Religion = Christian and Jewish; Ethnicity = Caucasian; Political affiliation = Republicans; Relationship status = married; Industry = Finance/Banking/Investment; Leaders = Chairman and CEOs. This study shows that the right tail of wealth is dominated by U.S. married Caucasian (Christian and Jewish) males who are largely Chairman or CEO, Republican, and earned their money in finance, banking, and investments.

#### 5.15. Prospective and retrospective longitudinal data show cognitive ability (and elite education) matter for occupational expertise

Prospective longitudinal data sources both in the top 1% (Study of Mathematically Precocious Youth: Park et al., 2007; Wai et al., 2005; Project Talent: Wai, 2014a) and the top 5% of the world (Rindermann & Thompson, 2011) have shown that people identified as cognitively able when young end up quite successful later in life. The data presented in this paper, along with prior research (Wai, 2013, 2014a, 2014b) serve as case controls and retrospective longitudinal data sources showing that people in the extreme right tail of achievement and wealth accumulation were to a large degree likely in the top 1% of cognitive ability for the U.S. and the world. These multiple data sources combined show that cognitive ability clearly matters in the development of educational and occupational expertise (Wai, 2014a). The retrospective data sources also indicate the importance of an elite education and/or graduate school for the development of occupational expertise. U.S. findings also provide right tail wealth data to go along with other groups of occupationally successful individuals that serve as case controls for extremely talented U.S. students (i.e., the top 0.01%; Kell et al., 2013) who have now reached occupational success nearly at the level as the people examined in this study. Given that each of these global elite groups (including extreme wealth) showed an average ability level well below the top 0.01%, this shows that to become one of the global elite much more than cognitive ability matters.



Much academic and public discussion has centered on how one must devote, on average, 10,000 hours of practice in one's domain in order to become an expert in that domain (Ericsson et al., 1993; Detterman, 2014; Epstein, 2013; Gladwell, 2008; Macnamara et al., 2014). The present study shows that in the development of expertise in accumulating wealth, a large role is played by one's starting point (e.g. source of wealth) along with personal traits including cognitive ability, elite education, and many other individual and societal factors. People who entirely inherited their wealth would likely be considered experts in the choice of their parents rather than any hard work of their own, whereas people who were entirely self-made and rose to positions of leadership such as CEO of a company likely put in at least the *equivalent* of 10,000 hours or more.

#### 5.16. *The global wealthy are highly educated, smart, well-connected, and powerful*

These findings also show that attending an elite school appears to be an important part of the trajectory of many people who ended up in the right tail of wealth. Kaplan and Rauh (2013, p. 161), discussing their findings on the 400 richest U.S. individuals, noted that "Future research should aim to understand what facet of educational access is driving its increasing importance for wealth generation. Specifically, education provides skills but it also provides access to networks." One unexplored facet of educational access is the increasing competition among the most academically gifted students for elite school admission due in part to the fact that standardized tests used in college admissions essentially function as intelligence or IQ tests (U.S.: Frey & Detterman, 2004; Koenig et al., 2008; China: Li, Meng, Shi, & Wu, 2012). The admissions filter for an elite school selects for people high on cognitive ability, motivation, and other traits, but it also provides access to networks. Research has shown that cognitive ability assessed well before college predicts educational and occupational performance well after college (Park et al., 2007; Wai et al., 2005), therefore it is unclear exactly how much an elite school education boosts later achievement. Dale and Krueger (2002) found that attending an elite school compared to a comparable alternative did not predict greater long-term earnings even when controlling for many factors. However, the findings on the extreme right tail of wealth in this paper, along with the extreme right tail of achievement across a variety of elite occupations in prior research (Wai, 2013, 2014b, 2015b) indicates that attending an elite school (and Harvard specifically) may have a payoff of some kind when one wishes to join the global elite, as the percentage of people who are in the right tail of wealth and other global elite occupations who attended an elite school were well above base rate expectations (Thompson, 2015; Wai, 2015b). Some parents appear concerned with getting their children into elite schools which may not be entirely unfounded based on the findings of this study and prior research if the goal is to join the ranks of the elite and wealthy. However, access to elite schools, at least in the U.S., appears largely dominated by students from financially secure backgrounds (Bastedo & Jaquette, 2011). This raises the issue of social mobility, which as Clark (2014, p. 279) puts it: "Most parents, particularly upper class parents, attach enormous importance to the social and economic success of their children. They spare no expenditure of time or money in the pursuit of these goals. In these efforts, they seek only to secure the best for their children, not to harm the chances of others. But the social world only has so many positions of status, influence, and wealth." An elite school education, therefore, may be an important stepping stone which opens up the beginning of building powerful networks, which as this study indicates, are influential even among people with wealth differences in the extreme right tail.

This clustering of education, brains, wealth, and power among the current wealth and global elite means how these influential people choose to spend their money, whether to improve our world (Bill

Gates; Gates, 2013), connect the world to the internet (Mark Zuckerberg; Zuckerberg, 2014), find cost effective ways to explore space (Jeff Bezos's company Blue Origin; Stone, 2013), find a way to create a Mars colony (Elon Musk's company Space-X; Knapp, 2012), promote their political and policy views (Page, Bartels, & Seawright, 2013; Vogel, 2014; West, 2014) and/or run for president (e.g. Donald Trump; Bump, 2015), reinvent the media (e.g. billionaire Jeff Bezos bought *The Washington Post* and billionaire Chris Hughes bought *The New Republic*; Stone, 2013), privatize science (Broad, 2014), or any other way they might choose, will be dictated largely by their personal tastes and essentially who they are and the people who influence them. The finding that wealthier people among UHNW individuals tend to have more connections and these connections hold greater wealth, shows the incredible network power among the wealthiest people. We don't elect these elites (Hacker, 1961), but they certainly can influence who gets elected. This should make us think deeply about what that means when so few control so much of the world's wealth (Fottrell, 2015).

## 6. Limitations

This study used average standardized test scores of a college or university according to *U.S. News & World Report (America's Best Colleges, 2013)* as an approximation for ability level (Frey & Detterman, 2004; Koenig et al., 2008), as well as attendance at a top college or university worldwide according to *QS World University Rankings (2012)* as an approximation for ability level (Li et al., 2012). Although this method did not rely on individual cognitive ability scores which were not publicly available, average test scores from U.S. schools reasonably placed individuals that attended one of these elite schools within the top 1% of ability. For the rest of the world, it is reasonable to think the very top schools select for the best and brightest within each country. Ultimately, the method cannot disentangle education from cognitive ability. However, using this method may give an underestimate because extremely smart people may not have chosen to attend a top school within their country for multiple reasons (e.g., financial limitations, scholarships, staying close to home). Alternatively, this method may also give an overestimate because there were likely some legacies, athletic admits, students with political connections, or others who gained entry with lower than typical test score and academic metrics (Espenshade & Radford, 2009; Golden, 2006; Sander, 2004). It is reasonable to think factors in both directions likely counterbalance one another, however lower the reliability of the method. The UHNW individuals examined in this study are not fully representative of the many other individuals in the top percentiles of ability worldwide, and are likely defined by attributes (such as high motivation, willingness to work and take risks, and a desire for money and power) that are not limited to ability.

## 7. Conclusions

Today, people in the right tail of wealth are highly educated, cognitively able, and intellectually gifted. Smarter and more educated people tended to be wealthier, give more, and have wider, wealthier, and more powerful social networks. This shows the importance of cognitive ability, and perhaps elite education, in being able to develop expertise in attaining extreme wealth. These findings also provide a unique window into the characteristics of the people worldwide who have enormous wealth and corresponding power.

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**Appendix A. General findings for UHNW individuals and billionaires: by education and ability level, gender, source of wealth, giving, net worth, network power, and age**

	N	Elite school	Grad school	College	NR/NC	Harvard	MBA	M/F ratio	Inherited	I/SM	Self-made	Giving sum (m)	Giving % NW	Net worth (m)	# KA	Net worth KA (m)	Network power	Age
<i>All</i>																		
UHNW All (30 m +)	18245	31.6%	15.2%	23.2%	29.9%	5.7%	16.1%	9.27	14.1%	19.9%	66.0%	\$28.72	7.5%	\$574.74	8.35	\$7115.28	59393.54	60.76
UHNW U.S. Only	8649	33.8%	18.3%	27.8%	20.0%	9.0%	21.4%	10.53	12.6%	12.4%	75.0%	\$31.60	8.7%	\$424.92	9.66	\$6948.36	67124.89	62.45
UHNW Self-made	12043	33.4%	17.1%	23.3%	26.2%	6.6%	18.3%	19.14				\$29.00	7.5%	\$499.10	8.94	\$7831.38	70017.19	61.07
UHNW Inheritance/Self-made	3630	29.2%	12.3%	24.3%	34.0%	3.6%	12.4%	9.56				\$27.38	4.5%	\$726.86	7.21	\$5824.02	41966.29	60.66
UHNW Inheritance	2572	26.6%	10.5%	21.3%	41.4%	4.2%	11.1%	2.07				\$28.66	10.2%	\$714.17	6.85	\$5173.29	35437.88	59.29
UHNW U.S. Self-made	6491	35.9%	20.0%	26.6%	17.5%	9.9%	23.9%	18.71				\$32.41	8.4%	\$375.03	10.30	\$7796.43	80311.49	62.13
UHNW U.S. Inheritance/Self-made	1069	28.7%	13.6%	34.4%	23.0%	6.9%	14.4%	11.70				\$22.74	6.6%	\$411.48	7.96	\$4177.36	33265.99	63.91
UHNW U.S. Inheritance	1089	26.0%	13.3%	28.7%	31.9%	6.0%	13.0%	2.22				\$33.85	11.8%	\$735.50	7.12	\$4087.19	29093.93	62.96
UHNW Males	16430	32.5%	15.7%	23.5%	28.3%	5.9%	17.0%		10.5%	20.0%	69.6%	\$28.93	7.1%	\$567.33	8.43	\$7220.34	60864.58	60.96
UHNW Females	1772	24.3%	10.6%	21.0%	44.1%	3.5%	8.0%		47.0%	19.4%	33.7%	\$27.29	11.3%	\$655.66	7.59	\$6131.76	46554.57	58.68
UHNW U.S. Males	7885	34.7%	18.8%	28.0%	18.6%	9.3%	22.4%		9.5%	12.5%	78.1%	\$31.83	8.3%	\$410.56	9.70	\$6928.04	67224.17	62.53
UHNW U.S. Females	749	25.1%	13.9%	26.4%	34.4%	5.6%	10.3%		44.9%	11.2%	43.9%	\$30.00	13.2%	\$582.71	9.30	\$7278.87	67719.48	61.52
UHNW U.S. Males Self-made	6155	36.2%	20.1%	26.6%	17.1%	10.0%	24.3%					\$33.43	8.6%	\$382.48	10.21	\$7634.75	77980.41	62.36
UHNW U.S. Males Inheritance/Self-made	983	29.3%	13.3%	34.8%	22.3%	7.1%	14.5%					\$23.88	6.2%	\$414.69	7.99	\$4288.23	34256.33	64.07
UHNW U.S. Males Inheritance	747	29.2%	14.7%	30.4%	25.7%	7.0%	17.3%					\$28.59	7.8%	\$636.50	7.32	\$3974.12	29095.54	61.86
UHNW U.S. Females Self-made	329	32.2%	16.7%	26.4%	24.6%	7.6%	16.1%					\$8.30	2.1%	\$241.76	12.12	\$11058.13	134035.51	57.25
UHNW U.S. Females Inheritance/Self-made	84	21.4%	16.7%	29.8%	32.1%	4.8%	13.1%							\$381.29	7.76	\$2949.69	22893.15	61.96
UHNW U.S. Females Inheritance	336	19.0%	10.4%	25.6%	44.6%	3.9%	3.9%					\$43.65	18.9%	\$966.90	6.74	\$4398.58	29624.79	65.38
UHNW Males Self-made	11429	33.6%	17.2%	23.2%	26.0%	6.6%	18.6%					\$29.67	7.6%	\$510.73	8.91	\$7796.36	69481.83	61.32
UHNW Females Self-made	597	31.2%	14.9%	24.6%	29.3%	6.0%	13.1%					\$15.44	5.0%	\$288.37	9.63	\$8667.30	83427.15	56.25
<i>Billionaires</i>																		
Billionaires All	2324	32.9%	14.0%	25.7%	27.3%	4.9%	13.1%	7.12	17.7%	27.8%	54.4%	\$107.28	2.8%	\$3214.85	11.21	\$15894.38	178252.18	63.10
Billionaires U.S. Only	588	43.4%	12.9%	33.8%	9.9%	12.2%	19.6%	6.08	21.8%	14.8%	63.4%	\$144.24	3.5%	\$4042.18	15.78	\$21272.12	335742.55	66.11
Billionaires Self-made	1246	31.3%	16.9%	27.4%	24.3%	5.4%	13.2%	27.32				\$126.85	3.3%	\$3258.55	12.32	\$19897.04	245149.07	63.12
Billionaires Inheritance/Self-made	637	35.8%	11.3%	23.2%	29.5%	4.1%	14.4%	8.80				\$84.45	2.4%	\$2984.76	9.79	\$11039.65	108049.60	64.04
Billionaires Inheritance	406	33.0%	9.4%	24.4%	33.3%	4.7%	11.1%	1.35				\$65.02	1.7%	\$3441.72	9.92	\$10682.78	105930.13	61.54
Billionaires U.S. Self-made	373	43.7%	16.1%	31.6%	8.6%	13.4%	21.7%	18.63				\$179.47	4.0%	\$4069.71	17.49	\$26842.86	469604.93	65.97
Billionaires U.S. Inheritance/Self-made	87	46.0%	10.3%	36.8%	6.9%	13.8%	17.2%	0.09				\$68.80	3.5%	\$2677.01	13.43	\$11927.02	160204.92	68.99
Billionaires U.S. Inheritance	128	40.6%	5.5%	38.3%	15.6%	7.8%	14.8%	1.29				\$85.97	2.1%	\$4889.84	12.12	\$10493.46	127222.40	64.57
Billionaires Males	2007	34.5%	14.8%	26.0%	24.6%	5.3%	14.2%		11.6%	28.5%	59.9%	\$114.90	2.9%	\$3218.39	11.60	\$16708.91	193773.63	63.29
Billionaires Females	282	20.9%	8.5%	23.8%	46.8%	2.1%	6.0%		61.3%	23.0%	15.6%	\$51.26	2.0%	\$3189.61	8.24	\$9563.28	\$78837.79	61.61
Billionaires U.S. Males	505	45.5%	14.1%	32.9%	7.5%	13.3%	21.6%		14.3%	15.6%	70.1%	\$156.99	3.7%	\$4038.42	16.31	\$22601.95	368739.48	66.68
Billionaires U.S. Females	83	30.1%	6.0%	39.8%	24.1%	6.0%	7.2%		67.5%	9.6%	22.9%	\$67.43	2.6%	\$4065.06	12.32	\$12593.28	155096.14	62.67
Billionaires Males Self-made	1202	31.4%	17.0%	27.5%	24.2%	5.3%	13.1%					\$130.06	3.3%	\$3297.97	12.35	\$19826.97	244794.17	63.28
Billionaires Females Self-made	44	29.5%	15.9%	27.3%	27.3%	6.8%	13.6%							\$2181.82	11.61	\$21840.20	253560.30	58.81

Note: Monetary values are expressed in millions (m). I/SM = source of wealth was "Inherited/Self-made". Giving % NW = Giving sum as a % of net worth. KA = "known associates". Network power = #KA × net worth KA (m).

**Appendix B. Religion: by country, education and ability level, gender, source of wealth, giving, net worth, network power, and age**

	N	Elite school	Grad school	College	NR/NC	Harvard	MBA	M/F ratio	Inherited	I/SM	Self-made	Giving sum (m)	Giving % NW	Net worth (m)	# KA	Net worth KA (m)	Network power	Age
<i>All</i>																		
Buddhist	142	34.5%	7.0%	15.5%	43.0%	4.2%	9.9%	4.26	10.6%	25.4%	64.1%	\$45.99	5.4%	\$1639.99	8.78	\$12918.19	113441.28	59.82
Christian	1753	30.1%	17.3%	29.7%	22.8%	6.3%	18.9%	9.01	20.3%	18.9%	60.8%	\$30.40	6.8%	\$553.35	8.52	\$6238.88	53184.20	62.74
Christian (Catholic)	958	33.1%	15.8%	28.7%	22.3%	6.6%	19.2%	9.52	15.8%	21.8%	62.4%	\$13.99	4.2%	\$617.27	9.77	\$7160.57	69949.35	63.48
Christian (Episcopalian)	91	50.5%	9.9%	29.7%	8.8%	17.6%	24.2%	5.50	25.3%	15.4%	59.3%	\$40.74	10.8%	\$405.48	12.28	\$9502.16	116659.01	64.09
Christian (Evangelical)	64	39.1%	15.6%	20.3%	25.0%	9.4%	18.8%	11.80	18.8%	20.3%	60.9%			\$713.20	10.71	\$12859.03	137775.29	63.51
Christian (Methodist)	73	20.5%	19.2%	37.0%	21.9%	8.2%	23.3%	7.11	27.4%	16.4%	56.2%			\$663.77	7.91	\$6728.01	53230.46	66.82
Christian (Orthodox)	141	21.3%	29.8%	27.7%	21.3%	1.4%	7.1%	6.83	9.9%	29.8%	60.3%			\$1225.89	9.80	\$13785.95	135080.05	58.12
Christian (Presbyterian)	95	41.1%	15.8%	26.3%	16.8%	8.4%	21.1%	6.92	33.7%	21.1%	45.3%	\$37.71	2.8%	\$738.64	9.43	\$4192.60	39543.80	64.32
Christian (Protestant)	105	32.4%	17.1%	28.6%	21.9%	7.6%	20.0%	6.00	31.4%	18.1%	50.5%			\$381.50	9.14	\$9967.64	91117.24	61.65
Hindu	401	32.7%	17.0%	21.2%	29.2%	4.0%	17.2%	12.83	23.7%	22.9%	53.4%	\$38.77	10.3%	\$602.57	9.25	\$9606.96	88871.25	55.43
Jain	43	32.6%	14.0%	25.6%	27.9%	2.3%	9.3%	20.50	32.6%	18.6%	48.8%			\$333.84	6.06	\$10487.94	63526.97	61.91
Jewish	1690	42.9%	14.1%	20.8%	22.1%	9.5%	15.8%	9.53	15.6%	17.9%	66.6%	\$35.47	12.2%	\$805.40	11.18	\$10507.08	117425.99	64.33
Mormon	25	36.0%	24.0%	28.0%	12.0%	20.0%	28.0%	24.00	16.0%	4.0%	80.0%			\$420.40				66.64
Muslim	1302	22.9%	12.6%	22.0%	42.5%	1.8%	7.1%	16.12	10.0%	44.3%	45.7%	\$42.05	2.2%	\$678.95	7.82	\$6792.62	53150.02	57.50
Sikh	42	19.0%	16.7%	28.6%	35.7%	0%	19.0%	41.00	4.8%	21.4%	73.8%			\$252.01	8.13	\$7472.74	60746.16	55.44
Unknown	10365	32.1%	15.8%	23.0%	29.0%	5.5%	17.3%	9.73	11.1%	17.3%	71.6%	\$16.35	6.4%	\$514.37	7.68	\$6362.52	48881.37	60.06
<i>U.S.</i>																		
Christian	1196	27.5%	19.6%	32.4%	20.3%	7.6%	21.6%	9.58	20.4%	15.6%	64.0%	\$30.44	7.5%	\$425.33	9.13	\$6269.23	57260.67	63.80
Christian (Catholic)	567	29.8%	20.6%	34.7%	14.8%	7.9%	24.7%	12.48	12.9%	14.8%	72.3%	\$14.52	4.5%	\$405.36	10.96	\$7243.69	79422.37	64.04
Christian (Episcopalian)	89	49.4%	10.1%	30.3%	9.0%	16.9%	23.6%	5.36	24.7%	14.6%	60.7%	\$40.74	10.8%	\$413.19	12.49	\$9732.15	121591.51	64.36
Christian (Evangelical)	41	39.0%	17.1%	24.4%	19.5%	12.2%	19.5%	12.67	12.2%	17.1%	70.7%			\$365.00	11.14	\$11112.01	123819.59	64.66
Christian (Methodist)	61	21.3%	23.0%	37.7%	18.0%	9.8%	27.9%	7.71	23.0%	18.0%	59.0%			\$643.69	8.53	\$7737.93	66039.22	67.57
Christian (Orthodox)	25	16.0%	20.0%	40.0%	24.0%	4.0%	8.0%	11.50	8.0%	40.0%	52.0%			\$761.40				64.60
Christian (Presbyterian)	90	43.3%	15.6%	26.7%	14.4%	8.9%	21.1%	7.18	32.2%	21.1%	46.7%	\$37.71	2.8%	\$742.34	9.83	\$4409.86	43354.77	64.40
Christian (Protestant)	63	34.9%	20.6%	31.7%	12.7%	12.7%	25.4%	20.00	20.6%	19.0%	60.3%			\$233.81	7.69	\$9287.85	71420.35	63.60
Hindu	55	56.4%	25.5%	10.9%	7.3%	7.3%	36.4%	26.50	3.6%	1.8%	94.5%			\$283.00	11.40	\$12695.44	144675.09	55.62
Jewish	1278	44.1%	15.4%	23.1%	17.4%	11.3%	17.8%	9.12	16.7%	16.6%	66.7%	\$37.38	13.3%	\$770.87	11.97	\$10287.52	123178.41	64.49
Muslim	51	41.2%	25.5%	15.7%	17.6%	2.0%	15.7%	50.00	3.9%	5.9%	90.2%			\$311.63	8.68	\$9458.83	82130.32	55.92
Unknown	4680	33.4%	19.1%	28.0%	19.4%	9.0%	22.6%	11.50	9.1%	10.1%	80.8%	\$17.34	7.6%	\$308.87	9.00	\$5784.11	52035.45	61.46
<i>Non-U.S.</i>																		
Buddhist	131	32.8%	6.1%	16.0%	45.0%	3.1%	9.9%	4.24	9.2%	26.7%	64.1%	\$43.63	5.9%	\$1703.46	8.20	\$12222.03	100243.09	59.63
Christian	557	35.7%	12.2%	23.7%	28.2%	3.6%	13.1%	7.98	19.9%	26.2%	53.9%	\$30.19	4.0%	\$828.23	7.25	\$6175.17	44750.62	60.12
Christian (Catholic)	391	37.9%	8.7%	19.9%	33.2%	4.6%	11.3%	6.98	19.9%	32.0%	48.1%	\$11.42	2.4%	\$924.55	7.98	\$7036.39	56166.20	62.60
Christian (Orthodox)	116	22.4%	31.9%	25.0%	20.7%	0.9%	6.9%	6.25	10.3%	27.6%	62.1%			\$1325.99	10.05	\$15548.80	156265.44	56.59
Christian (Protestant)	42	28.6%	11.9%	23.8%	35.7%	0%	11.9%	2.50	47.6%	16.7%	35.7%			\$603.02	11.62	\$11127.29	129272.91	58.49
Hindu	346	28.9%	15.6%	22.8%	32.7%	3.5%	14.2%	11.81	26.9%	26.3%	46.8%	\$51.34	13.5%	\$653.37	8.91	\$9117.70	81246.83	55.40
Jain	36	33.3%	8.3%	25.0%	33.3%	0%	5.6%	35.00	38.9%	22.2%	38.9%			\$350.42	5.00	\$5427.00	27135.00	63.00
Jewish	412	39.3%	10.0%	13.8%	36.9%	3.6%	9.7%	11.06	12.1%	21.8%	62.0%	\$18.48	3.0%	\$912.49	8.59	\$11218.50	96380.36	63.79
Muslim	1251	22.1%	12.1%	22.2%	43.6%	1.8%	6.7%	15.67	10.2%	45.9%	43.9%	\$45.84	0.9%	\$693.93	7.79	\$6687.20	52098.28	57.61
Sikh	33	18.2%	15.2%	24.2%	42.4%	0%	21.2%	32.00	6.1%	27.3%	66.7%			\$276.80				55.74
Unknown	5685	31.0%	13.1%	18.9%	36.9%	2.6%	12.9%	8.60	12.7%	23.2%	64.1%	\$14.68	4.5%	\$683.54	6.55	\$6862.19	44933.80	58.74

Note: Monetary values are expressed in millions (m). I/SM = source of wealth was "Inherited/Self-made". Giving % NW = Giving sum as a % of net worth. KA = "known associates". Network power = #KA × net worth KA (m).

**Appendix C. Ethnicity: by country, education and ability level, gender, source of wealth, giving, net worth, network power, and age**

	N	Elite school	Grad school	College	NR/NC	Harvard	MBA	M/F ratio	Inherited	I/SM	Self-made	Giving sum (m)	Giving % NW	Net worth (m)	# KA	Net worth KA (m)	Network power	Age	
<i>All</i>																			
Asian (Other)	640	35.8%	14.7%	21.6%	28.0%	3.4%	15.8%	7.10	13.0%	26.1%	60.9%	\$5.89	1.6%	\$630.46	5.67	\$5795.06	32879.60	58.00	
Black	277	32.1%	19.9%	25.6%	22.4%	6.9%	19.5%	6.91	4.0%	6.5%	89.5%	\$13.65	3.6%	\$370.48	9.77	\$7549.32	73734.70	55.72	
Caucasian	12128	32.8%	16.3%	24.7%	26.2%	7.0%	17.4%	9.93	14.1%	16.7%	69.2%	\$31.08	8.5%	\$565.82	8.84	\$6896.89	60973.91	61.89	
Chinese	1619	32.6%	13.3%	22.6%	31.3%	2.8%	15.1%	6.67	11.4%	20.9%	67.7%	\$23.05	6.1%	\$775.32	7.28	\$10133.12	73726.14	57.91	
Hispanic	515	34.0%	13.4%	20.8%	31.7%	4.3%	18.8%	7.83	17.5%	29.7%	52.8%	\$12.58	2.5%	\$729.44	7.11	\$8290.81	58910.36	60.74	
Middle Eastern	1429	26.2%	12.4%	20.8%	40.5%	1.9%	8.1%	14.86	8.8%	43.7%	47.4%	\$10.74	2.4%	\$631.46	7.88	\$6737.07	53088.14	58.36	
South Asian	914	31.4%	16.0%	19.5%	33.0%	3.2%	17.6%	12.63	18.6%	22.0%	59.4%	\$52.14	6.1%	\$474.23	8.14	\$7638.76	62169.01	55.81	
<i>U.S.</i>																			
Asian (Other)	87	34.5%	18.4%	18.4%	28.7%	11.5%	12.6%	7.70	5.7%	11.5%	82.8%			\$297.45	6.90	\$4617.61	31840.85	56.46	
Black	117	34.2%	19.7%	25.6%	20.5%	9.4%	28.2%	6.31	0.9%	4.3%	94.9%			\$201.00	14.94	\$12104.51	180901.40	54.23	
Caucasian	7606	34.2%	18.6%	29.0%	18.3%	9.3%	21.6%	10.91	13.2%	12.7%	74.1%	\$33.82	9.3%	\$447.96	9.81	\$6984.16	68503.09	63.00	
Chinese	68	48.5%	13.2%	26.5%	11.8%	10.3%	17.6%	5.18	4.4%	16.2%	79.4%			\$492.21	9.77	\$9925.74	96993.60	54.96	
Hispanic	116	26.7%	16.4%	28.4%	28.4%	9.5%	23.3%	8.67	7.8%	11.2%	81.0%			\$440.63	8.39	\$5262.66	44145.03	58.22	
Middle Eastern	125	32.8%	21.6%	21.6%	24.0%	4.8%	12.8%	14.50	8.0%	19.2%	72.8%	\$12.50	7.7%	\$451.19	8.82	\$7694.59	67845.54	58.61	
South Asian	164	51.8%	27.4%	9.8%	11.0%	5.5%	38.4%	26.33	2.4%	2.4%	95.1%	\$4.09	1.3%	\$225.38	9.53	\$9436.16	89971.16	54.69	
<i>Non U.S.</i>																			
Asian (Other)	553	36.0%	14.1%	22.1%	27.8%	2.2%	16.3%	7.01	14.1%	28.4%	57.5%	\$6.36	1.8%	\$682.85	5.47	\$5989.85	32774.09	58.27	
Black	160	30.6%	20.0%	25.6%	23.8%	5.0%	13.1%	7.42	6.3%	8.1%	85.6%			\$494.41	5.74	\$4002.77	22958.75	56.96	
Caucasian	4522	30.6%	12.4%	17.4%	39.5%	3.0%	10.4%	8.61	15.6%	23.6%	60.8%	\$17.43	4.6%	\$764.05	7.12	\$6741.91	48018.81	59.81	
Chinese	1551	31.9%	13.3%	22.4%	32.2%	2.5%	15.0%	6.75	11.7%	21.1%	67.2%	\$21.68	6.3%	\$787.73	7.17	\$10142.27	72675.78	58.05	
Hispanic	399	36.1%	12.5%	18.5%	32.6%	2.8%	17.5%	7.61	20.3%	35.1%	44.6%			\$813.40	6.71	\$9227.44	61904.20	61.68	
Middle Eastern	1304	25.6%	11.5%	20.7%	42.1%	1.6%	7.7%	14.89	8.9%	46.1%	45.0%	\$10.08	0.4%	\$648.74	7.79	\$6644.09	51750.73	58.32	
South Asian	750	26.9%	13.5%	21.6%	37.9%	2.7%	13.1%	11.28	22.1%	26.3%	51.6%	\$75.89	8.5%	\$528.64	7.80	\$7206.66	56233.63	56.11	

Note: Monetary values are expressed in millions (m). I/SM = source of wealth was "Inherited/Self-made". Giving % NW = Giving sum as a % of net worth. KA = "known associates". Network power = #KA × net worth KA (m).

## Appendix D.

Appendix D1. Political affiliation: by education and ability level, gender, source of wealth, giving, net worth, network power, and age

	N	Elite school	Grad school	College	NR/NC	Harvard	MBA	M/F ratio	Inherited	I/SM	Self-made	Giving sum (m)	Giving % NW	Net worth (m)	# KA	Net worth KA (m)	Network power	Age
United States (U.S.)	8649	33.8%	18.3%	27.8%	20.0%	9.0%	21.4%	10.53	12.6%	12.4%	75.0%	\$31.60	8.7%	\$424.92	9.66	\$6948.36	67124.89	62.45
U.S. Democratic Party	1539	46.2%	19.0%	22.9%	11.8%	14.1%	21.8%	7.05	13.1%	12.5%	74.3%	\$35.22	8.9%	\$466.84	11.14	\$10624.98	118375.54	62.04
U.S. Republican Party	2948	30.3%	20.6%	32.8%	16.2%	7.5%	22.4%	14.26	15.3%	12.7%	72.0%	\$36.07	6.1%	\$458.70	9.29	\$5466.60	50797.36	64.63
U.S. Bipartisan	1154	42.0%	18.1%	27.9%	12.0%	11.7%	26.7%	13.78	12.1%	11.4%	76.4%	\$26.44	5.1%	\$666.33	11.96	\$9139.09	109306.59	64.12
U.S. Nonpartisan	373	31.4%	17.7%	29.0%	22.0%	6.4%	20.4%	9.33	9.9%	8.0%	82.0%	\$12.78	6.2%	\$202.00	7.04	\$3013.14	21217.93	58.23
Communist Party of China (CPC)	124	23.4%	22.6%	30.6%	23.4%	0%	20.2%	23.80	0.8%	4.0%	95.2%			\$1174.31	7.53	\$14503.07	109255.95	57.13
Conservative Party (U.K.)	88	33.0%	5.7%	20.5%	40.9%	3.4%	4.5%	21.00	8.0%	12.5%	79.5%			\$681.25	7.94	\$3640.57	28907.87	61.30
United Russia Party	38	18.4%	44.7%	36.8%	0%	0%	5.3%	All Male	0%	0%	100.0%			\$2066.71	15.29	\$32808.42	501623.49	53.37

Note: Monetary values are expressed in millions (m). I/SM = source of wealth was "Inherited/self-made". Giving % NW = giving sum as a % of net worth. KA = "known associates". Network power = #KA × net worth KA (m).

Appendix D2. Political affiliation in the U.S. by ethnicity

	N	Percent total sample	Bipartisan	Democratic party	Independent party	Nonpartisan	Republican party	Unknown
Asian (Other)	87	1.0%	8.0%	10.3%		8.0%	12.6%	60.9%
Black	117	1.4%	8.5%	47.9%		2.6%	3.4%	37.6%
Caucasian	7606	87.9%	13.9%	17.7%	0.1%	4.1%	36.2%	27.3%
Chinese	68	0.8%	14.7%	13.2%	1.5%	5.9%	16.2%	48.5%
Hispanic	116	1.3%	10.3%	12.1%		3.4%	25.9%	48.3%
Middle Eastern	125	1.4%	16.0%	13.6%		3.2%	18.4%	48.8%
South Asian	164	1.9%	9.8%	35.4%		6.1%	12.8%	35.9%



**Appendix E. Relationship status: by country, education and ability level, gender, source of wealth, giving, net worth, network power, and age**

	N	Elite school	Grad school	College	NR/NC	Harvard	MBA	M/F ratio	Inherited	I/SM	Self-made	Giving sum (m)	Giving % NW	Net worth (m)	# KA	Net worth KA (m)	Network power	Age
<i>All</i>																		
Divorced	576	30.4%	12.0%	29.0%	29.0%	6.0%	11.0%	3.32	17.7%	16.3%	66.0%	\$48.39	9.9%	\$1259.37	10.03	\$11178.50	112124.45	60.86
Married	13120	34.2%	17.0%	25.0%	24.0%	7.0%	18.0%	11.98	12.3%	18.2%	69.5%	\$27.21	6.9%	\$598.01	8.92	\$7465.95	66560.76	61.51
Separated	56	33.9%	13.0%	23.0%	30.0%	4.0%	11.0%	3.31	16.1%	14.3%	69.6%			\$1543.84	11.76	\$11498.79	135217.66	55.93
Single	379	32.5%	9.0%	26.0%	33.0%	5.0%	10.0%	3.08	25.1%	17.4%	57.5%	\$73.53	16.6%	\$679.53	9.03	\$11290.70	101976.33	48.61
Unknown	3684	23.9%	11.0%	17.0%	48.0%	3.0%	11.0%	11.50	15.6%	26.3%	58.1%	\$12.58	5.6%	\$290.23	5.50	\$4062.07	22325.95	56.96
Widowed	387	16.5%	9.0%	21.0%	53.0%	3.0%	5.0%	0.70	43.7%	21.7%	34.6%	\$58.42	20.2%	\$1220.39	7.66	\$8313.30	63698.92	75.48
<i>U.S.</i>																		
Divorced	282	30.9%	13.0%	33.0%	23.0%	8.0%	13.0%	3.09	18.1%	11.3%	70.6%	\$52.37	10.1%	\$1319.25	11.11	\$11748.52	130570.93	63.85
Married	7255	35.3%	19.0%	28.0%	17.0%	10.0%	23.0%	14.66	11.4%	12.1%	76.5%	\$28.85	7.9%	\$397.66	9.89	\$6777.93	67028.73	62.64
Separated	20																	
Single	173	30.1%	8.0%	32.0%	30.0%	8.0%	13.0%	2.60	23.1%	11.6%	65.3%	\$97.94	20.6%	\$597.77	9.70	\$14700.61	142532.03	50.14
Unknown	726	24.7%	16.0%	23.0%	37.0%	6.0%	15.0%	9.38	12.7%	13.6%	73.7%	\$15.35	7.3%	\$146.16	6.27	\$2986.01	18736.59	59.15
Widowed	186	17.7%	11.0%	29.0%	41.0%	5.0%	7.0%	0.94	41.9%	19.9%	38.2%	\$62.99	25.3%	\$875.38	8.41	\$9853.68	82822.44	76.41
<i>Non-U.S.</i>																		
Divorced	294	29.9%	12.0%	24.0%	35.0%	3.0%	9.0%	3.58	17.3%	21.1%	61.6%	\$39.81	9.4%	\$1201.94	8.96	\$10613.08	95047.01	57.88
Married	5865	32.9%	14.0%	21.0%	32.0%	3.0%	13.0%	9.72	13.4%	25.8%	60.8%	\$22.71	4.2%	\$845.85	7.68	\$8341.02	64029.16	59.96
Separated	36	30.6%	14.0%	19.0%	36.0%	6.0%	8.0%	3.00	19.4%	19.4%	61.1%			\$1155.83	8.79	\$6184.69	54388.88	56.14
Single	206	34.5%	10.0%	21.0%	35.0%	2.0%	8.0%	3.58	26.7%	22.3%	51.0%			\$748.19	8.45	\$8307.03	70203.47	47.27
Unknown	2958	23.7%	10.0%	15.0%	51.0%	2.0%	10.0%	12.16	16.3%	29.4%	54.3%	\$11.15	4.8%	\$325.59	5.30	\$4329.81	22958.69	56.26
Widowed	201	15.4%	7.0%	14.0%	64.0%	1.0%	3.0%	0.52	45.3%	23.4%	31.3%	\$46.12	6.7%	\$1539.65	6.91	\$6762.78	46761.04	74.43

Note: Monetary values are expressed in millions (m). I/SM = source of wealth was "Inherited/self-made". Giving % NW = giving sum as a % of net worth. KA = "known associates". Network power = #KA × net worth KA (m).

## Appendix F. Country: by education and ability level, gender, source of wealth, giving, net worth, network power, and age

	N	Elite school	Grad school	College	NR/NC	Harvard	MBA	M/F ratio	Inherited	I/SM	Self-made	Giving sum (m)	Giving % NW	Net worth (m)	# KA	Net worth KA (m)	Network power	Age
Ukraine	56	5.4%	50.0%	33.9%	10.7%	0%	1.8%	55.00	3.6%	7.1%	89.3%			\$926.70	8.54	\$9751.10	83274.39	49.44
Qatar	146	7.5%	7.5%	25.3%	59.6%	0.7%	0%	23.33	8.9%	56.2%	34.9%			\$269.15	7.86	\$3175.93	24976.82	53.89
Austria	123	11.4%	4.9%	5.7%	78.0%	1.6%	4.9%	2.05	49.6%	32.5%	17.9%			\$481.38	4.79	\$2851.94	13661.69	55.95
Vietnam	26	11.5%	11.5%	38.5%	38.5%	0%	7.7%	2.71	0%	7.7%	92.3%			\$364.62				49.39
Poland	25	12.0%	20.0%	16.0%	52.0%	0%	0%	11.50	0%	4.0%	96.0%			\$511.20				56.70
United Arab Emirates	446	15.7%	12.6%	25.8%	46.0%	1.6%	6.3%	9.62	8.1%	38.3%	53.6%	\$10.20	0.7%	\$559.38	8.08	\$7764.18	62744.66	54.60
Germany	429	17.0%	8.9%	9.3%	64.8%	1.6%	6.1%	4.73	30.8%	41.3%	28.0%			\$1152.51	5.76	\$5795.90	33394.40	62.91
Argentina	39	17.9%	5.1%	7.7%	69.2%	2.6%	7.7%	18.00	17.9%	38.5%	43.6%			\$580.15	4.28	\$4889.24	20925.95	67.65
Russia	371	18.9%	39.4%	30.5%	11.3%	0%	6.7%	32.64	1.3%	1.6%	97.0%			\$1304.93	10.36	\$21074.97	218319.72	51.53
Luxembourg	59	20.3%	22.0%	27.1%	30.5%	1.7%	10.2%	7.43	16.9%	32.2%	50.8%			\$1150.34	7.92	\$7536.43	59676.21	56.24
Indonesia	210	21.0%	16.7%	21.9%	40.5%	0.5%	11.0%	9.50	21.9%	25.7%	52.4%			\$479.55	5.95	\$4634.43	27556.04	59.23
Kazakhstan	33	21.2%	42.4%	27.3%	9.1%	0%	15.2%	5.60	3.0%	12.1%	84.8%			\$624.70	5.10	\$5118.06	26085.62	48.47
Nigeria	80	21.3%	20.0%	30.0%	28.7%	7.5%	8.8%	19.00	10.0%	20.0%	70.0%			\$703.59	4.09	\$3714.30	15205.40	60.22
Italy	195	22.1%	13.8%	21.5%	42.6%	1.0%	5.1%	8.75	20.5%	38.5%	41.0%			\$895.15	10.09	\$7710.09	77789.35	61.09
Peru	27	22.2%	18.5%	25.9%	33.3%	0%	11.1%	8.00	14.8%	44.4%	40.7%			\$650.00				63.28
Norway	40	22.5%	15.0%	22.5%	40.0%	7.5%	25.0%	9.00	20.0%	37.5%	42.5%			\$1036.28	4.69	\$3732.03	17493.90	61.31
China	545	23.1%	20.6%	27.0%	29.4%	1.7%	20.9%	9.28	4.4%	5.0%	90.6%	\$25.12	3.3%	\$1024.32	7.16	\$13928.51	99661.41	52.41
France	186	23.1%	22.0%	16.1%	38.2%	4.3%	14.5%	6.40	18.3%	32.3%	49.5%			\$1315.86	8.27	\$8029.01	66379.96	62.81
Finland	33	24.2%	18.2%	6.1%	51.5%	0%	3.0%	10.00	9.1%	45.5%	45.5%			\$540.15	5.04	\$2291.80	11550.67	56.78
Turkey	189	24.3%	6.3%	12.7%	56.6%	1.6%	7.4%	7.17	19.0%	27.0%	54.0%			\$562.32	7.15	\$5090.12	36375.75	59.67
Kuwait	82	26.8%	4.9%	19.5%	48.8%	2.4%	3.7%	10.71	11.0%	57.3%	31.7%			\$528.29	7.41	\$4963.17	36769.39	61.95
Spain	177	27.1%	9.6%	9.0%	54.2%	0.6%	14.1%	6.33	14.1%	38.4%	47.5%			\$970.93	7.57	\$5776.12	43717.33	61.94
Republic of Ireland	33	27.3%	6.1%	18.2%	45.5%	3.0%	6.1%	10.00	18.2%	12.1%	69.7%			\$358.64	5.79	\$6891.96	39874.94	62.11
Denmark	39	28.2%	7.7%	10.3%	53.8%	0%	2.6%	5.50	23.1%	33.3%	43.6%			\$839.23	4.85	\$2194.85	10641.69	56.81
Netherlands	123	29.3%	4.9%	4.9%	61.0%	1.6%	5.7%	7.79	19.5%	28.5%	52.0%			\$737.72	4.78	\$3424.55	16353.98	59.90
United Kingdom	1091	29.3%	8.5%	20.2%	42.0%	3.6%	10.1%	10.60	12.5%	13.3%	74.2%	\$32.67	12.3%	\$397.25	6.93	\$4894.22	33926.74	57.80
Kenya	27	29.6%	14.8%	22.2%	33.3%	0%	7.4%	8.00	3.7%	48.1%	48.1%			\$218.70				65.48
Japan	67	29.9%	6.0%	32.8%	31.3%	1.5%	7.5%	12.40	17.9%	25.4%	56.7%			\$1578.21	4.37	\$12096.85	52888.55	64.90
Belgium	59	30.5%	13.6%	3.4%	52.5%	5.1%	18.6%	28.50	23.7%	44.1%	32.2%			\$521.78	6.25	\$5706.67	35694.64	58.90
Bahrain	26	30.8%	30.8%	11.5%	26.9%	3.8%	19.2%	25.00	11.5%	42.3%	46.2%			\$418.27				63.14
Malaysia	115	31.3%	10.4%	24.3%	33.9%	4.3%	11.3%	27.75	6.1%	24.3%	69.6%			\$509.26	5.84	\$4499.37	26254.59	61.53
Saudi Arabia	280	31.8%	12.1%	20.4%	35.7%	1.4%	10.4%	22.25	10.0%	55.0%	35.0%	\$6.88	0.4%	\$848.85	8.58	\$8070.85	69225.61	60.31
United States	8649	33.8%	18.3%	27.8%	20.0%	9.0%	21.4%	10.53	12.6%	12.4%	75.0%	\$31.60	8.7%	\$424.92	9.66	\$6948.36	67124.89	62.45
Brazil	169	34.9%	9.5%	19.5%	36.1%	3.6%	13.0%	10.27	24.3%	24.9%	50.9%			\$1232.93	6.04	\$8276.02	49951.70	61.77
Thailand	93	35.5%	16.1%	24.7%	23.7%	2.2%	25.8%	4.81	15.1%	50.5%	34.4%			\$830.67	4.18	\$6479.93	27080.29	61.88
India	393	35.6%	15.0%	19.8%	29.5%	3.1%	15.5%	10.53	31.6%	22.6%	45.8%	\$96.57	4.0%	\$620.08	9.45	\$9717.55	91789.91	56.05
Greece	86	37.2%	8.1%	16.3%	38.4%	1.2%	7.0%	4.73	15.1%	54.7%	30.2%			\$382.79	11.18	\$4947.64	55293.29	59.50
Switzerland	421	37.3%	8.6%	11.4%	42.5%	3.1%	12.6%	4.75	24.7%	31.4%	43.9%	\$11.76	1.8%	\$810.09	7.23	\$5495.66	39746.52	60.98
Hong Kong	425	39.1%	9.9%	17.6%	32.9%	5.9%	17.4%	4.97	16.7%	28.5%	54.8%	\$32.31	7.6%	\$970.68	8.36	\$13322.71	111375.03	60.14
Singapore	486	39.3%	7.6%	18.7%	34.0%	2.9%	10.3%	5.94	14.4%	27.0%	58.6%	\$13.89	7.5%	\$253.83	6.86	\$3605.34	24726.31	59.47
Mexico	119	39.5%	8.4%	22.7%	28.6%	2.5%	18.5%	9.82	17.6%	40.3%	42.0%			\$1448.80	9.81	\$19006.95	186516.83	62.73
Colombia	43	39.5%	20.9%	14.0%	25.6%	9.3%	25.6%	13.33	11.6%	37.2%	51.2%			\$887.21	5.55	\$5219.39	28944.15	64.87
Lebanon	106	40.6%	13.2%	19.8%	26.4%	0%	13.2%	14.14	6.6%	49.1%	44.3%			\$353.80	7.76	\$3601.12	27927.85	59.97
Canada	321	41.4%	7.5%	23.7%	27.4%	4.7%	14.3%	25.58	12.1%	17.1%	70.7%	\$23.43	4.5%	\$479.17	6.72	\$3213.80	21600.58	64.20
Egypt	37	43.2%	18.9%	18.9%	18.9%	0%	13.5%	35.00	8.1%	48.6%	43.2%			\$1104.19				58.52
Australia	426	43.2%	3.1%	12.4%	41.1%	2.6%	10.8%	10.18	11.3%	13.4%	75.4%	\$6.64	2.7%	\$319.35	4.43	\$2742.42	12140.01	61.99
Philippines	56	44.6%	7.1%	25.0%	23.2%	10.7%	14.3%	7.00	16.1%	30.4%	53.6%			\$629.53	6.22	\$5337.50	33223.20	64.79
Israel	72	47.2%	6.9%	11.1%	34.7%	6.9%	12.5%	6.78	11.1%	31.9%	56.9%			\$631.25	6.08	\$8136.36	49434.57	64.75
Sweden	48	47.9%	12.5%	16.7%	22.9%	6.3%	18.8%	3.36	43.8%	25.0%	31.3%			\$1758.65	7.17	\$11154.95	79943.83	58.85
Taiwan	86	50.0%	14.0%	14.0%	22.1%	1.2%	17.4%	13.33	11.6%	31.4%	57.0%			\$823.50	4.95	\$5303.40	26241.51	65.36
South Africa	119	52.1%	7.6%	16.8%	23.5%	0.8%	9.2%	5.61	5.9%	16.8%	77.3%			\$429.01	5.97	\$3212.05	19186.28	58.57
Chile	49	61.2%	2.0%	12.2%	24.5%	0%	6.1%	3.08	26.5%	40.8%	32.7%			\$1062.86	3.80	\$3727.98	14184.49	65.65
South Korea	51	78.4%	2.0%	7.8%	11.8%	5.9%	29.4%	6.29	19.6%	47.1%	33.3%			\$1223.14	4.34	\$7943.14	34495.93	58.04

Note: Monetary values are expressed in millions (m). I/SM = source of wealth was "Inherited/self-made". Giving % NW = giving sum as a % of net worth. KA = "known associates". Network power = #KA × net worth KA (m).

**Appendix G. Industry: by education and ability level, gender, source of wealth, giving, net worth, network power, and age**

	N	Elite school	Grad School	College	NR/NC	Harvard	MBA	M/F Ratio	Inherited	I/SM	Self-made	Giving Sum (m)	Giving % NW	Net Worth (m)	# KA	Net Worth KA (m)	Network Power	Age
Real Estate Management & Development	146	15.8%	19.2%	19.9%	45.2%	2.7%	13.7%	28.20	6.2%	21.9%	71.9%			\$556.82	6.39	\$4870.68	31110.89	61.74
Automobiles	316	17.7%	13.3%	24.4%	44.3%	1.9%	10.4%	16.56	17.1%	26.9%	56.0%	\$6.10	2.7%	\$470.61	7.09	\$6855.51	48588.40	63.23
Leisure Equipment & Products	151	18.5%	12.6%	30.5%	38.4%	4.6%	8.6%	5.57	15.9%	21.2%	62.9%	\$32.73	6.8%	\$531.92	7.29	\$4135.01	30149.77	61.46
Metals & Mining	274	20.8%	21.5%	27.0%	30.7%	1.5%	11.7%	21.75	11.3%	24.8%	63.9%	\$54.04	4.4%	\$610.81	6.81	\$6987.06	47564.47	59.12
Sports & Entertainment	325	20.9%	8.0%	29.2%	41.8%	3.4%	4.9%	6.07	11.7%	18.5%	69.8%	\$11.33	3.5%	\$485.55	9.17	\$7212.01	66146.51	54.59
Hotels, Restaurants & Leisure	393	20.9%	14.2%	28.8%	36.1%	2.3%	10.7%	7.52	15.8%	21.9%	62.3%	\$17.12	3.5%	\$475.41	7.17	\$6297.96	45142.18	62.47
Textiles, Apparel & Luxury Goods	539	21.0%	9.1%	25.6%	44.2%	2.0%	10.0%	4.49	15.8%	25.0%	59.2%	\$31.03	3.9%	\$1060.34	8.55	\$7605.97	65020.93	60.96
Retail	325	21.2%	11.4%	26.5%	40.9%	2.2%	9.5%	7.76	15.4%	30.5%	54.2%	\$89.72	38.2%	\$930.06	8.17	\$6942.22	56709.04	59.70
Food Products	646	21.5%	10.2%	27.6%	40.7%	2.3%	11.3%	8.91	18.9%	31.6%	49.5%	\$42.75	12.9%	\$736.12	6.00	\$3560.30	21368.94	62.56
Oil, Gas & Consumable Fuels	500	23.2%	24.2%	27.6%	25.0%	2.8%	16.8%	18.23	10.0%	19.0%	71.0%	\$23.33	4.6%	\$646.65	8.12	\$6233.19	50637.42	60.55
Commercial Airlines	58	24.1%	15.5%	20.7%	39.7%	3.4%	12.1%	7.14	12.1%	12.1%	75.9%			\$349.05	6.95	\$928.83	20355.33	57.53
Insurance	126	24.6%	22.2%	26.2%	27.0%	4.8%	15.9%	30.50	7.9%	15.9%	76.2%			\$287.90	9.62	\$5193.62	49957.71	61.71
Energy	97	24.7%	17.5%	30.9%	26.8%	2.1%	12.4%	31.00	8.2%	13.4%	78.4%			\$454.99	8.47	\$3023.77	25622.47	59.81
Manufacturing	831	25.4%	15.5%	21.3%	37.7%	2.9%	13.8%	11.75	15.8%	30.0%	54.3%	\$15.79	3.0%	\$560.85	6.98	\$5520.66	38534.03	62.38
Construction & Engineering	652	25.5%	13.3%	22.9%	38.3%	1.5%	10.0%	12.87	14.3%	27.1%	58.6%	\$15.00	3.7%	\$511.11	6.52	\$4851.38	31649.01	62.03
Aerospace & Defense	177	26.0%	14.7%	31.1%	28.2%	4.0%	13.0%	13.75	10.2%	17.5%	72.3%			\$250.90	8.85	\$5345.96	47327.23	59.35
Road & Rail	46	26.1%	10.9%	28.3%	34.8%	8.7%	21.7%	6.67	15.2%	21.7%	63.0%			\$472.07	7.72	\$6225.95	48051.55	59.58
Real Estate	1002	26.2%	15.4%	26.3%	31.9%	4.3%	12.8%	12.14	11.4%	22.3%	66.4%	\$14.59	3.4%	\$593.78	6.98	\$5869.63	40966.64	61.78
Utilities (Electric, Water, Gas)	133	27.1%	19.5%	28.6%	24.8%	2.3%	16.5%	18.00	8.3%	18.0%	73.7%			\$518.80	8.07	\$9219.95	74412.35	61.97
Industrial Conglomerates	1091	27.6%	13.2%	24.5%	34.7%	3.3%	13.7%	9.91	17.2%	39.1%	43.6%	\$40.00	1.4%	\$1139.77	8.73	\$9660.56	84300.05	61.11
Health Care Providers & Services	433	27.7%	24.7%	23.8%	23.6%	4.8%	16.2%	9.05	8.8%	13.4%	77.8%	\$20.47	3.1%	\$482.86	7.17	\$3128.00	22417.33	61.82
Beverages	240	27.9%	21.3%	22.9%	27.9%	2.9%	20.0%	5.86	22.5%	29.6%	47.9%	\$60.55	19.9%	\$767.62	8.22	\$6375.52	52417.59	62.23
Business Services	452	27.9%	18.4%	26.1%	27.7%	6.2%	16.6%	11.56	9.7%	16.6%	73.7%	\$9.05	3.3%	\$231.74	6.74	\$4194.13	28255.83	60.43
Banks	88	29.5%	21.6%	22.7%	26.1%	2.3%	14.8%	10.00	10.2%	17.0%	72.7%			\$311.95	8.51	\$7660.71	65165.82	59.41
Non-profit & Social Organizations	996	29.9%	14.8%	22.9%	32.2%	6.3%	9.5%	2.56	36.2%	16.7%	47.1%	\$65.52	12.6%	\$601.76	8.38	\$7827.92	65586.94	64.65
Shipping/Packaging/Distribution	301	29.9%	10.6%	21.3%	38.2%	4.7%	11.6%	14.05	14.6%	33.6%	51.8%	\$4.60	0.8%	\$506.05	7.60	\$5084.53	38629.77	61.81
Chemicals	156	31.4%	13.5%	28.2%	26.9%	4.5%	14.1%	10.92	12.2%	24.4%	63.5%			\$540.13	7.54	\$7187.23	54220.49	61.68
Paper & Forest Products	148	31.8%	9.5%	18.9%	39.9%	6.1%	12.8%	11.33	20.9%	31.1%	48.0%			\$363.21	8.80	\$6753.23	59416.61	61.33
Media	477	32.5%	9.0%	26.0%	32.3%	5.5%	9.9%	5.36	15.1%	15.3%	69.6%	\$19.09	4.1%	\$700.66	9.85	\$9130.84	89924.12	59.41
Semiconductors & Semiconductor Equipment	75	33.3%	22.7%	16.0%	26.7%	1.3%	14.7%	11.33	8.0%	16.0%	76.0%			\$377.56	9.39	\$4033.76	37892.87	62.76
Pharmaceuticals	222	35.1%	21.6%	21.2%	22.1%	3.6%	18.0%	11.88	13.5%	19.4%	67.1%	\$20.22	2.8%	\$725.55	8.74	\$5124.32	44809.37	60.64
Communications	213	35.2%	19.2%	24.4%	21.1%	5.2%	19.7%	20.30	2.8%	13.1%	84.0%	\$27.96	8.6%	\$304.78	8.65	\$7036.25	60854.04	57.97
Education	64	37.5%	23.4%	17.2%	21.9%	7.8%	17.2%	5.40	20.3%	15.6%	64.1%			\$256.38	7.83	\$5863.05	45927.03	65.63
Diversified Financial Services	253	37.9%	14.2%	22.1%	25.7%	7.1%	22.5%	27.11	7.5%	24.1%	68.4%	\$16.68	4.9%	\$356.46	10.10	\$8392.86	84752.94	59.04
Computers & Software	340	38.2%	16.2%	27.1%	18.5%	4.7%	16.2%	32.90	3.2%	4.4%	92.4%	\$22.52	5.2%	\$545.37	8.84	\$9322.04	82411.80	56.08
Biotechnology	100	39.0%	29.0%	16.0%	16.0%	7.0%	16.0%	9.00	9.0%	21.0%	70.0%			\$234.72	8.98	\$8008.58	71903.09	61.67
IT Services	306	40.2%	19.9%	25.8%	14.1%	6.5%	17.3%	10.33	4.6%	7.2%	88.2%	\$118.59	2.7%	\$718.47	9.01	\$9735.96	87731.85	54.30
Real Estate Investment Trusts	32	40.6%	21.9%	18.8%	21.9%	12.5%	34.4%	7.00	3.1%	18.8%	78.1%			\$494.69	14.18	\$5318.96	75415.32	63.13
Professional Services/Accounting/Consulting	39	41.0%	15.4%	33.3%	10.3%	7.7%	17.9%	12.00	2.6%	12.8%	84.6%			\$261.36	6.21	\$5084.29	31552.53	63.19
Asset Management	150	45.3%	12.0%	19.3%	22.7%	12.0%	21.3%	9.71	5.3%	21.3%	73.3%	\$30.85	3.9%	\$581.23	10.57	\$8575.55	90684.72	58.87
Finance/Banking/Investment	3005	48.6%	15.1%	19.1%	17.1%	11.5%	27.4%	16.55	8.4%	13.3%	78.3%	\$24.41	6.4%	\$579.35	10.39	\$8720.06	90602.28	59.43
Legal Services	140	50.0%	23.6%	10.0%	16.4%	10.7%	5.7%	9.00	6.4%	10.7%	82.9%	\$48.88		\$156.81	6.90	\$4508.01	31085.69	64.48
Internet	130	50.8%	12.3%	23.8%	13.1%	6.9%	17.7%	9.00	0.8%	3.8%	95.4%			\$1214.50	12.11	\$21958.26	265918.28	48.89
Venture Capital	101	56.4%	13.9%	18.8%	10.9%	16.8%	38.6%	48.50	3.0%	7.9%	89.1%	\$16.78	3.0%	\$531.73	12.96	\$17931.96	232368.35	57.31
Hedge Funds	47	63.8%	10.6%	12.8%	12.8%	19.1%	44.7%	46.00	4.3%	6.4%	89.4%			\$799.04	12.84	\$16869.76	216682.64	54.47

Note: Monetary values are expressed in millions (m). I/SM = source of wealth was "Inherited/self-made". Giving % NW = giving sum as a % of net worth. KA = "known associates". Network power = #KA x net worth KA (m).

**Appendix H. Leaders—CEO, Founder, Chairman, and President: by education and ability level, gender, source of wealth, giving, net worth, network power, and age**

	N	Elite School	Grad School	College	NR/NC	Harvard	MBA	M/F Ratio	Inherited	I/SM	Self-made	Giving Sum (m)	Giving % NW	Net Worth (m)	# KA	Net Worth KA (m)	Network Power	Age
CEO	3130	33.4%	17.4%	27.2%	22.0%	5.8%	19.6%	15.62	8.8%	20.1%	71.1%	\$14.88	3.8%	\$362.57	8.16	\$6291.81	51318.13	57.69
CEO Males	2937	32.9%	17.3%	27.3%	22.4%	5.7%	19.6%		8.4%	19.8%	71.8%	\$15.39	4.0%	\$364.09	8.10	\$6214.30	50330.26	57.89
CEO Females	188	42.0%	18.6%	25.0%	14.4%	8.0%	18.6%		16.0%	22.9%	61.2%			\$346.81	9.08	\$7513.77	68215.95	54.74
CEO U.S.	1772	30.9%	19.6%	31.9%	17.5%	7.6%	21.4%	14.14	8.7%	14.7%	76.6%	\$16.64	4.3%	\$285.22	8.87	\$6248.03	55440.36	59.44
CEO U.S. Males	1654	30.5%	19.4%	32.4%	17.7%	7.4%	21.7%		8.3%	14.6%	77.1%	\$17.15	4.5%	\$289.02	8.79	\$6074.04	53402.79	59.59
CEO U.S. Females	117	36.8%	23.1%	24.8%	15.4%	10.3%	17.9%		15.4%	14.5%	70.1%			\$233.68	9.95	\$8557.95	85172.00	57.31
CEO Self-made	2225	34.2%	19.3%	26.1%	20.3%	6.1%	20.5%	18.33				\$15.08	3.5%	\$319.94	8.54	\$6758.10	57732.10	57.88
CEO Self-made Males	2108	33.8%	19.2%	26.1%	20.9%	5.8%	20.7%					\$15.47	3.6%	\$326.16	8.46	\$6604.92	55848.91	58.09
CEO Self-made Females	115	42.6%	21.7%	27.0%	8.7%	10.4%	17.4%							\$210.65	10.07	\$9414.61	94767.45	54.37
Founder	1768	31.7%	14.8%	23.1%	30.3%	5.4%	14.6%	9.90	4.5%	7.6%	87.9%	\$33.90	11.0%	\$678.39	7.14	\$7411.94	52911.63	61.99
Founder Males	1603	32.6%	14.9%	22.7%	29.8%	5.6%	15.2%		2.5%	7.0%	90.5%	\$32.41	10.7%	\$694.69	7.18	\$7682.57	55164.49	62.19
Founder Females	162	23.5%	13.6%	27.8%	35.2%	3.1%	8.0%		23.5%	13.6%	63.0%	\$46.76	13.8%	\$527.64	6.69	\$4508.05	30160.99	59.90
Founder U.S.	875	33.8%	18.3%	27.4%	20.3%	8.2%	19.9%	10.22	4.9%	6.3%	88.8%	\$30.92	9.0%	\$428.44	7.53	\$6170.21	46473.32	62.66
Founder U.S. Males	797	34.6%	18.6%	27.2%	19.4%	8.5%	20.7%		2.6%	5.6%	91.7%	\$30.90	8.5%	\$416.89	7.53	\$6427.90	48427.92	62.89
Founder U.S. Females	78	25.6%	15.4%	29.5%	29.5%	5.1%	11.5%		28.2%	12.8%	59.0%	\$31.07	12.7%	\$546.47	7.51	\$3314.54	24886.23	60.32
Founder Self-made	1554	32.0%	15.1%	23.4%	29.5%	5.7%	15.0%	14.22				\$33.55	10.7%	\$675.75	7.29	\$7760.35	56568.57	61.94
Founder Self-made Males	1450	32.7%	15.3%	22.8%	29.2%	5.9%	15.3%					\$32.50	11.0%	\$692.42	7.31	\$7933.30	57959.69	62.21
Founder Self-made Females	102	22.5%	12.7%	32.4%	32.4%	3.9%	9.8%							\$449.09	7.04	\$5109.90	35960.92	58.03
Chairman	5773	33.1%	15.8%	25.1%	25.9%	5.6%	16.2%	20.60	10.5%	23.9%	65.6%	\$47.41	4.4%	\$823.68	9.64	\$8935.01	86173.08	63.72
Chairman Males	5499	33.0%	16.0%	25.3%	25.7%	5.7%	16.5%		9.3%	23.7%	67.0%	\$48.54	4.4%	\$826.35	9.66	\$8946.46	86410.09	63.85
Chairman Females	267	34.8%	12.7%	21.3%	30.7%	4.5%	10.5%		35.6%	27.7%	36.7%	\$25.01	4.6%	\$788.41	9.56	\$8940.69	85495.33	61.04
Chairman U.S.	2430	34.8%	19.2%	30.9%	15.0%	9.5%	21.7%	21.45	10.2%	16.0%	73.9%	\$57.09	5.5%	\$710.48	11.64	\$8805.91	102516.85	66.29
Chairman U.S. Males	2317	34.9%	19.3%	31.3%	14.5%	9.8%	22.1%		9.0%	15.9%	75.1%	\$58.48	5.6%	\$717.69	11.63	\$8794.39	102278.01	66.36
Chairman U.S. Females	108	34.3%	16.7%	23.1%	25.0%	4.6%	14.8%		35.2%	17.6%	47.2%	\$23.84	3.6%	\$585.19	12.38	\$9486.33	117393.39	64.39
Chairman Self-made	3787	31.9%	17.6%	25.4%	25.1%	6.1%	17.5%	37.59				\$51.20	4.6%	\$743.16	10.13	\$9472.51	96002.88	63.91
Chairman Self-made Males	3684	31.9%	17.5%	25.5%	25.1%	6.1%	17.6%					\$52.00	4.7%	\$752.47	10.09	\$9442.05	95241.80	64.01
Chairman Self-made Females	98	34.7%	18.4%	22.4%	24.5%	5.1%	13.3%							\$428.01	12.58	\$11260.01	141594.59	60.07
President	1516	27.6%	16.8%	27.7%	27.7%	5.5%	15.5%	9.41	18.5%	21.0%	60.4%	\$15.10	7.7%	\$413.14	7.55	\$5457.88	41229.28	60.85
President Males	1365	27.8%	17.6%	27.6%	26.8%	5.8%	16.3%		13.9%	21.5%	64.5%	\$14.77	7.6%	\$397.69	7.54	\$5569.27	41981.77	60.91
President Females	145	25.5%	9.0%	29.7%	35.9%	2.8%	7.6%		60.0%	17.2%	22.8%	\$18.10	8.8%	\$570.28	7.95	\$4684.87	37244.69	60.20
President U.S.	1050	27.7%	17.0%	31.3%	23.8%	7.0%	17.5%	10.01	19.7%	17.0%	63.3%	\$16.01	8.4%	\$297.97	7.79	\$4300.22	33493.18	61.38
President U.S. Males	951	28.1%	17.5%	31.3%	22.9%	7.4%	18.2%		15.6%	17.2%	67.2%	\$15.35	8.3%	\$274.56	7.73	\$4309.05	33306.08	61.26
President U.S. Females	95	24.2%	11.6%	32.6%	31.6%	4.2%	10.5%		58.9%	14.7%	26.3%	\$21.93	10.0%	\$538.21	8.62	\$4422.78	38125.52	62.48
President Self-made	916	28.4%	19.1%	27.4%	25.1%	5.8%	16.6%	26.70				\$14.63	8.1%	\$327.59	8.09	\$6332.95	51225.99	60.94
President Self-made Males	881	28.3%	19.3%	27.1%	25.3%	6.0%	16.6%					\$14.95	8.1%	\$336.03	8.05	\$6319.95	50866.17	61.20
President Self-made Females	33	33.3%	9.1%	36.4%	21.2%	0%	15.2%							\$115.00	9.38	\$6926.72	64967.90	54.03

Note: Monetary values are expressed in millions (m). I/SM = source of wealth was "Inherited/Self-made". Giving % NW = giving sum as a % of net worth. KA = "known associates". Network power = #KA × net worth KA (m).



**Appendix I. Association between education/ability level and net worth and giving: by self-made status, country, and political affiliation**

	N	Net worth (m)	SD	N	Giving sum	SD	N	Giving % NW	SD
<i>Self-made</i>									
Elite school	4026	\$545.99	2616.37	1044	\$39217113.23	311622131.95	1044	0.11	1.32
Non-elite school	8017	\$475.56	1581.40	1225	\$20298121.85	94775075.01	1225	0.05	0.34
	<b>t = 1.834</b>	<b>p = .067</b>	<b>r = .017</b>	<b>t = 2.018</b>	<b>p = .044</b>	<b>r = .042</b>	<b>t = 1.632</b>	<b>p = .103</b>	<b>r = .032</b>
<i>Non-self-made</i>									
Elite school	1744	\$919.82	2739.99	340	\$35661941.17	224696230.46	340	0.07	0.36
Non-elite school	4458	\$644.05	1791.07	637	\$24006971.78	111117828.50	637	0.08	0.34
	<b>t = 4.646</b>	<b>p = .000</b>	<b>r = .059</b>	<b>t = 1.084</b>	<b>p = .278</b>	<b>r = .035</b>	<b>t = -.192</b>	<b>p = .847</b>	<b>r = -.014</b>
<i>U.S.</i>									
Elite school	2923	\$597.83	3119.86	968	\$42270941.06	322080232.06	968	0.12	1.37
Non-elite school	5726	\$336.66	1347.09	1301	\$23660066.23	110325919.37	1301	0.07	0.40
	<b>t = 5.422</b>	<b>p = .000</b>	<b>r = .058</b>	<b>t = 1.937</b>	<b>p = .053</b>	<b>r = .041</b>	<b>t = 1.295</b>	<b>p = .195</b>	<b>r = .026</b>
<i>Non-U.S.</i>									
Elite school	2847	\$721.78	2082.69	416	\$29205421.32	208498663.94	416	0.06	0.33
Non-elite school	6749	\$704.70	1870.80	561	\$16712823.76	73322305.04	561	0.04	0.15
	<b>t = .395</b>	<b>p = .693</b>	<b>r = .004</b>	<b>t = 1.314</b>	<b>p = .189</b>	<b>r = .042</b>	<b>t = 1.666</b>	<b>p = .096</b>	<b>r = .041</b>
<i>China</i>									
Elite school	126	\$646.75	891.63						
Non-elite school	419	\$1137.86	2056.02						
	<b>t = -.2607</b>	<b>p = .009</b>	<b>r = -.111</b>						
<i>Russia</i>									
Elite school	70	\$1763.14	3453.80						
Non-elite school	301	\$1198.37	2213.89						
	<b>t = 1.707</b>	<b>p = .089</b>	<b>r = .088</b>						
<i>U.S. Democrats</i>									
Elite school	736	\$533.91	2872.95	272	\$36945877.59	197407528.48	259	0.07	0.32
Non-elite school	842	\$396.40	1359.41	249	\$31734691.86	112318870.79	249	0.11	0.75
	<b>t = 1.239</b>	<b>p = .215</b>	<b>r = .031</b>	<b>t = .366</b>	<b>p = .715</b>	<b>r = .016</b>	<b>t = -.737</b>	<b>p = 0.462</b>	<b>r = -.035</b>
<i>U.S. Republicans</i>									
Elite School	916	\$712.38	3792.09	322	\$54557514.97	506763161.15	316	0.07	0.35
Non-elite school	2083	\$341.34	1340.46	543	\$24573845.72	119727834.42	540	0.05	0.15
	<b>t = 3.941</b>	<b>p &lt; .000</b>	<b>r = .072</b>	<b>t = 1.319</b>	<b>p = .188</b>	<b>r = .045</b>	<b>t = 1.136</b>	<b>p = .256</b>	<b>r = .040</b>

Note: Monetary values for net worth are in millions (m). Giving % NW = giving sum as a % of net worth. Significant differences are in bold.

### Appendix J. Association between education/ability level and network power: by self-made status, country, and political affiliation

	N	Known associates (KA)	SD	N	Net worth KA	SD	N	Network power	SD
<i>Self-made</i>									
Elite school	3767	11.11	10.40	3767	\$10370888213.43	23639501938.63	3767	248638954499.60	980261652749.80
Non-elite school	6622	7.70	7.91	6622	\$6386744669.28	15870015952.62	6622	112529815040.77	456106444863.55
	<b>t = 18.781</b>	<b>p = .000</b>	r = .181	<b>t = 10.245</b>	<b>p = .000</b>	r = .100	<b>t = 9.617</b>	<b>p = .000</b>	r = .094
<i>Non-self-made</i>									
Elite school	1533	9.17	9.20	1533	\$7796610884.80	17426989524.40	1533	168735396984.70	603393023780.34
Non-elite school	3280	6.08	6.68	3280	\$4528695497.80	11581911082.80	3280	68525505525.79	356090663648.34
	<b>t = 13.174</b>	<b>p = .000</b>	r = .187	<b>t = 7.701</b>	<b>p = .000</b>	r = .110	<b>t = 7.200</b>	<b>p = .000</b>	r = .103
<i>U.S.</i>									
Elite school	2757	12.41	11.36	2757	\$10405213819.37	24708834880.57	2757	279579499927.46	1092399673742.37
Non-elite school	4702	8.05	8.52	4702	\$4921439323.69	14264296708.35	4702	95704273415.57	447917792000.04
	<b>t = 18.836</b>	<b>p = .000</b>	r = .213	<b>t = 12.152</b>	<b>p = .000</b>	r = .139	<b>t = 10.175</b>	<b>p = .000</b>	r = .117
<i>Non-U.S.</i>									
Elite school	2543	8.53	8.07	2543	\$8781819066.61	18721219988.92	2543	166926316900.33	587673411848.77
Non-elite school	5200	6.37	6.47	5200	\$6539718602.46	14885523003.25	5200	99987423023.96	405341576778.36
	<b>t = 12.671</b>	<b>p = .000</b>	r = .143	<b>t = 5.704</b>	<b>p = .000</b>	r = .065	<b>t = 5.848</b>	<b>p = .000</b>	r = .066
<i>China</i>									
Elite school	112	9.05	8.02	112	\$16275321428.57	24783889596.58	112	285018392857.14	714496882459.14
Non-elite school	339	6.53	7.15	339	\$13153159292.04	25216256924.50	339	199956982300.89	726832737731.82
	<b>t = 3.143</b>	<b>p = .002</b>	r = .146	t = 1.141	p = .255	r = .054	t = 1.078	p = .281	r = .051
<i>Russia</i>									
Elite school	67	14.18	12.71	67	\$34588880597.01	39932257701.85	67	922502238805.97	1609496970223.48
Non-elite school	281	9.45	8.87	281	\$17852790035.59	26600112954.02	281	357594925266.90	939089408343.81
	<b>t = 3.579</b>	<b>p = .000</b>	r = .188	<b>t = 4.157</b>	<b>p = .000</b>	r = .218	<b>t = 3.781</b>	<b>p = .000</b>	r = .199
<i>U.S. Democrats</i>									
Elite school	683	13.26	12.51	683	\$14047542166.91	29339508709.22	683	396968808784.77	1388890533508.17
Non-elite school	740	9.18	8.72	740	\$7466042432.43	19516586977.62	740	154960441486.49	499755547128.62
	<b>t = 7.182</b>	<b>p = .000</b>	r = .187	<b>t = 5.017</b>	<b>p = .000</b>	r = .132	<b>t = 4.439</b>	<b>p = .000</b>	r = .117
<i>U.S. Republicans</i>									
Elite school	842	12.38	11.29	842	\$8320977553.44	21326374121.44	842	242993114964.37	1189245649889.57
Non-elite school	1734	7.79	8.36	1734	\$4080563321.80	12322291805.01	1734	73695973356.40	358324166096.08
	<b>t = 11.600</b>	<b>p = .000</b>	r = .223	<b>t = 6.374</b>	<b>p = .000</b>	r = .125	<b>t = 5.442</b>	<b>p = .000</b>	r = .107

Note: Network power = # of known associates (KA) × net worth of KA. Significant differences are in bold.

**Appendix K. Sex differences: by general findings, religion, ethnicity, political affiliation, relationship status, country, industry, and leaders**

	M/F ratio		M/F ratio U.S.
<i>a. General</i>			
Billionaires Inheritance	1.35	Billionaires U.S. Inheritance	1.29
UHNW Inheritance	2.07	UHNW U.S. Inheritance	2.22
Billionaires All	6.89	Billionaires U.S. Only	5.78
Billionaires Inheritance/Self-made	8.80	Billionaires U.S. Inheritance/Self-made	9.88
UHNW All (30 m +)	9.27	UHNW U.S. Only	10.53
UHNW Inheritance/Self-made	9.56	UHNW U.S. Inheritance/Self-made	11.70
UHNW Self-made	19.14	Billionaires U.S. Self-made	18.63
Billionaires Self-made	27.32	UHNW U.S. Self-made	18.71
<i>b. Religion</i>			
Buddhist	4.26	Christian (Episcopalian)	5.36
Christian (Episcopalian)	5.50	Christian (Presbyterian)	7.18
Christian (Protestant)	6.00	Christian (Methodist)	7.71
Christian (Orthodox)	6.83	Christian	9.58
Christian (Presbyterian)	6.92	Unknown	11.50
Christian (Methodist)	7.11	Christian (Orthodox)	11.50
Christian	9.01	Christian (Catholic)	12.48
Christian (Catholic)	9.52	Christian (Evangelical)	12.67
Jewish	9.53	Christian (Protestant)	20.00
Unknown	9.73	Hindu	26.50
Christian (Evangelical)	11.80	Muslim	50.00
Hindu	12.83		
Muslim	16.12		
Jain	20.50		
Mormon	24.00		
Sikh	41.00		
<i>c. Ethnicity</i>			
Chinese	6.67	Chinese	5.18
Black	6.91	Black	6.31
Asian (Other)	7.10	Asian (Other)	7.70
Hispanic	7.83	Hispanic	8.67
Caucasian	9.93	Caucasian	10.91
South Asian	12.63	Middle Eastern	14.50
Middle Eastern	14.86	South Asian	26.33
<i>d. Political affiliation</i>			
United States	10.53	U.S. Democratic Party	7.05
Conservative Party (U.K.)	21.00	U.S. Nonpartisan	9.33
Communist Party of China (CPC)	23.80	U.S. Bipartisan	13.78
United Russia Party	All Male	U.S. Republican Party	14.26
<i>e. Relationship status</i>			
Widowed	0.70	Widowed	0.94
Single	3.08	Single	2.60
Separated	3.31	Separated	N/A
Divorced	3.32	Divorced	3.09
Unknown	11.50	Unknown	9.38
Married	11.98	Married	14.66
Bottom 5			
Country	M/F ratio	Industry	M/F ratio
<i>f. Country and industry</i>			
Austria	2.05	Non-profit & Social Organizations	2.56
Vietnam	2.71	Textiles, Apparel & Luxury Goods	4.49
Chile	3.08	Media	5.36
Sweden	3.36	Education	5.40
Germany	4.73	Leisure Equipment & Products	5.57
Top 5			
Malaysia	27.75	Insurance	30.50
Belgium	28.50	Energy	31.00
Russia	32.64	Computers & Software	32.90
Egypt	35.00	Hedge Funds	46.00
Ukraine	55.00	Venture Capital	48.50
M/F ratio		M/F ratio U.S.	
<i>g. Leaders</i>			
President	9.41	President U.S.	10.01
Founder	9.90	Founder U.S.	10.22
Founder Self-made	14.22	CEO U.S.	14.14
CEO	15.62	Chairman U.S.	21.45
CEO Self-made	18.33		
Chairman	20.60		
President Self-made	26.70		
Chairman Self-made	37.59		

**Appendix L. Giving differences: by general findings, religion, ethnicity, political affiliation, relationship status, country, industry, and leaders**

	Giving sum (m)		Giving % NW
<i>a. General</i>			
Bottom 5			
UHNW U.S. Females Self-made	\$8.30	Billionaires Inheritance	1.7%
UHNW U.S. Inheritance/Self-made	\$22.74	Billionaires Females	2.0%
UHNW U.S. Males Inheritance/Self-made	\$23.88	Billionaires U.S. Inheritance	2.1%
UHNW Females	\$27.29	UHNW U.S. Females Self-made	2.1%
UHNW Inheritance/Self-made	\$27.38	Billionaires Inheritance/Self-made	2.4%
Top 5			
Billionaires Self-made	\$126.85	UHNW Inheritance	10.2%
Billionaires Males Self-made	\$130.06	UHNW Females	11.3%
Billionaires U.S. Only	\$144.24	UHNW U.S. Inheritance	11.8%
Billionaires U.S. Males	\$156.99	UHNW U.S. Females	13.2%
Billionaires U.S. Self-made	\$179.47	UHNW U.S. Females Inheritance	18.9%
<i>b. Religion</i>			
Christian (Catholic)	\$13.99	Muslim	2.2%
Christian (Catholic) U.S.	\$14.52	Christian (Presbyterian)	2.8%
Unknown	\$16.35	Christian (Presbyterian) U.S.	2.8%
Unknown U.S.	\$17.34	Christian (Catholic)	4.2%
Christian	\$30.40	Christian (Catholic) U.S.	4.5%
Christian U.S.	\$30.44	Buddhist	5.4%
Jewish	\$35.47	Unknown	6.4%
Jewish U.S.	\$37.38	Christian	6.8%
Christian (Presbyterian)	\$37.71	Christian U.S.	7.5%
Christian (Presbyterian) U.S.	\$37.71	Unknown U.S.	7.6%
Hindu	\$38.77	Hindu	10.3%
Christian (Episcopalian)	\$40.74	Christian (Episcopalian)	10.8%
Christian (Episcopalian) U.S.	\$40.74	Christian (Episcopalian) U.S.	10.8%
Muslim	\$42.05	Jewish	12.2%
Buddhist	\$45.99	Jewish U.S.	13.3%
<i>c. Ethnicity</i>			
Asian (Other)	\$5.89	Asian (Other)	1.6%
Middle Eastern	\$10.74	Middle Eastern	2.4%
Hispanic	\$12.58	Hispanic	2.5%
Black	\$13.65	Black	3.6%
Chinese	\$23.05	Chinese	6.1%
Caucasian	\$31.08	South Asian	6.1%
South Asian	\$52.14	Caucasian	8.5%
<i>d. Political affiliation</i>			
U.S. Nonpartisan	\$12.78	U.S. Bipartisan	5.1%
U.S. Bipartisan	\$26.44	U.S. Republican Party	6.1%
United States	\$31.60	U.S. Nonpartisan	6.2%
U.S. Democratic Party	\$35.22	United States	8.7%
U.S. Republican Party	\$36.07	U.S. Democratic Party	8.9%
<i>e. Relationship status</i>			
Unknown	\$12.58	Unknown	5.6%
Unknown U.S.	\$15.35	Married	6.9%
Married	\$27.21	Unknown U.S.	7.3%
Married U.S.	\$28.85	Married U.S.	7.9%
Divorced	\$48.39	Divorced	9.9%
Divorced U.S.	\$52.37	Divorced U.S.	10.1%
Widowed	\$58.42	Single	16.6%
Widowed U.S.	\$62.99	Widowed	20.2%
Single	\$73.53	Single U.S.	20.6%
Single U.S.	\$97.94	Widowed U.S.	25.3%
<i>f. Country</i>			
Australia	\$6.64	Saudi Arabia	0.4%
Saudi Arabia	\$6.88	United Arab Emirates	0.7%
United Arab Emirates	\$10.20	Switzerland	1.8%
Switzerland	\$11.76	Australia	2.7%
Singapore	\$13.89	China	3.3%
Canada	\$23.43	India	4.0%
China	\$25.12	Canada	4.5%
United States	\$31.60	Singapore	7.5%
Hong Kong	\$32.31	Hong Kong	7.6%
United Kingdom	\$32.67	United States	8.7%
India	\$96.57	United Kingdom	12.3%
<i>g. Industry</i>			
Bottom 5			
Shipping/Packaging/Distribution	\$4.60	Shipping/Packaging/Distribution	0.8%
Automobiles	\$6.10	Industrial Conglomerates	1.4%

**Appendix L. (continued)**

<i>g. Industry</i>			
<i>Bottom 5</i>			
Business Services	\$9.05	Automobiles	2.7%
Sports & Entertainment	\$11.33	IT Services	2.7%
Real Estate	\$14.59	Pharmaceuticals	2.8%
<i>Top 5</i>			
Metals & Mining	\$54.04	Communications	8.6%
Beverages	\$60.55	Non-profit & Social Organizations	12.6%
Non-profit & Social Organizations	\$65.52	Food Products	12.9%
Retail	\$89.72	Beverages	19.9%
IT Services	\$118.59	Retail	38.2%
<i>h. Leaders</i>			
<i>Bottom 5</i>			
President Males	\$14.77	CEO Self-made	3.5%
CEO	\$14.88	Chairman U.S. Females	3.6%
CEO Self-made	\$15.08	CEO Self-made Males	3.6%
President	\$15.10	CEO	3.8%
President U.S. Males	\$15.35	CEO Males	4.0%
<i>Top 5</i>			
Founder Females	\$46.76	President U.S. Females	10.0%
Chairman	\$47.41	Founder Males	10.7%
Chairman Males	\$48.54	Founder	11.0%
Chairman U.S.	\$57.09	Founder U.S. Females	12.7%
Chairman U.S. Males	\$58.48	Founder Females	13.8%

Note: Monetary values are expressed in millions (m).

**Appendix M. Network power differences: by general findings, religion, ethnicity, political affiliation, relationship status, country, industry, leaders, and female leaders**

	# KA		Net Worth KA (m)		Network Power
<i>a. General</i>					
<i>Bottom 5</i>					
UHNW U.S. Females Inheritance	6.74	UHNW U.S. Females Inheritance/Self-made	\$2949.69	UHNW U.S. Females Inheritance/Self-made	22893.15
UHNW Inheritance	6.85	UHNW U.S. Males Inheritance	\$3974.12	UHNW U.S. Inheritance	29093.93
UHNW U.S. Inheritance	7.12	UHNW U.S. Inheritance	\$4087.19	UHNW U.S. Males Inheritance	29095.54
UHNW Inheritance/Self-made	7.21	UHNW U.S. Inheritance/Self-made	\$4177.36	UHNW U.S. Females Inheritance	29624.79
UHNW U.S. Males Inheritance	7.32	UHNW U.S. Males Inheritance/Self-made	\$4288.23	UHNW U.S. Inheritance/Self-made	33265.99
<i>Top 5</i>					
Billionaires Males Self-made	12.35	Billionaires Self-made	\$19897.04	Billionaires Self-made	245149.07
Billionaires U.S. Inheritance/Self-made	13.43	Billionaires U.S. Only	\$21272.12	Billionaires Females Self-made	253560.30
Billionaires U.S. Only	15.78	Billionaires Females Self-made	\$21840.20	Billionaires U.S. Only	335742.55
Billionaires U.S. Males	16.31	Billionaires U.S. Males	\$22601.95	Billionaires U.S. Males	368739.48
Billionaires U.S. Self-made	17.49	Billionaires U.S. Self-made	\$26842.86	Billionaires U.S. Self-made	469604.93
<i>b. Religion</i>					
<i>Bottom 5</i>					
Jain	6.06	Christian (Presbyterian)	\$4192.60	Christian (Presbyterian)	39543.80
Unknown	7.68	Christian (Presbyterian) U.S.	\$4409.86	Christian (Presbyterian) U.S.	43354.77
Christian (Protestant) U.S.	7.69	Unknown U.S.	\$5784.11	Unknown	48881.37
Muslim	7.82	Christian	\$6238.88	Unknown U.S.	52035.45
Christian (Methodist)	7.91	Christian U.S.	\$6269.23	Muslim	53150.02
<i>Top 5</i>					
Jewish	11.18	Christian (Evangelical) U.S.	\$11112.01	Jewish U.S.	123178.41
Hindu U.S.	11.40	Hindu U.S.	\$12695.44	Christian (Evangelical) U.S.	123819.59
Jewish U.S.	11.97	Christian (Evangelical)	\$12859.03	Christian (Orthodox)	135080.05
Christian (Episcopalian)	12.28	Buddhist	\$12918.19	Christian (Evangelical)	137775.29
Christian (Episcopalian) U.S.	12.49	Christian (Orthodox)	\$13785.95	Hindu U.S.	144675.09
<i>c. Ethnicity</i>					
Asian (Other)	5.67	Asian (Other) U.S.	\$4617.61	Asian (Other) U.S.	31840.85
Asian (Other) U.S.	6.90	Hispanic U.S.	\$5262.66	Asian (Other)	32879.60
Hispanic	7.11	Asian (Other)	\$5795.06	Hispanic U.S.	44145.03
Chinese	7.28	Middle Eastern	\$6737.07	Middle Eastern	53088.14
Middle Eastern	7.88	Caucasian	\$6896.89	Hispanic	58910.36
South Asian	8.14	Caucasian U.S.	\$6984.16	Caucasian	60973.91
Hispanic U.S.	8.39	Black	\$7549.32	South Asian	62169.01
Middle Eastern U.S.	8.82	South Asian	\$7638.76	Middle Eastern U.S.	67845.54
Caucasian	8.84	Middle Eastern U.S.	\$7694.59	Caucasian U.S.	68503.09
South Asian U.S.	9.53	Hispanic	\$8290.81	Chinese	73726.14
Black	9.77	South Asian U.S.	\$9436.16	Black	73734.70
Chinese U.S.	9.77	Chinese U.S.	\$9925.74	South Asian U.S.	89971.16
Caucasian U.S.	9.81	Chinese	\$10133.12	Chinese U.S.	96993.60
Black U.S.	14.94	Black U.S.	\$12104.51	Black U.S.	180901.40

(continued on next page)



## Appendix M. (continued)

	# KA		Net Worth KA (m)		Network Power
<i>d. Political affiliation</i>					
U.S. Nonpartisan	7.04	U.S. Nonpartisan	\$3013.14	U.S. Nonpartisan	21217.93
Communist Party of China (CPC)	7.53	Conservative Party (U.K.)	\$3640.57	Conservative Party (U.K.)	28907.87
Conservative Party (U.K.)	7.94	U.S. Republican Party	\$5466.60	U.S. Republican Party	50797.36
U.S. Republican Party	9.29	United States	\$6948.36	United States	67124.89
United States	9.66	U.S. Bipartisan	\$9139.09	Communist Party of China (CPC)	109255.95
U.S. Democratic Party	11.14	U.S. Democratic Party	\$10624.98	U.S. Bipartisan	109306.59
U.S. Bipartisan	11.96	Communist Party of China (CPC)	\$14503.07	U.S. Democratic Party	118375.54
United Russia Party	15.29	United Russia Party	\$32808.42	United Russia Party	501623.49
<i>e. Relationship status</i>					
Unknown	5.50	Unknown U.S.	\$2986.01	Unknown U.S.	18736.59
Unknown U.S.	6.27	Unknown	\$4062.07	Unknown	22325.95
Widowed	7.66	Married U.S.	\$6777.93	Widowed	63698.92
Widowed U.S.	8.41	Married	\$7465.95	Married	66560.76
Married	8.92	Widowed	\$8313.30	Married U.S.	67028.73
Single	9.03	Widowed U.S.	\$9853.68	Widowed U.S.	82822.44
Single U.S.	9.70	Divorced	\$11178.50	Single	101976.33
Married U.S.	9.89	Single	\$11290.70	Divorced	112124.45
Divorced	10.03	Separated	\$11498.79	Divorced U.S.	130570.93
Divorced U.S.	11.11	Divorced U.S.	\$11748.52	Separated	135217.66
Separated	11.76	Single U.S.	\$14700.61	Single U.S.	142532.03
<i>f. Country</i>					
Bottom 5					
Chile	3.80	Denmark	\$2194.85	Denmark	10641.69
Nigeria	4.09	Finland	\$2291.80	Finland	11550.67
Thailand	4.18	Australia	\$2742.42	Australia	12140.01
Argentina	4.28	Austria	\$2851.94	Austria	13661.69
South Korea	4.34	Qatar	\$3175.93	Chile	14184.49
Top 5					
United States	9.66	Japan	\$12096.85	India	91789.91
Mexico	9.81	Hong Kong	\$13322.71	China	99661.41
Italy	10.09	China	\$13928.51	Hong Kong	111375.03
Russia	10.36	Mexico	\$19006.95	Mexico	186516.83
Greece	11.18	Russia	\$21074.97	Russia	218319.72
<i>g. Industry</i>					
Bottom 5					
Food Products	6.00	Commercial Airlines	\$2928.83	Commercial Airlines	20355.33
Professional Services/Accounting/Consulting	6.21	Energy	\$3023.77	Food Products	21368.94
Real Estate Management & Development	6.39	Health Care Providers & Services	\$3128.00	Health Care Providers & Services	22417.33
Construction & Engineering	6.52	Food Products	\$3560.30	Energy	25622.47
Business Services	6.74	Semiconductors & Semiconductor Equipment	\$4033.76	Business Services	28255.83
Top 5					
Asset Management	10.57	Industrial Conglomerates	\$9660.56	Finance/Banking/Investment	90602.28
Internet	12.11	IT Services	\$9735.96	Asset Management	90684.72
Hedge Funds	12.84	Hedge Funds	\$16869.76	Hedge Funds	216682.64
Venture Capital	12.96	Venture Capital	\$17931.96	Venture Capital	232368.35
Real Estate Investment Trusts	14.18	Internet	\$21958.26	Internet	265918.28
<i>h. Leaders</i>					
Bottom 5					
Founder Females	6.69	Founder U.S. Females	\$3314.54	Founder U.S. Females	24886.23
Founder Self-made Females	7.04	President U.S.	\$4300.22	Founder Females	30160.99
Founder	7.14	President U.S. Males	\$4309.05	President U.S. Males	33306.08
Founder Males	7.18	President U.S. Females	\$4422.78	President U.S.	33493.18
Founder Self-made	7.29	Founder Females	\$4508.05	Founder Self-made Females	35960.92
Top 5					
Chairman Self-made	10.13	CEO Self-made Females	\$9414.61	Chairman Self-made	96002.88
Chairman U.S. Males	11.63	Chairman Self-made Males	\$9442.05	Chairman U.S. Males	102278.01
Chairman U.S.	11.64	Chairman Self-made	\$9472.51	Chairman U.S.	102516.85
Chairman U.S. Females	12.38	Chairman U.S. Females	\$9486.33	Chairman U.S. Females	117393.39
Chairman Self-made Females	12.58	Chairman Self-made Females	\$11260.01	Chairman Self-made Females	141594.59
<i>i. Female leaders (Country and Industry)</i>					
United Kingdom	6.82	Industrial Conglomerates	\$3913.81	United Kingdom	27842.39
Textiles, Apparel & Luxury Goods	7.63	United Kingdom	\$4081.61	Industrial Conglomerates	34087.99
Non-profit & Social Organizations	7.64	Media	\$5317.25	Textiles, Apparel & Luxury Goods	46814.26
Industrial Conglomerates	8.71	Textiles, Apparel & Luxury Goods	\$6132.22	Media	52982.67
United States	9.74	United States	\$6832.64	Non-profit & Social Organizations	60775.59
Media	9.96	Non-profit & Social Organizations	\$7954.09	United States	66545.75
Finance/Banking/Investment	11.48	Finance/Banking/Investment	\$11265.89	Finance/Banking/Investment	129356.59

Note: Monetary values are expressed in millions (m). Network power = # of known associates (KA) × net worth of KA.

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