

We inspire leaders and organizations to dream. We create the space for leaders to tap into their own creativity to innovate. We endow leaders with the tools and knowledge to launch and grow their ideas. We challenge leaders to become better versions of themselves. We transform leaders and their companies.

Virtu.us: Investing in Education and Human Capital in an Age of Government Decline

By: Eric B. Schnurer, Founder of Virtu.us

For the past half-dozen years, government-provided public goods -- particularly social welfare programs and education -- have been under worldwide assault. They are unlikely to recover anytime soon, regardless of any change in the political winds: the coronavirus (COVID-19) not only has undermined faith in the federal government (as well as those of most large countries across the globe) -- it also is bringing with it an unprecedented drop in government (particularly state and local) revenues, and thus funding for almost all public goods.

This is occurring, of course, just when record numbers of Americans will be looking for assistance in reentering an increasingly automated workforce. Meanwhile, social distancing and projected recurrent "spikes" in COVID-19 will drive numerous colleges and universities out of business, making access to higher education less available and more expensive for millions of Americans. As K-12 education is forced online, "public" education has become inaccessible to as many as one-quarter of (mostly low-income) children nationwide. Daycare will grow scarcer without large-scale public investment, as I've written recently, i making it harder for parents to work and creating a vicious circle of economic disfranchisement.

This is not just a product of the current political moment: The decline of government services, and particularly public-goods investment (except for retirees, which has squeezed out investment in all other forms of human capital, especially for the youngⁱⁱ), has been occurring worldwide for more than four decades. It's not a passing phenomenon.

We will need a new social mechanism, beyond government as it previously has been understood, to provide for needed public goods of all kinds -- but especially investments in human capital and social welfare -- and to avoid this vicious circle of disinvestment and disfranchisement. Fortunately, I have been working with a wide range of dedicated and innovative individuals over the last four years to create just such a needed virtuous circle, and it is ready for investment today.



A Quick History, and the Future, of Government

VIRTUOUS grew out of my twin experiences of (1) founding a consulting firm, Public Works LLC, iii that has been retained by state and local officials from across the country to "outsource" their core high-level



thinking and policy development (I had previously served as chief-of-staff in one of the country's largest state governments), and (2) designing and teaching a graduate course on "The Future of Government" at the University of Chicago, as well as writing extensively on the subject (my collected archives on this subject can be found at *The Atlantic*^{iv} and *U.S. News & World Report*^v).

The consulting firm was founded in 1995 on the belief that then-emerging internet technology would undermine the historic basis of the modern nation-state: the 1648 Treaty of Westphalia that made government authority coterminous with territoriality. Government is the service most tied to geography, and the internet was set to undermine geography as the delimiter of service. This would open the door to the provision of governmental services by what we would generally regard today as non-governmental entities. In fact, in my Future of Government course, I used Facebook as an example of what a "government" would become in the internet age several years before Mark Zuckerberg himself declared^{vi} that Facebook is a "government" and moved to establish Facebook's own currency^{vii} and court system.^{viii}

In the middle of my first semester teaching The Future of Government, the Estonian government, the world's most digitally sophisticated, launched its "e-resident" program – essentially, the creation of virtual citizenship. After I wrote in *US News*^{ix} and *Foreign Policy*^x that this represented the beginning of the end of the nation-state, the Estonian government invited me to come meet its leaders and see firsthand what it was doing.

What it was doing was offering a service so much better than its "competitors" that people and businesses everywhere would choose to get their government from Estonia. As I've discussed elsewhere, xi some other cutting-edge governments like Delaware and Nevada have long adopted similar competitive strategies. Delaware, while tiny, became home – at least on paper – to more of the world's major corporations than anywhere on earth by offering the best government-to-business services: easy incorporation, laws that protected incumbent management and thus corporate stability, and a special court system dedicated to business needs with high-quality judges and dependable legal precedent. Delaware, in short, pioneered a model in which government was "sellable" to non-residents, reducing the burden on its own physical residents to pay for it.

Nevada figured out how to sell a different sort of government product – marriage licenses and divorces – to outof-staters by making it easier, cheaper and, heck, more fun. People and companies with practically no physical connection to the state essentially have been seeking out extra-territorial application of Delaware's and Nevada's authority for decades, making them in many ways the first "virtual states."

Estonia, however, is the first "virtual state" actually to go "virtual" – totally abandoning any physical presence whatsoever. (After all, what stays in Vegas actually has to have happened there first.) Right now, you have to show up in Tallinn, or at an Estonian embassy somewhere, to verify your identity, but eventually you won't even have to do that. You'll be able to tap into all the advantages of being Estonian without ever having been there.

In short, Estonia is the harbinger of what's coming on a much larger scale. The line between "governments" and "businesses" is thinning. Governments now compete for customers. They increasingly must convince rather



than coerce customers to pay for their services, through cost reductions or quality improvements, or both. Those services can increasingly be obtained elsewhere. Eventually, people will be choosing government from the best provider, regardless of location, and governments will be competing like – in fact, will basically be – businesses.

And that means that businesses, in turn, can compete with – and, in fact, basically become – governments.

This actually isn't really anything new – the internet just makes it easier. The exercise of sovereign governmental functions – from money creation to war-fighting to regulatory powers like our current private securities rating system – by private companies or individuals (or even criminal organizations) is, historically, fairly common: The British Empire actually handed over governing large swaths of the globe to the private Hudson's Bay^{xii} and East India Companies^{xiii} (the Dutch did the same^{xiv}). But today the phenomenon is growing: Wealthy individuals in California, for instance, are turning to private fire companies^{xv} in the face of that state's collapsing ability to contain the fire threat.

This turn toward private "governments" is part of a slowly mounting challenge to the nation-state. The problem is that no alternative to government as we've known it for centuries has emerged to produce and fund public goods – particularly human capital investments (education, health care, social insurance) but also other goods like infrastructure, public safety, environmental goods, etc. In fact, many economists and political scientists today argue that paying for and providing public goods is the entire justification for government: Without a compulsory mechanism to collect payments through taxes and spend them on such efforts, public goods wouldn't exist.

As Abraham Lincoln put it, "The legitimate object of government is to do for a community of people whatever they need to have done, but cannot do at all, or cannot so well do, for themselves – in their separate, and individual capacities." But while people generally want, and society as a whole needs, public goods and services, no one wants to pay for them, because the payoffs – such as reductions in crime and dependency from higher overall earnings, increased economic activity due to widespread modern infrastructure and education, or greater societal productivity because of public health measures, sewers, and drainage systems – are diffuse and rarely return an identifiable cash dividend to the taxpayer:



Since the nature of public goods is that those who don't want to contribute nonetheless cannot be excluded, some people "free-ride" on provision of these goods and services, so actual support for them declines, in a



vicious circle. That's why, throughout history, public goods have been under-invested in – and why governments have to compel investment in such public goods by all. As technology today provides citizens with greater ability to "opt-out" and choose alternatives, however, public goods are becoming harder to fund because, by definition, they can't exist in a world where people can opt-out.

Until now.

Creating a Virtuous Circle

VIRTUOUS is a whole new "operating system" to modernize the age-old technology called "government." The same digital technologies undermining geography, and with it, governments – such as the internet, platform business models, and blockchain – also allow us to create new alternatives to compulsory government programs that make it easier to:

- aggregate people;
- agree on and enforce rules;
- monetize, capture, and redistribute the gains; and
- exclude "free-riders" who don't play by the rules...

...all the things we created government for.

Using modern digital technology that's revolutionizing money, finance, and value-exchange, people can choose to take collective action, invest in public goods, realize and share the benefits – but only amongst those who affirmatively choose to contribute – creating a virtuous circle:



The easiest way to illustrate how VIRTUOUS works, one that most people recognize immediately, is to look at financing for higher education:



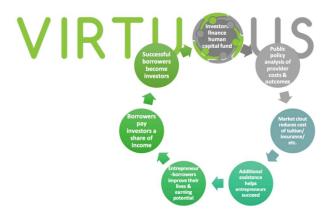


College is expensive – more expensive than many families can afford. VIRTUOUS re-conceptualizes college (and all human capital) investing: A college education has been estimated to produce an average increase in income of roughly \$1 million over the course of the student's working life. xvi If the cost of college were paid back as a percentage of income over a long period – e.g., a 30-year working life, like the average home mortgage – it would yield several major advantages:

- Lower average monthly payment, especially in the early years when salaries are lower than later in a career, relief is most needed and most defaults occur;
- A market-rate return for a private lender financing a public good; and
- Converting debt into equity, spending into social investment, and separate self-interests into a shared interest in a student's long-term success.

This concept was first developed by two of the greatest economists of the 20th Century. In 1954, Milton Friedman and Simon Kuznets wrote, "[I]f individuals sold 'stock' in themselves, i.e., obligated themselves to pay a fixed proportion of future earnings, investors could 'diversify' their holdings ... Such investments would be similar to others involving a large element of risk, a type of investment usually financed by stocks rather than bonds."

This type of arrangement – known as an Income Share Agreement (ISA) – is increasingly popular in college financing in the U.S., and in other areas, particularly job-training, in various countries around the world. But the concept – making everyone a shareholder in everyone else's success rather than just a financier – is central to building the real virtual online community, and virtuous circle, that VIRTUOUS represents:





We've Got an App for That

Higher education funding today isn't for everyone.

VIRTUOUS, in contrast, is.

VIRTUOUS creates a unique many-to-many model that allows widespread investment in widespread human capital.

- VIRTUOUS starts by giving all investors not just, as in most college-funding models today, a handful of wealthy VCs who make all the money the opportunity to invest in a college opportunity fund the way other funds (such as Calvert Impact Capital and RSF) have enabled small investors to put their money into social investing. In other words, VIRTUOUS does for human capital investment what mutual funds did for stock-market investing.
- VIRTUOUS enables student borrowers to obtain financing aligned with and invested in their own success but from a broad market of investors rather than an individual investor, or small number of investors, to whom they are personally beholden or "indentured." In other words, VIRTUOUS does for human capital development what the secondary mortgage market did for home ownership.
- The platform business model allows a simple, well-designed website easily to bring together a countless number of buyers and sellers of any kind of good or service as well as financiers of their purchases. Or, to put it another way, people could go onto a platform website to pay for a human need such as, say, shelter just as easily for others as for themselves: Think Airbnb, with a "JustGive" option, that generates a dividend.

VIRTUOUS*1

• VIRTUCUS makes this new many-to-many human capital marketplace available to both investors and consumers through an easy on-line interface, rather than traditional banks, brokers and other financial intermediaries: Just a few quick clicks allow the back-end to perform identity and credit checks and calculate terms for those seeking investment in themselves – or to set up an account for those looking to invest in opportunity for others. All of this translates into a simple, and seamless, interface:

Beyond Higher Education

The key to attracting a broad range of investors – as well as a wide array of customers – is by bringing together a larger variety of such investments on one platform, as Amazon did. Existing financing platforms are limited to a single form of human capital investment – mostly the easiest example, higher education. VIRTUOUS is a platform for financing investment in a wide range of human capital – and eventually an even wider range of public goods – to compensate for declining public-sector commitment.

That's because, while college financing has the most advanced existing infrastructure, the same basic concepts – equity instead of debt, investment in human capital generating returns like investment in financial capital, alignment of investor and entrepreneur interests, more widely-shared access, and more widely-shared gains – can be applied to other areas of human capital investment:



- This same ROI model already is being applied to post-college career investments. E.g., Upstart^{xvii} provides personal loans for entrepreneurship to promising college graduates by contracting to share a percent of their future income.
- It's easy to see how this also can be applied to job training. Currently at a handful of coding boot camps and specialized institutions, all students use ISAs to cover their tuition and fees. xviii
- Daycare funding, too, can be provided through an income-sharing investment. The costs in foregone income of leaving, or not entering, the workforce to care for children can reduce lifetime earnings by around 20%; xix when the additional downstream costs xx are added in, the lifetime monetary value of daycare for working families is almost as great as a college education!
- Completing high school doubles projected lifetime earnings. xxi In fact, each year of K-12 schooling can raise an individual's earnings about 10%. xxii The difference between a good teacher and a poorer-quality one for one year alone increases income \$6,000 in present value xxiii investing in a good teacher for an entire classroom (say, \$60,000, the average teacher salary in America xxiv) produces on average a market-rate of return (roughly \$150,000 in present-value xxv). In short, even investing in K-12 can produce similar economic returns to those discussed above.

In sum, a wide range of human capital investments can provide monetizable, market-rate returns – and opportunities for equity (i.e., income-sharing) investment. Others include life insurance, xxvii unemployment insurance, xxvii and new forms of health coverage. YIRTUOUS is a one-stop shop for those looking to better their lives – and for those looking to help them do so.

By pulling all these models together, VIRTUOUS provides a full suite of human services, all in one place, similar to what governments have traditionally provided – an Amazon of human-capital investment services and "public goods."

VIRTUOUS substitutes grudging taxpayers for willing investors, generating the funding to make needed services available to individuals and families who want to better their lives – and treats them as entrepreneurs rather than "beneficiaries," creating a stake in their futures. The technology makes it easier on a large scale to track the individual and social benefits, collect and disburse the return-on-investments, and ensure that the gains circulate and continue to build this virtual community, to everyone's benefit – or, at least, to the benefit of everyone who chooses to join in.

In short, VIRTUOUS is uniquely designed to make the world a better place – one smartphone user, one student, one worker, one investor at a time.

Launch Plan

There are plenty of people looking for money to better their futures, and plenty of service providers – from colleges and job-training organizations to health plans and daycare centers – looking to receive those dollars. There will be even more in the economic slowdown to come.



That's why VIRTUOUS is following an Investors-First launch strategy:

We are looking to partner with entities willing to invest in their own workforce: companies or non-profits that want to establish college, job-training, or daycare programs for employees, or municipal and state governments looking for new ways to finance such investments in their citizens. Some large U.S. companies (and some businesses in the developing world) have adopted such programs for employees, usually with a requirement that workers return to the sponsoring firm and "pay back" the investment by working for the employer for several years.

The VIRTUOUS model, however, overcomes perhaps the prime impediment to more private-sector workforce investment: concern that the employer's investment will simply result in the now-more-valuable employee being pirated by a competing firm. With VIRTUOUS, the employer that made the investment would continue to benefit for years to come as its former employee climbs the career ladder – at its competitor's expense (essentially the same is true in the case of government investment in today's mobile citizenry).

VIRTUOUS is in conversations with potential beta-users ranging from firms to municipal and state governments to even one foreign country. Once there is a critical mass of individuals benefiting from these investments, and investors receiving their monthly dividends – doing well by doing good – the pool will be opened to individual investors.

And while **VIRTUOUS** is starting with work-related human capital investments, a wide range of popular "apps" can be built off the "backbone" of this online community of shared interest, just as with modern governments: xxix not just the other education and social welfare investments mentioned above, but also creating parks and public places; using collective action and market clout to protect consumers and to lower costs; and even drive pay-for-performance in service delivery and other "public policy" improvement – the things *governments* ought to be doing. And even – by giving *users* control over what information they receive and ownership over their own data – creating virtually a real *community* of the kind people *really* want.

Virtuous Circles Give Rise to Virtual Communities

VIRTUI

(Printed Printed Communities Communities Circles Give Rise to Virtual Communities Circles Give Rise to Virtual Communities Circles Give Rise to Virtual Communities



www.socialinnovationsjournal.org



These, however, are all down-stream applications: The core product, and pressing need, is the creation of a 21st-Century marketplace for investment in public goods – specifically, human capital, starting with education and workforce investment.

We do this, very simply, by making such investments profitable, both for those who make the investments *and* those who receive them. Which makes for a very **VIRTUQUS** circle.

Author bio

Eric Schnurer is founder of Virtu.us. For 25 years, Eric also served as president of Public Works LLC, a consultancy providing public policy development and management consulting to state and city governments across the country. He previously served as chief of staff to the Acting Governor of Pennsylvania, speechwriter and press secretary to numerous governors and U.S. Senators, speechwriter and policy director for a dozen presidential candidates, and an associate federal special prosecutor. He has taught public policy, including a course on the "Future of Government" at the University of Chicago Harris School of Public Policy, as well as at the Fels School of Public Administration at the University of Pennsylvania, Brown University, and several other leading institutions. Eric has written on these subjects for the Aspen Institute, *U.S. News & World Report*, *The Atlantic, The Washington Monthly, Foreign Policy* and many other publications.

_

ⁱ Eric Schnurer, *Teachable Moment*. Last modified May 22, 2020. Accessed July 6, 2020. https://www.smerconish.com/news/2020/5/22/teachable-moment?rq=schnurer.

[&]quot;Eric Schnurer, 'It's the Grandparents Stealing from the Grandchildren.' Last modified December 12, 2017. Accessed July 6, 2020. https://www.theatlantic.com/politics/archive/2017/12/grandparents-raiding-grandchildren/548117/.

[&]quot;Public Works LLC, "Homepage." Accessed July 6, 2020. http://www.public-works.org/.

^{iv} The Atlantic, "Eric Schnurer Author Page." Accessed July 6, 2020. https://www.theatlantic.com/author/eric-schnurer/. ^v US News & World Report, "Eric Schnurer Author Page." Accessed July 6, 2020.

https://www.usnews.com/topics/author/eric_schnurer.

vi David Kirkpatrick, *The Facebook Effect: The Inside Story of the Company That Is Connecting the World* (New York: Simon and Schuster, 2010), 254.

vii Josh Constine, "Facebook announces Libra cryptocurrency: All you need to know," *TechCrunch*. Last modified June 18, 2019. Accessed July 6, 2020. https://techcrunch.com/2019/06/18/facebook-libra/.



- wiii Molly Roberts, "Facebook has declared sovereignty," *The Washington Post*. Last modified January 31, 2019. Accessed July 6, 2020. https://www.washingtonpost.com/opinions/2019/01/31/facebook-has-declared-sovereignty/.
- Eric Schnurer, "Welcome to E-stonia," *US News & World Report*. Last modified December 14, 2014. Accessed July 6, 2020. https://www.usnews.com/opinion/blogs/eric-schnurer/2014/12/04/estonias-e-citizenship-may-mark-the-beginning-of-the-virtual-state.
- * Eric B. Schnurer, "E-Stonia and the Future of the Cyberstate: Virtual Governments Come Online," *Foreign Affairs*. Last modified January 28, 2015. Accessed July 6, 2020. https://www.foreignaffairs.com/articles/eastern-europe-caucasus/2015-01-28/e-stonia-and-future-cyberstate.
- xi Eric Schnurer, "What Would It Mean for Governments to Compete Like Businesses?," *The Atlantic*. Last modified May 22, 2013. Accessed July 6, 2020. http://www.theatlantic.com/politics/archive/2013/05/what-would-it-mean-for-governments-to-compete-like-businesses/275723/
- xii Public Broadcasting System (PBS), "Empire of the Bay Website." Accessed July 6, 2020. http://www.pbs.org/empireofthebay/home.html.
- George P. Landow, "The British East India Company the Company that Owned a Nation (or Two)," *The Victorian Web*. Accessed July 6, 2020. http://www.victorianweb.org/history/empire/india/eic.html.
- xiv "Dutch West India Company: Dutch trading company," *Encyclopedia Britannica*. Accessed July 6, 2020. https://www.britannica.com/topic/Dutch-West-India-Company.
- ** Ethan Varian, "While California Fires Rage, the Rich Hire Private Firefighters," *The New York Times*. Last modified Oct. 31, 2019. Accessed July 6, 2020. https://www.nytimes.com/2019/10/26/style/private-firefighters-california.html.
- xvi Brian Burnsed, "How Higher Education Affects Lifetime Salary," *U.S. News & World Report*, August 5, 2011. Accessed July 6, 2020. https://www.usnews.com/education/best-colleges/articles/2011/08/05/how-higher-education-affects-lifetime-salary. United States Government. Social Security Administration. "*Education and Lifetime Earnings*," Research, Statistics & Policy Analysis (November 2015). Accessed July 6, 2020. https://www.ssa.gov/policy/docs/research-summaries/education-earnings.html.
- xvii Upstart.com, "Homepage." Accessed July 6, 2020. https://www.upstart.com/.
- kttps://www.coursereport.com/blog/best-free-coding-bootcamps-2020.
- xix Michael Madowitz, Alex Rowell, and Katie Hamm, "Calculating the Hidden Cost of Interrupting a Career for Child Care," Center for American Progress, June 21, 2016. Accessed July 6, 2020.
- $\frac{https://www.americanprogress.org/issues/early-childhood/reports/2016/06/21/139731/calculating-the-hidden-cost-of-interrupting-a-career-for-child-care/.\\$
- ** Meera Lee Sethi, "How Childcare Boosts Social Capital," *Greater Good Magazine*, January 18, 2012. Accessed July 6, 2020. https://greatergood.berkeley.edu/article/item/how childcare boosts social capital.
- xxi Michael Greenstone, Max Harris, Karen Li, Adam Looney, and Jeremy Patashnik, "A Dozen Economic Facts About K-12 Education," *Policy Memo* (The Hamilton Project), September 2012, 2. Accessed July 6, 2020.
- https://www.hamiltonproject.org/assets/legacy/files/downloads_and_links/THP_12EdFacts_2.pdf.
- Anna Bernasek, "What's the Return on Education?," *The New York Times*, Dec. 11, 2005. Accessed July 6, 2020. https://www.nytimes.com/2005/12/11/business/yourmoney/whats-the-return-on-education.html.
- xxiii Greenstone, Harris, Li, Looney, and Patashnik, "A Dozen Economic Facts About K-12 Education," 13.
- xxiv Niche.com, "Teacher Salaries in America." Accessed July 6, 2020. https://www.niche.com/blog/teacher-salaries-in-america/.
- xxv The aforementioned \$6,000 figure multiplied by 25 students, which is the roughly the average class-size in America: Catherine Rampell, "Class Size Around the World," *The New York Times*: Economix. September 11, 2009. Accessed July 6, 2020. https://economix.blogs.nytimes.com/2009/09/11/class-size-around-the-world/.
- xxvi Ostraa.com, "Homepage." Accessed July 6, 2020. http://www.ostraa.com/.



^{xxvii} Ron Lieber, "Finally, Private Unemployment Insurance. But Will Anyone Buy It?," *The New York Times*: Your Money, May 27, 2016. Accessed July 6, 2020. https://www.nytimes.com/2016/05/28/your-money/finally-private-unemployment-insurance-but-will-anyone-buy-it.html.

xxviii Colorado Official State Portal. *Nextera Health Care + DigitalGlobe: A Case Study*. Accessed July 6, 2020. https://www.colorado.gov/pacific/sites/default/files/NH CaseStudy AV HUB final.pdf.

xxix Eric Schnurer, "Trump Goes Postal," Smerconish.com. May 15, 2020.

https://www.smerconish.com/news/2020/5/15/trump-goes-postal?rq=schnurer.