

Career Advice

On December 8, 2008, the overhead projector in the classroom glowed blue and white from the Skype interface as the Professor established the connection with the caller on the other end. “Mr. Yoo, can you hear me?” the Professor inquired. “Yes, I can,” came the somewhat static-laced response.

“Welcome, Mr. Yoo. I apologize for any technical difficulties in advance. We are still quite new to this technology. In fact, I had to jump through hoops to get the Mathematics Department to allow me to install it on a college computer. But it is quite remarkable that we can get a remote speaker to address the students now. I know that Skype can sustain video as well, but our Internet connection speed is still insufficient for that.”

“That is not a problem,” replied Mr. Yoo. “I am happy to speak to your students, and to show them some career possibilities they had not considered before. Hopefully my remarks will resonate with them even if they cannot see me.”

“Absolutely, this is why we invited you. Students, this is your opportunity to learn from a truly outstanding actuary,” proclaimed the Professor. Just a year ago in 2007 Mr. Yoo became a Fellow of the Society of Actuaries, which means he had to pass a sequence of some of the most rigorous exams in the world. But what is especially impressive is that Mr. Yoo passed every single actuarial exam with a perfect score – the only person to ever do so. Normally the Society of Actuaries would not publish the exam results at this level of detail, but they made an exception for Mr. Yoo. What is more, he specifically requested to be closely monitored by the exam proctors at every moment that he was writing his exams. Multiple people confirmed that he absolutely did his own work and provided unique, thoughtful answers to the essay questions. I was so astonished when I learned about this, but even more astonished that Mr. Yoo reached out to our college and our department and actually suggested this presentation himself. Unfortunately, I urgently have to grade papers before the end-of-semester deadline, so I will be unable to stay, but you are in excellent hands for this class session. Since you will graduate next semester, this is an opportune occasion to explore what careers are possible with a mathematics degree.”

“Thank you, Professor, for this introduction. I am honored by your good words,” began Mr. Yoo. “I understand that you have a student here who has passed several actuarial exams already.”

The Actuarial Student sat up in his chair, a bit surprised at the direct mention. “Yes, that would be me,” he replied.

“And quite a dedicated student also,” the Professor noted. “It seems to me he spent all of his time outside of class – evenings, weekends, lunch breaks – studying for the actuarial exams, and he has already passed four of them.”

“A formidable effort,” acknowledged Mr. Yoo. “So you know that the actuarial exams are not the sort that one can just study for and be assured of passage. Being knowledgeable and competent regarding the subject matter will not suffice; one needs to be ultra-competent, and ultra-swift, and even then success is not guaranteed – and some will be blindsided by a completely new type of question, or follow a promising but false lead, or simply run out of time. Many will fail, and not for lack of trying. This, however, is true not just about actuarial exams; it is true about the world in general, and certainly about the kind of world you will be stepping into when you graduate. But I do not mean to discourage you; while you cannot avoid the difficulties

of the actuarial exams if you wish to have a successful actuarial career, you can avoid many of the broader difficulties of life through a prudent and creative career choice.”

“Fascinating,” remarked the Professor. “I am quite sorry that I cannot be present for the rest of your remarks, but such are the rigors of the academic workload.”

“Perfectly understandable,” Mr. Yoo reassured the Professor, who then walked out with a stack of student papers. “I am sure you have been following the news recently,” Mr. Yoo continued to address the seated students. “No one could miss the bursting of the housing bubble, the precipitous stock-market crash, the scramble by the federal government to bail out large banks. Yet nobody will bail out ordinary people, particularly young students such as yourselves, about to graduate into the deepest recession for the past 75 years. Even though you had no hand in causing this crisis, you will bear its greatest burdens. Even a few years ago, when I was still studying for my actuarial exams, it used to be that if you passed one exam, you were a prime candidate for an entry-level job, and then you could earn while you learn and work your way up. No longer! Now, even if you passed four actuarial exams, you are far from guaranteed to have even *one* job offer; if you do get one, it will be due to a combination of luck and determination. Job openings are scarce these days; companies are in panic mode and reluctant to hire. You might apply to a hundred of the job openings that remain, and you will start cherishing the rejections you get, because at least the employers will have communicated with you; you will be most fortunate if you get a single interview and a single offer after months of searching.”

The Actuarial Student listened to these words with a sense of validation for some of his prior misgivings about the job-search process – validation that gave him no satisfaction. Virtually everyone he had spoken to – professors, career counselors, friends of family – told him that he should have no trouble finding a job. And yet already he felt that his initial applications had disappeared into the void. Something about this entire situation did not reconcile with the facts; contrary to the common narrative about the actions that could assure a prosperous future, it seemed that the entire world was about to slide inexorably toward calamity. Almost nobody else had shared this hunch of his, and certainly no official source of information had expressed it – until he heard Mr. Yoo’s remarks.

“So, in light of this situation, you might be wondering, ‘Is it even worthwhile to pursue an actuarial career?’ Do not give up on it so quickly,” Mr. Yoo continued. “This is a systemic, macroeconomic crisis, and every previously lucrative profession is going to have similar shortages of openings. If you try becoming a lawyer or a doctor, you will likely have immense debt from your schooling *and* no job waiting for you at the end. At least the actuarial exam fees are affordable enough that you will not need to take on debt – but the work you do while you study for them will need to change. I know of a way to bypass the job-search abyss, but it will require an especially creative approach toward the identification and management of risk – skills that actuaries need to excel at.”

Now the Actuarial Student was laser-focused on Mr. Yoo’s every word. Previously, in his academic studies, a clear path toward success was always laid out before him. That path could be quite challenging on occasion, but he could always expect that rewards would be commensurate to effort. Here Mr. Yoo was suggesting a similar possibility – some way to bypass the indeterminacy of the job-search process and find a set path of progress once again.

“You may find what I am about to say difficult to believe, especially if you have always followed the conventional expectations of you because it seemed to be the easier way toward good grades, respect, or simply being allowed to be left to your own devices during what little spare time you could engineer for yourself.” How had Mr. Yoo so accurately pinpointed the

Actuarial Student's true underlying motivation with that latter mention? The Actuarial Student saw largely blank, indifferent looks on his classmates' faces; they did not seem to identify with Mr. Yoo's characterizations – but he already knew that he was different, and it seemed that Mr. Yoo had found a way to relate to his way of thinking. “What if I told you that following your personal ideas precisely when they are *unconventional* is the key to success? This is the case not just for your personal values and worldview, but also even your idiosyncratic tastes and preferences. For example, who among you is a vegetarian? Raise your hands; I can see you even though you cannot see me.”

No hands were raised; this was a predominantly conservative college where traditional ideas about food consumption prevailed.

“For the meat-eaters among you, then, how many of you believe in only eating from among a limited subset of animals – cows, pigs, chickens, fish – but not exotic or unusual animals that are not bred for consumption in the Western world?”

Several of the students exchanged quizzical looks. “What in the world does this have to do with actuaries?” whispered one of them. However, a few hands went up in response to this question, and the Actuarial Student's hand was among them.

“There is an important wider benefit to humanity arising from this avoidance of consumption of exotic animals,” Mr. Yoo continued. “You should keep in mind that the study of risk is foundational to actuarial science, and actuaries look to other scientific disciplines to identify key contributing factors to various risks. Epidemiologists have known for a long time that most devastating infectious diseases originate through unusual contact between humans and animals – although this is not commonly recognized by the general public, *yet*. Eating animals which have not been raised for food over the course of millennia is the practice which poses the greatest risk of causing a novel pathogen to jump from animals to humans. People's immune systems are unprepared for such new pathogens, and they can spread rapidly and trigger a worldwide pandemic before our public-health measures have the opportunity to respond. If you remember SARS from 2002, it was caused in this way as well.”

“But SARS caused relatively few deaths, virtually all of them in Asia, and petered out before reaching the Western world,” another student interjected. “Surely this is a minor risk compared to the others that people encounter every day!”

“So it may seem, until one finds oneself amid a pandemic!” Mr. Yoo replied. “I am sure that many people ninety years ago, prior to the Spanish influenza's onset, considered it a similarly improbable and minor risk. Yet just because a particular peril has not affected people for a long time, does not mean it will not return! The next deadly flu season may even happen during the late winter a few months from now! Likely it will not be anywhere as deadly as the 1918 influenza, but it should motivate people to put their guard up – if they are rational, that is.”

“But what does all this have to do with searching for actuarial jobs?” asked another student impatiently. “I don't know much about what actuaries do, but I'm pretty sure that epidemiology is not it.”

“I am not suggesting that actuaries become epidemiologists. What I *am* suggesting is that the students of today *create* their own jobs that would address this risk of a global pandemic that could kill millions of people,” Mr. Yoo replied.

“Are there opportunities to do this already?” inquired the Actuarial Student.

“Not officially. No insurance company is interested in this risk yet. Indeed, after the SARS outbreak in 2002-2003, many insurers introduced policy provisions excluding coverage for business income losses arising from viruses and bacteria. So the traditional insurers mostly

wish to protect *themselves* against having to pay for this risk. What they do not realize, however, is that if a worldwide pandemic occurs, then major business disruptions for every company are inevitable. Governments will go so far as shutting down places of business or any other venues where people could gather and spread the virus. No company will be spared major turmoil and costs of dramatic, immediate adjustments. Moreover, millions of people forced out of work and hundreds of thousands of businesses forced to shut down would mean many fewer clients for insurance companies and many fewer people able to afford insurance altogether. Thus, *preventing* the pandemic makes far more sense even from a purely economic standpoint than just trying to shield one's own business from the consequences. As Ludwig von Mises put it, "No one can find a safe way out for himself if society is sweeping towards destruction."

Now Mr. Yoo was quoting Mises, who was the Actuarial Student's favorite economist. It was as if this speech were tailored to speak directly to him!

"So no insurance company is currently focused on this pandemic risk. But this is where the opportunity exists for you to make a difference," Mr. Yoo continued. "To prevent the devastation caused by such a novel infection, one needs to address its source and avert the animal-to-human transmission that renders the virus a problem in the first place. I can think of no better way to stop such transmission than discouraging people from eating exotic animals. This is not a major problem in the Western world, but it is an immense problem in the country where most pandemics have historically and recently originated – China."

The Actuarial Student happened to think that consumption of exotic animals was repugnant. He had been called closed-minded before for only eating meat from a specified and limited list of animals, but he felt validated that the aversion had a rational basis behind it.

"If you are disgusted at the thought of people consuming bats or snakes, this is your opportunity to do something about it," urged Mr. Yoo. "Do not search for jobs in the United States. Go to China and advocate against such behavior! You will find an assortment of allies, not just among epidemiologists, but also among animal-rights and anti-poaching groups, and perhaps even the Chinese Communist Party itself, if you present your effort as helping China to modernize and turn away from harmful old traditions. Collaborate with anyone you have to, regardless of what you think of them otherwise, because stopping the consumption of exotic animals would save humankind from a greater tragedy than you could possibly expect."

"This is so *weird!*" one of the students exclaimed. "You are asking us to abandon our job search to do *that*? Couldn't we join the Peace Corps if we want to do humanitarian work? And I can't imagine that such a job would pay particularly well."

"I happen to have a small pool of money that could pay stipends for living expenses to those who relocate," Mr. Yoo replied. "In fact, I know some inexpensive hotels in Wuhan, the capital of China's Hubei Province, which offered discounted rates if I can persuade American students to stay there. Wuhan is a large city with all the amenities one can desire, and I believe it offers the best base of operations for combating pandemic risk. I also have enough funds to pay for actuarial exam fees, so you can study and continue to advance toward your credentials while you do this valuable work of reducing global pandemic risk."

"Still, that seems to be more like graduate school than an actuarial career," the Actuarial Student noted. "I know it is not uncommon to earn \$60,000 per year for an entry-level actuarial job."

"It is true," Mr. Yoo replied, "that even in this economy you could *probably* eventually land a \$60,000-per-year job if you try exceptionally hard or are exceptionally lucky in your search. It is also true that humanitarian advocacy in Wuhan would not pay nearly so much."

However, looking to the future, I can see a way for one to earn much more money than a conventional actuarial salary. For those of you who are interested, just a bit over a month ago on October 31, a certain Satoshi Nakamoto published a paper that I can share with you about a new concept for a decentralized digital currency using a distributed ledger system called a blockchain. This digital currency will be an alternative to government-issued fiat currencies and a hedge against inflation. Rumor has it that in less than a month, the first such digital currency will be released. I strongly suggest that you be on the lookout for the term ‘bitcoin’ – the name of this currency, and that you acquire as many units of bitcoin as possible, and if you can sell any goods or services in exchange for bitcoin, so much the better. I anticipate that there will be tremendous speculative demand for blockchain-based currencies in the future. If you own any from the beginning and simply hold them for, say, nine to twelve years, you will then be able to sell them and never worry about money again.”

Most of the students’ eyes were glazed over. It was clear that they had no idea what Mr. Yoo was referring to. “Why in the world would anyone value mere pieces of computer code that anyone else can create or replicate?” one of the students asserted skeptically.

“The supply of the digital currency will be algorithmically limited to increase at a decreasing rate, removing the possibility of discretionary inflation. Also, the technology of a decentralized ledger where everyone can access the entire transaction history can ensure trust among users and remove the role of banks as intermediaries. This is especially important since our centralized banking system is the major source of monetary inflation, and blockchain-based currencies can be designed to be impervious to that risk, though not to the risk of speculation driving prices to fluctuate far more than the purchasing power of government-issued currencies ever could,” Mr. Yoo explained, taking a nuanced position on this novel concept. “Well, one might not mind the fluctuations if they occasionally result in massive increases to the number of dollars one can obtain for each unit of digital currency sold! But obtaining the currency early is the key to benefitting from the growth in the market value later on.”

“So are you proposing that we give up on getting a steady salary, because the job market is too tough, and instead settle for a stipend for living expenses while we rely on being able to sell this... bitcoin many years from now in order to earn our money?” the skeptical student asked, still unconvinced. The Actuarial Student, however, had a different reaction: “Logically, there ought to be some value to the bitcoin if it is indeed designed to resist inflation – especially now with the ‘quantitative easing’ that the Federal Reserve is undertaking, which will likely boost dollar price levels soon.”

“Well, perhaps not as soon as one might fear, since some complex factors are at play actually restraining the inflationary pressures,” Mr. Yoo reassured him, “but eventually dollar inflation will indeed erode one’s purchasing power – and one will be happy to have some digital currencies to sell when that happens. In fact, selling digital currencies will be our way of financing our operations in Wuhan. If you value sound money and stable purchasing power, you are likely worried about hyperinflation right now.” Indeed, the Actuarial Student was worried precisely about that. “I would like to emphasize that the threat of a global pandemic is *far* more salient and proximate than that of hyperinflation. It is difficult to envision just how little purchasing power one begins to have, no matter what amount of money one has saved, if one is confined to one’s home by government order or if stores lack essential goods, even toilet paper!”

Now the Actuarial Student had to wonder whether Mr. Yoo was engaging in rhetorical scare tactics. Instead, however, he inquired, “I am still not clear on how you propose that actuaries use their skill set to reduce pandemic risk. Is this not a task for more conventional

activists – people who hold demonstrations, give speeches, distribute leaflets, and try to persuade politicians?”

“But the actuarial skill set is perfect for addressing this problem,” Mr. Yoo countered. “The key is to design the appropriate incentive structure for people to stop consuming exotic animals. Laws prohibiting such consumption are not going to suffice, because such laws often already exist and are ignored. Public shaming might help deter some, but not all, or else such practices would have disappeared long ago. We need to give people an incentive to *voluntarily* avoid the risk – and for that we can create an arrangement that is essentially the *reverse* of an insurance company. An insurance company collects premiums from many individuals in the expectation of paying much larger losses for a few. However, if losses are likely to affect many people at once and to have colossal severity, this mechanism cannot function. Instead, we can *pay* people a premium so that they take the steps needed to avoid the risk, but also inform them that they will receive no payment if *anyone* in their community is discovered to be consuming an exotic animal. We set the premium sufficiently high that the recipients will be disappointed by its absence and so will take steps to prevent their neighbors from violating the terms of the agreement.”

“The privacy concerns here are huge,” one student remarked.

“You may be surprised to learn that the Chinese government will be seeking to institute a ‘social credit’ system soon, which will monitor most of its citizens’ activities in person and online,” Mr. Yoo replied. “The incentive system I describe will be quite mild and limited by comparison. Everyone in the community will be paid a premium and asked to report any information they can get about consumption of exotic animals. Each month, if nobody consumes an exotic animal, everyone gets paid again. If, however, *anyone* consumes an exotic animal, then the entire community will not receive the premium next month. All that people will need to do for this money is to *avoid* a particular action, provided they remain vigilant in preventing a narrow set of undesirable activities; indeed, perhaps some will start to see it as a kind of *universal basic income*. I would not be surprised if, to ensure that their premium revenues keep flowing, some citizens will form their own volunteer groups to patrol the nearby wilderness areas and ensure that no poaching of animals occurs there. We will need actuaries to calculate the premium amounts sufficient to actually have the desired effects, and determine whether the premiums need to vary based on any characteristics of the recipient, such as proximity to the areas where people are likelier to encounter wild animals.”

“Yet it seems that paying a premium to the entire population at levels that would affect their behavior can become quite expensive, quite quickly,” the Actuarial Student pointed out.

“That is correct,” replied Mr. Yoo, “and it is one reason why I cannot offer a generous salary to entry-level actuaries. However, I estimate we will have enough bitcoin to sell to cover the costs of the premiums for all of Wuhan’s citizens. We can even take our time in designing the incentive system; it does not need to be launched right away – around the mid-2010s would suffice to have the desired effect. By that time I *hope* that one could sell one bitcoin for several hundred dollars, after having bought it for pennies or even ‘mined’ it for free on our personal computers, which it will be possible to do during the first two years of bitcoin’s existence or so.”

Some students were shaking their heads. “This is all so improbable!” one of them exclaimed, “And even if you could sell these strange... bitcoins for a profit every time, how do you expand this system to the rest of the world? You wouldn’t be able to pay everyone, after all!”

“We would not need to pay everyone,” Mr. Yoo replied. “Just covering the at-risk areas

of Wuhan would suffice. Another area where I would need actuarial analysts' help will be constructing predictive models to determine where in Wuhan people are most likely to consume unusual animals."

"But is it not the case that exotic animals are eaten outside of Wuhan as well?" the Actuarial Student inquired.

"Yes, unfortunately," Mr. Yoo responded. "But..." he seemed to pause a bit, as if he were trying to carefully construct his response. "What we truly need is to create a viable proof of concept, and Wuhan will more than suffice for that. If it works for us in Wuhan, others will emulate us, and this incentive model will spread throughout China, particularly if we can convince Chinese officials that this is a good idea for doing away with superstitious old practices and driving forward the modernization of social customs in the 21st century. Yes... that is what will happen if we succeed in Wuhan."

"And yet what leads you to be confident in the likelihood of success?" the Actuarial Student inquired. "Is there not considerable political risk in working in China?"

"Yes, there is," Mr. Yoo acknowledged.

"And is it possible that the next pandemic would arise somewhere else while we focus on Wuhan?"

"Yes, but I think it is most likely to arise near Wuhan... Perhaps my reasons for thinking this will become more apparent to you after you complete your studies and become a Fellow."

"And is it possible that people might not uniformly sign up for the incentive structure or – find ways to cheat and conceal the consumption of exotic animals from view?"

"Yes and yes – but we only need *enough* people to comply and start putting obstacles in the way of those who wish to consume exotic animals. We need to reduce such consumption enough to greatly lower the probability of virus transmission – which does not happen every time. All actuarial science deals with probabilities, not certainties. We cannot prevent all pandemics, but if we can lower the probability of the next big one by, say, 90 percent, I would consider that a job well worth dedicating the next twelve years of one's life to!"

"Twelve years?" the Actuarial Student inquired.

"Did I mention that this is a guaranteed twelve-year opportunity? No other employer will offer this assurance, even though the starting salary may be much higher. My question for you is, if you agree with my assessment of the risk and what can be done about it, and if I have suggested a course of action that resonates with your personal preferences, then why not at least try it and see what happens?"

The Actuarial Student knew exactly why *not* to try it; he knew that everyone in his life would be aghast if he, after a straight-A academic record, after passing four actuarial exams, decided not even to *apply* for any job with a decent starting salary – and instead abandoned any notion of a conventional career path to go to China to work on a completely unproven concept with no historical precedent or indication of success, other than Mr. Yoo's word for it, as heard from his disembodied voice over the static-ridden Skype connection. And yet Mr. Yoo made exactly the arguments that spoke to the Actuarial Student's personal convictions – his view that technological innovation was necessary to transcend the status quo that brought about the present recession, his hope that decentralized market-driven currencies might protect against inflation, his aversion toward eating exotic meat products. At the very least, the extensive discussion of these topics by a fully credentialed actuary suggested to him that he had picked the right career field. Most other people would consider such views to be *weird* if not reprehensible, but here was a person suggesting that these inclinations not merely be embraced but committed to as a way of

trying to... save the world from a deadly disease? As eccentric as this opportunity seemed, it was also quite appealing – but only to the Actuarial Student. It was evident that none of his classmates demonstrated any response that could remotely qualify as enthusiasm.

The classroom door opened and the Professor returned. “Well, I trust that you learned something about actuarial career possibilities today. Thank you very much for your time, Mr. Yoo. Our class is coming to an end, but is there a way for the students to contact you if they have further questions?”

“Of course,” Mr. Yoo replied. “I am happy to share my e-mail address, and if anyone wishes to follow up on the opportunity I mentioned, I will happily provide details about next steps.”

“Thank you, Mr. Yoo,” the Professor said just as the bell rang.

The Actuarial Student remained in his chair for a moment, immersed in thought, as the Skype connection terminated. He overheard several students bantering as they left the classroom, “Well, that was a waste of time,” said one. “I think a snake-oil salesman could give better career advice,” another replied. “Hey, does your dad’s auto dealership still have that receptionist opening? I need to earn some spare change,” yet another whispered. “No, I think they stopped hiring after dad’s stock portfolio took a dip. Maybe you should go to Wuhan...” They chuckled as they left.

Whatever uncertainty previously pervaded the Actuarial Student’s mind had receded upon hearing that kind of derision. How could the others treat this accomplished Fellow actuary, a man who had attained perfect exam scores, in such a dismissive manner? Nothing was quite as effective as this kind of casual social injustice at motivating the Actuarial Student to do the exact opposite. He was determined to write to Mr. Yoo that same evening.

On March 15, 2020, the former Actuarial Student entered the coffee shop in downtown Wuhan and ordered a small piece of cake with his beverage, to celebrate becoming a Fellow of the Society of Actuaries – at last, and after considerable delay. In truth, his studies had taken a second priority to implementing Mr. Yoo’s design all these years – not to mention learning to speak Mandarin semi-fluently. The work had not been easy, and indeed he never seemed to have any permanent colleagues, just temporary contractors whom Mr. Yoo had hired to carry out routine tasks from time to time. Mr. Yoo himself turned out to be a recluse who spent all of his time in his office on the top floor of the Wuhan Center, where he did not permit visitors. Mr. Yoo only ever communicated via e-mail or the same old audio-only Skype connection where the static never seemed to improve. Why his boss never bothered to upgrade his technology despite having vast amounts of money, the former Actuarial Student could not say. Life in Wuhan could be comfortable, yet it was mostly solitary and consumed by work – vitally important and life-saving work, as Mr. Yoo never hesitated to point out. And thus, day by day, the work went on. Occasionally the opportunity arose to celebrate moments such as passing an actuarial exam or attaining a major designation – and a little bit of cake here and there did not hurt. “Go enjoy your cake,” Mr. Yoo told him in their last Skype conversation. “Believe me, this is the good timeline,” he had said, a bit cryptically as usual, but always in a strangely relatable way, as if no context needed to be explained, and so that the former Actuarial Student was not tempted to ask too many follow-up questions.

And yet, as his 12-year position was approaching its conclusion, the new Actuarial Fellow was not altogether disappointed at how it all turned out. As the crowds of local residents bustled around him, he took his place in line and spotted a minor functionary of the city

government, also waiting for his coffee. “Ah, good day, and congratulations on your efforts in advancing the social progress of our city!” the official greeted him. As astonishing as it seemed even in retrospect, Wuhan now indeed had regular citizen patrols in the surrounding wilderness areas, which reduced the poaching of wildlife to nearly zero. The Citizens’ Basic Premium, originally seen as quite an oddity given its tie to non-consumption of exotic animals, became a widely relied-upon source of income for residents. Government officials, after several years of initial reluctance, were persuaded to cooperate with this arrangement and even ordered the police to thoroughly inspect all of the produce at the animal and seafood market in the Jiangnan District. The police presence could seem a bit draconian at times, but Mr. Yoo assured him it was all for the best.

Somehow Mr. Yoo had managed to liquidate his holdings of bitcoin, and now many other cryptocurrencies as well, at just the right times all these years to ensure that there was always more than enough to pay Wuhan’s 11 million citizens. Building that kind of payment stream from nothing was truly mind-boggling – but it seemed a product of Mr. Yoo’s extremely good luck at having noticed Satoshi Nakamoto’s paper and taken action on its ideas before virtually anyone else.

The new Actuarial Fellow had done quite well financially himself after liquidating his cryptocurrency holdings back during the short-lived boom of 2017; he did not feel that he needed to revisit that volatile market, but at least his capital gains far exceeded any conventional cumulative actuarial salary for the same time period. He truly had the financial freedom to pursue any course in life once the term of his contract with Mr. Yoo expired.

Whether or not there would have ever been a pandemic, the Actuarial Fellow still could not be sure. However, whatever the initial motivation for it, the enterprise developed by Mr. Yoo with his help had taken on a life of its own, and the culture of China had been forever altered by it – seemingly in a reasonably good way.

As he sat down at his table and ate the first spoonful of cake, a mail carrier half-jogged into the coffee shop and approached the Actuarial Fellow’s table with a small, sealed envelope. “Special delivery from Mr. Yoo,” the carrier said and dropped the envelope. *Odd*, thought the Actuarial Fellow, as Mr. Yoo had never sent a paper letter before.

As he opened the letter, the Actuarial Fellow’s mouth dropped. He saw his own handwriting upon the piece of paper inside.

“Congratulations to me? Perhaps not yet. I thought my actuarial studies would finally be complete after all these years, but I am only halfway through. This evening I need to go to SOA.org and download all of the past exams and solutions. I need to find all of the historical price charts of Bitcoin, Litecoin, Dogecoin, and Ethereum. I need to download all this on my thumb drive and then check my e-mail for a link to a set of documents that will describe a history I have never seen before. Then I will need to go to the Wuhan Center, to the office I was told was off-limits these past twelve years. Thereafter, the next steps – and the stakes – will be clear. Now to move forward I will need to go back.

*Sincerely,
Mr. You – or, rather, I*

P.S. But of course, I should have known that it is just my sense of humor to do this!

P.P.S. 2004 is not a bad time to live as an adult in my mid-thirties. The only question is, how can I persuade my younger self to act according to his preferences, however unusual, rather than what others expect of him? How can I make the strange but principled path more appealing than the obvious and conventional path? What can persuade a young person that by following one's conscience, one can truly save the world in more ways than one will ever know?"