The Origin of the First Index Fund

by Kate Ancell

“In 1960, Chicago was an outlier. Now, we’re not—but it’s not because we’ve changed: it’s because our proselytizing has worked,” said Sunil Kumar, Dean and George Pratt Shultz Professor of Operations Management, a recent rumination on Chicago Booth’s place in academia. And he’s right—so many of the things, concepts, theories, and ideas that the world takes for granted started right here, as a crazy idea in a professor’s (or, often, student’s) head, that the school was brave enough to let grow.

Take index funds, for example. Not a terribly complicated concept to understand, and a term that novice investors today like to toss around to sound knowledgeable, as they learn the industry. At its most basic level, an index fund is—quite simply—a passively-managed fund that mimics, follows, or replicates a well-known market index, such as the Standard & Poor’s S&P 500. It requires no active management—no one selects stocks, there are no security analysts, and there is no portfolio manager. It is the enemy of the investment or hedge fund manager, the scourge of Wall Street, and has been described by Mark Dowie in San Francisco Magazine as, “The best investment advice you’ll never get.” And it exists, in large part, to Chicago Booth’s willingness to think well, well-outside the finance box.

It wasn’t all Booth, of course—key players in the creation of the first index fund (which is not what they planned to call it, either) came from all walks of life: there was a mechanical engineer with a bent for portfolio management and an eye on the future of computation; a mathematician-musician from Kentucky; a statistician from Stanford, on loan from IBM; two young graduates with theorems on their minds; a brand-new professor and his mentor, too; and a bank chairman who was ready to go the distance. But, like the center of a beautiful spiderweb, there was Chicago, spinning and binding all the parts together to create something altogether brand new. And this is the story of how it all happened.

When John Andrew “Mac” McQuown, a mechanical engineer with a degree from Northwestern, graduated in 1957, he did two things: he entered the Navy, and he invested in Texas Instruments, because of the company’s expertise in transistors. Even then, he was convinced of the important role computers and technology would play in the future of business. It didn’t take long for him to be proven right, either: in 1959, he sold his shares—which he had bought only two years earlier for $1,600—for more than $120,000.
So it was only natural that, with this interest in the market, upon his discharge from the Navy and graduation from Harvard Business School, he went to work on Wall Street. Which is where he ran into problems.

“There are oodles of things that made no sense to me in Wall Street,” he recalls, sitting in his current offices at DCI on a leafy, tree-lined street in San Francisco. The place is like something out of *The Social Network*, with white-board walls covered in theorems and data, comfortable sofas, cool tripod lamps, and the almost-audible hum of whirring brains.

“One of the most perplexing things that I have ever encountered—and never sorted out—is the Prudent Man Rule of investing…an interpretation of a judicial proceeding going back early in the 19th century, when some fiduciary was charged with malfeasance. The conclusion of the case was that investment fiduciaries should behave as prudent men behave—and they defined a prudent man in terms that made no sense at all,” he says.

“Basically, they said: ‘Go find a prudent man and behave like he behaves.’ That rule governed the investment management process of fiduciaries for a hell of a long time, and in some sense still applies today. I got some inkling that there were weird things like that, in business school, but I never really came clear about what was going on until I got to Wall Street.”

One thing McQuown does not like is applying received wisdom, “just because.” Which is why, when he was working on his MBA, he discovered a professor at MIT “who was interested in testing a particular hypothesis about the behavior of share prices. I made a deal to be a data dog and do some programming, in order to follow the professor. It got me interested in the behavior of share prices.”

This interest—and the idea that share prices even *had* “behaviors” that could be quantified—was a new concept, largely ignored by investors. And it stayed with him in New York when he went to work for Smith Barney.

While holding down a day job (and simultaneously studying for a PhD in mathematics at NYU), McQuown spent evenings moonlighting for his former professor, finally buying time on the IBM 7090 in the “service center in the basement of the Time-Life Building for $300 a weekend. The program took so long to run, and produced so many reams of uninterpretable data, that McQuown often crawled into his sleeping bag on the floor and slept while the program was running,” as Peter L. Bernstein describes in *Capital Ideas: The Improbable Origins of Modern Wall Street*. 
Mac and the Chicago gang

Eventually, of course, word of these nocturnal adventures got around, and a colleague, who understood his determination to harness the quantitative power of computers, as a device to pick stocks, gave McQuown an entrée to a presentation that James Lorie, PhD '47, and Lawrence Fisher, '68, were giving to a group of Merrill Lynch executives about their preliminary results on returns for common stocks. (The seed money garnered by this Fisher-Lorie lecture resulted in what would eventually become the groundbreaking Center for Research in Security Prices [CRSP] database at Chicago Booth.)

“There were probably no more than maybe 40 or 50 people in this audience,” McQuown remembers. “I went up to Professor Lorie and I asked him a couple questions about the statistical behavior of share prices, and he said, ‘Well, you know, you’re going to have to come to Chicago and meet a couple of my colleagues—if you really want to talk about that subject, you need to meet Gene Fama.’”

Newly-minted professor Eugene F. Fama, now Robert R. McCormick Distinguished Service Professor of Finance, had spent years studying the markets, and had written his thesis on what he called the efficient markets hypothesis. Essentially, this states that at any given time, security prices fully reflect all given information. Put even more simply: you can’t know anything more than the market itself knows, which makes trying to beat it impossible. Not only was this idea heresy at the time, it was also revolutionary. Fama’s later study, “Random Walks in Stock Market Prices,” published in the Financial Analysts Journal in the September/October 1965 issue, cemented his—and Chicago’s—reputation as the leader in the field of efficient market theory.

This reputation was only confirmed when one of his graduate students, Michael Jensen, PhD '68, published, in the Journal of Finance in the same year, the first study comparing actively-managed funds to randomly-selected stocks, demonstrating that only 26 out of 115 actively-managed funds beat the random stocks. As McQuown puts it now, “Fama and Jensen were fellow members of the self-appointed inquisition into the real behavior and performance of common stock portfolios.”

By the time Burton Malkiel’s book, A Random Walk Down Wall Street came out in 1973, putting the efficient markets hypothesis into layman’s terms, McQuown and his team had taken this concept and run with it, all the way to the bank.

Meeting Fama and learning what the “Chicago gang” was all about was an offer McQuown—who was sure that traditional Wall Street wisdom was wrong, and wanted to figure out how to make it right—couldn’t refuse. Which is how, one cold post-Thanksgiving Monday
morning, McQuown found himself on campus. “I went to Professor Lorie’s office, and we chatted for a few minutes, and he took me in and introduced me to Gene Fama. An hour later he introduced me to Merton Miller. So, in the course of that morning, I met the two people who would be, ultimately, more influential than any other two, in terms of getting me started.”

McQuown recognized this life-changing moment at the time: “I thought, all of a sudden a door had opened up, on the other side of which was understanding and study that I’d never encountered. I was looking for an understanding in finance that was consistent with the learning that I had been exposed to in engineering. And it wasn’t there. And all of a sudden I’m at Chicago and there’s a whole bunch of guys asking all kinds of questions and collecting all kinds of data and actually investigating what’s going on. I mean—wow. Right?”

**Manifest Destiny**

Although he didn’t know it then, another wow moment was snapping at his heels. IBM—whose computer McQuown was currently renting—asked him to speak with a group of executives at their training facility in San Jose on the application of analytics to finance. In that audience was then-president of Wells Fargo, Ransom Cook. Cook, whose successor, Dick Cooley, became equally supportive of McQuown’s project, “was very skeptical about what was going on in the Trust Department,” recalls McQuown. “They were skeptical about corporate lending. They were skeptical about the economics of branch banking. They wanted it examined—and were willing to put a number of cherished banking/investment beliefs to the analytical blade.

“Ransom had the wisdom of realizing that loans and deposits are quite insufficient products for an expensive bank-branching system. He needed a more diverse product suite. Second, he was very skeptical about brokers and he was also very skeptical about investment performance. He wanted somebody independent, who wasn’t afraid to ask tough questions,” explains McQuown in hindsight.

“Cook said to himself, ‘Do you know what? We’re spending cajillions of dollars on computers. It’s the fastest-growing expense in the bank, and all we’re doing is the same things that we used to be doing with punch cards and people with green eyeshades and armbands. We’ve got computers full of data, but we’re not doing anything with it except mailing out customer statements, and miscellaneous other kinds of things.’ He was really committed to making sense out of his computers and making them work for him.”

Though McQuown didn’t know it, he was about to become the eye of a perfect storm.
After the speech, Cook approached McQuown and, within one day, offered him a job. Understandably, Mac—who had a wife, a career, and a PhD program on the go back East—was “kind of flabbergasted,” and asked for time to think about it.

He didn’t have long to consider it—about 10 days later, Cook was on the phone again. A few vacation days after that, the two met in California.

“He said, ‘I want you to come work here. And money is not going to be a problem,” says McQuown.

“I said, ‘Well, you know, it’s going to take a lot more than just me. And it’s going to cost something.’

He said: ‘Whatever it costs, it costs. That’s fine. We’ll just do it.’

He didn’t bat an eye.”

Which is how, going on little more than a handshake and hope, in March of 1964, McQuown arrived in San Francisco as the head of Wells Fargo’s Management Sciences division, tasked with developing the newly-coined “Investment Decision Making” project.

**Bits and bytes**

It is difficult to overstate just how “out there” both Cook’s offer and thinking were: the idea of trying to use computers—which, until this time, even IBM itself had only used for accounting—to break the investment process into parts, and to then evaluate those parts and come up with a reliable model predicting what they would do, was simply unheard of. Further, it seemed that, even if it could—in theory—be done, no one had the technological resources to do it.

**Wayne Wagner**, who came from IBM and was McQuown’s first hire and eventual lieutenant, puts it this way:

“To this day, I marvel that Mac was able to convince the chairman of the bank to fund—and continue to support—this highly-speculative venture that was frowned upon by virtually everybody else at the bank.”
It is hard to conceive of just how little data and few computing resources were available. First, Professor Lorie’s CRSP database, which at its inception had charted the rising and falling stock prices of 506 companies from 1925 to the current day, was brand new. (The team at Wells Fargo was its first outside user.) Other than that, analysts had virtually nothing to work with to begin building their database of information. And without a database, they could never hope to create a system to predict market behavior, and manage funds on those predictions.

Says Wagner, recalling the cobbled-together early days, “Say we wanted to do a test of security analysts’ ability to identify outperforming stocks. There was a weekly, approved list of stocks that could be bought, but nobody thought to save them: ‘Last week’s selections? Isn’t that as useless as last week’s news?’ Nobody had ever thought to keep them, to make a database to measure performance—so security-analyst performance wasn’t measured; nobody had any idea whether they were good, bad, or indifferent. But we found one financial analyst who had thrown the lists into a bottom drawer rather than the wastebasket. A treasure!

“We also needed, every day, what the closing prices were the day before, on all the stocks in the universe. We found this guy in Palo Alto—and this was his system. He went out and he bought a Wall Street Journal and a New York Times. He gave one to one keypunch operator and the other to another keypunch operator, and they both keyed in all of the prices and then compared them to check for errors. He was able to deliver that ‘report’ by noon the next day.”

Second, Wells Fargo didn’t have a single machine capable of running FORTRAN—the analytic language of the time.

“We were able to buy time on the 7094 II at Standard Oil for $500 an hour,” says Wagner. “We were hiring college graduate programmers for $475 a month! This was the largest machine in San Francisco. Quite literally, it had far less capacity than today’s iPhone, but it was room-sized.”

Thirdly, analytic packages didn’t exist.

“When I wanted to run a regression analysis, I had to program a step-wise regression.”

Finally, there was no university that offered a major in quantitative finance.
“Almost all the practitioners had operations research or engineering backgrounds,” says Wagner, who had graduated from Stanford. “Hell, hardly anyone graduated from college even knowing how to program a computer.”

Building the team

At the time, when big clients—like Wells Fargo—signed up for their services, IBM “gave” systems engineers away to the clients to make them happy (and, often, to explain how to do things). In what would prove to be a fateful move, Wayne Wagner was temporarily assigned to Wells Fargo. “Management said, ‘They have this crazy guy there, trying to rebuild the entire investment process,’” he remembers.

Wagner’s role was to literally assist McQuown in interviewing people. One of McQuown’s “eccentric” hallmarks at the time was his disinterest in hiring typical finance guys to be members of his fledgling team. Instead, he wanted mathematicians, statisticians, and computer science experts. As Wagner sat in on the meetings, he began to think that, actually, the guy McQuown should be hiring was…him.

“The more I listened to what his plans were, and his thinking behind them, the more thrilling it sounded to be a part of. Mac and I shared two very strong beliefs: that scientific method could be applied to business problems, and a strong libertarian streak. We got along from day one.”

There’s another reason he was the right man for the job: in another perfect-storm moment, Wagner had recently been assigned—unhappily, on his part—to IBM’s San Francisco–based finance division.

“I said, ‘I don’t want to go there. There’s nothing happening.’

And [the boss] said, ‘No, no, no, we’re going to come up with a new program. I want you to take the lead in putting this into usage.’

He handed me Markowitz’s book. I said, ‘Huh. That sounds interesting.’”
So Wagner, using Markowitz’s principles, had already begun to try to develop a financial-reporting program for IBM. But it was too big to be run—even on the Standard Oil machine. He recalls, “I had to come down to UCLA, which was the biggest machine on the West Coast, in order to run these programs. So, here I am. I don’t understand this; I’ve had some finance courses, but it wasn’t something I really understood. I didn’t really know what portfolio managers did, for example. But I had this program, and it required nine-point estimates.”

To fill the points, he started asking managers some previously unconsidered questions about potential portfolio performances—questions like: “What do you think it’s going to be?” “What’s your high and low estimate?” “What if things were not quite as good, or a little bit better?”

“You can imagine what kind of wacky looks I got talking about this stuff. But, I got some data and took it down to UCLA. It didn’t work. Meanwhile, I was learning theory, and something about quadratic programming, and operating systems portfolio management.”

When Wagner realized what McQuown wanted to do, he said, “You know, I’ve been working with this stuff.”

Mac was shocked. “He said, ‘I didn’t know anybody in the world was.’”

I said, ‘Well, I might be the only one in the world.’”

Needless to say, Wagner was hired.

Gradually, the years went by; the team increased from six to 35, and McQuown called in experts to help with the heavy lifting—experts like Bill Sharpe [MBA ’71] with his CAPM expertise, Harry Markowitz, Lawrence Fisher, Mike Jensen, Merton Miller, Jim Lorie, and Gene Fama. And still, they couldn’t make it work. And still, the bank funded the team.

Mac explains, “We did one thing really, really well—we were completely open about what we were doing. We didn’t withhold anything. When things got screwed up, we told the boss—‘Things are screwed up, and we need to do something different, or quit, or whatever, but there is no reason to do it anymore.’ I think that Dick [Cooley] really liked that attitude. It had to do with honesty and integrity.”
So when, after three years of going down blind alleys, following false starts, and working about 100 hours a week, McQuown announced that they needed to start over completely, from thought one, Cooley trusted him and his team to carry on.

“He said, ‘Go do it.’ There was no committee. There was no nothing. He just made up his mind,” says McQuown. “There was a lot of adaptive behavior and extremely good executive leadership from the top of the institution.”

So Mac began to cast about for new ideas. And it wasn’t long before he found one—which would change everything.

An idea that would, in fact, change the world.

**Back to the (Chicago) drawing board**

During the preceding years, as he worked with his team in San Francisco, McQuown maintained and deepened his ties to Chicago, both through attending the biannual Lorie seminar at CRSP, and by hiring its brightest minds as consultants for his ever-evolving project. A turning point came when the team realized that they had been missing a factor in their ruminations: the importance of creating and tracking transaction-cost analysis in the execution of trades.

Immediately, McQuown called in CRSP expert Jim Lorie, to help factor in that analysis in adjustments to reports and client-reporting procedures. They discovered that they needed to adjust for several variables:

1. Money added or withdrawn
2. The passage of time
3. The risks incurred in generating the results

The executives at Wells Fargo were so pleased with what McQuown and Lorie proved that they authorized a full study of performance measurement to supply to the industry as a whole. The study, published in 1968, was called “Measuring the Investment Performance of Pension Funds.” It ran to over 200 pages with seven academic authors, including Fisher and Lorie. Fama himself wrote a 30-page appendix, “Risk and Evaluation of Pension Fund Performance,” which, according to Bernstein in *Capital Ideas*, provided a “systematic, logically complete, non-technical discussion of the theory of pension fund performance.”
During their work together, McQuown had also become close to Merton Miller and Fama, both of whom mentored him through his process of trial and error. And, as time passed, Fama introduced McQuown to his students, who Fama still remembers as being "a group of extraordinary students, who all happened to be here at the same time. We’ve never again had a cohort that strong—we’ve had many excellent students throughout the years, but that group all turned out to be leaders, so it was really a unique experience. And I was very young for a faculty member—they were basically all my age. It was like a bunch of kids hanging around together."

One such "kid" was Myron Scholes, PhD '70, whose thesis was on the substitutions versus the information effect of securities prices. As Scholes went on to study Michael Jensen’s thesis, developed under thesis advisor Merton Miller, which showed that “the performance of mutual funds seemed to be no different from naïve strategies holding a market portfolio,” he began to believe that any kind of active portfolio management was difficult.

“I think I learned as much from my fellow students, in terms of the way to think about things, as I did from the faculty,” he muses. “We had not just new faculty, with new ideas, we had older faculty, so I could learn how others thought at that particular time and how the transition was working. It was a very rich experience.”

In 1968, Scholes left Chicago for MIT, which would prove to be another fateful cast of the die. It was at MIT that Scholes met a young man named Fischer Black, who was interested in working on options pricing theory. So, when McQuown came knocking, looking for expert consultants, the Chicagoans pointed him Scholes’s way—and Scholes introduced him to Black. In short order, the two young theorists, through Fischer Black’s consulting firm, Associates in Finance, were hired. They arrived in the summer (Scholes’ MIT class load was too heavy to allow him to travel very much during the school year) to evaluate the work the Management Science division had done thus far—which is where the wheels came off the wagon.

Black and Scholes noted that the team had constructed a “great middle piece—which was how to take inputs, construct portfolios, and then produce them, which was terrific. But the front-end was missing. One problem was: where were they going to achieve the analysts’ estimates. Two, they didn’t have many people to sell this portfolio to,” says Scholes. “I wrote a report saying, essentially, I like your middle part, but given that inputs are very tough, given Jensen’s research and what he has shown, and my own research from my thesis, I recommend that you take a passive view or an inventory view of holding securities. We never thought of it as an index fund.”
Rather, the two thought that it would be a good idea to construct an inventory—a portfolio of securities—that would provide good returns to investors, and that would mimic, but not replicate, a particular index. They thought of it as a market portfolio.

“Earlier funds were actually based on empirical research that showed that lower-risk (or low-beta) securities tended to perform well relative to higher-risk securities in a substitution effect. So we didn’t want to slavishly adhere to an index.

“I always thought there were three ways to make money in the market: one, holding inventory. Someone’s got to hold the inventory, and you should expect to see a return on holding it. Two, turning over inventory. There are a couple of ways to do this—you can be proactive, and try to forecast the future, which is tough because you’re competing against lots of different people.

“Or you can be reactive, which we innovated through Mac at Wells Fargo. Reactive means not turning over your inventory instantaneously, in order to exactly replicate an index. This non-reaction brings your costs down to approximately zero. So you can either make money or reduce your costs to turn over your portfolio. If you want something immediately, it could be costly. If you need immediacy, someone will supply it.”

**Figuring it out**

It was in understanding this activity, and how to behave at the margin of trades that would prove to be crucial to the success of the team. Immediately, McQuown knew the direction in which they needed to go. Embracing the efficient markets theory, he tasked Black and Scholes with analyzing the relationship between risk and return, and including option theory in their calculations.

Initially, the team focused on using Bill Sharpe’s CAPM model with its ideas of low-beta stocks, and measurements, in constructing portfolio theory. And they thought that, finally, they had figured it out.

“We had it all ready to go,” say McQuown. “Until Fischer and Myron made up their minds that there was something wrong with this picture. The betas weren’t right. We were also concerned that we had encountered a period of time in which this behavior existed, but what was the evidence that it was going to persist into the next period? It was at this stage of the evolution that the efficient market hypothesis became increasingly tested. But in the final analysis, Fischer and Myron found—after a great deal of research, development
and testing—that the returns that were being generated at mutual fund management companies were not as good as the S&P 500’s. Everybody thought it was easy to beat the S&P 500. It turns out, nobody was, or hardly anybody was, and certainly not consistently.”

“When Fischer Black and Myron Scholes got involved,” remembers Wayne Wagner, “The whole theory changed. We just stopped doing everything we had been doing—with some notable exceptions—and devoted it toward the new way of looking at things. Before that, we had been trying to carve ideas out of blocks of marble. Now, instead of trying to take apart the investment management process and then tackle each component separately, we replaced our ideas with this one, unifying theory: that all assets are priced based upon their risk and relative to one another.”

This proof, finally arrived at, proved at once to be both wildly unpopular…and correct.

**Fighting it out**

“Jim Vertin [the director of the Financial Analysis Department (FAD), which eventually became Wells Fargo Investment Advisors (WFIA) said, ‘This cannot possibly be right. We spend all this money on analysts and all this fancy stuff and you’re saying that all we really need to do is buy the S&P 500?,”’ remembers McQuown.

The conflict between McQuown and Vertin, though, was larger than just the difference in portfolio management theory. “It seemed to me that Mac wanted a takeover as well as a makeover,” Vertin says of the old, early days in Bernstein’s *Capital Ideas*. “Mac the Knife was going to own this thing. I could just see the fin of the shark cutting through the water.”

Bill Fouse, who arrived at Wells Fargo from Mellon in 1970, under a cloud for having pitched the idea of an index fund to executives there, remembers these days. “McQuown and Vertin were at each other’s throats. If they went into the office, pretty soon the walls of the office began to bulge. Little did I know what a battle royal I was getting myself in the middle of. I just could sense the ill-will between the traditional operation there and the scientist group.”

Wagner concurs. “Dick Cooley not only wanted this fund, he protected it. He stuck us in the back of the systems department, in another building, where all the computers were, down in the industrial area of San Francisco. In other words, he hid us. But obviously, we had to
encounter people in the bank and there was a kind of universal, ‘This is crazy. What are you trying to do here? Everyone knows how to manage portfolios. Why are we wasting money on this?’"

The short answer, as provided by Fouse, is that “We were, in effect, looking at the evidence that traditional management was a hoax. The forecast of the security selection didn’t work. Their performance of portfolios didn’t fill any superiority to random chance versus the market.”

Which is why, when he arrived, he found, “Two groups of people screaming at each other, and certainly not communicating.” (It was around this time that Vertin famously referred to Mac’s team as, “Guys in white smocks with computers whirring.”)

In fact, how Bill Fouse arrived at Wells Fargo is an interesting insight into the relationship between McQuown and Vertin. As disparate as their points of view were, they also had considerable mutual respect for one another. McQuown’s Management Sciences (MS) division “intended to provide the Financial Analysis Department with a whole set of new tools, procedures for using them, data on resultant performance introspection, etc. That meant that someone on the FAD side had to work with MS, and had to basically concur on the applications of the emergent investment technology. No such person existed in FAD,” Mac remembers.

“So I began a search for an outside person. I had met Bill Fouse at the CRSP biannual meetings. He was from Mellon, endeavoring to upgrade their investment process, with little success…for reasons I never knew. But, Bill was a bit of a quant, and quite an experienced investment guy. One day at CRSP, I said to him: ‘Why don’t you come to work at Wells on the FAD side?’ He thought about it and said he’d like to consider it.”

Getting Fouse on board was one thing—getting the budget for his hire, and assigning him to the right team, was another. Fouse eventually ended up under the FAD “umbrella,” and his job—unofficially—was to run interference between Mac’s team and Vertin’s more traditional members. In Capital Ideas, Bernstein cites a memo advertising Fouse’s hire, in which Vertin described Fouse—who officially worked for him, and not McQuown—as, “This Department’s ‘bridge’ between the theoretical new and the operating old…an ally in our quest for excellence.”
It didn’t go very well at first—Mac was distrustful of Fouse (who was working, after all, in the enemy camp), and he furthermore didn’t agree with Fouse’s dividend discount model—this disconnect went so far at one point that McQuown tried to have Fouse fired. But Fouse persisted, on both fronts, and slowly began to bring the two groups together.

“I proceeded to show the traditional guys that, in fact, there was perfect confluence between very traditional ideas of risk and what the management scientists were producing as a measure of systematic risk of stocks. So, step-by-step, I made my way into their trust.”

Fouse’s strategy worked so well that eventually Jim Vertin himself was converted to the new strategy. Once converted, he became one of its most vociferous proponents. And he had his work cut out for him.

“Once convinced that it provided a better way, it fell to me to convince the bank’s management that the way we handled trust portfolios should be drastically revised and, once over that hurdle, to get approval from Wells’ Trust Committee to put the changed methods we had developed into practice. Not the work of a day!”

The first fund

Now that they had the theory down, thanks in large part to Black and Scholes; and the practical application and database developed, thanks to Wayne Wagner; and the backing and approval achieved, thanks to Jim Vertin through Bill Fouse’s ministerings; the team needed a product. And once again, Chicago heard the call.

In the early 70s, Keith Shwayder, whose family owned the Samsonite luggage company, worked at Chicago as an assistant professor of accounting. Meanwhile, at the family firm, according to Bernstein, Shwayder discovered that “the company pension fund was invested in a mixed bag of mutual funds. To someone who had shared office space with the likes of Lorie, Fama, and Miller, this was heresy. He began asking around to see if anyone, anywhere, was managing money in the “theoretically proper” manner that he had come to admire and respect of his business school colleagues. His Chicago friends immediately told him what was going on at Wells Fargo.”
“It was another perfect storm,” says McQuown. “The group had been working for six years before we had the first manifestation of all that effort. Six years.”

During those years, Wagner, with Black and Scholes, had created a simulator that allowed them to track proposed portfolios through time. The simulator Wagner wrote allowed the team to gain confidence in the results they were generating.

So when Shwayder came along, after convincing his father to ante up six million dollars in company pension fund allocations to be put into a fund created and managed at Wells Fargo, it was—from theory and research, from academic what-ifs and practical arguments—suddenly all systems go.

“They asked if we could design a diversified portfolio that spanned the market,” says Wagner. “The simulator was perfect for that task and we found that we could make the concept workable. We didn’t know it at the time, but we were inventing the index fund.”

And so it was that, in 1971, the first index fund—the Samsonite Luggage Fund—was born.

According to Bernstein, “The basic design and software were developed by McQuown’s Management Sciences group, but Vertin saw to the day-to-day management of the fund and asked Fouse to manage the strategy. It was to hold an equal dollar amount of each of the 1,500 or so stocks listed on the NYSE, which seemed the most appropriate replication of ‘the market.’"

The fund worked, although there were heavy transaction costs and daily management was difficult. Still, the team could say—for one-hundred-percent-sure—that they, with the direct guidance, intervention, and expertise provided by Chicago, had changed the face of finance forever.

“We created the finance group. There was no finance function at Wells Fargo,” says McQuown, looking back over the long road of years. “We also started Wells Fargo Investment Advisor. And we hired David Booth, ‘71. Booth went to work on the WFIA, which then morphed into Nikko, then was sold to Barclay’s, where Fred Grauer, Patty Dunn, and Blake Grossman, the three CEOs, kept building it. John Bogle says he got the Vanguard S&P 500 index fund started because of us. Fouse and I were the ones who influenced Bogle.”
And as for who influenced McQuown? “It’s all thanks to Jim Lorie, Gene [Fama], and Merton [Miller]. The economic wealth of the McQuown family can be directly traced back to those individuals. It’s funny—when the index fund came along Dick Cooley said, ‘What a great idea—I mean, why the hell hasn’t anybody else figured this out?’

And I said, ‘Well, it’s the Chicago guys. They did.’”