Goldman Sachs Research

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The History of GS Research

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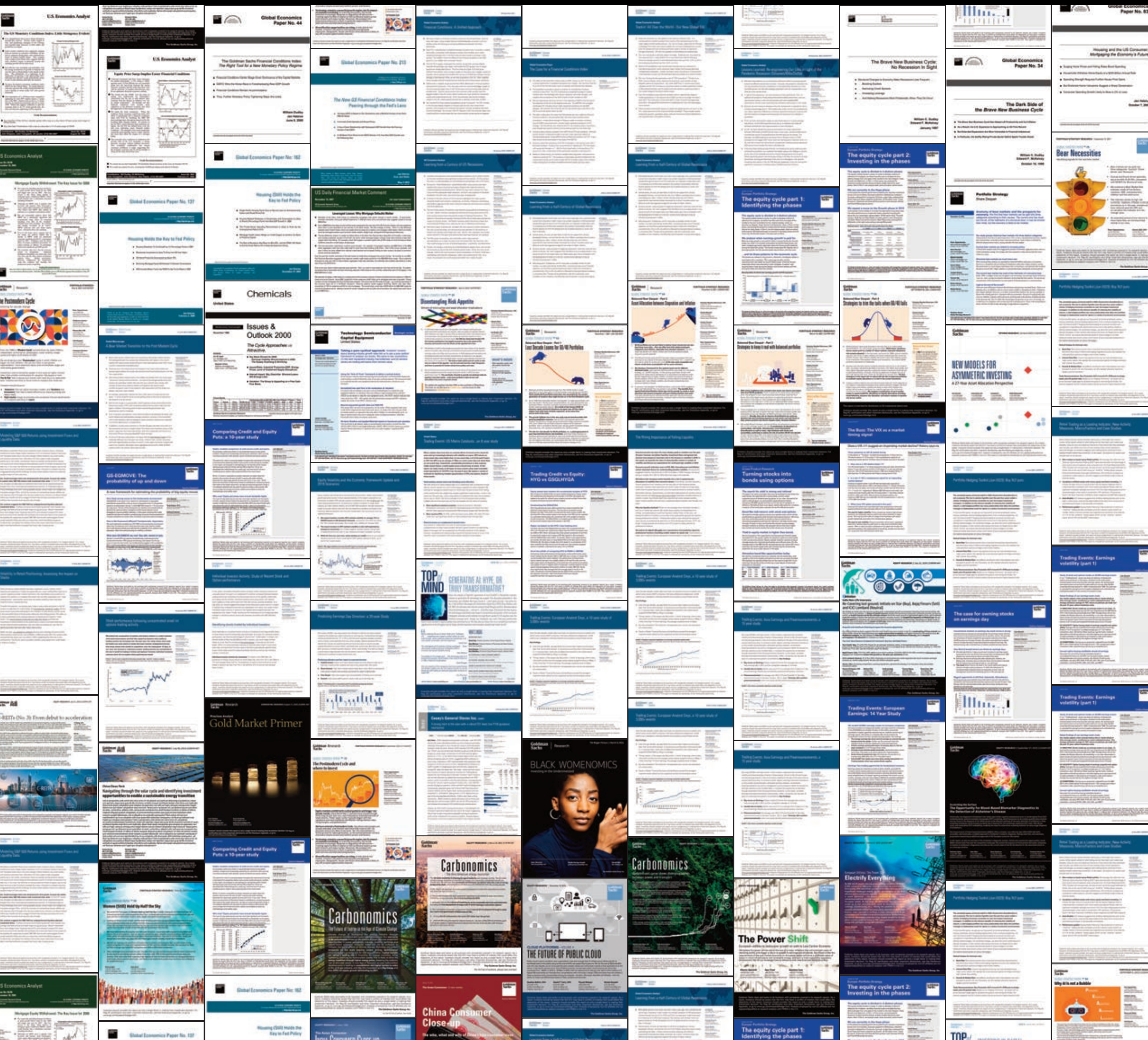

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Executive Summary

1. **The origin story.** Goldman Sachs' earliest research efforts started in the 1930s but were limited to servicing internal stakeholders. In the 1950s, research "specialists" broadened their scope, producing periodic reports for dealers and brokers and offering clients insights across various industries, sectors and companies upon request. A decade later, Goldman Sachs organized its first formal research efforts with the same foundational attributes that characterized the rest of the firm – an entrepreneurial and innovative drive to remain relevant, competitive, and effectively positioned to service clients. During the early 1960s, an expanding institutional investor business and the simultaneous formation of a series of boutique research firms across Wall Street buoyed the firm's decision to formalize and expand the GS Research department.
2. **Becoming "Investment" Research.** In the 1970s, Goldman Sachs Senior Partner Gus Levy was responding to client feedback when he mandated the strategic expansion of Research to include coverage of a broader suite of companies, particularly large caps, that were important to institutional investors. Leon Cooperman was tasked to build a more sophisticated and commercial GS Research department. The relationship between Research and Sales was a key factor in the success of the growing research franchise, which quickly developed a reputation as the most important provider of content to many institutional investors.
3. **Navigating globalization, growth, and volatility.** Goldman Sachs began its transformation into a global firm in the 1970s. As the firm grew its global footprint, GS Research also expanded beyond the US, under the leadership of Cooperman and, later, Steve Einhorn. A series of leadership transitions and a volatile macroeconomic environment in the late 1990s and early 2000s led to the appointment of new GS Research heads, Suzanne Nora Johnson and Andrew Melnick, who played instrumental roles in steering the division through new regulatory challenges that required the franchise to evolve in significant ways.
4. **The Global Analyst Research Settlement.** On December 20, 2002, the SEC announced that a "historic agreement to reform investment practices" had been reached with 10 leading investment banks (including Goldman Sachs). The Research Settlement followed the regulator's allegation that, between mid-1999 and mid-2001, the banks engaged in practices that allowed their investing banking segments to exert inappropriate and undue influence over research analysts and their content, leading to conflicts of interest for the analysts. The banks paid substantial penalties as part of this agreement, and the SEC stated that it would, "bring about balanced reform in the industry and bolster confidence in the integrity of equity research." The Research Settlement transformed the way brokerage firms operated and brought many changes to the GS Research division.
5. **60+ years of GS Research.** Investment research has evolved extensively over the past several decades. Yet, in spite of challenges stemming from new regulations that have impacted its business model, debates on the cost of research, technological developments, and globalization, the industry has remained resilient. The continued

prominence of and need for high quality, proprietary research is indicative of its value to clients and its importance to the efficient functioning of financial markets. This study seeks to document some of the pivotal moments in GS Research's history. In the course of its compilation, conversations with 17 former GS Research partners, as well as two current leaders – Division Head and Chief Economist Jan Hatzius, and Global Head of Equity Research Jim Covello – have highlighted some of the key tenets that have played a significant role in sustaining Research at Goldman Sachs and within the finance industry more broadly.

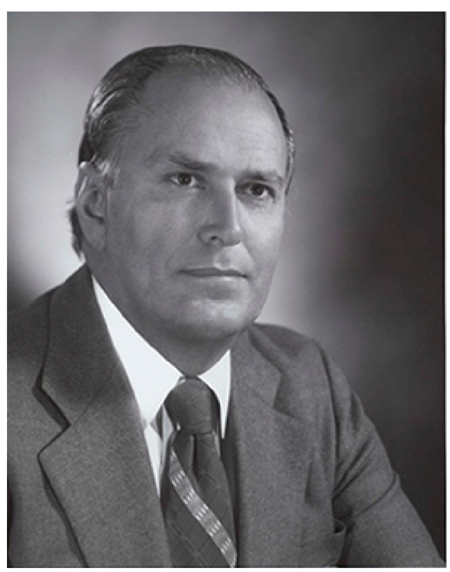
The GS Research Origin Story: The 1960s

From the humble beginnings of Goldman Sachs and the prodigious drive and courage of founder Marcus Goldman to the unparalleled level of teamwork, excellence and commitment to the client, the history of the firm is a story of evolution and endurance.[1]

Goldman Sachs' earliest research efforts started in the 1930s but were limited to servicing internal stakeholders. In the 1950s, research "specialists" broadened their scope, producing periodic reports for dealers and brokers and offering clients insights across various industries, sectors and companies upon request. A decade later, Goldman Sachs organized its first formal research efforts with the same foundational attributes that characterized the rest of the firm – an entrepreneurial and innovative drive to remain relevant, competitive, and effectively positioned to service clients.

During the early 1960s, an expanding institutional investor business and the simultaneous formation of a series of boutique research firms across Wall Street buoyed the firm's decision to formalize and expand the Research department.[1] The newly organized GS Research segment was led by Partner Robert Danforth and comprised six to eight team members who produced one monthly four-page report. Danforth joined the firm in 1948, was named partner in 1962 and, according to an internal GS memo, remained Partner-in-Charge of Research until 1977.

Exhibit 1: Robert Danforth served as Partner-in-Charge of Research until 1977



Source: Goldman Sachs Archives

Throughout the 1960s, investment research would become more influential on Wall Street and was seen as helping to build market share.[2] In the late 1960s, GS Research made four pivotal hires who would go on to help transform the department into the investment-focused and client-centric division it is today. Leon (Lee) Cooperman joined Equity Research in February 1967, after completing his MBA at Columbia University. That same year, Gary Wenglowski joined GS Research from the University of Pennsylvania, where he had just finished his PhD in economics. William (Bill) Kealy also joined the firm in 1967, from Morgan Guaranty Trust Company. And in December 1969, Michael Armellino joined Equity Research from Lord, Abbett & Co as an airline analyst. Cooperman, Wenglowski, Kealy and Armellino would all later assume significant client-facing and influential leadership positions in the growing Research department.

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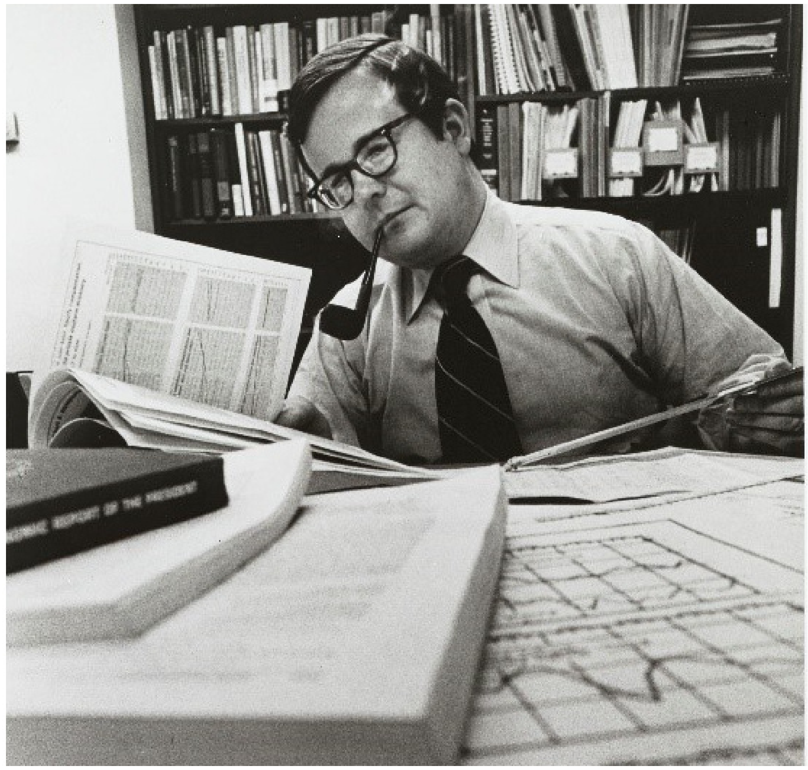
Lee Cooperman on Joining GS Research in 1967

“I joined the firm February 1st, 1967, as a junior analyst; I had just graduated from Columbia. I joined Equity Research on the consumer side. When the senior analyst left, it gave me the opportunity to be promoted, and I had responsibility for consumer research - I was the lead analyst in consumer products.

“I attribute my success to three things: hard work, luck, and intuition. Hard work and luck do not require any explanation, but intuition does. [One example:] I liked everyone I met at Goldman when I interviewed, but Goldman was my fourth highest offer and I was basically broke. I was straight As in finance, and my finance professor was friendly with the head of Goldman's Research. I met with Bob Danforth, who was then the Partner-in-Charge of Research. Then he calls me up – that was the only time in my life that I passed a deadline without acting – and said, ‘We haven't heard from you. What can we say?’ And I said, ‘Bob, I am going to be totally honest with you. I have 16 job offers. I am completely broke. Goldman was my 4th best offer, but I liked everybody I met in the interview process. Do you think I can make $25,000 a year in five years?’ And his response was, ‘If you work hard and keep your nose clean, you can do it.’ So, intuition. When I joined Goldman Sachs in 1967, they were not the powerhouse they are today, so I made the right judgement on people – I call it intuition. In joining Goldman, I joined a firm to be a big winner, and it was based on intuition.”

Source: Conversation with Lee Cooperman, August 2025

Exhibit 2: Gary Wenglowski joined GS Research in 1967 as an economist in New York



Source: Goldman Sachs Archives

Becoming "Investment" Research: The 1970s

Goldman Sachs' history is marked by many dynamic leaders who were steadfast stewards of the client franchise and led with vision and creativity. Gus Levy, who would later become one of the most respected leaders in the financial industry, was named senior partner in 1969. At the time, his appointment was unprecedented – it was rare for a trader to lead an investment bank. Levy served as the firm's senior partner until his death in 1976 and was viewed as a pioneer who transformed the sales and trading functions.

Levy was responding to client feedback when he mandated the strategic expansion of Research to include coverage of a broader suite of companies, particularly large caps, that were important to institutional investors.[1] The firm's partners debated the best approach to developing Research.[1] Some advocated for the acquisition of a boutique research firm while others supported the idea of hiring the entire research department of another major firm.[1] In the end, although all the partners acknowledged that hiring analysts individually seemed inefficient, they unanimously agreed that preserving the culture of the firm (which could potentially be jeopardized by an acquisition or merger) was essential.[1] Consequently, the partners elected to recruit individual analysts who would complement the culture and ultimately build the "best research on Wall Street."[1]

With the objective and strategy in place, the firm's leadership tasked Lee Cooperman to build a more sophisticated and commercial GS Research department.[1] Cooperman recalled that he was first made co-director of Research with Bill Kealy in 1972. In 1976, he was promoted to partner in recognition of his outstanding work as a portfolio strategist. The following year, he was made Partner-in-Charge of Research. Cooperman shared, “When I took over the Research department, we were unranked in Research in the various polls, and a couple of years later, we were number one in Research in the financial world – we were number one in the Institutional Investor survey, and we were number one in Greenwich Research.” Cooperman would ultimately be voted in Institutional Investor’s All-America Research Team surveys from 1976 to 1986 and was ranked first for nine consecutive years.

Exhibit 3: Lee Cooperman was promoted to Partner-in-Charge of Research in 1977

Source: Goldman Sachs Archives

In 1970, Joseph Ellis joined Equity Research as the retail analyst after five years at Bank of New York. Cooperman, who had previously served as the retail analyst, confirmed, “I hired Joe Ellis to replace me when I transitioned into Strategy.” Institutional Investor’s All-America Research Team ranking was launched in 1972, and Ellis was named as a runner-up in retailing. Ellis would go on to rank first place in the retail sector 19 times over the course of his career.[5]

In 1978, Gary Wenglowski, who had served as the director of Economic Research since 1972, was promoted to partner. Wenglowski ranked first or second in Institutional Investor’s All-America Research Team surveys from 1976 to 1986.

Cooperman and Wenglowski regularly traveled across the US together to meet with institutional clients and were highly visible and highly rated by clients.[1] Cooperman noted that the Cooperman-Wenglowski partnership – and the strategist and economist combination – “garnered a lot of interest for the firm.” Wenglowski added, “Lee and I worked hand-in-glove for 20 years. I would talk to our clients about the economy, then he would tell them, ‘Well, if that’s right, or if it’s not, here is what you should do and how you should invest.’”

Gavyn Davies, who would later be hired by Cooperman and Wenglowski in London, added, “They were a duo that clients would crowd big auditoriums to see. They were part of the reason we wanted to convince them to hire us, because they were so good at being research analysts in the field of investment banking.”

Michael Armellino also made a significant commercial contribution to the growing franchise. He initially placed first in Institutional Investor’s All-America Research Team survey in the airlines space in 1976 and was viewed as a strong stock picker and analyst.[4]

"The airlines were like the tech stocks of today," Armellino recalled. "Airlines during the 60s were converting from piston engines to jet aircraft and the economics were fabulous." He would later add railroads to his coverage, a model that he noted, "no one else was doing at the time, even though both airlines and railroads were 'transportation'." Armellino highlighted that covering the two sectors was motivating to him and allowed him the opportunity to, "talk about many businesses with clients". At the time of his retirement in 1990, he had appeared in the All-America Research Team survey 32 times and placed first 21 times – more than any GS analyst in Research history.[4]

Exhibit 4: Michael Armellino holds the GS Research analyst record for the most first-place ranks in Institutional Investor

Source: Goldman Sachs Archives

The relationship between Research and Sales was a key factor in the success of the growing Research franchise, which quickly developed a reputation as the most important provider of content to a large number of institutional investors.[1] Cooperman emphasized, "What truly distinguished us was the close relationship between Research, Sales, and Trading. Research would develop the idea, Sales would sell the idea, and the trader would implement the idea. We were a team effort."

Importantly, two key hires were made in the late 1970s. Steve Einhorn joined the firm in May 1977 in the portfolio strategy team. And in August of the same year, Jeffrey Weingarten joined Equity Research as a tobacco and beverages analyst. Both Einhorn and Weingarten would later assume key leadership roles in the commercial success and globalization of GS Research.

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Steve Einhorn on Joining GS Research in 1977

“A friend in the financial community indicated that Lee [Cooperman], who had just made partner in 1976, was looking to add to the Strategy group. Having done Markets Strategy and Economic Research at Prudential Insurance Company for a few years, I threw my hat in the ring and was hired in May of 1977. Initially when I joined, I was charged with developing a quantitative product – at that time, quantitative analysis was in the strategy arena and gaining in prominence and interest, and a number of firms had started initiatives in that area. I developed a product called Risk Return and Equity Analysis and published a piece every quarter with a monthly update.

“Within a year or two of joining Goldman Sachs, I began to work more closely with Lee on general market strategy and did strategy and quantitative equity analysis until 1990 when I took over the division as co-head with Bill Kealy.

“I truly loved the market strategy work. That was my first love when I joined Goldman, and I truly enjoyed the market analysis, meeting with clients, working internally with the various divisions, and integrating our market outlook into the work that Banking and Trading were doing.”

Source: Conversation with Steve Einhorn, August 2025

The Globalization of Research: The 1980s and 1990s

Goldman Sachs started its transformation into a global firm in the 1970s. The first international office was opened in London in 1970; four years later, offices in Tokyo and Zurich followed. In 1982, GS created its first International Advisory Board to guide the firm on global economic and political trends. In the early 1980s, Goldman Sachs' international business accounted for about 10% of the firm's total revenues, but by the end of the decade, this had risen to 20%.[1] Goldman's international expansion continued into the 1990s, marked by the opening of new headquarters in London in 1991 and the establishment of offices in mainland China in 1994.

In the 1980s, GS Research dominated Institutional Investor rankings.[1] The firm provided analysts with the necessary resources and offered incentives that promoted a model of differentiated thought leadership and client service.[1] In 1984, for instance, Joe Ellis began taking institutional clients on field trips to visit retailers and later launched an international retailing conference.[1] The spirit of entrepreneurship was a salient part of the culture.[1]

As the wider firm grew its global footprint, GS Research also expanded beyond the US. In 1986, Gavyn Davies and David Morrison joined Research in London and established the first Europe Economics team. Davies noted that being in London was critical to the success of the new team: “It was a big part of the way that we were able to have a different outlook while the firm was growing very rapidly in Europe and Asia. I don't think we would have been able to do that quite the same way if we were in New York. When you're in New York in a firm as big as Goldman, America dominates. But we just took the view that the rest of the world was also important.”

Gavyn Davies on Joining GS Research in 1986

"In the early to mid-80s, we [Davies and David Morrison] had set up an economics group in a UK stockbroker that was a fairly small firm but had a big reputation in research. When the Big Bang [the end of fixed stock commissions in 1986] in the London market was approaching, we thought we would like to move directly to a US investment bank. We thought our skillset, which was in international economics, wasn't really represented in the big, growing investment banks. So, obviously, the best of those was Goldman Sachs, and so we started talking to Lee Cooperman and Gary Wenglowski to persuade them. They eventually hired us, but I think it took us about two years to persuade them that Goldman Sachs needed these economists living in London.

"Another thing we did that was unusual, but critical in those days, was that we did not become part of the US team looking at the US economy. We built the global team outside of New York. There were some international economist teams working on the Street at the time, but they were really an adjunct to the US GDP forecasts. But that was not our vision. Our vision was that the rest of the world was very, very important and a huge growth area for the firm and that we would think better about the global opportunities if we were in London. And Gary and Lee agreed with us."

Source: Conversation with Gavyn Davies, August 2025

Davies and Morrison saw an opportunity to offer a differentiated product to the firm's clients. "Goldman Sachs had, as it does now, an incredible ability to serve clients and trade markets," Davies said. "And we were in the right place at the right time in the 1980s and '90s. We were the first group of economists to apply rigorous macroeconomic thinking and econometrics to forecasting economic development, but with a specific orientation to bonds, equities, commodities, and currencies. There was a realization that economics skills could be relevant to the revenue generation of the firm."

As Davies and Morrison built out the international economics team, first in London, then in Asia, Jeffrey Weingarten, who had been at the firm for approximately a decade and had achieved notable success as an analyst, was tasked by the firm's leadership with building Equity Research in Europe and Tokyo. Weingarten was appointed director of International Equity Research in 1985 and moved to London in 1987. "In addition to starting the research department, I was also meant to write a global investment strategy piece, called The World Investment Strategy Highlights," Weingarten recalled. "Gavyn and David were very important contributors to that."

Exhibit 5: Jeffrey Weingarten (left) and Gavyn Davies (right) worked closely together building GS Research outside of the US in the late 1980s

Source: Goldman Sachs Archives

In building out the new department, Weingarten's recruiting approach focused on identifying promising junior analysts who were client-oriented, hardworking and highly motivated.[1] "Basically, I had to start from zero to hire equity analysts," Weingarten explained. "There was nobody on the ground [in London or Tokyo] who did stock-specific research. Between the end of 1986 and 1991, we built an investment research organization in the UK and Tokyo."

Weingarten was named partner in 1990, and GS Research would become the first US firm to make the Europe top 10 research list.[1] Weingarten affirmed, "We put together what I think was a really great team."

Jeffrey Weingarten on Building the GS International Equities Research Footprint in the Late 1980s

"I was running a research department. I was hiring people. I was writing a strategy piece, and I was a supervisory analyst – so I had to review all of the research that went out as well. We managed to hire some very good people. We actually managed to get some recognition – we were the first non-UK company to be listed in the Institutional Investor equivalent – Extel. We were having an impact."

Source: Conversation with Jeffrey Weingarten, August 2025

During the late 1980s, GS Research in New York also added some key hires, including William (Bill) Dudley. Dudley joined the firm in 1986 as an experienced hire in the US Economics team. He would later assume a prominent role as the firm's chief US economist and head of the US Economics group.

> ***Bill Dudley on Joining GS Research US Economics Team in 1986***
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> "I got a call from a headhunter to join the Economics group, and it was to do macro, and I am not a macroeconomist by training, although I worked as a research assistant for a macroeconomist at Berkeley for five years. And I have to give Bob Giordano, who was the partner at the time, credit for being willing to hire someone who wasn't really necessarily the perfect fit. But what I brought to the equation a little bit was that I knew a lot about the nuts and bolts of the Federal Reserve and how the Federal Reserve conducted monetary policy. I knew about the plumbing, and I knew about regulation. So, I was bringing a piece that the economist team didn't really have at the time, and I was willing to take the plunge. I was very happy to work for Goldman Sachs for all those years. It was a good experience."
>
> *Source: Conversation with Bill Dudley, August 2025*

In 1989, Goldman Sachs made a strategic decision to expand the Asset Management division and named Lee Cooperman as head of the segment.[3] Michael Armellino, who had previously served as co-director of Research with Bill Kealy from 1984 (two years after he was named partner) noted, "When Lee went over to Goldman Sachs Asset Management – that was the newest division – I was elevated to Partner-in-Charge for a year." Armellino retired in 1990 after twenty-one years with Goldman Sachs Research.*

**Michael Armellino returned to the firm as the CEO of Goldman Sachs Asset Management in 1991, replacing Leon Cooperman after his retirement from the firm. Armellino formally retired from Goldman Sachs in 1994.*

> ***Michael Armellino on Taking on GS Research Management Responsibilities in the 1970s***
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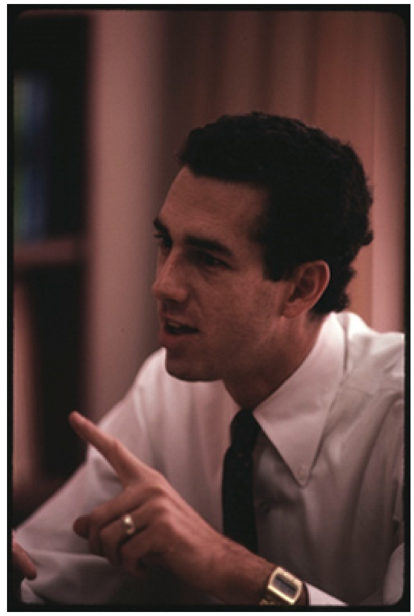
> "Somewhere in the mid to late 1970s, I was asked to get involved in management to manage what was called the Corporate Client Group. There were about six analysts, and the role of the group was to cover Goldman Sachs Investment Banking clients who were not followed by industry specialists. That was my first real management role, and it went from there to being co-director of Research with Bill Kealy. He was a great guy and a great friend. I was covering airlines and railroads and doing management at the same time. Goldman was just a great place to work, because they were very effective at motivating people. You were encouraged to do as much as you wanted to do as long as you did it well. I was surrounded by great people."
>
> *Source: Conversation with Michael Armellino, August 2025*

Following Armellino's retirement, Steve Einhorn and Bill Kealy were named the new Partners-in-Charge of Research. At the beginning of the 1995 fiscal year, Bill Kealy retired from the firm and Steve Einhorn remained Partner-in-Charge of Research. On November 12, 1998, co-Chairmen and co-CEOs Jon Corzine and Hank Paulson announced that Einhorn would retire from the firm. The internal memo highlighted that Einhorn, who had consistently ranked in the Institutional Investor All-America survey from 1978 to 1994 had made Research, "an integral part of the global leadership the firm enjoys." Further, firm leadership emphasized that, under Einhorn's direction, GS Research, "consistently ranked among the best in the world by investing clients" and that he had built, "Research into a powerhouse, widely respected inside and outside the firm."

Exhibit 6: Steve Einhorn served as Partner-in-Charge of Research from 1990-1998



Source: Goldman Sachs Archives

Steve Einhorn on Being "Partner-in-Charge" of Research in the 1990s

"When I was first asked to co-head and then head the division, I was reluctant because I enjoyed being – as one person put it – a soloist in the orchestra rather than the conductor. The senior partners at the time, Bob Rubin and Steve Friedman, and Bob Mnuchin, who was head of the trading area, all thought it would be a good idea if I took on this managerial role. And when three senior partners suggest that it would be a good idea for one to do this, I thought it was a good idea as well. And I must say, it was a thoroughly enjoyable experience. It was quite challenging managing hundreds of people around the globe, interacting with them in different time zones, traveling to visit with them and the clients in different geographies, and getting to know them, their research, their approach to their research, how it was integrated globally.

"It was truly just a fascinating experience to oversee the department in that decade because, in that decade, among other important initiatives, was the globalization of Research across Wall Street, which I worked hard to implement. I think we were leaders in integrating a global approach to our research effort both from a macro perspective and from a bottom-up stock selection perspective. It was both challenging and rewarding to watch the department migrate from siloes of research – one US, one Europe, one Asia – into an integrated global approach for industries that lent themselves to global analysis – autos, technology and pharmaceuticals, as examples. We were publishing in an integrated framework as opposed to just a US framework, and I found that an interesting road to travel with the analysts, as well."

Source: Conversation with Steve Einhorn, August 2025

Navigating Growth and Volatility

In the four years after Einhorn's retirement, GS Research experienced a series of leadership changes. Barry Mannis, who served as the department's co-head during that period, acknowledged, "It was a period of a lot of change and a period of great volatility in management."

From the start of the GS 1999 fiscal year (December 1998), Mark Evans and Robert Morris shared department leadership responsibilities. Morris joined the firm in 1988 in the San Francisco office and noted that he was the first hire in US Equity Research who was not based in New York.

In the November 1998 Goldman Sachs memo on the appointments of Morris and Evans as new co-heads of Research, Morris was recognized for being a top ranked US telecommunications analyst for nine consecutive years who had also attained top rankings in Europe and Latin America. Morris moved to London in 1994 and served as the co-head of Europe/UK Equity Research from 1995.

Morris highlighted that his mandate and objectives were broad in the EMEA director of Research role. First, he was tasked with growing Research in the region. Second, he transitioned the Research coverage model from country coverage – "It was all based on country research; for example, we had an Italian team, a German team etc," he said – to sector coverage research, in line with the coverage model in US Equity Research.

Mark Evans, Morris's co-head, joined the firm in 1984, initially in Investment Banking; prior to being named co-head of Research, he served as co-head of Equity Capital Markets.

In the same memo, Gavyn Davies was named chairman of GS Research. Davies, the memo outlined, would continue to lead the Economics group.

Exhibit 7: Robert Morris led GS Research from 1998-2001

Source: Goldman Sachs Archives

Less than a year later, in August 1999, Mark Evans retired from the firm, and Robert

Morris was named the sole head of GS Research. Morris highlighted that, during his leadership, the department's first co-chief operating officers – Barry Mannis and Greg Ostroff – were appointed to scale and bolster Research management. Mannis confirmed that he was given, "responsibility for everything outside of the Americas, and Greg, who was US [director of US Equity Research] had responsibility for the Americas."

Morris highlighted that several research initiatives were also launched during that period, including the department's efforts to brand its research for a more uniform presentation. Morris explained, "We needed to standardize the way our research looked to reinforce our brand. We started redesigning everything, using similar fonts, using the same stock of paper, whereas it wasn't like that before. We started to harmonize the look to make it a truly global department." In addition, analysts started promoting the firm and their content through the growing medium of TV and radio broadcasting. "We needed to understand how to deliver this kind of product," Morris said. "We needed to understand how to do a live interview. The analysts were used to doing interviews with newspapers, not live on the air."

When Robert Morris retired from Goldman Sachs in 2001, firm leadership – CEO Hank Paulson and Co-Presidents and COOs John Thain and John Thornton – announced two changes to GS Research leadership. First, Greg Ostroff and Barry Mannis were appointed co-directors of the Research division. Second, the new leaders would report to Bob Steel, Head of the Equities division, marking a shift from the previous reporting line to the Executive Office. According to the internal memo, the new structure would serve as, "a declaration to our investing clients of the priority we place on serving their needs."

Both Ostroff and Mannis were highly regarded analysts and previously covered the beverage, tobacco, photography and advertising sectors, and the environmental services industry, respectively. Both had also previously served in leadership roles in Asia – Ostroff as co-director of Japan Investment Research as well as the first director of Asia Investment Research and, later, Mannis as director of Asia Investment Research. Ostroff later led US Equity Research as director of Research.

Barry Mannis on Joining GS Research as an Experienced Hire in 1993

"I came to the firm in 1993 as an environmental services analyst. My very first impression of the firm was something that really stuck with me and turned out to be important, which was getting a call from my competitor at the firm at the time, who I knew from going to company meetings and offsites. And I was a little surprised to get this call. He said he was moving to a strategic position in the [Goldman Sachs] Executive Office and that Steve Einhorn had asked him for two or three names of people he respected, and I'll never forget his words. He said, 'It seems to me that you're very happy [at peer bank], but, you know, I figured it couldn't hurt to ask.' There were a limited number of places I would have even considered moving to and, of course, Goldman was at the top of that list. I couldn't begin the conversations fast enough. For me, meeting Steve Einhorn personally, and with the firm as a whole, it was love at first sight. And I was thrilled when a couple of months later, Steve made the offer for me to join the firm. So the idea of mobility and different roles and people's range of talent being considered for opportunities were evident to me from that very first outreach."

Source: Conversation with Barry Mannis, August 2025

Exhibit 8: Barry Mannis and Greg Ostroff were announced as co-heads of Research in May 2001

Source: Goldman Sachs Archives

Greg Ostroff on Being Asked to Move to Tokyo as the Director of Japan Equity Research and Asia Investment Research in 1992

"In the fall of 1991, I was pitching a stock for the recommended list to [Research Directors] Mike Armellino and Bill Kealy, when Bill asked my opinion about a note that [GS Chairman] John Weinberg had recently sent out to the entire firm about globalizing Goldman – a to-all to the firm that featured a commencement speech from the chairman of PepsiCo, another stock that I was covering. I responded, 'Goldman and PepsiCo have very different cultures, as well as apparently different goals and methods for professional development. PepsiCo deliberately moves people around different roles, regions and businesses early in their careers to gain global business experience. But at Goldman [in 1991], while I'm grateful you've given me the opportunity to cover a number of different industries in Research, and I'm really happy doing what I'm doing right now, if I came to you next year and said I want to try something completely different … like moving to Tokyo to trade Japanese government bonds … it would just never happen. Suddenly, they looked at each other and one of them said, 'Tokyo? Actually, we'd like you to think about moving to Tokyo and leading the Japanese research department.' And this was in the aftermath of a huge market crash in Japan. A month or so later, I accepted the opportunity and then, before I had even arrived in Tokyo, they came back and asked me to launch Research throughout the rest of Asia. So, for the next 3-4 years, I worked out of both the Tokyo and Hong Kong offices, commuting back and forth almost biweekly. And given our success, by the time I was heading back to New York, we were hearing from our clients that our regional competitors were beginning to follow our strategy and tactics."

Source: Conversation with Greg Ostroff, September 2025

In 2002, the leadership of GS Research experienced further changes. Barry Mannis observed that several factors played a role in creating the uncertain environment. "To some degree, the fact that the markets were very volatile at that time was a part of it, but it was more than that," he said. The September 11 attacks had shocked the world and the markets in 2001. A few months later, in December 2001, the Enron scandal began to unravel, resulting in a significant loss of trust in corporate governance, including the effectiveness of internal controls and self-regulation.[9] Then, in early 2002, the SEC started investigations into research analysts and the potential conflicts related to their work and relationships with investment banking.[10] "In my opinion," Mannis recalled, "this dismantled to a great degree Equity Research as we knew it. Having been in sell-side research my whole career, having gotten to the job that if you're in sell-side research is the job you would most dream to have – in global research at Goldman – to get there and then really help oversee dismantlement, it was dispiriting at times."

Goldman Sachs announced Suzanne Nora Johnson and Andrew Melnick as new co-heads of Research in February 2002, with Nora Johnson later becoming the sole division head. Melnick and Nora Johnson would play an instrumental role in guiding the division through the new regulatory challenges that would require the franchise to evolve in significant ways.

Importantly, a series of next-generation senior Research leaders were hired during the 1990s and early 2000s. In 1992, Lisa Fontenelli joined Equity Research as an associate covering small and mid-cap consumer staples stocks, then Steve Strongin joined as the commodities strategist in 1994. Jim O'Neill joined as partner and chief currency economist in 1995, and Jan Hatzius joined Goldman Sachs as a junior economist in Germany in 1997. In 1999, Anthony Ling joined EMEA Equity Research in London in the energy space, and Jim Covello joined US Equity Research as an associate in the technology industry in 2000. Fontenelli, Strongin, O'Neill, Hatzius, Ling and Covello would play pivotal roles in shaping the future of GS Research over the coming decades.

Exhibit 9: Steve Strongin and Lisa Fontenelli joined GS Research in the 90s and later served as head and deputy head of GS Research, respectively

Source: Goldman Sachs Archives

Exhibit 10: Jim O’Neill joined GS Research in 1995 and became chairman of Goldman Sachs Asset Management in 2010

Source: Goldman Sachs Archives

The Global Analyst Research Settlement: The 2000s

Prior to the Global Analyst Research Settlement, Goldman Sachs had already started implementing changes to strengthen the independence of Research. This included, in 2002, the announcement of new leadership, who were invited to join the firm's Management Committee. CEO Hank Paulson stated that the leadership appointments were in part to, "reaffirm the importance of distinguished and truly independent investment research to Goldman Sachs."

Suzanne Nora Johnson transferred into Research leadership from Investment Banking, where she had been head of the global healthcare business for eight years. Nora Johnson noted that when she was asked to take on the role, she found it "a worthy challenge". She explained, "It was an opportunity to strategically optimize an asset of the firm and think about how we could evolve and transform it."

Andrew Melnick joined the firm as a partner from Merrill Lynch & Co, where he had been head of research for 13 years. Earlier in his career, Melnick was an industry analyst. Melnick said of the transition to Goldman and his partnership with Nora Johnson, "Suzanne was wonderful to me. I didn't know anybody, and I was coming in from left field. At that time, Goldman, for the first time in a long time, was bringing in people from outside, and I was brought in from outside and made a member of the Management Committee." He added, "My father is an immigrant watchmaker; I didn't grow up in the Ivy Leagues. So going into Goldman Sachs and being on the Management Committee, holy moly! That's the only way I can say it. And Suzanne ensured I didn't make the wrong steps. We had a great partnership." Nora Johnson agreed. "He [Melnick] was great – and that was kind of the beauty of Goldman Sachs. We brought in the best external talent to help us up our game. Andy assimilated to the GS culture very quickly. He did a great job; he was a great partner."

Melnick noted that the focus of the new leadership was to, "shift analysts to be more focused on stocks."

Exhibit 11: Suzanne Nora Johnson and Andrew Melnick were announced as the new heads of Research in 2002


Source: Goldman Sachs Archives

Less than three months after GS announced the new Research co-heads, the president of the North American Securities Administrators Association (NASAA) publicly stated that, in collaboration with other regulatory agencies, its board of directors had voted to form a taskforce to investigate research analysts' possible conflicts of interests at 10 securities firms.[6] In addition to NASAA, the taskforce comprised the Securities and Exchange Commission (SEC), New York Attorney General, the National Association of Securities Dealers (NASD), the New York Stock Exchange (NYSE) and other state securities regulators.[7] The taskforce's primary allegation was that, between mid-1999 and mid-2001, 10 securities firms [Bear, Stearns & Co., J.P. Morgan Securities, Lehman Brothers, Merrill Lynch, Pierce, Fenner & Smith, U.S. Bancorp Piper Jaffray, UBS Securities, Goldman Sachs & Co., Citigroup Global Markets, Credit Suisse First Boston, and Morgan Stanley] engaged in practices that allowed their investing banking segments to exert inappropriate and undue influence over research analysts and their content, leading to conflicts of interest for the analysts.[8] The firms were also accused of failure to supervise and manage these conflicts effectively.[8]

On December 20 of the same year, the SEC announced that a "historic agreement to reform investment practices" had been reached and that the 10 leading investment banks, including Goldman Sachs, would pay substantial penalties as part of this agreement.[7] The SEC stated that the settlement would, "bring about balanced reform in the industry and bolster confidence in the integrity of equity research." [7] The banks did not admit or deny the allegations.[8] In addition to a $1.4 billion monetary penalty across the firms, the banks agreed to a series of reforms (Exhibit 12).[8]

Exhibit 12: Notable structural reforms and enhanced disclosures from the Global Analyst Research Settlement

Structural Reforms	Enhanced Disclosures
1. Physical, managerial and operational (e.g. finance and other support staff) separation of research and investment banking. 2. Analysts' compensation cannot be tied to investment banking revenues. 3. Investment banking excluded from analysts' performance review process. 4. Analysts' compensation process documented and linked to the quality and accuracy of their content. 5. Research analysts prohibited from soliciting investment banking business. 6. Investment banking is not allowed to opine on analysts' coverage. 7. Firms will create firewalls between research and investment banking.	1. Firms will disclose in their reports that potential engagements with the companies could lead to conflicts of interest, which could impact the objectivity of the research. 2. Final research reports must be published when a company's coverage is discontinued. 3. The performance of individual analysts must be highlighted on firms' websites each quarter.

Source: U.S. Securities and Exchange Commission, Goldman Sachs Research

Suzanne Nora Johnson on Managing Through the Global Analyst Research Settlement

"Research plays a key translational role in the markets. In Macro and Micro Research, analysts and economists leverage specific industry domain and economic expertise to aid investors in evaluating opportunities and market dynamics. I think the translational function is a critical one, and during the time of the settlement there was a perception in the public square that the translational role of objectivity was being corroded by the wrong incentives, that the incentives were aligned with one side of the translational equation – the issuer side. I think market participants recognized that the core function of objective research was of critical importance and ways needed to be found to preserve the function of 'translation.' This catalyzed an important evolution of the business model of Research."

Source: Conversation with Suzanne Nora Johnson, August 2025

When David Tenney was asked to co-run Americas Equity Research with Kimberly Ritrievi in 2001, he became the first non-analyst to co-run the department. Tenney joined the firm in 1986 in the Chicago office as a research salesperson in the Equities division. From 1999 to 2001, he was head of Research Sales for the Midwest region. Tenney explained that his move to US Equity Research from Sales was a GS leadership decision made in part to assuage growing anxiety in the Equities Division about the increasing cost of Research and in part as a strategic pivot to proactively run Research more efficiently.

Exhibit 13: David Tenney transferred from the Equities Division to co-head Americas Equity Research in 2001

Source: Goldman Sachs Archives

The Global Analyst Research Settlement transformed the way brokerage firms operated.[11] Tenney specified that it changed how equity analysts conducted their research process. "Analysts used to be focused on writing research and spending time with clients and Banking, and had to reprioritize," he said. "We created a scorecard to have a quantitative basis on which to assess and pay analysts." Among other data points, the scorecard included stock picking, broker votes, morning call appearances, research quality, results from the sales survey and outgoing calls to clients. Tenney said, "We were required to change our ratings distribution. The forced distribution was important – you couldn't really have real research integrity if you only had buys and holds on companies. Chaperones were implemented for any meetings between Banking and Research. We were all trying to do what was right for the business."

Lisa Fontenelli, who had since moved from stock coverage into a project management role focused on driving value for the firm's largest institutional clients, was brought in to help manage the operational and technological restructuring required to meet some of the regulatory deadlines. One of the first projects was changing the rating system for stocks and, as part of that, systemically capturing price targets. Fontenelli worked closely with Roy Joseph, who served as head of Research Engineering at the time, to "pull everyone together and create a common mission." The magnitude of the project is encapsulated by the over 600 deliverables the team had identified, all of which needed to be completed the weekend before the project was due to go live the following work week.

Fontenelli was promoted to head of Content Management in 2002. She noted that the period was one when, "We had to not only keep the trains running, but we had to make all of this change at the same time."

Lisa Fontenelli on Strengthening Research Independence

"To mitigate the risk of conflict, all of the things that we did in Research after the Research Settlement were meant to reinforce the independence and objectivity of the Equity sell side product. And the whole idea of an investment review committee, where analysts went and not only had to get approval, but had to justify their price target – for example, analysts had to talk about ceiling and floor and had to force rank their stocks – that was all new. If you covered 10 stocks and one of them had a price target with 50% upside and one of them had a price target with 10% upside, your 10% upside could potentially be a sell."

Source: Conversation with Lisa Fontenelli, August 2025

Anthony Ling, who had transitioned into Equity Research Management as the co-director of Research in EMEA, noted, "These were some fairly turbulent times within the history of Research. We were really trying to figure out what the Research model should be."

Exhibit 14: Anthony Ling led EMEA Equity Research for over a decade

Source: Goldman Sachs Archives

> ***Anthony Ling on Redefining and Rebuilding the Research Model***
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> "Post Settlement, that old Research model just died and Banking couldn't contribute to Research anymore, so Research had to stand on its own two feet and move more into a role where the value add was primarily to the Securities Division, to PWM [Private Wealth Management]… and that meant we needed to have identifiable investment track records. Under Suzanne [Nora Johnson] and Steve [Strongin], we changed direction, and it meant that we could then become known as real investment professionals and sell track records of performance."
>
> "For instance, the team created the concept of 'conviction calls', which were the top 10% of buys and top 10% of sells. That was very controversial because, while that was great for hedge funds, obviously corporations didn't like Goldman Sachs putting a sell or a conviction sell on their stock. But certainly, in Europe, it led to us becoming by far the number one, top-ranked house on the street in terms of rankings from the major clients that we cared about. And it was because we actually were able to genuinely focus on stock picking. We had the tools through Quantum [the newly built Research database] and established the Tactical Research Group, working with the directors of Research, to be able to forensically interrogate Quantum and to help the analysts with their recommendations. We put in place a system where every idea had to be passed by the Investment Review Committee before it went live. So, by the time an analyst's recommendation went out to the Street, it had already been tested to be as [sound] as it could. There was a huge degree of rigor that wasn't there before and a massive amount of scrutiny on recommendations. One of the key factors was that recommendations had to match to upside and downside to target prices. This meant that the system had to be rigorous and transparent and, inevitably, there was controversy. Because every idea had to be passed by the IRC, it meant that the heads of department were effectively part of every idea, and that gave the analysts a lot of air cover. If they had done their work properly and thoroughly then they had the very public backing of their management. But the whole system worked."
>
> *Source: Conversation with Anthony Ling, September 2025*

One of the unintended consequences of the Research Settlement was the exodus of star analysts.[12] David Tenney confirmed, "Analysts were held accountable to the scorecard, and many of them packed up and left Research." Anthony Ling concurred, "There was quite a turnover in the analytical community and a lot of the big established names left."

An October 2003 article by Institutional Investor underlined the impact of the Research Settlement, noting that research on Wall Street had become "remarkably unsettled". Suzanne Nora Johnson acknowledged the uncertainty and emphasized, "I think it was important to refresh the strategic vision and mission and the cultural glue." Nora Johnson also noted that she leaned into the global business model to do that, "Because it was a global business, I thought the more we could leverage GS' unique strengths at that point, the better." For instance, in 2003, the firm was invited to join the Asset Management Working Group (AMWG) of the United Nations Environment Program Finance Initiative (UNEP-FI). Anthony Ling was asked by Nora Johnson to participate on behalf of GS and Research.

> **“**
>
> ***Anthony Ling on the “Genesis” of GS SUSTAIN***
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> “GS SUSTAIN started as a request from the United Nations when they reached out to the firm at the end of 2002. The UN Global Compact was an initiative by [then UN Secretary General] Kofi Annan, and it was the biggest public-private partnership on sustainable business that there had ever been. So, they reached out to the finance community and asked various banks to produce research to see if environmental, social, and governance issues had an impact on corporate performance and stock market performance, and they asked us to look at the impact on energy. Thankfully, Suzanne Nora Johnson thought it would be a good idea and said, ‘Anthony, you can do this’ because we covered oil [in Europe].
>
> “And we [the team] created the SUSTAIN framework, which was a systematic way of looking at corporate performance in the oil sector around all of the metrics that you'd care about. We published it sometime in 2003 or the beginning of 2004. It took off far faster than we imagined, because what we looked at, the theory was if these things matter, the best managed companies will be the best at them in their sectors; you've got to look at companies against each other, and then versus their competitive positioning, and then versus whether they delivered the highest returns or the highest growth in their industry. So, it was quite revolutionary in its methodology, and it was aimed at long-term investing. It really found real traction amongst ESG investing, which was just really starting to take off then, but also amongst long-term investing and intergenerational investment, because you're really saying, if you’re looking out, the best positioned companies are gonna win, the best positioned companies will be the best managed companies. Can I find companies that are the best managed and best positioned and that deliver the best financial returns? If I can, then they will perform in the long run. And that was the genesis of SUSTAIN.”
>
> *Source: Conversation with Anthony Ling, September 2025*

While the Research Settlement brought many changes to the division, Lisa Fontenelli noted that, at the core, the value of Research had not changed: “We don’t always know how to quantify the value, but it has value. And for that client who wants to talk to somebody who’s smart about a specific space, picking up the phone and having somebody at Goldman you can talk to – who has done their homework, has conviction in their ideas, is every single day doing the work to be in that position and is willing to have the back and forth with somebody who’s trying to figure something out – is truthfully priceless. The whole idea that this group of people spend every minute of every day trying to be as smart as they can in the space that they’re accountable to, it’s not something you can just turn on and off unless you want to pay 10 times more than what you’re paying now so that you can buy the very best at the moment that you need it.”

In 2004, Andy Melnick retired from the Goldman Sachs partnership and Nora Johnson became the sole head of GS Research. Nora Johnson elevated Steve Strongin and David Tenney to co-chief operating officers, in addition to their responsibilities as global head of Strategy Research and co-director of US Equity Research, respectively.

GS Research made another change in 2005 when an internal memo from Suzanne Nora Johnson and other senior leaders at the firm announced on October 6 that Credit Research would become a new department within GS Research. Anne Brennan, who was part of the Investment Grade Credit Sales team, was named director of Research of the new group. The memo underlined that, “the quality, integrity and commercial impact of all Goldman Sachs’ research remain the cornerstone of our business strategy.”

In December 2006, an internal memo to all Goldman Sachs from firm leadership –

Chairman and CEO Lloyd Blankfein and Co-COOs and Presidents Jon Winkelried and Gary Cohn – announced that Nora Johnson would retire from the firm in mid-January 2007. In her final email to the division, Nora Johnson wrote, "Research has a unique and irreplaceable role at the firm and in the world today. Among research teams in the world, Goldman Sachs stands out with its commitment to excellence and integrity, its distinguished alumni, its unmatched ability to attract the best and the brightest, and most importantly its intense dedication to clients; Research has never had as much potential as it does now."

On April 12, 2007, firm leadership announced that Steve Strongin would assume the role of head of GS Research. The memo highlighted that Strongin's, "depth of experience position[ed] him well to lead Global Investment Research at a time of rapid change and global expansion in the industry." Shortly after his announcement, Strongin appointed Lisa Fontenelli as the division's chief operating officer.

The Evolving Business of Research

During the early days of Strongin's leadership, several key changes were made to the research model, including fully moving away from Institutional Investor as a data point in analysts' assessment. Strongin noted that Research leadership had decided, "We're going to compete on two things: client votes and stock picking. We can count both of them; we'll be held accountable for both of them. But that meant we had to have good infrastructure on client votes and good infrastructure on stock picking. So, some of the infrastructure that we built in response to the Research Settlement, we then used to help change the GIR business model. We knew every number every analyst produced, we knew how good their stock picking was, and we had every client vote there was. So, we could do real-life business metrics that were actually relevant to our clients and our business. And that became the new business model. And that allowed us to begin to hire much better analysts because they could now focus on clients who really mattered. This is when Research really became a business."

Jim Covello moved into Global Research management in 2018, when he was announced as co-head of Global Equity Research that April, in addition to his role as director of Research in the Americas. Covello, who had been ranked #1 nine times by II, noted, "I think moving away from the II model toward a model where we aligned our incentive structure with what our most important clients wanted from us was a true defining moment in the history of equity research at GS."

Exhibit 15: Jim Covello was named the sole head of Global Equity Research in 2022

Source: Goldman Sachs Archives

> **“**
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> ***Jim Covello on Keeping the Research Model Focused on Serving Clients***
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> “I have tried to continue the focus on evolving our incentive structure to meet the changing needs of our most important clients. While stock picking and broker votes are still very important and, as such, remain an important part of our scorecard, our clients increasingly are asking the sell side to help them with inputs to their investment process, including models, channel checks and data trackers, management insights and corporate access. We have evolved our scorecard to incentivize our analysts accordingly while maintaining the appropriate focus on stock picking and broker votes. Watching the model evolve when I was a covering analyst has always kept me vigilant about the need to continually evolve the model to align with clients' ever-changing interests. That's one of the many great things about being at GS for the last 25 years, the ability to have learned under so many great mentors, both as an analyst and a manager.”
>
> *Source: Conversation with Jim Covello, September 2025*

Research Note: The Impact of MIFID II

MiFID II (the second directive on Markets in Financial Instruments) was approved by the European Parliament in 2014 and implemented in 2018.[13] The directive brought several changes to the Research landscape in Europe.[14] One of the key objectives was to separate, or “unbundle”, the costs of research from trading execution fees in an effort to better protect individual investors.[14]

The European Securities and Markets Authority (ESMA), the EU's financial markets regulator, leveraged academic research to analyze the impact of MiFID II and identified several key takeaways, both positive and negative.[14]

1. MiFID II had increased the transparency of research costs and enhanced competition, thus mitigating conflicts of interest.

2. The directive had enabled more efficient allocation of research resources as firms reassessed the volume and impact of research generated, and some clients increased in-house research capabilities.
3. It had increased research quality as analysts worked to demonstrate the value of research to clients.
4. It had created a more equitable market environment without compromising the quality of the research content.
5. MiFID II had reduced expertise in the industry, as many tenured analysts exited their roles; consequently, it had also increased remaining (junior) analysts' coverage and workload.

Sources: European Institute of Management and Finance, European Securities and Markets Authority (ESMA)

During his tenure as GS Research division head, Steve Strongin also restructured the Global Macro Research team. In an internal memo to all Research in November 2008, Strongin announced the merger of the macro research teams – combining Economics, Commodities and Strategy into one global team under the leadership of Jim O'Neill, the firm's chief economist.

The memo stated, "The formation of Global ECS (Economics, Commodities and Strategy) will allow the Research division to continue to produce world-class macroeconomic research with a greater focus on cross-product strategy."

In 2010, Jim O'Neill moved to Goldman Sachs Asset Management to take on the role of chairman. The memo from Lloyd Blankfein and Gary Cohn on O'Neill's departure from Research noted that, "Jim is the creator of the acronym BRICs. Together with his colleagues, he has published research about BRICs, which has become synonymous with the emergence of Brazil, Russia, India and China as the growth opportunities of the future."

Jim O'Neill on the Start of BRICs Research

"We were sort of the masters of the G7 economic cycle, but we did little on the emerging world. And we thought, if we want to be the true leading, genuinely global investment bank, we need to start thinking truly global, rather than just very old-fashioned Western."

Source: Conversation with Jim O'Neill, August 2025

Subsequently, in January 2011, Steve Strongin implemented a series of changes to Macro Research leadership. In an internal memo to Research, Strongin named Jan Hatzius and Dominic Wilson co-heads of Global Economics Research and elevated them to chief economist and chief markets economist, respectively. In addition, Kathy Matsui and Timothy Moe were named co-heads of Global ECS Asia, and Jeff Currie and Peter Oppenheimer were named co-heads of European ECS Research. Oppenheimer, the memo said, would assume the role of chief global equity strategist and Currie would continue to serve as global head of Commodities Research.

Throughout the 2000s, Goldman Sachs continued to grow its global and US presence, opening new offices in Salt Lake City (2000), Bengaluru (2004), Mumbai (2006) and

Dubai (2007). The firm also formed joint ventures in Australia (JBWere, 2003) and Beijing and Shanghai (Gao Hua, 2004) and expanded its presence in Moscow and Brazil (2007). In line with the wider firm's strategy and to better support clients in these markets, GS Research also expanded its presence both internationally and within the United States.

Lisa Fontenelli on the Global Expansion of GS Research in the 2000s

"From 2000 until 2009, the Research global footprint really expanded – we had this explosion of international presence. By the end [of that decade], we had boots on the ground in 20 countries. In 2003, the firm entered a joint venture with JBWere in Australia, and in 2004, we opened our first office in Bengaluru. There were a lot of distinctions about the different locations and what it meant to build presence in each of them. For example, in a place like Melbourne, which had a big financial industry, there were other brokers who had research departments and people in the market aligned to what we did with equity industrial coverage, with a macro call, with servicing clients and supporting brokerage enterprise, as well as corporate finance – that all existed in Australia. It was not the same in Brazil – the same was true in Moscow.

"So, we had to work at an operational level on how this was all going to work, and how we would integrate all these different offices. We had boots on the ground in Brazil, in Bengaluru, in Mumbai, Australia, Shanghai, and Beijing with Gao Hua. We also redoubled our efforts in places like Singapore, and on the ground in Russia. In Moscow, there were not a lot of people doing sell side research, so we hired people who were industry experts and helped them develop as securities analysts.

"It was really interesting to navigate this increase in global footprint – and Research headcount remained the same even with the expansion into all of those markets. We got smaller in some of our core places in order to be able to grow outside of our core offices.

"The global expansion of Research is a testament to what I have been told over the years, especially by clients, is unique about Goldman Research – we work intensely but we also talk to each other. So having this global footprint in a collaborative, collegial environment really enhanced people's understanding of how the variables worked together around the world to create or destroy value."

Source: Conversation with Lisa Fontenelli, September 2025

In March 2020, Steve Strongin retired as head of GS Research. In his final note to the division, he wrote, "Goldman Sachs is a special place. GIR is emblematic of the special nature of Goldman Sachs: that a common mission to support the best people to produce the best product for our clients can create and sustain a great business. The idea that by working as a team, rather than as a collection of individuals, we can all be better and do better for our clients."

"Steve-isms"

During his tenure in Research leadership, Steve Strongin often used memorable lines and quotes to guide, advise, and support the division's leaders and team members. These sayings became informally known as "Steve-isms". When Strongin retired from the firm, the division presented him with a collection of these "Steve-isms".

1) You never reach the bar at Goldman – every time you reach it, we raise it.
2) If you're in the same place for too long in this industry, that's not a good thing.
3) The world's worst way to make money is how you made it last year.*
4) People who have asked for roadmaps here at GS have not survived a career here: replicating success is only done by low-cost producers.
5) What differentiates a bad manager from a good manager is the time it takes to reverse a bad decision.
6) We work in an environment where cooperation and competition are equally valued.
7) The only way for your people to know you care about them, is for you to actually care about them.
8) If you think you're doing too much, do less.
9) That's a self-help problem.
10) A distinctive voice is not something you're born with.

**Strongin attributes this line to retired Goldman Sachs partner Jim Riley.*

In March 2020, firm leadership (CEO and Chairman David Solomon, COO and President John Waldron, and CFO Stephen Scherr) announced that Jan Hatzius would serve as the next head of GS Research, in addition to his role as the firm's chief economist. The memo highlighted, "Jan brings extensive and deep knowledge to his new role, including more than two decades of research experience at Goldman Sachs."

Exhibit 16: GS Research Division Head and Chief Economist Hatzius is the only three-time winner of the Lawrence R. Klein Award for accuracy in US economic forecasting

Source: Goldman Sachs Biography

> ***Jan Hatzius on His Dual Roles as Chief Economist and GS Head of Research***
>
> "When GS COO and President John Waldron started talking to me about becoming head of Research in 2019, I had already been chief [global] economist for eight years and chief US economist for 14 years. I'd enjoyed that role as a research producer enormously and wasn't really looking to transition into a management role. But when John made clear that he really wanted me to be a 'player-coach', I got a lot more excited about the idea. I was surrounded by such incredibly talented and hard-working people, both in macro research and in broader leadership – first and foremost Jim Covello and Gizelle George-Joseph – that I thought it might be a manageable lift. Now, to be honest, the timing of the actual transition on March 9, 2020, was brutal. Not only was the global and US economy in its deepest recession since records began in the mid-1800s, but COVID-19 forced us to shut down our offices a few days after the memo went out, and keeping our people safe became an even more important priority than helping our clients navigate markets. But I'm happy to say that, together, we steered the ship through the storm on both accounts."
>
> *Source: Conversation with Jan Hatzius, September 2025*

60+ Years of GS Research

Investment research has evolved extensively over the past several decades.[2] Yet, in spite of challenges stemming from new regulations that have impacted its business model, debates on the cost of research, technological developments, and globalization, the industry has remained resilient.[2] The continued prominence of and need for high quality, proprietary research is indicative of its value to clients and its importance to the efficient functioning of financial markets.[2] This study on the history of GS Research, while limited in scope, aspires to document some of the key milestones in the division's history. In the process of its compilation, several long-standing tenets emerged that have had a significant role in sustaining the Research franchise.

Content is King

One of Jan Hatzius' frequent mantras to the Research team is, "Content is King." Hatzius explained, "It is a terrific reminder of GS Research's long-standing mission of producing analytically ambitious research with out-of-consensus conclusions in a fast-paced environment where time to market is of the essence. The fact that clients and our team still refer to research that is nearly 25 years old demonstrates the value of our rigorous analysis and comprehensive frameworks over the years."

Suzanne Nora Johnson added that the role of research in the era of Generative AI is even more important. "As AI tools become increasingly adept at collecting, processing and communicating staggeringly vast amounts of information, the critical analysis of AI-generated information is going to be indispensable, particularly as we go through this transitional time with AI," she observed. "I think Research will play a vital role if the qualities of critical thinking and experiences add value beyond the LLMs."

Differentiated thought leadership is critical to staying relevant

Jim Covello explained, "I believe the single most difficult part of being a sell side analyst but also the single most important trait of a sell side analyst is the commitment to having a differentiated view. Even as the sell side has consolidated, the biggest stocks we cover still have 30 to 50 analysts covering each name. With so many voices, it's hard to find white space to be differentiated, particularly in a momentum-driven market or a momentum-driven stock." He added, "Our analysts can't have different views just for the sake of being different. Rather, they need to be intellectually honest about stocks on which they have truly different views and make those stocks the focus of their client engagement. Given how dynamic the market is, what's differentiated today can become consensus pretty quickly and so our people need to be constantly vigilant on this issue."

Lisa Fontenelli noted, "It's so hard to know how to play it, but that's the business that we're in, right? It's hard to quantify, hard to know how to play it. That's exactly where the profitability is – in the gray. If you wait for the black and white to appear, the dust is already settled and you've lost your edge."

Research independence remains critical

An academic study on Wall Street research by Boris Groysberg and Paul Healy suggests that, even prior to the Research Settlement, analysts at the top investment banks generally generated profitable recommendations for both institutional and corporate clients and were able to effectively service both groups.[2] Gavyn Davies corroborated, "If we really wanted to succeed within an investment bank, we needed to be independent from the trading businesses and the sales businesses – so we needed to be an independent research unit." Goldman Sachs' senior partners (at the time, Bob Rubin, Steve Friedman, and Jon Corzine), he added, "got it and understood it. We needed to be able to think independently so that we weren't seen as a mouthpiece of the business side of the firm or paid because we were directly supporting the positions of the firm; it would have been impossible to generate a reputation with clients if that had been the case." Davies' words were validated by his real-life experience during the European exchange rate crisis of the early 1990s, when he predicted that France would be forced to devalue the franc against the deutschmark.[1] The Banque de France Governor expressed very openly to GS Senior Partner Steve Friedman that the firm would be unable to secure future business in France unless the economist was dismissed. Friedman and the firm stood by Davies and, by extension, Research independence; France devalued less than three months later.[1]

Analysts are excited and passionate about research.

Lee Cooperman noted, "The only way to be successful in life is to do what you love and love what you do. I loved what I did at Goldman Sachs, and I never looked to being paid for doing something I didn't enjoy doing. So, I think it's very important that you do what you love, and you love what you do and don't go into a field for a lot of money. Go into a field because you have a natural inclination; that was what I did with Goldman."

The culture of apprenticeship has always been a core part of the culture

Bill Dudley, for instance, noted that he considered coaching the next generation to be part of his job. That included, "grooming Jan Hatzius to be my successor." Dudley hired Hatzius from the GS German Economics team into the US Economics team in 1999 as a junior economist. "I was a little skeptical at first," Dudley admitted. "Then I interviewed Jan and decided to bring him onto the team. That was obviously the right call. And Jan basically took what I thought was a very good US Economics group to an even higher level." Dudley added, "You want to build something that lasts and that's what my goal was. I thought Jan could take it forward, and he has and that pleases me a lot. The more people you empower, the more passionate and creative they are and the better work they do. So, it's like a virtuous cycle."

Hatzius highlighted that the strong apprenticeship culture impacts both the people and the content. "Part of our responsibility for advancing the GS culture lies in nurturing the next generation of talent," he said. "And having spent more than 28 years in GIR, I am acutely conscious that research is cumulative and we all stand on the shoulders of our predecessors."

The partnership with stakeholders in Sales and Trading is long-standing
"Respecting the compliance walls and the independence of research, my job was to sit in the middle of the FX and fixed income sales and trading people and try to propel this vision of Goldman Sachs as the most informed about macro affairs," Jim O'Neill recalled.

David Tenney, who led Research Sales in Chicago prior to joining Research, recalled, "I learned early as a salesperson the importance of building great relationships. Our goal was to serve our clients – even ahead of Goldman Sachs' interests – and to make the research analysts look good." He added, "You knew as a salesperson that having a good relationship with the research analysts meant you could easily get the analysts on the phone with your most important clients, and as a result you could often get the clients in a three-way conversation with company management."

The culture of teamwork and collaboration is also long-standing
Greg Ostroff noted, "The colleagues I worked with around the world were brilliant, bold thinkers, and our achievements derived from individual creativity and integrity, combined with a willingness to collaborate and challenge conventional thinking."

Jim Covello agreed. "It's cliché and everyone who has spent any reasonable amount of time at GS says the same thing, but it really is the people that differentiate this firm," he said. "I believe that global coordination is one of the differentiating aspects of this firm. Whether it was as a semis analyst coordinating with our global semi team on a global DRAM model or our global semi capex model, or in my management role coordinating with regional DoRs to ensure globally consistent and relevant incentive structures, it has been far and away one of the great privileges of this job."

Jan Hatzius added, "Fostering a strong culture in GIR is essential. And the global coherence of our views is one of the ways we differentiate ourselves in the market."

The Research division has always been hard-working
"We are the fifth wheel," Cooperman said. "We constantly have to prove ourselves. And, once you develop a habit, it's hard to break it. No one ever survived at Goldman Sachs who didn't work hard."

Analysts have a client-first mentality
"All of us had real passion about the research and real passion about really finding good ideas for people to invest in," Jeffrey Weingarten remarked. "That was always the principal focus."

Steve Strongin noted that, "Various parts of research came into existence, not as a department, but to service various businesses and clients."

Hatzius highlighted, "Over the years, our research franchise has successfully adapted to shifting environments, while remaining focused on client service and our culture of excellence."

Bill Dudley on "Dudley Rule: No One Ever Criticized me for Repeating the View Too Much".

"Dudley Rules" – guidelines provided by Bill Dudley when he led the US Economics team at Goldman Sachs – are still occasionally referenced by senior members of GS Macro Research. One of the most well-known is: No one ever criticized me for repeating the view too much.

Dudley explained, "So here's the theory of the Dudley Rule. First, it's just based on empirical. Never in my 20 years at the firm did people complain that I was repeating myself too much, and I thought 'Why is that?', because we do repeat ourselves in Dailys and Weeklies [the daily and weekly research reports published by the team] and calls, etc. But why is that not annoying anybody? So here is my hypothesis – the people that like you aren't bothered by the fact that you are repeating yourself; it's like you're playing your greatest hits and they're just fans. The people who like you a little bit less aren't so aware you're repeating, because they're not tuning in so frequently.

"But we did take an expansive view of what economics should do. My view was anything we think we can explain intelligently for financial market investors to help them navigate the investing world, we should do."

Source: Conversation with Bill Dudley, August 2025

Exhibit 17: Partner-in-Charge of Research Over 60+ Years

Head of Research	Tenure as Research Head
Robert Danforth	1962-1977
Lee Cooperman	1977-1989
Michael Armenillo	1989-1990
Steve Einhorn and Bill Kealy	1990 - 1994
Steve Einhorn	1994-1998
Mark Evans and Robert Morris	1998-1999
Robert Morris	1999-2001
Barry Mannis and Greg Ostroff	2001-2002
Suzanne Nora Johnson and Andy Melnick	2002-2004
Suzanne Nora Johnson	2004-2007
Steve Strongin	2007-2020
Jan Hatzius	2020 –

Exhibit 18: Partners Over 60+ Years who were Promoted to or Hired as Partners in GS Research

#	PMD Year	GIR Partner	#	PMD Year	GIR Partner
1	1962	Robert Danforth	38	2004	Anthony Carpet
2	1976	Leon Cooperman	39	2004	Amy Low Chasen
3	1978	Gary Wenglowski	40	2004	Keith Hayes
4	1980	William Kealy	41	2004	Anthony Noto
5	1982	Michael Armellino	42	2004	David Tenney
6	1986	Steve Einhorn	43	2006	David Atkinson
7	1986	Joseph Ellis	44	2006	Elisabeth Fontenelli
8	1986	Robert Giordano	45	2006	Timothy Moe
9	1988	Gavyn Davies	46	2006	Arjun Murti
10	1988	David Morrison	47	2006	Peter Oppenheimer
11	1990	Donald Textor	48	2006	Roy Ramos
12	1990	Jeffrey Weingarten	49	2006	Kunihiko Shiohara
13	1992	Mark Evans	50	2008	Anne Brennan
14	1992	Robert Morris	51	2008	James Covello
15	1994	Jack Salzman	52	2008	Jeffrey Currie
16	1994	Richard Sherlund	53	2008	Jan Hatzius
17	1994	Nomi Ghez	54	2008	Richard Ramsden
18	1996	Mary Henry	55	2008	Dominic Wilson
19	1996	Barry Kaplan	56	2010	Robert Boroujerdi
20	1996	Jim O'Neill	57	2010	Christopher Eoyang
21	1998	Abby Joseph Cohen	58	2010	Shin Horie
22	1998	Avi Nash	59	2010	Kelvin Koh
23	1998	Greg Ostroff	60	2010	David Kostin
24	2000	Laura Conigliaro	61	2010	Richard Tufft
25	2000	James Golob	62	2012	Heather Bellini
26	2000	Frank Governali	63	2012	Francesco Garzarelli
27	2000	Kathy Matsui	64	2012	Hugh Pill
28	2000	Barry Mannis	65	2012	Jami Rubin
29	2000	Mukesh Parekh	66	2014	Charles Himmelberg
30	2000	Mark Tracey	67	2014	Richard Manley
31	2002	Neil Crowder	68	2014	Jernej Omahen
32	2002	William Dudley	69	2016	John Sawtell
33	2002	Maykin Ho	70	2016	Andrew Tilton
34	2002	Anthony Ling	71	2018	Philippa Vizzone
35	2002	Andrew Melnick	72	2022	Gizelle George-Joseph
36	2002	Steven Strongin	73	2024	Lotfi Karoui
37	2004	Paul Bernard	74	2024	Eric Sheridan

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GS Research Key Milestones

Early 1960s: Six to eight people focused on providing research predominantly for institutional investors and partners' portfolios

1962: **Robert Danforth** promoted to partner and Partner-in-Charge of Research

1967: **Leon Cooperman** joined Research as an analyst in Portfolio Strategy; **Gary Wenglowski** joined Research and would later be named director of Economic Research; **William (Bill) Kealy** joined Goldman Sachs

1969: **Michael Armellino** joined Equity Research as an airline analyst

1970: **Joseph Ellis** joined Equity Research as a retail analyst

1972: **Robert Giordano** joined Economics Research

1976: **Lee Cooperman** promoted to partner and named Partner-in-Charge of Research the following year

1977: **Steve Einhorn** joined GS Research in Portfolio Strategy; **Jeffrey Weingarten** joined Equity Research as a tobacco and beverages analyst

1978: **Gary Wenglowski** named partner

1980: **Bill Kealy** named partner

1982: **Michael Armellino** named partner

1984: **Joe Ellis** (leading retail analyst) began hosting field trips

1986: **Gavyn Davies** and **David Morrison** joined Research as the Europe Economics team; **Gary Wenglowski** retired from Goldman Sachs; **Bill Dudley** joined the US Economics team in New York; **Steve Einhorn** and **Joe Ellis** named partners

1986-1991: Equity Research presence built in Europe and Tokyo

1989: **Lee Cooperman** stepped down as head of Research and is named Chairman and CEO of Goldman Sachs Asset Management; **Michael Armellino** named Partner-in-Charge of Research

1990: **Michael Armellino** retired at the start of the 1991 fiscal year*; **Steve Einhorn** and **Bill Kealy** named Partners-in-Charge of Research; **Jeffrey Weingarten** named partner

1992: **Lisa Fontenelli** joined Equity Research as a consumer staples analyst

1994: **Joe Ellis** retired from the partnership (remained an Advisory Director until 2005); **Steve Strongin** joined the firm as a commodities strategist; **Bill Kealy** retired from Goldman Sachs; **Steve Einhorn** remained Partner-in-Charge of Research

1995: **Jim O'Neill** joined as a partner and Chief Currency Economist

1997: **Jan Hatzius** joined the firm as a junior economist in Germany

1998: **Steve Einhorn** retired from Goldman Sachs; **Mark Evans** and **Robert Morris** appointed co-heads of Research

1999: **Mark Evans** retired from the firm; **Anthony Ling** joined EMEA Equity Research in London

1999-2001: **Robert Morris** served as sole head of Research

2000: **Jim Covello** joined US Equity Research in New York

2001: **David Tenney** and **Kim Ritrievi** appointed co-directors of US Equity Research

2001-2002: **Barry Mannis** and **Greg Ostroff** served as co-heads of Research

2002: **Andy Melnick** and **Suzanne Nora Johnson** named co-heads of Research; Investigation into research analysts' possible conflicts of interests at ten securities firms launched by a joint taskforce comprised of key regulators. Global Analyst Research Settlement announced later that year

2004: **Andy Melnick** retired from Goldman Sachs; **Suzanne Nora Johnson** named sole head of Research

2005: Credit Research created within GS Research

2007: **Suzanne Nora Johnson** retired from Goldman Sachs; **Steve Strongin** named Research division head

2010: **Jim O'Neill** named Chairman of Goldman Sachs Asset Management; **Jan Hatzius, Dominic Wilson, Kathy Matsui, Tim Moe, Jeff Currie and Peter Oppenheimer** form the Macro Leadership Group

2020: **Steve Strongin** retired from Goldman Sachs; **Jan Hatzius** named Research division head

**Michael Armellino returned to the firm as CEO of GSAM and officially retired from Goldman Sachs in 1994*

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Disclosure Appendix

Disclosures

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