# THE HERRING'S ADVICE TO THE GOVERNMENT OF TAIWAN: BUY IBM!

By Red Herring From March 1994 issue

# Open Letter

To:

Mr. Vincent C. Siew, Chairman Council for Economic Planning and Development The Government of Taiwan 9F, 87 Nanking East Road Section 2, Taipei, Republic of China

From:

The Editors, The Red Herring

Re:

Buy IBM -- An Obvious Investment Opportunity for the Republic of China

Consider this: IBM is worth more to Taiwan than it is to itself. That anomaly could be vitally important to your country's long-term success. You may have been so involved in your six year, \$300 billion plan to grow and evolve the Taiwanese infrastructure, that you haven't noticed certain investment trends in the United States that your government could take advantage of to help meet its goals. Think again. The mind-boggling \$33 billion failed run at TCI by Bell Atlantic, and the excitement over the intense Viacom/QVC bidding war for Paramount is raising the feasibility threshold of corporate takeovers by many billions of dollars. Investment bankers are frothing at the mouth while in search of the next big play in more of the same: media, cable, and cellular companies. But while the hype is at a high pitch, it would be stupid to make a run at something boring and overpriced like NBC, when the real prize hangs ripe for your picking: IBM

# Beaten, Bloodied, and Undervalued

IBM was once the most profitable corporation in the world and had the attitude to match. It has been humiliated by the loss of its leadership, balkanized by bureaucratic infighting, and bloodied by billions of dollars of red ink. It has sacrificed buildings and land, whole operating units, and 40% of its staff. IBM is presently more pitied than feared. Microsoft and Intel now flaunt the mantle of industry arrogance that previously attired IBM. Investors have also lost faith in the bluest of bluechip stocks. Last fall, IBM's market equity (~\$24.3 billion) fell below Intel's (~\$28.9 billion), an ironic reversal of fortune from the mideighties, when IBM had to prop up Intel with an infusion of several hundred million dollars. The 1000 institutions that own 50% of IBM's equity have seen the dividend cut and the share value plummet to below a quarter of their peak, and fund managers are in no mood to add to their losses. Even the ouster of its ineffectual CEO, John F. Akers, didn't boost the shares. The judgment of the market has taken its toll. IBM is artificially undervalued. Even Microsoft's chairman, Bill Gates, made that observation in an interview with the *New York Times*. All the better for you to buy IBM.

#### **Put Taiwan on the Fast Track**

Buying IBM would put Taiwan on the fast track to reaching the national goals that you, as Economic Minister, have set forth. Your stated goals are to diversify your country's investments, reduce its dependence on Mainland China, and develop an economy where half the GNP comes from the high technology industries. You have set 1996 world market share targets of 2.9%, 5.5% and 2% respectively for Taiwan's computer hardware, semiconductors, and telecommunications equipment production, and earmarked \$2 billion to encourage computer software activities. You have also established 29 major public projects to computerize aspects of your national infrastructure. Strategically, owning IBM would help you meet all these goals.

Buying IBM would also help your country solve its major structural problems. For starters, Taiwan would no longer be dependent on constrained Japanese or Korean technology transfer to grow its industry. IBM has all the semiconductor, liquid crystal display, signal processing, opto-electronic, and software technologies that you seek. Second, your PC industry suffers from Intel's limiting allocation of its latest chips to Taiwanese manufacturers. IBM not only could share its large chip allotment, but also its mask rights to the actual i486 chip design and patent rights to the Pentium. And finally, Taiwan would be buying international credibility and vastly enhanced and consolidated market channels. It brings NAFTA, European Union, Eastern Europe, and Latin American markets into Taiwanese reach. Taiwan would gain access to intellectual property agreements that would allow both legal cloning of computer designs and also motivate Taiwan to observe intellectual property protection. It would also further Taiwan's entrance to GATT and decrease the likelihood of US Super 301 actions.

Fundamentally, IBM would also gain from foreign ownership in a number of ways. First, it would have to finally face up to the fact that although 60% of its sales come from outside the United States -- it still doesn't think nor act like an international company. Second, it would benefit from the nimble, market-focused, entrepreneurial management style and low cost manufacturing favored by Taiwanese businesses, and gain direct access to the pool of 28,000 electrical engineers and computer scientists that Taiwan graduates every year. Third, it would significantly enhance its presence in Asia -- the fastest growing region of the world. Finally, the product fit is excellent. IBM is strong in LCD panel, silicon, disk drive production, large systems and software -- areas of Taiwanese weakness. Taiwan is the world leader in CRT monitor, keyboard, mouse, computer case, and motherboard production and is also strong in diskette drives, scanners, and power supplies. With IBM's divestiture of Lexmark, the match is perfect.

#### Is IBM So Bad?

But before we expect you to put in your buy order, we need to help you answer that nagging question -- Is IBM really so bad? Financial analysts, business commentators, and technology pundits regularly disparage every crucial aspect of IBM's enterprise. Its management is derided as arrogant, insular, and generally lacking technical acumen, strategic vision, and even integrity. IBM's organization is faulted for being alternately too centralized, decentralized, or autonomous, and its business model is lambasted for its dependence on mainframe margins, proprietary systems, and a monolithic sales force. IBM's research effort is lamented as politicized and too tightly geared for short-range results. IBM's marketing efforts are debunked as really only sales, lacking product positioning ability, and adequate staff training. IBM's alliance management, particularly with Intel and Microsoft, also gets monumentally bad reviews. Likewise, IBM's own stock buy back, venture investments, and depositions, from Rolm on down, have proven to be scattershot wastes of cash. And so on.

This litany of carping is justified. But is it really relevant to a major acquisition decision? Did Sony buy Columbia Pictures for the excellence of its post-David Begelman management team? No, they bought it for its film library and proceeded to import expensive (\$700 million!) new management. Did AT&T, with its own world-class foundries and Bell Labs research arm, buy NCR for its technology? Absolutely not. More likely they were trying to pick up NCR's distribution channels and account control. Was Bell Atlantic interested in TCI for its marketing ability? Only so far as it will let them sell long distance services and compete with other RBOCs. With each of these other inter-industry mega-mergers, the market misses the big picture -- the value of the off-the-books assets. These assets might take the form of backlists of movies, records, books, or television series as with MCA-Matsushita, CBS Records-Sony, or Paramount-Viacom. Or the assets might be spectrum allocation or domain franchises as in McCaw-AT&T or TCI-Bell Atlantic. At IBM, all the bean counters can see is rapidly eroding margins and \$7.1 billion in cash equivalents on hand, but they don't account for the takeover value of three critical IBM assets: intellectual property, cross-licensing agreements, and account access and control.

IBM has accumulated an enormous global patent portfolio. In 1993, it was granted over a 1000 US patents, beating Toshiba to regain the number one position. Without considering the R&D effort behind it, each patent costs thousands of dollars to file and defend. Prior to 1982, when the Federal Circuit was established, patents were useful and interesting, but valuable mostly for macho techno-bragging rights. After the Federal Circuit issued a series of opinions that strengthened the ability of patent holders to not only win on trial but even obtain preliminary injunctive relief, companies were able to establish their legal

departments as profit centers. TI collects around \$300 million a year in licensing fees based on its patents, more than it derives from operating profits. IBM reputedly has had several years where it made more from PC-related litigation settlements than selling its PCs. Intel, before losing its case against Cyrix, used its patents as a club to intimidate PC manufacturers, especially Taiwanese, that use Cyrix or other x86 clone microprocessors in order to maintain Intel volumes and margins. Most market analysts and investors have not adjusted their thinking to this brave new world of patent valuation.

IBM holds a diverse array of patents on things as simple as the cursor, as ubiquitous as direct memory addressing, and as important as the single cell memory array. But as a patent "superpower," IBM has the leverage to make cross-licensing arrangements with every major technology venture in the world. IBM has agreements to share patents with AT&T, Intel, Motorola, Texas Instruments, Phillips, Matsushita, NT&T, NEC, Toshiba, and just about anyone else you can think of. As these companies develop new technologies, IBM's indirect patent portfolio grows. Cross-licensing provides what intellectual property wonks call "freedom of action." IBM can introduce new products without worrying that they will infringe on others' patents. It also gives IBM a big leg up in selling foundry and other OEM services. Under the US legal doctrine called "patent exhaustion," products that IBM makes for others that don't have access to large patent portfolios may be covered by IBM's agreements. Cyrix, which uses SGS Thomson, TI, and IBM as fabs, has recently tested this principle successfully in court. The value of this extended patent portfolio is akin to owning "Gone with the Wind." New movies will still be made, but having control of the classic titles is worth billions of dollars.

Besides accruing access to the lion's share of the world's technology, IBM has honed a tenth of the company into a sales force 30,000 strong. Whatever their lack of savvy, they still have unrivaled access to the companies that produce and control most of the world's wealth. Sales forces, like fabs, are expensive but invaluable when used with the right product mix. Just ask Intel. IBM's greatest challenge is to find more and better corporate oriented products for it to market. It hasn't realized that there is more to life than selling IBM branded mainframes. IBM, along with Sony, McDonalds, and Coca-Cola, make up the handful of the world's best known brand names. Whether loyal customer or not, what businessman would fail to return a call from an IBM executive, pass up a free visit to IBM's advanced research facilities, or avoid a pleasant week-long briefing on advanced management techniques? When it comes to business, business comes to IBM.

IBM's executives have been testosterone deficient in not defending the value and use of its mainframe systems. American Airlines, whose SABRE system services 3900 transactions per second, is not about to run their business on PCs running Windows. Even computer manufacturers like Sun, H-P, or Intel run significant parts of their operations on IBM mainframes. While many fewer companies are all "Blue," IBM maintains a significant influence on companies' information technology investments. In the US alone, businesses have over \$1 trillion invested in applications running on mainframes. Customers spend about \$8 billion annually for IBM's MVS mainframe operating system software. Most of that is profit; IBM's gross margins are twice as high on software now as they are on hardware. That revenue will not be lost to NT during this decade. Even if companies chose to invest in the staggering effort to migrate applications to inexpensive hardware, the systems management and control disciplines necessary to support mission-critical applications aren't available yet. MIS management has found that PC networks actually increase their mainframe workloads. IBM can capitalize on such re-engineering efforts by guiding data-mining applications and system integration. By growing its outsourcing business, IBM is gradually rebuilding the financial stability it forfeited in the 1970s when it shifted its business model from lease-based to outright equipment purchase. IBM's sales machine is still the envy of the industry.

# Signs of Spring

In addition to the value of off-the-book assets, IBM operations are showing hints of good news. Intoning the mantra of "From Palmtops to Teraflops" IBM has been creating a buzz for its PowerPC line of RISC microprocessors. Twenty-five years after Frank Cary licensed system incompatibility within the IBM product line, and fourteen years since John Opel refused to sponsor a cohesive family of RISC-based systems, IBM is finally circling its wagons around a RISC architecture, providing up to twice the performance at half the cost of its older CISC S/390 and Intel x86 architecture. In an unseen but widespread move, IBM is substituting its own RISC controller chips for commercial Intel and Motorola products. IBM

telecommunications products, disk drives, and mainframe channels are all incorporating these RISC chips derived from the basic PowerPC design. This year, IBM will sell one million RISC 601 processors from its own fabs to Apple, the core of the new PowerPC-based Macintosh that will run Apple's System 7 and Microsoft's Windows operating systems. It will also introduce its own family of low cost PowerPC products that will eventually run Unix, Win32, Taligent, and OS/2 on top of its Workplace O/S shell and Windows NT native. It has even enlisted a seven-member consortium in Taiwan to develop additional PowerPC products.

Last fall, IBM introduced a high-end third generation RISC system that took engineering workstation bragging rights away from DEC's Alpha-based systems. Next year, that system will be enhanced with an ultra-fast wave-pipelined floating-point unit. This month, at CeBit in Hannover, Germany, IBM should introduce a general purpose commercial version of its RISC-based Power Parallel supercomputer that until now has been targeted at esoteric technical applications. By year-end, the AS/400 group in Rochester will introduce the first of the new line of mid-range systems using RISC engines, instead of the current more expensive proprietary silicon. By the end of next year, the entire mid-range line will be converted to the new platform and boast open system, i.e. UNIX, capabilities. Thus within the course of a year, IBM will have implemented a major sea change and renewed its hardware offerings, leaving the Intel-based PC and the S/390 mainframe areas as the only non-RISC players. IBM will gradually outflank and neutralize those architectures by running Windows software emulation on the PowerPC and porting mainframe online transactions processing and powerful data mining facilities onto the new commercial RISC supercomputers.

These developments wouldn't have been possible if it weren't for the emergence of two enabling technologies. First, after ten years of growth pains, IBM's AIX version of Unix is maturing to become a functional and durable operating system. IBM is finally using some of its own technology to improve compiling, scheduling, multitasking, parallelizing software, and getting ideas out of the labs and into products. And secondly, under the benign guidance of Motorola and the harsher discipline of competing on the open market, IBM's CMOS fabrication process has become world class. For years within IBM, the cracker barrel motto regarding the Burlington, Vermont facility of IBM Microelectronics was: "You can buy better; but you can't pay more." Yields were low, parts were slow, turnaround time long, and prices steep. IBM surprised the industry when it completed the 603 microprocessor design in a year and announced availability of a high speed 80MHz 601 RISC part and the design of the 615 part with some degree of i486 hardware implementation. IBM is also moving towards being a credible player in the OEM market. IBM Microelectronics, viewed as an independent entity, is larger than Intel. It recently announced that it will sell CMOS gate arrays with a staggering 1.3 million gates per chip. Some companies looking for CMOS even rate IBM better than the Japanese for price, development tools, and delivery. Unisys will now use IBM as a foundry for its mainframe silicon. Good silicon has driven IBM's emerging OEM business which last year is estimated to have brought in about \$3 billion, with about \$1 billion of that total coming from selling disk drives to its competitors. For example, the Silicon Graphics sexy high end video server uses IBM drives. IBM is also selling boards and systems through OEM. IBM is now a leading OEM of PCMCIA "smart cards," It even sold close to \$200 million of workstations via OEM channels, Besides OEM, IBM has also expanded its "outsourcing," systems integration, and business consulting service operations into a multi-billion dollar business. Though working on next to nothing margins, they help IBM reposition with regard to its traditional customer base and buy time to execute its hardware migration plans. Businesses look to IBM to play this role.

# Why isn't IBM Already in Play?

Arbitrageurs haven't made a run for IBM because of a mindset of past and current mis-perceptions, a lack of potential buyers, and fear of potential obstacles to a sale. IBM is viewed relative to prospects of other computer companies and companies in other industries. As such, it is not an attractive investment. Analysts focus on IBM's cash flow, driven deeply negative by repeated stock buybacks, restructuring costs, and dividend payouts. Investors also notice the margins in free fall as IBM fights a war of attrition against other companies with shallower pockets: Amdahl, DEC, Dell, Fujitsu etc. IBM is betting that it has the financial staying power to weaken or drive out of business those companies smaller or weaker than it is, and eventually stabilize prices and margins. In the meantime, IBM, as an investment, looks unfavorable compared with industry darlings such as Compaq and Hewlett-Packard.

At differing times, many groups would have jumped at controlling IBM. Unfortunately, new tax laws, investment fads, and the world economic situation have eliminated a number of the most likely buyers in either the US or Europe. Apple, AT&T, or Warren Buffett have either no money or no interest. The royal families of Kuwait and Saudi Arabia, who could have bought IBM, without much thought fifteen years ago, out of their then current cash flow, now have Gulf War era deficits to worry about. KKR might want to reclaim its crown gained with its mega-acquisition of RJR-Nabisco, especially since IBM's present CEO, Louis Gerstner is the same gent that KKR recruited to manage running *its* company. They might find, however, that there are fewer solvent savings & loans eager to buy the financing. So who does that leave? With the yen/dollar exchange rate at near record highs, Japanese companies like NEC, Sony, Matsushita, or Fujitsu might be expected to gobble up such assets on the cheap. As much as they would like to, they can't now because of their negligible earnings or outright loses and the huge debt exposure from their warrant bonds coming due. Given where the Nikkei is these days, these bonds won't be exercised.

Even if there were interest and money to do a deal, most would shy from the publicity. The knee jerk reaction would be to invoke the "national security" argument. Here, Gerstner did you a favor by selling IBM's Federal Systems Division, the group that did all of IBM's government and defense-related contracting, like Skylab, AWACS, Submarine sonar, FAA air control etc. The \$1.575 billion that Loral will deposit this month, conveniently leaves you cash and a clear playing field. Nor can complaints of loss of technology to overseas interests be taken seriously. IBM routinely gives its most advanced technology to foreign companies. Its most advanced silicon development projects are done with Toshiba and Siemens. Its state-of-the-art, color thin-film-transistor LCD flat displays are manufactured in partnership with Toshiba. As to IBM Research being a "national asset," one IBM executive recently dismissed the notion saying that it is now a second rate center for advanced product development. What unique technology is IBM developing that is not available to AT&T, H-P, Xerox, Motorola, Intel, or Microsoft? Legally, the computer industry ownership is not protected by statute like airlines, TV, radio, or newspapers. Taiwan already has investments in 200 companies in Silicon Valley. Foreign governments invest and invite investment. France's nationalized Bull computer company begged IBM and NEC to invest 10% each in their company. Does anyone avoid movies made by Sony or Matsushita? The "investment office" of Kuwait has owned 14% of Daimler-Benz since the mid-seventies. How many Mercedes car sales has that investment deterred?

### Make a Bid -- You Can Afford It!

Taiwan has grown its GNP 9% annually the last three decades, and has accumulated over \$80 billion in foreign currency in the process. That's \$4 billion for every million of your population -- the largest surplus cash pile in the world and more than enough to put in a "buy" order for IBM at its current market price. If you decide you can't stomach the whole company, we suggest splitting it up and selling off the "RISC-free" parts that don't fit with your objectives. You just neatly spin off a \$20 billion S/390 mainframe hardware, MVS software, and services company, an \$8 billion disk drive and tape storage manufacturing company, and a \$10 billion PC company. Each of these new units would enter the business world as the largest in their industries. That would leave you a nice business that made silicon and RISC-based PCs, workstations, mid-range departmental computers, and parallel supercomputers that could dominate the industry in the next decade. Either way, go for it!