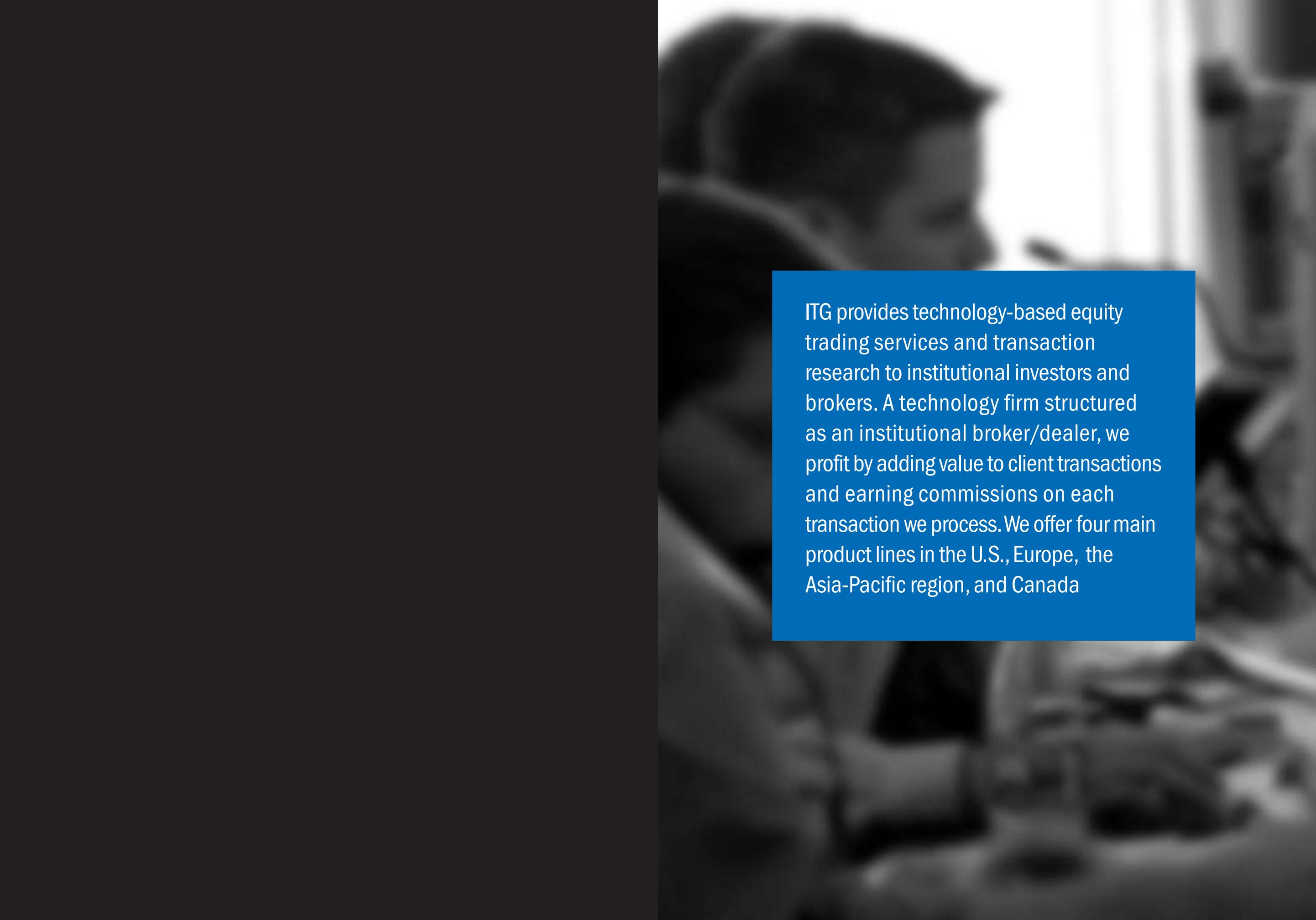




ANNUAL REPORT 2002

# Investment Technology Group, Inc.



ITG provides technology-based equity trading services and transaction research to institutional investors and brokers. A technology firm structured as an institutional broker/dealer, we profit by adding value to client transactions and earning commissions on each transaction we process. We offer four main product lines in the U.S., Europe, the Asia-Pacific region, and Canada

## Execution Destinations

POSIT<sup>®</sup>, TriAct<sup>™</sup>, ITG SmartServers<sup>™</sup>

### Provide clients:

- Confidential, low-cost trading environments
- Vast pools of alternative liquidity spanning the market spectrum

### Provide ITG:

- Commission revenue for each share transacted
- A solid core for our business plus a new generation of destinations to attract order flow

## Client-Site Trading Products

ITG Platform, QuantEX<sup>®</sup>

### Provide clients:

- Powerful desktop interfaces that centralize and manage all electronic trading
- Easy access to over 75 liquidity sources both within and outside ITG

### Provide ITG:

- Electronic funnels for transmission of commission-generating orders to ITG Execution Destinations and the ITG Trading Desk
- Added commissions on all other transactions for which ITG serves as broker
- A continuous presence on client desktops

## ITG Electronic Trading Desk

### Provides clients:

- Execution services (single stock and portfolio) on an agency basis
- A unique trading process taking full advantage of ITG's proprietary technologies
- Significant transaction cost savings

### Provides ITG:

- Commission-based revenues
- Hands-on trading expertise
- The ability to add value to any agency transaction

## Research Products

TCA<sup>™</sup>, ITG ACE<sup>™</sup>, ITG/Opt<sup>™</sup>, ITG Equity Risk Models, ITG Fair Value Model

### Provide clients:

- Advanced tools for cost measurement, portfolio construction, and decision support
- Information and insights that improve investment performance

### Provide ITG:

- Added value for all commission-generating business lines
- Enhancements to client relationships

## ITG Research

The analytical capabilities and trading strategies developed by ITG Research provide essential components of ITG's revenue-generating products; some evolve into stand-alone products. ITG Research also develops transaction tools for use by the ITG Trading Desk, in the ITG SmartServers, and in client strategies.

## ITG Technology

Underlying all ITG capabilities is the extensive technical infrastructure—including communication networks, information systems, software, and support teams—built and maintained by ITG Technology.

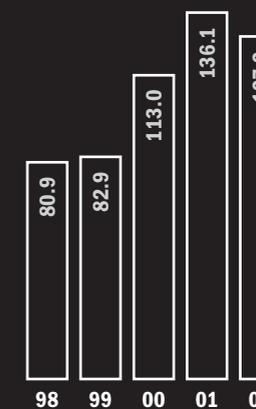
## Financial Highlights

(Dollars in thousands, except per share amounts)

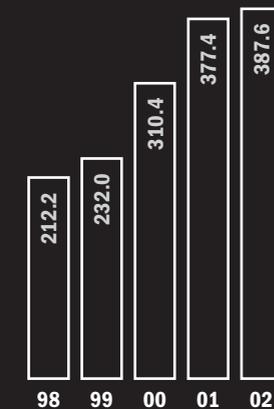
Year Ended December 31,	2002	2001	2000	1999	1998
Consolidated Statement of Income Data:					
Total revenues	\$ 387,581	\$ 377,407	\$ 310,405	\$ 232,044	\$ 212,205
Total expenses	260,328 <sup>1</sup>	241,295	197,409	149,183	131,270
Income before income taxes	127,253 <sup>1</sup>	136,112	112,996	82,861	80,935
Income tax expense	53,443	57,217	49,403	37,435	37,541
Net income	\$ 73,810 <sup>1</sup>	\$ 78,895	\$ 63,593	\$ 45,426	\$ 43,394
Basic earnings per share	\$ 1.52 <sup>1</sup>	\$ 1.65	\$ 1.37	\$ 0.99	\$ 0.99
Diluted earnings per share	\$ 1.51 <sup>1</sup>	\$ 1.62	\$ 1.34	\$ 0.95	\$ 0.94
Basic weighted average number of common shares outstanding (in millions)	48.5	47.9	46.5	46.0	44.0
Diluted weighted average number of common shares outstanding (in millions)	49.0	48.7	47.3	47.9	46.2
Consolidated Statement of Financial Condition Data:					
Total assets	\$594,254	\$418,478	\$281,712	\$179,488	\$180,706
Total stockholders' equity	\$356,509	\$317,944	\$210,416	\$115,652	\$143,709

<sup>1</sup> Includes a \$5.9 million pretax restructuring charge (\$4.1 million net of tax), or \$0.09 per share. Note: Please refer to Form 10-K for complete financials and footnotes.

**Pre-tax Income**  
(Dollars in millions)



**Total Revenues**  
(Dollars in millions)



## **To our shareholders, clients, and employees:**

The year 2002 can only be described as immensely challenging for virtually everyone in our industry. Uncertainty ruled the marketplace, and institutional equity trading volumes fell off significantly in the course of the year. The drop in order flow produced increased competitive pressures industrywide. Investors also altered their usual patterns of behavior, handling more activity in-house and becoming more conservative in their trading choices.

In this context, ITG's performance can be gauged in two ways. On the one hand, we fell far short of the robust, double-digit annual growth we had consistently attained over the previous decade. On the other, we succeeded in holding our own in a very tough year that saw many others in our industry sustain significant losses.

### **ITG maintained profitability and achieved a slight measure of growth despite the adverse conditions.**

Our 2002 total revenues were up 3 percent over 2001, rising to \$387.6 million. Three other key measures—revenues per day, net income, and earnings per share—were all up 1 percent for the year, adjusting for one-time, non-operating events in 2001 and 2002. Just as important, available analyses of market activity indicate that in 2002 we maintained market share in our core client segment of large mutual funds and plan sponsors.

### **The year's results strongly validated our strategy of broad diversification among various equity trading products and services for the institutional market.**

Gains in some business lines helped to offset slowdowns in others. POSIT revenues per trading day declined 18 percent, due to a drop in institutional portfolio rebalancing activity, among other factors. Modest increases in commission revenues generated by our Electronic Trading Desk and Client-Site Trading Products helped to fill that gap and contributed to a positive trend in total revenues.

### **Global operations were a bright spot in 2002.**

Combined revenues from our subsidiaries in Europe, Australia, Asia, and Canada increased 58 percent, despite international market conditions little better than those in the U.S.

ITG Europe's growth in annual revenues was impressive, especially in light of the steep decline in U.K. market capitalization and the fact that the U.K. market structure bases commissions on share value, not the number of shares. ITG Canada reached profitability and grew its annual revenues by 80 percent.

### **We simultaneously made substantial investments in business expansion, including a major acquisition.**

In September of 2002, ITG completed its acquisition of Hoenig Group Inc., a brokerage firm that specializes in services to alternative investment funds and has an established client base in the U.S., Europe, and Asia. This transaction will enable us to accelerate our growth strategy in the hedge fund market; it also gives us standing in the soft-dollar business, which we have not actively pursued in the past.

In 2002 we also furthered our overseas expansion with significant additions to our global product line. Specifically, we introduced global versions of our leading research products, which have now been adapted to more than 20 countries, and created a new Asian subsidiary, ITG Hong Kong.

### **Rigorous cost control and trimming across all areas also contributed to profitability.**

During the third quarter, we began integrating the Hoenig operations, and this unit's margins doubled in the fourth quarter. In 2002 we also scaled back our headcount by 10 percent, resulting in a total of 635 employees worldwide by year end. While related charges brought down our 2002 net income, this workforce reduction will produce cost savings in 2003. We continue to focus particular attention on controlling recurring, transaction-related costs.

Moving into 2003, we can only be cautious in our outlook. Institutional equity trading volumes softened further in the third and fourth quarters and remained at low levels through the start of 2003. We see no signs of an imminent market recovery, and no one can predict when a turnaround will occur.

Based on the assumption that conditions will not improve anytime soon, ITG is moving forward with a set of strategies aimed at capturing greater market share and penetrating new markets. We have no intention of merely holding our ground as we wait for the market to recover; rather, we will be aggressive in exploiting our advantages and proactive in pursuing new opportunities. We believe ITG is well-equipped to compete, with advantages including:

#### **A growing roster of unique, value-added tools and services**

ITG provides clients with trading cost control and automation capabilities that are either available nowhere else, or are head and shoulders above competing products. These tools add value to all our execution services; they also give us an edge in building and cementing client relationships. Examples include:

- TCA, our Web-based tool for Transaction Cost Analysis. No other product matches TCA's ability to deliver the meaningful, daily cost measurement that institutions will need to pursue best execution.
- POSIT and TriAct, the only totally anonymous systems for trade crossing during the market day.
- Our growing line of proprietary, strategy-driven SmartServers, which let clients outsource entire categories of trades with improved results.
- ITG's Daily Risk Model, which provides the shorter-term, more flexible analysis clients need in today's volatile markets.
- Desktop trading systems giving clients direct electronic access to more trading destinations—including unique ITG venues—than any competing system.

ITG is leveraging these industry-leading tools by rapidly adapting them to markets abroad.

### **A clear focus on the optimization of trading**

ITG is differentiated by a laser-like focus on execution quality and cost-control, two principles from which all our products arise. Operating in a climate of lower market returns and rising “best execution” obligations, institutional investors are increasingly focused on the same concerns. Those seeking better performance are being driven to exert more control over trading costs and improve their trading decisions—goals ITG has been working toward for more than a decade.

### **Financial strength**

With a solid balance sheet, ample cash flow, and healthy margins, ITG has the resources and the flexibility to keep advancing our competitive position through lean times. Among other things, this will enable us to keep up our high level of commitment to R&D and enter the next business cycle with strong momentum behind our product line.

These advantages will both fuel our competitiveness through the market slump and position ITG to leap ahead when institutional trading volumes rebound.



Through 2003 and beyond, ITG is pursuing a clearly defined set of strategies for growth:

#### **Leverage our expanding research capabilities to build client relationships**

The effectiveness of this strategy has already been demonstrated by increases in order flow among clients using research products such as ITG ACE and TCA. TCA in particular is an excellent way to gain entrée with new clients. In a similar vein is our evolving suite of risk management tools; their appeal to portfolio managers helps us penetrate further into client organizations. Offering unique transaction research capabilities will remain a cornerstone of our strategy.

#### **Expand global operations**

In 2002, over 10 percent of ITG’s total revenue flowed from our global subsidiaries. ITG Europe and ITG Canada made strong gains in market share and trading volume. We utilized our infrastructure in Australia to help launch ITG Hong Kong operations. All in all, we expect global operations to play an even larger role in ITG’s future growth and profitability—especially as overseas markets strengthen.

### **Develop specialized tools for outsourcing and automation**

Buy-side traders are continually looking for ways to leverage their resources. In creating SmartServers, ITG makes it possible for clients to trade millions of shares with high-quality execution and minimal effort. This has proved to be a winning concept, and it’s one we will continue to expand upon.

### **Increase market share in client-site desktop systems**

ITG already offers the industry’s most comprehensive direct access integrated with other list-trading capabilities. In 2003, we aim to broaden our client base with advanced tools for single-stock trading; look for a major product announcement during the year. This year we will also begin migrating QuantEX technology to the Windows NT platform for easier client integration.

### **Target hedge funds, an important new client segment**

While hedge funds still represent a relatively small share of total invested assets, they comprise one of the fastest-growing market segments. According to *Institutional Investor*, annual inflows to hedge funds grew from \$3.4 billion in 1999 to \$22 billion in 2001; hedge fund assets now total more than \$500 billion worldwide. At the same time, many hedge funds employ high-turnover, trading-oriented investment strategies.

Having combined ITG’s advanced technologies with our new Hoenig unit’s established reputation and relationships in the hedge fund community, we are positioned to make major inroads into this high-growth market segment. While our Hoenig subsidiary only came online in the third quarter of 2002, it is already leveraging ITG’s infrastructure and capabilities to deepen its client relationships and increase its own operational efficiency and profitability. Hoenig’s operations are also contributing to the growth of ITG Europe and ITG Hong Kong.

### **Capitalize on POSIT—still a one-of-a-kind asset**

POSIT remains uniquely capable of helping institutions execute major portfolio transactions at low cost. Its anonymity still makes it a key resource for large block trades. And as a unique pool of alternative liquidity, it is also valuable to those trading small, illiquid stocks. In fact, in a recent *Institutional Investor* survey of senior traders at 144 buy-side firms, POSIT was ranked number one for execution of small-cap stocks.

We continue to enhance POSIT with advanced risk-control features that preserve sector balance, minimize tracking error, and avoid cash or share imbalance. In early 2003 we highlighted these features with a new daily cross after market hours. Another plus for POSIT has been TriAct, our recently introduced continuous crossing system.

**Grow our Trading Desk business in areas where we excel**

Key areas of opportunity include portfolio trading and transition management, capabilities greatly enhanced by POSIT and the Desk's disciplined approach to trading. It's worth noting that the most recent Greenwich Associates study ranked ITG among the top three firms in portfolio trading quality. Block trading is another area where we will continue to capitalize upon POSIT and our Desk's market knowledge.



Clearly, ITG has not been immune to the dislocations that have rocked the markets. In 2002, our differentiated products and transaction-based business model enabled us to remain profitable in a time of adversity. Like everyone else, we look forward to an eventual shift to better times. But we are focused on ITG's immediate opportunities to gain market share and broaden our client base—opportunities we are moving decisively to seize. I do not underestimate the challenges we will face in 2003, but neither do I underestimate ITG's competitive strengths and resolve.

On a personal note, I want to say what a privilege it is to be here at the helm of ITG, where I've been since last July. Though I could scarcely have begun at a more challenging time, I feel fortunate to have been a member of the ITG management team since 1996, to be working with a very experienced and cohesive group of Executive Committee members, and to have such a skilled and dedicated group of ITG employees around the world. I particularly appreciate the wise counsel of Ray Killian, who has remained actively involved as Chairman. I am also grateful that ITG has a base of shareholders and clients who understand what we're doing and share our vision. My thanks to you all.



**Robert J. Russel**  
Chief Executive Officer

While striving to meet the challenges of this business climate, ITG remains focused on our customers and their needs. We are constantly working to answer the question, "What's next?"

What new tools would help our clients improve their equity investment and trading performance in the months and years ahead? What problems are arising that technology can solve? And what are the most important and promising avenues for innovation?

Since 1986, ITG has been in the business of delivering the technologies our clients need. Through that time we have maintained an R&D effort unsurpassed in our industry, in terms of the scope of our ambitions and our proportional commitment of resources. Today that effort is as strong and as focused as ever.

For ITG, *The Future of Trading*<sup>®</sup> isn't merely a tagline. It is also the definition of our business strategy.

WHAT'S NEXT?

# Precision targeting of hidden transaction costs

“Each execution has a direct impact on performance. No longer can you waste an opportunity to lower transaction costs.”

PETER JENKINS  
HEAD OF ACTIVE NORTH AMERICAN EQUITY TRADING  
DEUTSCHE BANK



*Peter Jenkins joined Deutsche Bank's asset management unit in 2002 when it acquired Zurich Scudder Investments, where he headed global equity trading for 16 years.*

Transaction costs matter. To most institutional investors, that's not a new idea. It is all too clear that by fractional, yet cumulatively significant amounts, the costs of execution chip away at equity returns, reducing the value derived from investment ideas. Even a small cost increment can mean the difference between beating or lagging a benchmark, between winning or losing a major asset management competition.

What's new is the urgency this era of shrinking returns has brought to cost-control efforts. “Markets are becoming so efficient, and there are so many competitors out there, that whether you make the top decile of managers in your category may be a matter of fifty or one hundred basis points,” says Jenkins. “Transaction cost may be only one piece of investment performance, but it's a prime area firms will be looking at to increase returns.”

Yet even performance-conscious investors may not know the full extent of their trading costs. The bulk of that expense is embedded in buy or sell prices, and therefore unseen. Recent studies estimate that implicit costs account for up to 80 percent of total trading costs. Market impact alone costs U.S. institutions an estimated \$100 billion annually, according to the Plexus Group.

#### COST MEASUREMENT

Trend-watchers see implicit trading costs rising even higher, if volatility keeps escalating as it has in recent years. The most immediate answer, forward-looking plan sponsors and money managers say, lies in analysis—and more specifically, in an emerging generation of tools providing the fast, fine-grained data traders need to inform their typically rapid-fire decision-making.

Measuring the costs of completed trades is a first step in controlling the costs of future transactions. After all, how can you take action to lower trading costs if you don't know what they are? According to a recent *Institutional Investor* survey of 1,000-plus public and corporate plan sponsors, about

#### ITG ADVANCING

### Cost Measurement

Until recently, transaction cost analysis meant poring over reams of standardized, hard-copy reports compiled many days or weeks after trade completion. ITG's **TCA (Transaction Cost Analysis)** is the first tool to provide comprehensive, customizable cost measurement with rapid turnarounds—in short, the first to make **daily cost analysis** both practical and convenient. TCA qualifies as the most advanced of its kind on a variety of scores. Augmenting its capabilities is the TCA product team, available to assist in interpreting cost analyses and applying them to improve trading strategies.

With TCA, ITG has redefined the state of the art in transaction cost measurement.

#### TCA Competitive Advantages

- Web-based interface
- Same-day or overnight results
- Measure costs vs. any benchmark
- Analyze by any factor (by side, broker, exchange, sector, etc.)
- Choose any base currency
- Customizable benchmarks & reports
- Covers all MSCI<sup>®</sup> EAFE countries

\*MSCI is a registered trademark of Morgan Stanley Capital International Inc.

75 percent currently monitor their equity transaction costs, with most reviewing costs on a quarterly or semi-annual basis. But those efforts are sure to intensify.

“To lower the implicit costs of execution, we need much closer tracking of trade performance—to see the different patterns in our results. The only way to do that is by measuring on a daily basis,” says Jenkins. “Going to daily analysis is a new thing in the industry. People have been frustrated enough with measuring executions on a quarterly basis. But being on top of costs every day is of tremendous importance. What we need now is an efficient way to do it.”

Cost measurement is a similarly hot topic in the U.K., where a sweeping government-sponsored review of institutional investment has called for comprehensive performance analysis. “Regulators here in Europe are taking the position that transaction cost analysis is a process rather than a number,” reports Martin Ekers, head of equity dealing for Morley Fund Management. “The Myners report concludes that everyone should be aware of all costs of completing an order, from initiation through execution.”

Jenkins agrees that effective cost measurement isn’t cut-and-dried. “The task is really quite complex. It’s not like saying, ‘Plug in this wire and kick out the results.’ The most important part of the execution analysis is seeing trends, and trends aren’t necessarily obvious. So what we need is not only the data, but expert advice on how to analyze and interpret cost measurements.”

**PRE-TRADE ANALYSIS**

The flip side of the analytical coin is estimating costs before the fact, providing traders with quantitative support for their decisions. With the advent of real-time data feeds, more rapid historical analysis, and more powerful transaction models, traders can quickly predict outcomes using multiple scenarios.

“We’re increasing our emphasis on pre-trade cost analysis, to eliminate some trading risk by analyzing what the market is doing,” says Jenkins. “In coming years this will become even more important to us.”

*A trader since 1980, Jenkins has been active in many industry groups, as an advisor to emerging alternative trading systems, and as a spokesman on industry and congressional panels.*



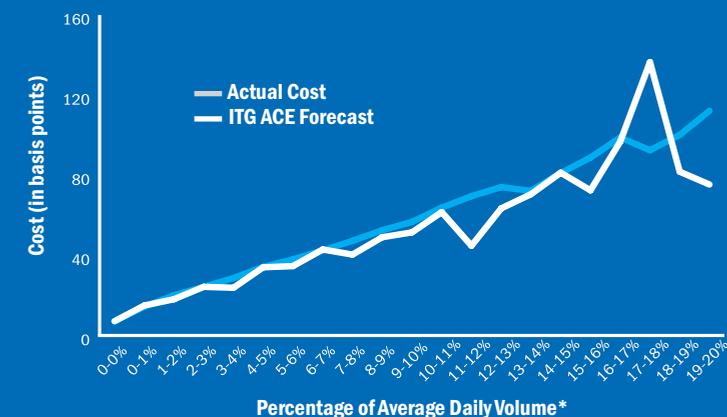
“Being on top of [trading] costs every day is of tremendous importance. What we need now is an efficient way to do it.”

**ITG ADVANCING**

**Pre-Trade Cost Analysis**

What is the optimal way to trade? ITG’s **Agency Cost Estimator (ITG ACE)** delivers answers based on quantitative analysis, rather than intuition and guesswork. By modeling transactions based on historical and real-time market data, ACE can **forecast implicit trading costs** of a given strategy, or recommend the strategy that will be the most cost-effective overall. Applicable to single-stock or portfolio transactions, ACE is the most sophisticated pre-trade cost estimator available in the U.S. today. It is also available for more than 20 other countries, including all those in the MSCI EAFE index.

**Example of ITG ACE Forecasts vs. Actual Trading Costs**  
(Average Cost by Order Size)



\*Based on all VWAP SmartServer executions between 12/99 and 5/02

WHAT'S NEXT?

**Smarter  
ways to  
access  
liquidity**

## “Market fragmentation is bad, and getting worse. And we’re missing out on natural liquidity because of it.”

MARY MCDERMOTT-HOLLAND  
SENIOR V.P. AND DIRECTOR OF TRADING  
FRANKLIN PORTFOLIO ASSOCIATES



*Mary McDermott-Holland is responsible for all trading at Franklin. She is also a member of Nasdaq’s Institutional Traders Advisory Council, which she chaired from 1998 to 2001.*

The good news is that institutional investors today have more alternatives to traditional trading methods than ever before. The rise of electronic trading systems, investors’ push to lower transaction costs, regulatory changes intended to bring more fairness to the market—all these trends have converged to transform equity market structures.

Traders seeking liquidity can now look beyond the floor of the New York Stock Exchange and the network of Nasdaq market makers to more than a dozen alternative trading systems and ECNs. Offering lower costs and more advanced features, the upstarts have succeeded in pulling significant order flow from traditional channels. In 2002, ECNs handled nearly half of all trading in Nasdaq-listed stocks—more than twice the volume that went through Nasdaq’s own systems. At the same time, competition among ECNs has spawned new features and exerted downward pressure on commissions.

### TRADING IN SIZE

Yet in some ways, the explosion of trading venues is also the bad news. A constant frustration for institutional traders is the lack of depth that has come with splintering of the marketplace. From 1999 through 2002, the average trade size plummeted to 666 shares on the NYSE and 707 on Nasdaq, declining 45 percent and 10 percent, respectively.

This means that a busy buy-side trading desk called upon to execute millions of shares a day must complete many more transactions, and thus incur potentially greater expense, to do its job. The problem is worst for block traders who may be trying to move hundreds of thousands of shares in a single name, but find that the best bid or offer is based on a quote of 100 shares.

### BEYOND CONNECTIVITY

For traders such as McDermott-Holland, the abundance of choice raises an even more fundamental concern, especially when it comes to the crazy-quilt markets for Nasdaq-listed stocks. “You have the whole raft of ECNs, you have Nasdaq’s SuperMontage system, you have upstairs trading for negotiating transactions off the exchange. Now you also have ADF,”

### ITG ADVANCING

#### Trading in Size

The world’s largest system for electronic trade crossing during the market day, **POSIT** gives cost-conscious block traders a unique edge. POSIT’s total anonymity means **zero costs of market impact**, which encourages traders to submit large orders rather than breaking them up as they would in the open market. The proof is in POSIT’s results: an average execution size more than five times greater than the overall market average.

#### Average 2002 Execution Size

POSIT	Overall Market
4,002 Shares	688 Shares

The **ITG Trading Desk** is another invaluable resource for those trading in size. While taking full advantage of POSIT liquidity, ITG’s traders continuously work orders in multiple markets. The combination of their market knowledge and ITG’s technologies gives them a leg up in achieving timely, high-quality block executions at the right price.

#### Beyond Connectivity

New in 2002, the **OTC Router** automates OTC trading while solving the problems of a complex, fragmented marketplace. Beyond providing a channel to all ECNs and market makers, the OTC Router **intelligently sweeps the entire OTC marketplace** for available and hidden liquidity. Traders simply transmit their orders; the OTC Router automatically speeds them to the right destination, taking each venue’s features and historical execution quality into consideration. In short, it lets traders outsource an entire segment of their workload while improving results.

the NASD's Alternative Display Facility for posting OTC quotes and trades. "It's virtually impossible to be represented in all those markets at once—and as the trader, it's my job to select the right destination."

Adding a worrisome dimension are fast evolving regulations requiring institutional traders to document the steps taken to complete trades at the best possible price. "We all have best execution obligations," says McDermott-Holland. "But how can I know in advance of the trade which is the appropriate venue to balance that best price with the necessary liquidity and speed?"

Across the Atlantic the view is remarkably similar. European markets are covered by three large competing exchanges and two dozen far smaller ones. At the same time, the push for best execution rules is now moving to the U.K. and beyond.

"My worst nightmare is split liquidity pools," says Martin Ekers of Morley Fund Management, "but the regulators are currently very keen on supporting competing exchanges. So to trade in, say, Royal Dutch, you wouldn't only have Euronext, you would have a realistic option of dealing on the Deutsche Bourse and several others. It's not just the administrative problems, but the disruption of possibly having to shift your focus based on the best execution rule."

**EFFICIENT ACCESS**

One way to ease the pain is with desktop direct access systems that link buy-side traders to multiple trading venues through a single electronic conduit. "I can have one connection to one broker, and a different connection to another. A better idea is technology that lets us reach out to all pools of liquidity at one time," says Peter Jenkins of Deutsche Bank. "Not only do we need to connect to as many trading destinations as possible, we need to do it as efficiently as possible."

An even more advanced solution are the intelligent order-routing systems just beginning to emerge. In the meantime, the U.S. exchanges are coming up with new technologies of their own, most notably SuperMontage, which Nasdaq recently introduced with much fanfare in a bid to win back some ground from the ECNs. This much seems clear: While technology may have helped enable the market's complexity and confusion, it may also be the only real hope for a solution.

*McDermott-Holland is also a director of the Boston Stock Exchange, a member of the NYSE's Institutional Traders Advisory Committee, and vice chair of the Security Traders Association.*



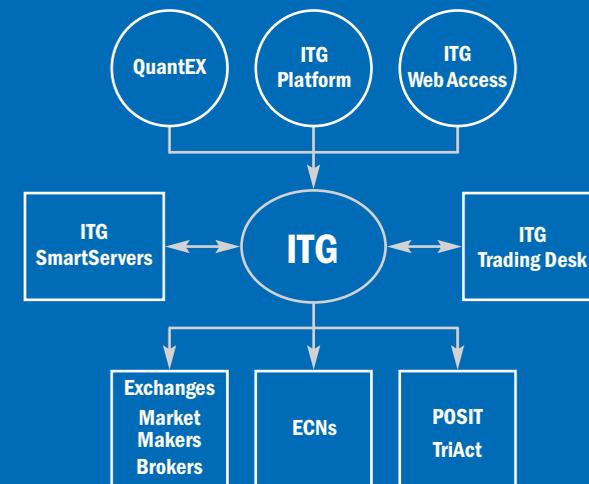
“We all have best execution obligations. But how can I know in advance of the trade which is the appropriate venue...?”

**ITG ADVANCING**

**Efficient Access**

ITG clients can choose from two desktop trading interfaces that provide complete, direct market access while centralizing all trading functions. The **ITG Platform** is an all-purpose, PC-based system; **QuantEX** is a high-end workstation designed for high-volume list trading. Both incorporate **RouteNet™**, an electronic routing capability giving users single-point access to the entire equity marketplace.

RouteNet connects with over **75 trading venues**—more than any competing front end—including POSIT and other proprietary ITG destinations. Because most clients must trade with a variety of brokers to pay for the research they use, RouteNet even lets clients send orders to other brokers, a feature encouraging full reliance on ITG's desktop systems.



Both the ITG Platform and QuantEX help traders dispatch the routine elements of trading, so they can focus on ways to lower costs and add investment value. QuantEX adds powerful capabilities to customize and automate sophisticated quantitative trading strategies. The growing family of proprietary **ITG Trading Strategies** includes **Long/Short, Pairs, Risk Arbitrage, and VWAP**.

WHAT'S NEXT?

# Heightened scrutiny of trading practices

“Here in Europe as in the U.S., there is a strong, industrywide push for higher-quality execution.”

MARTIN EKERS  
HEAD OF EQUITY DEALING  
MORLEY FUND MANAGEMENT



*Martin Ekers is based in London as Head of Equity Dealing for Morley Fund Management, part of the Aviva Group.*

**A SYSTEMATIC APPROACH**

“I believe and hope that here in Britain, best execution requirements will come down to the buy side demonstrating that we have a coherent process for ensuring best execution, rather than turning on any specific number, which only leads to mediocrity and gaming,” says Ekers. He and his colleagues are closely watching the U.K. government’s pending policy overhaul in the wake of a comprehensive investment industry review.

A focus on process is certainly the thrust of U.S. developments. While the SEC is still wrestling with proposed regulations, in late 2002 the Association for Investment Management and Research (AIMR), the industry’s main arm for self-policing, released its own set of detailed guidelines for trading practices in the areas of broker selection, disclosure, record-keeping, and more.

All in all, the new regulatory framework now taking shape promises to transform institutional trading practices around the world. “The approach taken here and in the U.S. will undoubtedly be reflected in future European Union directives, and will ultimately ripple through other markets as well,” says Ekers.

The U.S. Securities and Exchange Commission has long held that investment advisors have a fiduciary responsibility to seek “best execution.” For nearly as long, that objective was so fuzzy as to be unenforceable.

But with steady advances in the technologies available to facilitate execution and measure outcomes, the concept of best execution has recently gained a new and more concrete importance. Both in the U.S. and abroad, regulators and industry groups are now actively developing policies spelling out exactly what the pursuit of best execution should entail.

It hasn’t been an easy task. Given the nature of trading, with its backdrop of often conflicting and always shifting considerations, what constitutes the “best” possible result is rarely clear-cut.

ITG ADVANCING

**A Systematic Approach**

For the past decade, ITG has focused its entire R&D program on methodically deconstructing and improving the trading process. As a result, ITG now offers the most **comprehensive suite of performance-enhancing technologies** available anywhere. The more that regulators demand consistent trading methods with proven benefits, the more valuable and necessary ITG’s products will become.



“In the meantime, I expect the U.K.’s best execution policies will produce slow, incremental changes moving the industry toward greater efficiency and higher standards.”

**COMPLIANCE FUNDAMENTALS**

In the U.S., institutions are already busy assessing the immediate and practical ramifications of the emerging standards. “The AIMR guidelines carry substantial weight in the industry,” says Mary McDermott-Holland of Franklin Portfolio Associates. “Sweeping as they are, we’re going to have to make a huge technology commitment to meet them in the area of record-keeping alone.” Clearly mandated is more consistent measurement of trading outcomes, as firms cannot implement “an effective trade evaluation process,” or “review the quality of services received from brokers,” or meet any number of other AIMR guidelines without it.

Record-keeping and number-crunching aside, institutional investors may readily accept—perhaps even welcome—the kind of critical self-review best execution regulations will call for. After all, it is in their own interest to maximize performance, and the longer the bear market drags on, the more acute that realization becomes.

**PROCESS ENGINEERING**

“In this difficult market environment, it’s essential that we constantly question and challenge our practices,” says Dave Briggs of Federated Investors. “Take list trading, for example. So many managers have embraced it. Now the challenge is figuring out how to get more performance from it.”

The answers, Briggs believes, lie both in better practices and in more advanced technology. On his list trading wish list: “Give me comprehensive direct access, give me the ease of getting multiple executions done, give me immediate fills, give me a running cash total, and guarantee me that everything I’m doing is going out to market.”

“One of the main reasons I moved from the sell to the buy side was my conviction that there were huge opportunities for improvement in the process. More and more, I see those in my peer groups taking a similar view,” agrees Ekers. “We are constantly looking for increased and improved technologies toward that end.”

*Ekers became a buy-side trader in 1999 after 27 years on the sell side, during which he set up and ran London equity trading desks for Smith Barney and S.G. Warburg.*



“The approach taken here will undoubtedly be reflected in future European Union directives, and will ripple through other markets as well.”

**ITG ADVANCING**

**Compliance Fundamentals**

As institutional investors begin taking steps to fulfill best execution mandates, instituting or upgrading performance measurement systems will be a logical place to start. In a feature-by-feature comparison among all available products, ITG’s **TCA (Transaction Cost Analysis)** system emerges as the clear winner. Those seeking cost-effective compliance will find no better solution than TCA—which is why the **number of ITG clients using it more than doubled in 2002 alone.**

**Process Engineering**

For the model of a technologically advanced, precision-tuned trading process, look no further than the **ITG Trading Desk**, where all traders are expert users of ITG technologies. Exemplifying ITG’s approach to best execution, the desk’s **Portfolio Trading** unit employs a **systematic, step-by-step approach** designed to complete portfolio transactions at a low total cost and with a high degree of control in managing risk and meeting client objectives.

**The Ingredients of ITG’s Approach**



In fact, a Greenwich Associates study for 2002 ranked **ITG among the top three brokerage firms in overall portfolio trading quality.** ITG has also become a leading institutional resource for major portfolio transactions such as manager transitions and rebalancings.

WHAT'S NEXT?

**More  
strategic  
parsing  
of orders**

“Electronic trading vehicles are simply one more set of tools. The key is to analyze each order and determine the best possible way to work it.”

DAVE BRIGGS  
HEAD OF GLOBAL EQUITY TRADING  
FEDERATED INVESTORS INC.



*With Federated Investors since 1982, Dave Briggs currently manages a desk responsible for trading of \$24 billion in equity assets.*

being automated. On our own desk, electronic trading currently accounts for about one-fourth to one-third of our total volume.”

**ZERO-INFORMATION TRADING**

“Another reason people are embracing electronic trading to such a large extent is the anonymity it can provide,” Briggs adds. “Nowadays, the electronic market is the one place you can trade with no trust issues and no worries about information disclosure.” Martin Ekers of Morley Fund Management agrees. “If you want to improve market access without creating a huge market impact that undermines performance, finding ways to source liquidity without information leakage is a key component of the job,” says Ekers.

**THE KNOWLEDGE FACTOR**

At the same time, sophisticated traders never forget that technology can’t always do it all. “When it comes to the less liquid mid-cap and small-cap issues, finding a natural on the other side of the trade is probably the way to go—and there, the human element can be critical,” Briggs observes. “The same is true when it comes to the handling of large blocks, where

Surgeons once reached automatically for their scalpels. Today, depending on the procedure, they might wield a laser, arthroscopic technology, or a gamma radiation knife. Institutional traders likewise have seen an outpouring of innovative technologies making the execution process more precise, efficient, and intelligent, not to mention less tedious and labor-intensive.

For traders, like surgeons, the first step in handling any task is determining which tools are right for the job. Increasingly, they deliberately weigh their execution choices across the widening technology spectrum.

“More and more, we hold the view that there are different types of trading,” says Briggs of Federated Investors, a major mutual fund complex based in Pittsburgh. “There’s a lot that gets done electronically. That’s partly for the sake of convenience; all the easy trades are

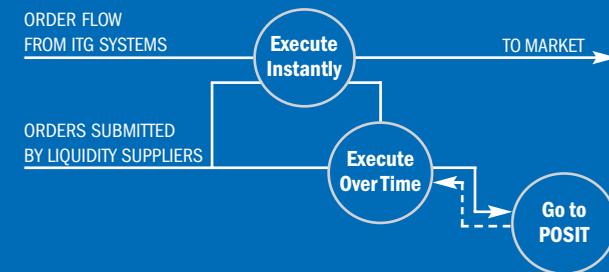
ITG ADVANCING

**Zero-Information Trading**

Anonymity has always been the trader’s ideal, but until ITG introduced **POSIT** in 1987, there was no such thing as a zero-information system for trading during the market day. POSIT’s anonymous, low-cost trading has been a magnet for liquidity ever since; the system traded more than 7.6 billion shares in 2002.

This past year, ITG also introduced a brand new anonymous electronic crossing system: **TriAct**, which brings together many kinds of order flow through ITG, including the liquidity in POSIT matches.

**How TriAct Works**



**The Knowledge Factor**

The **ITG Trading Desk** was created to meld the skills and experience of human traders with the most advanced trading technology available—in short, to bring the best of both worlds to institutional equity trading. Expert users of all the firm’s technologies, ITG’s traders apply their market knowledge to orchestrate a **disciplined, technology-assisted trading process that precisely targets best execution** in the context of each client’s multiple objectives.

ITG is also differentiated by its focus on **agency trading**. Because ITG does not commit capital to transactions or trade for its own account, traders’ decisions are driven solely by the client’s agenda.

the high-margin value is added. On the tough orders, you want to partner with very skilled, knowledgeable professional traders who are sensitive to buy-side traders and are always thinking about what they can do for them.”

While institutional traders have always had to consider various ways of handling any given trade, the widening array and growing sophistication of their choices now demand a more systematic approach. “I’m a big believer in automation, but it has to be used intelligently,” says Briggs. “We’re kicking around a methodology of classifying trades into sixteen different types, based on their parameters, to help us determine the best way of handling them.”

**SPECIALIZED AUTOMATION**

At Deutsche Bank’s active equity trading desk, Peter Jenkins is taking a similar tack. “One idea we want to expand on is categorizing trades and then utilizing electronic links to execute them in specialized ways. For instance, take our small, highly liquid orders and route those to firms offering the appropriate algorithms to maximize performance and efficiency. We’re already doing that with small orders, and I’d be interested in ways to do that with large orders as well.”

Undeniably, it takes thought and effort to analyze orders, categorize trades, and match them with the right execution alternatives. This kind of “pre-pre-trade analysis” adds another step to an already complex execution process. Still, buy-side traders have growing reason to find the exercise worthwhile. Under immense pressure to cut costs and boost returns, they also need to find the most efficient ways of pumping millions of shares through the market each day.

Another factor is the surge in popularity of program trading, whereby hundreds of small orders are bundled into a single large trading basket that can be handled at lower cost. The institutional desk can either send this entire “program” to a broker, or manage the trades itself, using direct access systems to execute them in multiple venues. Either way, there are choices to be made. More and more, making smart choices is a capsule description of the institutional trader’s job.

*Instrumental in establishing Federated Investors’ global trading operation, Briggs also has extensive experience in systems consulting and applications development.*



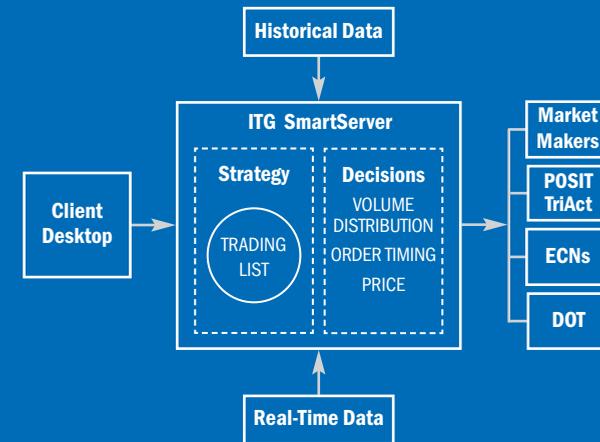
“[Sometimes,] finding a natural on the other side of the trade is probably the way to go—and there, the human element can be critical.”

ITG ADVANCING

**Specialized Automation**

ITG’s family of **SmartServers** lets clients outsource trades according to their trading objectives. Unique to ITG, SmartServers are **automated electronic trading destinations**, each dedicated to a single trading strategy. Clients simply transmit orders to the SmartServer that best meets their needs, and then ITG’s automated trading technology takes over to work their shares. The SmartServers continuously analyze real-time market conditions over the lifetime of each client order to determine the optimal method for meeting the trading objectives. As the SmartServer generates trades, it determines timing, price, size, and venue in order to locate liquidity, minimize impact, and deliver quality fills.

**A SmartServer in Action**



The year 2002 saw the debut of the **OTC Router** plus growing usage of ITG’s **SPI SmartServer**, a strategy for improving performance of small orders that must trade quickly, and the **VWAP SmartServer**, for clients targeting Volume Weighted Average Price. All told, ITG’s **SmartServer volume increased 33 percent** in 2002 for a total of 1.9 billion shares. Three more SmartServers are scheduled for introduction in 2003.



WHAT'S NEXT?

**An  
intensified,  
multi-layered  
focus on risk**

“We select investments on the basis of alpha. But that’s computed through implementation—which means you can give up all your return if you don’t get execution right.”

NANETTE J. BUZIAK  
V.P. AND SENIOR PORTFOLIO MANAGER  
J.P. MORGAN FLEMING ASSET MANAGEMENT



*Nanette Buziak is V.P. and Senior Portfolio Manager in the U.S. Equity Group of J.P. Morgan Fleming Asset Management, where she is responsible for Structured Equity Strategies.*

Risk and reward. Reward and risk. Those are the two constant fundamentals in virtually every calculation investors and traders must make. In years past, returns have occupied center stage. Risks were murkier and less tangible, their outlines harder to discern.

But now risk is moving from the shadows into a spotlight. Financial engineers are rapidly advancing methods of ferreting out and taming the many species of investment risk. Meanwhile, the market’s new realities are adding urgency to their efforts. Risk is always about the unknown, and several factors have combined to make uncertainty the ruling force in the marketplace.

Volatility, for one, has increased “dramatically,” says Buziak. “In fact, in 2002 the volatility index reached an all-time high. That’s a major concern when I’m considering what a given stock is worth.”

Liquidity issues also come into play. “Natural order flow has shifted,” Buziak observes. “Liquidity has moved away from market makers and toward package trades, into channels that are more difficult or expensive to access.”

The tilt toward package or program trading itself raises risk concerns ranging from “sector imbalance” to “tracking error,” whereby investments veer away from a desired profile or performance benchmark. Overarching it all is the cold fact that these days investment performance is simply harder to come by.

**OPTIMIZATION TECHNOLOGY**

Against this backdrop, institutions are attacking multiple categories of risk at every possible inflection point, including methods of stock selection, portfolio construction, and, increasingly, in the trading process. As a result, trading considerations now filter through all stages of investment. “Whenever I’m selecting stocks, I’m looking at each stock’s liquidity and market capitalization,” Buziak explains. “We want ideas we can implement, so liquidity is key.” She also relies on sophisticated optimization technology that factors implementation costs into portfolio construction.

ITG ADVANCING

**Optimization Technology**

ITG/Opt is a state-of-the-art tool for **constructing portfolios that meet multiple constraints and objectives**, including lower execution costs and enhanced liquidity. Built on patented optimization technology and highly customizable, ITG/Opt is uniquely equipped to **handle complex portfolio scenarios**, from enhanced index funds and large sets of managed accounts to long/short portfolios and tax-sensitive funds.

**Enhanced Crossing**

Complementing the cost and liquidity advantages of the **POSIT** and **TriAct** crossing systems are their **sophisticated portfolio risk controls**—an asset ITG is capitalizing on with a new POSIT session conducted after closing hours, when concerns with risk run especially high. POSIT and TriAct risk controls are available throughout the market day, and in the **new POSIT after hours cross**.

**Use POSIT Risk Controls to:**

MAINTAIN/IMPROVE	PROTECT AGAINST
Sector Balance	Price-Influencing News
Liquidity Profile	Price Movements
Tracking Error	
Dollar/Share Imbalance	

**ENHANCED CROSSING**

While risk management technologies have come a long way, portfolio managers and technology providers keep pushing the envelope. “To cross portfolios without distorting sector balance, we initially put a very tight collar around buys and sells in each sector,” says Buziak. “But when market liquidity fell off, it became too expensive to execute trades that weren’t crossed. So we collaborated in developing a new tool allowing more freedom in crossing, but with multiple portfolio bands so tracking error can be tightly controlled.”

**RISK MODELING**

One technological advance she would like to see is better design of models for analyzing portfolio risk. “The trouble with most risk models is that they’re historically based, rather than forward-looking. They may be looking at the right factors, but models built around a five- or ten-year time period get clouded by the bubble,” she says. “To gauge stock-specific risk, I need shorter-term data streams. What are the options markets telling me today? How is the debt trading?”

Of course, not all the ingredients in risk management are high-tech; better communication is critical, too. It used to be that portfolio managers simply handed traders a stock list and then waited for reports. Now there is constant back-and-forth, both in conversation and in the flow of orders to and from trading system blotters.

“With liquidity so tight, portfolio managers and traders have to work much more closely together. Communicating instructions, dealing with time horizons, deciding where to look for liquidity—it’s a constant, ongoing discussion,” says Buziak. “Just as I look for continual feedback from the trading desk, I also provide continual input to trading strategy. That’s where I add value as a portfolio manager.”

*Buziak was previously with First Marathon America, Inc., where she managed convertible bond arbitrage and stock index arbitrage strategies, and with Bear Stearns & Co.*



“The trouble with most risk models is that they’re historically based, rather than forward-looking ...Models built around a five-or ten-year time period get clouded by the bubble.”

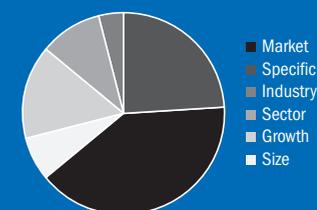
**ITG ADVANCING**

**Risk Modeling**

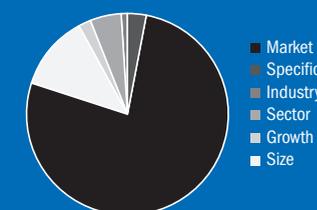
Having seen room to improve available tools for risk management, ITG is actively pursuing that business with a complete suite of **U.S. and Global Equity Risk Models**. Designed for today’s climate of heightened volatility and uncertainty, ITG’s Equity Risk Models:

- **Forecast and quantify risks** to improve the risk characteristics of trading lists and portfolios.
- **Offer daily, weekly, and monthly versions**, to best meet varying client needs. Particularly useful in the current climate is our Daily Risk Model, which is re-estimated every night for approximately 8,500 U.S. equities.
- **Accommodate both fundamental and statistical approaches** to risk analysis.
- **Have been adapted to more than 20 countries**, including all those in the MSCI EAFE index.
- **Are easily accessed through ITG PRIME™**, a Web-based interface used to customize and graphically summarize results. Here ITG PRIME graphs the sources of total risk and active risk (relative to the chosen benchmark) of a sample portfolio.

Percentage of Active Variance



Percentage of Portfolio Variance



# What's New/What's Coming

ITG keeps moving on all strategic tracks

	2002 Advances	2003 Plans
<b>Build on the success of POSIT</b>	<p>Introduced TriAct, a new trade-crossing system complementing POSIT</p> <p>Introduced POSIT Canada, operated as a facility of the Toronto Stock Exchange, and POSIT Hong Kong</p>	<p>POSIT after hours cross debuted in February with enhanced risk controls</p> <p>Integrate SmartServer suite with TriAct execution capabilities</p>
<b>Increase value added through research products</b>	<p>New TCA (Transaction Cost Analysis) features</p> <p>Major upgrade of ITG/Opt, the industry-leading portfolio optimizer</p> <p>ITG Fair Value Model—helps mutual funds accurately value foreign securities</p> <p>ITG PRIME, Web-based interface for analyzing and graphing risk model data</p>	<p>Introduce new performance attribution service</p> <p>Extend research product coverage to a total of 23 countries</p> <p>Introduce Global Risk Model</p>
<b>Leverage capabilities globally</b>	<p>Established ITG Hong Kong</p> <p>Research product expansion to more than 20 countries</p>	<p>Introduce POSIT for Japanese equities, completing crossing capability for major global markets</p> <p>Extend SmartServer technology to cover global markets</p>
<b>Broaden client base</b>	<p>Acquired Hoenig Group Inc., a broker with strong hedge fund clientele and expertise</p>	<p>Expand single-stock system capabilities to serve hedge funds, active traders</p>
<b>Win a central place on client desktops</b>	<p>Major upgrade of QuantEX, redesigned with open architecture</p>	<p>Begin migrating QuantEX to Windows NT platform</p> <p>Integrate risk models and other research tools into client-site front ends</p>
<b>Encourage client outsourcing with automation</b>	<p>OTC Router, enabling “smart” sweeps of ECN and market maker liquidity</p>	<p>Three new SmartServers: Horizon, activePeg, MOC (Market-on-Close)</p>

# General Corporate Information

## Investment Technology Group, Inc.

### Executive Offices

380 Madison Avenue  
New York, New York 10017  
(212) 588-4000

### Directors

Frank E. Baxter

J. William Burdett <sup>(3)</sup>

Neal S. Garonzik <sup>(1)(2)(3)</sup>

William I Jacobs <sup>(1)(2)(3)</sup>

Raymond L. Killian, Jr.  
*Chairman of the Board*

Robert L. King <sup>(1)(2)(3)</sup>  
*Chairman and CEO*  
*Requisite Technology*

Maureen O'Hara  
*Robert W. Purcell*  
*Professor of Finance*  
*Johnson Graduate School*  
*of Management,*  
*Cornell University*

Robert J. Russel  
*Chief Executive Officer*

Mark A. Wolfson <sup>(1)(2)</sup>  
*Managing Partner*  
*Oak Hill Capital Management*  
*Vice President*  
*Keystone, Inc.*

(1) Member of Audit Committee

(2) Member of Compensation Committee

(3) Member of Nominating and Corporate Governance Committee

### Forward-Looking Statements

This Annual Report contains forward-looking statements within the meaning of the U.S. securities laws. All statements regarding our expected future financial position, results of operations, cash flows, dividends, financing plans, business strategies, competitive positions, plans and objectives of management for future operations, and concerning securities markets and economic trends are forward-looking statements. Although we believe our expectations reflected in such forward-looking statements are based on reasonable assumptions, there can be no assurance that such expectations will prove to have been correct. Important factors that could cause actual results to differ materially from the expectations reflected in the forward-looking statements herein include, among others, the actions of both current and potential new competitors, rapid changes in technology, fluctuations in market trading volumes, financial market volatility, evolving industry regulations, risk of errors or malfunctions in our systems or technology, cash flows into or redemptions from equity funds, effects of inflation, customer trading patterns, the success of our new products and services offerings as well as general economic and business conditions, internationally or nationally, securities, credit and financial market conditions, and adverse changes or volatility in interest rates. For additional factors which may cause results to differ materially from the forward-looking statements herein, please refer to our Annual Report on Form 10-K on file with the Securities and Exchange Commission.

### Officers

Robert J. Russel  
*Chief Executive Officer*

Ian Domowitz  
*Managing Director*

P. Mats Goebels  
*Managing Director*  
*General Counsel and Secretary*

Christopher J. Heckman  
*Managing Director*

Anthony J. Huck  
*Managing Director*

Ananth Madhavan  
*Managing Director*

David Meitz  
*Managing Director*

Howard C. Naphtali  
*Managing Director*  
*and Chief Financial Officer*

Steven J. Sorice  
*Managing Director*

James M. Wright  
*Managing Director*

Angelo Bulone  
*Senior Vice President*  
*and Controller*

### ITG Sales

(877) 399-4ITG

### World Wide Web Site

<http://www.itginc.com>

### Form 10-K

A copy of the Company's 2002 Annual Report on Form 10-K, as filed with the Securities and Exchange Commission, is available to stockholders who request it by writing to:

Director  
Investor Relations  
Investment Technology Group, Inc.  
380 Madison Avenue  
New York, New York 10017

### Stockholder Assistance

Stockholders may communicate with the Company's registrar regarding their accounts, certificates, or dividends using the toll-free telephone number: (800) 426-5523

### Transfer Agent and Registrar

EquiServe Trust Company, N.A.  
P.O. Box 43023  
Providence, RI 02940  
Phone: (800) 426-5523  
TDD: (800) 952-9245

### Investor Relations

(800) 991-4484

### Legal Counsel

Cahill Gordon & Reindel

### Independent Auditors

KPMG LLP

### Company Securities

Investment Technology Group, Inc. Common Stock is traded on the New York Stock Exchange under the symbol ITG  
Cusip #46145F-10-5





**Investment Technology Group, Inc.**

380 Madison Avenue  
New York, New York 10017  
[www.itginc.com](http://www.itginc.com)