The Yale ENTREPRENEUR

TEACHING OLD BUSINESS NEW TRICKS

SARBANES-OXLEY AND ITS DISCONTENTS

THE ENTREPRENEUR UNDER SHARI'A LAW

PLUS

Women, Entrepreneurship & Microcredit
How Microcredit Is Planting the Seeds of Independence

The Art of Investment

A Conversation:
YE Speaks with Jeffrey Citron, Chairman of Vonage

The Future of Cocaine:
Considerations for Ending Colombia's Cocaine Trade

Entrepreneurial Tyranny

A Yale Entrepreneurial Society Publication

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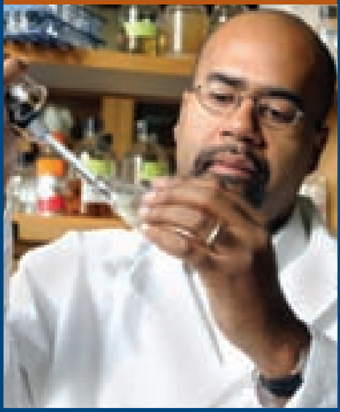
SPRING 2007, ISSUE No.3

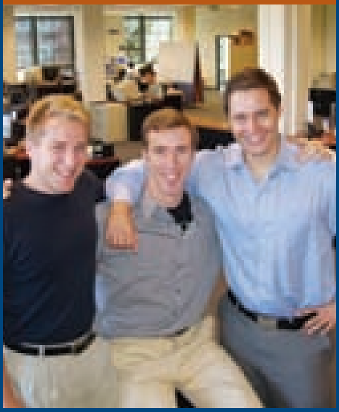
FOR THE YALE UNIVERSITY COMMUNITY AND BEYOND

Yale University and New Haven's Biotech Cluster

SCIENTIFIC RESEARCH



YES AND LOCAL BUSINESS



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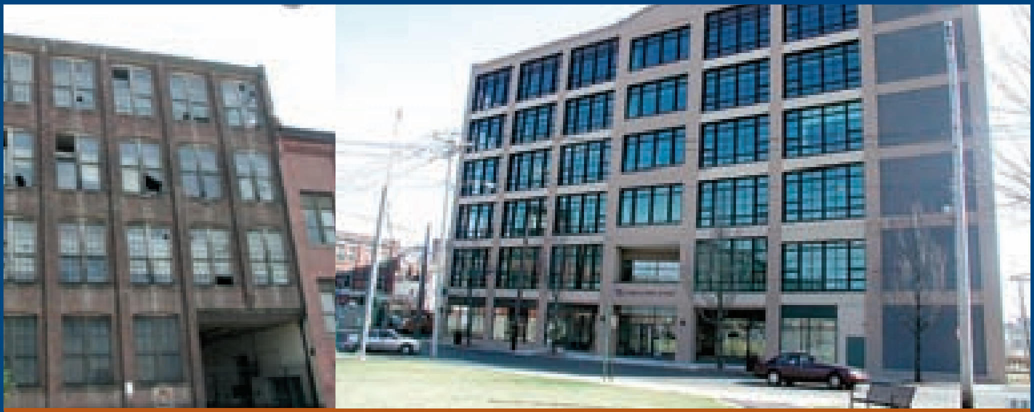

SCIENCE PARK AT YALE (BEFORE AND AFTER)

Fostering Economic Development

- Over the past decade, Yale research has contributed to a growing cluster of spin-off companies, generating over 50 business ventures—including 24 biotech companies located in Greater New Haven.
- Pfizer, drawn by proximity to Yale, selected New Haven as the location for its new $35 million clinical research facility adjacent to the Medical School campus.
- The Yale Entrepreneurial Society (YES) business plan competition, which awards $50,000 in cash prizes and free office/lab space at Science Park at Yale to winning teams, encourages businesses to locate in New Haven.
- Science Park at Yale is now being developed by companies with a successful track record for creating laboratory space for biotech startups.

Yale University

Contributing to a Strong New Haven

www.yale.edu/onhsa

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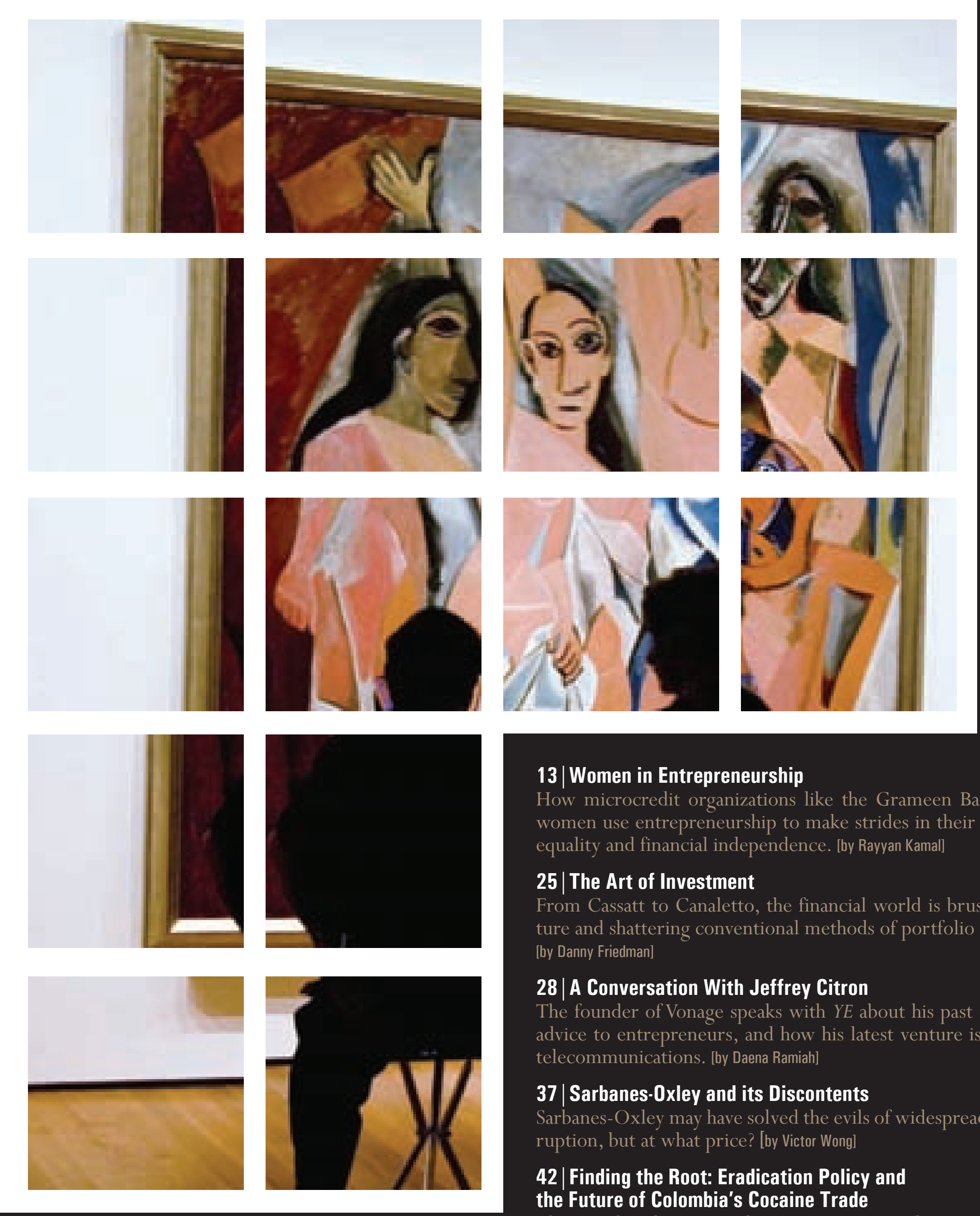


coverSTORIES

[news.stats.reports]

MARKETperiscope

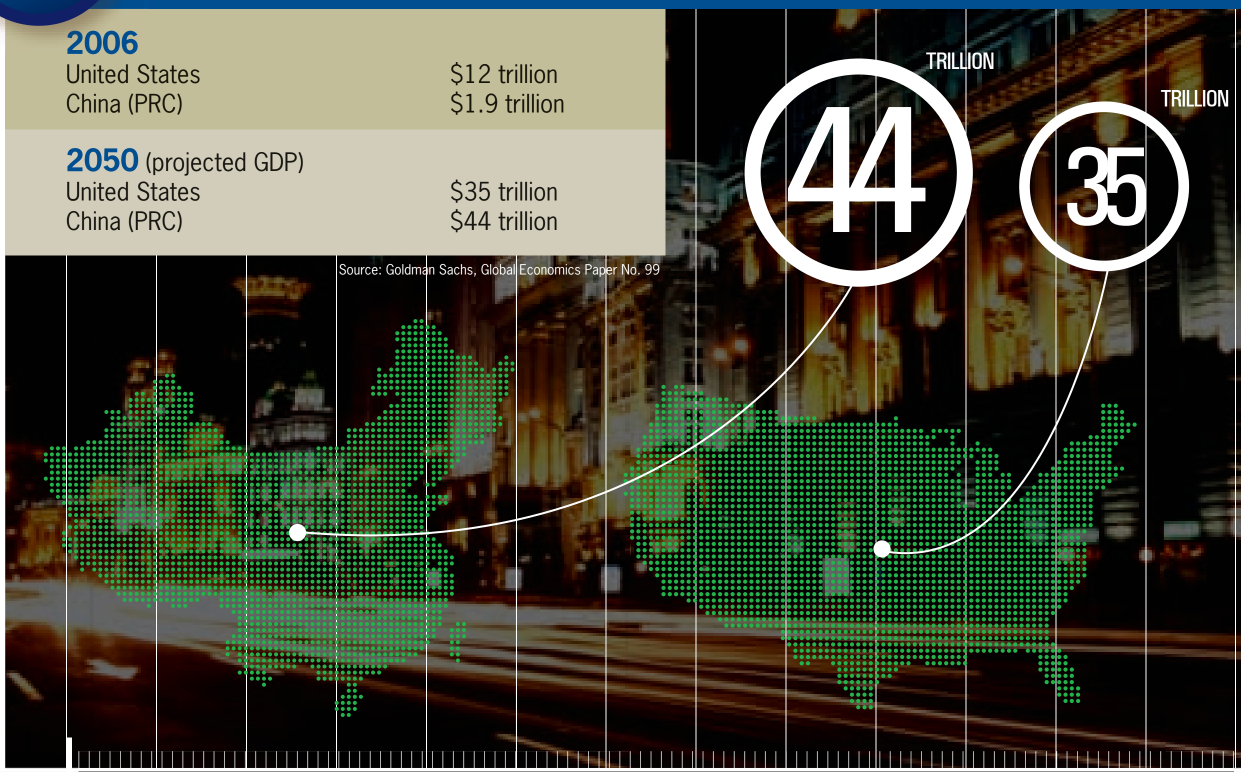
QUICK STATS

BY THE NUMBERS

By 2050, China's projected GDP will have surpassed the United States'

2006	
United States	$12 trillion
China (PRC)	$1.9 trillion
2050 (projected GDP)	
United States	$35 trillion
China (PRC)	$44 trillion

Source: Goldman Sachs, Global Economics Paper No. 99



BY THE NUMBERS

The U.S. has been the lone economic superpower since the collapse of the Soviet Union in 1991. Now, the U.S.' economic supremacy is once again being threatened, and again it is a communist state, China, that is posing the threat. This achievement has little to do with the triumph of socialist economic planning, however, and much to do with the sheer size of China. With a population more than four times that of the U.S., China need only attain a middling GDP per capita to vault far past the U.S. in the aggregate figure. If current projections hold true, by 2050 the U.S. will be little more than a signpost in the rear-view mirror of China's explosive growth.

Jobs Moving Overseas by 2015

Office	1,659,310
Computer	472,632
Sales	226,564
Management	288,281
Business	348,028
Architecture	184,347
Life Sciences	36,770
Legal	76,642
Art, Design	29,564

Source: Forrester Research, Inc

JOBS MOVING OVERSEAS BY 2015

Fueling China's impressive growth, in part, has been an influx of manufacturing jobs from the United States. The outsourcing boom does not end at the factory, however. Drawn by an abundance of well-educated workers in the developing world, economists estimate that more than 3 million jobs in skilled service professions will move overseas by 2015.

[editors'] letter

With this printing, we are proud to present the third issue of the *Yale Entrepreneur*. This release marks the conclusion of the first full year of production for the *YE*, and we have come a long way since the release of our premier issue one year ago.

In previous issues we have looked at the future of privatization and the intersection between ethics and the boardroom. In this issue, we continue to look outside traditional business concerns to see how the law is shaping innovation around the globe.

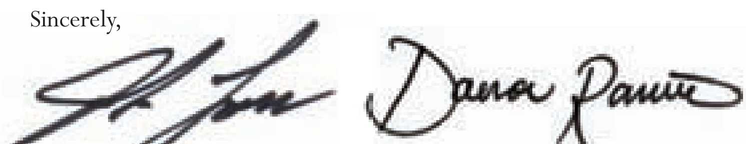
From black markets, drugs and sex trafficking to accounting regulations and corporate governance, legal climates have played a significant role in defining how businesses operate around the world. In the Islamic world, traditional Shari'a law threatens the entrepreneur with amputation if he runs afoul of religious doctrine. In Colombia, the United States' desire to eradicate cocaine threatens the livelihood of small coca farmers. In Cambodia, girls as young as four fall victim to a ruthless human trafficking industry. And here in America, legislators struggle to keep corporate America honest without choking the entrepreneurial spirit with mountains of regulatory tape.

For this issue, *YE* was fortunate to have had the opportunity to interview Jeffrey Citron, the founder of Vonage, a company that promised to revolutionize the telecommunications industry but has since suffered numerous setbacks. Through SEC investigations, shareholder lawsuits and a failed IPO, Citron has never lost sight of his goal: to change the world, in whichever way he can.

We owe tremendous thanks to the Yale Entrepreneurial Society; without YES' support, this issue of the *YE* would not be possible. We wish to thank Brad Hargreaves, President of YES, for his encouragement, as well as all the YES staff members who have contributed to this publication. Lastly, we must thank all of the dedicated staffers whose tireless devotion and countless hours of hard work have made this issue possible.

Enjoy the issue.

Sincerely,



John Loser　　Daena Ramiah

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Spring 2007, Issue no. 3

VISIT US AT www.yesatyale.org **or WRITE TO US**
The Yale Entrepreneurial Society, P.O. Box 206094, New Haven, Connecticut 06520

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Please recycle your *Yale Entrepreneur.*

[Inside Look]

New Haven's Schools of Management

by emily chen

On the surface, Monique Flegler appears the same as any typical high school student—she fills her time with classes and extracurriculars such as the history team and yearbook staff. However, Flegler is no ordinary teenager. In addition to tackling her coursework and activities, Flegler can deftly analyze current stock market trends and deliver flawless product pitches.

Flegler is a student at Metropolitan Business Academy, a small magnet school in New Haven with around four hundred students. Metropolitan was created for students interested in business, and it rigorously prepares them accordingly. The school aims to "prepare students to manage and own business enterprises in the 21st century global economy." As a mere high school junior, Flegler has finished several introductory business courses and is currently enrolled in a year-long course in accounting.

Beyond academics, Flegler has also participated in one of many job shadowing programs that bring students to companies such as Wachovia Bank, Toyota, and Apple in order to observe the inner workings of a business. Flegler adds excitedly that she is looking forward to the senior-year paid internship project where students complete an internship and document their experience.

Metropolitan integrates "occupation-related instruction" into academics by providing students with real-world skills that include accounting, writing cover letters and resumes, interviewing, and creating professional PowerPoint presentations. The course offerings reflect the same business-directed curriculum and include marketing, entrepreneurship, and personal finance. Metropolitan Business High School is also the first high school in New Haven to offer Advanced Placement classes in both Microeconomics and Macroeconomics, as well as Statistics.

Metropolitan does not stop with curricular concerns in its efforts to prepare students for the working world. The dress code each day is business casual. The classrooms resemble conference rooms. The teachers have impressive resumes in diverse business fields—often having been entrepreneurs, business owners, or corporate administrators. The staff and teachers are also quite willing to assist students in finding internships, and frequently encourage them to shadow jobs.

Because the students are focused on a more directed and narrower path than general education high schools, the specialization encourages students to excel at business. However, critics of such pre-professional programs argue that by focusing on job-specific skills, business programs such as Metropolitan sacrifice the skills that are gained through a liberal arts course of study. In addition, the question arises as to whether a student can rationally choose his future career path at the age of thirteen or fourteen without much experience or real-world exposure.

Responding to these criticisms, Metropolitan Principal Alan Frishman points out that Metropolitan itself is self-selective. "Most [of our students] go into business, so why not focus on those skills while they are still in high school?" While the students do not receive instruction in all subjects—for instance, Metropolitan students miss out on Art and Music classes—Frishman explains that in every other way the students follow a normal high school curriculum. "They simply take more classes, graduating with 28 rather than 21 credits. Also, we try to teach a way of thinking as much as simply content knowledge. That skill is of course applicable to other subject areas." As to whether a student would be at a disadvantage if he or she went to Metropolitan and ultimately decided not to go into business, Frishman responds, "The skills [the students] have learned, both personally and academically, are transferable."

Ultimately, the benefits are contingent upon the individual student's goals and needs. Students with specific business aspirations may be fast-tracked in their careers by attending a program like that at Metropolitan. On the other hand, students who are unsure of what the future holds for them will undoubtedly find a business program more restricting. As for Flegler, she believes that Metropolitan has been a wise choice for her. Although she is not certain of pursuing a career a business, she knows that the skills she has acquired will serve her well in any future endeavors. YE

by the [byline]

“When it comes to regulation, balance is key… [The government must] rise above a rules-based mind-set that asks, **‘Is this legal?’** and adopt a more principles-based approach that asks, **‘Is this right?’**”

—U.S. Treasury Secretary Henry Paulson, acknowledging that regulation of businesses in America could be hurting the economy.

“This is a **serious** competitive problem.”

—Glenn Hubbard, Dean of Columbia Business School, suggesting that excessive regulatory measures are hurting U.S. businesses in competing with their international peers.

“Clearly we saw with Sarbanes-Oxley, if you make it too onerous for people to come and access your markets, they can go elsewhere.”

—Gordon Bodnar, Professor of International Finance at Johns Hopkins University, on businesses fleeing to international markets in the wake of the 2002 act.

“**This law says** to every dishonest corporate leader: you will be exposed and punished. The era of low standards and false profits is over. No boardroom in America is above or **beyond the law.**”

— President George W. Bush, commenting on the Sarbanes-Oxley Act which mandated reforms to enhance corporate responsibility.

“Today, central authorities continue to be **too involved** in investment decisions that are more efficiently made by the market.”

—U.S. Treasury Secretary Henry Paulson criticizing Chinese authorities for restricting foreign competition in markets.

“**In certain areas, we do not have the balance right at the moment. If we are not careful, we will in fact make the U.S. less attractive to the rest of the world.**”

—John Thain, Chief Executive of NYSE Group, commenting on unnecessary regulatory measures imposed on traders.

Serial Entrepreneurs

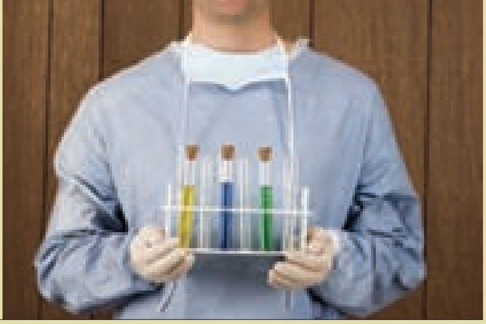
by brad hargreaves

>>> GEOFFREY CHAIKEN, A MEMBER OF YALE'S CLASS OF 2007, MIGHT NOT BE A NAME YOU ARE FAMILIAR WITH, ESPECIALLY NOT IN RELATION TO SERIAL ENTREPRENEURSHIP. While many Yalies have heard the story of Sean Glass, Miles Lasater, and Mark Volchek's creation of New Haven-based HigherOne, Chaiken's creation brain child has remained well below the radar. While a junior at Yale several years ago, Chaiken founded Marinus Pharmaceuticals, a company dedicated to developing drugs for serious neurological disorders. Within two months of founding the company, Chaiken decided to leave Yale to further pursue this venture. By February 2006, Marinus had won financing from top-tier venture capital firms, and Chaiken then passed the day-to-day activities of the company to managers with more business experience.

Chaiken would not characterize himself as a serial entrepreneur, although he may return to founding companies after he completes business school which he is set to begin this fall. However, his seemingly unusual experience prompts us to look more closely at the emerging trends of entrepreneurship. How common is it for college students to start companies, only to pass them along to venture capitalists and "the professionals" once the business is established? This phenomenon is often prevalent in web application development, but does it take place in other sectors as well? In order to address these questions, serial entrepreneurship must be examined from multiple perspectives—through both a historical and modern lens.

The concept of serial entrepreneurship entered the consciousness of most Americans in the late 1990s, as investor cash flooded the technology sector and increasing numbers of young multi-millionaires seemed to pop up on television screens and in magazine articles. When the rush slowed and the money dried up, many individuals—especially those who had lost money in the slowdown—continued to associate college entrepreneurship and serial entrepreneurs with the got-rich-quick playboys of the bubble. Furthermore, the bad taste left by the mass of bankruptcies left in the bubble's wake goes beyond the casual investor. "We're still too close to the late '90s for most tech companies to go public," says Brad Galiette, the founder of PolariStar and winner of *BusinessWeek* magazine's 25 Top Entrepreneurs Under 25. However, the bubble undoubtedly had a silver lining. "People are still excited by what entrepreneurship can do," continues Galiette. "Just look at the Web 2.0 effect."

Anyone in the biotech industry, of course, is wondering about the origins of the entrepreneurial fuss that has taken over the tech industry. Ever since Amgen challenged the established pharmaceutical companies in the early 1980s, biotechnology has been a hotbed of serial entrepreneurship—albeit among a different, specialized group of innovators. Chaiken asserts that "biotech is a difficult place for young entrepreneurs. It's very capital-intensive, and the talented managers out there are not willing to work in a garage eating pizza with a stock certificate." In other words, due to the considerable overhead of establishing such a company, innovators in the life sciences have few options beyond partnering with venture capitalists or pharmaceutical companies who can quickly marginalize the original vision of the entrepreneur. The upside, of course, is that the inventor doesn't face the risk burden present in drug development in terms of money and red tape. (*continued on next page*)



Despite the inherent challenges of the industry, serial entrepreneurs in the Yale biotech community are by no means hard to find. Many of them, such as Yale Molecular Biology professor Ronald Breaker, have already made a name for themselves in other contexts, such as through classes or laboratory work. Breaker has founded two companies, Archemix and BioRelix, both of which heavily incorporated his research in RNA technology. Yet Breaker's attitude toward entrepreneurship is remarkably less mercenary than that of many more famous innovators. "Without question, my primary motivation is to pursue pure basic research," says Breaker. "There are undiscovered aspects of biology that undoubtedly will surprise us all, and I would like my laboratory to be among the best teams of explorers in this field."

As Breaker emphasizes, Chaiken's case of undergraduate student entrepreneurship is the exception, not the rule. "There are a number of factors that conspire to make biotech entrepreneurship inaccessible to undergraduates. Unlike some other areas, such as computer software or internet technologies, an undergrad cannot drop out of school and within a time frame of a few months stir up an innovative new therapeutic agent. Most biotech advances come out of years of careful and usually expensive basic science or medical research."

Thus, it seems to be the case that biotechnology is largely off-limits to those lacking experience, and internet successes are few and far between. But is serial entrepreneurship just a phenomenon of dot-coms and biotech companies, or can people with less experience (say, undergraduates) consider it a career choice?

In fact, examples of career serial entrepreneurs outside of "hot" technologies can be traced back for decades and are surprisingly easy to find in Yale's backyard. In Connecticut after World War II, brothers Bill and Hugh Rowland founded nineteen companies. After this flurry of entrepreneurial activity, they then purchased the technology that allowed them to create the optical engineering firm Reflexite, which would become known as one of the largest companies headquartered in Connecticut and an innovator in employee stock ownership. However, the Reflexite name isn't exactly well-known among local undergraduates. "There's a press selection bias," says Joseph Citarrella, the Director of Innovation for the Yale Entrepreneurial Society. "The ones that get the media are the fancy technical ideas because of the overnight millionaires formed in the late 1990s."

Often, examples of homegrown non-IT entrepreneurship are simply overlooked. Citarrella raises the example of Fred Smith, who devised the idea for Fed-Ex while an undergraduate at Yale. "It's a totally non-technical idea. Ideas don't necessarily need a new idea or program. Just try to use an existing idea in a novel way." In addition, says Citarrella, the risk involved in serial entrepreneurship is often overblown. "Regardless of what the idea is, people have the misconception that you'll live as a starving, garage-bound, college kid, or you'll strike it rich, becoming an instant playboy with a ton of money. Most [angel investor] money, on the other hand, goes toward paying the entrepreneur a salary. Obviously success is the goal, but even if the idea fails, you get paid. It's definitely a viable career."

However, the attractiveness of non-IT entrepreneurship to undergraduates is still subject to debate. "Ultimately, it comes down to a question of getting access to capital," says Galiette. "You have to convince whoever is holding the checkbook that an idea is worth taking a risk on. It's much easier to make that argument in a space where there's greater upside than a traditional brick-and-mortar type of business. You would have to do something novel." Citarrella seconds this opinion. "It's hard," he asserts, "but not impossible."

In all, both Chaiken and Citarrella emphasize the importance of forming a strong team, especially in the case of an entrepreneur who lacks industry-specific or business experience. "Lots of people assume they don't have the ability to implement an idea," says Citarrella. "That's one misconception, since a huge part of the entrepreneurship process is recruiting people who can fill in where you can't." An experienced team, he continues, is especially helpful in providing credibility and convincing skeptical venture capitalists or angel investors to finance the venture.

Chaiken has his own advice for those considering a career in serial entrepreneurship. "If you're going to do it, it's not a bad idea to do it right out of college. If you fail at age 24… well, you haven't really failed. You've learned so much and you've got a unique experience [that] will be invaluable in any of your future endeavors. Surround yourself with smart, trustworthy people, listen to them, and then just make things happen." YE

"If you fail at age 24, well, you haven't really failed. You've learned so much and you've got a unique experience that will be invaluable in any of your future endeavors."

Giving to Get

How Business is Heralding a New Era of Charity **by kelly chang**

"A certain amount of corporate philanthropy is simply good business."
-John Mackey, CEO Whole Foods

SCANDALS FUELED BY greed have rocked corporate America, destroying multi-billion dollar companies and wiping out retirement benefits for workers of such companies as Enron and WorldCom. Is it any wonder that many Americans have lost faith in our major corporations? Some individuals are working to transform the somewhat tarnished image of corporate America, however, through the recently flourishing practice of "retail philanthropy."

With roots in traditional philanthropy of the Carnegie or Rockefeller variety comes a new breed of philanthropists termed "philanthropreneurs." Typically young successful billionaires, they blend both entrepreneurship and philanthropy into what becomes an entrepreneurial organization with a philanthropic mindset. They believe the standard methods of philanthropy are inefficient and narrow-minded. As quoted in the *New York Times*, Stephen M. Case, co-founder of AOL, announced, "We need to be open to bigger, bolder reform because the hard truth is Philanthropy 1.0 hasn't worked well enough."

And with the resources to support their dream, these new philanthropreneurs are out to directly effect change as they see fit in the name of charity. Perhaps one of the most successful philanthropreneurs is Sir Richard Branson, founder of Virgin Group. Branson built his record label into a $10 billion-a-year operation. Charismatic and full of innovative ideas, Branson embodies the perfect combination of philanthropy and entrepreneurship. In a landmark announcement last year in the fight against global warming, Branson announced that he would put all future profits of Virgin Group into renewable energy sources, an estimated $3 billion in the next ten years.

Yet, are his intentions completely altruistic? In an interview with ABC, Branson hinted at possible profits gained from investing in alternative energy. He stated, "Obviously what we hope is to generate profit from that so we can then carry on reinvesting it and building a powerful company, which can invest… in more fuels."

Recently, millions of dollars have been funneled to charity through an untraditional, fashionable, and rapidly growing trend: retail philanthropy. Also known as cause-related marketing, retail philanthropy allows the individual consumer, who may be reluctant to write a hefty check to a specific charity, to act in the role of the philanthropist—and still get the new hip product out of it. Essentially, retail philanthropy consists of marketing a chosen product by donating a specific portion of profits to a non-profit of choice.

Retail philanthropy actually found its beginnings in a bona fide charity: champion cyclist Lance Armstrong's LIVESTRONG campaign, which directed its proceeds towards a foundation in the fight against cancer. Founded in 1997 by Armstrong himself, the foundation in its first year sold over 55 million LIVESTRONG wristbands. Popular, attractive, and inexpensive, the wristbands successfully appealed to consumers' tastes and sense of giving.

Retail stores, stunned by the overwhelming success of the LIVESTRONG campaign, soon began to adopt cause-related marketing as a tool for their own brands and stumbled upon a goldmine. Depending on the cause, American companies found that by tying their products to a cause that consumers are passionate about, their company will be thought of as progressive and trendsetting rather than stodgy and money-grubbing. Accordingly, cause-related products can sell like hot cakes, drastically increasing corporate revenue.

Over the past few years, retail philanthropy has come to embody what many now call the marriage of corporate America and philanthropy. Many popular retail chains now market products under a charitable platform. Prominent examples include (PRODUCT)RED and Kenneth Cole's 'R.S.V.P. to HELP,' two product lines that were pushed using broad advertisement campaigns and highly recognized celebrities. Other examples include "1% For the Planet" and the "General Mills Box Tops for Education" program.

The creators of (RED) directly state that "(RED) is not a charity. It's a commercial initiative to create awareness and a sustainable flow of money from the private sector into the Global Fund to fight the AIDS pandemic in Africa." The marketing strategy combines both an effort to differentiate products and to contribute to contemporary causes. Companies supporting the (RED) logo market their products as charitable, thereby increasing general sales while contributing a percentage of profits from (RED) goods. To date, (RED) affiliated companies have donated approximately $10.4 million to the Global Fund.

So, to what degree do charitable motivations drive the practice of retail philanthropy? The answer varies from campaign to campaign, and more interestingly, within campaigns themselves. GAP (RED) items range from $1 to $350, with 50% of the profits going to the Global Fund. On the other hand, the 4GB iPod Nano, sells for $199 but only $10 of that sum, or 5%, goes to the Global Fund. This means that in order to contribute $100 to the Global Fund through (PRODUCT)RED, the individual consumer would need to buy 10 iPod nanos for a retail value of $1990.

Private corporations have changed the face of philanthropy. On one side, charitable products create steady revenue for charities. On the other, companies market philanthropy to increase sales and ultimately their revenue. Simply put, companies do not lose money on retail philanthropy. In most cases, increase in revenue covers and exceeds any donations made to the philanthropic organizations. Neither the charity nor the company loses anything in the process. Ultimately, purchasing (RED) items allows consumers to contribute to a cause by buying the newest MP3 player. Thus, consumers should be wary, as this form of philanthropy is not entirely philanthropic; what consumers count as donations, corporations count as sales. YE

THINKING DIFFERENT
Apple's iPod Nano™ Product(RED), one of the most visible examples of corporate philanthropy.

"PRIVATE CORPORATIONS HAVE CHANGED THE FACE OF PHILANTHROPY"

HOT COMMODITIES
Bangladeshi women prepare chilis for sale in local markets.

Women in Entrepreneurship

How Microcredit is Planting the Seeds of Independence by rayyan kamal

After six years of marriage, Asiran, a Bangladeshi woman, was abandoned by her husband and left with two children. Destitute and alone, she took the children to her father's house and tried to provide for her family by laying roads. Still, it wasn't enough to get by—on a lucky day her children would eat two meals. In desperation, Asiran took a loan of 3,000 taka (1 US$ = 71 taka, roughly $42) from Grameen Bank. Due to her lack of experience in entrepreneurship, she instead used this money to raise cattle, but all her livestock died. This failed endeavor pushed Asiran further into debt, and she was forced to work extra hours laying road to pay off the balance of her loan.

Fortunately, Asiran was able to take out a second loan and embark on a more profitable venture. In Bangladesh, numerous laws prevent village women from conducting business in the marketplace. As a consequence, Asiran had to be far more ingenious than her male counterparts to develop a viable business plan. After much thought and deliberation, she stumbled across one such venture—traveling door-to-door selling saris, a garment worn by Bengali women. Through this profitable business, Asiran was able to provide for her family as a single mother in a country in which women are often faced with limited opportunities for advancement.

At the root of Asiran's success lies Grameen Bank. Under the direction of Dr. Muhammad Yunus, Grameen became an officially recognized independent bank in Bangladesh in October of 1983. Founded upon the principles of mutual trust within groups of borrowers and between the bank and the borrower, Grameen grants small, collateral-free loans to those who meet the bank's predetermined conditions for reliability. This model has steadily gained popularity across the developing world and is commonly known today as microcredit.

As the nature of this arrangement implies, Grameen Bank provides banking services to the poor, whom conventional banks would undoubtedly deem "not credit-worthy." Clients are then expected to use these loans as a capital investment to launch income-generating activities, such as buying cows or purchasing saris to sell in their villages. Grameen Bank also differs from traditional banks in that the spirit of mutual trust does not require clients to sign any sort of legal document. Rather, its clients are placed into groups in which peers pressure and encourage one another to pay back loans in a timely manner.

Early critics of this novel venture predicted that Grameen Bank would go bankrupt soon after its inception. Skeptics felt that without collateral, borrowers would lack the incentive to repay loans. However, Grameen Bank has enjoyed a loan repayment rate of over 98% throughout its existence. This success can be attributed partly to its unique system of support groups. Borrowers are divided into groups of five in which all group members must repay their loans before any member can take out a new loan. This method generates a highly effective form of peer pressure that drives clients

"Grameen's appearance has sent waves through the **fight for gender equality** in Bangladesh."

to clear loans in a timely manner.

In 1995, Grameen Bank officially became self-sufficient, ceasing to accept donor money to fund its loans. Since then, it has been able to fully support itself through collecting interest on its already existing loans. Borrowers are grouped into four categories, each with a distinct repayment interest rate: income-generating loans (20%), housing loans (8%), student loans (5%), and loans taken out by struggling members or beggars (0%). These different groups allow Grameen Bank to fund the next generation of loans without placing an interest burden on the truly destitute.

As of December 2006, the Bank had loaned out a total of $5.95 billion to 6.91 million borrowers, and its branches spanned over 89% of rural Bangladesh. Grameen's proponents hail the operation as a dependable mechanism for attacking poverty from the bottom up. In addition, the bank has begun to address critical social issues such as gender oppression and conflict in Bangladesh. Grameen has spurred advances in women's empowerment, as 97% of its clients are female. In a country where women are traditionally prohibited from engaging in the market place, Grameen's appearance has sent waves through the fight for gender equality in Bangladesh.

In fact, Grameen places the goal of female empowerment on the same level as its fight against poverty. Staff members of the Bank often lead borrowers' support group meetings designed to teach female entrepreneurs how to become financially self-sufficient. In these sessions, women are taught lessons ranging from classic business tactics to modern forms of birth control. In countries like Bangladesh, where few women receive an education, these services are of particular value. Grameen also awards scholarships to clients' children. Girls are given preference to help ensure that the next generation of female Bangladeshis will have a greater sense of gender equality.

THE FLOWER LADY
An entrepreneur from Kolkata, India tends her shop on a busy thoroughfare.

Among the female enterprises achieved through Grameen, perhaps none is more famous than the program to create "telephone ladies." This simple initiative loans women funds to purchase cell phones. "Telephone ladies" then make a profit by charging others to use these phones. This business has proven especially lucrative in rural areas where few people own cell phones, leading Grameen Bank to supply 282,662 loans of this nature.

Microcredit has done much to elevate the status of its female borrowers in traditionally male-dominated societies. By running their own businesses, women are no longer financially dependent on their husbands. In fact, these female entrepreneurs often earn more money than their respective spouses. With this new-found economic power, women now also have a stronger platform from which to fight for their political and social rights. With the backing of Grameen Bank, women borrowers in Bangladesh have made impressive gains in the battle against child marriage and dowry, a practice that requires a woman's family to give her husband a substantial amount of money or property upon marriage. Also, by edu-

The ***Grameen Bank***

LAST YEAR, THE NORWEGIAN NOBEL COMMITTEE decided to award what is arguably its most famous prize—the Nobel Peace Prize—to both a corporation and an individual. The corporation was the Grameen Bank and the individual, its founder, Muhammad Yunus.

Being awarded the Nobel Peace Prize is the acme of almost half a century worth of accomplishments for Yunus. Born in the little-known village of Bathua in southern Bangladesh, he was the third of fourteen children, although five of his siblings died in infancy. However, it soon became clear that Yunus was a gifted child, and he rose swiftly through the academic ranks in Bangladesh until he secured a Fulbright scholarship to study economics at Vanderbilt University. Upon completion of his PhD, Yunus returned to Bangladesh and became a professor at Chittagong University.

The spark for microcredit has been widely attributed to a field trip that Yunus took with one of his classes to the poor village of Jobra. There, he interviewed a woman who made bamboo stools and found out that after repaying all of her loans, she made only a penny on each stool. Struck by her poverty and the usurious nature of her loans, Yunus began to lend money out of his own pocket to basket weavers in the area.

In 1983, Yunus founded Grameen Bank, which means "village bank" in his native tongue. Today, 94% of Grameen's borrowers are women, and 98% of its loans are paid back in full. It now has more than 2000 branches spanning countries from East Timor to Uganda, Saudi Arabia to El Salvador.

-Janet Xu

cating women about birth control and safe-sex practices, the risks of debilitating disease and unwanted pregnancy have been significantly decreased.

Grameen Bank's decision to lend primarily to women is not solely motivated by a desire to encourage gender equality – women have also proven to be more reliable clients than men. Many studies suggest that women tend to be more risk-averse and possess substantial "unrealized entrepreneurial capacity." In other words, women have both a higher propensity to save and a stronger sense of duty to their families. In a recent interview, Grameen Foundation Chair Susan Davis noted that "when women make financial decisions, greater disposable income goes into improved nutrition, health status, and housing for their children and families."

At the same time, these women still have a long road to travel before they attain full gender equality. One of the biggest criticisms of Grameen Bank policy is that many female borrowers are forced to act as puppets to their spouses or male relatives and simply hand over their loans rather than pursue their own entrepreneurial ventures. Professor Geoff Wood of the University of Bath points out that "the politics of the household means when money comes in it does not necessarily benefit the women. But women have the obligation to re-pay." In light of this reality, many women might feel an obligation to use their loans according to their husbands' wishes or to maintain their households rather than use their loans to build viable businesses. This not only hinders a woman from earning her own income, but also has the potential to push her into debt.

Despite the reservations that some hold against microcredit, Grameen Bank's role in alleviating poverty and fostering gender equality in Bangladesh cannot be understated. Dr. Yunus was awarded the Nobel Peace Prize in 2006, and his institution's effective use of microcredit has been replicated not only in developing countries such as Cameroon and the Philippines but also in more developed nations like the U.S.

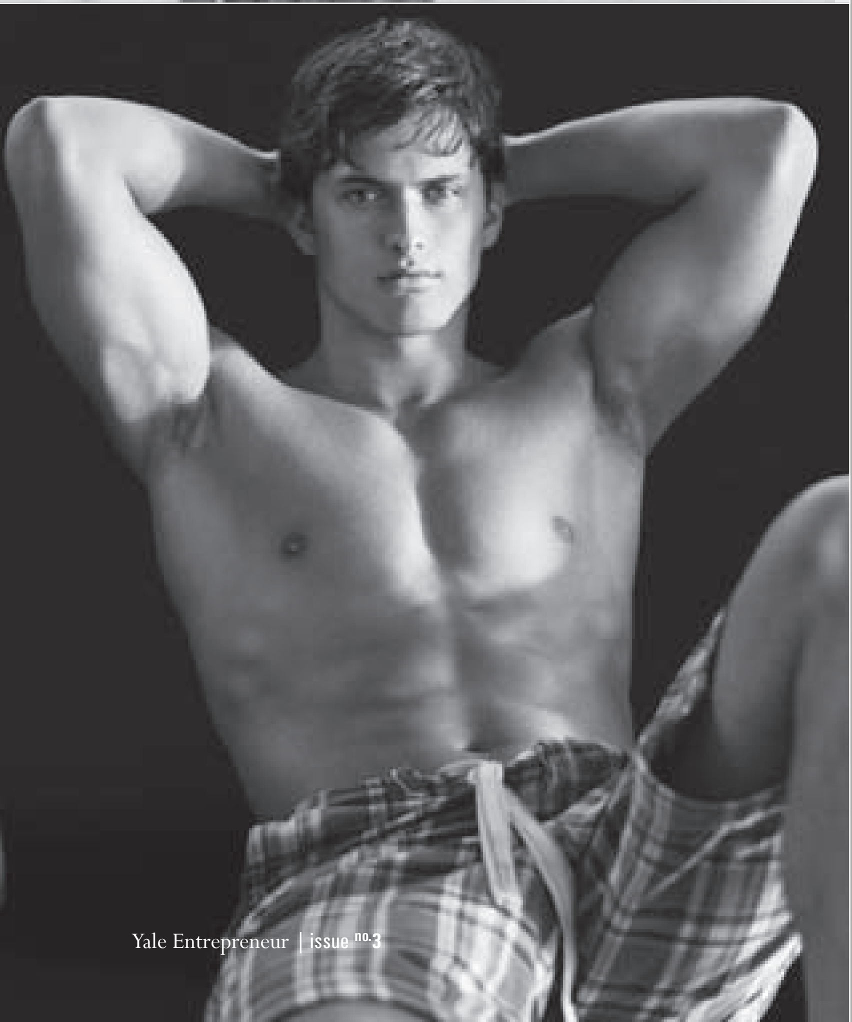
The fact that Grameen Bank's model has been adopted by institutions around the world is a testament to the long-term effectiveness of Dr. Yunus' groundbreaking model of microcredit. Grameen has granted impoverished women like Asiran a degree of economic independence unimaginable to their ancestors. By providing education and planting the seeds of independence, microcredit promises to push women of the developing world into a modern era of equality and opportunity, propelling their countries forward with them. YE

6 STEPS TO A SUCCESSFUL APPAREL COMPANY:

How Abercrombie & Fitch Does It

CONVENTIONALLY, SUCCESS FOR FIRMS in the fashion industry has been defined by how groundbreaking or artistic their clothing lines are. But for the business-minded, a much more substantial measure of success exists: profits. The unique problem facing designer-entrepreneurs in the fashion and apparel industry is that of reconciling corporate success with artistic ingenuity. Fashion companies must operate with the same considerations of corporations such as Ford, Microsoft, or Apple: brand recognition, design, service, store location, price, and quality. Abercrombie & Fitch, the casual-luxury clothing retailer which announced record profits in 2006, provides an example of incorporating into their marketing and design operations the business challenges that all companies must consider. The Yale Entrepreneur recently had a chance to speak with A&F's Chief Financial Officer, Michael Kramer, to discuss the steps Abercrombie & Fitch took to become a successful business. >>>

WRITTEN BY DIANA WANG



1. PICK A LEVEL OF DESIGN AND STICK TO IT

Only a few top designers are associated with high fashion and are typically cast as the fashion forecasters of the world. But the industry as a whole consists of differentiated groups of designer-entrepreneurs who produce fashion to target a particular niche of customers. Thus, the challenge for designers is not designing what is "fashionable," which is dictated by the top names, but in deciding which type of fashion to pursue.

Of course, within the ready-to-wear mass market, there are designers who have chosen to make profits by following runway fashion, producing low-priced copies of the couturiers. These designers pride themselves on adapting quickly to changes in demand and assimilating ideas seen on Paris streets into their collections.

Companies like Abercrombie & Fitch, however, neither aspire to be the fashion originators of the world nor attempt to replicate the trendsetters' designs. Rather, they hire "concept teams" to analyze the trends emerging on the streets and from top designers and incorporate these changes into their own image—what Mike Kramer describes as "Abercrombie-izing." He said, "You're not going to see fur coats in our store," referring to the popularity of fur among high-fashion designers. "But we've taken notice of fur and embedded them into our products…and 'Abercrombie-ized' them."

2. MARKET A BRAND IDENTITY AND LIFESTYLE

While their customers vary, designers everywhere face the similar problem of how to market a brand to attract a targeted, loyal group. The Versace customer seeks an ornate and glamorous lifestyle, while the Calvin Klein customer desires minimalist aesthetic. Successful designers, big or small, market their identity by creating an experience—an experience that is often defined by the store set-up, the models and employees, and even the music played in stores. The solution to the marketing dilemma is to deliver a lifestyle the target group desires.

Originally a sporting goods store in the early 20th century, A&F rebuilt itself in the 1990s as a preppy teen apparel merchandiser. Since then, it has positioned itself as an "aspirational" brand with the clean-cut, all-American kid as its target. "You'll never see gothic design in A&F. You'll never see black, sculls, and crossbones," said Kramer. Because the company believes that "there will always be this middle of the road with the clean-cut American kid," A&F does everything it can to attract them to their stores—this means stimulating as many of the consumers' senses as possible. The look of the store—the lighting, tables, music, smell, all of these aspects—are purposefully chosen to engage the shopper's senses. Besides the loud, hard-hitting music and ubiquitous scent of A&F's signature cologne, the company recruits "aspirational, clean-cut kids" to work in the stores and greet customers outside the doors because they know that "girls come in to see the good-looking guys, and guys come in to see the good-looking girls."

3. BALANCE CREATIVITY WITH THE BOTTOM LINE

Sometimes, growing as a business may mean a loss of artistic independence and control for the designer. New York Fashion designer Mary Ping warns that the corporate world of fashion tends to be bottom-line driven: "Trend-forecasters in the big companies come up with these excel spreadsheets that tell the companies exactly what they should design and how much of it they should produce. The benefit of being a young designer is that… you can come to the table with your own ideas."

Designers working for large fashion companies, however, have chosen to conform to an established brand image. Kramer affirms that adding, "The only constraint that we set is that the designs should conform to what our brands actually represent." Thus, the ultimate balance the designer-entrepreneur must strike is one between growing as a corporate brand and maintaining artistic creativity. As Kramer states there are fashion companies that "focus almost entirely on the creative side of the business rather than the infrastructure side of the business. Then you have the other businesses that are more business-minded and don't have a creative bone in their bodies…There's a balance that we have to strategically employ to go forward."

4. MAINTAIN A HEALTHY GROWTH RATE

Often, a company may be tempted to grow too quickly. In fashion, focusing solely on the numbers runs the risk of diluting the brand. By expanding too far too quickly, companies lose the image of uniqueness and exceptionality that is so important in fashion, making it impossible to sustain the brand: "With tremendous growth there is huge negative pressure," said Kramer. "A lot of companies that grow like this lose who they are, and we are very cognizant of that." Aiming for steady growth, A&F stores grow at no more than one hundred stores per year. "The culture of the store is what makes the firm unique. The bigger they get the harder that becomes [to maintain it]," said Kramer.

5. SUSTAIN YOUR BRAND WITH CONSISTENT PRICING

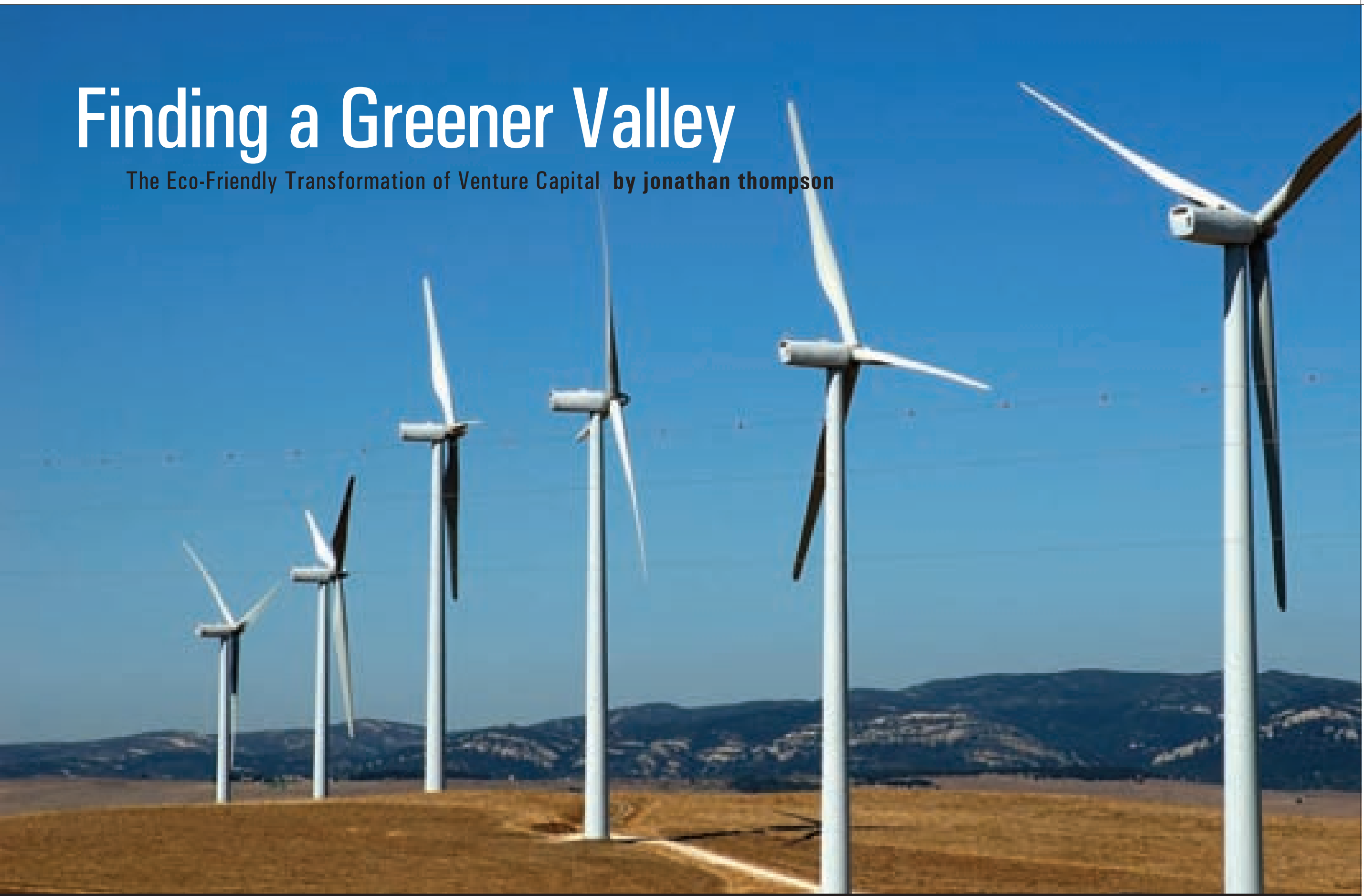
An aspirational brand like A&F's can command a high price premium in the marketplace over other commodity brands. Kramer states, "We have to make sure that our brand is priced correctly and that we are not going to come off that." The idea is to sustain the brand over the long-term and avoid discounting the product, even when the business gets tough. Kramer believes that discounting a brand just deteriorates it: "[Even] if the weather's really bad a particular quarter, we're not going to turn on a promotion. You're not going to see a 25% sale, though a lot of companies bow to that pressure. "

He uses Banana Republic as an example of a brand that has discounted their products. "Roughly 25% of Banana Republic stores are outlet stores… What really is their brand? Is their brand full-priced Banana Republic or is it diluted?" Thus, he suggests that a consistent pricing of the product is a critical element in maintaining a strong brand image. In the case of A&F, their aspirational positioning has given way to a beneficial cycle: a high-end aspirational brand can command higher price points, which leads to higher profit margins. "These margins allow for the opportunity to reinvest in more infrastructure and R&D," Kramer suggests, thus contributing significantly to the development of the company.

6. INVEST IN R&D

In fact, A&F dedicates a significant amount of funding to research and development. They have developed an "Innovation and Design Center," and Kramer notes that A&F has in fact "bought a ton of equipment and massive technology which will allow us to create the initial product here on campus which we send overseas to the manufacturer." Much of their research team focuses on the new trends, constantly "looking at new ways and new technologies that allow [A&F] to create a more Abercrombie look." The company has focused on the R&D department, which is growing more "exponentially than any other department." Through this department, A&F is working to ensure the future longevity of the business.

Whatever the level may be—whether it is the small entrepreneur or artist for a large clothing manufacturer—the designer faces unique challenges of blending his own individual ideas with emerging trends. Yet, the apparel industry must consider the same business problems as any other corporation. The executive must be aware of the risks of a diluted brand that come with expansion. Creating a solid name like Abercrombie & Fitch in the fashion industry requires the right blend of creativity, a well-targeted group of customers, and a splash of business ingenuity. YE



Finding a Greener Valley

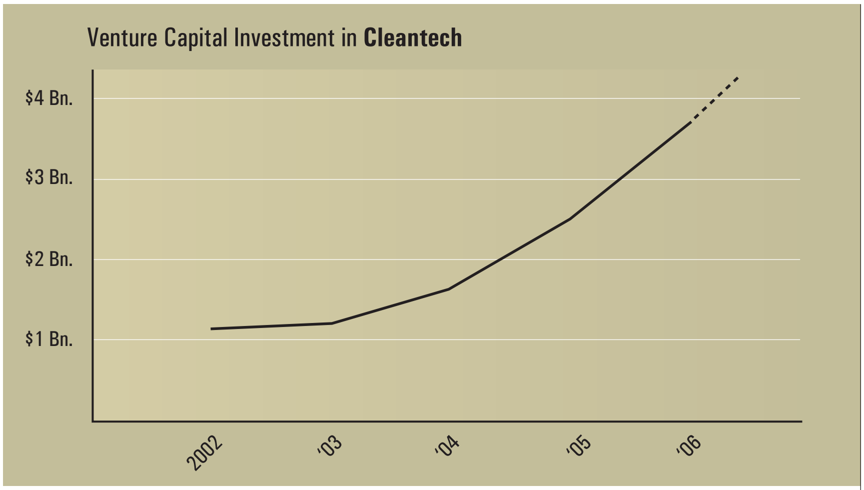
The Eco-Friendly Transformation of Venture Capital **by jonathan thompson**

>> "Venture capitalists point to a heightened concern about global warming, rising oil prices, and the rapid expansion of developing Asian nations as the driving forces behind greentech investment."

If solar panels blanketed one-fifth of Arizona deserts, they could meet all U.S. power needs. As repulsive or attractive as that notion may sound, it could prove to be the feverishly sought solution to the problem of supplying energy to a society consuming it ever more voraciously. Unfortunately, even plans of a more limited scale are impractical right now—as it stands, solar energy accounts for less than .01% of the total electricity in the world. Will it remain so, or will the blanket scenario come true? The answer may lie not only in science, but also in venture capital.

When a group of German scientists founded Sulfurcell, a Berlin-based solar module designer, in 2003, they hoped to profit from the emerging sensation surrounding green technology. Sulfurcell pioneered the use of thin-film technology, which allows solar cells to be painted on roofs and parking lots, and the company sought to capitalize on its research. Their hopes were far surpassed when they attracted $32 million from investors and most recently garnered just under $10 million in second round funding from Credit Suisse's Masdar Clean Tech Fund LP.

The success of Sulfurcell comes at the height of an industry-wide surge in environmental technology investment. According to Cleantech Venture Network, venture capital investment in "green technology" totaled a record $2.9 billion for 2006, representing a 78% increase from greentech investments in 2005 and a 140% increase from 2004. Greentech encompasses a broad spectrum of industries including nano-technology, water and air purification, and alternative energy. Essentially, greentech refers to technology



that benefits the environment in some manner. Whereas in past decades greentech was simply brushed off by investors as inefficient projects that did much for the environment but little for their pocketbooks, today green technology is providing opportunities for profit far beyond what any investor could have imagined.

"This field of greentech could be the largest economic opportunity of the 21st century," said John Doerr, a managing partner at Kleiner, Perkins, Caufield & Byers, in a February 2006 press release. Nobody seems to disagree, and many compare this trend to that computer surge and dotcom boom of the early 1990s. "But greentech is broader than that," explained Craig Cuddeback, Senior Vice President of Cleantech Capital Group. "All the major energy companies are playing in this space now." But what has sparked this sudden frenzy? Venture capitalists point to a heightened concern about global warming, rising oil prices, and the rapid expansion of developing Asian nations as the driving forces behind greentech investment.

Rising Temps, Rising Stocks

After the release of Al Gore's documentary *An Inconvenient Truth* in 2006, environmental concerns became a prominent political issue. Most scientists blame carbon emissions from the burning of coal and oil for destabilizing the climate – a harsh blow to those industries. In the face of fierce public criticism and a February UN-backed climate report confirming man-made climate change, even Exxon Mobil, which in the past had adamantly refuted global warming, has had to come to terms with the eco-friendly trend in the industry.

As a result, alternative energy sources such as ethanol, solar, and wind energy are grabbing more headlines than ever. Solar energy commands significant attention for its energy potential and viability, but it would require substantial initial investment and raised costs for higher capacity energy generation. However, government subsidies to the industry have made it look particularly promising, and more efficient solar panels have been steadily decreasing the cost of solar power. Wind energy has similar characteristics; proponents tout its high energy potential, but critics deride the unfortunate aesthetic consequences of turbines blanketing mountain ranges and meadows.

> "This field of greentech could be the largest economic opportunity of the 21st century." -John Doerr

Arguably, the most widely supported technology has been ethanol, with 113 American plants already in existence and 77 more in construction, according to the Renewable Fuels Association. The abundance and low cost of corn and grain make ethanol cheap to produce; furthermore, a decentralized industry would create immense opportunities for rural farmers. As wheat fields in areas like Idaho and Washington sprout ethanol refineries, venture capital money will be needed to finance more efficient methods of production. In addition, investment in alternative energy has seen impressive growth over the past year. The National Venture Capital Association reported that in 2006 the energy sector experienced a 107% gain in investment, reaching $1.8 billion—40% of which was attributed to alternative energy.

Oil and Legislation

Added to global warming woes are oil prices, which hit $70 per barrel in July 2006 and are now hovering around the $60 mark. Volatile oil prices and the tense, unstable situation in the Middle East have given the U.S. significant incentive to promote alternative energy development.

Accordingly, the Bush Administration jumped – albeit less enthusiastically than many hoped – on the green bandwagon as well, providing even greater room for sector growth. In the 2007 State of the Union Address, President Bush called for a 20% reduction in oil consumption over 10 years and required a fuel standard of 35 billion gallons of alternative fuel by 2017. In addition, ethanol, solar, and biomass producers have already received generous subsidies and loans, as will other alternative energy producers in the near future.

President Bush's energy proposals seem paltry in comparison to those put forth by some states. California Governor Arnold Schwarzenegger has arguably the most ambitious plans, aiming both to cut greenhouse gas emissions to 1990 levels and reduce fuel-producers' carbon dioxide emissions by 10% by 2020. Moreover, California state law will require utility companies to supply 20% of their power from renewable sources by 2010, increasing the rate to 33% by 2020. Other states have followed California's lead, and with a much greener President expected in 2008, legislation is rapidly moving in favor of increased greentech innovation and broader investment possibilities.

The Asia Factor

Industry researchers point to the rapid expansion of the developing world as another force driving the green technology growth machine. Although America is still the reigning king of oil consumption, China and India are rapidly closing the gap. After two decades of unbridled growth and industrialization, China is home to three of the ten most polluted cities in the world. Thick air pollution in urban areas has led to widespread respiratory disease and China's dependence on coal, which accounts for 75% of the country's energy, does not appear to be weakening. As China continues on its skyrocketing growth trajectory, its energy needs will very soon outpace the supply.

The Chinese government is taking swift measures to combat its burgeoning energy and environmental crisis, providing vast possibilities for green technology investment. In the spring of 2006, Chinese officials declared solar and clean coal technology as their main areas of investment and development. China's high-volume market for energy, as well as its low labor costs, has led to the founding of greentech companies in China like Suntech, one of the world's leading manufacturers of solar energy equipment. Big investments in Suntech allowed it to become profitable in 2003, just one year after it began operations in 2002.

A significant portion of legislation has been geared towards green technology. Effective January 2006, the Energy Law of China requires real estate developers to incorporate provisions for renewable sources of energy like solar panels into their designs. China recently also signed an agreement with the European Union to completely eliminate carbon dioxide emissions by 2020. All of these changes signal a marked shift in Chinese environmental policy and could possibly be a harbinger for an even broader scope for investment in green technology than previously imagined. The venture capital world stands salivating at the opportunity.

With ever increasing levels of environmental legislation, the unstable oil market, and a rapidly expanding China, there has never been a better time for greentech development. Doerr opines that the present environmental issues are "causing the nations of the world to put an even higher priority than we have now on innovation." And as innovation continues, venture capital firms will be close behind to finance it. Clean Edge Inc., a San Francisco marketing firm, expects the sector to more than quadruple by 2015 to an astounding $167 billion. The globe might be warming up, but Silicon Valley has never looked cooler. YE

Catering to the Lifestyles of the Rich and the Richer

by nadav night

In the famous 1989 film *Field of Dreams*, Ray Kinsella hears, "If you build it, they will come." Today, this line might very-well be the motto for a kind of industry unheard of in Kinsella's day. The growth of the "super-elites," an exclusive niche of the highly wealthy, has also given rise to an entire business devoted to fulfilling their needs. By expanding operations into the sky, sea, and even space, businesses tailored to the super-elite have begun to offer products that not only venture into new frontiers, but also redefine the consumer experience.

By Air

The airline industry has recently added many high-end services to attract the wealthiest consumers on the globe. While flying a full private jet can cost anywhere from two to four times the price of flying the same number of people in commercial first class, the number of private jet flights continues to grow. For example, the number of private planes going to and from John Wayne Airport, located in Santa Ana, California, has more than tripled over the past decade. Last year alone, the airport totaled nearly 36,000 private jet arrivals and departures. Although private flights represent less than 3% of the airport's total revenue, this dramatic increase in private jet usage comes at a time when revenue from non-commercial flights has declined over 33%.

Part of the lure that firms use to attract wealthy clients is transforming an existing good into a luxury good. In the case of West Coast Charters, the largest air charter company headquartered at John Wayne, the entire flying experience has been changed. West Coast Charters offers a fast-pass to flyers' destinations, allowing customers to bypass the arduous process of checking in and going through security. Passengers experience no layovers, are not required to remove their shoes, and most pets and animals are allowed on the plane rather than below with the baggage. These air charter companies are finding that super-elite consumers are willing to pay quite a high premium to avoid the post-9/11 hassle of air travel.

Thus, the economics of this type of high-end products are based on the concept of price discrimination. In the case of air travel, consumers can be categorized as those who prefer to fly privately and those who prefer to fly commercially. Generally, those who fly with private airlines have a lower demand elasticity: increases in prices do not dissuade them from purchasing products as much as other consumers who are more sensitive to changes in price. Companies therefore can raise prices and still retain enough consumers—namely the super-rich— to increase their revenue.

Some airlines, such as Eos Airlines, have benefited from this concept. After beginning operations in October 2005, Eos Airlines has greatly outperformed other commercial airline businesses. The company, a business class-only transatlantic carrier, charges $12,600 for a roundtrip first-class ticket from New York to London. Eos' services include curbside escorts, fast-track through security, 48 suites on planes built for 220 people, and 21 feet of personal space. Every suite features a 6′6″ lie-flat bed, direct aisle access, a double sized table, personal entertainment system, and Bose noise-canceling headphones. Despite the limited flight schedules, terror alerts, and other increased security regulations that crippled commercial carriers after September 11th, Eos has developed to meet the increased demand in charter services.

By Sea

While private airlines cater to the elite consumer miles above sea level, companies such as U.S. Submarines Inc. offer consumers personal voyages on luxurious submarines. Until now, submarines have generally served one of two purposes: maintaining national security and aiding scientific expeditions. However, U.S. Submarines Inc., a company based in Florida, attracts not naval officers nor oceanographers. Instead, it specializes in making multiple-passenger submarines that can take tourists up to 300 meters below the surface. Imagine cruising around the soft corals in the South China Sea and exploring shipwrecks in the Caribbean at your leisure. Although this may seem far-fetched and improbable, U.S. Submarines Inc. has actually created an operational model known as the Phoenix 1000, which is 65 meters in length and has more than 500 square meters of interior space. Although this appeals to many, the price tag of about $80 million will likely cause most consumers to think twice before swiping their card.

By Space

Not only have businesses provided for the demands and needs of super-elites in the sea and sky, but space has also become the new frontier for thrill-seeking and affluent individuals. To the regular person, penetrating the heavenly divide is a ludicrous idea; to Microsoft's Paul Allen, however, it can be a goldmine. In 2004, Allen became the sole investor in SpaceShipOne, an experimental spaceplane that launched the first privately funded human spaceflight in June of that year. Allen foot the $25 million bill for the project.

Virgin Galactic, headed by Richard Branson's Virgin Group, has also begun to invest in the market for space tourism. Branson is funding SpaceShipTwo, the successor to SpaceShipOne, with an investment of $21 million. Additionally, by 2009, Virgin Galactic plans to offer passenger service on its first spaceship, the VSS Enterprise. The first one hundred people would pay $200,000 with the potential of lower prices as this project gains popularity. If successful, Virgin Galactic will be the first private space tourism company to regularly send civilians into space. On top of the hefty admissions fee, consumers would be required to train with their group for three days before their launch. Flights will hypothetically last 2.5 hours, carry 6 passengers, and reach a height of 100 kilometers—the boundary between Earth and space.

Super-elites appear to have the sea, sky, and space at their fingertips. Whether businesses offer consumers flights to London or the stratosphere, some consumers are willing to spend more than the average American makes annually for the opportunity to explore uncharted territory. Businesses tailored to the super-elite are breaking down the barriers to where, when, and how businesses can operate. YE

WHEN GOOGLE INITIALLY WENT PUBLIC, its shares opened at $85; in 2006, a mere two years later, Google's share price had rocketed up to $513. That same year, cosmetics mogul Ronald Lauder forked over $135 million for a painting by artist Gustav Klimt, making the piece, "Adele Block-Bauer I," the highest valued painting in history. These two incidents share more than just a coincidence of timing—the value of both the Google stock and the Klimt painting rose stunningly in a short period of time. In light of this commonality, investors have started to consider whether art as an investment vehicle can yield the same exorbitant returns as a good stock pick. Is it possible that in the near future Wall Street analysts will evaluate the boom-bust cycles of post-modern art?

THE art OF INVESTMENT

why the financial world is brushing up on its culture **by danny friedman**

IN FACT, THIS THOUGHT HAS ALREADY ENTERED the popular perspective—numerous fund managers are devoting large portions of their finances to art. Recently, bankers established a dozen funds to purchase more than $1 billion of art, with each fund raising up to $150 million. While seasoned and experienced managers have little difficulty spotting the hottest stock picks, they may be somewhat unacquainted with the value of the artistic works of Caillebotte or Delacroix. Accordingly, one art fund draws advice from twenty-one art and finance experts who assist managers in estimating valuations. Through looking at past transactions and valuations of comparable paintings, as well as tracking predicted growth in interest in historic periods, investors look for future appreciation in value of the artwork in question. Some speculate art investments could yield substantial returns, but many financial economists argue that returns on paintings are much lower relative to the risks presented by traditional investments.

Entering this debate, Michael Moses and Jiangping Mei of New York University have spent the past few years tracking the performance of fine art. Their question: has the value of certain paintings appreciated over long time horizons? Constructing a diversified portfolio of various bodies of art, Moses and Mei analyzed returns in comparison to a benchmark portfolio of stocks. While these researchers focused only on stocks, other financial economists have compared paintings to other financial assets in addition to equity, including U.S. government debt and corporate debt.

Comparing the S&P 500 to an art index of 9,000 transactions over the last 50 years, the researchers found that stocks averaged a 10.9% return annually, while the art index returned 10.5% annually. Since 2001, however, the art index has significantly outperformed the stock index.

In their portfolio construction, Moses and Mei have created categories such as "American Art Before 1950" and "Masterpieces." Specifically, Masterpieces tend to underperform lower-priced paintings because of the large initial purchase price. This category, however, carries a lower risk as the artists are well known and the paintings rarely depreciate in value. Thus, it may seem that the art market follows the familiar low-risk, low-return principles as the stock market in some respects.

Additionally, certain periods have outperformed others due to critics' appraisals of entire periods or public interest in certain periods. The behavior of this market sounds familiar: certain sectors within the S&P have historically outperformed others, as technology stocks have recently outperformed consumer product stocks. Less risky stocks of better known corporations tend to grow slower than start up companies or other more risky assets. The greatest potential for growth arises when art from a lesser known artist attracts critics and speculators.

In 2005, the Fine Art Index demonstrated 14.52% returns, compared to the S&P 500's rate of 4.9% and U.S. Treasury 10-year notes' 2.68%. So what is preventing every investor in the nation from turning to art over the standard indexes? Even with the art market yielding such substantial returns, the illiquidity of art might scare investors away—it is not easily converted into cash or traded. In the first 13 minutes of trading after its IPO, Google saw 6.5 million shares trade hands. When Lauder purchased the Klimt painting, it changed hands for the first time in 60 years. If price trends in the art market shift suddenly, any investor will find it difficult to buy or sell with hopes of minimizing loss or maximizing profit. Yet, investor speculation on artwork and stocks can lead to highly inflated prices. One might argue that art prices are more susceptible to the changing moods and preferences of the public than are stocks. Nevertheless, Lauder will certainly face a challenge should he attempt to sell the Klimt for more than $130 million anytime soon.

Art also departs from stocks in another way—unlike traditional investment vehicles, fine art has few methodical and scientific ways to assess value. By looking at the stock market, analysts can value a company with ratios and earning figures. They can also compare it to its competitors and its past and expected performance. But how can the price/earnings ratio be easily applied to a Monet? Should a work of art be valued by future cash flows from admissions to museums or by comparable sales? Clearly, some of the traditional methods for evaluating and predicting stock performance cannot be applied to the art market. Even respected auction houses such as Sotheby's often misestimate the paintings up for sale.

One might guess that an answer may be to look at whether the performance of art has been correlated to the performance of stocks and bonds. But, Moses and Mei have shown that fine art has a low correlation with stocks and a negative correlation with bonds. Perhaps, then, art may serve as a diversifier for portfolios. If the stock market crashes, a Renaissance fresco will still be worth millions.

The singer and guitarist Frank Zappa once said, "Art is making something out of nothing and selling it." His cynical remark sounds eerily akin to the criticisms that many have towards the stock market. Even though there are crucial differences between the two, the fact may be that art is not as susceptible to the fickle busts of the economy. Perhaps in the near future, art museums will be seeing a fair share of patrons from the investment community coming to scout out the next hot pick. After all, stock markets crash and bond rates fall, but a Picasso will always be worth a fortune. YE

A Government Balancing Act

The Price Tag on Corporate Responsibility **by della fok**

For as long as most Americans can remember, New York has been the financial center of the world. However, it may be time to pass the torch. In recent years, the New York Stock Exchange has been losing top initial public offerings (IPOs) to its competitors in London and Hong Kong. This decrease in IPO activity in the U.S. coincided with a changing legal climate that has given companies incentives to list on foreign exchanges. While investors are quick to blame overregulation for the shift in IPO activity abroad, several other factors have emerged that can explain the sudden change.

In New York, many officials, including Michael Bloomberg, Mayor of New York City, argue that several stringent regulatory regulations have discouraged innovation and entrepreneurship and give the competitive edge to foreign markets. Perhaps the most representative legislation of the current American legal climate for financial markets is the Sarbanes-Oxley Act of 2002, commonly referred to as SOX. Although the initial goal was to enforce corporate responsibility, the stricter standards and regulations have had many unintentional negative effects. Most notably, companies now have to deal with the high cost of compliance, which includes updating information systems and abiding by rigorous accounting procedures.

Over the past seven years, the U.S. market share in IPOs has dropped markedly. In 2000, the U.S. boasted 48.5% of the market share in IPOs; by 2005, this figure dropped to 23.9%. In 2006, Hong Kong asserted its position as market leader with 29% of last year's $227 billion pot, with the London Stock Exchange (LSE) coming in at a close second with 15%, while the NYSE trailed behind at a meager 11%.

Despite the criticism that SOX has received, several prominent business figures, such as NYSE CEO John Thain, believe that the stricter regulation has been necessary to address issues of corporate responsibility. In this vein, if companies believe that an environment of trustworthiness would spur investor confidence and allow shares to trade at a premium, the legislation could actually attract IPOs.

So, looking at the flip side of the equation, why have companies moved overseas to go public? Some argue that companies in London are more likely to be capable of generating cash internally; not surprisingly, the LSE boasts 58% of the overall market value for international equities. Another reason is the development of global markets. Capital has become increasingly available in foreign countries due to the opening of markets. Azmi Mikati, CEO of Investcom LLC, a Beirut-based telephone company, said that ``Capital is becoming more abundant worldwide, so listing in the U.S. isn't as necessary. The rules, on the other hand, are becoming a detriment.'' While the U.S. is losing opportunities to invigorate its slowing economy, other countries are taking advantage of the influx of successful new businesses.

Domestic investment banks, on the other hand, are not opposed to the shift of IPOs to foreign exchanges as it does not prevent them from underwriting IPOs. ``It's irrelevant to us where companies list,'' said Nicholas Andrews, the Hong Kong-based head of Asia equities at JPMorgan. ``We're able to help them in whichever market makes sense the most for their business.'' More companies have gone public worldwide due to increasingly attractive international markets. U.S. investment banks may actually be benefiting from the recent shifts as more international business have spiked worldwide IPO fees up by 17% in 2006.

The Big Apple still boasts the largest concentration of financial firms and the most stable, efficient, and liquid capital markets in the world. But, financial experts warn that if current trends continue, New York may be forced to abdicate its throne as leader of the industry. In order to maintain a legal climate conducive to entrepreneurship, the U.S. will need to strike a balance: work to avoid overly restrictive standards while ultimately enforcing corporate responsibility. YE

A CONVERSATION WITH

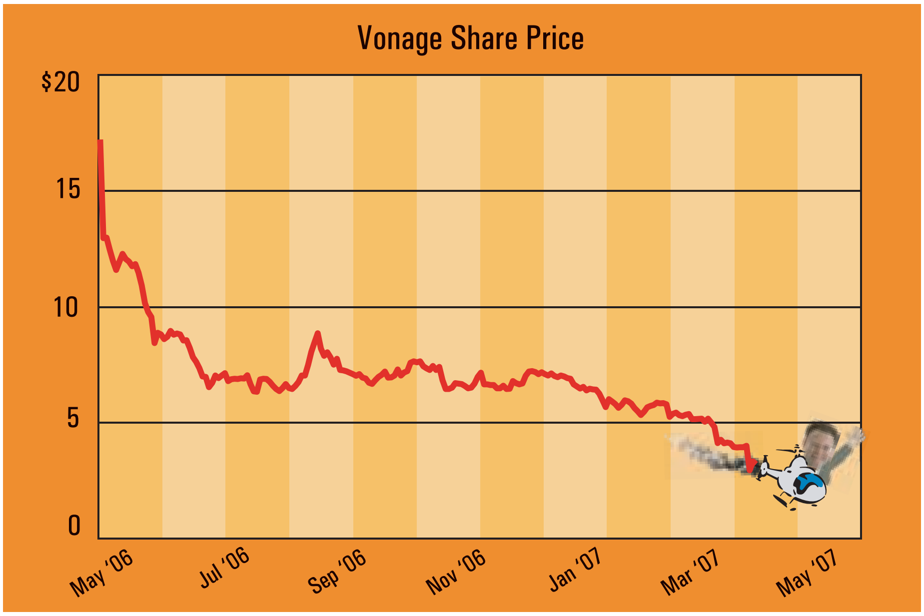
JEFFREY CITRON

CHAIRMAN + FOUNDER OF

VONAGE

AS VONAGE COMMERCIALS REMIND US, "PEOPLE DO STUPID THINGS." To the hundreds of thousands of investors who took a chance on Vonage's Initial Public Offering, those words have never rung truer. As Chairman, Founder, and Chief Strategist of Vonage, however, Jeffrey Citron is working to win back investor confidence and thrust his company on towards success. Vonage, which gained its name from a play on "Voice-Over-Net-Age," pioneered the voice-over-IP (VoIP) industry and opened the doors for web-based telephone calls.

WRITTEN BY DAENA RAMIAH



at Datek, devised an unlawful trading scheme using Nasdaq's Small Order Execution System (SOES) from which they illegally profited tens of millions of dollars. SOES was designed to execute trades on behalf of individual investors, but Citron used SOES to execute millions of proprietary trades. To hide the proprietary trading, Citron and his co-executives created over125 nominee accounts at Datek. In return for the use of their identities and complete discretionary trading authority, the nominees were paid a fix rate of return. On top of the multi-million dollar fine, Citron was barred from associating with any broker or dealer, which essentially meant that his career in the financial services industry was terminated.

Prior to Vonage, telecom giants like AT&T, MCI, and Verizon had dismissed VoIP, thinking it was simply too complicated for consumers and would never sell. But, Citron has proved them wrong; with a price range half that of standard telephone services, Vonage has staked a place for VoIP at the forefront of the telecommunications industry. Telecom competitors have since followed suit, attempting to capitalize on the growing market that Citron had recognized far before any other player. Vonage promotes itself as "Leading the Internet Phone Revolution," and as a result of Citron's driving innovation, voice-over-IP has become a phenomenon in its own right. Recently, *YE* had the opportunity to exchange a few words with Citron and ask about his past experiences, his advice to entrepreneurs, and his outlook for Vonage.

A Checkered Career History

With a high school degree and nowhere to go but up, Jeff Citron hightailed it straight to Wall Street at the ripe age of 18 to make his fortune. In 1995, Citron founded the Island ECN, a financial trading system which eliminated several order execution problems endemic to trading. After the company grew, Island was acquired by Instinet Group for $503 million, and Citron turned to Datek Online Holdings, an online brokerage, seeking his next great success. Under Citron's leadership as CEO and Chairman, Datek grew to be the fourth largest online brokerage system in the nation. I was interested to hear what drew Citron, a serial entrepreneur, back to square one to continually launch new ventures. "I love to go ahead and be a little agent of change," he said. "I like to take on very large common industries and apply new technology to them to allow them to be transformed, and Datek and Island are both examples of that." Citron parted ways with Datek in 1999 after having left an indisputable, tangible impact on the company; Datek was later sold to Ameritrade for a whopping $1.3 billion in 2002.

Citron found categorical success at Datek, but unfortunately, this success came at a price. In 2003, Citron was charged with securities fraud by the SEC and fined $29.2 million, among the largest sums the SEC ever collected. Citron, along with three other executives

Citron would not comment on his SEC charges during our interview, and he offered a somewhat divergent response as to why he chose to move away from financial services. "There really wasn't that much more to do in financial services. I mean if you look at it, since the year 2000, what amazing change have you seen in the financial service industry? Essentially, the real change had already taken place." Telecommunications in particular appealed to Citron because "when looking at other marketplaces that were ripe for big change, there was none bigger than the world of telecommunications."

And Then Came the IPO

And so, Vonage was created, and Citron's newest company grew just as his prior ventures had. The only difference this time around, however, was that Citron would take the company public himself. And that brings us to Vonage's Initial Public Offering. Pre-IPO, Vonage had a lot to offer investors—approximately 1.5 million customers at the time

"It's hard. There's nothing easy about changing the world, and you just have to take it one day at a time, (Vonage now boasts 2.2 million), a good brand name, and a growing market—but the IPO quickly imploded. The company went public on May 23, opening at $17 per share, and at the day's close, the stock had plummeted to $14.85. Subsequently, shares continued to fall and kept falling until they recently reached a new low of 20% of the opening price.

Many believe investor nervousness and poor pricing by the underwriters set the stage for the IPO plunge. UBS, Citigroup, and Deutsche Bank were the culprits behind the pricing. "Investment banks are supposed to do a better job at pricing a stock,'' said Robert V. Green, a telecommunications industry strategist with Briefing.com. ''There was a mass exodus,'' he stated to *The New York Times*. ''IPO prices go down, but not this far, this fast.'' As for investor nervousness, some believe that investors saw Vonage as a good way to make a buck off of an IPO but not as a viable long term investment. Thus, when Vonage debuted, investors frantically sold when the price first dipped, sending the stock snowballing into one of the rockiest IPOs in recent history.

To make matters worse, Vonage had encouraged its customers to buy shares at the offering price, and numerous customers, disgruntled, refused to pay up after recognizing the losses they had incurred. 13% of the 31 million shares offered in the IPO were earmarked for Vonage customers. Vonage is currently threatening its non-paying customers with legal action, and several customers in response have joined a class action lawsuit against Vonage. The plaintiffs in the are arguing that Vonage tried to cram customers into the IPO, disregarding whether the investment was suitable for them.

Fighting for Territory

After the IPO, the problems kept coming as competition from cable companies intensified. Recognizing the profit potential in VoIP, companies such as Comcast and Time Warner Cable strategically positioned themselves in the market by offering bundled packages of television, internet, and phone services with VoIP in one. For Vonage, the main question that stands in its way is whether the company has any competitive edge over these mega-giants with well-established customer relationships, deep pockets, and a cheaper bundle.

Citron was willing to share his views on this looming threat and how Vonage has responded. "Vonage has done a good job at fending off the competition," he said. "But for us, it is time for us to change our strategy. We're changing our marketing message to cut through the clutter more efficiently. We're also bringing about new products and features that really separate Vonage from other players." In particular, Vonage is launching Vonage Mobile and Vonage Broadband. The former is a wireless phone that can make calls anywhere a wireless network is available, and the latter is Vonage's foray into providing several broadband services. The ability to combine mobile phone service, home phone service, and broadband service is what Citron dubbed "Vonage's triple play" in our interview. "You take that and it really creates a competitive differentiator," he added.

"Woo-Hooing" to the Top?

In further attempts to remain competitive, Vonage launched its famous $425 million "woo-hoo, woo-hoo-hoo" advertising campaign, aggressively trying to win a larger market share. But, many have raised doubts over whether the high cost of the media campaign will ultimately push the floundering company out of the red. Citron spoke to Vonage's media campaign during our interview. "Sure Vonage has invested a large amount of money in our advertising campaign," he said. "Now we've done that to do a couple of things: one to create a brand for the company and two to acquire customers. In the four short years we have been in business, Vonage has become a household name when it comes to voice over IP. I think that definitely paid off dramatically for us."

"WHEN I ENTER INDUSTRIES, ONE THING IS FOR SURE – WHEN I LEAVE, IT IS A VERY, VERY DIFFERENT LANDSCAPE."

But, Citron's suppositions about acquiring new customers may be in dispute. In mid-February, Vonage reported that customer growth fell by 19% in its fourth quarter, marking the first sign of slowed growth since the company went public in spring of 2006. Todd Reithmeier, an analyst with Soleil Securities noted in an interview with *The New York Times* that this decline in subscriber growth is a "huge concern," adding that "the business model only works if Vonage gets to a sufficient scale." Investors seemed to harbor the same concern as pursuantly, Vonage shares promptly dropped by 9.25%.

It Could Always Get Worse

As if things weren't bad enough, Vonage was recently dealt a heavy blow when a federal judge charged the company with infringing on three Verizon patents. The two communications giants began butting heads in mid-2006 when Verizon alleged that Vonage was employing its proprietary technology related to VoIP, which Vonage adamantly denied. But, unfortunately for Citron and his crew, the courts handed down a decision to fine Vonage $58 million and ordered the company to pay 5.5% of all royalties on its future sales. On top of that, the courts slapped Vonage with an injunction in order to prevent the future use of patented Verizon technologies. The decision sent Vonage stock reeling, and the already flailing shares plunged another 26%. After the lawsuit, Citigroup downgraded Vonage Shares from "hold" to "sell." Vonage is now trading around $3. "For Vonage, everything that can go wrong has gone wrong," said Richard Greenfield, the co-head of Pali Research

one step at a time, and you just have to keep going." -Jeffrey Citron, Chairman and Founder of Vonage in a recent *New York Times* article. Citron could not comment on the matter during our interview, but the lawsuit is certainly not a positive harbinger for Vonage.

Yet, Citron is by no means unacquainted with lawsuits and the like, and it is improbable that this lawsuit in particular will bring an end to Vonage or to Citron for that matter. Speaking to the numerous obstacles he has faced in his many years as an entrepreneur, Citron noted, "It's hard. There's nothing easy about changing the world, and you just have to take it one day at a time, one step at a time, and you just have to keep going."

Somewhat surprised by this remark, I asked how he believed he was changing the world. Citron laughed and replied, "When I enter industries, one thing is for sure—when I leave, it is a very very different landscape." To make his case he cited his effect on the financial services industry. "When you look at what we've done in the marketplace, we've taken the cost of transaction down to a nominal amount, and when transactions costs are so low, you get two really important things. One a lot more people playing in the marketplace. That leads to more efficient capital deployment. Two we get the money going where it needs to be— to the people who are trying to raise capital, not to the people who are moving capital back and forth. Wall Street will be forever changed in this." While this isn't quite the finding-the-cure-for-AIDS response one might expect when faced with the proposition of "changing the world," few could argue that Citron's impact on the financial services industry has been minimal. Datek and Island ECN both fundamentally changed the very dynamics of markets, and according to Citron, thus changed the world. "As for phone communication," Citron added, "who knows, it's still pretty early. But, I've got a feeling that the world will look a lot different in a couple years than it looks today, and it already looks a lot different."

As our conversation came to a close, I was curious to see if Citron had any advice to proffer Yale's up-and-coming entrepreneurs. He was more than happy to oblige. "I think the most valuable advice that I've ever gotten or that I've ever given," he responded, "is to take your dictionary and find the page with the word fail on it and rip it out, because that word to the entrepreneur just doesn't exist. For us, there is always a way—it's just about finding it and doing it."

As for the fate of Vonage, Jeffrey Citron and his crew continue to "woo-hoo" their way through lawsuits, flailing media campaigns, and falling numbers, all the while managing to keep their company just above water. For Vonage, there is no choice left but to press on. YE

[alumni profile]

Baiju Shah & BioEnterprise

by janet noh

Until recently, few have known much more about Cleveland other than that Drew Carey calls it home and that its river has caught fire multiple times. Within the last few years, however, the city's surrounding environs in northeast Ohio have grown into a thriving bioscience community with increased healthcare venture investment and flourishing start-up activity.

Baiju Shah JE '93 has spearheaded much of this change. A "passion for Cleveland" and a "love of entrepreneurship" gave Shah the inspiration to start BioEnterprise, a business formation, recruitment, and acceleration initiative focused on developing healthcare companies in northeast Ohio. Every year, BioEnterprise works to build a select number of high-potential medical device, pharmaceutical, and health care services companies, providing networks and resources that help these firms move forward and find financing in their stage of development. BioEnterprise works closely with its partners Cleveland Clinic, Case Western Reserve University, and University Hospitals. The initiative is based heavily on the model set forth by the Yale Office of Cooperative Research (OCR), which has spawned a vibrant bioscience economy around New Haven.

Currently the President of BioEnterprise, Shah received his B.A. from Yale with a major in History. He went on to get his J.D. from Harvard Law School, and worked for McKinsey & Company, where he played a leading role in both the Growth and Business Building and Economic Development practices.

Since its founding in July 2002, BioEnterprise has been responsible for substantial growth in biotechnology and business in the Cleveland region. Over 50 companies have been created and accelerated and more than $425 million in new funding has been raised for those firms.

Due in no small part to Shah's devotion to entrepreneurship and his vision for the city, Cleveland has taken great steps towards becoming the next healthcare venture hotspot. The *Yale Entrepreneur* had an opportunity to sit down with Shah and ask him his thoughts on entrepreneurial potential in regions like Cleveland and New Haven.

YE**:** What is the best way you have seen to stimulate entrepreneurship in a region?

Shah: The old adage of "success begets success" is a truism but it's very important.

You can't just talk about it; you have to deliver results. To get to results, you need to find and focus on your best opportunities. I don't think you can always predict your best entrepreneurial opportunities. No one would have guessed that Progressive Insurance would have started in Cleveland. No one would have guessed that Microsoft would have started in Albuquerque or Wal-Mart in Bentonville, Arkansas. The point is that you don't want to shut out any regional type of entrepreneur. You want to promote them so they inspire others to come forward with their crazy ideas and pursue their passions, which will then attract investors to come forward.

YE**:** Traditionally, areas like Boston and Silicon Valley have been considered the hotbeds for entrepreneurship. Why would regions like Cleveland or even New Haven be attractive for entrepreneurship?

Shah: Cleveland affords to an entrepreneur a rich pool of research and phenomenal support from its institutions. The city is so hungry for start-ups that it is willing to bend over backwards to be engaged. For VC [venture capital] investors, you've got an under-fished pond. In Boston and Silicon Valley, valuations on good deals are pushed up by the hundred other VC firms competing in the bidding war, whereas in a region like Cleveland or New Haven, you don't have the same competition.

YE**:** How have you seen New Haven change after efforts like the Yale OCR?

Shah: OCR and the companies that OCR has spun out have attracted around $2 billion in funding since 1996. By far, it's the single best example of rapidly accelerating a region. New Haven went from being nowhere on the national radar to a bioscience hotspot in a short period of time and continues to succeed because of its great model, great individuals, and great support from Yale. That impact has resulted in the blossoming of the New Haven region. When I was at Yale in the early-90s, New Haven had a bleak economy. But President Levin and OCR committed to grow a biotech community that has blossomed considerably in the last decade.

YE**:** How do you attract venture capitalists and investors in an area that isn't historically rich in venture capital activity?

Shah: Show them good deals that they want to invest in. OCR is our model. We spend one third of our time just listening to VCs. Not pitching, just listening. We want to hear in detail the kind of deals in which they want to invest: the specific subsectors, the stage of development, the nature of the team, and the financing opportunity. With that knowledge, our job is to find a deal in our region that matches their criteria. Most economic development efforts fail because they focus too much effort on pushing technologies independent of whether there is market interest rather than the reverse.

YE**:** What is the most valuable thing you learned at Yale that's applicable to your work today?

Shah: First, the basics of how to lead people and how to work with people. Second, Yale broadened or accentuated or maybe established my sense of public service. Clearly, Yale's fundamental difference as an institution from every other institution I've dealt with is an unbelievable ethos of public service.

YE**:** What piece of advice would you give to Yalies looking to go into entrepreneurship?

Shah: For entrepreneurs, just do it. Especially when you are young. Join an entrepreneurial venture and do your piece of that venture extraordinarily well; focus on what you are responsible for to make that venture successful. And if it doesn't work out, learn from it and join another venture.

In general, be prepared for the unexpected professional opportunities. If you examine how successful people, the people you admire and want to be, actually got to their positions of influence, you will find that their career paths look absolutely nothing like the plans that most Yalies are developing for themselves. The best opportunities come along when you don't want them, and you are forced to deviate from your plans and perhaps take a risk. In general, people who follow that type of career path, which changes frequently and in response to interesting opportunities, are both more successful over time and much happier when they come back for reunions. YE

A Red Light For Sex Trafficking

As with every other trade, this market is fueled by steady demand.

by aarlo stone-fish

While the Emancipation Proclamation in 1863 outlawed slavery, a form of slavery still exists as sex trafficking. Having left their homes in search of better jobs, many foreign women quickly find themselves misled or worse off than before they left. A widespread epidemic, sex trafficking has been classified by President Bush as a "special evil" as an inordinate number of women have been exploited and brutalized.

Although the large majority of Americans oppose the exploitation of these women, profits and consumer demand perpetuate the trade. Sex trafficking has expanded to a twelve billion-dollar industry with millions of men, women and children trafficked around the world each year. In the U.S. specifically, twenty thousand women are "imported" annually.

The trade cannot end without addressing the issues of what fuels the business. The market in the U.S. ultimately relies on the demand of "johns": the American men who pay to have sex with foreign women or children. While one might assume that the majority of Americans stand against this trade, the market exists because of steady demand. Interestingly, one study by the Vancouver Police Department found that more than half of the johns examined were in stable relationships and had children. Another study suggests that most of the men desired a more active and fulfilling sex life. According to Donna Hughes, an expert in human trafficking at the University of Rhode Island, these johns seek a certain kind of sex that their current partner is unable provide. This can refer to specific sexual acts, or a desire for general "control...in contexts in which they are not required to be polite or nice, and where they can humiliate, degrade, and hurt the woman or child." The single johns that were examined were discovered to have had more non-prostitute sexual partners than the average single man.

Much of the developing world—Mexico, former Soviet Union states, South America, China, Thailand, and the Philippines—lacks the proper infrastructure to protect women from abduction, so perhaps eradication efforts should be focused on "consumers." According to Dr. Vesna Nikolic-Ristanovic of Belgrade University, war-torn regions like the Balkans are especially vulnerable because the economy is placed under an inordinate amount of stress, and recruiters take advantage of the "marginalization and hopelessness" of many women.

Not only are these women pushed by cultural and social forces, but the United States' demand for sex workers exceeds the local available supply, thus creating the need for foreign women in domestic brothels. Additionally, many American johns prefer imported women over local prostitutes, either because they see foreigners as naïve or submissive or because they desire women who have been uprooted from their culture and family base. These women are somewhat ignorant about American culture, poor, and probably lonely. Because most johns prefer white women, there has been a recent increase in trafficking from places like Ukraine and Russia, though a country's economic and political condition mostly determine where women originate.

Where else may efforts to stop this trade be focused? Recruiters and transporters initiate the trafficking scheme, so perhaps efforts should be devoted to curtailing activity at this end. But, the structure of the human trafficking industry varies by the region of the world. In the former Soviet Union, recruitment begins on a small scale as an individual crime group or person captures the women to sell them to a larger group, which then transports them to richer countries.

Conversely, in China, one large group handles the entire smuggling operation "from recruitment through debt bondage and eventually to an assignment in a brothel in order to secure long-term profits." Once the women have been recruited, they may be put to work in local areas or exported to other countries. If they are exported, the responsibility then shifts to the traffickers who are responsible for bringing the women to the United States. Depending on the transaction, the women may be bought and sold several times before reaching a "steady" brothel. Women are typically flown into Mexico City before being transported into the United States, and corrupt Mexican immigration officials allow the women to enter despite their lack of proper identification or work visas.

"SEX TRAFFICKING ACTIVITY, THEN, CAN ONLY BE ENDED BY ADDRESSING EACH PART OF THIS COMPLEX CHAIN: SUPPLY, DEMAND, TRANSPORTATION, AND LAW ENFORCEMENT."

Once in Mexico, women are often passed to Los Lenones, a network of organized crime groups. These crime groups connect women with brothels, and transport the women through the oft porous border between Mexico and the United States. Mexican smugglers can transport tens of people at once for only a few hundred dollars, giving part of this sum as a bribe for Mexican border officials. After arriving in America, the women find themselves in debt to their brothel owners who charge them for food, rent, and travel. These costs may amount to the tens of thousand of dollars, and the prostitutes find themselves in a position similar to that of indentured servants.

On top of the recruiters, it may be in fact American law enforcement that further enables the industry. Local police focus on arresting the female prostitutes rather than the more elusive pimps or brothel owners who organize their importation. Some women might be prosecuted as illegal immigrants. "Juries have a hard time," says Heidi Rummel, a former federal prosecutor in Los Angeles. "They wonder: If the door was open, why didn't she just run?" Perhaps women fear their captors may find them or may harm their family members in their home country, or perhaps they do not believe they can live independently given the language barrier and unfamiliar setting.

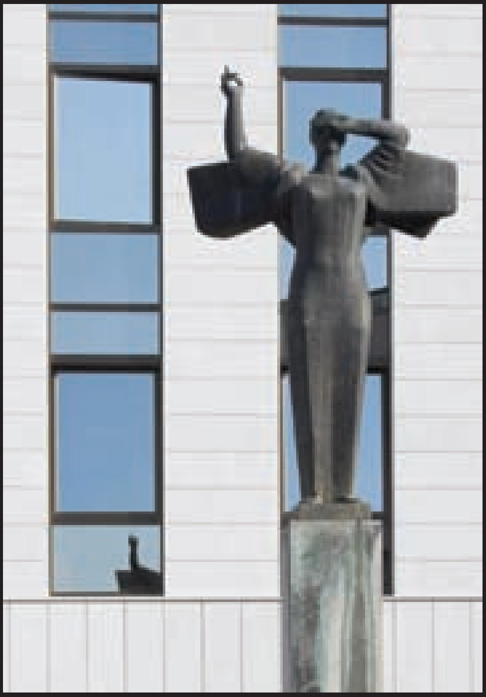
Sex trafficking activity, then, can only be ended by addressing each part of this complex chain: supply, demand, transportation, and law enforcement. Non-governmental organizations like the Coalition Against Trafficking in Women and the United Nations are currently working to halt the rapid spread of sex trafficking. The United Nations recently adopted the Palermo Convention, which has two protocols to address the issue of sex trafficking: the Protocol against the Smuggling of Migrants by Land, Sea and Air; and the Protocol to Prevent, Suppress and Punish Trafficking in Persons, especially Women and Children. Among other things, this convention seeks to discipline families who sell their daughters to traffickers as well as to punish the traffickers and brothel owners—not the women—for prostitution or illegal immigration.

As with every other trade, this market is fueled by steady demand. The United States does not consistently prosecute sex customers, and the police have a tendency to arrest prostitutes rather than their johns or pimps. Recent activism to fight this trade illustrates how some have taken steps in the right direction. In the face of such a complex trade with numerous factors that contribute to its existence, any hopes of ending the trade necessitate a holistic approach that involves thwarting the trade at each and every nexus. YE

Sarbanes-Oxley and its Discontents

by victor wong

HAILED BY THE WHITE HOUSE as "the most far-reaching reform of American business practices since the time of Franklin D. Roosevelt," the Sarbanes-Oxley Act of 2002 (also known as SOX) has spurred controversy throughout the American economy—from the government, to corporate managers, to the individual entrepreneurs and small business owners. In the wake of the corporate scandals that erupted in 2001, SOX was passed as financial markets reeled in the wake of the fallout from scandal-plagued firms. While many agree that SOX was a necessary antidote for the corruption prevalent in corporate America, some speculate that the act has actually proven detrimental to America's financial markets and the start-up environment, creating precisely the kind of economic damage the act was designed to prevent.



SOX ushered in far-reaching changes with the hopes of preventing future financial scandals. It imposed greater regulatory oversight on America's public corporations, additional certification requirements for financial reports, further financial disclosures, and deeper reformation of accounting practices. In passing the act, Congress placed a premium on corporate transparency. These rules, however, have serious implications for decision makers in all parts of the economy.

With SOX came a mass migration of companies from the publicly traded arena to the private one, as corporations began to find the public market stifling. Increasingly, public companies are being privatized through management buyout deals, whereby a private-equity firm assists corporate management in buying back all the company's floating shares in the stock market. In fact, since the adoption of SOX, leveraged buy-outs in the U.S. have skyrocketed from just over $10 billion in 2002 to over $200 billion in 2006.

Along with the increased scrutiny brought by SOX, CEOs must spend more of their time on compliance issues. Already pressured by Wall Street's quarterly reports to produce short-term results, executives now face the daunting task of managing both compliance and performance, leaving less time to care for the long-term growth of the company. Consequently, management has increasingly opted to buyout its firm, going private to ensure that more time can be dedicated to running the business rather than worrying about abiding by every detail of regulation. In fact, in attempts to lessen the strain on CEOs, public companies spent an estimated $3.5 billion on technology and consulting services to meet their Sarbanes-Oxley obligations in 2005.

An additional effect of SOX has been an exodus of top talent from the public domain. Jim Clark, co-founder of Netscape, resigned from the board of the online photo-publishing service Shutterfly in January of 2007, citing the limitations on his power that SOX had imposed as one of the primary reasons for his departure: "[Sarbanes-Oxley] dictates that I not chair any committee due to the size of my holdings, not be on the compensation committee because of the loan I once made to the company, (and) not be on the governance committee." When such seasoned talent chooses to depart from startups, many promising companies are forced to go it alone, potentially lowering their growth potential.

Such a strongly negative reaction to SOX is not unique to Shutterfly. Tim Draper, a partner in the venture capital firm that invested in Skype, has also cited SOX as the primary reason for leaving corporate governance boards. He remarks that "public boards before SOX were generally tolerable because the team could talk about R&D, marketing, finance, and sales before the lawyers and accountants took over. Sarbanes-Oxley was a knee-jerk reaction to Enron, and the repercussions are far more disastrous than Enron was." The internal controls imposed by SOX can hamper leadership and overturn corporate dynamics. Resignations like those of Jim Clark and Tim Draper may just be the beginning of a mass exodus from the boardroom.

Heightening the problem of retaining talent, a new accounting rule derived from SOX diminishes the usefulness of one of the few startup recruitment tools—stock options. According to the rule, employee stock options must now be deducted from profits. The National Venture Capital Association asserts that, in many cases, the opportunity cost of calculating stock option values and their related accounting now render stock options too expensive for companies to offer. While stock options are often a popular motivating tool for employees, many entrepreneurs can no longer offer such benefits and must rely on bonuses to avoid regulatory costs. In the end, bonuses might prove an effective means of tying individual performance to compensation, but without the allure of stock options, startups may now find it harder to attract top talent from already established businesses.

The attractiveness of being a public company in the U.S. has certainly diminished as a result of SOX. The cost of compliance alone may pose a significant barrier to entry for startups seeking public capital. This difficulty may inhibit the growth of young private enterprises that need late-stage funding.

"AT THE END OF THE DAY, SARBANES-OXLEY GIVES THE UNITED STATES A MORE TRUSTWORTHY BUSINESS CLIMATE."

Even worse, fewer venture capitalists may front "seed money" or early-stage investment to private startups, as venture capitalists primarily earn their profits from growing portfolio companies until they can be taken public. With the increased difficulty of taking companies public, many venture capitalists shy away from the 1990s record-breaking levels of investment, all to the added detriment of startups.

Many on Wall Street have been quick to point out that recently, the biggest public offerings have been made outside of the U.S. Avoiding the regulatory burdens of SOX, an increasing number of foreign companies have opted for listings on the London or Hong Kong Stock Exchanges instead of the "Big Board," also known as the New York Stock Exchange. Some view this trend as a reflection of the diminished financial competitiveness of America due to the stifling regulations of SOX.

Still, others have pointed out that in the last few months America has seen a record number of foreign listings. This trend, combined with international developments, would indicate that a heavier regulatory environment in America has not scared business away. Rather, some argue that it is simply just that there has been an expansion in overseas business in general. Not all foreign listings are in New York anymore simply because of the rise of global financial markets and thus an increase in options in exchanges on which to list. Ultimately, SOX may just be a convenient scapegoat.

This disparity in opinion concerning SOX may be only temporary, since the passage of time will make clearer the true effects of the regulations. Each participant in the American economy will eventually need to weigh the increased trustworthiness provided by SOX against the cost of compliance with the regulations. For example, whether or not shareholders continue to support the law will depend on whether the potential costs of investing in a corrupt company outweigh the damage to future earnings caused by increased costs in compliance.

Robert Shiller, Professor of Economics at Yale, contends that "at the end of the day, Sarbanes-Oxley gives the United States a more trustworthy business climate. This country is a leader in regulation of securities and trading. Sarbanes-Oxley is a reaction, coming right in after a lot of accounting scandals, to the public's disconcertion about them. Increased trustworthiness will ultimately allow for a premium on American firms."

Such compliance was designed to protect the public by shining light on the inner-workings of corporations. Essentially, SOX may have helped the U.S. business climate by restoring investor confidence in American companies, effectively steering corporate America away from ethical and financial collapse. Yet whether SOX has indeed placed such a premium on American companies, or whether this controversial act has simply driven businesses away from the spotlight and back into the private domain is ultimately for the investor to decide. YE

[PAST & PRESENT] Consolidation Motiviations and Rationales **by carly stockdale**

Bigpharma

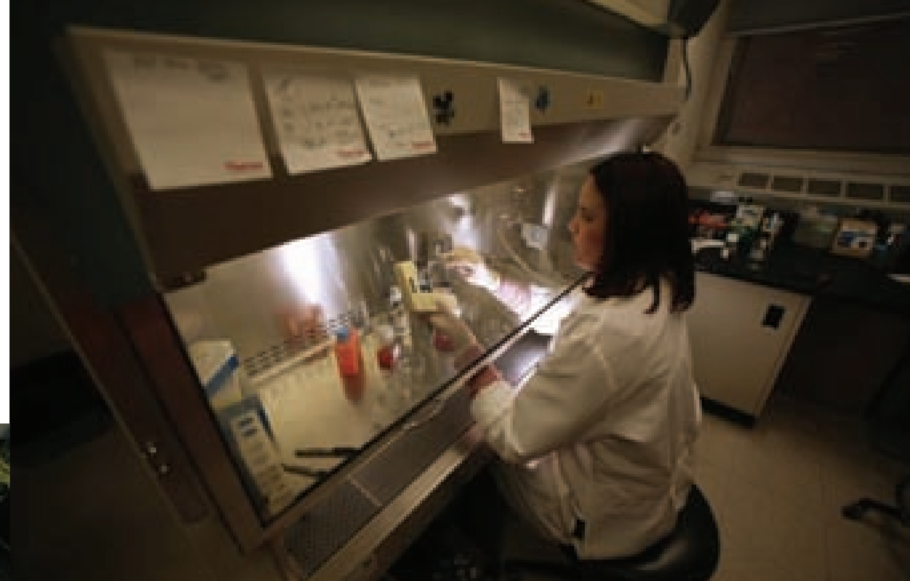
"BIGGER IS BETTER." If the pharmaceutical industry of today has a mantra, this might very well be it. In the past few decades, the healthcare sector—of which the pharmaceutical industry comprises a significant portion—has undergone huge waves of consolidation. The ultimate result is the domination of lumbering pharmaceutical corporations with ever-increasing global market shares and profit margins.

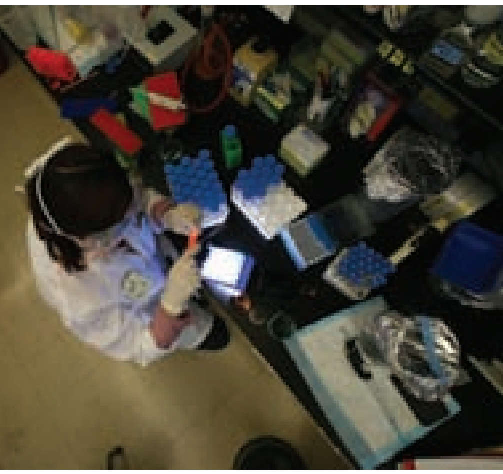
According to the Healthcare M&A Monthly, 2006 alone saw a record-setting $77.1 billion committed to funding merger and acquisition (M&A) activity in pharmaceuticals. Furthermore, the difference between the actual cost at acquisition and its estimated pre-acquisition value (referred to as the acquisition premium) averaged 42.8% for the sector.

All of these astounding figures beg the question: what factors are causing this historic shift in business activity patterns? Historically, a number of demand and supply-side trends have motivated the pharmaceutical industry's growth attempts. More contemporary justifications, however, focus on internal rather than external explanations. For many pharma companies today, the draw to consolidation lies in the potential increase in productivity resulting from the expansion of existing research and development (R&D) foundations. This change in motivation is apparent and clear, but scholars, analysts, and executives alike are starting to question the productivity implications of the increasingly common practice of pharma consolidation.

Historical Review

The impact of the first wave of consolidation was first registered in the early 1980s, and was preceded by a period of tremendous profitability. During this time, the pharmaceutical stock index experienced an incredible 959% increase. This figure is especially notable when compared to the 386% jump in the S&P index, a standard market benchmark. According to analysis conducted by David Ravenscraft and William Long, the sector's innovative progress in these years can be attributed to two distinct factors: a flexible market structure that included leeway for price increases (and thus profit expansion), as well as the adoption of more rational, scientific approaches to drug discovery.





However, the outlook on pharma growth changed substantially in the early 1990s. At this juncture, the innovative means of pharmaceutical firms failed to keep pace with the investors' expectations of rapid growth. As a result, the industry underwent its first series of consolidation. Most of the research devoted to this first wave cites demand and supply side factors as the most important drivers of early pharmaceutical consolidation.

On the demand side, several constraints on drug pricing became key motivators for consolidation. Ravenscraft and Long contend that at that time, the increased buyer power (that is, the ability to negotiate lower drug prices) was largely derived through recent increases in managed care organizations and hospital consolidations. In these cases, as enlarged provider networks enjoyed increased market share, they also gained considerable leverage in negotiations for drug prices. Corporate consolidations allowed the pharmaceutical companies to present a stronger front and wield more influence in price negotiations. Furthermore, there was increased competition as providers were increasingly selecting the more inexpensive generic drugs or alternative treatments to reimburse fully.

Supply side (or cost-related) drivers also contributed to pharmaceutical companies' pursuit of consolidation during this period. Many in-house pharma R&D units felt a considerable strain as increasing numbers of biotechnology firms began to participate in clinical trials. It is undeniable that the cost of drug discovery itself also has accrued a heftier price tag over time. The most commonly cited statistic to illustrate this point, as determined by Joseph DiMasi et al., reveals that generating a new chemical entity costs an average of $802 million. Ultimately, industry consolidation became an attractive solution when the pressures on the pharmaceutical companies to supply their drugs at lower prices collided with increasing cost demands. For many firms, expansion was the sole viable solution.

Today's Consolidation Outlook

Another distinct wave of M&A activity emerged in the beginning of this century and has continued through to the current times. It seems that in this second wave, ten years after the first, the pharmaceutical companies are again drawn to M&A activities, with almost the same demand and supply side reasons. In many ways, it seems that these factors are stacked against the pharma companies themselves. A quick examination of the market reveals that the price tag for discovering and developing drugs has risen exponentially, and will most likely continue to do so. In addition, pharmaceutical firms are faced with declining profit sources as their flagship "cash cow" drugs reach the patent expiration date. Once these lucrative patents are no longer exclusive, generic manufacturers can enter the market to distribute comparable drugs for a near-marginal cost.

Pharmaceutical companies are also facing competition from alternative research mechanisms, most notably biotechnology firms. This increased competition serves as an incentive for many firms to acquire their own biotech research firm, allowing them to keep pace with outside research in a cheaper and quicker manner than changing the trajectory of their own internal research and development department. And if all that is not enough, pharmaceutical prices have recently been further constrained by political pressures and negative reputations caused by the high cost of buying drugs.

The most recent wave of mergers and acquisitions can be interpreted as a corporate attempt to foster economies of scale and scope. Economies of scale are most readily sought after in industries that have high fixed costs, such as pharmaceutics. In these cases, large baseline costs are required to conduct industry-competitive R&D, so fixed costs are spread over increasing production levels to create economies of scale. In other words, extra research projects are profitable, since the fixed costs remain static.

Economies of scope denote the cost advantages that result from firms providing a variety of drugs, as opposed to specializing in a single output. These economies often result from the sharing or joint utilization of inputs, and ultimately lead to reductions in total unit costs. In order to achieve these economies (and thus rein in their R&D expenses), pharmaceutical companies have to engage in both vertical and horizontal M&A behavior, thus being responsible for more of the stages of production of drugs as well as producing cheaper goods. At this point, however, not enough empirical and observable evidence has been culled to substantiate economies of scale and scope.

The Debate: Consolidation on Productivity

Although the causes and motivations of pharmaceutical industry consolidation have been clearly outlined, the overall productivity of such activity has been contested by several prominent researchers. Past research on economies of scope and scale have led to conflicting conclusions on the effectiveness of pharma consolidation as a business strategy. In a 1996 paper entitled "Scale, Scope, and Spillovers: The Determinants of Research Productivity in Drug Discovery," Henderson et al. found that larger pharmaceutical companies' research efforts are more productive because they enjoy economies of scale and scope, where economies of scope are important for shaping the boundaries of a pharmaceutical company. However, more recently in 2002, McKinsey & Company found no correlation between R&D investment and company size in the pharmaceutical industry. This finding undermines the conclusion that a larger company is able to engage in more R&D due to their successes in achieving economies of scale and scope.

The confusion over whether or not M&A activity leads to overall productivity is by no means limited to empirical scholars. On the contrary, even Wall Street is beginning to question the value-added assumptions of R&D integrations. In *The Observer* this past February, PricewaterhouseCooper's pharmaceutical corporate finance head stated that, "evidence that mega-mergers in this sector improve the discovery rate of new drugs is not compelling."

It is clear that more research must be conducted on this most recent wave of consolidation in order to make an educated judgment on its overall efficacy. In an analysis of pharmaceutical merger decisions, Eleanor Morgan, a management professor at the University of Bath, asserts that although the relationships between firm size, R&D, and innovative output in the pharmaceutical industry have been extensively studied, the drivers of investment and socially optimal levels of R&D are not well identified. In another study, Jeff Jung of the IBM Institute for Business Value found that the R&D benefits acquired through M&As usually revolve around taking advantage of scale and scope economies—namely through filling pipeline gaps, expanding therapeutic areas, spreading risk, and eliminating costs on duplicate resources. By the same token, Jung points out that these potential R&D gains, however, are typically not the drivers for M&A. Rather, executives often seek consolidation with more tangible financial metrics in mind. Instead of focusing on the importance of research, executives may pursue merger activity in order to increase shareholder value with volume, price, or cost strategies.

In order to determine the most efficient course of consolidation action, further research must be conducted to better understand at precisely which point scale benefits productivity and at what point diminishing returns to R&D occurs. A merger that results in a monstrosity of a pharmaceutical organization can result in increased costs and decreased productivity. However, the appropriate level of integration and organization for R&D with respect to M&A may allow for firms to take advantage of economies of scale and scope.

The significant potential welfare benefits resulting from innovation make M&A decisions and their effect on R&D productivity important and relevant to society as a whole. Increased R&D productivity literally translates into the faster delivery of life-saving and enhancing medical drugs to populations and economies of scale lead to the availability of cheaper drugs for the public. For this reason, a consolidation decision in the life sciences is critical to the many consumers who rely on these products. With little consensus available in literature regarding consolidation's effect on R&D productivity, lab scientists and Wall Street alike are looking to alternative R&D organization through consolidation in order to encourage the greatest benefits from shared resources and greater size. YE

FINDING THE ROOT

ERADICATION policy and the future of colombia's COCAINE TRADE

by abigail keane-babcock

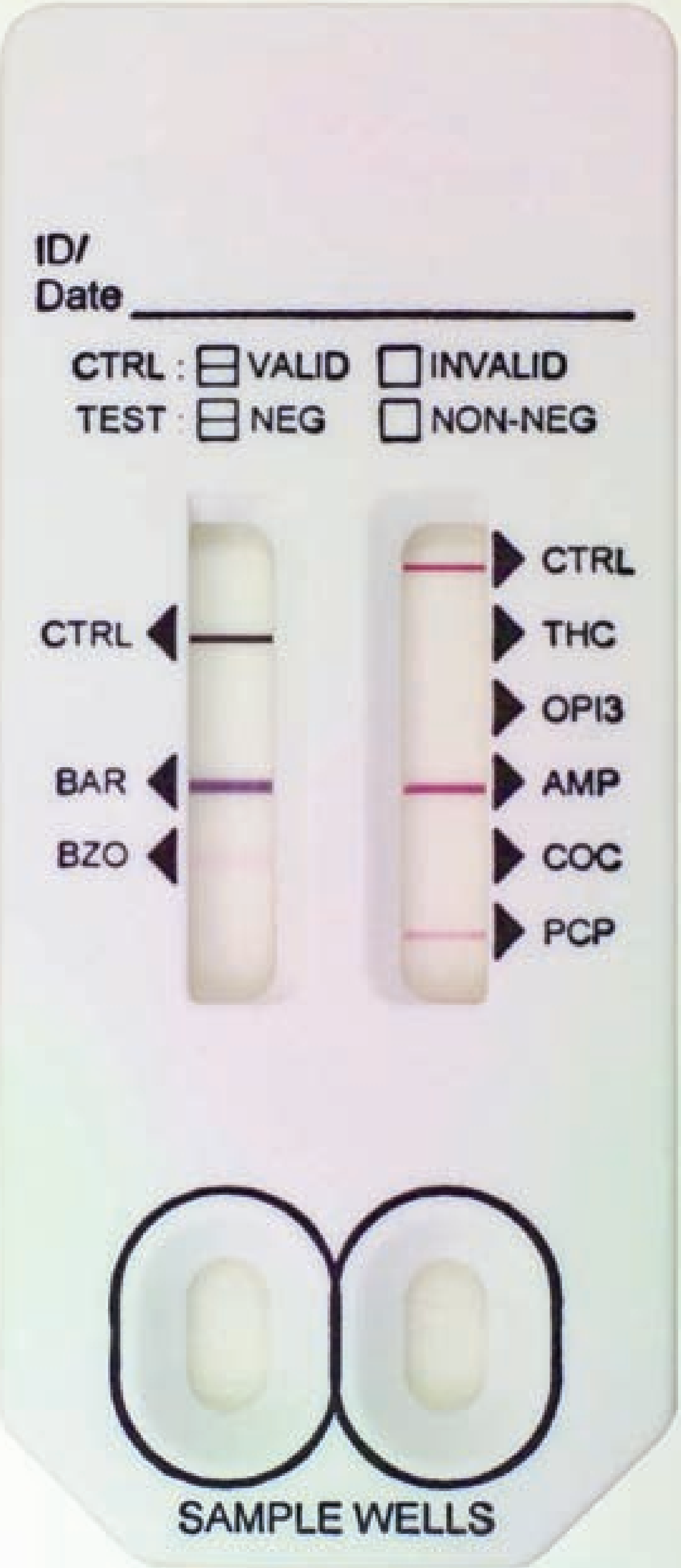
It would seem that a rural location two hours walk from the nearest town accessible by vehicle is a far from promising destination for entrepreneurial success. Yet, one enterprising Colombian farmer in the department (or administrative state) of Sierra Nevada de Santa Marta, finds his business venture to be flourishing. In recent years, he has become an informal entrepreneur in rural tourism, charging curious backpackers 20,000 pesos apiece ($8 US) for a demonstration in the first steps of cocaine production. Interspersed with his banana plants and other agricultural products, the farmer cultivates coca leaves and processes them into paste at a small open-air station. In any given month, he produces one kilo of cocaine paste and sells it to a local trafficker with paramilitary ties. The paste is transferred to another location where it is refined with ether into cocaine base, and then further refined into pure cocaine for export.

The farmer notes that his profit margin is miniscule compared to the profit that others gain from the finished cocaine product—largely because approximately 100 kilos of coca leaves are required for just one kilo of paste. However, for the farmer, even this margin far exceeds the typical earnings from his other crops. When questioned about the impact of the Colombian government's massive fumigation and eradication efforts in recent years on his livelihood, the farmer seems unconcerned: "If the helicopters come and they burn my plants, I will run and hide, but then I will replant. It's a risk, but it's not bad. I can harvest three or four times a year, and it's not likely they will find me."

Eradicating a Firmly-Rooted Industry

Although this individual farmer may be a small-scale producer, small farmers make up a key portion of Colombia's multi-billion dollar industry that provides anywhere between 50% and 75% of the world's cocaine supply. The individual farmer is at the very bottom of a product chain largely controlled by Colombia's major armed groups, the Revolutionary Armed Forces (FARC) guerillas and the United Self-Defense of Colombia (AUC) paramilitaries. The majority of small-scale farmers cultivating coca are not members of either organization, nor do they use cocaine

> "In order to stamp out narcotics production, a Pan-Andean effort may be essential to prevent cultivation and production from moving from country to country."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themselves; yet, they remain implicit in fueling the business of these illegal organizations. According to the UN Office on Drugs and Crime in Bogotá (UNODC), the FARC derives 60% of its funding from drug trafficking. Similarly, the AUC is almost entirely funded by the drug trade. Yet, violence and insecurity in some areas of Colombia have sharply declined over the past three years, largely attributed to demobilization negotiations with the AUC and increased military action against the FARC. However, the narcotics trade remains the lifeblood of these illegal groups and a major obstacle to rule of law and socioeconomic stability, particularly in rural areas. Coca is currently cultivated by an estimated 100,000 Colombian families in at least 23 of the country's 32 departments.

Since the adoption of Plan Colombia in 2000, the U.S. has provided \$4.7 billion in training, military equipment, and aid, focused chiefly on militaristic eradication and counter-trafficking efforts. The central objective of the Plan is to cut off the flow of drugs at the source by frequent aerial fumigation and even the manual destruction of coca plants. The administration of President Andrés Pastrana originally implemented this bilateral drug reduction agreement. Colombia's current president, Álvaro Uribe, has recently renewed it for 2007, with strong support from the Bush Administration. John Walters, Director of the White House Office of National Drug Control Policy, affirmed the success of Plan Colombia in September 2006, asserting that, "[the] strategy in Colombia is working. We are attacking traffickers across all fronts, by eradication, interdiction, and organizational attack. By putting traffickers on the defensive, life is much better in Colombia…we increase the financial risk to growers and take income away from illegal armed groups."

"There is much evidence on the ground that eradication is failing to reach the root of the problem."

Gone Today, Back Tomorrow

However, the real progress being made has been difficult to measure, due to varying assessment tactics, political agendas, and the opaque nature of international clandestine markets. The Colombian government reports that its forces destroyed approximately 73,000 hectares of coca plants in 2006, and has announced plans to destroy 50,000 more hectares this year. These figures combined amount to roughly 60% of the coca estimated to be grown in Colombia. The UN Office on Drugs and Crime in Bogotá reported to the U.S. House Subcommittee on Crime, Terrorism and Homeland Security in 2006 that coca cultivation in Colombia had dropped to almost 50% of its 2000 peak. The same report also noted, however, that cultivation areas began to increase again in 2005, and expressed concern about the long-term efficacy of continuing current eradication methods. A study conducted last year by the U.S. State Department using different satellite imagery was less optimistic. The results suggested that cultivation areas were massively underestimated in prior reports. Some NGOs and drug policy groups have reported an actual increase in the quantity of cocaine exported since the enactment of Plan Colombia, possibly in response to growing demand

COCAINE: THE PROCESS

(1) Coca leaves are harvested individually by small farmers throughout Colombia.

(2) The farmers process the leaves into raw paste at small open-air stations. This paste is then sold to large cocaine dealers for processing. For their role as producers, the cocaine farmers receive a minute fraction of the eventual street price of the drug.

(3) The large dealers refine the raw paste first into cocaine base and later into finished product, as well as coordinate the distribution and sale of the drug.

for the drug in Western Europe.

Evidence provided by the UNODC's own Illicit Crop Monitoring Program shows that although coca cultivation has diminished in areas where it has been historically concentrated, it has also begun to spread into regions where coca was previously less common. As compared to 2003, an estimated 62% of coca fields in 2004 were new, revealing "the important mobility of coca cultivation in Colombia, and the strong motivation of the farmers to continue planting coca bush." In an interview for *The New York Times*, John Walsh, who follows drug policy for the Washington Office on Latin America, said paradoxically, "the spray program itself has increased the difficulty of carrying out the spray program." In other words, crop relocation and fragmentation into smaller plots have rendered spraying less cost-effective and efficient. Farmers are using more ingenious techniques of interspersion and sheltering in order to maintain their harvest yields. Some, like the farmer and his neighbors of Sierra Nevada de Santa Marta, have adopted the strategy of planting even more coca plants to counter the risk of losing part of their crop.

Fumigation and Its Discontents

For the individual coca farmer, business may or may not be booming, depending on their luck in avoiding discovery and their financial stability to reinvest if fumigation temporarily destroys their crop. However, coca is not the only crop affected by fumigation. Local residents in parts of Sierra Nevada de Santa Marta complain that repeated spraying has been counterproductive, causing fruit trees and comestible crops to die or to become inedible. Farmers point out withered cacao fruits and sickly mangoes as evidence of the fumigation campaigns; their complaints are formally echoed by agricultural damage reports from other Colombian departments. Coca, farmers say, is the first product that can be re-planted after fumigation because of its resiliency. Environmental and human rights groups oppose the fumigation spraying because it indiscriminately blankets agricultural areas with large amounts of a glyphosate cocktail. This substance has deleterious effects and can linger in the soil for years, inhibiting the essential process of nitrogen fixation.

The logistics of Plan Colombia rely heavily on fumigation because it is more efficient and less dangerous than sending in human forces to physically pull coca out by hand. Manual eradication is not a practical strategy to apply broadly on a national level; however, the efficacy of fumigation in the long-run remains an issue of intense debate. One commonly held view of fumigation is laced with pessimism, suggesting that Colombia may be pursuing such policies only in an attempt to show tangible proof on the progress of the war on drugs. It is also possible eradication is simply pursued to ensure that Colombians believe serious action is being taken to weaken the deeply-rooted drug production channels.

Many drug experts in the U.S. believe that anti-narcotic efforts in Colombia have not significantly affected the availability or the street price of cocaine. But, policy makers often cite the considerable lag between cultivation and when the end-product enters the market as the reason for this belief. The UNODC attributes the lack of impact on the consumer end to simultaneous increases in Peruvian and Bolivian cocaine production. Additionally, some experts contend that the international cocaine market is so greatly over-supplied that such disruptions in Colombia would have a negligible net impact on the U.S. cocaine market.

Considering Alternatives

Numerous U.S. and Colombian non-profit groups, as well as some foreign governments, have expressed concern over the highly-militarized approach of fumigation. The root of this apprehension lies in the fear that such measures will only temporarily solve security problems in Colombia's rural areas. The Center for International Policy (CIP), a non-profit dedicated to promoting de-militarization and post-conflict resolution strategies, supports continued U.S. aid to Colombia, but believes that directing 80% of funding toward military solutions is not a sustainable strategy. CIP argues that greater priority should be given to "efforts such as rural development, judicial reform, rule-of-law programs, and aid to the world's second-largest population of internally displaced people." If this is made possible, the Colombian government will be able to sustain territorial gains accrued as the FARC is pushed into more isolated regions. Supporters of Plan Colombia believe that a hard-line military approach remains essential to establishing stability and forcing farmers to transition away from their dependence on illicit crops.

Plan Colombia does offer some funding to develop alternative economic opportunities for farmers who voluntarily eradicate their own crops and keep their communities free of coca. Programs include monthly payments provided to participating families over a span of three years, and also feature negotiated marketing agreements for traditional agricultural products. Alternative development projects have been successful in small pockets, but the UN estimates that no more than 20% of coca growers have been influenced by these programs.

The Pan-Andean Problems

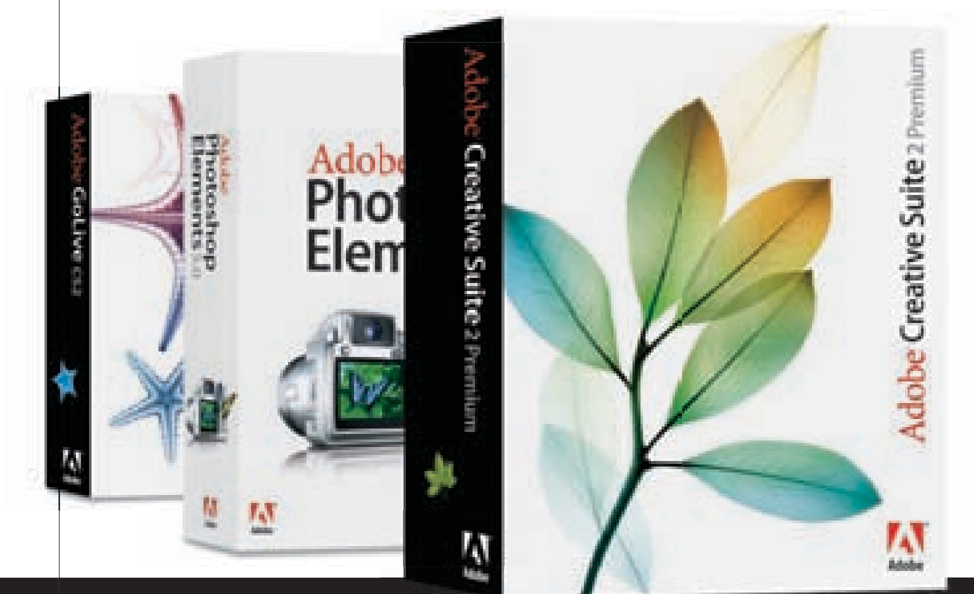
Since the late 1990s, Colombia's cocaine production has far surpassed that of its Andean neighbors, Bolivia and Peru. The two countries remain the only other significant suppliers of cocaine to the world market, and policy makers believe that disruptions in one often affect market conditions in the others. In order to stamp out narcotics production, a Pan-Andean effort may be essential to prevent cultivation and production from moving from country to country. In the late 1990s, Peruvian ex-President Fujimori's administration, despite being thoroughly corrupt, was successful in closing the air-bridge that traffickers used to transport cocaine base from Peru to refineries in Colombia. According to comments made by Major General Gary D. Speer, Acting Commander in Chief of the US Southern Command, the downside of Peru's success was the consolidation and intensification of cultivation in Colombia. Colombia's internal conflict has long provided a nurturing environment for illicit trade, luring in cocaine business from Peru and Bolivia whose past counter-narcotics efforts made them less hospitable to traffickers. With recent political changes in Bolivia, and with increased targeting of the narcotics trade in Colombia, the vicious cycle of rotating production and cultivation may be occurring again. Statistics in the UNODC's 2005 report reflected that coca cultivation is on the rise again in Peru and Bolivia.

Colombia at a Crossroads

Views of Plan Colombia's future impact on cocaine trafficking range from supportive to skeptical, but one feeling that is certainly palpable throughout Colombia is that the country is approaching a crossroads. The level of violence has been reduced, but the specter of armed struggle and future insecurity remains. The urban economy is growing at a fast clip, but in large areas of the country, rule of law and government services are non-existent, and economic realities remain unchanged. Thinking back to the small farmer offering demonstrations in coca production in Sierra Nevada Santa Marta, there is much evidence on the ground that eradication is failing to reach the root of the problem. For many farmers, cultivating coca still presents the best option for building a better future, even as the deeply entrenched cocaine trade threatens to undermine a brighter future for the country. YE

Owning the Intangible

Intellectual Property in the International Arena



WRITTEN BY **LUCAS JULLIAN**

>> AS GLOBALIZATION HAS EVOLVED INTO AN UNDENIABLE FORCE IN THE INTERNATIONAL ARENA, THE WORLD TRADE ORGANIZATION (WTO) HAS CREATED STRATEGIES to cope with the multitude of issues stemming from burgeoning levels of worldwide trade and economic interdependence. Among the most controversial of these issues is the effective protection of intellectual property rights (IPRs). Until recently, the laws and regulations of each nation had been sufficient to ensure protection of intellectual property created by individuals and corporations on a domestic scale. As companies expand across national borders, however, they understandably seek assurance that their patents and trademarks will be respected in these new areas. Yet in the process of this expansion, firms have discovered that many of the countries in which they seek to do business can offer little or no protection for their intellectual property.

In an attempt to "narrow the gaps" in how IPRs are protected around the world, the WTO adopted the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). The TRIPS agreement, binding all WTO members, purports "minimum levels of protection" for intellectual property rights through "common international rules."

(*continued on next page*)

The adoption of the standards specified by TRIPS, however, has been a source of considerable controversy.

While supporters of TRIPs claim that the regulations will greatly benefit all WTO member nations, the actual effects of the agreement might prove substantially less egalitarian. For developed nations with similar standards already in place, the TRIPs agreement will serve to direct profits from technological innovations to the specific companies who own the rights to the products. The effects in developing countries may not be quite so clear-cut. In many cases, for the profits of the innovating companies to increase, the profits in many developing countries will need to decrease. If these nations are able to bring their laws into accordance with the WTO standards, TRIPs could result in the total destruction of local industries based on stolen intellectual property.

Because developed nations already have substantial levels of IPR protection, developing countries represent the main target of the TRIPs agreement. Firms in these countries are able to take advantage of weak or non-existent IPR legislation in order to copy and reproduce products patented by foreign corporations. Due to the fact that the products do not bear the cost of the original research required to develop them, they can be sold at artificially low prices. The original companies which spent significant resources on research and development cannot compete with these artificially low prices; consequently, industries have developed around selling these low cost versions of foreign technologies.

Yet, even the WTO is finding its share of difficulty in enforcing TRIPs. Chile, as with all WTO members, was originally given until January 1, 2000, to bring a halt to these practices by passing legislation to create the levels of IPR protection demanded by TRIPs. On April 4, 2006, however, the U.S. Department of Commerce declared that violations of pharmaceutical production and the pirating of movies, music, and software in Chile amounted to US$106.7 million of lost profits for American businesses. Additionally, a study by the Association of Software Distributors determined that 66% of all computer software in use in Chile at the time was pirated.

While indicative of the continued discrepancy in IPR protection, these figures are dwarfed by the losses suffered in larger, more populous countries. In China, an estimated 90% of all computer software is counterfeit. The International Intellectual Property Alliance estimates that annual trade losses globally due to copyright infringements are $1.28 billion for business software, $589 million for entertainment software, $244 million for motion pictures, and $204 million for music.

Given the substantial profits lost by firms in developed countries through the violation of IPRs, it comes as no surprise that the earliest calls for international standards came from the U.S., Japan and the EU. However, because WTO regulations are passed only by consensus, these powers were required to convince their fellow members that more stringent IPR regulations were necessary. In order to develop a broad base of support, developed countries argued that the enactment of TRIPs would not only serve to curb corporate losses in developed countries but also to encourage technological innovation in developing nations. Former WTO Director-General Mike Moore explained that the implementation of the agreement "represents an opportunity for the world's poorest nations to harness intellectual property in order to accelerate their economic, social, and cultural development."

"FIRMS HAVE DISCOVERED THAT MANY OF THE COUNTRIES IN WHICH THEY SEEK TO DO BUSINESS CAN OFFER LITTLE OR NO PROTECTION FOR THEIR INTELLECTUAL PROPERTY."

The ultimate hope is that these regulations will encourage development through two separate initiatives. First, higher levels of IPRs encourage foreign firms to enter and invest in developing nations by mitigating fears that their technology will be illegally copied. This increase in imports and investment generates a transfer of knowledge and technology. Theoretically, as individuals and local enterprises are given more exposure to more advanced, foreign innovation, the rate of technological development increases. In addition, stronger IPRs will force domestic firms to invest in the research and development of their own products in order to compete with foreign firms, rather than merely copying existing technology. Together, these processes could spur rapid development in the economies of developing countries.

Implementing the standards demanded by the WTO, however, is a challenging objective that will undoubtedly require extensive resources. Before they are able to reap any of the foreseen benefits of TRIPs, governments must first dedicate time and energy to develop legislations that meet the standards called for by TRIPs. Considering the number of problems that besiege the developing world, protection IPRs may not be among the most urgent issues waiting to be dealt with, especially considering the high

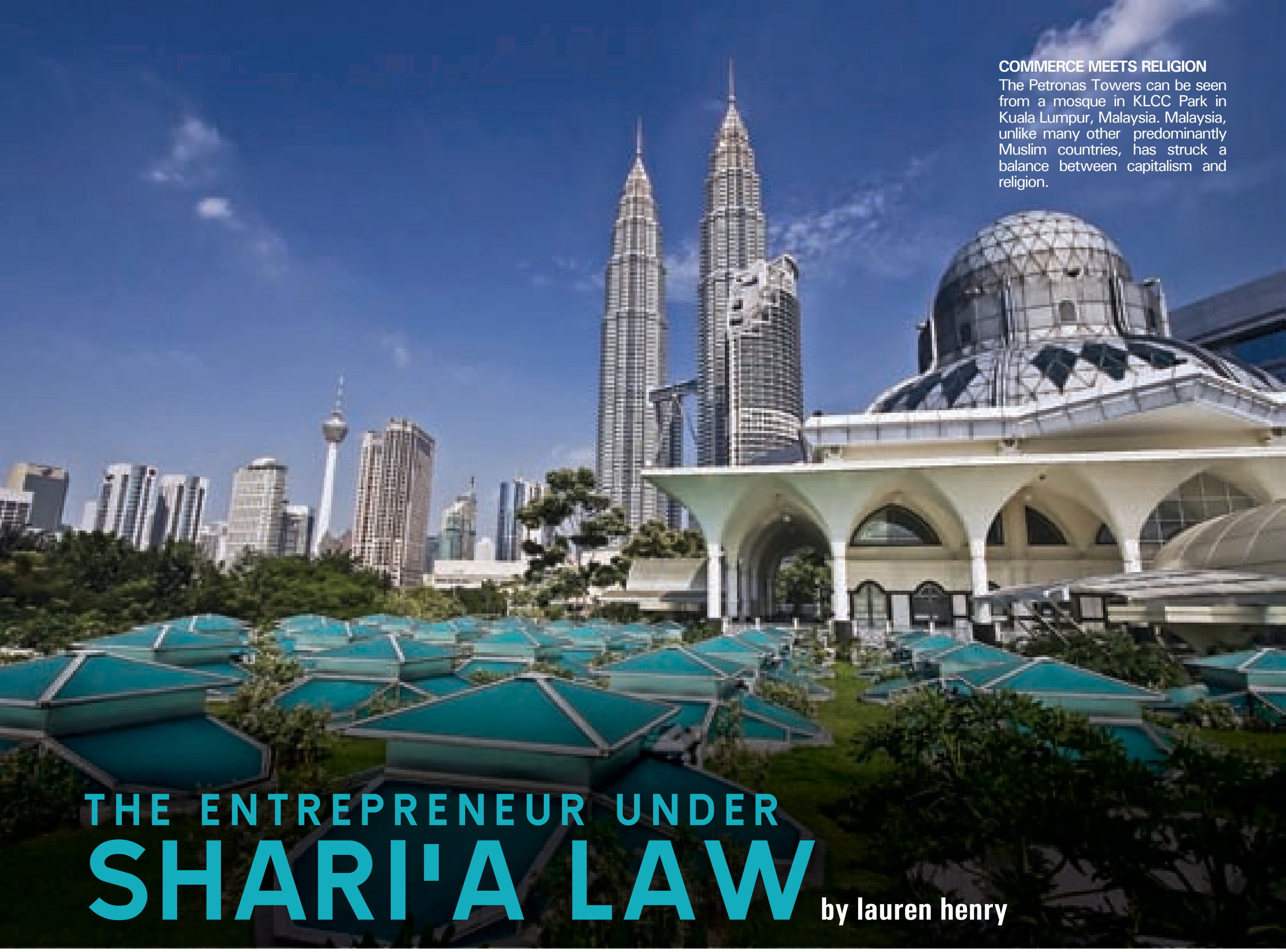
OH, THE IRONY Adobe's Creative Suite line of products is one of the most frequently pirated pieces of software.

costs required to enforce any protective legislation.

Yet even if the regulations are successfully implemented and adequate resources are allocated to their enforcement, the immediate effects of IPR legislation would most likely prove injurious to a developing economy. The elimination of the companies producing these goods illegally would result in a substantial surge in prices, as technologies would only be available from the original producers. Enforcement of TRIPs could also result in a substantial increase in unemployment, as those previously employed by the counterfeit industries would find themselves out of work.

The case study of Jordan provides a preview of the devastating effects that TRIPs might have on the economies of developing nations. In late 1999, Jordan strengthened its stance on IPRs by granting greater protection to foreign pharmaceutical companies. Thus far, Jordan has experienced only the drawbacks of higher IPR regulations: the local pharmaceutical industry has been severely damaged, prices of drugs have risen considerably, imports have increased as exports have dropped, and unemployment has increased. Because they lack the resources to engage in adequate research and development, Jordanian pharmaceutical companies have been unable to compete with the firms of the developed world. While modern drugs are imported from foreign pharmaceuticals at considerably higher prices, Jordanian firms have been relegated to the production of old drugs that are no longer protected. In light of these harsh short-term effects of IPR legislation, countries like Jordan can only hope in time they will gain the increased investment and technology transfer that was assured to them when they voted for TRIPs.

Ultimately, in terms of encouraging worldwide entrepreneurship and innovation, the adoption of standard IPRs worldwide is a step in the right direction. Standard international IPRs ensure that first-world companies are appropriately compensated for their achievements. At the same time, firms in the developing world are forced to develop their own products and technologies. Developing nations have faced a variety of obstacles in their attempts to implement and enforce the TRIPs agreement; even in cases where they have successfully done so, the results have often been disappointing. But, time still remains for the negative effects felt by developing nations to give way to the foreseen benefits: greater investment by foreign firms, greater trust amongst trade partners, and an environment that fosters and protects businesses and their creations. YE



COMMERCE MEETS RELIGION
The Petronas Towers can be seen from a mosque in KLCC Park in Kuala Lumpur, Malaysia. Malaysia, unlike many other predominantly Muslim countries, has struck a balance between capitalism and religion.

THE ENTREPRENEUR UNDER SHARI'A LAW

by lauren henry

American investors complaining about the heightened corporate regulations imposed by the Sarbanes-Oxley Act of '02 might be less disgruntled if they considered the case of Aceh. This semi-autonomous Indonesian province implemented Islamic Shari'a law in 1999, and its financial world has been dramatically restructured since. Public officials in Aceh have a unique sense of what constitutes fair punishment: violators of Shari'a's prohibition on interest or credit might find themselves not only targets of more standard financial penalties but also victims of rattan caning. If more extreme officials get their way, illegally conducted business could even be punished with amputation or public stoning. Aceh is only one example of a dynamic between Western business practices and stringent Shari'a conventions that is present in many of today's Muslim nations.

For devout Muslims, Shari'a is much more than a controversial method of punishment—it is a way of life, a series of normative practices. Aspects of Shari'a touch upon not only personal acts of worship, but also commercial dealings, marriage and divorce, and just punishment for secular crime. Legally and morally based on the Qur'an and the examples of the Prophet Muhammad, Shari'a injunctions are not fixed. There is no single objective code of law that one might designate as Shari'a which may even be based on scholarly interpretation of the Qu'ran; different groups of Muslims have disparate views of what Shari'a mandates.

Yet, Shari'a has had a tenable impact on economic activity in Muslim-majority regions. Contrary to popular belief, although Shari'a places limitations on entrepreneurs seeking to operate in Muslim countries, some have noted that such regulations have proven increasingly compatible with a global economy based largely on Western cultural norms. One example of this compatibility is the case of women. Often, Shari'a does not preclude the participation of women in the economy in general. There are certain impediments, but women have played a key role in economic development in many Muslim countries that enforce Shari'a. Where women are excluded from economic activity, most likely conservative attitudes are to blame; the exclusion is a function of cultural norms rather than a standard interpretation of Shari'a. Frank Griffel, Assistant Professor of Islamic Studies at Yale Divinity School, comments: "In Muslim countries in West Africa, for instance, women have always been a very strong motor of the economy, providing a huge part of, if not the majority of, small businesses. But, that is not the case in the Middle East. Yet, the great majority of rules in Shari'a treat the sexes equally."

Even with its sometimes brutal practices, Aceh illustrates the potential for a symbiotic relationship between Shari'a and entrepreneurship. Because a strict interpretation of Shari'a mandates that *Riba*—interest on credit—be forbidden, no interest can be paid in savings or deposit account. Speculative money investments in the modern stocks and shares are regarded as gambling and are also condemned. Yet, the province strives to reconcile economic development with its population's dedication to Shari'a. Aceh is developing a network of Shari'a banks offering loans with a profit-sharing mechanism in place of interest. Said Hisyam, manager of the Institute for Finance and Capitalization at the Aceh and Nias Rehabilitation and Reconstruction Agency (BRR) explains: "If you make a 10% profit, 30% of this profit will go to the creditor while you keep the remaining 70%." The profit sharing mechanism promotes a trust based, cooperative relationship between creditor and debtor. It is in the interest of the creditor for the debtor to do well, and it insulates the debtor from the pecuniary risk of paying for a failed operation.

While the observation of the economic element of Shari'a can benefit creditors, it also necessarily limits the menu of investment and trade options to like-minded individuals, corporations and agencies. This may pose some distinct disadvantages to Muslim countries, but Shari'a may create opportunities for great economic benefit; a growing subset of the international economy operates with no interest. An large portion of financial institutions in the Middle East and Northern Africa have rules requiring some or all of their money to be managed in compliance with Shari'a. This has prompted rapid growth in Shari'a-compatible investments.

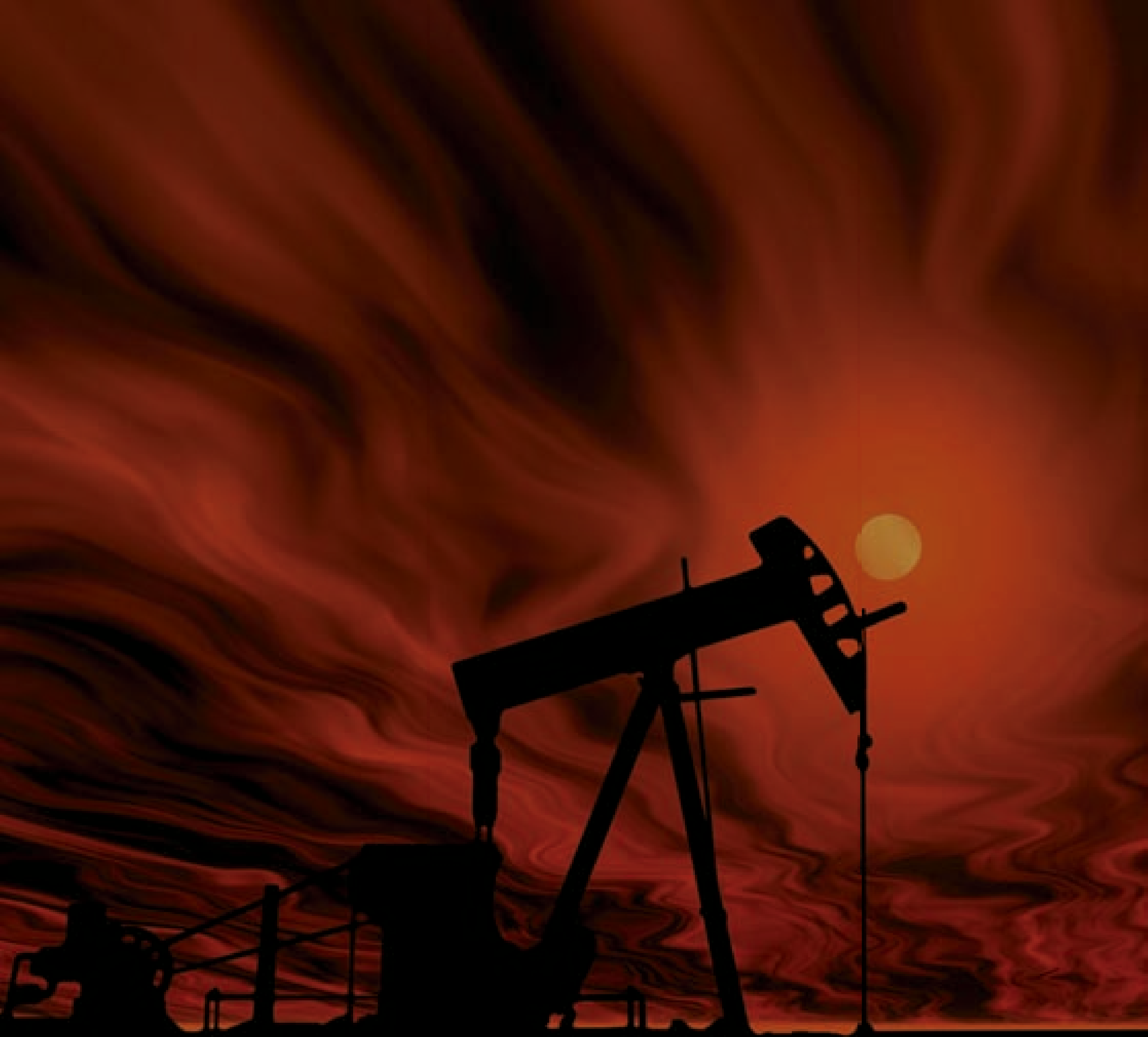
The first Shari'a-compliant hedge funds were launched last year after the London prime broking arm of French bank Société Générale developed systems to replicate the effects of selling shares short without breaking Islamic law. The Institute of Islamic Banking and Insurance provides international leadership and coordination in Islamic finance. This increasingly autonomous Islamic global economy is consistent with the idea of *umaa*, that is, a Muslim world community. Thus, through forgoing some business transactions with those who will not conform to Shari'a, a country's horizons are opened to an economic community based on shared religious ideals.

The economic benefits associated with Shari'a, however, are contingent upon the individuals involved freely agreeing to operate within these rules. Shari'a often becomes contentious in areas with a significant non-Muslim minority. Whether directly through legislation or indirectly through cultural norms, non-Muslims are constrained in a society where the majority of people observe Shari'a. In many regions, systems of law that enforce the moral code of one particular religious group have fomented discontent and deepened religious divisions.

The potential for conflict associated with this unrest has exerted a detrimental influence on business activity and entrepreneurship. In the northern regions of Nigeria, aspects of Shari'a were incorporated into the law in 2000. The laws, binding for Muslims and non-Muslims alike, include flogging for alcohol consumption, amputation for theft, and stoning for adultery. The area, beset with both ethnic and religious division, has suffered from unrest and controversy since.

> "Whether directly through legislation or indirectly through cultural norms, non-Muslims are constrained in a society where the majority of people observe Shari'a."

In light of these apparent constraints imposed by Shari'a, combined with the potential benefits of conducting commerce in an *umaa* community, Sharia's effect on entrepreneurship does not seem to be unequivocally negative nor positive. As a final caveat, Shari'a's effects can cause severe unrest and violence, indisputably harming entrepreneurship when the voluntary element is taken away; that is, when non-Muslims who do not wish to work under an Islamic framework are nevertheless forced to do so, only disorder and instability can result. YE



ENTREPRENEURIAL TYRANNY

YALE ENTREPRENEUR WRITER **THOMAS POWERS** EXPLORES **BLOOD** DIAMONDS, OIL, AND THE CONGO

Kanye West raps vehemently against blood diamonds, but he does not scruple to fly a private jet fueled by Saudi oil. This arguable hypocrisy throws into sharp relief an important question: At what point do morals outweigh a good price? Take just a few examples from recent memory. In the 1980s, boycotts and sanctions helped bring down apartheid. However, the West today continues to buy gas for cars and coltan for electronics from decidedly oppressive and destabilizing regimes. Democracy-promoting nations must answer this difficult question, or risk moral flip-flopping in the world's eyes. Perhaps most importantly, where are these historical problems rooted, and where can a newly neoconservative America take them?

During the 1990s, blood diamonds— diamonds sold to finance warfare—accounted for a peak 20% of the worldwide market. Critical to this effort was former wedding photographer, television cameraman, and Sierra Leonean revolutionary Foday Sankoh.

In 1991, Sankoh, along with friends Abu Kanu and Rashid Mansara, founded the Revolutionary United Front (RUF) in Sierra Leone. This organization, dedicated to the violent overthrow of the allegedly democratic government (elected in one-party elections), professed no creed nor ideology other than the destruction of the forces in power. The RUF employed controversial tactics, such as forcing children to kill their own parents and subsequently join the RUF army. After government forces started executing revolutionaries, Sankoh's men started a campaign of amputating the hands of those claimed to be government supporters. Ostensibly, as the right hand was traditionally used as a means for voting, cutting off the hands of those who opposed the RUF was justified as both a symbolic and military measure.

Sankoh's RUF also allowed a number of "human rights issues," in the understated words of Human Rights Watch, to take place. In one horrific example, soldiers sometimes gambled on the sex of unborn babies and then cut open their pregnant mothers to find out the correct answer. One RUF operation, known as "Operation Pay Yourself," essentially authorized widespread looting. In another questionable proposal called "Operation Kill All Your Family," RUF soldiers planned to kill the families of Sierra Leone's elected leaders.

Liberian President Charles Taylor, now facing trial for war crimes and crimes against humanity, was one of Sankoh's biggest supporters and purchasers of Leonean conflict diamonds. The two had met in the 1970s on a trip to Muammar al-Gaddafi's Libya to participate in Soviet-backed exercises and became close friends. Two decades later, in exchange for Sankoh's diamonds, Taylor supplied arms and training to the RUF army, which allowed the RUF to carry on its civil war for about a decade.

In 1999, international pressure forced a peace accord between the warring factions, but only a joint British-Guinean invasion in 2000 put an end to civil strife with the capture of Sankoh himself. Sankoh died of a stroke while awaiting trial.

Towards the end of the Leonean war in May 2000, and in response to the large number of conflict diamonds on the market, a group of diamond sellers and political leaders met in Kimberley, South Africa, to discuss a means of reducing the number of such diamonds. The plan they invented, which they dubbed the Kimberley Process Certification Scheme (KPCS), is now the premier method for certifying a diamond's non-conflict status and has been instrumental in reducing the number of such diamonds on the market. Every country agreeing to KPCS by treaty must abide by three conditions:

1) No diamond sales (in the country) may finance rebels or other groups trying to overthrow a UN-recognized government.

2) A certificate that proves the above must accompany every export.

3) No diamond trading with non-KPCS countries.

While these conditions create hope for putting an end to the trade of blood diamonds, unfortunately compliance with KPCS is voluntary in all countries. Many in the developed world generally approve of the Kimberley Process, but some say more action should be taken. Amnesty International, for example, asserts that, "…[U]ntil the diamond trade is subject to mandatory, impartial monitoring, there is still no effective guarantee that all conflict diamonds will be identified and removed from the market."

Aside from the voluntary nature of KPCS, critics raise two main objections: first, Kimberley Process certifications are easily forged and do nothing to combat smuggling. Second, the Kimberley Process involuntarily prevents diamond trading with other countries, rendering certification merely a matter for consumer conscience (such as the "Fairtrade" label), and bringing it into the realm of government regulation. If the government is to regulate, how should one define "rebels" or identify a group "trying to overthrow a UN government"? Arguably, the U.S. overthrew a UN-recognized government when it invaded Iraq, but its status as a signatory of the KPCS is not in question, even though taxes on diamond sales in the U.S. go to support the U.S. military. In any case, a large proportion of humanitarian organizations consider the Kimberley Process a step forward, despite its shortcomings and the fact that it does not completely address the full magnitude of the problem at hand.

But why is the Kimberley Process even relevant anymore? Only 1% of today's traded diamonds can be proven to be conflict diamonds (which leaves room for others which may have come from conflict areas, but were not identified as such), whereas 20% were in the 1990s. True, 1% of the diamond market is still a respectable $90 million, but

this misses the point. The rise or fall of a particular commodity does not resolve the question of morality in the marketplace; as diamonds fall, other conflict commodities may take their place. Recently, oil has taken center stage, in a particularly pointed form. How can America claim to be building democracy while financing regimes that severely limit freedom?

At current energy prices, daily American spending on Saudi oil totals some $92.1 million-- more than the entire world what spends on conflict diamonds in a year. Moreover, world oil trade is far larger than Saudi Arabia's trade alone. Unfortunately, OPEC members, and other oil-producing nations, also have a shaky record when it comes to "human rights issues."

In Saudi Arabia alone, Human Rights Watch claims that the government, which operates on the principles of Shari'a, or Islamic Law, often punishes thieves by amputating their arms, in an interesting parallel to the hand amputation practiced by the RUF. In contrast, however, Saudi Arabia claims to be backed by God, rather than by a possibly illegitimate warlord. It must be said that Human Rights Watch does not consider the word of God, as interpreted by the Saudi government, as grounds for violating the "natural rights" of individuals— even though many philosophers cite God or an abstract "reason" as the source of those natural rights in the first place.

Saudi judges also frequently use Shari'a law, or their interpretation of it, to discriminate against the Shiite Muslim minority. For example, a judge annulled one marriage because the groom, a Shiite, was "not worthy" of his Sunni wife. Judges also have a tendency to require punishments that Westerners would consider degrading and unacceptable, such as public lashing without medical treatment. Furthermore, the government regulates freedom of speech and the press, for example, by closing down a newspaper after its publication of the infamous "Muhammad cartoons." Finally, the government forbids women from traveling, working, or studying without a permit and under no circumstances allows them to drive.

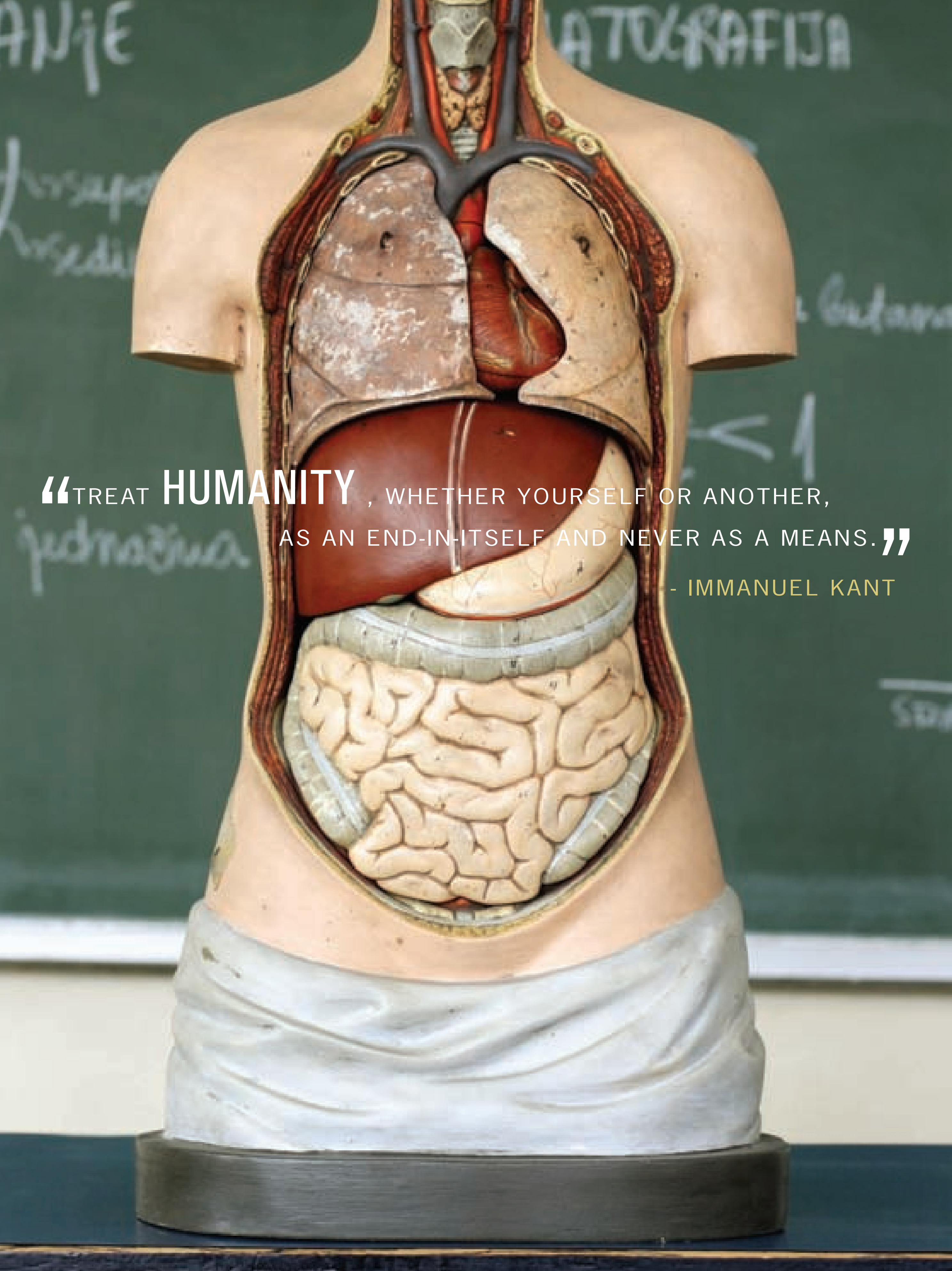
Of course, the West takes a very different attitude towards Saudi Arabia than it assumes in regard to Sierra Leone. While America is a signatory of the KPCS, essentially forbidding Americans to trade with countries that are not conflict-diamond-free, it is at the same time a great supporter and trade partner of Saudi Arabia, which has been shown to oppress its own people. Other Western powers work along similar lines: the EU is a member of the KPCS, but the UK recently sold 72 fighter jets to Saudi Arabia in a deal worth $10 billion.

The United States is trying to spread democracy in the Middle East, but that concept does not come with an easy price tag. By one estimate, the U.S. government will spend $2 trillion on the war in Iraq by the time it is finished. But how do people in the Middle East construe America's actions in propping up regimes that defend its oil interests? Al-Qa'ida cites the American-Saudi alliance as a raison d'être.

Of course, al-Qa'ida's statement does not mean that America is wrong to protect its interests; just because America's action caused al-Qa'ida to do something harmful does not necessarily mean America committed a misadvised action itself. Who is actually right or wrong, however, is somewhat irrelevant. The question is not a moral one; it is a question of credibility. Is the United States credible as a source of freedom and happiness in the region?

If America wants to project an image of a country opposed to tyranny, it must wean itself from supporting philosophically incompatible regimes. Otherwise it will be accused of invading Iraq "just for oil,"—since America now supports cooperative oil-bearing regimes regardless of their tyrannical status.

The American government must consider how the world will understand its policy choices. By choosing policies such as blocking the conflict diamond trade, while allowing trade for coltan capacitors from the Congo or oil from the Sudan or Saudi Arabia, the United States is supporting paradoxical policy goals. If America's ultimate goal is serving its own best interests, perhaps this is morally justified; but is it the best way to serve those interests to show a hypocritical nature as an example to other countries? This is not a question of political theory but rather an empirical one. America must pay attention to the results of its actions if the nation is to succeed in ending terrorism in the Middle East or wishes to avoid responsibility for the thousands of rapes, amputations, and deaths resulting from indirectly financed **WAR**


"TREAT HUMANITY , WHETHER YOURSELF OR ANOTHER,
AS AN END-IN-ITSELF AND NEVER AS A MEANS."
- IMMANUEL KANT

legalizing a market for ORGANS

by evan leitner

AMIDST IMMANUEL KANT'S famous moral musings, he clearly expresses his disgust at the potential commoditization of human beings, outlining a mandate to "treat humanity, whether yourself or another, as an end-in-itself and never as a means." His writings have been often cited in regards to slavery, prostitution, and organ donation. While I agree that the reach of his lofty philosophical musings can be effectively applied to the immorality of the first two practices, the rise of an organ market that would increase society's utility should not be impeded by the implications of outdated ethical discourse.

Since the time that Kant spoke these famous words, society has changed at an exponentially fast rate. One of the most notable advances has been in the realm of medical technology. These innovations have profoundly evolved from leeches to x-rays, from amputation to microsurgery. Yet in recent years, it has become apparent that medical recourse for organ failure has been slow to follow suit. According to a June 2006 article in *USA Today*, the list of people awaiting an organ transplant has doubled in the past decade to an astounding 90,000 people, largely due to medical advances increasing the safety of such operations. The bio-mechanical community is scrambling to catch up to the increased organ demand by exploring two possible solutions: mechanical organs and biologically "grown" organs. The first self-contained mechanical heart was successfully transplanted in 2001, with subsequent research in the area progressing steadily since then. While the latter option has yet to produce widespread, transferable results, the use of a patient's own cells to grow another organ has also shown some preliminary promise.

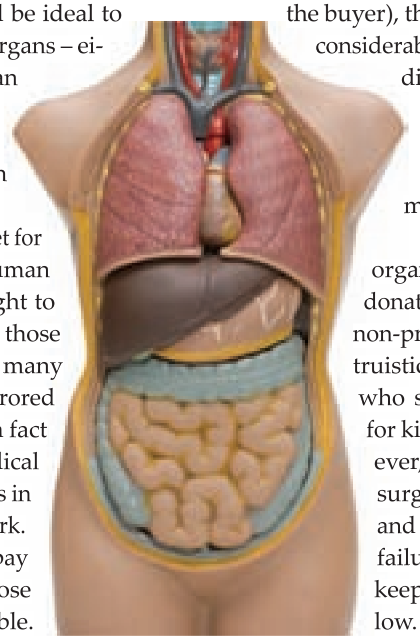
However, the time horizon for the broad application of these two technological options still extends far into the future. Until either of these alternatives becomes safe and inexpensive enough to help large numbers of people, the medical community is forced to make do with its available resources – cadaver organs. When a dying patient is rushed into the hospital, a team of doctors will do everything it can to save his or her life. The doctors are only informed of the patient's organ donor status after they have been pronounced deceased, at which point another team of medical experts is brought in to assess which organs can be used. This procedure ensures that all conflicts of interest are eliminated (such as doctors allowing a patient on the brink to die in order to "harvest" their organs) as highly-dramatized popular media depictions (plotlines on *Grey's Anatomy*, for example) may lead you to believe.

Yet, although there is a clear procedure in place to prevent abuse of organ donation, it seems that the system is far from meeting complete success. In most cases, the second team of doctors is never even needed, due to the fact that only 30% of American citizens are registered as organ donors. The remaining 70% of the non-donating population can be divided into three categories: individuals with religious or ethical concerns pertaining to organ donation, individuals that have been misinformed about the realities of organ donation, and those who are apathetic to the donation program. Thus, cadaver organ supplies are not nearly sufficient to save all 90,000 individuals anxiously awaiting them as the sole provider of hope for their survival.

The statistics are astounding-- today alone 19 brothers, daughters, sons, mothers or spouses were killed. The cause was not the conventional culprits of cigarettes or alcohol, firearms or drunk drivers. Rather, these individuals died awaiting organ transplant in an inefficient system that doesn't allow the "golden hand" to work to create a market for organs. I am by no means supporting a wild and unregulated auction in which kidneys go to the highest bidder. Instead, I propose a taxable and transparent market which would provide maximum benefits to all parties.

Is it possible that placement on a long list for cadaver organs is not the only option for those awaiting a transplant? Suppress your repugnance for a second and imagine the following scenario: You have a loved one who needs a kidney replacement in the next few days or he or she will die. You currently would be faced with two unpromising options: await an organ transplant for an indefinite period of time, or pursue black market activity to find a suitable organ for an alternate source. Say that you decide you are willing to spend the $30,000 on a black market kidney—are you also willing to commit a federal felony and spend a minimum of five years in prison and pay a minimum $50,000 fine? When presented with this choice, you might find yourself questioning the logic behind being forced to turn to a black market when it is clear that free and competitive trade would benefit society as a whole. If someone with the same blood type, made completely aware of the risks involved, wants to provide their kidney in exchange for a predetermined sum, there is no reason the government should illegalize the transaction.

Of course, I would not suggest the complete abolition of the organ donation list. Rather, it would be ideal to provide two options for those in need of organs – either enter the market and try to purchase an organ from a willing seller, or for those who cannot afford to enter the market (or are strict adherents to Kantian ethics), remain on the list awaiting cadaver organs.



A central argument against an open market for organs is that medical ethics (and basic human rights) state that we all have an equal right to life and that an open market would allow those with money a distinct advantage. But in many ways, is this phenomenon not already mirrored in our current system? It is a well known fact that the wealthy have access to better medical care. The best doctors and medical facilities in the U.S. are not being used for pro-bono work. It only seems natural that rational people pay what they can to ensure that they and those they love get the best medical care possible. A market for organ donation would not give the wealthy any more of a health care advantage than they already have. Furthermore, removing those willing to purchase an organ from the list awaiting donation gives those individuals on the list a better chance of receiving an organ through this method.

An often cited problem is the possibility that an organ market would result in the pillaging of the third world for organs supplied almost exclusively to the first world. This process, unfortunately, has already become an increasingly common practice due to the thriving black market for organs. While those selling in developing countries receive a pittance as compensation, a considerable profit is siphoned off by middlemen. The legalization of the organ market would funnel more of that money into the pockets of those in desperate need. By monitoring and verifying the organ sources, middlemen could be effectively eliminated and more of the funds could be returned to the donors. Enhanced monitoring could also ensure the health and safety of those individuals who decide to donate an organ.

Furthermore, legalized markets would allow for transparent transactions, monitored and taxed by the government. In 1999, an eBay user listed a human kidney on the popular online auction site, bringing in bids up to $5.7 million. Although the seriousness of this auction is unclear, administrators of the site caught wind of the illegal sale and intervened. If organ transaction were legalized, obviously prices would not be so astronomically high, but large sums would still be changing hands. If the government instituted a 5% tax on all organ sales (or even more effective, a .5% tax on the net wealth of the buyer), the potential benefits to society would be considerable. This money could easily be funneled directly into researching mechanical and biological organ replacements, funding groups like Students for Organ Donation, and raising awareness of preventative medicine.

A final point made against the case for organ sale is the possible decline in organ donations as a result of commoditization. The non-profit LivingOrganDonor.org describes altruistic donors as "wonderful, caring people who simply understand the desperate need for kidneys." There is no compensation, however, for those willing to endure the risk of surgery, the pain and suffering of recovery, and of course the possibility of future kidney failure. This arduous process has served to keep the number of altruistic donors quite low. While there is no empirical evidence to support this claim, I believe that organs acquired through a new market with monetary incentive would grossly outnumber those currently altruistically donating. Also, in order to ensure that those who can't afford to enter the market are still provided with donated organs, the sale of cadaver organs could be prevented with a government statute; thus all donated cadaver organs could be given to the low-income American population.

If tomorrow America ditched its detrimental stigma and legalized an organ market, most people would go about their morning routine as usual—still stumble out of bed, jump in the shower, drink a cup of coffee, and go to class or work. Around the U.S., however, the thousands of people hoping for an organ donation would be waking up to a second chance at life. What is the sense in robbing them of this fair market solution? YE

Panacea or Pandora? by gary dyal and christopher wihlidahl

Legalizing Stem Cell Research

IN THE EARLY STAGE OF LIFE, human embryonic stem cells transform into the full array of specialized cells that enable the body to function. This process represents one of the most fascinating aspects of human biology, but serious medical conditions such as cancer and birth defects can result from stem cell abnormalities. Consequently, many feel that studying these cells may unlock the secrets to preventing such conditions, and may even allow for the production of human cells and tissues for use in medical therapies.

However, moral objections to the destruction of human embryos in order to obtain stem cells may limit the resources dedicated to their study. Many followers of Buddhism, Judaism, and Hinduism believe the possible benefits of stem cell research validate the use and even destruction of embryos within certain boundaries. On the other side of the camp, the Catholic Church has come down forcefully in opposition of stem cell research. In an official statement on the issue released in 2000, the Church explained that the destruction of a human embryo, which it considers "a human subject with a well defined identity," represents a wrong that "no end believed to be good" is able to justify. In addition, various sects and religious leaders from both Muslim and Protestant faiths have issued similar statements condemning embryonic stem cell research.

As expected from the diverse opinions among religious groups, similar variation can be found in the policies and legislation regarding stem cells adopted by national governments. These policies are typically based on what a country deems to be an ethically acceptable source for the stem cells used in research. Georgetown professor Leroy Walters explains that such legislation on acceptable stem cell sources can normally be classified under one of six well-defined levels of limitation, ascending in order of leniency:

1. **No permission is granted to study human embryonic stem cells.**
2. **Research is permitted only on existing human embryonic stem cell lines. (This excludes use of human embryos to create additional stem cell lines.)**
3. **Research is permitted on both existing stem cell lines and on embryos that are no longer needed for reproductive purposes.**
4. **In addition to acquiring stem cells from the previously mentioned sources, the country permits the study of embryos created specifically for research purposes through in vitro fertilization.**
5. **Research is permitted on embryos created specifically for research purposes through somatic cell nuclear transfer into human eggs or zygotes (known as research cloning).**
6. **The creation of embryos through somatic cell nuclear transfer is allowed not only into human zygotes but into animal eggs as well.**

Walters explains that the policy that a nation chooses to adopt often depends on a variety of cultural and political factors, which creates variation even within regional borders. The United Kingdom, for example, placed itself among the nations with the most liberal policies regarding stem cell research; in 1990 it accepted options four and five, while several of its more conservative EU neighbors, such as Austria, Italy, and Poland, refused to consent to any stem cell research whatsoever. Others, such as Russia, Greece, and the Netherlands, have chosen option three, a more moderate approach. As a result of this discrepancy in legal restrictions, the EU had great difficulty determining the type of program to adopt for the funding of research on stem cells. The body ultimately settled upon only funding projects that did not involve the destruction of human embryos.

China, on the other hand, represents the world's most lenient stance toward stem cell research. In 2001 it became the first and only nation to permit the transfer of human nuclei into animal eggs, the process described in option six. Japan is only slightly more restrictive, permitting all stem cell sources except those derived from this sixth option.

The nation of Singapore has recently been promoting itself as an extremely accommodating location for stem cell research. In addition to allowing stem cells created from options four and five, the country has been recruiting leading scientists from around the world, including one of the British scientists who helped clone Dolly the sheep. In October of 2006, Singapore completed Biopolis, an enormous international research and development center to which the country's government has contributed over $400 million. The research conducted in this facility, combined with the $600 million that has been invested in stem cell startups, should place Singapore among the leaders in embryonic stem cell research in the years to come.

The United States currently has perhaps the most complex policy on stem cell research, resulting from the federalist principles at work in this country. The Human Cloning Ban and Stem Cell Research passed by Congress in 2005 makes it unlawful for any person or legal entity, "to conduct or attempt to conduct human cloning," a restriction that prevents the use of stem cells derived using options four through six. Apart from this restriction, the federal government has left further decisions concerning the legality of stem cell research up to the states. As a result, eleven states have issued complete bans on stem cell research, while most of the others have allowed all federally approved research options. States like California, Maryland, and Wisconsin, for example, have put in place a number of incentives, including significant research grants designed to promote stem cell research.

"WITHOUT A MAJOR SHIFT IN STEM CELL POLICY, THE U.S. WILL MOST LIKELY BE SUPPLANTED BY COUNTRIES THAT CONTINUE TO COMBINE LENIENT LEGISLATION WITH EXPANSIVE RESEARCH GRANTS."

Far more stringent regulations, however, exist for those research programs hoping to receive federal funding. During a 2001 address, President Bush clearly outlined the conditions needed to be met if federal funds were to be dedicated to a research program:

- The derivation process (which begins with the destruction of the embryo) had to be initiated prior to 9:00 P.M. EDT on August 9, 2001 (the time of the speech).
- The stem cells have to be derived from an embryo that was created for reproductive purposes and was no longer needed.
- Informed consent has to be obtained for the donation of the embryo and that donation involving financial inducement.

This stance permits federal funding to be allocated for research programs using option two as the stem cell source, and according to President Bush, "allows us to explore the promise and potential of stem cell research without crossing a fundamental moral line by providing taxpayer funding that would sanction or encourage further destruction of human embryos that have at least the potential for life."

While these policies demonstrate the dramatic variance in stem cell legislation across national, regional, and cultural borders, perhaps the most important issue is to what extent these different policies curtail or support the potential benefits from stem cell research. Despite its relatively stringent policies, the United States remains among the leaders in research on embryonic stem cells. Even with legislation limiting the quantity of stem cells available to U.S. scientists, research on existing lines has kept the country among the industry's leaders.

In January of this year, Aruna Biomedical Inc. announced its plans to become the first company to commercialize the distribution of products derived from stem cells in the United States. CEO Steven Stice explained in a press release that the company has recently reached an agreement allowing it to distribute the human neural progenitor cells that are derived from stem cell lines to academic and industry research communities. The "Neural Progenitor Product" will provide cells that can be used to research Alzheimer's disease, spinal cord injury, and depression, and the company expects that it will soon be able to provide additional products that will further enhance research capabilities.

Advances like those taking place at Aruna are indicative of the U.S.'s influence in the field of stem cell research. In an article published in the journal Nature Biotechnology, Jennifer McCormick, a postdoctoral fellow at the Stanford University Center for Biomedical Ethics, claims that this advantage could disappear if the United States does not alter its current policy on stem cells. McCormick explains that without expanded federal policies to support stem cell research, fragmented state, not-for-profit and commercial funding arrangements will be unable to keep pace with international efforts to develop large-scale research infrastructures. Without a major shift in stem cell policy, the U.S. will most likely be supplanted by countries that continue to combine lenient legislation with expansive research grants.

Such a shift is unlikely to occur, however, given the differing opinions and often heated debate that surrounds ethics, life, and morality in the United States. Stem cell research has the potential to save human lives, but the issue of the destruction of embryos is one that strikes a resounding chord in the heart of the country, and its moral concerns cannot be taken lightly. While no ultimate consensus may ever be reached, stem cell research in the U.S. continues to grow, and perhaps with time, the ethical and scientific implications of stem cell research along with its full potential may be understood. YE

The Gray Areas of Black Markets: A Case Study of China's

Command Economy

by my khanh ngo

FOR THE LAST FEW DECADES, it has been commonplace to walk through Chinatown and encounter cheap knock-offs lining the streets. Tourists wandering around downtown New York City need not look far to find an imitation Prada bag or DVDs of an unreleased movie. However, these wares pale in comparison to the pirated treasures sold in the motherland itself. In China, tourists can purchase anything from Microsoft software to every season of Friends, all for under $10.

China serves as a prime example of how black markets function under a command economy—one in which supply and price are regulated by the government rather than market forces. These black markets are not a new phenomenon; in the 1980s, the black markets in the Soviet Union were estimated to account for nearly 60% of its economic activities. In the United States, the Prohibition period saw the black market trade of alcohol flourish.

The Chinese example, however, is unique in one aspect in particular. Whereas command economies have traditionally cracked down on black markets within their borders, China faces a more difficult task. Much of its black market economy focuses on trading counterfeit copyrighted materials, the majority of which takes place in local markets. Pressures from multinational corporations on the Chinese government to deal with piracy compete directly with internal pressures of employing the population and keeping prices affordable.

The products sold on black markets, specifically copyrighted materials, are cheaper because the illegal supplier faces lower costs of production than legal suppliers. In the legitimate market, supply is restricted and products are sold at a certain price level. In a black market, the supply is not restricted in an analogous manner, and products can be sold at lower levels. The black market is often more efficient than the market mired by government intervention because prices are determined solely by the interaction of supply and demand. In government-monitored markets, price distortions and inappropriate allocation of resources are more prevalent; consequently, black markets may be beneficial to economies in which the government artificially controls transactions.

Most countries consider the handling of illegal goods to be a criminal offense. However, multinational corporations and other governments find it difficult to make China comply with the World Trade Organization Agreement on Trade-Related Aspects of Intellectual Property Rights. *The New York Times* reported that as a result, "China has long had the reputation as a sort of no man's land for intellectual property rights, with companies in virtually every industry freely copying designs and other content from foreign companies and domestic rivals with little fear of punishment."

"AS LONG AS ENFORCEMENT LAGS BEHIND LEGISLATION, COUNTERFEIT GOODS WILL CONTINUE TO MAKE THEIR WAY ACROSS THE NATIONAL AND WORLD ECONOMY."

Technological innovations such as the Internet have made it particularly difficult for authorities to control this black market. This is due in part to networking resources, which have enhanced the accessibility of the equipment necessary to produce black market goods. Moreover, because China is the world's center for manufacturing, factories can easily divert goods made for a Western brand name to the black market. The black markets are so up-to-date that, for example, once Microsoft releases new software, it is copied within days. Often times, these illegal copies are so precise that even people in the industry cannot distinguish fake from authentic. Some companies have gotten so good at pirating that they have begun to export such intricate products as car parts and computer chips to the United States.

Recently, in a survey organized by the International Chamber of Commerce, chief executives from 48 companies in 27 product categories singled out China as the worst offender in global piracy. As a result, they are pushing for greater Chinese government enforcement to combat piracy. The Office of the U.S. Trade Representatives reported that in 2004, two-thirds of all piracy-related seizures at U.S. and EU borders originated in China, which explains why the U.S. is leading the campaign for stronger protection of intellectual property in China.

Since China joined the WTO, it has made some notable efforts to refurbish its copyright laws. The government passed a law in 2004 criminalizing counterfeiting and piracy. Violators can now be punished with fines and even jail sentences up to seven years. The Chinese legal system is in many ways still a work in progress, but it seems clear that the government understands that better intellectual property protection will benefit the country's development and trade relations internationally.

Looking to the future, China now needs to move to implement these laws and ensure they affect the desired changes in markets. In an interview with the *Seattle Times*, Joseph Tsang, a Hong Kong private investigator who has long worked on the counterfeiting issue, contends that "the law is more than adequate to punish the culprits. The question is how much time and resources the government in various cities will put in." It is important to note, however, that local officials have little incentive to enforce intellectual property laws because they do not want to put people out of work. The fake good industry is currently entrenched in Chinese society, with millions of jobs dependent on counterfeit trade.

How essential, then, is piracy to China's overall economy? Nelson Dong, a partner of a law firm that works with multinational technology companies doing business in China, recently explained that "piracy provides a safety valve of trickle-down gain to the man on the street, presenting jobs and economic freedom for people who have no other options." In Shanghai, for example, full-time workers make a standard wage of $85 a month. However, those who participate in the local Xiangyang counterfeit market can make as much as a few hundred dollars a month.

In some cases, the local government also turns their back on such transgressions because they stand to gain financially from black market dealings. For example, in the Xiangyang market, hundreds of tenants working to manufacture fake goods pay monthly rents as high as $5,000 a month. The rent costs alone bring millions of dollars to the leasers of the city's land.

Further, the *Seattle Times* reported that around half of all Chinese customs officials in some areas are involved in smuggling. The corruption does not stop there; it extends far up the chain of command. Local authorities don't comply with the new legislation because superiors have trouble enforcing the costs of disobedience. The country's sheer size and population make the piracy issue a difficult one to solve.

As long as enforcement lags behind legislation, counterfeit goods will continue to make their way across the national and world economy. Some businesses in China have adapted to this phenomenon by lowering prices to compete with black market levels, while others continue to seek government intervention. Chinese companies are also gaining awareness that they must build strong brands of their own in order to succeed, and they recognize that they cannot do so in an environment where copying goes unpunished. The process towards dismantling the black market will not be easy or straightforward. However, with these positive developments already underway, perhaps China will not remain a shopper's paradise for long. YE

[an opinion]

Click! for Labor

by joseph walker

WITH THE SIMPLE CLICK OF THE "Order Your Workers Now!" button, recruiting cheap foreign labor just got a lot easier. Sporting catchy website names like "Labormex.com" and "getaworker.com," specialized immigrant labor agencies are popping up all over the Internet, gladly catering to web-surfing employers in search of what they refer to as "innovative foreign labor solutions." The increasing prevalence of these sites raises the question: do these online middlemen increase efficiency in the low-cost global labor market, or do they instead facilitate exploitation and illegal immigration? In the transient frontier that is the World Wide Web, it is often tough to tell. But it is likely that online immigrant labor recruitment will continue to expand, precipitating increased scrutiny and regulation. Although many businesses may dislike the idea, it may be necessary for the government to heighten its involvement in order to preserve the job security of American workers as well as to maintain national security.

Demand for cheap labor is growing fast, and immigrant workers are filling the gap. Many employers – especially in industries such as agriculture, construction, and catering – are facing considerable challenges finding workers to fill their labor needs. Willing domestic workers are growing scarce and the immigrant workers to whom understaffed firms inevitably turn are often difficult to reach in a complex global labor market.

Historically, employers have outsourced the recruitment of both skilled and unskilled workers to specialized labor recruitment agencies, whose practices have been monitored and regulated by the federal government to limit exploitation and corruption. However, government agencies such as the Department of Labor and the Department of Homeland Security were unprepared for the impact the Internet has had on international labor recruitment. With the advent of the World Wide Web, labor recruitment agencies flocked online: white-collar job search sites such as Monster.com and CareerBuilder.com were the first to gain widespread popularity and recognition. Now, however, low-cost foreign labor agencies are joining the web-based labor recruitment boom at a time when illegal immigration is hotly contested in the political sphere. Spending considerable energy and resources on both the crackdown at the southern border and the expansion of guest-worker programs, officials must now deal with the regulatory nightmare of the Internet amidst a government unprepared and ill-equipped to monitor the online foreign labor market.

Yet American firms in demand of low-cost labor have nonetheless continued to increase their dependence upon convenient online foreign worker placement services. Although the issues related to Web-based recruitment agencies are complex, the process of obtaining foreign workers online is simple. The prospective employer completes a short online application, describes the nature of his business, indicates the type of work experience desired of his prospective employees, and specifies the number of workers needed. Immigrant worker agencies locate suitable low-cost foreign laborers and process their visas and work permits. The employer pays the online middleman for placing and processing each worker as well as the Department of Homeland Security for participating in the H2A or H2B worker programs. (The H2A and H2B visas allow a foreign national into the United States for temporary agricultural or non-agricultural low-skilled work, respectively.) After the foreign workers are documented and processed, the low-cost laborers are delivered directly to their employer for temporary employment in the United States.

The benefits of online foreign labor recruitment seem clear. Click-for-labor middlemen provide a hassle-free recruitment process for busy companies unfamiliar with foreign labor relations. Online immigrant worker agencies that have experience with the necessary procedures can locate low-cost foreign laborers and handle the complicated U.S. entry and documentation processes.

This specialization makes sense; companies have realized it is more efficient to pay an experienced agency to handle the recruitment process than to undertake it on their own. By taking advantage of the Internet, these web-based recruitment agencies can use their resources to connect employers with a hard-to-reach global labor force. Linking employers and employees across the world increases the efficiency and decreases the friction costs of labor markets. By providing work opportunities to low-skilled, low-income laborers, online labor agencies give foreign workers the chance to earn a living and support their families. Many foreign workers rely on temporary work in the United States for survival. On the other side of the equation, cheap labor enables struggling American companies to save costs and more effectively compete in the global marketplace. Many employers rely on low-cost laborers from Latin America and Asia when willing domestic workers are scarce.

But the positive effects of Internet-based foreign labor agencies on efficiency, expenses, and economic growth require a certain standard of credibility and accountability. Unfortunately, like any nascent development lacking scrutiny, the advent of online foreign labor agencies and their benefits can be overshadowed by an unregulated system susceptible to corruption and exploitation.

As with all things Internet-related, the online foreign labor market provides ample opportunities for both legitimate organizations and fraudulent outfits. Because the extent of government scrutiny has yet to catch up with the proliferation of online foreign labor agencies, it is difficult to discern exactly who is playing by the rules. The Web is host to scores of "foreign labor relations specialists," who use the power and anonymity of the Internet to connect employers and workers from around the globe. Although online foreign labor recruitment agencies abound, the overall market is highly fragmented, with a typical firm placing only a few hundred workers a year. With few regulations and little oversight, just about anyone can establish a recruitment site promising "innovative foreign labor solutions." While some of the click-for-labor sites online today appear fairly professional, others are downright frightening. One "international labor management" specialist advertises: "Hardworking people who are acclimated to tough physical labor and who have worked under severe warm weather conditions." Another boasts that its workers are "Accustomed to hard work and long hours as the professions dictate." Could the current system be rife with opportunities for abuse? You bet.

As a relatively new phenomenon, click-for-labor websites and the online foreign labor market are relatively unregulated and poorly understood. The Internet makes it easy for illegitimate organizations to exploit both honest foreign workers (by taking their money without delivering jobs) and responsible American companies (by charging placement fees without delivering workers). With little oversight to regulate how online labor middlemen operate their recruitment agencies, responsible workers and employers risk being scammed by dishonest and illegitimate organizations.

Even if foreign workers are placed with employers, they could be forced into unfair contracts, underpaid, overworked, or mistreated. As temporary immigrant workers, foreign low-cost laborers are already likely to face poor work conditions and abuse. Unregulated click-for-labor websites and the anonymity of their online operations further propagate existing faults in the system by dehumanizing foreign workers and limiting personal accountability. Even worse, persistent lack of government scrutiny risks the development of an extensive illegal online foreign labor market, a human trafficking underworld fraught with widespread worker exploitation and human rights violations.

The absence of government oversight of an expanding unmonitored Web-based foreign labor market also threatens both the job security of American workers and the national security of the United States. Increasing the efficiency with which low-cost foreign laborers are introduced into the country worries low-skilled American workers concerned about losing their jobs. Providing American firms with a convenient supply of cheap foreign labor and expanding temporary guest-worker programs reduce incentives for employers to search for suitable domestic workers. Furthermore, the entire click-for-labor online recruitment system makes it easier for illegitimate organizations to facilitate illegal immigration. Employers who utilize the services of Internet-based foreign labor recruitment agencies are outsourcing the authentication and documentation of immigrant workers to organizations who, when operating in the unregulated online environment, might be illegally avoiding the process altogether. Undocumented, unlawful entry into the United States poses an obvious national security risk to the country, and employers using unsupervised and potentially dishonest organizations are only exacerbating this problem.

Government oversight of the online foreign labor market is desperately needed. Greater government involvement is necessary in order to prevent further exploitation and illegal immigration. Yet, Internet-based foreign labor recruiting remains unfamiliar territory for both the Department of Labor and the Department of Homeland Security. Currently, the Department of Labor is responsible for registering companies participating in the H2A and H2B visa programs and maintaining a database of visa certifications. Hundreds of recruiting organizations are listed, but few Internet-based foreign labor placement firms are included because the Labor Department does not analyze online recruiters to determine legitimacy. Furthermore, the Labor Department's visa certification database is incomplete and unreliable, and the agency is under-staffed and under-funded. Similarly, the Homeland Security Department's Immigration and Customs Enforcement unit (ICE), which is responsible for enforcing immigration law, has also made little effort to properly regulate the foreign labor recruitment industry. ICE has failed to pursue both the employers of illegal immigrants and the recruiters responsible for their entry into the United States.

Because online foreign labor recruitment agencies are largely unmonitored by the Department of Labor, and the Department of Homeland Security does not have the capacity to completely eliminate illegal immigration, greater regulation of the online foreign labor market is clearly required. Labor and immigration laws must be strengthened and more actively enforced. Greater government involvement is necessary in order to prevent further exploitation and illegal immigration. The government must also ensure that Web-based immigrant labor agencies are appropriately honoring contracts, properly documenting workers, and treating foreign laborers fairly in the process. Legitimate, responsible, and fair online recruitment agencies can be an asset to a more efficient and competitive global labor market, but only if the government can enforce greater standards of credibility and accountability in the future. YE

last [word]

by joe citarrella

GREENWICH, CT – Three-year-old investor Johnny Edman has recently launched his own hedge fund, Toddler Capital Management, LLC. Over $1.2 billion has been committed to Toddler, which has said it will specialize in complex derivates known as exotics.

"He wanted to get an entrepreneurial start early," commented Edman's father, "and where are there fewer barriers to entry than starting a fund." Edman Sr., himself a securities attorney, further elaborated on these start-up challenges. "There are none," he said. "That's the great thing about them – basically no regulation, no real laws to get in the way, no problem!"

Hedge funds skate heavy regulation by only managing money for wealthy clients, known as "sophisticated investors," whom the SEC clearly knows are smarter than everyone else. This decision leaves them free to pursue risky strategies that dumb, poor people can't handle. "There's totally no way anyone without a lot of money would understand these opportunities," said Peter von Barron, an oil tycoon who invested $50 million of his own money with Toddler. "They're just too complex, too mystical, too awesome for peons to ever comprehend. God it's great to be rich!"

But others find the news to be yet another sign of excessive and worrisome activity in the private investment world. The number of hedge funds and private equity firms has ballooned exponentially over the past several years, and it seems that everyone is getting in on the action. Combine this fact with their notorious secrecy, and it is argued that the results might be lethal.

"Only here can a child, with absolutely no education, no experience, no credentials, and barely potty-trained start a f***ing hedge fund and raise $1.2 billion from a bunch of Jed Clampetts. This'll tank like all the others," asserted one skeptic, referring to the over 1,200 or so funds that have blown up in the past year alone.

Some have expressed concern that the current oversight of the private investment world is negligent at best. Only recently have these private money pools of the nouveau riche even really had to inform the SEC of their existence. Yet, numerous instances of fraudulent or potentially fraudulent behavior have been a part of the game for as long as anyone can remember.

In one infamous case just about a year ago, managers at "The Bayou Group," a "hedge fund" running money for clients including NFL athletes, were caught in a not-so-subtle scam. When manager Kirk Wright reassured investors of their collective $150 million dollars in assets, he was actually three zeros short. He forgot to inform them that he had taken the tiny liberty of lining his and his cronies' pockets with a cool $149,850,000. So while he may not have been on Institutional Investor's Alpha magazine's list of highest paid hedge fund managers, he "earned" just as much as or more than any other fellow schmuck. Wright, reportedly in exile on his private Caribbean island, was unavailable for comment.

Yet Edman's mother, Barbara, promises she'll keep a close eye on Johnny so that Toddler does not blow up or run into problems. "Sometime between his piano lessons and soccer practice I'll make sure he doesn't overleverage himself on any subprime mortgage strip contracts," she stated. "And as for fraud: it's okay, he's a good boy."

The desire to participate in the field should come as no surprise. With hedge funds easier than ramen noodles to start and more lucrative than the Colombian drug trade, who can blame anyone for trying? "Hedgies," as managers are called, live the high life if successful. Estates, yachts, 2.4 children, trophy spouses, caviar and all. They are the envy of, well, everyone.

"Don't hate the player, hate the game," said Edman. "I'm just livin' the American Dream. Not even four and I got the hook-up. Avid arts collector, fine golfer, champion horse breeder, opera enthusiast, you name it. Through Toddler Capital, I continue making the most of my God-given talents in order to enjoy the fruits of this great nation and its marvelous capital markets. Don't hate." YE

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