



### The Visible Hand

Spring 2004

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### From the Editor:

"a severe contest between intelligence which presses forward, and an unworthy, timid ignorance obstructing our progress" - The Economist

In Economics class we learned about being risk loving, risk averse and risk neutral. A person is considered risk-loving if she prefers an expected value of some uncertain lottery A to a known or deterministic sum of the same lottery. In other words, if you're at a casino and not satisfied until you've played at least a dozen games of blackjack, you are a risk lover. The Spring 2004 semester for the Visible Hand has been one of risks. We have risked crossing department lines by seeking funding from outside sources. We have risked expanding the

group of Economics Society members by seeking submissions from all of Cornell's undergraduates; by encouraging contributions from non-Economics majors. We have risked encountering new obstacles by taking the road less traveled.

Kantian theorists claim that everything individuals do is motivated by self-interest. It can also be argued that the nature of organisms is to seek perpetuity. Can these concepts be applied to an intangible organism, such as an idea? How does an idea like democracy, the republic, no-taxation-without-representation spread? It needs agents that are willing to incorporate the idea into their own system of beliefs, sometimes so fully that it causes them to incorporate its interests as their own. There comes a point when a distinction can no longer be made between their individual interests and that of the idea. An idea can be so strong that it has the power to change you from risk averse to risk loving, to make you want to wake up every morning, to make you want to share it with others. An idea can make you feel passion.

The Visible Hand, though tangible to the touch in paper form and arguably tangible in internet space, is also the intangible idea of global economic awareness, the inter-relatedness of our international climate and our lives serving as links between the past of our forefathers and the future of our children. The Visible Hand encourages passion not just for economics but for all risk-taking in support of your beliefs. In doing so, it must inevitably confront apathy-the intangible organism that tends to lie wherever passion does not. It is the organism that consumes the risk neutral or the risk averse. It is what the Spring 2004 issue of The Visible Hand tries to eradicate through its risk-loving stance. Be passionate about life, adhere to your beliefs, and do not be afraid of the obstacles on the road less traveled and you might just clear a brighter path for our future.

Sincerely Yours,

Anna Nesterova

#### **Our Mission**

1. To raise economic, political, and social awareness amongst American University students of our roles as citizens of the global community.

2. To address and analyze current news-worthy events while promoting further inquiry into how they fit within a historical context, as a link between our past and the possible realities of our future.

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### An Economic Revitalization: The Effects of the Closer Economic Partnership Agreement on the Hong Kong Special Administrative Region

By Humphrey Lee

The paper begins with an overview of Hong Kong's economy, followed by an overview of the recently established Free Trade Closer Economic Partnership Agreement (CEPA). It then examines the benefits of CEPA on the economy of Hong Kong with its redefined role.

Since the inauguration of China's open policy in 1979, Hong Kong Special Administrative Region (HKSAR) and the Mainland China (PRC) have started to become each other's foremost partner in investment and trade. With the labor shortage in Hong Kong during that time, the labor-intensive export-oriented industries of Hong Kong have gradually relocated to the Mainland, creating increasing flows of trade and investment between Hong Kong and the Mainland China. (Gao, 1997)

After over a century of British colonial rule, the handover of Hong Kong to China on June 1997 has led to much polemic and controversy, with people rushing to make pessimistic predictions. Against all negative forecasts, the transition has proved to be a smooth one. And contrary to most predictions, Hong Kong's most serious post-handover problems have been economic and social rather than political; both the pre-handover doomsayers' prediction of lost freedom under Beijing's repression and the optimal forecast of post-1997 economic prosperity have been off the mark (Wang, 1999).

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Since the outburst of the Asia Financial Crisis in 1997, Hong Kong has been confronting economic recession, rising unemployment, and the collapse of the real estate and stock markets. As Hong Kong seems to be recovering from the Asian crisis turbulence, China's accession to the World Trade Organization (WTO) has created another major shock to Hong Kong. Once again, negative predictions on the subject abound; opinions are varied and the effects of this major event are still mere speculation. With the outbreak of the mysterious pneumonia "Severe Acute Respiratory Syndrome" (SARS) in 2003 (Faber, 2003), the economy of Hong Kong plummeted to the bottom of the hill, with unemployment rate at record high, big loss in value in the property market, and retail sales at all time low.

Although Hong Kong's economy has come to a downturn, saying that Hong Kong is heading towards a Darwinian dead end would be a rather presumptuous statement. Rated by the Heritage Foundation of the US as the world's freest economy for the past seven years, Hong Kong has been one of the most open, outward-looking economies in the world. Under the principle of "one country, two systems," Hong Kong has enjoyed a high degree of legal and economic autonomy (Tung, 1997). With no tariffs, no quotas, no foreign exchange controls and no restriction on investments, Hong Kong has embraced the globalization of international trade and economic activities. Acting as a business broker for China, Hong Kong's economy, which has provided mainly financial and export services from foreign companies, has been highly dependent on foreign investment. Although it is true that Hong Kong is in a period of decline, Hong Kong doesn't seem to be falling off the face of the earth either: it just needs a push to get the ball rolling in the right direction again.

With the world investors following the island's unpleasant economic outlook with concern, mainland China has decided to offer a helping hand to boost Hong Kong's economy through a bilateral Free Trade Agreement (FTA) that is designed to attract foreign investments directly into Hong Kong. The Closer Economic Partnership Agreement (CEPA), which is referred to by the financial secretary, Anthony Leung, as a policy that "has given us an opportunity other countries can only dream of," has covered two broad areas, namely trade in goods and trade in services. On trade in goods, the Mainland China has agreed to apply zero import tariffs from January 1, 2004 for exports from Hong Kong meeting the CEPA rules or origin requirement. The Mainland China has also agreed to apply zero import tariffs latest by January 1, 2006 upon applications by local manufacturers for other codes maintained on China's tariff system and meeting the CEPA rules of origin.



On trade in services, a number of sectors will benefit in terms of additional market access or removal of specific restrictions in the Mainland market. Moreover, CEPA also aims to reduce and eliminate all discriminatory measures in an effort to boost trade and investment facilitation between Hong Kong and China. As a result, the policy has strengthened Hong Kong's role as the premier gateway for trade and investment moving into and out of the Chinese mainland. Furthermore, CEPA has addressed the issue of the development of high-value added and high potential property industries mentioned in the policy address of Hong Kong 2003 (Tung, 2003). Giving Hong Kong the first mover advantage, the Closer Economic Partnership Agreement has provided many benefits to both improve Hong Kong's current economic situation and to redefine the economic structure of Hong Kong.

#### Trade in Goods

#### Increase in Price Competitiveness

Under CEPA's provisions on trade in goods, the favorable terms of zero import tariffs on Hong Kong originated goods will immediately increase the price competitiveness of domestic exports. Starting from 1st January 2004, 273 types of products made in Hong Kong can be exported to the Mainland free of tariff. Moreover, zero tariffs will also be applied upon applications by manufacturers in Hong Kong to other products made in Hong Kong for accessing the Mainland market by January 2006. (CEPA Annex 1 Point 4) According to Hong Kong's Financial Secretary, Anthony Leung, "Hong Kong exporters would save 750 million US dollars a year through the removal of tariffs." (Press Conference of CEPA, July 2003)

#### Attractive to High-Value Added Industries

Aiming to attract new investments into the development of high-value added industries, CEPA has set forth a series of manufacturing requirements for products to quality for the zero import tariffs benefit. In order to take advantage of the zero import tariffs, a product has to be qualified as "made in Hong Kong" under the CEPA origin rules. (CEPA Annex 2 Point 2):

Under the Rules of Origin, "specific manufacturing process" criterion (CEPA Annex

2 Point 5) will be used for the 273 types of products covered in the initial phase for tarifffree importation. The rules of origin on other products will be governed by the "change in tariff heading" approach or the "30% valueadded" requirement. (CEPA Annex 2 Point 5)

While the requirements are consistent throughout all industries, Mr. Edward Leung, who is the Chief Economist of the Hong Kong Trade Development Council, foresees that:

"given the eased market access to the mainland and the stringent protection of intellectual property rights in Hong Kong, the city should be the first choice of foreign companies wishing to enter China's market with products and services that have high intellectual property content." (The British Chamber of Commerce in Hong Kong, 2003)

Capitalizing on the advantage of Hong Kong in intellectual property rights protection (Wang 1999), free trade and investment environment, CEPA has shaped Hong Kong to be a highly attractive place for foreign companies to develop high intellectual property value industries such as product design and brand name products (Wan, 2003) that target the Chinese market. Together with a comparative advantage on technology over China (Wang, 1999), Hong Kong's zero import tariffs advantage will also attract foreign investors to develop similar high value-added manufacturing activities in Hong Kong.

#### **Trade in Services**

#### First Mover Advantage

Under CEPA provisions, the liberalization of trade in services will strengthen Hong Kong's first mover advantage and enhance its economic development. Through upgrading the economic partnership between Hong Kong and China, CEPA has offered early market access to qualified Hong Kong-based companies in a total of 18 service industries, namely: management consulting, convention and exhibition, advertising, accounting, construction and real estate, medical and dental, distribution, logistics, freight forwarding, storage and warehousing, transport, tourism, audio-visual, legal, banking, securities, insurance and value-added telecommunications services. (CEPA Annex 4) Eden Y Woon, the Chief Executive Officer of the Hong Kong General Chamber of Commerce, has commented on the liberalization of trade in services that:

> "This (the liberalization of trade in services) is a phenomenon, which has already been recognized not only within Hong Kong, but also by foreign businesses and mainland provinces, cities, and enterprises. It is now up to businesses to use CEPA in their own way quickly." (Xinhua News Agency, September 30, 2003)

In concert with the zero import tariffs advantage, the liberalization of trade in services in Hong Kong will definitely catch the attention of foreign investors who want to break into the emerging Chinese market. Together with China's commitments upon accession to the WTO, CEPA has given Hong Kong a first mover advantage that will attract foreign investments in developing the local economy.

#### **Increase in Investment Activities**

The liberalization of trade in services will also increase overseas firms' incentives in merging or investing with Hong Kong's domestic companies. Due to the "Hong Kong Service Suppliers" (CEPA Annex 4) requirement imposed in the arrangement, a service company, regardless of the nationality of its investors or shareholders, must have substantive business activity in Hong Kong. While exact provisions vary across industry sectors, service companies have to fulfill the following criteria to be entitled to the benefits of CEPA (CEPA Annex 4):

- (1) the company must be incorporated under the laws of Hong Kong;
- the company has to own or rent business premises in Hong Kong;
- (3) the company must be liable to pay profits tax in Hong Kong;
- (4) the company must employ 50% or more of its total staff in Hong Kong.

#### ANALYZING ASIA

In addition, service companies are also required to meet a minimum residency requirement of three to five years to ensure that they have been engaging in substantive business operations in Hong Kong. To overseas companies, this residence requirement would require them to either merge or acquire Hong Kong certified firms in order to take advantage of the benefits offered by CEPA, increasing the investment activities in Hong Kong.

#### Benefits

#### Trade Creation

CEPA's zero import tariffs advantage will stimulate the volume of trade between Hong Kong and China. In recent years, consumers from Mainland China have become increasingly sophisticated, especially emerging middle class consumers who are willing to pay more for goods offering the latest international trends, good design and style. According to a recent study by Hong Kong Trade Development Council, middle class consumers from Mainland China generally have a favorable image of Hong Kong products, and over half of the surveyed consumers find Hong Kong products very appealing. Moreover, these consumers have a general conception that Hong Kong products are trendy, good in taste and creative in design. However, the high level of import tariffs has made Hong Kong products

#### Mainland import tariff rate on selected consumer products

	Mainland Import Tariff Rate
Clothing	14-25%
Processed food and beverage	17-35%
Precious jewelry	20-35%
Watches and clocks	13-23%
Cosmetics and toiletries	12-22%
Travel goods and handbags	17-20%
Footwear	13-24%

CEPA e	effect on the import price of Hong K Example: Precious jewelry	(ong Products
	Without CEPA	With CEPA
Import Price	=HK\$3,000*(1+27.5%)*(1+17%) =HK\$4,475.25	=HK\$3,000*(1+17%) =HK\$3,510
Savings	HK\$965.25 or 21.6%	

#### CEPA effect on the possibility of production in Hong Kong

	Example: Hand-made blouse Production in Hong Kong:							
			Factory Price	Import Prie	ce	on China		
	Design and Brand Value			Without CEP	Ą	With CEPA		
	HK \$300	500.00		698.49		585.00		
			Productio	n in China:				
De	sign and Brand V	alue	Import P	rice on China	E	Ex-factory Price		
	HK \$300			133.73		508.13		

too expensive to Mainland consumers.

As a result, many Hong Kong products have not been sold to the Mainland market even though they appeal to Mainland consumers. Hence, Hong Kong products, with increased price competitiveness under CEPA provisions, will find new opportunities to break into the Mainland market:

Given the enormous savings on import prices, Hong Kong manufacturers should therefore capitalize on CEPA to apply zero tariff treatment on their Hong Kong originated products that have good market potential on the China market. With the import tariffs savings, CEPA has created huge opportunities in trade, benefiting Hong Kong industries across many different sectors.

#### Brand building

Given the advantage from CEPA, a "made in Hong Kong" product or brand that is accepted by Mainland consumers can constitute to a considerable premium. Since Hong Kong has been under British's jurisdiction for over a century, Hong Kong's culture is considered to be closer to that of the western world by the mainlanders. As a result, Hong Kong designers are also considered by Mainland consumers as more creative and sensitive to the international fashion trend. Unfortunately, exports of highend products from Hong Kong to the Mainland were not competitive in the past due to high import tariffs. With CEPA, these Hong Kong originated products with high intellectual property values will become more price competitive and affordable in the Mainland market.

Given the positive association of Hong Kong in design and quality, lifestyle products with intellectual value substantially higher than the actual production cost such as designers' clothes, fine jewelry and fashion watches seems to be potential products for Hong Kong to target the Mainland market. Furthermore, as most high end products require imports of high quality raw materials, the savings in tariffs of these production inputs under CEPA would give Hong Kong an additional advantage for placing the products in Hong Kong:



Price difference be	ween product	ion in Hong	Kong (with and with	nout CEPA) and	d China:
	Import Price	on China	Production in China	Price Diffe	erences
Design and Brand Value	Without CEPA	With CEPA	Ex-factory Price	Without CEPA	With CEPA
HK \$300	698.49	585	508.13	190.36	76.87

As a result, Hong Kong manufacturers, with the cost benefit derived from CEPA, will find new market opportunities in creating a new high end market brand in Hong Kong. Furthermore, these new opportunities will be especially attractive to Hong Kong manufacturers who have already established distribution networks on the Mainland. Given the strength and advantage of Hong Kong companies in distribution on the Mainland and their good track record in intellectual property rights protection, Hong Kong companies will also be in a good position to form partnerships or negotiate licensing agreements with international brands to produce and distribute for the Mainland market as well.

#### Design and Manufacturing Investment

Although the increased opportunities in exporting Hong Kong originated products to the Mainland market will encourage existing local industries to expand their output and production capacity, the Government has expected that CEPA will also attract foreign companies to set up new production lines in Hong Kong. According to a recent survey conducted by Hong Kong Trade Development Council, most Hong Kong factories on the Mainland are producing under original equipment manufacturing (OEM) arrangements for overseas markets:

"Over the years, Hong Kong companies have been successful in original equipment manufacturing (OEM) arrangements. However, competition from suppliers in other Asian economies has been rising. To sharpen their edge for staying ahead of competitors, Hong Kong companies have moved to upgrade their OEM production by moving to other aspects of the product development cycle. The move towards the front end of the production cycle can be seen by the shift from OEM to original design manufacturing (ODM) arrangements. Some Hong Kong manufacturers are also moving to the back end of the cycle by becoming involved in the development of brand name products."

(HKTDC, July 2000)

Even though some companies have developed their own brands and have started selling to the Mainland domestic market, most of them are positioned only at the middle- or upper-middle end of the market level. Given that Hong Kong originated products with high value-added contents such as lifestyle and fashion products can charge a higher premium in the Mainland market, Hong Kong companies may consider starting new production lines to process premium products or new brands that target at the higher end market of China. Together with the zero import tariffs advantage under CEPA, Hong Kong companies will have even higher incentives to invest in such high value-added production lines in Hong Kong. However, Hong Kong's high cost structure will make cost efficient mass market product lines neither feasible nor profitable. Hence, only local industries that produce limited quantities of high priced products with good reputations, strong value-added contents, and the ability to achieve

high savings in tariffs will be able to benefit from CEPA's zero tariff arrangement.

Other than creating local incentives in design and manufacturing investments, CEPA will also be able to help Hong Kong to attract new foreign investment in industries that require strong protection of the proprietary technology or invention. Given Hong Kong's higher standard of intellectual property rights

protection over China, foreign investors may prefer setting up research and development (R&D) facilities or production of proprietary products in Hong Kong, especially for foreign companies which do not understand the Mainland's business environment. Moreover, Hong Kong's comparative advantage on technology over China will further attract foreign companies that require skillful laborers and advanced technological equipment in productions. As some industries in China are still restricted from forming wholly-owned foreign companies on the Mainland, foreign investors may also prefer to invest in a whollyowned foreign venture in Hong Kong instead of forming joint-ventures in the Mainland. With the added advantage of CEPA, China will give Hong Kong an edge to attract foreign investments into Hong Kong.

#### **Conclusion:**

From past to present, Hong Kong has held a pivotal position as both an aid for Chinese companies adapting to the free market economy and as a bridge and supporting hub for foreign companies who are willing to enter the Chinese market. The financial skills, infrastructure and the business connections between Hong Kong and China have provided an excellent environment in Hong Kong for business to thrive, enhanced the island's status as a key world trading power and reinforced its historical role as intermediary to China. As Chinese Premier Wen Jiabao pointed out in a speech after the signing ceremony of CEPA,

"the arrangement embodies a closer economic relationship between China



as a sovereign state and Hong Kong as a separate customs territory, and demonstrates the care and support for Hong Kong from the Central Government and the fellow folks of the motherland." (Xinhua News Agency, June 29, 2003)

Under the "one country, two systems" principle, CEPA will leverage on the institutional strengths of Hong Kong and the huge market potential on the Mainland for revitalizing the Hong Kong economy and modernizing the Chinese Mainland. Together with the eased market access to the Mainland and the stringent protection of intellectual property rights, Hong Kong will be the first choice to supply products and services with high intellectual property values for the Mainland market. In a constructive way, CEPA has successfully redefined Hong Kong's role in connecting China with the rest of the world, making Hong Kong more vital than ever before.

Hong Kong's major strengths rely on its well-developed financial, transportation and professional services. These comparative advantages will therefore be the central focus of Hong Kong's opportunities and benefits as the trade between Hong Kong and China rapidly increases under CEPA provisions. Although CEPA's immediate trade and employment creation is important to Hong Kong, the long term effect of CEPA is even more substantial. As the impact evolves over time, the pace of Hong Kong's economic restructuring will accelerate under CEPA.

Moreover, the opportunities arising from CEPA are not only limited to activities within the HKSAR but also extend to its neighborhoods. In his speech, Wen added that "in the mean time, we should step up efforts to promote economic cooperation between Hong Kong and the Pearl River Delta in particular." (Xinhua News Agency, June 29, 2003) Given the proximity of Hong Kong to the Pearl River Delta (PRD), CEPA has a special meaning to the closer co-operation of the two places. Supported by Hong Kong's strength in business services, the PRD will develop into one of the world's major manufacturing centers, enhancing the partnership of the Greater PRD under CEPA.

In his speech, Wen further mentioned that CEPA represents only the first step towards a closer economic partnership between the

Mainland and Hong Kong, adding that "in future, we should not only implement this arrangement in earnest but keep up our study in light of the new developments and update our policies and measures." (Xinhua News Agency, June 29, 2003)Although CEPA has created the environment for Hong Kong products, Hong Kong companies, Hong Kong professionals and residents to have an effective access to the Mainland China, CEPA does not provide them with privileges to enjoy exclusive rights in the Mainland market. In order to fully utilize the benefits of CEPA, Andrew Leung, who is the chairperson of the Federation of Hong Kong Industries, has called on Hong Kong companies to study the contents of CEPA carefully and form more creative business ideas. (Xinhua News Agency, September 30, 2003) All in all, creativity will be the key determinant for Hong Kong people and companies to succeed on the Mainland.

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#### Appendix A

Annex 2 Rules of Origin for Trade in Goods 5. On the criteria for "substantial transformation" set out in Article 2 (2) of this Annex, the two sides agree on the following:

(1)the criteria for determining "substantial transformation" may include the "manufacturing or processing operations", "change in tariff heading", "value-added content", "other criteria" or "mixed criteria";

(2)"manufacturing or processing operations" refers to the principal manufacturing or processing operations carried out in the area of one side which confer essential characteristics to the goods derived after the operations;

(3)"change in tariff heading" refers to the processing and manufacturing operations of non-originating materials carried out in the area of one side and resulting in a product of a different four-digit tariff heading under the "Product Description and Harmonized System Codes". Moreover, no production, processing or manufacturing operations will be carried out in countries or territories other than that side which will result in a chance in the four-digit tariff heading;

(4)"value-added content" refers to the total value of raw materials, component parts, labour costs and product development costs exclusively incurred in one side being greater than or equal to 30% of the FOB value of the exporting goods, and that the final manufacturing or processing operations should be completed in the area of that side. The formula for calculation is as follows: value of raw materials + value of component parts + labour costs + product development costs x 100% = 30% FOB value of the exporting goods

(i)"product development" refers to product development carried out in the area of one side for the purposes of producing or processing the exporting goods. Development expenses incurred should be related to the exporting goods. These expenses include fees payable for the development of designs, patents, patented technologies, trademarks or copyrights (collectively "these rights") carried out by the manufacturer himself, fees payable to a natural or legal person in the area of one side for undertaking development of these rights, and fees payable for purchasing these rights owned by a natural or legal person in the area of one side. The fees payable should be clearly identifiable under generally accepted accounting principles and the requirements of "Agreement on Implementation of Article VII of the General Agreement on Tariffs and Trade 1994;

(ii)calculation of the above "valueadded content" will be consistent with generally accepted accounting principles and the "Agreement on Implementation of Article CII of the General Agreement on Tariffs and Trade 1994;

(5)"other criteria" refers to methods agreed by both sides in determining origin, other than "manufacturing or processing operations", "change in tariff heading" and "value-added content" as set out above;

(6)"mixed criteria" refers to the use of two or more of the above criteria in determining origin.

#### Appendix **B**

Import price = ex-factory price X (1+tariff rate) X (1+VAT)

Ex-factory price: HK\$3,000

Average Tariff Rate: (20%+35%)/2=27.5% VAT: 17% (HK Census and Statistical Department, 2003)

#### Appendix C

Production in Hong Kong: Import price on China = ex-factory price X

#### (1+tariff rate) X (1+VAT) Ex-factory price in Hong Kong: Cost of material + Wages + Design and Brand Value

Production in China:

Import price of raw material in China = cost of raw material X (1+tariff rate) X (1+VAT) Ex-factory Price = Import price of raw materials + (wage + design and brand value) X (1+VAT) Variables:

Cost of imported fabric: HK\$100

Wages: HK\$100 in Hong Kong; HK\$20 in China

Design and brand Value: HK\$100-300 (from 1x to 3x of original value)

Mainland import tariff: 14.3% for fabric; 19.4% for finished blouse

VAT: 17%

(HK Census and Statistical Department, 2003)



# American Business Process Outsourcing in India: A Close Examination

#### By Rushi Parikh

What strategy are today's corporations employing to dramatically, yet efficiently, cut labor costs by thirty to sixty percent? Business Process Outsourcing.

As communication and travel became easier in the U.S. in the mid-twentieth century, manufacturers moved to wherever costs were lowest. Similarly, U.S. firms today are relocating office and white-collar work via international business process outsourcing (BPO) in order to cut labor costs. In today's Internet-dominated society, companies are more flexible and can easily link themselves to their suppliers through a commonly accessible web-based network, thereby making a company's location practically irrelevant [8]. Therefore, in order to maximize their profits, U.S. firms are outsourcing, or offshoring, certain jobs overseas to countries such as India whose labor rates are substantially lower than that of the U.S.

Engaging in BPO can dramatically lower costs for U.S. companies that take advantage of the significant discrepancies in labor rates between developing countries like India and the U.S. For instance, companies now can offshore office work to India where for \$1.50 to \$2 per hour Indian companies can hire college graduates to do jobs that would cost \$12 to \$18 in the U.S. According to financial

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experts, most U.S. companies can decrease net labor costs by 30 to 60 percent through BPO in India. This reduction of costs in turn allows firms to undertake other profitable tasks that had been impractical before BPO was utilized, such as following up bills regardless of the dollar amount [8]. According to outsourcing experts at Giga Information Group in Cambridge, Massachusetts, global revenue from offshore software work hit \$7.68 billion in 2002, a 20 percent increase from 2001. Forrester Research estimates that corporate budgets for offshore software outsourcing will more than double by 2004 [1]. Thus, costeffective BPO is becoming an increasingly lucrative means by which U.S. companies attain larger profits.

BPO in India not only saves money for U.S. companies, but it also increases labor efficiency. Outsourced jobs appeal to the most qualified Indians because these jobs generally have higher wages than most local positions. With starting salaries ranging from \$165 to \$210, these jobs attract India's diligent and dedicated college graduates. The desire to climb the occupational ladder forces such Indian college graduates to constantly work at improving their skills and consequently produce high quality work [6].

#### India: The Center of U.S. BPO

India serves as the primary target of

BPO for nearly all U.S. companies interested in offshoring jobs for several reasons. Firstly, India possesses a highly skilled, young, English-speaking, information technology (IT) savvy, and cheap (thirty to forty percent cheaper than its competitors) work force [6]. India's IT proficiency is reflected by the fact that it exports software to 95 countries worldwide and that 82 percent of U.S. companies involved in IT ranked India as their first choice for software outsourcing. Further evidence of India's IT capabilities is that Bill Gates acknowledges India as an IT superpower and has formed partnerships with Indian outsourcing companies Infosys and Wipro to carry out Microsoft's outsourcing plans. Another reason that India is the hottest destination for BPO is that it now has a stable, democratic government that has propelled India to become one of the world's ten fastestgrowing economies. Moreover, India currently has the third highest investment potential in Asia according to a study by the Export-Import bank of Japan [9].

BPO in India has its roots in the IT sector. The dot com boom along with the uncertainties of Y2K forced many U.S. companies to offshore coding jobs to India. Today, in an effort to reduce costs, non-menial and non-tech jobs are being outsourced to India as well [8]. Indian outsourcing companies, most prominently Infosys, Tata Consulting Services, and Wipro Technologies,



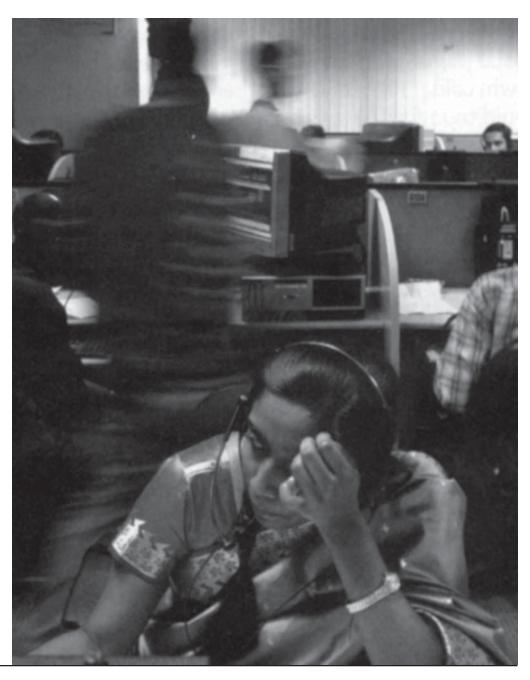
offer a wealth of services to U.S. companies seeking to BPO. India chiefly provides ITenabled services, particularly in the form of customer service call centers. Other services that Indian companies offer for BPO include animation, benefits administration, CAT-scan reading, credit card and insurance claims processing, higher-end engineering design, maintenance of legal databases, medical record transcribing, patient number crunching, payroll management, stock analysis, tax work, and telemarketing [6]. Therefore, the plethora of services a U.S. company can outsource to India surely contributes to India's reputation as the best place to offshore jobs.

According to Giga Information Group, nearly 200 of the U.S.'s Fortune 500 companies are conducting BPO today, with most of the offshoring of jobs taking place in India [1]. For instance, General Electric employs over 13,000 people to do a wide range of tasks including accounting and remote marketing. Citigroup houses more than 3,000 people in Mumbai and Chennai, American Express employs 2,000 Indians to process transactions and man a 24hour international call center in Delhi, HSBC employs 1,000 people in Bangalore, Hyderabad, and Pune to do back-office work, Charles Schwab staffs nearly 150 people in Bangalore to do programming, and World Bank employs a hundred people in Chennai [5]. Additionally, Amazon.com and America Online perform much of their e-mail customer service from India, and DirecTV does telemarketing from India. This trend of offshoring jobs to India has just begun. According to Forrester Research, Delta Airlines will soon shift its call centers to India, saving \$15 million in the process [7]. Several other leading corporations such as Dell, Procter & Gamble, Target, and Visa are beginning to partake in BPO in India, and so the influx of new outsourced jobs to India will continue to grow.

#### BPO's effect on the Indian and U.S. economies

BPO is consistently creating new jobs and enhancing investment in the Indian economy. This year, leading Indian outsourcing companies such as Infosys are expected to attain quarterly profits increases of up to 31 percent in response to the strong outsourcing demand from overseas [2]. Additionally, the National Association of Software and Services Companies (NASSCOM) estimates that India's share of back-office work will increase by more than sixty percent this year [1]. Despite these immediate successes, India has just begun to realize its outsourcing potential. NASSCOM predicts that India's revenue from IT-enabled services, which is currently \$829 million, will increase to nearly \$17 billion by 2008 due to BPO. NASSCOM also forecasts that the number of workers in the Indian IT-enabled services industry will rise from 68,000 employees this year to about 1.1 million employees in 2008 [6]. Thus, BPO will be an increasingly valuable venture for the Indian economy in the long run.

The major consequence of BPO on the U.S. economy is a higher rate of unemployment. Forrester Research predicts that 3.3 million U.S. jobs will be moved offshore by 2015. However, some economists downplay the significance of job outsourcing on U.S. employment rates. Gail Fosler, chief economist of the Conference Board, points out that each year the U.S. services sector loses about ten million jobs while it creates twelve million new ones [8]. "So a couple hundred thousand jobs a year going to





India is a drop in the bucket," she says. Marc Vollenwieder, head of the research consultancy firm Evalueserve, reports that only 0.2 percent of U.S. workers lose their jobs and remain unemployed for more than three months because of BPO. Furthermore, he says that for every hundred jobs displaced due to outsourcing, fifteen new ones are created in the U.S. to oversee them, and that for every \$100 spent on BPO, nearly \$140 is reinvested in the U.S. economy [3]. The drop in employment in the U.S. because of BPO, therefore, is not nearly as detrimental as it may appear. In fact, NASSCOM reports that BPO in India will indeed boost the U.S. economy and prompt economic growth. According to the NASSCOM study, the outsourcing of jobs is imperative in order to avoid a potential labor shortfall of 5.6 million by 2010 that would cost the U.S. economy a loss of up to \$2 trillion in output. So, protectionist measures against offshoring jobs to India will only hurt the U.S. economy [3]. BPO not only helps U.S. companies stay competitive in the global marketplace, but it also benefits the American consumer by combating inflation through the reduction in costs. More significantly, BPO is aiding the spread of wealth from rich nations like the U.S. to poor ones like India, and so BPO may indeed turn out to be "the great equalizer" [8].

Although data shows that BPO is beneficial to the U.S. economy, American backlashes against BPO are still likely to occur. Already, some U.S. states have legislated to prohibit government agencies from outsourcing tech services overseas. Several unions are also joining the fight against what they believe to be a particularly appalling and unpatriotic trend [3]. Recently, a major engineering group has requested that Congress investigate whether or not the BPO trend is a significant reason for the uncommonly high unemployment rate amongst U.S. engineers [1]. Hence, the evolution of offshoring jobs to India will unavoidably face resistance at times.

#### Disadvantages of BPO in India and the Methods to Remedying Them

Despite the multitude of economic benefits of outsourcing jobs to India, there are still several shortcomings to conducting BPO in India that the U.S. encounters. Firstly, poor and unreliable Indian infrastructure brings about constant power outages that may cause data centers to lose significant information. Secondly, time zonal differences as well as a large amount of religious holidays in India can result in costly delays. Lastly, there are many downsides to BPO in India that involve cultural and language barriers. According to Dave Lakhani, president of the business consulting firm Bold Approach Inc., only 40 percent of offshoring projects are successful because of these shortcomings. Further evidence of the downsides of BPO is that 66 percent of the companies surveyed by the esteemed PA consulting group were disappointed with their outsourcing contracts, 39 percent of them would renew contracts with their current outsourcing suppliers, and 15 percent of them planned to discontinue outsourcing altogether [4].

In order for BPO to be a long-lasting stimulus to the Indian economy, therefore, India needs to eliminate its shortcomings as an outsourcing destination. India must assemble stronger infrastructure, build marketing skills, and attend to cultural and language-related issues in order to become an even more appealing offshoring location. For example, call centers should try to hire Indian agents with neutral accents. These call center agents should also be trained in American culture and linguistics as well as educated about current U.S. events and U.S. holidays. Some agents may even use American names in order to make callers feel more comfortable. Most importantly, the cultural discrepancies between India and the U.S. need to be addressed. Differences in aggressiveness, approaches to problem solving, intimacy of professional relationships, views of family, and views of time constraints must be reconciled in order to make certain that a professional trust between the American outsourcer and Indian supplier is established [6]. By addressing its own shortcomings as an outsourcing destination, India can ensure that BPO will continue to boost its economy in the future.

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# Laotian Economic Development

#### By Lim Tam Wei

Tucked away in the heartland of Indo-China is the landlocked country of Laos. Laos is a former communist nation that has since transited to socialism and is adopting market economy while integrating with ASEAN formerly an organization allied with the US bloc to combat communism. However, politics is now left behind as the region concentrates on economic development. What is little known is that the government has started decentralizing and opening up its economy since 1986.<sup>1</sup> Since then, its growth has been quite remarkable considering the Asian financial economic crisis that hit Asia in 1997. Its growth rate has been 7%, although this is much aided by the fact that the Laotian economy starts from a lower level of economic development.2

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However, much more needs to be done. Currently, the transportation system in Laos is in need of empowering, especially in basic infrastructure like the railroad and roads for cars. Electricity, power generators and power lines are also some of the things badly needed in the Laotian economy. These infrastructural needs may be profitable areas in which investors can capitalize on. It would not be easy constructing these transportation routes as Laos is peppered with rugged mountains.

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The other infrastructure that requires greater investments is telecommunications. There are currently only 68 000 telephones in service for a country that has about 6 million inhabitants.<sup>3</sup> Communication over this mountainous country has however, vastly improved with 730 000 radios and 52 000 television sets in use in the Laotian households.<sup>4</sup> However, more needs to be done to help Laos catch up with the IT age and to connect its people to the Internet to enjoy information exchange. Currently, there is only one Internet service provider (ISP) and 6000 people with access to the Internet.5 In this aspect, her ITcapable neighbors like Singapore can help her develop IT capabilities.

Industrialization has only remotely touched Laos as its economy is still basically an agricultural one with very little surplus to be used as cash crops or as agricultural exports. Its agricultural sector takes up 51% of the overall economy.6 This has several weaknesses. It means that Laos basically has to rely on subsistence farming for the survival of its population and it would devastating should an external event (e.g. wars, drought, monsoon rain) ever affect this equilibrium of selfsufficiency. There is also the lurking danger of environmental problems such as deforestation. In addition, Laos practice almost a monoculture industry like rice cultivation and this runs the danger of overdependence on a single crop for survival.7 Moreover, it does not look like Laos can depend on agriculture for economic growth for too long a time as its physical geography only has 4% arable land and lots of rugged

mountains. It needs to depend more on industries to survive.

Laos also badly needs Overseas Developmental Assistance (ODAs). 46.1% of its population is currently under the poverty line, although unemployment rate remains manageable at around 5%.<sup>8</sup> Economic aid is crucial as there are still numerous unexploded bombs lodged in the Laotian soil, a remnant of the Vietnam-era days. Currently, Japan is the largest donor to this secluded Indo-Chinese state. Things have changed much since the Cold War days when the Soviet bloc was its largest donor.

Amongst its ASEAN neighbors, Singapore has been an active help to the Laotian people. Since 1974 when diplomatic relations between both countries was established, Singapore has been rendering assistance and empowering the Laotian economy.<sup>9</sup> Singapore has been cooperating with Laos in the areas of IT empowerment, English language training, financial management, etc.<sup>10</sup> All these training takes place within the framework of Initiative for ASEAN integration. In 1992, Singapore earmarked \$10 million dollars to assist Indo-Chinese ASEAN neighbors.<sup>11</sup>

Future trends indicate a rosier picture for Laos. Currently, Laos' major export destinations are France, Germany, Thailand and Vietnam.<sup>12</sup> But things may change in the near future. For example, its primary industries, e.g. tin gypsum mining and timber, will likely enjoy a boom with a rising Chinese economy that requires more primary raw materials. China is also likely to take an active interest in Laos' gemstone industry. Laos is also party of the Mekong tributary which runs through most of Indo-China and South China. There are plans to better integrate the economies found along the Mekong with various projects linking up trade in this river route. Meanwhile, the Laos trade is improving the economies of its neighbors. For example, Thailand saw a 10% increase in its trade with Laos to 1.1 billion baht in 2001.<sup>13</sup> Thailand also benefits from transit goods from other regions to the land-locked country of Laos with 78 million bahts of business.<sup>14</sup>

Laos' main sources of technologies transfer and procurement are Thailand, Singapore, Japan, China and Vietnam (countries which Laos buys most of its machinery from). Increasingly, China's hi-tech consumer products will play a role in Laos technological procurement needs. Already, Chinese TVs (e.g. brands like Haier) are popular with Vietnamese consumers. This trend is likely to hit Laos. In terms of technological transfer, having been integrated into ASEAN, technological procurement from its ASEAN neighbors may increase. Japan e-ASEAN scheme may facilitated even greater technological transfer in the IT aspects to Laos on top of Singapore's ongoing IT training for Laos under its Singapore Cooperation programs.

With its integration into ASEAN, Laos can also participate in the collective solutions for regional problems. The Bali bombing in Indonesia has awoken ASEAN to the dangers of terrorism in the region. This has prompted ASEAN to rethink their strategies towards terrorism which has been seen as disparate and not far-reaching enough. The call for ASEAN unity seems to have emanated strongly from all regional leaders, fearful that the bombing might give the wrong impression to international investors that the region is a hotbed for terrorists. The region does not need another event to further stereotype as another terrorist base for international terrorism. The long-term solution to the problem of terrorism is not war against terrorists as more counter insurgencies will only bring about more reprisal attacks. Instead, a sustainable long-term solution is to address the problem of terrorism and its seeds that sprouted the movement in the first place in Southeast Asia.



There are various schemes to address the impact of terrorism on ASEAN economies. For example, Singapore has initiated proposals to get tourist dollars back into the region again. The leadership in Singapore went down to the specifics of working together in projects that can boost confidence in the region. One of these projects could be in tourism where Southeast Asian nations can promote the diversity of the region to attract tourists back here again. One of the worst outcomes of the terrorist label was the numerous travel advisories issued by almost all developed nations for their citizens intending to visit Southeast Asia. Besides affecting one of the most important industries in the region, tourism, these travel advisories can similarly deter international investors from coming into the region.

To fend off this negative development, a new tourism agreement was signed on 3 November 2002 Monday by ASEAN leaders to introduce a coordinated approach in introducing smoother visa processing, more comprehensive upgrade of tourism sites, faster and less bureaucratic air services, lower travel taxes and the co-promotion of Southeast Asia as a travel destination. Laos is a signatory to this agreement. Through such initiatives, perhaps the badly needed foreign currencies can come back to the region again and provide some economic relief to the impoverished region. Laos has shown a tremendous political and economic will to propel itself into the world economy in the 21st century. Besides absorbing IT knowledge from its East Asian neighbors

like Japan and ASEAN friends like Singapore, Laos is also moving on to the space age with its own satellite launch. This modern comsat is expected to capitalize on the Beijing Olympics and broadcast its images to eager consumers looking to get a piece of the action – this applies to both domestic and external markets. Laos was introduced to this project by a Thai telecom media tycoon. Named the Lao Star Satellite Project, it would be operated by a Canadian company and launched on a French Ariane rocket.<sup>15</sup> Along with the rocket is Laos's soaring ambitions for its economy.

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# Strengthening Corporate Governance in Developing Countries

By Rima Bhattacharyay

In the wake of the collapse of Enron, WorldCom and Global Crossing, and following a series of revelations of firms' misrepresenting their financial statements, and with possibly more scandals yet be revealed in the most prosperous and developed countries in the world, investor confidence has faltered severely. This underscores the critical need for firms to improve corporate governance, even in economies that are known to possess "almost perfect" capital markets. Corporate governance is even more important in the developing countries of Asia with weak legal system, less developed financial markets and inferior quality of information.

In Asia, where the majority of the world's poor resides, bad governance hurts the unprivileged via both economic and noneconomic factors and processes. It weakens the effectiveness of markets and thus holds down investments, employment, income and economic growth. Therefore, good corporate governance is necessary for sustainable economic development and poverty reduction.

The Asian financial crisis that hit Southeast and East Asia in mid-1997 underscored the importance of good corporate

*Rima Bhattacharyay, '06, is a* sophomore with an Economics major in the school of Arts and Sciences governance. A recent publication of the Organisation for Economic Co-operation and Development (OECD) reported that "Poor corporate governance was identified as one of the root causes of the recent Asian financial crisis. The absence of effective disciplines on corporate managers, coupled with complicated and opaque relationships between corporations, their owners and their finance providers, affected severely investors' confidence in the region's corporate sectors. Economies that took early steps to improve corporate governance have been recovering from the crisis at a more rapid pace than those who have not addressed this issue. The Asian crisis showed that good corporate governance is important not only for individual corporations to raise capital but also for an economy to achieve sustainable growth" (OECD, 2001).

Even if the Asian crisis was not a "governance crisis", the strengthening of governance will improve the economics of the affected countries. In order to fully recover from the ongoing recession, there is a need for increased resource flow into Asian countries. This cannot be achieved without strengthening corporate governance.

#### What is Good Corporate Governance?

Corporate Governance may mean different things to various people. In very simple terms, it means the act or manner of governing a corporate institute. According to Nestor (2001), "the concept of corporate governance is two-fold and can be defined in the following manner: (a) It encompasses the relationship and ensuing patterns of behavior between different agents in a limited liability corporation; the way the managers and shareholders but also employees, creditors, key customers and communities interact with each other and give shape to a firm's strategy and identity in the capital, goods and labor markets. This could be considered as the behavioral side of corporate governance; (b) It also refers to the set of rules that frame private behavior.

These include company law, securities regulation in the form of codes. These are soft rules that rely on reputational mechanisms for their implementation. This could be considered as the normative side of corporate governance".

Good corporate governance could be defined as a governance framework that follows an international standard. The core OECD principles of corporate governance (as adopted by the OECD Ministers in May 1999) can be considered as an international standard. According to OECD, "the corporate governance framework should (i) protect the right of the shareholders; (ii) ensure the equitable treatment of all shareholders, including minority and foreign shareholders. All shareholders should have the opportunity to obtain effective redress for violation of their rights; (iii) recognize the rights of stakeholders



as established by law and encourage active cooperation between corporations and stakeholders in creating wealth, jobs, and the sustainability of financially sound enterprises; (iv) ensure that timely and accurate disclosure is made on all material matters regarding the corporation, including the financial situation, performance, ownership, and governance of the company; and (v) ensure strategic guidance of the company, the effective monitoring of management by the board, and the board's accountability to the company and the stakeholders." (OECD, 1999).

#### **Corporate Governance in Asian Countries**

The major challenges in strengthening corporate governance in many Asian developing countries include: (i) excessive government interventions; (ii) highly concentrated ownership structure; (iii) weak external discipline in the corporate sector; (iv) weak legal system and regulatory framework which fails to enforce contracts and disputes effectively; (v) lack of quality information which may hinder effective monitoring and encourage corruption and mistrust; (vi) lack of proper protection for investors which adversely affects further development of the financial markets and company access to finance; and (vii) lack of developed financial markets.

Another area that needs urgent attention is the serious inadequacies in the oversight of banks and other financial institutions. Good governance of banks also depends on the governance of central banks, banking supervisory agencies, capital market supervisory agencies, and the corporate sector. Banks can play an important role in imposing external discipline on firms.

According to an study of corporate governance and financing in five crisis-affected countries namely, Indonesia, Republic of Korea (Korea), Malaysia, the Philippines and Thailand, "the priority areas where corporate governance reforms could be most effective in the short or medium term are: (i) to strengthen external disciplining, a priority area is prudential regulations and supervision of banks and non-bank financial institutions; (ii) to strengthen corporate internal control, measures that improve standards of accounting, auditing and financial reporting systems and their

enforcement should be placed on top of the reform agenda and; (iii) initiatives to develop capital markets, promote market competition, advance the market for corporate control and encourage participation by institutional shareholders. Other issues that Asian governments should consider in reforming corporate governance are (i) how to balance the use of legal enforcement and self-regulation and (ii) how to account for each country's own specific conditions in formulating reform packages" (Zhuang, et. al. 2000). Even though the above reform measures were recommended to the above crisis-affected countries, these measures may be applicable to other Asian countries.

There is a need for corporate governance assessments by the regional governments in collaboration with international organizations. Ideally an assessment should include in-depth studies on corporate behavior of firms in different sectors together with governance issues and problems. The assessments should define priorities in governance and action plans for the concerned country that will best suit local environment.

To prevent a future crisis and minimize its potential impact in a region, countries need to continue strengthening their financial and corporate regulations. The fact that the contagion of the crisis was extremely virulent among neighboring countries highlights the need to establish and develop a regional corporate governance cooperation program.

A regional cooperation forum in this front can also provide a useful platform to exchange views and experiences, and will help sustain the initiatives and momentum required for strengthening and harmonizing corporate governance practices in this region. This will help countries develop a consensus on regional benchmarks, codes of conduct, and best practices across the range of public and private sectors, and establish indicators of good corporate oversight.

There is also a need for formal training and development of the management and board members of companies to inculcate governance skills. The training should focus on board members' duties and responsibilities, and on ways to be effective in balancing the interests of stakeholders

#### Conclusion

In recent years, there has been increased demand in Asian countries for stronger corporate governance. Closer coordination with international organizations and regional countries will boost the formulation and implementation process of corporate governance reforms and improve practices in the region.

Each regional country needs to develop a good corporate governance action plan that addresses priorities, reforms and measures that best suits its specific condition. The action plan should be based on a sound governance assessment and should include a roadmap toward achieving a high standard of corporate governance.

To effectively formulate corporate governance reforms, developing countries should encourage continuous policy dialogue among decision makers from public and private sectors as well as representatives of civil society, such as non-governmental organizations.

Finally, new legislation should be implemented so that firms adhere to compliance and accountability.

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### A Case Study: The Problem of Income Polarization in Hong Kong

By Humphrey Lee

This paper addresses some of the causes of unemployment and income dispersion in Hong Kong and then examines the effects of unemployment and income dispersion on Hong Kong's income distribution.

Since the establishment of WTO<sup>1</sup>, the United States and other developed countries have promoted the globalization of the world economy under the canonical principle of free trade, a theory which is believed to promise the optimal allocation of resources and sufficient productivity improvement to support the stable development of the global economy. Although OECD<sup>2</sup> countries have benefited from increased economic growth, globalization has promoted competition, which increases the problem of income dispersion through dividing successes and failures. While the roots to income dispersion vary across time and place, they seem to be associated with social and economic factors such as the labor-saving effect of technical progress, policy-related factors such as the rising unequal distribution of industrial and financial assets, and the inequality in distributing land and human capital. Depending on the economic structure of the country<sup>3</sup>, these policies can lead to possible erosions in wage negotiations, union

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Unemploy	ment Rates on S	elected Deve	loped Coun	tries
	Netherlands	Sweden	Britain	Hong Kong
Jnemployment Rate (2002 est.)	3.0%	4.0%	5.2%	7.5%

representations, and the regulations of wages in the public and monopolistic sector, resulting in greater unemployment and depression of the labor share in total income. On the other hand, recent studies have indicated that there exists a widespread perception of which wealthier countries seem to have both lower income dispersions and lower unemployment rates. (Quibria, 2002) Given Hong Kong has undergone fundamental social and economic changes in the past few years, it would be interesting to analyze the problems of unemployment and income dispersion in Hong Kong and their relationships with its wealth.

Since 1995, Hong Kong has ranked eighth in the world for its per capital income. (Central Intelligence Agency, 2003). In 2002, Hong Kong has still ranked in the same league as many developed European countries such as Britain, Sweden, and the Netherlands, with about US\$26,000 in per capita income.

According to the scale, Hong Kong should be considered to be a richer economy than the British or the Swedish economies. However, a comparison of unemployment

	GDP per Capi	ta on Selected De	veloped Countries	
In US \$	Britain	Sweden	Hong Kong	Netherlands
GDP Per Capita (2002 est.)	25,300	25,400	26,000	26,900
(Central Inte	elligence Agency	, 2003)		



### rates among these countries shows contrasting results:

Instead of being one of the richer countries, Hong Kong should be considered as the poorest country among these countries according to the unemployment statistics. Given the contrasting results from the above data, it seems that the statistics has created "an illusion of wealth" which misrepresents Hong Kong's living standard. In fact, the unemployment rate of Hong Kong has risen threefold from 3% in the early 90's to today's all time high of 8.6% in 2003<sup>4</sup>. Furthermore, Hong Kong's nominal wages have been constantly decreasing since the early 90's and the income gap between the low quartile and higher quartile has grown from HK\$4,000 in 1985 to a stunning HK\$10,500 in 2002<sup>5</sup> (Hong Kong Census and Statistical Department, 2003).

Given the seemingly inaccurate representation of Hong Kong's wealth and people's increasing concerns on unemployment and income dispersion, various organizations have begun studying Hong Kong's income distribution. Among these organizations, TNS, which is one of the world's leading market information groups, has found out the following result from a recent survey conducted on behalf of the World Economic Forum:

"Employment and narrowing the gap between the rich and poor are two of the leading issues that the Hong Kong public expects to be addressed by government." (Yap, October 14, 2003)

Wander Meijer, who is the managing director of TNS Hong Kong, has further commented that

"With a quarter of Hong Kongers highlighting this issue as another top focus for government attention, our findings reveal that social inequality has leapt to the forefront of the public's consciousness as one of the consequences of recent economic

Unemployed Po	pulation in Hong k	(ong SAR
	1997	1998
Unemployed Population	71,200	154,100
yr-to-yr % increase		116.4%
(Hong Kong Census of Statistical Department,		

difficulties." (Yap, October 14, 2003)

Moreover, they have found that social and economic issues can lead to problems on unemployment and income dispersion. As the economic and social structures of Hong Kong has undergone fundamental changes through all the crises and financial turmoil in the past few years, it is therefore very essential to understand these fundamental social and economic issues that lie beneath the problems of unemployment and income dispersion in order to provide possible solutions to help relieve the economic problems in Hong Kong.

#### **Causes of Unemployment**

#### Asian Financial Crisis

The Asian financial crisis has created significant impacts on the rise of unemployment in Hong Kong. Beginning with the collapse of the Thai currency in early July of 1997, the financial crisis has toppled one "tiger" after another. The resulting chaos has even challenged the solvency and stability of the once seemingly invincible Asian economic hegemony and the commonly accepted model of Asian economic development and prosperity. Confronting economic recession, rising unemployment and the collapse of the real estate and stock markets, the economic turmoil in South-east and East Asia has "underscored the vulnerability of these once high growth and full employment economies, where unemployment rates have doubled and even tripled in the space of a few months."<sup>6</sup> (Marx, May 25, 1999)

Hong Kong, unfortunately, has not been able to escape from the financial crisis and suffered from rise in unemployment as well as the others. Since October 1997, Hong Kong has gone through the most difficult financial time ever.<sup>7</sup> In between October 1997 and December 1998, the unemployed population has increased from 71,200 to 154,100<sup>8</sup>, which is about twice as many people without work than before the crisis in just a year's time.

Moreover, the subsequent burst of the bubble economy in Asia has worsened the unemployment situation in Hong Kong. In the past decade, Hong Kong's ability to source materials, to merchandise, to market and to export its goods has supported its high cost structure and its high wages. Although foreign investors and local businesses have expressed their concerns on the high cost of business operations in Hong Kong (Wang, Ch.7, 1999), the fact that Hong Kong is the gateway to rapid growing China and one of the major financial centers in Asia have contributed to local and overseas businesses to invest in Hong Kong.

As the economic growth of Asia has slowed down after the burst of its bubble economy, the profitability of businesses in Asia have dramatically gone down. With a weaker prospect of profits, many investors have halted their investment in Asia. In order to sustain their operations, businesses have begun cost-cutting through reduction of workers.<sup>9</sup> (Marx, May 25, 1999) All together, the Asian financial crisis has contributed to a



Nu	mber of p	persons en	gaged in N	<b>Anufactur</b>	ing from 19	990-2000	1
In Thousands	1990	1995	1996	1997	1998	1999	2000
Manufacturing	715.6	375.8	325.1	288.9	245.5	244.7	226.2
Yr-to-yr increase		-47.48%	-13.49%	-11.14%	-15.02%	33%	-7.56%
% increase from 1990 to 2000							-68.39%

 (Hong Kong Census and Statistical Department, 2003)
 "Hong Kong Social and Economic Trends, 2001 Edition" Table 2.4, Hong Kong Census and Statistics Department, Dec 2001.

#### **Causes of Income Dispersion**

Migration of Manufacturing Industry

The migration of the manufacturing sector from Hong Kong to Mainland China has increased the income dispersion of Hong Kong. Acting as a hub connecting the Chinese market with the world, the economy of Hong

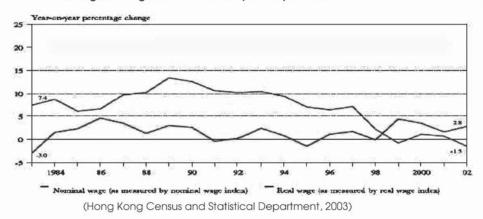
major increase of unemployment rate in Hong Kong.

#### Structural Changes

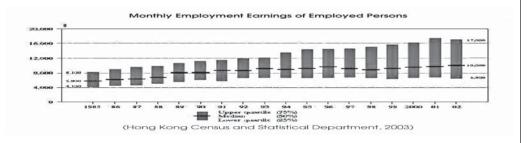
The structural change from an industrial economy to a knowledge economy in Hong Kong has also contributed to the prompt rise in unemployment. According to an interview conducted by Hong Kong Voice of Democracy in 1998, Mr. Chong Chan Yau, who is the director of Fundraising and Outreach of Oxfam Hong Kong<sup>10</sup>, has believed that:

"There are two causes for the recent serious unemployment, the first one is economic downturn, and the second one which is becoming more and more significant is the structural change in Hong Kong society."<sup>11</sup> (Hong Kong Voice of Democracy, 1998)

In the past, the manufacturing industry has been the most significant factor in our economic development. Since the opening of the China market in 1979, Hong Kong's economy has gradually changed from manufacturing industry-oriented to the tertiary industry-oriented. Through the transformation, the main pillars of Hong Kong's economy have shifted from commercial, manufacturing, and industrial to financial, property, and the development of science and technology. Consequently, many manufacturing activities in Hong Kong have relocated, resulting in a decline of labor force in this sector. Changes in Wages for Workers at Supervisory Level and Below



From 1990 to 2000, the decrease of labor in the manufacturing sector has been approximately 70%, dropping the employed population as much as three folds from 715,600 in 1990 to merely 226,200 in 2000. Due to their inability to provide the required skills and knowledge in other emerging industries such as retailing, trading and finance, many of these unemployed workers have become remain unemployed (Lui, 1997). As a result, the structural changes have also contributed to the increase of unemployed population in Hong Kong. Kong has become closely interlocked with China after the turnover of Hong Kong in 1997. Among other things, one of the consequences of this economic integration has been the migration of the manufacturing sector of Hong Kong into the Mainland, where labor and other costs are lower, leaving behind a lot of workers unemployed in Hong Kong. With the lack of job opportunities in other sectors of the economy, structural unemployment in Hong Kong has gone up significantly. On the other hand, the absorption capacity of these emerging sectors for surplus workers has also been





#### ANALYZING ASIA

In HK \$	1985	2002	Difference	Total % Increase	Avg. yr-to-yı Increase
Income Gap*	10,800	21,000	94.44%	3.	99%

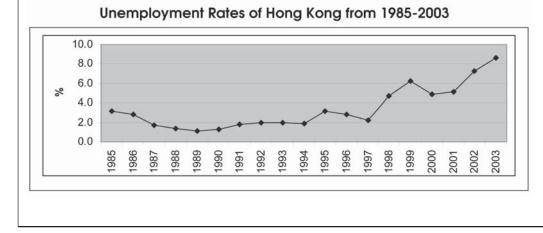
<sup>1</sup> Please refer to Appendix A for detailed explanations of calculation methods

adversely affected by the slowdown of the economy after 1997. As a result, the take home pay for the workers in Hong Kong, with the decreasing opportunities and increasing demand, has been significantly affected.

According to the chart, the nominal wages of these workers has experienced a uniform downward trend since 1990. With the drastic reduction in wages of this lowerincome group, the income gap of has therefore been widened (Wang, Ch.5, 1999). As a result, the migration of the manufacturing sector, among other things, has dispersed the income distribution of Hong Kong.

#### Heavy Influx of Chinese Immigrants

Other than the migration of manufacturing industry to China, the constant and heavy influx of Chinese immigrants into Hong Kong has also played a role in widening the income gap of Hong Kong's income distribution. In addition to the outsourcing to China, the inflow of cheap Chinese labor to Hong Kong has intensified the problem of income dispersion in Hong Kong. After the migration of the manufacturing industry to China, the decrease of job opportunities in Hong Kong have left a large population suffering from unemployment or decrease in wages. Together with the competition from the Mainland immigrants who are willing to work at a much lower wage than Hong Kong workers (Wang, Ch.9, 1999), Hong Kong's employed population, especially the less educated and unskilled workers, are forced to take lower wages in order to compete with the Mainland immigrants. According to the Graphic Guide on Hong Kong's Development (1967-2002), the increase of wages in the lower quartile range over the past 17 years (1985-2002) has been merely 59%, while the upper quartile range has enjoyed an increase of 110% from 1985-2002.



Moreover, the average year to year increase of the lower quartile range has just been 2.9%, which has barely caught up with the inflation rate of 3% in 2002<sup>12</sup>. As a result, the uneven growth in the lower quartile income range has widened the

income gap of Hong Kong, causing further income dispersion in Hong Kong.

#### Consequences

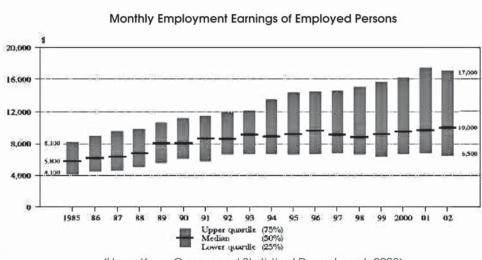
#### Unemployment

In the Encyclical Letter of Pope John Paul II on the Dignity of Work 18, it claims that "Unemployment is a terrible misfortune. It can become a total disaster for society when it reaches a certain level." (Laborem Exercens, Encyclical Letter of Pope John Paul II, on the Dignity of Work, 18) Through the structural changes and the aftermath of the financial crisis, unemployment rate has risen from approximately 2.5% in 1985 to one of the highest in Asia sitting at a stunning 8.6% in 2003.

#### **Income Dispersion**

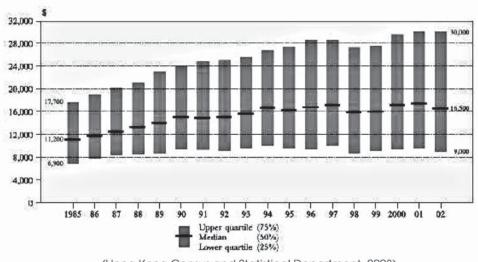
On the other hand, the migration of manufacturing activities and the heavy influx of Chinese immigrants have made the poorer to become poorer, while the richer have not been significantly affected by these adverse factors. All together, the income gap of the income distribution of Hong Kong has been widened.

A further analysis of the income distribution has shown that the income gap between the low quartile and high quartile has widened from HK\$4000 in 1985 to HK\$10500 in 2002, which is a total increase of 162.5% in income gap over the course of 17 years. The problem of income dispersion is still astounding when we consider each domestic household as an individual unit. With a gap of HK\$10800 in 1985 and a gap of HK\$21000 in 2002, the



(Hong Kong Census and Statistical Department, 2003)

Monthly Domestic Household Income



(Hong Kong Census and Statistical Department, 2003)

income gap among the domestic households has experienced a 94.4% increase in income gap between 1985 and 2002.

#### **Effects on Income Distribution**

Together with an abnormally high unemployment rate and a dramatic increase in income gap, Hong Kong, needless to say, has experienced significant changes in its income distribution for the past decade. According to the changes in household income distribution from 1971-1996, the income distribution has become increasingly skewed.

With the dramatic decrease of the share of total household income in the first nine deciles and the rapid increase of 20.81% in the share of the richest 10 percent of households, the income distribution in 1996 has become significantly more skewed than

before. Although the information on income distribution from 1997-2002 is not available. Joseph Yam, who is the Chief Executive of Hong Kong Monetary Authority, has claimed that "the restructuring of Hong Kong's economy has contributed to a skewing of the distribution of income in Hong Kong."13 (Yam, February 6 2003) As the economic restructuring of Hong Kong is still in progress, it can be inferred that the skewing of income distribution should have continued. Together with the rapid rise in unemployment and drastic decrease in wages among the lower-income groups in recent years, it can be further inferred that the share of the total household income among the lower-income groups  $(1^{st} to 5^{th})$ docile) would have increased after 1996. Given the increase of the share of total household income in the lower deciles and the already high share of total household income in the highest docile, Hong Kong might be experiencing the problem of income polarization<sup>14</sup>; an effect which would lead to a decrease of population in the middle class through the rise of population in both the lower and higher income groups.

THE VISIBLE HAND

#### **Conclusion:**

Other than the available empirical data on unemployment and income distribution, the Gini coefficient, which is a measure of inequality in a population, has also been a widely used tool in measuring income dispersion. According to the Economist,

"The Gini coefficient<sup>15</sup> measures the inequality of INCOME distribution within a country. It varies from zero, which indicates perfect equality, with every household earning exactly the same, to one, which implies absolute inequality, with a single household earning a country's entire income. Latin America is the world's most unequal region, with a Gini coefficient of around 0.5; in rich countries the figure is closer to 0.3.<sup>16</sup>" (Economist Tools: Economics A-Z,

Income Group		% Increase					
	1971	1976	1981	1986	1991	1996	(1971-1996)
Lowest decile (10%)	2.3	1.9	1.4	1.6	1.3	1.1	-52.17%
2 <sup>nd</sup> decile	3.9	3.5	3.2	3.4	3	2.6	-33.33%
3 <sup>rd</sup> decile	5.1	4.6	4.4	4.4	4	3.6	-29.41%
4 <sup>th</sup> decile	5.1	5.5	5.4	5.4	5	4.6	-9.80%
5 <sup>th</sup> decile	7	6.8	6.5	6.4	6.1	5.7	-18.57%
6 <sup>th</sup> decile	7.3	8.1	7.8	7.6	7.4	7	-4.11%
7 <sup>th</sup> decile	9	8.8	9.4	9.1	9	8.5	-5.56%
8 <sup>th</sup> decile	11	11.3	11.5	11.4	11.4	10.6	-3.64%
9th decile	14.7	15.9	15.2	15.2	15.5	14.5	-1.36%
Highest decile	34.6	33.6	35.2	35.5	37.3	41.8	20.81%
Total	100	100	100	100	100	100	
Gini Coefficient	.4	.4	.5	.5	.5	.5	

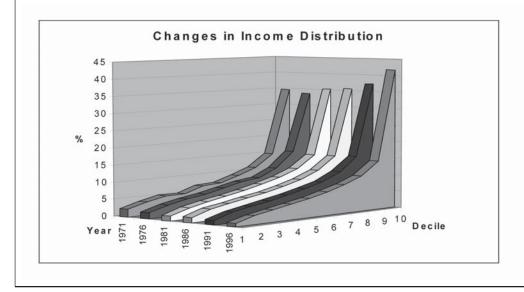
#### 2003)

With a Gini coefficient at about  $0.5^{17}$ , Hong Kong, which has a Gini coefficient just below Mexico<sup>18</sup>, can barely be considered as one of the developed countries according to the definition.

Tung Chee Hwa, who is the chief executive in Hong Kong, has pointed out in his 2003 Policy Address that

"Over the past five years, we have successfully implemented the 'One Country, Two Systems' and weathered the Asian financial crisis. At the same time, we have set the broad direction of our future development and for steering Hong Kong out of its economic difficulties." (Tung, 2003)

Given the rising seriousness of unemployment and income dispersion in Hong Kong, the Government should take on the responsibility and address to these immediate concerns. As most of the newly elected Legislative Council memberdesignates have advocated for eradicating unemployment in their platforms, it is hoped that they will urge the Government to adopt practical measures to help people with



employment difficulties. Other than addressing the issues of unemployment, the newly elected Legislative Council should also assume the responsibility to monitor Government policies and programs in order to strive for a harmonious and caring community. On the positive side, the Social Welfare Department has already introduced various new measures related to social welfare reform, raising concerns and debates within and outside the social welfare sector in recent years.

As Hong Kong grapples with this issue, it is also essential to recognize that long-term focused policies will bring much greater benefits to the community than short term income redistribution policies. As Tung has pointed out, "the common goal of our community is to achieve long-term prosperity and stability." (Tung, 2003) Other than the questionable sustainability of short term policies, policies on income redistribution might create side effects such as introducing distortions in the labor market to the society. Hence, the Government should focus on long-term social policies that will enhance education and skills, social welfare, and economics. A good example is the establishment of Closer Economic Partnership Agreement (CEPA), which is a free trade agreement that is believed to give constructive improvement to the economy. When attacking the problem, the government must bear in mind that policies that seem to be very noble or justifiable can also lead to disastrous and irreparable impacts on others, doing more harm than good.

#### FOOTNOTES

 WTO stands for World Trade Organization
 OECD stands for Organization for Economic Cooperation and Development
 These factors may have different effects on different economic structures.
 Source: General Household Survey Section
 Census and Statistics Department
 Source: General Household Survey (2), Census and Statistics Department
 Marx, Kerstin. "Economic Crisis Causes Massive Unemployment in Asia." Asia Times



Magazine, May 25, 1999. <www.atimes.com> 7. Hong Kong remained almost untouched by the Asian turmoil until a massive sell off of its share market in the week of 20

October. The dive in the market was driven by fears of a downturn in the Hong Kong economy

8. Hong Kong Census and Statistical Department, 2003

9. Marx, Kerstin. "Economic Crisis Causes Massive Unemployment in Asia." Asia Times Magazine, May 25, 1999. <www.atimes.com>

10. Oxfam Hong Kong is one of the members of Anti-Unemployment Coalition which is organized by various Hong Kong activist groups.

11. Mr. Chong Chan Yau was interviewed by Hong Kong Voice of Democracy on June
19, 1998. (http://www.democracy.org.hk)
12. "Hong Kong Social and Economic Trends, 2001 Edition" Table 2.4, Hong Kong Census and Statistics Department, Dec 2001.

13. "Hong Kong Social and Economic Trends, 2001 Edition" Table 3.1, Hong Kong Census and Statistics Department, Dec 2001.

14. Please refer to Appendix A for detailed explanations of calculation methods.

15. Source: CIA World Factbook (http:// www.odci.gov/cia/publications/factbook)16. Hong Kong Census and Statistical Department, July 2003.

17. "Hong Kong Social and Economic Trends, 2001 Edition" Table 3.3, Hong Kong Census and Statistics Department, Dec 2001.

18. Please refer to Appendix A for detailed explanations of calculation methods.

19. Please refer to Appendix A for detailed explanations of calculation methods.

20. Wang, Gungwu. Hong Kong in China: The Challenges of Transition.Ch.5 Pp.109.Singapore: Times Academic Press, 1999.21. Yam, Joseph. "Income Distribution." Hong Kong Monetary Authority. February 6, 2003.

22. Please refer to Appendix C for an

arbitrary example of the effect of income polarization on income distribution.

23. A mathematical definition of the Gini coefficient can be found in Appendix B 24. Economist Tools: Economics A-Z. (http://www.economist.com)

25. Wang, Gungwu. Hong Kong in China: The Challenges of Transition.Ch.5 Pp.109.Singapore: Times Academic Press, 1999.26. Mexico has a Gini coefficient of 0.525 according to World Bank data.

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nathworld.wolfram.com>

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18. Wang ShaoGuang and Hu Angang. The Political Economy of Uneven Development. New York: M. E. Sharpe, Inc., 1999.

19. World Bank. 2003 World Development Indicators CD-ROM, 2003.

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#### Appendix A

Difference = Data on Year 2002 – Data on Year 1985

Total % Increase = [(Data on Year 2002 – Data on Year 1985) / Data on Year 1985] X 100%

Average yr-to-yr Increase = [(Data on 2002/ Data on 1985)^(1/ 2002-1985)] - 1

#### Appendix **B**

### The Concept and Measurement of Income Disparity:

#### Lorenz Curve

The Lorenz curve is used in economics and ecology to describe inequality in wealth or size. The Lorenz curve is a function of the cumulative proportion of ordered individuals mapped onto the corresponding cumulative proportion of their size. Given a sample of n ordered individuals with x'i the size of individual i and x'1 < x'2 <...< x'n, then the sample Lorenz curve is the polygon joining the points (h/n, Lh / Ln), where h = 0, 1, 2, ...n, L0 = 0, and Lh = "i=1, h x'i . Alternatively, the Lorenz curve can be expressed as

L(y) = [0 + y xdF(x)] / a

where F(y) is the cumulative distribution function of ordered individuals and å is the average size.

If all individuals are the same size, the Lorenz curve is a straight diagonal line, called the line of equality. If there is any inequality in size, then the Lorenz curve falls below the line of equality. The total amount o f inequality can be summarized by the Gini coefficient (also called the Gini ratio), which is the ratio between the area enclosed by the line of equality and the Lorenz curve, and the total triangular area under the line of equality. The degree of asymmetry around the axis of symmetry is measured by the so-called Lorenz asymmetry coefficient.

#### Gini Coefficient

The Gini coefficient (or Gini ratio) G is a summary statistic of the Lorenz curve and a measure of inequality in a population. The Gini coefficient is most easily calculated from unordered size data as the "relative mean difference," i.e., the mean of the difference between every possible pair of individuals, divided by the mean size å,

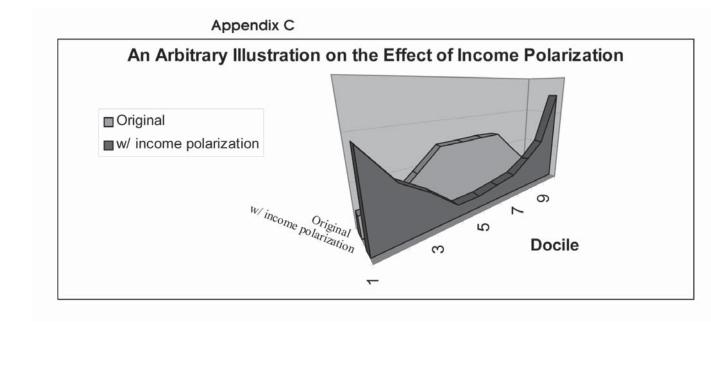
$$G = [ \underset{i=1, n}{"} \underset{j=1, n}{"} abs(x_i - x_j) ] / n^2 a$$

Alternatively, if the data is ordered by increasing size of individuals, G is given by

$$G = [``_{i=1,n} (2i - n - 1) x'_i] / n^2 a$$

(Dixon *et al.* 1988), correcting the typographical error in the original paper (Dixon *et al.* 1987).

The Gini coefficient ranges from a minimum value of zero, when all individuals are equal, to a theoretical maximum of one in an infinite population in which every individual except one has a size of zero. It has been shown that the sample Gini coefficients defined above need to be multiplied by n / (n-1) in order to become unbiased estimators for the *population* coefficients.





### Australia as a Regional Power? A Political Economy Assessment of the Australian Armed Forces

by Lim Tai Wei

According to the Howard doctrine, Australia wants to be the US deputy in the Southeast Asian and the Pacific Islands regions. This doctrine was announced in 1999 when Prime Minister Howard declared Australia as American's deputy sheriff in the Pacific.<sup>1</sup> It has shown the political will to do so as well, participating in peacekeeping operations in East Timor and having an active role in the Fiji coup. This new political will was even entrenched in a government White Paper released in 2000 calling for a military interventionist doctrine.<sup>2</sup> The question in this paper is viewed from a political economy perspective, and examines the issue of whether such a role can be sustained economically, political will aside.

#### Comparing Australia with Immediate Neighbors

Australian spending on the military has traditionally been low, either out of austerity reasons or self-limitation. In comparison with the other advanced nations of the world, this is true. But compared to its immediate neighbors, this is not so. At US\$7.6 billion, Australia's

Tai Wei, Lim is a graduate student at Cornell University. He holds a law degree from University of London, a degree in political science, an honors degree in Japanese studies and a masters degree in political economy from National University of Singapore. budget is significantly higher than the Indonesian military budget that has been hit badly by the 1997 Asian financial crisis.<sup>3</sup> Although the Australian budget is much higher than its ASEAN counterparts (with perhaps the exception of Singapore), it is numerically weak compared to countries like Indonesia. The latter maintains a 200,000 strong land force compared to Australia's 24 000 regulars and 16 000 reserves.<sup>4</sup> There are plans to address this with the expansion from 4 to 6 army brigades and an increase of 3000 men.<sup>5</sup> However, even with this expansion, Australia is still vastly understrength for a regional role.

#### **Comparing Australia with Regional Powers**

The real comparison, however, if one wants to be a regional power would be comparing with the other major powers in the region. Australia's budget is now half of that China, possibly the strongest military power in the region other than the US Pacific Seventh fleet or the technologically powerful but numerically weak Japanese Self-Defense forces.<sup>6</sup> However, this is all set to change with China's incredible economic growth. In March 2002, China announced that it was going to increase its military budget by 17.6% to 20 billion US dollars, which will dwarf the Australian budget by 3 times.<sup>7</sup> Japan, the other dominant East Asian power, earmarked US\$40 billion for its defense spending in 2001, overshadowing Australia's defense budget by a factor of 5 times <sup>8</sup>– nearly the entire combined budgets of countries in the region.

Seen from the perspectives of other major power in the region, Australia's selfdeclared sheriff role is not a radical shift of balance of power in the region. Neither will it disturb the positions of other major powers such as China, Japan or the US Pacific Seventh Fleet. However, it will have more of an impact on Australia's immediate neighbors i.e. ASEAN. It is likely that when the Howard sheriff doctrines was announced, Australia was referring to its immediate region of the pacific and not Northeast Asia which has far more dominant powers than herself.

In comparison with the economicallystronger ASEAN countries (See Annex A), Australia per capita still spends less than countries like Singapore which allocates 25% of its military expenditure on the military.<sup>9</sup> In addition, Malaysia (almost similar in size in terms of population with Australia) is rapidly catching up with Australia in defense spending.<sup>10</sup> For example, Malaysia intends to spend US\$3-4 billion for its military in the period 2002-2005.<sup>11</sup> A traditional regional political rival, Malaysia is one of the most vocal critics of Australia in ASEAN and has consistently blocked moves by Australia to integrate itself with the ASEAN region – politically, militarily or economically.

#### **Political Economy Considerations**

Australia has to realize the strains power projection can cause in its budget, for e.g. an increase by a margin of US\$1.3 billion was attributed to its intervention in East Timor to a large extent.12 This is almost one-seventh of its military budget. Some analysts in International Herald Tribune (IHT) even went as far as to say that the Australian military spending has exceeded budget allocations.13 Australia projects that it requires 88-106 billion Aussie dollars over the next 20 years just to replace its frontline fighters and ships, a thought that is very worrying for Australian military planners.14 This sum only includes maintenance and upgrading and does not include additional finances required for power projection. Thus, there is a gap between Australia's military ambitions and its current economic capability.

Australia will do well to share its burden of self-declared policing of the region with bigger powers like the US, technologically-advanced close allies like Singapore or allies within the regional US military network like the Philippines. Most importantly, Australia will need to work even closer with the US to realize its ambitions of a regional power. Opportunities for cementing these ties can be found in joint exercises like the one in Shoalwater Bay in 2001 with the US 7<sup>th</sup> fleet – Operation Tandem Thrust.<sup>15</sup>

Another factor that dampens Australia's military capability is its economy. Australia's economy, though in better shape than its Southeast Asian neighbors, is not enjoying the high growth rates like other regional powers for e.g. China which has been consistently enjoying 7-9% growth rates. Australia's economy is growing at a decent 4% per year but this would not be enough for it to emerge as a serious contender for regional power status or even that of a sheriff role in terms of sheer size of the economy.<sup>16</sup> Domestic weakness (A\$367 million household debts in 2001) and macroeconomic factors (weak Aussie dollar, sometimes at low as 53 Aussie cents to the USD) can potentially create pressures for Australia to cut back on its military budget and consequently, its military ambitions.

Other challenges for Australia include its declining birth rates which have been below replacement rates for the last 25 years.<sup>17</sup> This will have tremendous impact on its economic growth as well as its military capabilities in terms of manpower. In this manner, critics also argue that the 5500 force sent to East Timor may not be numerically enough to be considered even as a sizable force and is more like a detachment-sized force.<sup>18</sup> Consequently, such forces may not be seen as good examples of power projection. Seen from such analyses, manpower is very crucial for a regional military role.

#### Australia and Terrorism

The new and, perhaps, most immediate challenge to Australia is terrorism. The recent tough measures taken by Australia towards terrorism have irked its Southeast Asian neighbors. On 10<sup>th</sup> October 2002, the Australian police raided some homes of Muslims suspected to be concealing terrorists. The Australian Prime Minister John Howard then subsequently made the comments that he was ready to carry out pre-emptive strikes against terrorists should they use neighboring Southeast Asian countries as bases.

This drew flak from her neighbors who accused Australia of being arrogant. The hardline stance comes after the Bali bombings in which nearly half of the victims were Australians. Australia's hardline stance resembles that of the US after September 11, especially with the current atmosphere of an impending war on Iraq. Some Southeast Asian leaders like Prime Minister Mahathir have even lumped US and Australia together, criticizing their travel alerts issued to their citizens traveling to Southeast Asia.

However, taking a hardline stance may turn out to be counter-productive in Australia's case. This is because Australia has very different attributes from the US strategic environment. These differences can be classified into the diplomatic, military and economic aspects. Economically, Australia's exports are partially destined for Southeast Asia, a collective negative trade reaction from her Southeast Asian neighbors could have an impact on Australia's economy.

Australia also imports Southeast Asian products for her needs, thus a trade embargo could have some impact as well. In contrast, the US has a large domestic market and her main trading partners are Canada, Japan European and Northeast Asian countries – almost all of whom are either close allies or countries that depend on the US consumer market. Thus, the US is likely to face relatively less economic backlash.

Militarily, Australia's troop strength is relatively compact with something like 24,000 regulars and 16,000 reserves. Thus, her military may be stretched by pre-emptive strikes on neighboring countries, especially if Al Qaeda or Jemaah Islamiah has already penetrated Australia, as some experts claimed. Australia may need to conserve her strength for domestic security. Moreover, there were previous concerns about over-budgeting the last time Australia intervened in East Timor despite the fact that it was an overall successful intervention.

Diplomatically, Australia and her neighbors' relations have already been tense since her intervention in East Timor (perceived by Muslim countries as being too eager to do so), the announcement of the Howard Doctrine more than two years ago where Australia professes to be a US deputy in the region and her treatment of refugees transiting through Indonesia . If she carries out her pre-emptive strikes, Australia might just break the straw on the camel's back and attract a severe backlash from her Southeast Asian neighbors.

Fortunately, Australia seems to have drawn her perimeters in this latest announcement of pre-emptive strikes. The Australian government does not seem to include Northeast Asia in the application of this new doctrine. This is important as she cannot afford to offend her most important trading partners (Northeast Asia accounts for 41% of Australia's exports). In any case, their military, economic and diplomatic prowess in containing terrorism far exceeds Australia's capability. For now, Australia is closely watching her neighbors and is busy taking measures to prepare itself against terrorist acts.

#### **Future Trends**

Australia has also shown trends towards power projection with increased spending on its ANZAC frigates and reconnaissance helicopters.<sup>19</sup> Besides raw



defense spending, Australian defense industries have also been busy trying to upgrade themselves for the domestic and possibly export markets. One example is South Australia's plan to boost their defense industries, particularly in the field of electronic warfare systems.<sup>20</sup> South Australia already wins a substantial portion of the federal military budget and is poised to up its shares with the recent trends in increases of the federal military budget.

The South Australian defense industries enjoy comparative advantages such as the vast space in the outback that enables it to test weapons and launch satellites or rockets. These are potential niche commercial areas for foreign weapons manufacturers to invest and make use of such Australian facilities. However, one has to keep in mind that if there is indeed an ambition to be a regional power, more than merely renting out space, indigenous development of weapons technologies is needed, for e.g. the vibrant weapons export industries in China.

In this aspect, however, Australia's Military Research and Development Center does not seem to have major breakthroughs in the area of weapons research or major export products thus far. This contrasts with the defense industries of Australia's neighbors, the CISCO industries of Singapore, which at one time was one of the world's largest producers of small arms. This is a record achieved by a country much smaller in size and population compared to Australia. Perhaps, more attention needs to be focused on this area for successful commercialization of military technologies in order to sustain Australia's regional ambitions and also foot the bill for some of its military spending. Annex B shows a sample of Australia's defense needs being externally acquired rather than indigenously produced and a certain portion of the defense work done indigenously are maintenance-based rather than development of new weapons.

Australia's military budget is likely to rise in the near future, especially since there is a credible and politically satisfactory reason of combating terrorism at home and abroad. The pressure to increase the military budget may grow even stronger after the Bali bombings where Australians were basically the main victims. Another possible reason for increasing its military budget could be political instability in the region, particularly after the 1997 Asian financial crisis that had struck its immediate neighbor Indonesia and fermented political changes there.

In conclusion, Australia has shown in recent years a desire to upgrade its military role in the region. While it has successfully executed successful operations in East Timor and Fiji, more needs to be done in order to cement this role in the region. It may also be wise for Australia to delineate the geographical limits of her military role to make it commensurate with her economic capabilities. This may mean power projection over a smaller area such as South Pacific, Oceania and Southeast Asia rather than incorporating Northeast Asia with its host of existing regional powers. Australia will also have to think of creative means to sustain this role like building up its indigenous industries or working closely with its allies in the region to realize its military ambitions.

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Annex B: (Source: Defence Materiel Organization, Projects, Available at http:// www.defence.gov.au/dmo/DMO/ function.cfm?function id=70)



<b>Annex A</b> Comparison between Australia, Malaysia and Singapore.			
Criteria	Australia	, ivialaysia and sing Malaysia	Singapore
Growth	2.3% 2001 estimate	4-5%	0.2-2%
Exports	68 billion	95 billion	125 billion
Debt	169 billion	44 billion	None
No. mobile phones	8 million	5 million	3 million
Internet use	10 million	5 million	3 million
Reservists	16 000	Proposed 400 000	250 000
Defense spending	9 billion	4 billion	5 billion
Labor force	9 million	10 million	3 million
Unemployment	7%	3.5%	4.7%
Able bodied men 15-40 years old (to run the economy or to fight in wars)	4 million	6 million	1.5 million
Political Regional Association (sample)	APEC, Commonwealth, entry into ASEAN, AFTA, EAEC resisted by ASEAN countries like Malaysia	APEC, ASEAN, AFTA, proposed EAEC, NAM, Commonwealth	APEC, ASEAN, AFTA, proposed EAEC, NAM, Commonwealth
Size of Economy	465 billion	200 billion	107 billion
GDP Per capita	24 000	9 000	25 000
Nuclear test sites	In the past, Christmas islands, outback	None	None

(All figures in USD, Figures data from CIA www.cia.gov/cia/publications/factbook, available online, updated at 1 Jan 2002)

Air

#### Grouping of air defence projects.

#### • Strategic Airlift Capability (C-130J-30 replacement for C-130E) AIR 5216

Project Air 5216 Phase 1 acquired 12 C-130J-30 aircraft to replace the C-130E fleet that was operated by the RAAF's No 37 Squadron from 1966 until 2001.

#### • F-111 Interim EW Self Protection AIR 5391 Phase 6

This project seeks the priority acquisition of an interim EW self protection capability for the F-111. The majority of contracts for the project activities have been placed. Land replacement fleet of 40 graders will enter service in 2003. Sea

Grouping of maritime defence projects.

#### Anzac Ship Helicopters

#### SEA 1411

Project Sea 1411 is to acquire Super Seasprite Helicopters for operations primarily from the ANZAC class Frigate.

• Maritime Warfare Training Centre SEA 1412

The goal of Project SEA 1412 is to build on the existing simulation capability at HMAS WATSON.

• Anzac Ship Helicopter Missile Project

#### SEA 1414

Project Sea 1414 is for the acquisition of Penguin MK2 MOD 7 Air to Surface Missiles for the SH-2G (A) Super Seasprite helicopter. • New Generation Minesweeping

#### SEA 1424

Sea 1424 involves the acquisition of an Acoustic Generator for use in conjunction with Dyad influence sweeps.

• S-70B-2 Fleet Support Development
Project

#### SEA 1431

Project Sea 1431 is for the acquisition of a range of logistic support items to support the introduction into service of the four attrition S-70B-2 Seahawk helicopters stored at NAS Nowra



# How Might Integration Affect the Economic Geography of Europe?

By Neal Miniyar

Economic integration within the common market of the European Union, designed to increase efficiency through comparative advantage and reducing barriers to trade, has also affected the economic geography through industrial concentration. Models predict that with imperfect competition, there exist agglomeration forces that naturally lead to concentrations of industry within specialized regions. In this paper I plan to look at some of these models, and then use these models to predict the future of European economic geography.

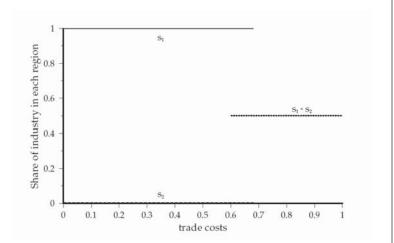
Using a simple model with two identical countries, Krugman (1991) shows that with mobile workers and flexible wages, lowering transport costs will lead to a total clustering of industry to either one or the other of the two countries (Figure 1) [1]. With very high trade costs, firms will locate where the market share is highest, and in this case will not relocate. However, as trade costs fall, firms will be more able to serve both markets from either location. As one firm changes locations, the higher demand for labor in the new region attracts more workers. Additional workers lead to higher expenditures, and this demand linkage draws even more firms to the region in a similar manner. In this situation, with flexible wages and labor mobility, the combination of demand linkages and product market competition leads to a complete concentration of industry in one of the two countries as trade costs fall below a certain threshold.

However, the assumption of this first model of labor mobility does not apply to Europe. Puga (2002) indicates, for instance, that only 1.5% of EU citizens live in a different country from which they were born [2]. For

Neal Miniyar, '04 is an Economics major in the College of Arts and Sciences. whatever the reason, be it cultural and language barriers or otherwise, the adjustment process of workers migrating to economically stronger regions does not occur [3].

Krugman and Venables (1995) [4] along with Puga (1999) [5] elaborate upon this by assuming labor to be immobile. Illustrated in Figure 2, as two equal economies integrate and lower trading costs towards a more intermediate level, one firm moving to another region will once again increase demand for factors of production in the new region through demand linkages. This puts upward wage pressure for laborers in the concentrating region, creating a dispersion force in the factor market. However, having an extra firm in the new region increases the demand for

intermediary goods produced in that region. Assuming increasing returns to scale in intermediate good production, additional intermediate good production lowers input costs for all firms in the region. The agglomeration force continues to build momentum for intermediary trading costs, even with



upward wage pressure for laborers in the concentrated region. As trading costs continue to decline, the location of the firm matters less, and the dispersion force from the factor market prevails. Firms relocate to where they can find cheaper labor. The eventual equilibrium as trading costs fall is at equality between regions.

According to this theory, the perceived concentration of industries in Europe today shouldn't be of concern, because as trade barriers fall, transportation networks improve, and other costs to trade continue to fall, the concentration will stop and the periphery will grow. In essence, the divergent paths of the core and periphery will



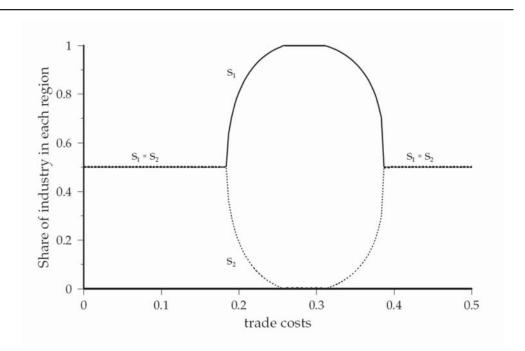


only be temporary. Once again, however, this theory contains an assumption that does not appear to apply in practice in Europe. There are many reasons that policy makers wouldn't want wage differentials to change dramatically within the EU. On the grounds of equality, policies could have the effect of equalizing wages to some degree between the core and periphery. In addition, wages could be artificially raised to prevent large-scale migrations as in the East German example [6], which could themselves have very negative consequences.

Puga (2002) states that, "in the models discussed above, when agglomeration does not get reflected in wage differentials, agglomeration increases monotonically with integration" [7]. In other words, if through some external policy wages in different regions cannot fluctuate according to normal factor market competition, then this important dispersion force is lost. What then results is simply the cost linkage agglomeration force that will lead industry to concentrate in one area. This is illustrated in Figure 3. As trade costs fall, industry continues to concentrate.

This has several policy considerations worth mentioning. With such a large portion of EU spending geared towards improving standards in the periphery and promoting more equality with the core [8], perhaps a better way to achieve this would be to lower wage controls. Along with the already improving transportation system, this would then allow the dispersion forces to kick in, leading to new investment where factor prices are lower-in the periphery. Otherwise, if wages are kept artificially high, there won't be enough labor demanded by the industry that does remain in the peripheral regions, leading to higher unemployment. Based upon the model just described, this could very well be systemic, worsening with improved integration. Alternatively, policies could be enacted that would increase labor mobility.

While the field of empirical evidence in these theories isn't vast by any means, some data does already exist that supports the models of agglomeration presented here. Quoting Ottaviano and Puga (1998): "Brülhart and Torstensson (1996) find some support for the U-shaped relationship between the degree of regional integration and spatial agglomeration



predicted by the models when labour mobility is low: activities with larger scale economies were more concentrated in regions close to the geographical core of the EU during the early stages of European integration, while concentration in the core has fallen in the 1980s" [9].

If the goal for EU policies is to promote equality between the core regions and the periphery, then ideally policies should encourage dispersion forces that the peripheral regions can then exploit for growth and lowering unemployment. Assuming that EU policies can successfully do so, then the future of EU integration should follow a path similar to that set out by Krugman and Venables (1995). Otherwise, further European integration will mean a continued buildup of industry in the core of industry at the expense of the other regions.

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# The Problems of Private **Health Insurance**

By Neal Minivar

This paper will attempt to describe the efficiency and equity considerations of using private medical insurance to allocate health-care resources. The overall conclusions that this paper reaches are that the use of private insurance to allocate resources will lead to major problems in cost containment, and to gaps in coverage.

Before delving into the analysis of private medical insurance markets, we must first examine the principal motivations behind the demand for health-care insurance. There exists much uncertainty about one's future health, and individuals do not know beforehand whether they will need to pay these expenses. Patients also patients lack information about the probabilities of different outcomes for health-care treatments and the relative efficiencies of different health-care providers. Because obtaining this information could prove very costly, there is

an opportunity for risk-averse individuals to pool together under insurance contracts [1].

There are five conditions that must hold for private market insurance to operate efficiently: probabilities of loss must be known, independent, less than one, no adverse selection, and no moral

hazard. In terms of health-care, the probabilities are generally estimable and known. They are independent as well, except in the case of major epidemics. The

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probabilities are also less than one for particular risk individuals no longer desire insurance treatments, although for chronic illnesses or and exit, then only high-risk individuals congenital diseases, the probability could be would remain with high premiums. Due to very close to one. The advancement of genetic affordability issues, some may be forced to testing in determining who will acquire an go uninsured. With effective regulation illness that needs a claim can become highly mandating compulsory participation in an problematic. When the probabilities of claims insurance scheme, some of these problems approach one, as they can with genetic screening can be mitigated [3]. or chronic illnesses, actuarial costs for insurance approach or equal the cost of the loss itself. may also be a tendency for so-called "cream Insurance then becomes prohibitively skimming." Because the private, for-profit expensive, and large groups of people might be companies have an incentive to reduce left uninsurable. Private insurance would then payouts, insurance companies can employ

... insurance companies can employ several clever means to attempt to deny insurance to those the company perceives to be a higher risk and financially unattractive.

> to have low probabilities, leaving the rest to pay insurance companies could require applicants for their own treatments [2].

> Adverse selection problematic because of asymmetrical a building without a working elevator. As a information problems. Individuals can hide result, horizontal inequity in terms of access information from the insurance companies in to health care develops. Government terms of their overall risk, thus leading to more intervention with regard to a minimum or bad risks being taken on. If uncorrected, this standard benefits package can help. would then lead to higher premiums. If the premiums were to rise to a point where the low- role in affecting private health insurance

Within the private market, there

several clever means to attempt to deny insurance to those the company perceives to be a higher risk and financially unattractive. "These ways of cream skimming include, for example, being rude to unattractive clients, delaying the processing of their applications, or presenting information in a

offer cheaper coverage for those lucky enough mystifying way" [4]. For a direct example, to apply in person at their office, which could becomes conveniently be located several floors up in

Moral hazard plays an important



efficiency through patients being able to influence their probability of requiring treatment, or the cost of the treatment. While individuals may not necessarily influence the probability of requiring treatment through deliberate illness or injury, which extends a negative cost on the individual as well, they can influence the probability through matters of choice. Patients may visit doctors and consume health services more frequently for more minor illnesses such as the cold, for instance. "Elective medical care of this sort ... is not well covered by voluntary policies: some risks are uninsurable in private markets, at least for voluntary individual policies" [5].

A major source of moral hazard, according to Barr, is the so-called "third-party payment" problem. The crux of the problem lies in the fact that patients, the consumers of service, as well as doctors, the providers of service, do not observe the marginal social cost of health care. If health-care is free at the point of use for patients, and doctors recover these costs from the insurance company, then there will be a natural tendency to over-consume health-care resources beyond the social optimum [6]. Naturally, this translates into a large problem of cost containment for the insurance company.

Solutions to plug this money drain have included charging patients a deductible for each office visit, and coinsurance, under which the insured party pays a particular proportion of the provider's charges, with the insurer picking up the balance. However, this does not completely bridge the gap between perceived marginal private cost and marginal social cost, and cost containment issues remain a problem. Another method now actively used in the United States is that of attempting to impose cost controls upon doctors themselves. Health Maintenance Organizations (HMOs) function to try and "internalize the externality by merging the activities of doctor and insurance company, thereby forcing doctors to face the social marginal cost of the treatment they prescribe" [7]. The goal is that with doctors essentially budgeted, the incentive to oversupply beyond the social optimum of health care will be mitigated.

An extra point of consideration when looking at private health insurance is its

# We want you to know

relative efficiency. Due to the nature of private markets, insurance firms' actuarial premiums will include administrative costs and other costs such as marketing, processing, and reimbursement. Under a social insurance scheme, there would be no need for marketing costs (especially if compulsory under social insurance), processing costs would be lower, and reimbursement costs would be lower as well if providers are paid directly by the government. In addition, the relative scale and scope of insurance firms should also be taken into consideration. Culver (1993) states that "the purely financial costs are a good deal higher under private insurance and social insurance that also involves extensive billing and reimbursement by patient, episode of care or case" [8]. Therefore, when comparing a private system of insurance versus a social insurance mechanism that avoids the pitfalls of extensible billing, the private insurance scheme contains considerable inefficiency. Costs are higher than they need be.

Although a detailed list of all explanations for the major problems of private medical insurance to allocate limited healthcare resources cannot be given, the reasons point to two overwhelmingly large problems: gaps in coverage and cost containment because of inefficiency. The problems become extremely evident in the United States, which has private health insurance (but with still some government interventions, such as Medicare and Medicaid). Despite health expenditures that as a percentage of GDP are higher than any other nation in the world, health insurance coverage has decreased from 1987 to 2000 from one in eight being uninsured to one in six [9]. The US experience shows both problems that one would expect to arise from private insurance on a grand scale. Despite continuing reforms, cost containment and coverage gaps remain.

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## Neither Rain Nor Sleet Nor Changing Economic Conditions?

#### By Scott Sable

In the last decade, the communication industry has embraced several groundbreaking technologies, most notably cellular telephones, FAX machines, E-mail, and the internet, however, despite this technological blitz, the United States Postal Service remains the sole carrier of the single most significant form of correspondence in the US economy and under current law is not subject to competition in this regard.

The United States Postal Service (USPS) delivers more than 200 billion pieces of mail each year. It collects nearly

66 billion dollars in revenue annually, making it the eleventh largest enterprise in the country based on revenue. Additionally, it is the second largest civilian employer in the nation, giving work to 770,000 Americans. More than seven million Americans visit post offices every day [1].

These figures underscore the importance of the USPS to the United States economy. However, as technology, commerce, and household and business needs

Scott Sable is a Junior in the School of Industrial and Labor Relations. He is doing a concentration in Economics and has been a member of CES for two years. have changed, it has become clear that the Postal Service must also make adjustments to its organizational structure and operations in order to continue to be an economically sustainable entity. Many information transfers that would traditionally make use of the USPS are now sent by E-mail, Fax, text messages and overnight letters such as FedEx, Airborne Express and UPS overnight. Bill payments by check that would have been mailed may now be paid on-line. All of these activities represent major financial losses to the USPS.

Many information transfers that would traditionally make use of the USPS are now sent by E-mail, Fax, text messages and overnight letters such as FedEx,

> The threat to traditional mailing services in the United States is not an isolated event. Indeed, several foreign countries, most notably the United Kingdom, Sweden, New Zealand, Germany, Finland, and the Netherlands have already taken measures to support their struggling national postal services. Each of these countries has introduced reforms in an attempt to liberalize their postal markets. For instance, The United Kingdom recently introduced a five year plan to fully liberalize

(expand) its licensed letter market, which services small packages that cost less than one pound sterling to send. [2].

Despite the increasing prevalence of liberalized postal markets in foreign nations, a policy of liberalization has drawbacks. Indeed, monopolized postal markets have some significant advantages. First, the USPS and the UK's Royal Mail have a universal service requirement, and thus they are obliged to make deliveries to all households and businesses regardless of their location and the cost of provision. Citizens view such arrangements as socially desirable and therefore governments have a compelling interest in maintain universal service requirements. While monopolized (and often subsidized) postal markets can handle the additional cost of these requirements well, their liberalization could in theory make such policies unfeasible.

Also, In the UK and the US, domestic first class postal rates are fixed regardless of the geographic distance a letter will travel to reach its destination. While deliveries over shorter distances cost the postal service less than the fixed rate, (often within densely populated areas) deliveries to more distant rural addresses exceed the fixed rate. Thus, under this arrangement, the positive economic profits accrued over short distance deliveries more than compensate for the losses sustained for long distance deliveries. [3]. A liberalized





postal market may choose not to subsidize these losing routes from the profitable ones. This could have an undesired social consequence.

Finally, liberalization policies leave postal markets vulnerable to cream-skimming [3]. This occurs when a firm, with a higher cost structure than the incumbent postal service, enters the profitable urban market, where the incumbent charges a fee much higher than its marginal cost, and makes a profit. The opposite effect may occur in the rural market: a new firm with higher cost structures than the incumbent would be unable or unwilling to profitably enter the industry because it would be necessary to subsidize the rural service. If widespread cream-skimming arose, the postal service would no longer be able to subsidize its unprofitable rural deliveries, and be forced to abandon universal service.

There are some possible solutions to these flaws in liberalized postal markets. First,

postal services could abandon fixed postage rates, and introduce variable rates that depend on the distance of each delivery. However, this would greatly increase the search costs involved in sending letters; every time an individual would want to mail a letter he would have to look up the delivery rate charged for each specific area. Perhaps a better resolution would be to keep the uniform rate in place and require entrants to be taxed or to subsidize deliveries to the same extent as the incumbent firm. While this plan would single-handedly solve the problems facing liberalized postal markets, it would also be complicated to run and initiate. Such a plan would require additional monitoring, regulation (and its associated costs), and transaction costs [3].

While the British commitment to a liberalized postal market will most likely increase overall market efficiency by its attendant competition, it is unlikely that the US market will undergo such an extreme structural

change. Instead, the USPS is considering three alternative plans for long-run reorganization: government agency, privatized corporation, and commercial government enterprise. In the government agency model, the postal service would abandon its businesslike approach by cutting services that can be provided by the private sector, and instead concentrate on essential universal services. However, under this plan, the USPS would be unable to fund public services solely through postal revenue, which would force the US government help fund it through underwriting. [1]. Moreover, as revenues from the universal services are expected to decrease over the next few decades, the subsidy burden would only increase. Under the privatization plan, the post office would become a publicly held company funded by its shareholders and function similar to any other corporation. Such a change would be even more extreme than the system described in the UK, and regulatory safeguards would have to be put into place in order to protect universal service [1]. The model most likely to be adopted is the commercial government enterprise plan. Under this system, the USPS would become a commercial enterprise owned by the federal government. This type of organization would function more like a typical business than it currently does, but still retain the ability to meet the universal service requirements of the current system.

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## No Money Mo' Problems: U.S. Economic Recovery?

#### By Todd Zuccarino

While the current state of the United States economy has shown everything but signs of stability, many economists try to reassure certainty in the "recovery." Although I refuse to do that, as a concession, below find a comforting blanket of unalloyed analysis

On the trading floor of the New York Mercantile Exchange, optimism fills the air as ambitious traders participate in the upbeat swing of their economy, energy and metal. Year-end bonuses treat the prestigious few with extravagant prizes, BMW z4's, and lavish dining experiences at only the finest establishments. But while the best in the business pop open their hundred dollar bottles of Dom and enjoy delectable Beluga in their prime seating next to the bubbling pool at the Four Seasons, not everyone shares the pleasure of flaunting their bling bling. In an economic atmosphere where the only fitting elevator music for the New York Fed remains Soul Asylum's "Runaway Train," more cautious, discerning consumers cross their t's and their eyes as they carefully balance their checkbooks. Certain indicators may be on an up-tick, but the vast majority of the United States has demonstrated a slight trend towards frugality, and some might even call it prudence.

Recent economic performance has produced an array of confusion. While both the Dow Industrial Average and the Nasdaq steadily climb to yearlong highs, personal consumption and housing starts take a slight

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dip. And top this off with disposable personal income (DPI) figures and you'll be sinking: in the 3<sup>rd</sup> quarter of 2003, DPI increased by 160.8 billion dollars, followed by a lethargic 4<sup>th</sup> quarter increase of only 1.7 billion [1]. This dramatic change cannot be attributed to any one indication of economic health or weakness.

After all, while the economy's performance isn't robust, it's not exactly floundering either. Gross Domestic Product (GDP), one of the most widely accepted indicators of

economic condition, reported a fourth quarter increase of 4.0 percent. Sure, this does not match the 8.2% raked in by the preceding quarter, but when was the last time

the United States has seen GDP growth at 8.2 percent? (The fourth quarter of 1983 hit 8.4 percent, close enough [2].) The job market might be gaining stability as well. Unemployment figures continue to decline, falling to 5.6% in January of 2004, and alongside this, productivity has been falling [3]. Intuitively, productivity is associated with high levels of growth and strong economic performance, but in our current state a fall in output per hour might actually help the labor market. As workers produce goods at less efficient rates, the markets require a greater number of laborers to match current levels of production, *ceteris paribus*.

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Yet, recent signs of both the consumer and producer markets gaining stability have not helped overall confidence. The Conference Board, which takes a representative sample of 5,000 households across the United States to measure economic health, reported a decrease in consumer confidence for February of 2004, falling to an unpromising 87.3. Although the consumer

Certain indicators may be on an up-tick, but the vast majority of the United States has demonstrated a slight trend towards frugality, and some might even call it prudence..

> confidence, present situation, and expectation indices showed slight increases from December 2003 to January 2004, they realized legitimate setbacks last month [4]. This poses a pressing concern for weary consumers, and an even bigger danger for a weary economy. While previously these indicators predicting future promise maintained the high ground, this downturn might serve as the telling harbinger. Despite some of the United States's national account growth, the most important numbers remain an unsure bet.



And that's what Greenspan has been telling the markets all along. Monetary policy works most effectively when the economy is caught by surprise, perhaps shedding some light as to why the target rates were reduced to 1.00% from 1.25% in June of 2003 [5]. The key principle underlying the Federal Open Market Committee's interaction with the economy is to stimulate growth while keeping an eye on stability. As the economy has shown promise in neither of these aspects until recently, previous rate reductions seemed necessary. But now Greenspan faces a pressing dilemma: the federal funds rate cannot fall below zero. The United States is coming dangerously close to dancing with conditions similar to what Japan experienced, the ill-fated liquidity trap. That is, when monetary policy becomes altogether ineffective.

Admittedly, the economy is not in as bad a shape as Japan's. But at the same time, the wisest consumers, and in turn, the dumbest consumers, realize one thing: interest rates have to rise eventually. Over these past few months, the economy has been flirting with all-time federal funds rate lows. But in months to come, it might be flirting with death. The Organization of Petroleum Exporting Countries (OPEC) has proved adamant in fighting reserve buildup, or more than slight overproduction. Oil prices have reached eleven-month highs recently, and OPEC firmly stands by its word in reducing production to defend their market [6]. This uncollapsible price plateau will tame economic performance no matter what the interest rates, causing setbacks to be only that much greater if rates are rising.

The current state of the economy is difficult to decipher. Confidence weakens as the major stock indices rise along with the healthy movement of Gross Domestic Product. But at the same time, inter-temporal investigations might point otherwise: GDP is down compared to previous quarters, and so are housing starts, personal consumption, and disposable personal income. Interest rates have fallen to record lows, and oil prices won't help the situation. Where we seem to be, and where we are headed, may be two completely different arenas.

So sure, lounge back in your Ferrari and Jaguar switching four lanes<sup>1</sup>, if you can. But to the

vast majority of consumers out there: save up your bank accounts and share the commute to work, because the way things are headed it will be costly to cruise down the highway in your broken-down Buick, unless of course, you are driving to the Mercantile Exchange.

#### FOOTNOTES

1.with the top down screaming out, "Money Ain't a Thang," by Jay Z featuring Jermaine Dupri.

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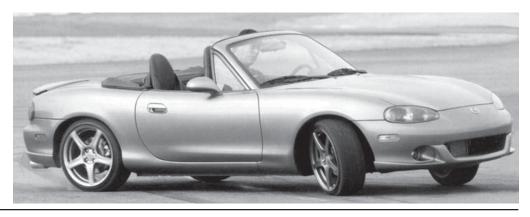
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## The Secret Recipe of Crate & Barrel

By Feng Olivia Liang

This article examines the rise of American home furnishings retailer Crate&Barrel. What is the future like for Crate&Barrel under today's fast-growing technological advancement and globalization? What kind of implication does Crate&Barrel's success provide the home furnishing and other industries?

From an unknown family business started in an abandoned factory in the Old Town section of Chicago in 1962, Crate&Barrel has grown to a size of 115 stores nationwide. Ever since its birth, Crate&Barrel has strived to introduce the latest and most fashionable elements into every American's vision of lifestyle. Under pressure from competitors within and outside of the US, Crate&Barrel has always kept its legacy and remained a pioneer in the home furnishing industry in the US. How did Crate&Barrel accomplish this? Is there any secret or magic in its market strategies and planning? What is the future like for Crate&Barrel under today's fast-growing technological advancement and globalization? What kind of implication does Crate&Barrel's success provide the home furnishing and other industries? These are the questions that this article will investigate.

#### Introduction

Gordon and Carole Segal, after spending their honeymoon in Europe, were fascinated by the "unique, functional, and affordable designs"[1] that they bought for their

Feng Olivia Liang, '07 is a Psychology and Economics major in the College of Arts and Sciences. new home during this trip. Yet, what triggered their innovative idea was not merely the beauty of these designs, but the fact that Chicago residents (and perhaps all Americans) could not possibly purchase such great designs without paying an amount that was almost equivalent to a mortgage. Driven by their desire to bring such a sophisticated life style into every American household at a reasonable price, this energetic couple decided to open the first store of their family business—Crate&Barrel—in their home city of Chicago. In a little more than forty years, Crate&Barrel has grown from a tiny showcase located on a funky street in the Old Town section of Chicago to a chain store that has 115 branches all over the US. It has grown from an unknown infant among thousands of new-starting businesses in America to a prominent leader in the home furnishing industry. Recently, the founder and current CEO of Crate&Barrel, Gordon Segal, was awarded the National Design Award presented by the Smithsonian Institution's Cooper-Hewitt National Design Museum, an award





that has also been presented to some distinguished designers such as I.M. Pei. So, what is the secret recipe behind the success of Crate&Barrel? The motto of this family business best summarizes the answer: "People, Product, and Presentation." Well-trained store managers and innovative, up-to-date designs certainly have helped Crate&Barrel earn its reputation in the industry. Nevertheless, after one has paid a visit to one of Crate&Barrel's chain stores, one must admit that it is the unique and sophisticated store presentation that sets Crate&Barrel apart from its competitors and wins the customers' favor.

#### A New Concept of Shopping Experience

The Segals certainly understand that the most important key to success for a new brand is to create it with a heart, a soul, and an identity, especially for a brand in the home furnishing industry that has been more or less dominated by European competitors. They have always been committed to following this motto in directing the development of Crate&Barrel. After opening his first store in Manhattan in 1995, Gordon Segal spent another seven years to find another ideal location that satisfied Crate&Barrel's strict criteria for a store in New York City.[2] Just like any other Crate&Barrel store you would find in America, this recently opened store in SoHo, one of the most energetic and fashioncentered areas in New York City, commits itself to bringing out the "Crate&Barrel" style. As Gordon Segal explained, their premier goal never was to build a worldwide chain, but to craft a beautiful store. More specifically, Crate&Barrel designers have put a great deal of effort into bringing out the most visually pleasing display of their products. The stores are always kept neat and clean to let the customers feel at home. Products of the same kind are displayed in one area so that customers don't need to go running up and down the aisles trying to look for a particular product. Every subtle detail in the store is given great attention: the handles of all the cups must be facing the light; even flatware is never put into glass display windows; and an interesting mix of music is always played in the background. In short, for a customer, even a quick visit to a Crate&Barrel store is a relaxing and pleasurable experience. Here is

where the magic of fast growing sales comes from: whenever you walk into a Crate&Barrel store, you feel as if you are gathering a handful of beautiful artwork to decorate your home, rather than hurrying into Home Depot just to grab something for fixing the bathtub. Every single Crate&Barrel store was created to give the customers an enjoyable shopping experience; and this has come to be one of the identities that customers associate with Crate&Barrel. Everything in the store is arranged in a customer-centric way that is unique to Crate&Barrel, thus developing a stable, established reputation among its customers throughout America.

#### An Up-to-date Taste

Of course, if the products of Crate&Barrel were completely off the fashion track, they would never make any sales no matter how wonderful the stores appear. Sensitivity to the change in American lifestyle and the ability to quickly respond to such changes together is another key to the Segals' success. As the pace of American urban life speeds up, the need for a mentally-soothing, harmonic home atmosphere becomes more and more pressing. Especially after a turbulent period of terrorist attacks and economic recessions, Americans long for a comfortable, simple and secure living environment. Crate&Barrel soon realized and responded to this need. In 2002, Crate&Barrel successfully promoted its new products such as the Clipper game table and fondue products which still remain highly popular today. This is again a representation of Crate&Barrel's customeroriented strategy. In fact, fondue was ranked by the Gourmet Retailer as one of 2003 Best Merchandising Ideas. When used outdoors, a fondue set is a great way to bring friends and neighbors to the same dining table and promote better personal bonds in a troublesome time. When used indoors, a fondue set is also a great medium to draw all family members to the dining table for a casual yet intimate chat accompanied by great food. In addition, Crate&Barrel targets consumers who are generally "aged 26 and older, and most often is either married or engaged."[3] Not only did Crate&Barrel see the psychological needs of a majority of its target consumers, it also

successfully assessed the consumers' financial ability and the willingness to purchase such leisure products. The reward for this sensitivity is certain, obvious and fruitful: "its revenue has grown at a 19% compounded annual rate" throughout the 80s and the 90s.[4]

#### The Birth of Partnership

Certainly, Crate&Barrel recognizes that it is situated in a highly competitive industry, with competitors coming from inside and outside of the country. However, they have always kept a cooperative attitude toward their competitors. Recently, Crate&Barrel has manifested this mentality into establishing a business partnership with one of its competitors-the Container Store. What is special about this partnership is that it is not based on any form of an official, legal business contract. Thus, the two sides are free to cooperate whenever they find it beneficial without considering the legal issues or obligation. Since there is a 90% consumer overlap and only 5% product overlap between these two stores, the result of such a partnership is that it brought more consumers to both sides.[5] Crate&Barrel and the Container Store first experimented this innovative idea in Chicago; and according to Segal, this combination was doing 15% to 20% better than an average Crate&Barrel store.[6] Moreover, bringing two similar stores together makes shopping much more fun and efficient for the consumers. They can go to one place and find everything they need and like. This, again, catches up with the fast pace of modern urban life. By creating this partnership, Crate&Barrel and the Container Store are hoping to attract more upscale retailers in the same industry to the adjacent area, yet maintain their individual identity and specialty, thus keeping up healthy competition.[7]

#### Conclusion

As one can easily see, Crate&Barrel has adopted various business strategies throughout its development. Nevertheless, all these strategies have centered around one major theme: a consumer-oriented philosophy. From taking care of each detail in presenting their products to managing the relationship with their business partners/competitors. Crate&Barrel has successfully crafted beautiful stores and products that meet the demands of the sophisticated and picky urban American consumers today. Rather than merely being a home furnishing store, Crate&Barrel has established its identity and reputation as the first one to seek when decorating a home, because it not only provides products, but also ideas, styles and solutions. As Gordon Segal projected the future of Crate&Barrel at the 2004 National Retail federation's annual convention, he showed great confidence in carrying on the rapid growth that has always accompanied Crate&Barrel.[8] The opening of CB2 and the Land of Nod (new branches of Crate&Barrel that target younger consumers) certainly broadens the source of revenue for Crate&Barrel. Segal also expects the Internet sales to grow 40 to 45 percent, which will account for 12% of the company's sales.[9] If Crate&Barrel carries on its 3P's motto-People, Products, and Presentation-this growth will not come to us as a surprise. This secret recipe behind Crate&Barrel's accomplishments provides us some insight to a new philosophy of successful business, which extends beyond the home furnishing industry.

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By Chistopher Lackert

#### Short History, Functioning of the ILO

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Ever since the founding of the International Labor Organization (ILO) in 1919 as the only major surviving creation of the Treaty of Versailles, the ILO has strived to achieve fundamental workplace rights for workers in all member nations. The ILO is a specialized United Nations (UN) agency which "seeks the promotion of social justice and internationally recognized human and labour rights" (1). The ILO creates international labor standards in accordance with member states in the form of conventions and recommendations in such areas as: minimum labor rights standards, freedom of association, the right to organize, collective bargaining, abolition of forced labor, equality of opportunity and treatment, worker health and safety, conditions of work, and other areas. Key ILO conventions out of hundreds include: the forced labor convention (1930), freedom of association and protection of the right to organize (1948), right to organize and collective bargaining (1949). equal pay and benefits for men and women for work of equal value (1951), abolition of forced labor (1957), discrimination (employment and occupation) (1958), minimum age and child

Chirstopher Lackert '04 is a student in the School of Industrial and Labor Relations labor (1973), and worst forms of child labor (1999). These conventions are one of the ILO's most important functions in order to achieve its objectives in workplaces around the world.

In addition to creating recommendations and conventions concerning labor rights, the ILO also provides technical assistance to countries in such diverse employment areas as: vocational training and vocational rehabilitation, labor law and industrial relations, employment policy, labor administration, management development, working conditions, social security, labor statistics, and occupational safety and health. In promoting technical assistance, the ILO promotes the development of independent workers' and employers' organizations and provides training to these organizations. Due to the tripartite structure of the ILO, governments, workers, and employers all work together as equal partners in order to solve the complex problems in the field of labor. The ILO also encourages tripartism within its member states by promoting social dialogue between active social players in formulating and implementing national policy on social, economic, and other issues.

#### **Current ILO Trends**

Recently, the Declaration on Fundamental Principles and Rights at Work

(1998) was created which reaffirmed the commitment of the international community to "respect, to promote and to realize in good faith" (2) the rights of employers and workers to freedom of association and the right of collective bargaining. In addition, the Declaration commits member states to continue work on eliminating child labor, eliminating all forms of forced or compulsory labor, and eliminating discrimination in employment. In addition to promoting the Declaration, the ILO is moving forward on five main objectives which it is placing much emphasis on. These areas include: a) promoting and realizing standards dealing with fundamental principles and rights at work which include child labor and normative action, b) creating greater opportunities for women and men to secure decent employment and income by helping in employment and policy support, employment creation, and knowledge, skills, and employability for workers, c) enhancing the coverage and effectiveness of social protection for all in areas such as working conditions and social security, d) strengthening tripartism and social dialogue through social partners, governments, and institutions of social dialogue, and e) conducting work in crosscutting activities in areas such as expanding labor knowledge through statistics to improving the awareness of the ILO through External Relations and Partnerships. In order to achieve these objectives, the ILO approaches these

issues in four different ways. Currently, the ILO is 1. formulating international policies and programs which promote basic human rights, improve working and living conditions, and enhance employment opportunities, 2. creating international labor standards to serve as guidelines for nations to put ILO policies into use, 3. using an extensive program of international technical cooperation which is implemented with constituents, and 4. conducting training, education, research, and publishing documents to help advance the previous three efforts.

#### **Possible Economic Impact of the ILO**

As one can see, the ILO enters the labor market in many different areas by providing recommendations and conventions so member countries follow what ILO strives to achieve. There has been much speculation as the effect of the ILO in terms of countries actually doing what the ILO says they should do along with the different economic impacts in different nations. Since ILO conventions cover advanced economies such as the U.S., Canada, and Western Europe to undereconomically developed nations in Africa, South America, and parts of Asia, it is clear the ILO affects different states in different ways.

Different economists and sources have different theories about the ILO and its effectiveness showing the ILO's economic impact remains unclear. According to Tilly and Welfens, "economic theory provides little to support the utility of ILO methods. The improvement of work standards, by raising costs, encourages investment in labor-saving devices in high-wage countries, increasing unemployment, and discourages investment where wages are low, reducing growth ... ". In other cases, Tilly and Welfens show us that countries may experience welfare losses by adopting low labor standards while the ILO raises the bar for minimum labor standards. If there is no set core of labor standards, there may be a "race to bottom" according to these two authors so employers can bring goods to the market at a lower cost than other employers. By creating minimum labor standards, higher



welfare levels are achieved by dissuading employers from reducing labor standards for their workers. According to a research publication of the Organization for Economic Cooperation and Development (OCED) arguments are presented in favor of the ILO and how it helps economic effectiveness. In the OCED's publication, "International Trade and Core Labor Standards", a research paper by Stiglitz (2000) shows that the "high road" (which includes collective bargaining) to economic development can increase economic efficiency by promoting the increased buy-in by workers to the goals of the immediate work group which may also lead to increases in productivity. Stiglitz also argues that collective bargaining, which is supported by the ILO, can enhance the overall economic efficiency of an economy since bargaining facilitates income redistribution but that extremely strong unions may cause a "hold up" on the rest of the economy. The ILO itself also addresses the economic benefits of core labor standards and the ILO states: a) child labor is detrimental to development since the next generation of workers will be unskilled and undereducated, b) collective bargaining and tripartite dialogue are necessary elements for an environment which encourages innovation, higher productivity, attracting foreign investment, and allows societies to adjust to financial crises, and c) the discrimination faced by women and minorities are important obstacles for economic efficiency and social development. On the other hand, according to an OCED study, there was no evidence that countries with core labor standards enjoy a better global export performance than high-standards countries,

which goes against the ILO argument. In addition, a study by Mah (1997) found that in 45 developing countries, each country's export share of GDP is negatively correlated with freedom-of-association rights and rights to nondiscrimination. Also, Mah found that exports are negatively correlated with the right to organize and collective bargaining.

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#### Conclusion

In conclusion, it is clear that the ILO is striving to promote fundamental working rights and conditions for all workers in many areas within the area of employment, but the economic impacts of the ILO are uncertain. By having the headquarters of the ILO in Geneva, Switzerland, the ILO has the opportunity to work with many other UN agencies such as the World Health Organization, the World Trade Organization, and others to reach out to more people to spread its message. Under the Sectary General of the ILO, Juan Somavia of Chile, new initiatives along with focus on traditional goals for the ILO have been brought about and only time will tell to see how these objectives play out in all 177 member countries.

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## What Low Carbs Mean for the Economy

#### By Tulika Kumar

Unlike other popular diets, the Atkins diet has impacted sales in the food industry; some critics maintain that these economic changes are the result of the Atkins diet, along with several other factors..

Trendy weight-loss fads and enticing new diets dominate popular media today. Numerous television commercials and magazine ads promise weight loss in the most convenient and fastest ways possible. People find hope in many of these advertised techniques; they try these diets, only to abandon them soon after.

The Atkins diet, however, has proven to be far less transient then some of its fellow diet rivals. The Atkins diet, which was developed with much scientific evidence and planning, allows for immediate weight-loss, but what makes it so widely accepted is its stress on long-term maintenance of proper health. As a result, the diet has been popular and respected for years, as it has streamlined many of the clichéd tactics of other diets. The effects of the Atkins diet have been widespread, particularly impacting the dynamics of food industry sales. While there is a noticeable change in the sales of certain food products, some critics observe that it is important to consider a variety of reasons for these changes.

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#### **Basics of the Atkins diet**

The Atkins diet plan invented by Dr. Robert Atkins, has four phases to attain success. The first phase called induction mandates the restriction of carbohydrate intake to only twenty grams a day; this can be done by eating vegetables with low starch content. Secondly, the phase of ongoing weight loss (OWL) promotes increasing fiber-rich foods to twentyfive grams daily the first week, then thirty grams the next week, and so on. Then, five grams of carbohydrates from daily intake are subtracted so that there is sustained weight loss. Phase three is that of pre-maintenance, which is the transitional phase from weight loss to weight

maintenance through moderating and controlling daily c a r b o h y d r a t e consumption. The last phase, lifetime maintenance, allows the dieter to select from a

large variety of foods, while still controlling carbohydrate intake to guarantee balanced weight maintenance [1]. Essentially, the plan is an "approach to dieting that stresses consumption of high-protein, fatty products, at the expense of carbohydrates" [2].

Foods promoted by the Atkins diet are booming in sales.

Though the four phases seem complicated and require discipline on the part of the dieter, almost 25 million Americans are on the diet, according to Atkins Nutritionals, the food company started by Atkins before his death in 2003 [2], [4]. Additionally, approximately 4 times as many, 100 million people, follow a reduced carbohydrate diet of some sort [2]. The diet which not only stresses immediate weight loss, but also weight maintenance and stabilization, good health, and disease prevention, has become more popular since Atkins' re-release of his book in 1997 [1], [4].

Economic changes in the food industry due to the Atkins diet

In July of 2003, Unilever PLC, the British food company that owns Slim-Fast Foods, claimed that its U.S. profits had dropped by almost twenty-three percent, and

quickly blamed the Atkins diet for promoting protein consumption and reduction of carbohydrate intake [4]. In fact, *Time*, USA *Today*, and other sources of media have noticed the economic impact this "fad" has created. All have been quick to point fingers



at the Atkins diet for plummeting wheat and bread prices and thriving beef sales [3], [4].

Foods promoted by the Atkins diet are booming in sales. An increase in U.S. beef sales have been reported in twelve of the past fourteen quarters [4]. Furthermore, the amount of consumption of products like bacon and eggs are at an all-time high in the past ten years [4]. Additionally, the sales of beef jerky have gone up by more than forty percent in just the past two years, and even pork rinds have tripled their profits [4].

In addition to the rising profits of beef and meats, other products, like pastas with low

carbohydrate content, introduced by Weight Watchers, are also making more profits. In some states, like California and New York, freshly made Atkins meals can be delivered to homes; experts guess that this Atkins market makes a minimum of \$1 billion

per year. Further, diet sweeteners have now become the sugar-alternatives of choice, with a double-digit growth in sales [5]. Sales of Splenda, the brand utilized in all of Atkins Nutritionals products, have increased a 90 percent growth, reporting profits of \$89 million for the past year [5].

On the other hand, products that are deemed unhealthy by the Atkins diet, those with high carbohydrate content, such as breads and wheat, have experienced a decline in sales. Particularly, wheat consumption has fallen by 8 pounds per person in the past six years [3], [4]. Also, the Wheat Foods Council in Colorado has reported that flour consumption has fallen to 139 pounds per person, versus 147 pounds in 1997 [5].

### Critics question the role of Atkins in economic changes

Though many of these decreases and increases in sales are because of the Atkins regimen, some economists believe these changes are "an example of how media excitement about a cultural trend leads to misinterpretation of an economic trend" [4]. A survey by the Natural Marketing Institute claims that twelve percent of the adult population has tried the Atkins diet; what people fail to realize is that these numbers reflect even those people who avoid bread for a few days to lose weight to be an avid Atkins dieter; in other words, this study broadly defines an "avid" Atkins dieter, encompassing both those individuals who have just tried Atkins for a short period of time and those who are planning to be on the diet for a long period of time. Additionally, another flaw comes from people relying on convenient ways to cook. Consumers purchase what is easiest for them,

... celebrities like Demi Moore, Jennifer Aniston, and Brad Pitt, along with the other 25 million Americans continue to forego breads and carbohydrates... and lately meat products, either frozen and/or microwaveable, have become the most suitable for busy families. Foods like these have become cheaper, and many economists believe that the weight problem this country faces may be due to inexpensive and

easier food preparation methods. They claim that "we're eating more, simply because we can," thereby explaining the boom in sales of certain food products. These critics feel that the main differences in food consumption patterns result from a combination of these reasons. While they do feel the Atkins regimen may be partly responsible for the boom in beef and meat sales and decline in carbohydrate sales, they do not feel it is the only attributable cause [4].

#### Conclusion

The Atkins diet has remained popular for years, triumphing over some fellow diets that have been evanescent and much less popular. Thus, the diet has had far-reaching effects, specifically in food industry sales. Many economists believe that there are other factors to consider in addition to the Atkins diet, when looking at the recent changes in the food sales. That is, while there are noticeable changes in increases and decreases of certain food products because of Atkins, it is important to realize that economists have studied additional reasons for such changes. This highlights the difficulty in making such an economic analysis or interpretation, since there are several aspects that must be considered. What is certain, though, is that as long as celebrities like Demi Moore, Jennifer Aniston, and Brad Pitt, along with the other 25 million Americans continue to forego breads and carbohydrates, the Atkins Diet's impact on the economy is here to stay [5].

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## Din and Dischord: The Fight to Save the Music Industry

By Jason Roth

The free distribution of music online has reduced sales of compact discs. Can record companies harness this new technology to their advantage, or will they succumb to it?

The average musical artist may live in the lap of luxury, but beneath this ubiquitous façade is a record industry in the midst of a serious sales slump. A case in point: 50 Cent, 2003's top selling artist, sold 6.5 million units of his debut album, "Get Rich or Die Tryin," but failed to match the sales of top artists from past years. Amidst the explosion of teen pop, business boomed in the late 90's; top artists like 'NSync routinely sold 10 million units apiece. But since that recent heyday, the music industry has hit a sour note.

Just how badly have record sales declined? In 1999, record sales had reached \$40 billion, an all time high. Since then, album sales have experienced a free fall. From 2001 to 2002, annual sales fell a staggering 12.9% [5]. By 2003, annual record sales shrunk to \$28 billion, a 30% decline over a mere four year period.

What is responsible for the staggering decline in record sales? One possible explanation is the 2001 recession, in which which aggregate consumer spending fell. However, business cycles alone cannot explain this persistent sales decline. While consumer

Jason Roth, '05, is an Economics major in the College of Arts and Sciences confidence and spending have risen since the 2001 recession, record sales did not rebound. Rather, a much more probable cause is the rapid rise of unsanctioned music distribution through Internet-based services. This innovation has introduced a powerful new competitor in a market once dominated by the compact disc. Consumers who download music on free online services have strong incentives not to purchase CD's. Accordingly, record sales remain in a slump even after the economic recovery.

Precariously, the industry has turned to online music swapping, the innovation threatening its demise, for potential salvation. Strategically countering the free distribution services, several companies have developed fee-based online services, such as iTunes, that observe copyright laws and pay royalties to record companies for each song downloaded from their service. To control the proliferation of unsanctioned music distribution, the industry also has turned to legal action. The Recording Industry Association of America (RIAA) recently filed copyright infringement suits against both the distribution software developers and the individuals who use them.

Will these strategies save the record industry? While investing in licensed online music distribution services brings promise, this nascent venture poses challenges and uncertainties. The fate of the record industry remains, at best, unclear.



The Online File Sharing Revolution

At the heart of the record industry's near collapse from 1999 to 2003 was the rapid emergence of online music swapping as a free, and user-friendly, alternative to purchasing compact discs. In mid 1999, Shawn Fanning, an undergraduate at Northeastern University, launched Napster, the now infamously debunked networking software that provided unlimited access to music files amongst its users. (The RIAA successfully sued Napster for piracy, and the company folded in 2002.) Napster proved a touchstone for more sophisticated distribution software. As Napster came under siege, new start-ups, like

#### THE AMERICAN DREAM

Kazaa and Morpheus, were established overseas, where copyright regulations are typically lax. These new services employed a peer-to-peer networking system, which enabled service users to connect to other individual's computers without the use of a central server. With new peer-to-peer technology, companies like Kazaa look to avoid responsibility for the pirated music that may circulate via their software.

File-sharing network software has proved wildly popular. The proliferation of peer-to-peer networking, coupled by the expansion of high-speed Internet services, has greatly expanded the file swapping community. Studies estimate that 63 million Americans presently use Kazaa and its competitors [3]. That figure continues to grow; upwards of 2 million Internet users download Kazaa's software each week alone [3].

Undoubtedly, online music distribution, a costless substitute for compact discs, has been a major cause of the 30% sales freefall over the last four years. Studies suggest that free online distribution will continue to take a toll on the record industry. Analysts forecast that unsanctioned file swapping will cost the record industry \$4.7 billion in revenue in 2008 [12].

#### **Record Companies Fight Back**

Spearheaded by the RIAA, the recording industry has orchestrated a multiprong response against free music distribution online. After successfully suing Napster, the RIAA has now filed lawsuits against the new generation of peer-to-peer networks. To discourage consumers from using these services, the RIAA filed suit in September 2003 against selected individuals who share their music through uploading. The industry continues to issue new suits to reinforce its antipiracy message. In January 2004, the several labels announced a new round of lawsuits against music uploaders [4]. These highly publicized lawsuits may have helped reduce traffic on peer-to-peer networks. Survey statistics from the Pew Internet & American Life Project and comScore Media Matrix indicate that the percentage of American households that download unauthorized music has fallen from 29% to 14% since spring 2003.

Other studies show that user traffic fell on the four major peer-to-peer networks—Kazaa, WinMX, BearShare, and Grokster [7]

However, the RIAA's suits have fostered strong legal objections. Some federal judges contend that RIAA's policy of identifying anonymous Internet users may infringe on individuals' rights to privacy. In December 2003, a U.S. Court of Appeals placed severe restrictions on the RIAA's ability screen for the identities of music swappers. In another December 2003 ruling, an appeals court upheld Verizon Communications' decision to hide the identities of its Internet customers from the RIAA [8]. Constitutional concerns may further hinder the RIAA from pursuing legal recourse.



#### **Fighting Fire with Fire**

To counter the popularity of free file sharing, record companies have ventured into the business of online music distribution by licensing its recordings to online services. Apple's service, iTunes, has emerged as the clear leader in the licensed online service market. Unveiled in April 2003, Apple's iTunes sold an impressive 25 million songs at 99 cents each by the year's end [2]. Marketed alongside Apple's innovative portable music player, the iPod, iTunes's immediate success has spawned heavy investment in the burgeoning licensed online music market. Keen on establishing market presence, several other companies have introduced competing online services. RealNetworks's Music Store, Buymusic.com, and Roxio's revived Napster 2.0 all launched in 2003. Indicative of the fervent market climate, ensuing price wars have driven prices down to as low as 79 cents per song [9]. In 2004, the market will crowd further, as Wal-Mart, the nation's largest CD vendor, and Sony introduce their services.

#### **Evaluating the iTunes Revolution**

As the licensed online music market booms, serious questions remain about its potential for profitability. If companies can successfully entice just a fraction of Kazaa's users to switch to their services, they can establish a formative marketplace for their services. However, as long as free downloading services are available online, convincing users to switch remains problematic. Other important considerations cast doubt on the industry's future success. Market analysts fear that the number of competitors has grown too quickly. When Sony and Wal-Mart introduce their services in 2004, the market will have seven major competitors, all providing relatively similar services. The lack of product differentiation, coupled by high service start-up costs, raises uncertainty about profit potential in a crowded marketplace. Profits may spread too thin, and it is unlikely that all seven of these services will survive.

Mostly importantly, market analysts are concerned that selling a song online is less profitable than selling a compact disc. A CD retailing for \$14.99 may have cost only a few dollars to manufacture and market. However, the profit margin on a 99 cent download is slim [1]. Also, most services offer substantial price breaks for downloading entire albums. On iTunes, an album retails for only \$9.99, much cheaper than in most record stores [1].

Ultimately, the volume of sales online may simply not be enough to compensate for the decline in record sales. For example, in 2003, iTunes users downloaded



161,000 copies of John Mayer's singles, some of iTunes's strongest sellers. However, these sales correspond to only about 16,000 records, a small fraction of Mayer's total compact disc sales in 2003 [6]. Thus, the usage of services like iTunes must grow substantially before they can become a major market force.

While the fate of download sales remains uncertain, portable music players themselves have become a very profitable business. At retail prices of hundreds of dollars, consumers bought 3.5 million portable players in 2003 alone [9]. Apple's sales for its iPod have been outstanding; 730,000 iPods were sold in the fourth quarter of 2003 alone [9]. In fact, Apple expects to make the majority of its profits not from the iTunes service, but from the sales of iPods.

However, the rise of portable music players does not necessarily raise revenues for the record companies themselves. The iPod and its competitors support music files downloaded from unauthorized sources. As long as unsanctioned services remain online, consumers still have a free alternative to licensed download services. Thus, the proliferation of portable players does not guarantee a comparable growth in licensed downloads.

#### The Future of the Record Industry

With its strong commitment to feebased online services, the music industry's new ventures may dramatically change its structure. The rise of online distribution may cause the retail record market to consolidate and shrink. Many independently owned stores are unable to keep pace with large corporate competitors during a record sales slump. In February 2004, Tower Records, one of the largest family-run record stores in the country, filed for bankruptcy [10]. While large retailers like Best Buy and Wal-Mart are more poised to survive, the online revolution may someday claim even the biggest retail chains. Following the record companies' lead, retail chains may try to adapt to the online distribution service phenomenon. One possibility would be to provide services for custom CD mixes that utilize downloaded music files.

Ultimately, online music distribution may not only reshape the music industry, but fundamentally alter the way in which the listener appreciates the music medium. Downloading removes emphasis from the album as a collective body of work, in favor of exchanging individual song files. As the significance of the retail record market shrinks, so too does the major outlet for album distribution. If the online exchange of licensed music proves to be the wave of the future, the compact disc, and perhaps the 'album' itself, soon may join the LP, 8-track, and cassette in the forgotten recesses of our music lexicon.

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# Low Price Airlines - A Thing of the Past or a Promise for the Future?

By Linda Pedersen

During recent years the airline industry has experienced an increasing popularity in low-price airlines. In the late 1990s, airlines such as JetBlue in the United States and Ryanair in Europe entered the airline industry, rapidly usurping passengers from established commercial carriers. During a time when commercial carriers were struggling financially, low-price airlines continued to steal more and more of the market share. While the increased airline competition and the lower price offers certainly appear to benefit travelers, there has been much debate recently about low-price airlines. The question for the future appears to be: How will new regulations affecting low-price airlines affect the airline industry and what kinds of fares will consumers face in the future?

#### The JetBlue Strategy

In the United States, the leading lowprice airline, JetBlue has been subject to much awe, the recurring question being "How can you offer great service with low fares- and

Linda Pedersen '06 is an Economics Major in the College of Arts and Sciences. make a profit- when so many airlines are having a hard time? [8]." JetBlue operates by a much admired business model aimed at operating as efficiently as possible, and thereby being able to offer low rates and efficient customer service. As JetBlue CEO, David Neeleman addresses, "Critics scoffed at our dream of creating a successful low-fare airline based in New York City. They said we'd never find quality employees, that no one would want to fly domestically from JFK, and that we'd never be able to offer both low fares and a product that includes new planes, leather seats, and live satellite TV with DIRECTV® programming [3]." Having flown JetBlue twice myself, I can attest to the fact that despite its relatively low fares, passenger comfort is not being sacrificed. JetBlue outlines its successful business plan as relying on the following: "Start with a lot of money," "Fly new planes," "Hire the best people," and "Focus on service [8]." These appear to be key tools for JetBlue's remarkable success in offering low-fare tickets without sacrificing passenger comfort. However, lowprice airlines have not only experienced success in the United States, but also in Europe, where they have gained a considerable share of the airline market over the past few years.

The European Market

The two leading European low-fare airlines, Ryanair and EasyJet have posed a challenge to established national airlines by taking over an increasing share of the market. Attracting passengers through their lower fares, these airlines have risen considerably in popularity in recent years. A press release published by Ryanair on February 12, 2004, revealed that Ryanair has now replaced the national carrier, British Airways, as Britain's most popular airline. While British Airways experienced a 0.5 percent passenger decrease in the United Kingdom and Europe in January 2004, Ryanair experienced a 36 percent increase in passenger growth in the same month. Consequently, in January 2004, Ryanair carried 1,705,954 passengers as opposed to British Airways' 1,564,000 passengers [7]. Despite this low-fare airline popularity among consumers, not everyone is as thrilled about their expanding market share. Whether factual or not, low-fare airlines are often accused of offering low customer service and posing a danger to passenger safety. Additionally, a recent ruling in Europe has provided a new obstacle for low-fare airlines.

#### The Charleroi Case

On February 4, 2004, Ryanair released the statement, "Ryanair congratulates



the EU Commission on the unanimous support it has received from the high fares airlines and the high cost airports on the Charleroi decision [6]." This release was a response to the European Commission's decision to ban special deals between Ryanair and the local government in Charleroi, Belgium. The local government in the depressed city of Charleroi had struck a deal with Ryanair, granting 50 percent lower landing charges in addition to considerable subsidies for staff training and recruitment [2]. In late January, the European Commission ruled that these subsidies were illegal, and according to the chief executive of Ryanair, Michael O'Leary, the European Commission's decision to ban these subsidies "spells the end of cheap flights in Europe [6]."

According to The Economist article, "Low-cost airlines- Grounded?", Ryanair's share price declined by 30 percent on January 28th as a result of the European Commission's ruling. As The Economist article argues, "The European Commission is supposed to be promoting new jobs, competition, and travel between EU countries... That is why it is odd that it is poised to take a decision that will hurt Ryanair, an Irish airline whose rise has helped slash the cost of travel, and created thousands of jobs- many at under-used airports in depressed areas [2]." Ryanair describes the European Commission's decision as being "anti-consumer" and "anti-competitive." Ryanair's Head of Communications, Paul Fitzsimmons, argued that "If ever one needed evidence that this decision is bad for consumers, the fact that it has been supported by the association representing the high cost airports and the association representing the high fare airlines, ... endorses Ryanair's view that yesterday's decision is bad for competition, bad for publicly owned airports and bad for Europe's consumers [6]." Will Ryanair's predictions turn out to be accurate or overly pessimistic? Only the future and further rulings in similar cases will tell, but The Economist points out some solutions to the problem.

#### **Possible Solutions**

Although Ryanair's statements in response to the Charleroi decision are pretty pessimistic, not everyone predicts that the European Commission's decision in this case and in other potentially similar cases will have such a negative effect on low-fare airlines and their ability to provide inexpensive tickets for their passengers. According to The Economist article, Ryanair only has to pay back one quarter of the 15 million euro subsidy it received from the Charleroi deal [1]. Also, the European Union's transport commissioner, Loyola de Palacio, stated that she opposed the Charleroi deal due to the fact that it was "exclusive and not transparent," arguing the need for clearer guidelines for airports to follow when trying to attract business [1]. The Economist argues that while reduced subsidies may influence Ryanair and other low-fare airlines to cut some of their less profitable routes, overall the future is not as bleak as Ryanair's press releases portrav it [1].

#### Looking Into the Future

As The Economist points out, low-fare airlines increasing their already low ticket prices by a few euros would not cause the demise of low-price air travel. Additionally, it appears that the low-fare airline phenomenon is spreading rather than diminishing, as lowprice airlines are branching out from their markets in North America and Europe, and entering the Asian airline market [4]. In particular, Singapore Airlines is the latest large airline planning a new low-fare option, Tiger Airways, with the help of Ryanair founder, Tony Ryan [5]. Thus, despite recent obstacles faced by low-fare airlines in Europe, the future of the low-fare airline industry does not appear to be threatened by these new developments. Rather, the fact that the low-fare airline phenomenon is gaining momentum in Asia as well, indicates a bright future for passengers looking for cheaper options than traditional national carriers.

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## **Ten Guidelines for Picking Winning Stocks**

#### By John Gilman

Before you contact your stockbroker, here are ten important suggestions to strength your portfolio:

10. Know what the company actually does I can't tell you how many times I've seen a stock with attractive financials, but I have no concept nor clue of what is it that they do to make their money. Therefore, before I even look at a company seriously I make sure that I completely understand what they do. Such phenomena are common in the technology industry and with business-to-business service companies. It is important to recognize that I am not recommending you buy only companies that you know; that would be ridiculous and would not lead to profitable investing. Nevertheless, if you read a company description and cannot tell if it is written in French, Latin, German or English, then it is best to stop there and move on to the next one. Feel free to research the business/industry of the company in order to understand companies you are not familiar with but if you feel you might need an MBA or PhD to fully understand the company, it's not worth your valuable investment research time!

#### John Gilman is President of the Cornell Investment Club

9. Interpret their P/E ratio

The P/E ratio is simply the price of the stock divided by the earnings, i.e. profit of the company, per share. Some "experts" might tell you not to buy a stock with a P/E over 20, but I think such absolute guidelines are unnecessary.



Most basically, the P/E ratio is a measure of expected growth. A very high P/E implies investors expect earnings increase to substantially over the next twelve months and beyond. A very low P/E implies that investors expect earnings to remain

unchanged or even decrease over the upcoming years. High/low P/E's do not distinguish between good and bad stocks, but rather are important indications of what it expected from your stock. After you gain some experience investing in the market, you will come to realize that the market is driven by expectations. Back to P/E's, if you encounter a low P/E stock, but think that the company has great growth potential, then it is a good buy. Conversely, if you like a stock but see that it has a very high P/E and might not be able to live up to those expectations, then you should wait and see if the stock falls in price before buying.

### 8. Choose companies with low relative Debt levels

Most beginning investors believe high debt is bad and low debt is good. While this is generally true, in order to be a smarter investor, you should look at your company's debt level compared to its competitors. Even though a debt free balance sheet allows management more flexibility in its operations, you must realize that debt is more appropriate in some industries over others. For example, in lowrisk industries such as utilities, debt is a very useful financing tool and you will commonly find high debt levels across the board. However, in high-risk technology companies, high levels of debt may be a hindrance on the company's performance and can eventually lead to bankruptcy. Understanding this seemingly minute distinction is a crucial step towards becoming an intelligent investor. Important ratios to look at when comparing debt levels are Debt/Equity and Debt/Assets.

### 7. Find out what historical news has led to big movements in the stock

Unless you find an even-steven company, when looking at a one-year chart of your company's stock performance you will find THE VISIBLE HAND

either a big spike upwards or a sharp decline. These big movements contain critical information and aren't just there to make stock charts look pretty. After you recognize when this movement occurred, go to historical headlines and find news that can explain what happened to the stock at the time. The most likely cause is earnings guidance, i.e. when companies tell the public if they foresee earnings declines or increases in the near future. If the news was bad, make sure you can rationalize what has changed since then and why the stock performance should be different going forwards. If the news was positive, you must ask yourself if this stellar performance is sustainable or was it most likely a one-time event.

#### 6. Compare Cash Flow To Net Income

In the age of corporate scandals and financial manipulation, a cash flow to net income comparison has become critical. Without getting into too much detail, we can keep this analysis simple and meaningful. Strong net income or expected strong net income is a necessary but not sufficient condition for stock performance. If the company's strong net income is backed by very weak cash flow, there is cause for concern. Unless you can specifically identify why this is occurring, I would recommend that you stay away from such stocks and not risk encountering the next Enron or Parmalat. Naturally, the best scenarios would be strong net income and cash flow. However, one does not often find such a stock at a suitable P/E ratio (see 9). Investing is the stock market is continuously a balancing act between finding solid companies at a good/ cheap price and solid companies at a bad/high price.

#### 5. Look for solid return on assets

Return on Assets (ROA) is simply the Net Income of a company divided by its Assets. It is an absolute measure of profitability that can be compared across all sectors and industries. For this reason, I would recommend that you only look at companies with a ROA of at least 5%. Nevertheless, as with any investing rule, there is always a catch. A high ROA must be taken in context with all of the above guidelines and you MUST analyze the sustainability of an abnormally high ROA. As an economics major, you are practically brainwashed into expecting zero economic profit in competitive situations. Therefore, when I encounter a company with incredible performance over the last few years, I ask myself if this performance is sustainable or are there some ways in which competitors can enter the market, thus driving down prices and profitability. While many companies are cyclical and some variation in ROA is expected, when you see a one-year ROA is excess of 15-20%, there is some cause for sustainability concerns.

### 4. Go to the company's website, read other SEC filings

This step is challenging but will provide substantial rewards if done correctly. Most companies now have Investor Relations sections of their website that contain SEC filings such as 10-Ks and 10-Qs (The 10-K is released annually while the Q is released quarterly). In these filings you will find a section called "Management's Discussion of Results". Reading this section will give you great insight into what management sees as drivers of good or bad performance. Then you can take this information and assess the company's future prospects in terms of continuing this performance or changing their operations. Also, the 10-K and 10-Q include possible risks, business segmentation breakdowns, extended business descriptions, company strategies and even industry analysis. I think companies put so much information in there so as to hide the stuff they don't want you to notice. However, after you have developed an investing acumen, you can begin to pick golden nuggets of information from these filings and make sound investment decisions based on all publicly available information.

### 3. Ask yourself why you should buy this stock now

After you have done a substantial analysis of the company's financials and strategy, you must begin to think about an entry point into the stock. I alluded to this in previous sections but want to go into more detail here. Here is where you really need to concentrate on recent news about the company and how the stock has been performing week to week. For example, if you found a stock you like but just saw the stock run-up a solid 10% since you started looking at the company, you must ask yourself an important question; did this gain happen too fast and is the stock in for a sell-off or is this just the beginning of a long-term upwards trend? I cannot give you any steadfast method for assessing this issue, but it will come from feel and experience in the market. When you can form a well thought-out opinion about this type of dilemma, you are really getting a knack for investing.

## 2. Know what time frame/gain you expect from this stock

I cannot emphasize enough the importance of forming expectations about your stock purchases and WRITING THEM DOWN. Setting these guidelines ex-ante will be very helpful when the time comes to sell your stock to lock in those gains. Depending on the particular stock, your expected gain might be anywhere from 10-40% of a 1-3 year period. If you are sitting on a stock that is up 30% when the market is mostly unchanged, don't be afraid to sell. There's nothing wrong with selling a stock at a profit! People commonly are afraid of missing out on that last gain before the stock takes a downward turn. Believe me, this kind of marketing timing is impossible and more often than not proves be unprofitable. Even if you time the market perfectly on most stocks, one wrong decision could erase all of your previous successes. You will be surprised how much a stock can move in one day if bad news comes out.

### 1. Do not be suckered into buying "trendy" stocks

If you have recently seen your company of interest in about five articles spread out through various sources, all of which were positive, it is best to assume that you are too late and should avoid investing in such a trap. More often that not, stocks with a lot of good press have already incorporated this good news into its price. However, on the flip side, do not be discouraged with bad press about your company. If you still believe in the stock and the "bad news" drives the stock price down further, it should make that stock an even better buy in your mind. People will try and steer you away from "trying to catch a falling knife", but turnaround stocks are where great profits may lie. I urge you to be cautious here as you MUST be sure that this bad press is just chatter or overreaction to some event and does not affect your initial view of the company before taking any action.

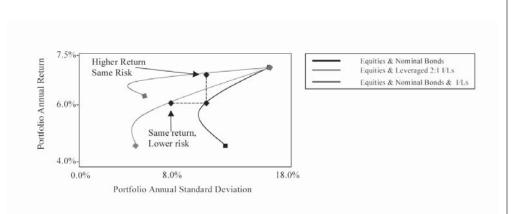


## Global Inflation Linked Bonds as Separate Portfolio Allocation

By Gwendolyn Graziano

While many investors use an inflation linked (I/L) bond allocation as part of their nominal portfolio, I/Ls actually should be considered as a separate asset class because of the large market size, and because of their diversification benefits.

Italy announced it would enter the I/L market on September 5th by adding between 3bln and 5bln euros to the global I/L market. Italy will make the 7<sup>th</sup> country in the I/L market, with Japan and Germany likely to follow. This illustrates the transition of I/Ls from a niche market into a global asset class. At a total current market cap of 406 billion, the I/L market is nearly double the size of the Emerging Market Debt market, slightly bigger than the Emerging Market Equities market, and triple its own market cap 5 years ago. [1] I/L's should be invested in as a separate asset class not only because of their increasing market cap but because they are different in nature from nominal bonds. I/ L bonds tend to have a low and often negative correlation with nominals because movements in the I/L are driven by moves in real yields, the return above inflation, where as nominal bonds are driven by both real yields and inflation. [2]



Fundamentally, although the I/L bond returns are comparative to nominal bonds they are less risky and have a high risk return ratio. In addition to being uncorrelated to nominal bonds I/Ls are uncorrelated to most other assets classes. This allows I/Ls to be a strong diversification tool. The efficient frontier, a graph of the risk to return ratio of different concentrations of assets within a portfolio, demonstrates the benefits of adding I/Ls. As seen in the chart below, the efficient frontier for a portfolio consisting of equities, nominal bonds, and I/Ls reveals that adding I/L bonds into the portfolio allows for the efficient frontier to be moved to theleft giving higher returns for the same amount of risk or the same amount of return for lower risk.

The last important reason to have I/Ls as an asset class in your portfolio is that they serve as a hedge against inflation. Inflation has been at an all time low of late but there has been a large implied increase in inflation as the difference between nominal bonds and real yields has increased. Also supporting a future increase in inflation, commodities have steadily increased since May. [2] As seen in the below table, a Global I/L

	Average Cor	relation to US	5 Inflation		
Domestic I/L Portfolio	0.18	0.28	0.52	0.85	0.91
Global I/L Portfolio	0.14	0.26	0.52	0.80	0.87

portfolio nearly equals a US I/L portfolio in its correlation to US inflation. [3]

Global I/Ls are highly correlated to US inflation because inflation is a global phenomenon. Consequently, once hedged for currency exposure, the foreign I/Ls are a good proxy for a US I/L. By going global you also benefit from increased diversification which pushes your efficient frontier farther to the north-west than a frontier with US I/Ls alone. This results in a higher return for the same risk or lower risk for the same return.

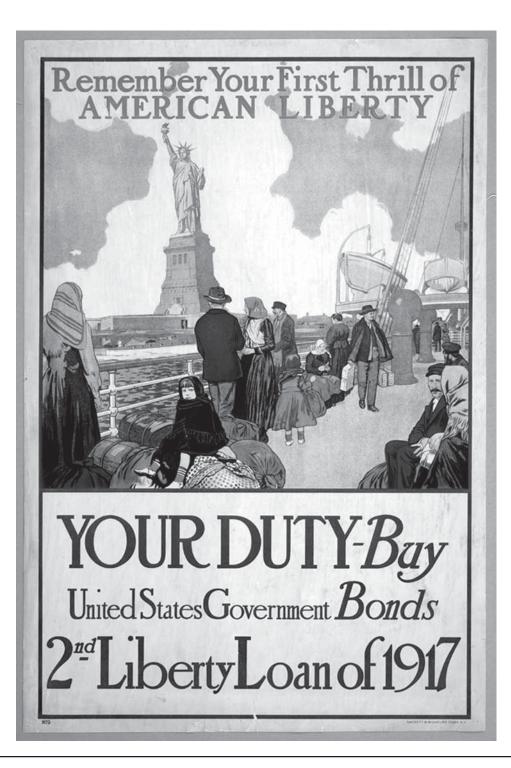
Because of the size of the asset class, its diversification benefits, and because of its ability to hedge inflation, Global I/L bonds should be considered a separate asset class.

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## The Cingular-AT&T Wireless Deal: What it means for Cingular and the Wireless Industry

With competitors eyeing the merger as an opportunity to catch up, how will Cingular justify its decision? Is Cingular hobbling itself in the competitive wireless market, or is it ready to take on the leading role?

By Samson Cheng

After outbidding Britain's Vodafone Group PLC, Cingular Wireless has recently agreed to acquire

\* cingular\*

the struggling AT&T Wireless Services Inc. for \$41 billion in cash plus the assumption of \$6 billion in debt. If regulators approve the deal without requiring Cingular to sell off any of its assets, the merger will create the largest cellphone operator in the nation, with 46 million subscribers and combined revenue of \$32.2 billion in 2003. The merger will also allow Cingular to extend its network coverage to 97 of the nation's top 100 markets. Marrying the second and third largest wireless companies, the merged entity will assume Cingular's brand and phase out the 118 year-old AT&T name.

Formed in 2000, Cingular Wireless is jointly owned by regional phone companies Atlanta-based BellSouth Corp. and San Antoniobased SBC Communications Inc. As the wireless and high-speed internet industries are growing fast, the two companies have seen declines in their core landline businesses and are betting that going wireless will be the dominant trend in the future of communications. Paying a 36% premium over its initial bid (\$15 per share vs. the initial bid valued at \$11 per share), BellSouth and SBC are obviously desperate for acquiring more assets in the growing wireless industry. The acquisition

Samson Cheng '07 is an Economics Major in the College of Arts and Sciences will help them level off their declining revenue from traditional telecom business as consumers give up their landlines in favor of wireless services.

AT&T Wireless, currently the third largest wireless operator in the nation, has spun off from AT&T Corp., the nation's largest longdistance phone company, in 2001. Despite the split into two independent entities, the two still have business links today. AT&T Corp. uses AT&T Wireless cell phone services while the wireless operator pays AT&T Corp. to use its network to send

long-distance calls.



#### Is Cingular overpaying?

Vodafone Group, a major investor in Verizon Wireless, was on the verge of winning the bidding war for AT&T Wireless before Cingular's last-minute entrance to the battle. The British wireless company pushed the price beyond \$14 a share and forced Cingular to pay a 36% premium over the initial \$11-per-share bid. The \$15-per-share bid shocked many investors, as AT&T has always traded below \$8 a share over the past twelve months.

Of course, in agreeing to pay such a hefty premium, Cingular is expecting substantial synergies that will help sustain the company's growth in the future. It promises its shareholders robust long-term growth and significant operating efficiencies. Not only will the merger give Cingular broader network coverage, it will provide a larger spectrum to accommodate growth and next-generation network services.

Is the 36% premium really worth it? Financially speaking, Cingular is anticipating cost savings from the deal and increases in revenue that will help offset the high price they are paying. Both Cingular and AT&T Wireless have their own strength in the market that, when combined, will give the merged company a leadership role in the strong-growth wireless industry. Cingular has a broader customer base, while AT&T caters mostly to business customers (90% of Fortune 100). Combining the two companies' billing platforms, Cingular can expect a 40% reduction in billing costs per customer. The new company will also save big bucks by trimming capital investments, slashing jobs, and reducing administrative and marketing costs. Expected total savings will reach \$1 billion in 2006 and \$2 billion after that.

Clearly, Cingular is betting on its future. The cost savings resulting from the deal come from two major sources, capital investment and operating costs. By integrating AT&T Wireless's network into its own, Cingular will save capital costs of \$600 million to \$900 million in 2005 and \$800 million to \$1.2 billion each year after that. However, not all of the big savings are likely to go back to the pocket as profits: Cingular will be under intense pressure to roll out new services quickly enough to

Company	Cingular*	Verizon Wireless	
Subscribers	46 million	37.5 million	
Net new subscribers (4Q 2003)	77,0000	1.5 million	
Churn rate (customer turnover)	3.05%	1.8%	

\*Cingular and AT&T Wireless combined

compete with Verizon Wireless, a heavy spender on investment and new services.

The anticipated savings in marketing costs may prove ephemeral. Cingular says by integrating the tasks of marketing, administration, and customer care, the company will save more than \$1.2 billion in operating costs after 2006. But analysts warn that since AT&T Wireless is losing its subscribers at the highest rate in the industry, Cingular may have to increase its investment spending to fend off its rivals who are likely steal customers away. Cingular's optimistic view of the merger rests on the assumption that its cost saving plan will go well as expected, which is not likely to happen.

#### Verizon Wireless: pleased to see the deal



If consummated, the merger will result in head-to-head competition between the two giants: Cingular Wireless and Verizon Wireless. Verizon Wireless, a joint venture between Verizon Communications Inc. and Vodafone Group, is now leading the market with 37.5 million customers. Verizon sees the Cingular deal as an opportunity to grab more market share. Verizon can take advantage of the upcoming few years during which the new Cingular will be concentrating its efforts on restructuring, integrating its technology and combining its billing systems.

At least in the short run, the new Cingular is going to be very inward-focused. While the management is busy merging their operations, they are likely to get distracted and routine customer service will be disrupted. This will scare more customers away, especially after the federal number portability

rules went into effect last November, which allows customers to switch carrier without losing their phone numbers.

Merging two big businesses can be very complicated. In the short run, operating and capital expenditures are expected to remain high during the integration period due to the fact that each carrier is running two separate networks that use different technologies. Both Cingular and AT&T Wireless are in the process of moving their customers to the new GSM network (global system for mobile communication), a technology that is dominant in most part of the world. However, AT&T has been slow in moving its customers over: 20% of its customers are on the new network, compared to 45% of Cingular's.

Another concern for Cingular is that AT&T Wireless leads the market in customer complaints. Alarmed by its high rate of subscriber turnover, AT&T Wireless hopes the merger with Cingular will improve its image of weak management and bad customer service. However, even if the deal is approved without barriers, it will not close until the fourth quarter of the year. It will delay the synergies that Cingular is anticipating and will give enough time for competitors, Verizon Wireless in particular, to lure customers away from AT&T Wireless. In the mean time, employees at AT&T Wireless will start looking for jobs, which again will hurt the quality of customer care. Subscribers may switch to other service providers with their numbers kept since the company they are having a relationship with will be disappearing soon.

Verizon is known for its efficient network which allows it to add network capacity without much extra costs. While Cingular has to deal with the burden of debt that it takes on from AT&T Wireless, Verizon can take advantage of the period and easily roll out new services. Indeed, Verizon has been very successful in getting new subscribers: it added 1.5 million new subscribers in the fourth quarter of 2003, while the number of combined net new customers of Cingular and AT&T Wireless was merely 770,000.

#### Impact on the industry and consumers

Clearly, the deal will help reshape the industry. As local and long-distance phone businesses are in decline, traditional telecom companies like SBC and BellSouth will secure their source of revenue through acquisition of wireless businesses. Sparked by the Cingular deal, the telecom industry is expecting more deals coming out in the near future. The megamerger will leave five players on the field: Cingular, Verizon, T-Mobile, Nextel, and Sprint PCS. The continuing industry consolidation is going to hurt consumers in the long run as prices are likely to increase due to reduced competition.

#### The winner is...

Telecom analysts seem to be divided on whether Cingular has made the right move. Optimists believe that once Cingular digests AT&T Wireless, it will be ready to manipulate its large business scale to take on Verizon Wireless and challenge its leadership position in terms of network coverage and phone call quality. From Verizon Wirelessi's point of view, the deal will help the company in adding new subscribers and once Cingulari's integration is complete, it will already be far ahead. The true winner of the deal thus remains to be determined in the future.

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## **Nobel Prize Lecture in Cornell**

By Wee Lee Loh

Professor Robert Engle, Nobel Prize winner in Economics 2003 presented a distinguished lecture in Cornell. This lecture gave a glimpse of his illustrious achievements, which won him the coveted prize.

The hall was near empty as I entered Goldwin Smith HEC Auditorium on 25 January, 2004. I could not help but wonder if enough audience would turn up, especially since this was winter break. Fortunately, within the next fifteen minutes, many faculty and graduate students trickled in. I had forgotten that many of our over-worked graduate students work over the breaks here at Cornell. Soon enough, the place was densely packed.

At around 4pm, Professor Robert Engle and his wife arrived. He is a corecipient of the 2003 Nobel Prize in Economics Science, which was awarded in recognition of his achievements in developing the methods of analyzing economic time series with time-varying volatility (ARCH). In fact, he is a Cornell alumnus, having graduated with a M.S in Physics in 1966 and a PHD in economics in 1969.

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His presentation was entitled "Risk and Volatility: Econometric Models and Financial Practice". We were honored that he delivered the same lecture as he did for his Nobel Prize Award Lecture in Stockholm, Sweden. His lecture was centered around the conception and development of his revolutionary model, ARCH (Autoregressive Conditional Heteroskedasticity). To distill this term into its components, conditional refers to its predictive nature, and heteroskedasticity refers to its uncertainty and autoregressive means to fluctuate over time. This model attempts to distinguish between true serial correlation and an ARCH effect arising from inter-temporal dependence of the variances. His idea was first conceived when he was away on sabbatical at the London School of Economics. He was interested in a conjecture that Milton Friedman had made in his Nobel Prize lecture in 1976. His revolutionary idea has since become an indispensable tool for financial practitioners. It is significant enough to justify the claim that his model, gave birth to the entire field of financial econometrics. Towards the end of his lecture, he also posed several new

challenges to fellow economists. He described some of his existing research, hoping that other economists could further delve into those areas.

Based on his lecture, I developed a keener sense of how the academia field functions. As Maurice G Kendal aptly commented, "the study of economics requires a team of behavior scientists, mathematicians, statisticians, psychologists, system analysts and numerical data handlers". To develop the sophistry in his ARCH model, Prof Engle had to collaborate with a mathematician. It is thus obvious that academia is not all about a professor, fervently working alone in the library or the office.

Professor Engle has a wonderful sense of humor. During his presentation, he listed a huge series of newer models like GARCH, which have been based on his original ARCH model. When he wanted to illustrate how ARCH models are present in everyday life, he juxtaposed that with pictures of real arches, like the Arc de Triumph in Paris, arch bridges and arch walkways. During the presentation, he also excitedly recounted his experiences in Stockholm, where he had attended the Nobel Prize award ceremony. He showed



us several photographs of his experiences too. It was quite amusing when he recounted how his son thought the Swedish princess was quite attractive.

I am most impressed by Professor Engle's desire for the field of financial econometrics to develop useful and accessible tools that could be used by the typical household, so that people are able to make sound investment decisions for themselves. In this aspect, Professor Engle echoes Arthur C. Pigou's view that "the main motive of economic study is to help social improvement". It would truly be a pareto improvement if every economic agent in the economy uses these tools to make fully-informed investment decisions.

Besides the ARCH model, Professor Engle also jointly developed 'Cointegration' with Professor Clive Granger. Co-integration is essentially a method of defining the long run relationship amongst a group of time series variables. It uses the idea of an integrated time series in describing the long run interaction and arose in the context of spurious regression problem. For those who are interested in these subjects, I would highly recommend **Economics 327 Time Series Econometrics** (Spring). Both of these revolutionary concepts are covered in this advanced undergraduate course. Besides, a new young and energetic professor, Morten Nielsen, a time-series econometrician, is teaching this class. If you have ever wondered how to examine the impact of present events on future values, then this course is exactly what you need. Similarly, for those who have enjoyed or are enjoying Economics 320 Introduction Econometrics, I would also recommend another newlycreated course, Economics 325 Cross-Section and Panel Data analysis. This course is taught by another dynamic faculty member, Professor Francesca Molinari. This course covers specialized topics in microeconometrics, which, are particularly useful for empirical economic analyses.



## Reducing Traffic Congestion on the Cornell Campus

By Thomas Wei

As a fellow Cornellian, if you aren't awoken by the incessant shrieking of your alarm clock every morning, you, like me, are probably jolted up by the sounds of automobiles zooming by your window. This is true whether you live on North campus (think about the garbage trucks), in the construction laden area of West campus, or in the bustling "metropolis" of Collegetown. Traffic flow certainly has a normative presence throughout Cornell University and Ithaca. This comes as no surprise for a campus that encompasses 745 acres of land. The thought of traversing from residence to class halls in order to make 8 AM labs is often very unappealing to sleep-deprived undergraduates. This distaste is compounded by the frequent hazards of steep inclines and frigid temperatures. Indeed, many would rather hit the gym in their free time, rather than get their daily exercise by walking to class.

The simple solution to this dilemma: a car. What's easier than getting up, jumping into a car, and arriving at class with minimal hassle? Unfortunately, as most of you probably suspect, the issue is a bit more complicated than that. This article is the second of two separate papers, which informally outline a study conducted by a few colleagues and I concerning

Thomas Wei '05 is a Policy Analysis and Management Major in the College of Human Ecology what we dub as "Cornell's Transportation Problem." The first paper, published in a previous issue of this journal (Fall 2003), covered the rationale, objectives, methodology, and hypotheses of the research. This second paper reviews some of the main points from the first paper, reports our principal findings, and then subsequently evaluates the implications that arise. Alternative systems are suggested based on policies from the literature that appear to have been successful in similar educational settings.

#### A Review:

In the previous paper, a portion of it was devoted towards presenting the nature of the problem. It was stated that traffic congestion is a negative effect resulting from a public good. The two characteristics of public goods, non-rivalry and non-excludability, apply in the case of Cornell's road system. As a result, there is a tendency toward non-optimal outcomes- in this case, there is overprovision. This is evident by simply walking around central campus during the transitional periods between lecture hours. It was stated that other negative effects of increased traffic flow on campus include faster road deterioration, lost productivity from time spent waiting in traffic, and increased danger to bicvclists, pedestrians, and other motor vehicles. Indirect consequences, or externalities, include pollution from exhaust gases which are particularly undesirable since they cause

environmental degradation and can adversely affect the overall level of public health.

This study took a demand approach to the problem. The purpose was to determine the most effective method to suppress the over-usage of cars on campus. To do this, we used oncampus parking permits as a proxy for traffic flow on campus. The rationale is that the more people who demand parking permits, the more people who have cars and presumably would wish to drive them on campus. Our goal was to determine whether consumers are affected by the prices of parking permits. More importantly, however, we wanted to determine how sensitive they were to these prices relative to an obvious close substitute for cars- buses. In other words, we wished to compare the price elasticities of demand for each of these goods (parking permits and OmniRide bus passes). For those who have not had a microeconomics principles course, price elasticity of demand is a measure of how consumer demand for a good or service is impacted by changes in the price of that good or service. In more technical terms, it is the average percentage change in quantity demanded of a good or service for a given percentage change in the price of that good or service.

It should be noted that we originally wished to incorporate both income variations and the demand for bus passes and parking permits into a multiple regression model. However, when the study was actually conducted, we realized



that we were unable to do this because one of our scales was misunderstood by respondents. This confusion was not realized during the pilot testing of the initial questionnaire, and so we were unable to correct the deficiency until after the survey distribution was completed and analysis begun. As a result, we decided to simply estimate the demand for each good separately and then perform a two-sample test to compare each good's price elasticity of demand. Even though we were unable to statistically control for the income and tastes/preferences factors, we did obtain data on these variables, and simply used them descriptively. These deviations from the original research approach may weaken some of our conclusions, and thus paves the way for improvement in future investigations. Please refer to the first paper for a more thorough overview of our definitions, methods, and hypotheses.[1]

#### The Sample- Preferences and Perceptions:

We obtained a sample size of 74, obtained from lectures and sections of various courses, as well as from fraternity houses around campus. There was a 5% and 12% non-response rate for racial/ethnic identity and annual household income, respectively. Although we could not obtain all of our population's demographics to determine representative-ness, it is clear that our sample over-represents males, Caucasians, juniors, Human Ecology, offcampus housing, and wealthier students. This is most likely due to our method of convenience sampling at courses where the composition of such students is greater. Nevertheless, we were able to catch most groups in our sample, albeit not in representative proportions.

Some descriptive results we found include that 54% of the sample have a car at Cornell. Of these people, only 7.3% currently own an on-campus parking permit. Despite this, 85% of these car owners drive to campus during class times at least once a week, with a relatively normal distribution centered around 2-3 times per week. This indicates that perhaps ownership of parking permits may not be the best indicator of traffic congestion on-campus, as originally hypothesized. That is, even though very few people actually own on-campus parking permits in our sample, a large majority of car owners still drive to campus during peak times (class times).

Other descriptive results include information on bus system usage. For this, 96% of our sample have used the TCAT system. Of these people, only 37% actually own an OmniRide bus pass. This implies that most people know about the system, but only a minority actually utilizes it on a regular basis. The reason for this is certainly not because people perceive the bus system as poor. Our index of preferences revealed that people in our sample on average felt relatively neutral/uncertain about their experience with the TCAT system. The other scale we utilized revealed that our sample had on average a slight preference for cars over buses. In general, these results indicate that people may be using cars more frequently not because they are dissatisfied with the TCAT bus system, but rather because they may simply prefer cars over buses in general as a mode of transportation (i.e., maybe because of convenience).

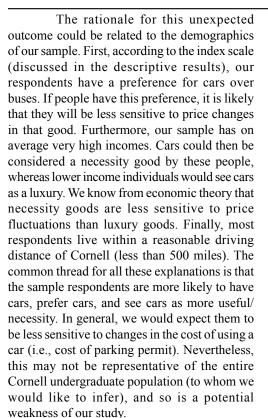
We did not test for the regularity which bus pass and non-bus pass owners actually utilize the TCAT bus system. We assume that agents act rationally; that is, if a respondent owns a bus pass, he or she uses the bus system both frequently and more often than a non-bus pass owner. Thus, we considered the number of people who have used the TCAT bus system but are not owners of passes as a proxy for the overall awareness level of the transit option. On the other hand, we used owners of bus passes to approximate the number of regular users of the system. Although these indicators may make imprecise assumptions about actual human behavior, they are generally appropriate for our simple model.

#### The Demand Curves and Elasticity:

To address our main hypothesis, we used inferential statistics (i.e., regression analysis). As discussed earlier, we were unable to form a multivariate model to statistically control for other variables that might have been important for our estimation. However, we were still able to perform simple bivariate regression analyses. Using our scales, we aggregated all the data for each hypothetical price level to derive a demand curve for both parking permits and bus passes as a function of each respective good. Next, by performing a double-log transformation of the data in the above regressions, we were able to compute and compare the price elasticities of demand for bus passes and parking permits. Using price as the predictor and quantity demanded as the response variable, we computed the relationship between the two variables with the method of Ordinary Least Squares. The results for each demand curve showed that there was a statistically significantly negative relationship between parking permits and bus passes and their respective prices (P-value  $\sim$  0; one-tailed test since we expected a negative relationship). This is in line with what we expected from Demand Theory: as the price of a good increases, the quantity demanded for that good decreases.

As mentioned earlier, to address the price elasticity question, we performed a log (ln) transformation of our data and re-estimated each of the previous regression models (demand curves). The usefulness of this model is that the slope parameter now is an estimate of the price elasticity of demand (?) for the good in question. Our a priori expectation is that the price elasticity for parking permits will be greater than the price elasticity of bus passes, in absolute values; that is, consumers are more sensitive to changes in parking prices than to changes in bus prices.

After running the two regressions, we obtained the following price elasticity of demand estimates: for parking permits, ? = -1.32; for bus passes, ? = -1.91; both estimates were highly statistically significant (P-value ~ 0; again, onetailed test based on our expectations of a negative relationship). It is evident that in absolute values, the price elasticity of demand for bus passes is greater than that of parking permits; thus, consumers are more sensitive to bus pass prices than to parking permit prices. But is this difference statistically significant? To assess this, we performed a two-sample one-tailed t-test (alternative that elasticity for bus passes is greater in absolute values than elasticity for parking permits). The results: under the assumption that there is no true difference, obtaining such values as we did would only occur with approximately a 6.01% chance (df = 19.95). With the conventional 5% critical level needed for statistical significance, this falls slightly short, but we will allow the reader to decide whether this P-value is enough to reject the null hypothesis. Assuming we deem this as sufficient evidence in favor of the alternative, the result shows the opposite effect of what we had originally hypothesized.



#### **Discussion:**

With these results in mind, it appears the best course of action is to implement a program whereby bus pass prices would be lowered in order to reduce traffic congestion on campus, specifically during class times. Therefore, we suggest the implementation of a program similar to "Unlimited Access." This is a program in which universities and public transit agencies cooperate to provide students fare-free transit services.[2] In order to provide such a service, the university subsidizes the transit agency for all rides taken by eligible members of the campus community. If Cornell is able to arrange this for the entire Cornell undergraduate population, bus ridership to campus should increase, vehicle trips to campus should decrease, and parking demand on campus should decrease. Such results were found at the more than fifty other universities across the United States that have implemented versions of the Unlimited Access programs.[3] The university typically pays the transit agency an annual lump sum based on expected student ridership, and students simply show their university identification to board the bus. This "shadow fare" allows students to ride the bus for free, and it also allows the transit agency to gain another source of revenue.

One argument against this system is that it would increase university operating costs, which then are passed back to the students. It is important to understand that the total subsidization would be shared equally amongst all students, thus minimizing the costs per student; furthermore, it would provide incentives for usage if this is effectively perceived as a sunk cost for students. In sum, this argument may raise some equity issues (since not all students would realistically start using the buses, but all students would pay), but there is no doubt that it would help to achieve the stated goals of reducing traffic congestion and increasing bus ridership.

If Cornell implements such a program, the TCAT agency would receive increased revenue. Increased revenue would allow for future bus service improvements, including more buses and travel routes. Service improvements, in turn, should increase students' satisfaction with the bus system and increase ridership, a sort of beneficial snowball effect. Since students surveyed currently are indifferent toward the bus system and only slightly prefer driving their car to campus over riding the bus, it is presumed that if students' satisfaction with the system increases, less people will drive to campus during class times. There is also the possibility that an unintended effect may occur with walkers also taking advantage of the free transit. This may be true, as walking is a viable substitute for bus transportation; thus, there is risk for overcrowding. However, the principal assumption in this study is that cars are the closer substitute to buses than walking because walking is both more limiting in terms of distance and subjectivity to adverse climate than both cars and buses. Moreover, overcrowding on the buses should not be a problem because only a percentage of all TCAT riders will be offered fare-free transit. Tompkins County has a population of about 96,500 to Cornell's undergraduate population of about 13,725; thus, the fare-free ridership would only account for about 14% of the total eligible riders.[4] Finally, with increased revenue, TCAT would increase its fleet, which would serve to counteract overcrowding.

This proposal is of course not the only solution, but is the optimum as dictated by our

results. There is no doubt that the results may not be the most popular because we are essentially suggesting that more indirect restrictions be placed on people's ability to choose their mode of transportation. However, the nature of the problem (public good), suggests that the private market will not correct itself, and so needs intervention from officials. Nevertheless, unpopular policies tend to be infeasible. The results are of course limited by our methodology: a few factors to consider are sample size (limited statistical power), hypothetical vs. observed behavior, choice of proxy variable, and sample bias. We will not go into the details of the weaknesses in this paper, but the reader should be aware that these results are by no means absolute in terms of conclusiveness. Nevertheless, this study does reveal some interesting insights on how the traffic problem may be controlled and paves the way for future research in the area.

THE VISIBLE HAND

#### Acknowledgements:

The other investigators in this study were Melissa Iammatteo, Ari Stern, and Harris Ziskroit. This project was advised by Professor John Kuder from the Department of Policy Analysis and Management. For the sake of brevity, this paper has omitted many of the technicalities with respect to methodology and limiting factors of the study. For inquiries and/ or a comprehensive written report of this study, please contact the author of this article via email: tew28@cornell.edu.

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## **Community Disservice**

By Colyar Pridgen

An opinon on why most community service is fundamentally harmful to society

Throughout American history, people who have tried to gain the highest degree of prestige and respect from their community have felt compelled to "give back" to said community. It has never simply been enough to be successful in your career, raise a nice family, or be a generally amiable person. You must bribe your neighbors through acts of volunteering for them to appreciate all your efforts. While thanking you for kindly spending your Sunday afternoon serving soup to the homeless, people never stop to think that not only are you wasting your own time, but you are actually hurting those whom you are feeding. Community service is fundamentally more detrimental to society than it is helpful.

THE VISIBLE HAND

Specialization exists for a reason; its result is increased efficiency. Just as you would never hire a roofer to fix a leaky faucet, you would not hire a doctor to put a roof on your house. It is the basic concept of comparative advantage that should be a part of any Econ 101 course. But through

Colyar Pridgen, '06, is an Economics major in the College of Arts and Sciences such community service programs as Habitat for Humanity, doctors and other non-roofers are applying roofs to roofless houses all the time. If they really want to do the most good possible in the amount of time they spend working on roofs, doctors should use those hours to save lives and then donate the money they made in

that time to pay a professional roofer to work for even longer than the amount of time the doctor had to work.

In a sense, the hypothetical doctor is socially obligated to spend this time practicing medicine instead of carpentry simply because he is able to. The immeasurable amount of time and effort required to obtain the human capital to be able (either legally or with regards to capability)

to work as a doctor necessitate that once able, a doctor spend all his non-leisure time working in the medical field. If a roofer could work as a doctor and receive a doctor's paycheck for a day, he would. Therefore, a doctor should not be willing to work as a roofer for a day, even though





he is able to. Furthermore, simply by doing his own job and donating money to be paid to roofers for their services, the doctor would be creating jobs for more roofers. This is preferable to the scenario in which he does the construction himself, thereby essentially stealing employment opportunities from professional roofers or unemployed would-be roofers.

Certainly this does not imply that it is unethical for people to not spend every waking moment working away in their area of expertise. In fact, it can be a nice change of pace to do a different style of work from that which you normally do. But any sort of work you do other than in your most efficient field should be regarded as leisure, whether or not it produces a positive externality. For instance, constructing roofs could be a favorite hobby of a doctor. Since this is the case, society should not rush to proclaim its most prolific volunteers as its greatest heroes. Rather, such a person should be only slightly appreciated for spending his free time doing something to the benefit of others instead of sailing or golfing.

After all, no volunteers are as selflessly motivated as people tend to believe. In most cases, active community service participants are hoping to be seen and recognized for their behavior. At best, they are attempting to feel good about themselves. Societal institutions, through efforts to reward such people, are further adulterating their motives. Colleges and universities today are drastically overzealous in accepting and recruiting applicants with extensive community service records. Admissions officers fail to realize that an impressive employment history is much more worthy because it is possible to get fired from a job, but nobody in their right mind turns away free labor. High school students pick up trash off of the side of the highway for all the wrong reasons.

The time has come for a change in attitude towards community service. It is

not as admirable an activity as most people assume. With the exception of a few rare cases, such as lawyers performing their daily tasks pro bono, community service detracts from the efficiency of market economy without adding a considerable amount of equality. It often takes jobs away from those who are struggling to find lowskill employment. It is also not as much of an altruistic endeavor as society seems to think. For all these reasons, people should regard achievements in volunteering less as remarkable feats of selflessness and more as productive forms of leisure.



## Assistant Professor Levon Barseghyan Joins Cornell Faculty

By Scott Sable

The Cornell University community welcomes Mr. Levon Barseghyan to the College of Arts and Sciences as an Assistant Professor. Professor Barseghyan, who prefers that students call him by his firm name, has assumed teaching responsibilities for two undergraduate courses, ECON 302 Macroeconomics and ECON 314 Intermediate Macroeconomics, as well as the graduate level course ECON 712 Advanced Macroeconomics. Excited about his first professorship and the opportunity to be a member of the Cornell community, Professor Barseghyan expressed his commitment to teaching and research.

A native of Armenia, Professor Barseghyan has earned multiple educational degrees. After high school, he attended Yerevan State University, Armenia's leading institute, and graduated in 1995 with a degree in Mathematics. One year later he earned a master's degree in Industrial Engineering from the same institute. Emigrating from Armenia to the United States in 1997, he matriculated at the University of Illinois-Urbana, from which he received a second masters in Science and Policy Economics. He then pursued a doctoral degree in Economics from Northwestern University and earned his Ph.D. after completing his thesis on the

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macroeconomics of Japan's economy during the 1990's.

Upon graduating from Northwestern, Professor Barseghyan began searching for a teaching position at a university in the States. His main criterion was to find a university that would offer faculty positions to both him and his wife, who is also a Ph.D. in Economics. When Cornell made such an offer, both he and his wife accepted. Professor Barseghyan attributes his decision to choose academia over a more financially lucrative position in the private or public sector to his family's high regard for education. During his childhood, Professor Barseghyan was surrounded by adults with degrees in high education. His father and several of his family friends earned Ph.D.'s, and from a young age, Professor Barseghyan recognized that high educational attainment was

well respected by society. Today, he maintains that academia provides rewarding challenges that conventional professions fail to offer.

Professor Barseghyan also has a passion for research. He is currently involved in two major research projects. Collaborating with professors and graduate students at Northwestern, and researchers at the Chicago Federal Reserve Bank, he is examining contemporary problems in the banking sector. He and his colleagues are analyzing how failed investments affect the economy in the long term, and what actions government should take in response. His other research project aims to understand deviations from economic theories of global bond markets.. Theory suggests that government bonds in different countries should have the same rates of return, but often they do not. Likewise, rationality theory predicts that people will invest in the bonds of those countries that have the highest returns, but often they settle for investments with lower rates of return. Professor Barseghyan suspects that personal costs to investing in foreign securities may well have pronounceable effects on agent's investing decisions.

With his teaching and research commitments, Professor Barseghyan admits that his free time is limited. "Cornell students think they work hard," he remarks, "but the professors work even harder." When he has time to spare, he likes to lift weights and play basketball. He also hopes to one day build working model airplanes, a hobby that has intrigued him for a long time.

An enthusiastic teacher and a skilled researcher, Professor Barseghyan is a welcomed addition to the Cornell Economics Department faculty.

THE VISIBLE HAND

## **Bulgaria in the New Europe**

By Atanas Tzenev

How does Bulgaria look in the New Europe? Through the eyes of a Bulgarian policy-maker

H. E. Elena Poptodorova, Ambassador of Bulgaria to the United States, visited the Cornell campus in February 2004. During her three-day visit, she met with faculty and students, including the Bulgarian community at Cornell and Ithaca College. She delivered several public lectures, such as "The Rule of Law in Bulgaria – an Emerging Democracy: New Concepts, Legal Instruments and Practices" at the Law School, "A View from the 'New Europe'" at a Peace Studies seminar, and a lecture at the Johnson Graduate School of Management in Professor Iankova's International Political Risk Management class. In this essay, I summarize the ambassador's views on the transition process in Bulgaria.

During her meeting with the Bulgarian community in Ithaca – an event that was also attended by members of the Cornell Economics Society – Ambassador Poptodorova mentioned that the number of Bulgarians living in the US was 200,000 and growing by the day. Her main message was that the situation in Bulgaria is set to improve with Bulgaria's accession to NATO in 2004 and to the EU in 2007.

During her speech on the rule of law

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in Bulgaria, the ambassador described the transition in Bulgaria as being a very complicated process. As part of the development and stabilization policy of southeastern Europe, Bulgaria's transition has become a strategic international security issue for both the US and Europe. In 1989, the rule of law was a new concept for Bulgarians. During totalitarian life, law and impartial judging were subjugated and under the demands and orders of communist ideology. Opposition parties were created in 1989 and the change happened in November 1989. The first democratic election was in 1990. The newly elected National Assembly, or Parliament, was faced with deciding on a new Constitution. The constitution had to provide for basic liberties and division of power between the three branches, executive, legislative, and judicial.

One priority for the economic development of the country was restoring private ownership and building an independently functioning economic sector. During state socialism, private ownership was nonexistent. People could only possess small things, such as their flats, which people could not even possess in the Soviet Union. In the 1990s, there was an illusion that privatization would happen overnight. The privatization process was controversial and another illusion existed, consistent with egalitarian society, that it could be fair.

One initial attempt at privatization was mass privatization. In this experiment, enterprise workers owned the assets of the enterprise, but this never really worked since there was no real owner to be held accountable. Initially there was also restitution of property confiscated by the communist regime in the late 1940s. The restitution process was complicated because various certificates, proofs, and titles for ownership had to be collected, and a land rush resulted. There was inadequate knowledge of how the law for restitution would work, so it had to be amended 17 times in the course of 5 years to avoid the land rush and other unintended consequences. This heavy amending procedure hampered the implementation of legislation.

Privatization actually started in 1997, with market or cash privatization. This type of privatization still had defects and deficiencies because of the human factor and numerous political pressures. The economy had to be made more independent of political influences. In the financing of political parties, more transparency and monitoring were needed, and in general more financial transparency was sought. As of now, major branches of the economy have been privatized. The banking sector was privatized in 2003. The last major industry yet to be privatized is the tobacco industry, which will be done in 2004.

Historically the Bulgarian judiciary has been under the control of the Communist Party. To correct for this, the constitution gave the judiciary full independence, which was also a mistake since it now was not accountable to anybody. As the Bulgarian Prosecutor General liked to joke, "there is me and God above me." Therefore, a major priority for Parliament was to make the judiciary accountable. The country needed a well functioning (i.e., transparent, accountable, and efficient) judiciary to stifle organized crime. Judicial reform, also under EU demands, was a basic issue. The reforms limited the mandates of judges and limited functional immunity. The reform of the judiciary took 35 years in the US, and the Bulgarian ambassador hoped that the process would be accomplished for a shorter period in Bulgaria.

Corruption is another issue that was directly related to the reform of the judiciary. Organized crime benefited from the misbehavior of certain members of the judiciary. The ambassador emphasized that corruption, being part of human nature, could not be completely removed, as it exists everywhere in the world (for example, Enron in 2003) However, in the US there is a working system of checks and balances. Thus, instruments to fight corruption and create accountability are needed. This becomes easier with strong independent media and public pressure. Over the last couple of years, there were improvements in the internal controls of customs, politicians, and police. Bulgaria was the only country among the EU candidates to improve its Transparency International index of corruption, moving from the 66th place in 1998 to 45th in 2002 out of 102 countries.

Overall, Bulgaria's transition period in its entirety of fourteen years was a

complicated road and was not easy for a small nation. However, there have been definite achievements: first, democracy is irreversible; second, the Bulgarian people are committed to the strategic choices made; and third, Bulgaria is a good friend and strategic ally of the US. International security is important, and NATO and the EU are Bulgaria's future.

At the Johnson Graduate School of Management, Ambassador Poptodorova discussed the political risks faced both by Bulgaria and by foreign investors. Bulgaria was surrounded by risks. There were four wars in the region, including in the former Yugoslavia and Kosovo. The damage and sanctions in Yugoslavia meant that Bulgaria could not trade with its traditional partners - there was no cargo transport through Yugoslavia, and the losses amounted to over \$6 billion. The only bridge the way westward was through Romania, and it had too much traffic. Bulgarian business people who did travel through Yugoslavia ran the risk of being asked for bribes or even robbed.

For its own government, Bulgaria faced unpredictability, which is also a serious risk, in that early elections often happened, which was a sign of turmoil. The quick changes of government and what legislations would be passed were all of interest to the foreign investor. The various attempts at privatization, including the early mass privatization and depreciation to make the property cheaper, were also important for foreign investors. The foreign investor is looking for certain recourse to free, fair, and transparent justice in case the contract is not observed. The legislation passed should also be observed. Bulgaria needs to provide a mechanism to find legal protection of interests in a law for that purpose, for

example something similar to the regulated lobbying in the US. Fast political changes and omnipresent corruption are also major political risks, the remedy for which is to create institutional barriers.

The strategic importance of southeastern Europe as a region will increase as countries, including Bulgaria, become members of NATO and the EU. Foreign investment will also increase, as membership in these institutions is a good instrument to decrease risk perception.

A VIP arrival and departure were arranged for the Bulgarian ambassador, including a playing of the Bulgarian hymn by the Cornell band. All the people who met with the ambassador could appreciate the opportunity to interact with her and get to know a real policy maker from Eastern Europe and her views on Bulgaria and the transition process there.



# Building a Campus Organization: A Model of Student Entrepreneurship

#### By Michael Rogers

Promoting and exposing undergraduate research, The Research Paper has grown from a simple monochrome production of an industrious student and an affiliated organization into a sprawling, colorful, independent journal with campus-wide distribution and a large, devoted staff. The magazine is a model of student entrepreneurship and the growth potential of a not-for-profit organization.

Not long ago, in the fall of 2001, The Research Paper was conceived, like so many successful endeavors before it, by a single ambitious, passionate founder with a broad idea and the focus necessary to establish the publication. Beginning only with the basic strategy of promoting research undertaken by undergraduates in a wide range of disciplines, Emily Posner '04 quickly expanded her vision and formulated the general commitment to opportunity, resources, management, and rewards that has largely sustained the magazine even to its current format.

#### **Commitment to Opportunity**

Using her personal connections with other determined, interested students, Posner established an original staff of five members, each equally committed to the strategic vision of the journal. Another of Posner's contacts, Vice Provost of Undergraduate Education Isaac Kramnick, became one of the organization's earliest supporters, pledging the first financial support for The Research Paper and beginning

Michael Rogers '05 is an Economics major in the College of Arts and Sciences its enduring, constructive relationship with the University's administration.

The next opportunity seized by Posner and her staff was the enlistment of the Cornell Undergraduate Research Board, a longstanding organization devoted to "enhancing the undergraduate research experience." With

this solid pool of students to develop ideas, assist in production, and enhance connections with faculty and administration, the founding members of The Research Paper and their growing staff were prepared to publish the inaugural issue in the spring of 2002.

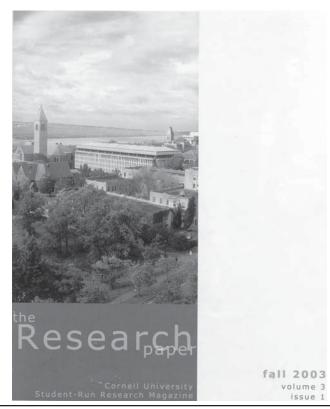
Through its commitment to blossom in the short term through personal connections and the vast resources of the University administrative structure, The Research Paper debuted on campus with 750 aesthetic, sophisticated, eighteen-page issues featuring twelve articles by ten writers.

#### **Control of Resources**

After this first edition, the sky became the limit for Posner and her staff. Motivated

to "make it better, continue to grow, and feature inspiring people," Posner used the original work to promote the organization on campus and develop the journal's staff, finances, and content.

Distributing the journal to campus libraries, academic buildings, and community



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centers, the staff gained exposure and enlisted more and more members over the following semesters, driven particularly by freshmen recruitment and encouraging people to profile their interests and friends. The Paper soon had more than twenty members on its staff.

With growing membership and enthusiasm, The Research Paper became recognized as a fully independent venture, still close to the Undergraduate Research Board but now with its own staff and opportunity for financial growth. Money began flowing in from other University conduits which allowed the magazine to expand its operations and consider new areas of growth.

This growth manifests itself in several ways for the organization, perhaps most notably in the Paper's beautiful full color cover and three tone text. The journal built its finances for longevity and quickly became one of the most visible publications on campus.

#### **Management Structure**

Now boasting a staff of sixty-five members representing each of Cornell's seven undergraduate schools and each graduating class, Posner, as Editor-in-Chief, has established an efficient and accommodating organizational structure that has encouraged creativity and participation.

Whereas it began with five members, the Paper now has as many departments and a nine student management team, including a managing editor, design editor, photo editor, director of recruitment, director of distribution strategy, and two copy editors. Dean David DeVries remains the organizations advisor and one of its primary advocates in the University structure.

This flat management structure, where Posner has direct contact with all of the magazine's agents, allows her and her immediate staff to delegate responsibility easily to the interested individuals or groups that produce the articles and the finished product. By employing teams of students to work on each article, the staff maintains the "breadth that attracts people to it" by "covering all the bases."

Posner and the organization's treasurer, Michael Lander '06, have even managed to use the magazine's broad appeal and potential for exposure to elicit funding



from at least four different administrative organizations and expand output to a thousand issues each semester.

#### **Reward Philosophy**

As The Research Paper prepares for this semester and beyond, it faces the challenge of outlasting the educational tenure of its founder. However, as she approaches graduation, Posner is confident that, while the dynamics may change, the incoming leadership, including the Volume 4 Editor-in-Chief Jack Cognetta '06, is passionate enough and the existing institutions are strong enough to motivate the staff to continue the rewarding venture they have been involved in and continue its growth.

The grand reward for all this hard work is now held every spring in Mann Library, at the release gala and undergraduate research forum. Doubling as a promotion tool, this event allows the magazine's many readers the opportunity to meet the writers, the researchers, the staff, and the many faculty and administrators that support The Research Paper.

Students continue to be enthusiastic about the opportunity to grant their peers' research unparalleled exposure and the chance to publish their own writing in a professional piece of journalism that grows before their very eyes—output continues to expand, the magazine is longer every semester, and the print is more colorful every issue. Built from the charisma and determination of a single student, The Research Paper has already grown beyond its founder's vision into a Cornell institution that its staff, supporters, and hundreds of readers can each be proud of.



## The Fiat Dollar

By Jeffery Zhang

As fiat currency, the dollar has value because people accept and have faith in itsvalue. Our government's legal tender laws reinforce citzens' trust in the dollar. So what could go wrong?

On the surface, there is not that much difference between fiat currency and hard currency, because with a gold-backed currency one has to have faith in the demand for gold by others. It might even seem that a system of legal tender fiat currency is better than hard currency because it's illegal not to accept dollars for the repayment of debt, whereas it is perfectly legal to refuse gold. Why then would some people prefer a hard currency over a fiat currency? There is a huge difference between hard currencies and fiat currencies in the basis of trust. In any modern currency system, people must have faith in the persisting value of the currency. The sophistication of modern economic division

of labor and capital require that money serve as a storage of value to coordinate savings and investment. Thus to function properly, modern currency not only has to be accepted widely, it also has to

be relatively stable in value. It is this second

Jeffery Zhang, '06, is a Math major in the College of Arts and Sciences requirement where fiat currencies are inferior in relation to hard currencies. Whereas the expansion possibilities of hard currencies are

inherently limited by the scarcity of the physical commodities by which it is backed, fiat currencies can be expanded infinitely since there is no inherent limit to its expansion. Thus the

basis for trust in hard currencies lie in its inherent physical limitations on expansion, whereas the basis for trust in fiat currencies has to depend on a government promise not to inflate and thereby debasing the currency.

...the basis for trust in fiat currencies has to depend on a government promise not to inflate and thereby debasing the currency. From the laws of supply and demand, an increase in the supply of money without a corresponding increase in the supply of other commodities will

cause the price of money in relation to other commodities to drop. This is what we call inflation. The corresponding inverse of this phenomenon is deflation, where the price of money relative to other commodities increase. These effects distort the incentives of savings and investment. Needless to say, volatility in the money supply can wreak havoc on the price of money and in the stability of the economy. It

If more goods and services are produced every year, why do we have persistent inflation? then follows that a stable currency is a desirable prerequisite to a stable and p r o d u c t i v e economy.

Having this in mind, we

may now ask how stable the fiat dollar has been. The dollar became inconvertible in 1971 on orders of the Nixon Administration. In that year the Consumer Price Index (CPI) was 39.8, in 2004, it is 185.2, an increase of 365% over 33 years, or roughly 4% per year [1]. This does not seems very alarming in light of the fact that nominal GDP (Gross Domestic Product) has grown from \$1127.1bn to \$10985.5bn at the same time, averaging 6.79% growth per year [6]. Judging from the CPI figures, nominal GDP growth has outpaced inflation by a significant margin during this time period, so the real GDP growth has been quite positive. Despite the reassuring message that these numbers seem to convey, they also lead us to ask the following question: if CPI discounted GDP growth is so positive, why is there inflation in the first place? If more goods and services are produced every year, why do we have persistent inflation? The

**ECONOMIC THEORY** 



answer to this question, the reader probably should have guessed by now, is inflation of the money supply. The money supply has to grow at a faster pace than the overall economy to sustain long-term inflation as we have seen. This leads us to the question of how

much has the money supply grown since the

dollar became inconvertible? Unfortunately,

this is a difficult question that is almost

impossible to answer, because it depends on

what definition of "money" one accepts.

Modern financial markets have monetarized

previously non-monetary assets, which is why

it is so hard to define, let alone measure the

money supply. One good proxy is the gross bank

credit, since fractional reserve banking is the

prime source of monetary inflation in the

economy. Gross bank credit has grown from

\$442bn in 1971 to \$6311.6bn in 2004 [3]. This

is a growth of 1328% which averages to 8.15%

In a fractional reserve banking system, each dollar saved can generate several dollars of loans through the money multiplier effect. per year. One thing i m m e d i a t e l y obvious from this figure is that it outpaces both nominal GDP growth and CPI inflation by quite a b i t . Conventionally, money used for and under a hard

loans come from savings, and under a hard money 100% reserve banking system this would be true. But a look at our gross national savings

figures shows that it grew from \$208.9bn in 1971 to \$1539.4bn in 2003, or an average of 5.95% annually [5]. This is actually lower than the nominal growth in GDP, so there is no way our astronomical growth of bank credit could have been funded by domestic savings. Here we see the difference between a hard currency 100% reserve

banking system and a fiat currency fractional reserve banking system. In a hard currency 100% reserve banking system, the above figures would be impossible, the difference is too great to be a statistical error. There is no way that lending could exceed savings by so much, or for them to diverge on a long term basis. That would amount to defying gravity. But with a fiat currency and a fractional reserve banking system, we can see that gravity does not apply. In a fractional reserve banking system, each dollar saved can generate several dollars of loans through the money multiplier effect. A 20% reserve ratio will have a money multiplier of 5, meaning that each dollar deposited can generate \$5 of loans,

... a combination of artificially low interest rates and high monetary inflation combines to distort and enhance the returns of investing in assets.

> the extra \$4 being essentially created out of thin air. As if this is not inflationary enough, in our fiat currency system, the reserve assets themselves can be created from thin air by the Federal Reserve.

> If the harmful effects of inflation are so great, then why would the Federal Reserve do anything so blatantly inflationary? The federal government has been running a huge deficit for much of the past 30 years, although not directly controlled by elected officials, there is nevertheless political pressure to increase the money supply to allow the fed'eral government to borrow at cheap rates. A more commonly given reason for inflating the money supply is to help the economy, which is what the Federal Reserve is trying to do currently. Consider the Federal Reserve's open market operation, the 1980 Monetary Control Act authorizes the Federal Reserve to acquire reserve assets to control the money supply to any extent deemed necessary, so the Federal Reserve can purchase any asset and print the money to pay for it to inject it into the economy [7]. However, this money isn't injected into the economy directly, when



#### ECONOMIC THEORY



the Federal Reserve buys reserve assets, it pays in the form of a check, which can only be cashed at some depository institution with an account with the Federal Reserve. When a check is cashed, that amount of money is

credited toward the seller in a bank account, and at the same time, the bank that cashed this check gets the same amount credited to its account with the Federal Reserve. In this way, the money that the Federal Reserve just created becomes a reserve asset, which through the fractional reserve banking system can multiply itself many times through [7]. Now we're ready to consider the increase in

aggregate reserve assets of depository institutions. In 2004, the agregate reserves of depository institutions is 296% of what it was in 1971, if we assume a 20% reserve ratio, it would imply a maximum possible lending increase of (1480-100)=1380%. As we can see from the gross bank credit data, these two numbers are quite close. Despite the fact that reserve assets have increased even less than CPI, the effect of the frational reserve banking system allows the Federal Reserve to inject a vast amount of money into the economy through even a tiny increase in reserve assets. Having seen how the money supply has ballooned in the past 30 years, this leads us to ask, where does all this money go? CPI which measures consumer price inflation, only registered a 365% growth in prices, a far cry from the 1328% growth in bank credit.

If all this money were borrowed to fund consumption, then surely consumer prices would have registered a higher rate of inflation. Surely people are not borrowing all this money to hide in their mattresses; Investment is the other main source of demand for money in the economy. Turning towards the S&P 500 Composite Index to get an idea of the amount of money being pumped into the stock market (only a representative of overall investment and market capitalization). The S&P 500 Composite Index grew from 93.49 in 1971 to 1054.87 in 2004 [4]. This is a growth of 1128%, by far the highest rate of growth other than the growth of bank credit. This rate of growth is higher than even the rate of nominal GDP growth (which already factored in consumer price inflation). Why would anyone pour money into a stock market that's so overvalued? It's not as if the interest rate is negative. But when we consider the effect of an inflationary monetary policy, a fiat currency, and a fractional reserve banking system, we begin to see that a

Given the importance of a stable currency to the long term health of the economy, the fiat dollar is highly dangerous.

> combination of artificially low interest rates and high monetary inflation combines to distort and enhance the returns of investing in assets. No wonder we see asset price inflation that outpaces even the nominal GDP growth.

> The fiat currency is only one component of the engine of inflation, so switching to a hard currency alone won't stop inflation. But there is no doubt that without it, it would be much harder to inflate currency. Through the fractional reserve banking system, a 200% increase in reserve assets translated to roughly 1300% increase in lending. So even a small change can have a big effect. With fiat currency, it's very easy to increase the reserves by this much, however, it would be difficult to increase the amount of gold by even 20%, let alone 200%. There is no doubt that the suspension of gold convertibility has allowed the Federal Reserve to massively inflate the money supply and create inflation in both consumer and asset markets. Given the importance of a stable currency to the long term health of the economy, the fiat dollar is highly dangerous. Our fractional reserve banking system has inflated our fiat currency system into a dangerous ponzi scheme. Already the dollar is losing its value against other major world currencies as well as commodities such as gold and platinum. Faced with these realities. one must ask, how much longer will the dollar hold more value than the paper it is printed on?

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## The Case for Market-based Environmentalism

By Tianai Lin

"The power of the market can be harnessed and channeled towards the achievement of environmental goals" (Tom Tietenberg)

Judging from their English names, one would assume that economists and ecologists have much in common. After all, the "eco" part of each word derives from the Greek word for "home", and both disciplines aim to advance humanity's welfare (Lomborg 2001). However, until about a decade ago, ecologists looked upon the market system as a powerful adversary as market forces were thought to be environmentally destructive (Tietenberg 1999). There was a widespread belief that economists are preoccupied with rational choice and efficiency arguments that have nothing to do with intangible goals like environmental protection. Thus, it was (and still is sometimes) claimed that the government should take on the dominant role in environmental policy. Nevertheless, I believe that economics has a large role to play. In particular, market-based approaches provide a cheaper, more efficient means of environmental protection than traditional command-and-control measures.

#### Background

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Conventional economic wisdom suggests that the free market cannot be expected to protect the environment. This is because market processes will not reflect the true value of "public goods" like clean air and wildlife diversity. There is a divergence between social and private costs/benefits potential polluters do not consider the social costs of their action, but only the costs to themselves. Also, since efforts to maintain a clean environment will benefit even those who do not help fund them, each individual faces a strong temptation to avoid footing the bill. In belonging to everyone, environmental endowments belong to no one - a situation that was brilliantly characterized by Garret Hardin as the "tragedy of the commons". Not surprisingly then, governments everywhere have tended to follow a heavy-handed "command-and-control" approach.

#### Problems with the regulatory approach

As the label "command-and-control" suggests, there is relatively little flexibility in terms of how goals are achieved. Instead, laws are imposed to set pollution standards, regulate harmful activities, ban the release of toxic chemicals into the environment, and protect irreplaceable or slowly replenished resources from unsustainable use (Miller 2002).

Such a system is beset with difficulties. One major criticism of this approach is that top-down laws are inefficient. By setting uniform standards across the board, firms are forced to take on similar shares of the pollution-control burden, regardless of their individual marginal costs of pollution control (Stavins 2003). Due to differences in the firms' production design, physical configuration, etc., the costs of controlling emissions vary greatly among firms. Consequently, even though standards may effectively limit the emissions of pollutants, this often comes at an unwarranted high cost as some firms are forced to resort to unduly expensive means of controlling pollution.

A second drawback to the regulatory approach is that it stifles innovation. There is little financial incentive for businesses to exceed their control targets, and by mandating specific production methods, both technologybased and performance-based standards discourage adoption of new technologies (Miller 2003). As a result, "command-andcontrol" measures tend to freeze the development of technologies that might otherwise have led to greater levels of control. Furthermore, when environmental goals and controls are politically determined, there is the danger that populist sentiment and pork-barrel politics will influence priorities, rather than



actual environmental risks (Stroup et al 1992). Concessions might be given to politically connected or wealthy groups. According to Edwards et al (1998), activities adverse to conservation are often not strictly the result of economic disincentives or 'market failure' but of deliberate political action or 'policy failure'. A good example would be the Common Agricultural Policy of the European Union, which has arguably caused extensive environmental damage.

#### Market-based Approach

Given the problems with the regulatory approach, this leads us to a consideration of the free-market solution to environmental pollution. As defined by Stavins (2003), market-based instruments are regulations that encourage behavior through market signals rather than through explicit directives regarding pollution control levels or methods. The idea is to get people to automatically conserve the environment as a result of the signals they receive from the marketplace. Some of the ways to mobilize market forces to protect the environment include pollution charges, tradable permits, subsidy removal, voluntary approaches, and provision of information.

Pollution charge systems impose a fee or tax on the amount of pollution that a firm generates. As Convery (2003) points out, the use of such charges to reflect the scarcity value of the environment is a powerful economic tool – by introducing a price signal, this ensures that polluters take into account the costs of pollution on the environment when they make production decisions. In economic parlance, this is known as the internalization of external costs. Consequently, the profit-maximizing firm has an incentive to reduce emissions to the point where its marginal abatement cost equals the tax rate.

Indeed, a 2001 OECD report on environmentally related taxes presented "growing evidence of their effectiveness as a means to reduce damage to the environment". In 1991, Sweden introduced a sulfur tax, which led to a drop in the sulfur content of fuels to 50% below legal requirements. Norway's carbon tax, levied in the same year, also lowered emissions from power plants by 21% (The Economist 2003).

Another free-market solution is that of the tradable permit scheme. In this system, the government decides on an acceptable level of pollution and allocates credits for meeting the limit among firms. Firms that keep their emission levels below their allotted level can sell their spare credits to other firms; those with high abatement costs can then buy from them. One well-known example is the 1990 amendment to the Clean Air Act of 1970 in the United States. A cap-and-trade system was created under which more than a hundred large coal-fired power plants were given initial emissions reductions. Findings to date show that reductions in sulfur dioxide emissions have been both larger and faster than required by the law (Portney 2003).

A third area of market-based environmental policy lies in the removal of market barriers –subsidies, regulations, quotas, etc. – that are environmentally harmful. These range from prices below market levels for electricity and water to generous cash handouts for industries such as coal. The reduction of these market distortions will certainly aid in the process of environmental conservation, although powerful advocates and painful shortterm economic implications for the affected regions are likely to pose obstacles.

#### Advantage of the market-based approach

Given the empirical evidence, what are the theoretical arguments that favor the market-based approach over "command-andcontrol" measures?

Firstly, there is a lower cost of compliance, as market-based strategies allowing polluters greater flexibility in terms of achieving the required reduction in pollution. Regulators cannot possibly keep up with all the relevant information on complex, changing technologies, let alone the site-specific information about the relative cost of installing new technologies at each location. By setting broad standards and allowing firms to choose the most cost-effective means of meeting those standards, static efficiency arises (Ackerman et al 2000). Polluters with low abatement costs will find it beneficial to contribute to higher levels of abatement, while polluters with high abatement costs need not spend excessive amounts. Studies estimate that greater reliance on a variety of market-based policies could cut current expenditure (about \$130 billion a year) on compliance with federal environmental regulations by 30 - 50%(Miller 2003).

In addition to the potential static efficiency advantages of market mechanisms, they may also confer dynamic efficiency gains (OECD 1997). Market-based instruments can stimulate more rapid innovation in pollution abatement technologies because there is a direct benefit from improvement, no matter what the level of existing performance.

Thirdly, as in the case of emission taxes or auctioned permits, these economic instruments generate revenues. The revenues raised could allow other taxes, with possible distortionary effects on labor supply, investment or consumption, to be reduced. In fact, a study conducted by Terkla (1984) showed that the environmental benefits from pollution abatement using emissions taxes outweighed the deadweight loss that would be incurred in raising the same revenue through general taxation.

#### Afterthoughts

Command-and-control measures are typically the betê noire of economists as they are expensive and ineffective, emphasize process over performance, and allow legalisms and manipulation of the law to become ends in themselves (Convery 2003). However, the regulatory approach may be more appropriate in some situations. For instance, in the case when even small emissions are highly toxic, strict compliance with a regulatory policy where there is no margin for error might be necessary. Despite all the benefits associated with using economic instruments to discourage pollution, we must not forget that the pollution outcome remains rather uncertain, unlike regulatory policies that set quantitative emissions limits (assuming complete compliance). Also, there might be popular support for "command-and-control" because it reassures the public that every individual plant or facility is being monitored. As Gilpin (2000) points out, some plants have poor equipment and short stacks, resulting in higher ground level concentrations. It would be a gross mistake to assert that the mass emission is all that matters, for it is the exposure of the public and the workforce that is crucial.

Other critics of the market-based approach point out that it has not been as successful as theory might suggest. For instance, although the number of transactions consummated under the Emissions Trading Program has been large, it has been smaller than expected. However, Tietenberg (1999) defends the market-based approach by showing us how the models used to calculate the potential cost savings are not fully realistic. This is because the cost functions are invariably ex ante cost functions which implicitly assume that the modeled plant can be built from scratch and can incorporate the best technology. In practice, of course, many existing sources cannot retrofit these technologies and therefore their ex post control options are much more limited than implied by the models.

#### Conclusion

When the idea of free-market environmentalism was first introduced in the 1980s, it was considered an oxymoron. Today, however, there is hardly an environmentalist who would not concede that markets have a role to play in advancing environmental quality (Anderson et al 2001). Of course, this is not to say that market-based policies provide a panacea for the world's environmental problems, and that governments can wash their hands off this matter. Indeed, Portney (2003) rightly argues that market-based approaches to environmental protection area are still a form of government regulation. Rather, like Tietenberg (1999), governments should recognize that this 'former adversary', the market, can be turned into a powerful ally, and concentrate their efforts on building a powerful set of economic incentives to limit the extent of our environmentally-damaging activities.

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## Goodbye, Sticky (P)rice

By Todd Zuccarino

Although conventional wage models violate the law of one price, with George Stigler's newly founded approach the wage market clears like oily skin and Noxema. Information has a marginal cost.

In 1954, the International Economic Association released a striking report uncovering the fallibility of the applicability of modern labor economic theory to the real world. Researching the hourly wage rates for non-union motor-truck drivers of different goods in Boston, an analyst reported these numbers: for wholesale laundry, \$1.20; for wastepaper, \$1.38; for magazines, \$2.25; for newspaper, \$2.16 (i). In the Boston truck driving industry, one important thing should be noted. That is, drivers engage in the same responsibilities regardless of the product in their bed. Like driving apples like bananas like pickles like pink flying horses, the operation of the driver remains the same. To drive is to drive, yet the labor market disregards this, or at least produces wage rate output that contradicts the principle.

Standard labor economic theory suggests that when labor demand intersects supply, a general equilibrium is attained, comprising the equilibrium wage rate and level of employment (ii). Behind this intersection lie two integral assumptions — employees are rational and have convex preferences towards higher utility, and employees have choice

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between a limited number of available jobs (iii). Based on these assumptions, in competing markets amongst equal employees, *ceteris paribus*, wages should invariably be equal.

Here is why. Given that all employees make decisions rationally, that they prefer to maximize utility, their decision-making processes tend to be relatively methodical ---benefits increase utility and costs decrease utility. This behavioral propensity can be explained by employee indifference curves, which represent subsets of possible choices workers can make that give them similar utility outcomes. Generally, indifference curves model the most common worker trade-off decision, the choice between working and not working, earning wages and consuming leisure. As the models depict, when employees work, they forgo the opportunity cost of consuming leisure; to the counter, when employees consume leisure, they forgo the opportunity cost of working. By this logic, workers value high paying jobs more than low paying jobs, whether the compensation is in the form of wages, benefit packages, or even comfort. Workers will attempt to maximize their utilities following this hierarchy of preferences, choosing the most attractive jobs available (iv).

Yet, despite the formulaic precision of economic allocation followed in the preceding model, empirical evidence has pointed that wage differentials do exist, that the utopian free-

flowing market is not always the case. In recognizing this, old-generation labor economist John Dunlop submits, "The automatic pricing mechanism as model or institution in the labor market is dead." (v) But is it really? Or is there something more behind supply and demand intersection in the labor market, something indistinguishable yet that je ne sais quoi of wage and employment equilibrium. I hypothesize that wage differentials across like occupations, holding exogenous variables constant and equal, result due to the cost of information — the law of one price is violated because information in competitive labor markets remains imperfect. Theory suggests therefore, that in markets where information costs less to obtain (or is more avidly sought), wage differentials across like occupations will be smaller than in those markets where information is costly and scarce.

#### EMPRICAL ANALYSIS

George Stigler maintains an important premise, claiming, "information has a cost, particularly the opportunity cost of a worker's time." (vi) Presumably, sometimes it is more costly than others. In developing his theory, Stigler first turns to the product market. He rationalizes:



only if either buyers have complete knowledge of all sellers' offers, or all sellers have complete knowledge of all buyers' offers, will there be a single price. Complete knowledge, however, is seldom possessed simply because it costs more to learn of alternative prices than (at the margin) this information yields. (vii)

Analogously, continuing this marginal analysis, he maintains, "a worker will search for wage offers (and an employer will search for wage demands) until the expected marginal return equals the marginal cost of search."(viii) Thus, the utility maximizing employee will not overtly search for potential jobs if the sea appears foggy - situations in which information scarcities pose overbearing costs. Therefore, wage differentials result when unequal information costs prevail in equal industries, amongst equal workers. By including the information cost into the supply and demand analysis of perfectly competitive labor markets, the law of one price is not violated, and wage differentials theoretically would not exist.

In my research I relate wage differentials to information cost. In order to do this, I work from various established conditions based on the assumption that wage differentials across like occupations widen when information becomes more costly: as age increases, wage differentials increase; as skill increases, wage differentials increase; and as the percentage of white community members decrease, wage differentials increase. For brevity, these conditions, while formally proved in previous editions, are given as being established. Following this logic, I analyze a dataset of occupations from a New York area, and a California area, showing that the variation of wages across like occupations is greater under conditions in which information is relatively more costly.

The Economic Research Institute, the program from which I extracted my data, reports worker compensation packages for specific occupations, geographic locations, and years of experience by the 10th percentile earnings, the mean earnings, and the 90th percentile earnings (ix). Therefore, from these

	new york.	california
accountant 6, 1 year	1593.35	2951.20
accountant 6, 9 years	1552.00	2895.255
accountant 6, 18 years	1529.79	2865.06
accountant 1, 1 year	525.47	914.70
accountant 1, 2 years	514.03	917.36
accountant 1, 4 years	504.07	919.84
cashier 2, 1 year	163.52	232.17
cashier 2, 4 years	197.55	290.12

220.70

TABLE 1.3<sup>XI</sup> (STANDARD DEVIATION)

data, I compared earnings from various percentiles in order to show wage variability. The results were dismal. All ratios of compensation, regardless of location, years of experience, or occupation, produced the following ratios: between the 90th percentile and 10th percentile, 1.35454 (yes, the decimals are exact for every possible variable of comparison); between the 90th percentile and the mean, 1.1765; between the mean and the 10th percentile, 1.15. This leads me to conclude only one thing: the Economic Research Institute program that I was using skewed the data by those ratios, as they were not empirically founded.

cashier 2, 8 years

Therefore, I compared my findings using a different method. The Economic Research Institute's Geographic Assessor reports salaries of specific geographic locations as a percentage of the United States average. For Ithaca, Cortlandville, and Freeville, they are 93.5%, 95.1%, and 92.8% respectively. For Alameda, Oakland, and Piedmont, they are 123%, 122.4%, and 120.9% respectively (x). Therefore, I grouped the first three locations together, creating location one, designated as New York, and I grouped the latter three locations together to create location two, designated as California. By this grouping, it is now possible to compare wage differentials by geographic location. Next, I averaged the mean compensations for New York and

California by specific occupation and years of experience, and then I calculated the standard deviations related to each average. Subsequently, I adjusted the standard deviations, comparing them to a designated base, to adjust for the disparity that results from magnitude (1).

328.90

First, I analyzed the data holding the specific occupation and location constant, varying years of experience (or essentially age). Following the implications of Stigler's uncovering, as the years of experience increase, standard deviation should increase (based on the fact that it is more costly to acquire information with age). More costly information creates greater wage differentials, which are represented by larger standard deviations. The results are found presented in table 1.3.

Of these data, as the table shows, only Cashier 2 from New York and California, and Accountant 1 from California show results that support Stigler's theory affirming wage differentials to increase with age. This might be due to a significant lurking variable, the degree of skill (and disposition of the worker with that respective skill) required for the job. The theory could hold for Cashier 2 in New York and California, and Accountant 1 in California, because these jobs require less skill than those of Accountant 6. In jobs requiring less skill, when workers begin employment, they may search more frequently for

#### **ECONOMIC THEORY**

information than workers in jobs requiring more skill. Workers in highly skilled jobs with little experience probably are not looking for another, better job, and therefore information is less available to them (because it is more costly; in the beginning phases of a highly skilled job, time is extremely precious and generally devoted to learning and satisfying the requests of management).

Due to this discrepancy, I then analyzed differentials between skilled and unskilled occupations, holding location and years of experience constant. Skilled occupations include Accountant 6, which "applies accounting principles, theories, concepts, and practices to specialized, unique, or nonrecurring complex problems," (xii) and Accountant 1, which "performs a variety of accounting tasks as an entry-level accountant working under close supervision of an experienced accountant." (xiii) Accountant 6 is more skilled than Accountant 1. The unskilled occupation is Cashier 2, which has "general cashier responsibilities for receiving payment for goods or services and associated records." (xiv) The training required to become an accountant includes four years of college, and passing the CPA examination, while the training required to become a cashier includes at most one month of related study. There should be greater differentials for skilled labor compared to unskilled labor. The results are presented in table 1.4.

As illustrated by the table, there is a remarkable difference between the standard deviation's of Accountant 6 and Cashier 2, for each category of years of experience and location (Accountant 6's standard deviation is much larger than Cashier 2's standard deviation for every category). However, as the results show, the standard deviation for Accountant 1 is larger than both the standard deviation's of Accountant 6 and Cashier 2. While the variation in wages should be greater for Accountant 1 when compared to the variation for Cashier 2, they should not be when compared to the variation for Accountant 6, which demands the most skill of the three occupations. Thus, between skilled and unskilled labor, theory holds — differentials are greater for skilled labor than they are for unskilled labor. However, at a more precise marginal level, when comparing degrees of skill

#### TABLE $1.4^{xy}$ (STANDARD DEVIATION)

	new york.	california	
accountant 6, 1 year	1043.93	1956.73	
accountant 1, 1 year	1251.94	2096.34	
cashier 2, 1 year	815.69	1095.89	
accountant 1, 9 years	1311.79	2457.37	
accountant 1, 2 years	1579.90	2691.36	
cashier 2, 4 years	1271.30	1753.00	
accountant 6, 1 year	1529.79	2865.06	
accountant 1, 4 years	1832.99	3179.52	
cashier 2, 8 years	1680.36	2341.50	

#### TABLE 1.5<sup>XVI</sup> (PERCENT)

	alameda	oakland	piedmont	cortland	freeville	ithaca
white	51.91%	31.27	78.68	96.42	98.17	74.41
black	5.80	35.37	0.52	1.41	0.41	6.15
asian	25.88	15.05	16.48	0.36	0.00	13.92
other	11.41	18.31	4.32	1.81	1.42	5.52

#### TABLE 1.6<sup>XVIII</sup> (STANDARD DEVIATION)

	new york.	california
accountant 6, 1 year	1225.95	1956.73
accountant 6, 9 years	1528.63	2457.37
accountant 6, 18 years	1775.24	2865.06
accountant 1, 1 year	576.87	822.53
accountant 1, 2 years	597.27	873.12
accountant 1, 4 years	615.37	919.84
cashier 2, 1 year	173.84	198.88
cashier 2, 4 years	229.64	271.74
cashier 2, 8 years	273.91	328.90

with wage differentials, theory does not hold. Perhaps other variables (like race) affect this shortcoming.

There is a significant difference in the demographic breakdown by race between the New York location and the California location. Table 1.5 depicts a racial breakdown of the total population, by percent.

As the table shows, Cortland (which includes the demographics of Cortlandville), Freeville, and Ithaca are predominantly white communities, whereas Alameda, Oakland, and Piedmont break down with more diversity (especially Oakland, which consists of 35.37 percent black families, 25.78 percent of which do not own automobile transportation). (xvii) Following Stephenson Jr.'s previously established theoretical logic, that information is more costly in largely non-white communities, wage differentials should be greater in California than they are in New York. Table 1.6, which compares wage differentials in New York to California, holding the number of years of experience and occupation constant (using California as the base), precisely depicts this relationship.

In every category, wage differentials are greater in California than they are in New

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York. This is extremely telling, reconciling previous theory inconsistency by allowing for the possibility of the lurking variable explanation — jobs requiring greater skills might have produced less wage variability than jobs requiring lesser skills due to differences in demographics. If differences in information costs due to geographic discrepancies impact wage differentials most strongly, previous empirical inconsistencies can be ignored, maintaining the validity of the original theoretical relationship: as search costs increase, wage differentials across like occupations increase.

#### CONCLUSION

Although theoretical constructs are not always supported by empirical research, the real world is dynamic, containing an infinite number of variables that could possibly skew data. The impetus then, is to control the real world, manipulating the most important, significantly impacting variables. Based on the evidence, geography contributes the most to differences in costs of obtaining information, whereas age and skill are less significant (though not wholly insignificant). Regardless, the empirical findings support Stigler's original theory, that information has a marginal cost. As the cost of information increases, wage differentials across like occupations increase. The marginal cost of information prevents the formation of a perfectly equilibrated world that defends the supremacy of the law of one price. However, it does not negate the principle. Under perfectly informed models that account for the cost of obtaining information, only one "wage rate" could possibly survive the selfcorrecting forces of the market.

#### FOOTNOTES

1. In comparing standard deviations of groups with different means, the comparison is not fair. The groups with higher means will have higher standard deviations by default, due to their greater magnitudes, and the groups with lower means will therefore have smaller standard deviations. Therefore, I adjusted the standard deviations as follows:  $s_{adj} = s_n(g_1 / g_n)$ 

where g = mean, s = standard deviation, and n = group number.

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"You are not here merely to make a living. You are here to enable the world to live more amply, with greater vision, and with a finer spirit of hope and

achievement. You impoverish yourself if you forget this errand." --Woodrow Wilson



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"One by one they were all becoming shades. Better pass boldly into that other world, in the full

glory of some passion, than fade and wither dismally with age."

-- Dubliners, "The Dead" James Joyce



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"Une soir, j'ai assis la Beauté sur mes genoux. - Et je l'ai trouvée amère. - Et je l'ai injuriée." Arthur RIMBAUD, Une Saison en enfer, Jadis, si je me souviens bien

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"As a man's action, such his fate / Then justice shall be true and straight."

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"The Biggest Risk is Not Taking One"

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#### From the CES President:

The Cornell Economics Society has had a very productive year. In addition to our usual activities, this semester we had the chance to gain from our interaction with other Cornell departments and programs. We met with the Director of Internet First Press as well as representatives from CCS and CA. We were also fortunate to host the Director of Technology from the International University of Moscow in his speech on business planning in modernday Russia.

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It does not feel as though a whole year has passed since we took over as the Board. Nick, Doug, Allen, Justin, Philip, Kim, Anna, and Michael – once again I thank you for being a pleasure to work with. Professor Wissink, all your help this semester was priceless. Thank you so much for the encouragement, the breakfast food for early morning meetings, and everything else in between. Future board members are lucky to be able to work with such an advisor.

Thank you to all our members for making last year superb. I do hope you continue your involvement with CES both while at Cornell and as alumni.

#### Sincerely, Diksha Basu

2004

Cornell Economics Society President 2003 –

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