

“The Dynamics of Tobacco Industry in
Pakistan”



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ACKNOWLEDGEMENTS

I WILL LIKE TO THANK ALLAH ALMIGHTY FOR GIVING ME THE COURAGE AND WISDOM TO COMPLETE THIS THESIS

I would like to thank my parents for always being there and supporting me throughout.

I will also like to express my deepest gratitude to madam Rozeena Shaheen for encouraging and constantly supporting me. Thank you madam for all your guidance, love and tolerance and making me aware of my “ hidden talents and abilities” through this project ☺

I will also like to thank my class fellows here with whom I successfully completed my master's and from whom I really got 2 learn a lot....

“ Oh Allah, with this prayer I embark on a journey of life that you blessed me with. Give me the sincerity to accept the things I can't change and the courage to change the things I can and the wisdom to know the difference”

EXECUTIVE SUMMARY:

The following report has been produced on two of the biggest players in the Pakistan tobacco industry, namely, LTC and PTC and their impact on the economy. The tobacco industry has also been reviewed in this regard to draw pertinent and relevant conclusion.

Tobacco industry is one of the fastest growing industries and is one of the greatest contributors of the national exchequer, contributing almost 30 Billion to the economy. The industry is, however, subject to numerous regulations and human rights' movements, which threatens it. Both technical and fundamental analysis has been done in order to draw relevant conclusions as to the impact that both lakson and Pakistan tobacco group have on the economy. The sales have, however, been increasing in spite of that. In 2005, both companies had sales in excess of Rs. 20 Billion. This was an increase of 20% in case of PTC and 18% in case of LTC over the last year. Other measures of profitability have also been increasing, such as gross profit, operating profit and net profit. However, the net profit increase has slowed down. This may be owed to increase in government levies in the last two years.

PTC seems to have better consolidation and streamlining of operations. Its turnover is on the increase (Fixed Asset Turnover increased from 7.1 to 8.1 between 2004 and 2005). However, LTC's Fixed Assets Turnover declined from 11.8 to 10.22. However, both firms face some issues in managing their liquidity. PTC seems to have a very high stock level, which implies that cash may have been unnecessarily tied up. This is further reinforced by the very small cash ratio of 0.016 times. LTC on the other hand, has kept too much cash in hand amounting to about 1.03. This shows that the company is not taking advantage of its investment potential.

Dividend yield of PTC is close to 5 due to its low share price in comparison to LTC which has a yield of only 0.07. The share prices of PTC at the end of 2005 were 50 and 249 respectively. The EPS of LTC is also much higher being 32 as opposed to 5 of PTC. The company therefore enjoys greater strength in terms of capital gains for investors.

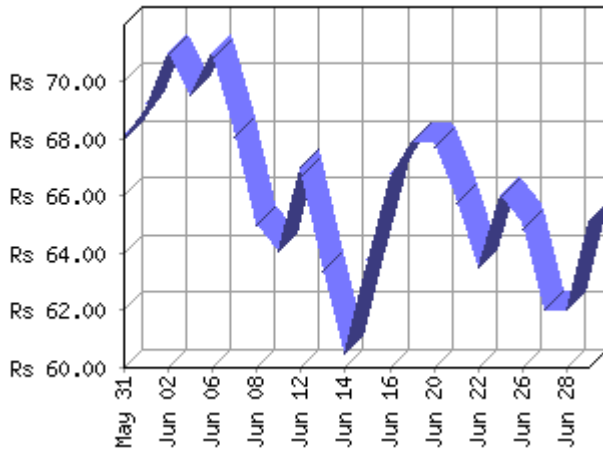
The future projections have been made to analyze whether or not the market was trading at its fair value in 2005. The growth taken for this purpose was the long-term growth rate expected to be 3% although the average growth rate for PTC came out to be 10% and that for LTC came out to be 20% based on the formula: $ROE * Retention Rate$. It was felt that currently the industry is in a period of hyper growth and will stabilize to 3% in the long-run as predicted by the industry analysts.

The latest slump in stock market has put a downward push on the prices of both. However, PTC has again experienced sharper trends between overselling and overbuying, rising and falling 2-3 times each month, in the last two months.

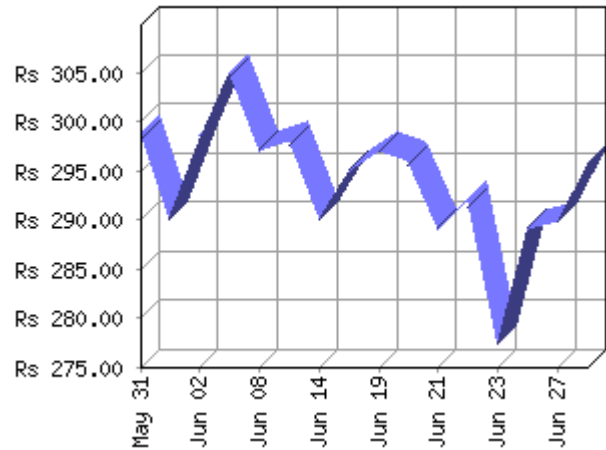
I recommend that at present stock market is very risky business and any investor should take due care in evaluating the strength of any stock. PTC seems to be riskier at this point

and investors should attempt to liquidate their stock on the days when the stock has picked up after a period of over-selling or hold on to the stock until the market stabilizes. Further investment in PTC is not wise. LTC again suffers from the same effects with its price falling from above Rs. 299 to Rs. 277 in June alone. In fact, the PTC stock has seen a change from Rs. 68 to Rs. 66 which is far narrower than that of LTC.

Pakistan Tobacco Co. Ltd. - 1 month



Lakson Tobacco Co. Ltd. - 1 month



LAKSON TOBACCO COMPANY			
Last Trade	295.50 (↑ 5.65)	Day's Range	285.00 - 295.50
Trade Time	Jun 28, 2006	Volume	1,300
Previous's Close	289.85 (↑ 0.85)	Previous's Range	280.00 - 289.85
Avg Volume (3M)	2,350	3M Range	277.4 - 355.0
P/E	N/A	1Y Range	226.55 - 355.00
EPS	N/A	Dividend	N/A
Highest	355.00 (on May 22, 2006)		
Lowest	60.05 (on Feb 17, 2003)		

PAKISTAN TOBACCO COMPANY			
Last Trade	65.10 (↑ 3.10)	Day's Range	63.05 - 65.10
Trade Time	Jun 29, 2006	Volume	13,300
Previous's Close	62.00 (0.00)	Previous's Range	60.75 - 62.10
Avg Volume (3M)	29,560	3M Range	60.45 - 79.9
P/E	N/A	1Y Range	51.75 - 81.60
EPS	N/A	Dividend	N/A
Highest	81.60 (on Jan 24, 2006)		
Lowest	10.30 (on Jan 15, 2002)		

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Introduction:

1. INTERNATIONAL TOBACCO MARKET:

A quiet revolution has taken place in the international tobacco industry in the past 10 years. Riding the wave of economic liberalization and free trade pushed by developed countries and the international financial institutions, the cigarette companies have massively increased their manufacturing capacity in developing countries and in the countries of eastern Europe and the former Soviet Union. Although politicians and many tobacco control advocates still talk of the multinational tobacco companies "exporting death and disease", the reality is that more and more of the causes of this death and disease are being manufactured locally, from China to Mexico to Russia. In fact, Philip Morris, RJ Reynolds, and British American Tobacco (BAT), the world's three largest multinational cigarette companies, now each own or lease plants in at least 50 countries spanning all corners of the globe.

A number of factors have driven this overseas expansion, including: the opening up of formerly closed economies in eastern Europe, the former Soviet Union, and China; pressure on governments by the international financial institutions to privatize previously state-owned industries and to relax laws restricting foreign investment; the attempt by these countries to attract foreign investment through the provision of tax incentives and the lifting of import duties; cheaper labor and transport costs; the threat of further regulation in the multinational companies' home countries; the attempt by these companies to shield an increasing proportion of their assets from lawsuits in developed countries; and the desire to locate cigarette manufacturing plants closer to sources of tobacco leaf, an increasing proportion of which is being purchased overseas.

Certainly the United States is still the world's largest exporter of cigarettes. As home to two of the world's three largest multinational cigarette companies, it exported 217 billion cigarettes in 1997. Yet this was an 11% drop from the previous year, "due to greater offshore production by US manufacturers", according to an analysis by the United States Department of Agriculture (USDA) (economic research service, US department of agriculture). Increasingly, the cigarettes sold abroad by the multinationals are being manufactured there as well. In 1997, for example, only 18% of the cigarettes RJ Reynolds sold overseas were made in the United States (Reynolds R.J., 1997 & 1998)

The drop in American cigarette exports has coincided with record sales and profits for the multinational companies' overseas operations. In recent years, Philip Morris, RJ Reynolds, and BAT have all registered double-digit growth in international cigarette sales, the payoff for a decade of heavy overseas spending on buying newly privatised cigarette companies, setting up joint ventures, building distribution and sales networks, and, of course, advertising.

Tobacco use is a growing global epidemic, hitting the third world, Eastern Europe, and the former Soviet Union the hardest. Ten million people will die each year from tobacco-related diseases by 2030. The U.S. government has long assisted the international expansion of U.S. tobacco multinationals through promotional trade policies and tolerance of double standards in industry behavior. Negotiations on a global tobacco

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treaty could help rein in Big Tobacco's global expansion. The human costs of tobacco use are staggering and rising dramatically. Every eight seconds, someone in the world dies from tobacco use— 4 million deaths a year. If current trends continue, that number will soar to 10 million by 2030, according to the World Health Organization (WHO), with 70% of those deaths occurring in the third world. Given these figures, over 150 million people will die from tobacco-related diseases over the next 30 years—exceeding the toll from AIDS, automobile accidents, maternal mortality, homicide, and suicide combined.

As the world's biggest cigarette exporter and as home to the world's largest multinational cigarette company, Philip Morris, the United States has a special responsibility to address this catastrophe. Facing declining markets in developed countries, the U.S. tobacco industry has aggressively expanded overseas, particularly in recently opened markets in Asia, the former Soviet Union, and Eastern Europe, where the bulk of the world's smokers live. Philip Morris now sells more cigarettes abroad than it does in the United States. Philip Morris currently earns half of its cigarette profits overseas, garners almost two-thirds of its tobacco revenues in foreign markets, and sells more than three-quarters of its cigarettes outside the United States. The company's international gains come after two decades of heavy overseas spending to advertise its products, buy newly privatized cigarette companies, set up joint ventures, and build distribution and sales networks.

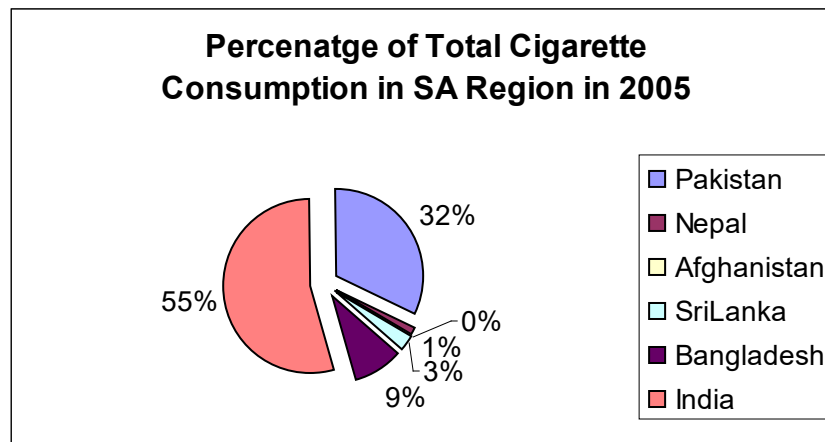
Philip Morris is now a truly global company, exporting not only cigarettes but the slick advertising and marketing strategies that successfully addicted generations of people in the United States. The tobacco multinationals hook kids and unsuspecting adults—especially women—around the world on tobacco by using exactly the sorts of promotional and marketing techniques that have largely been abandoned or outlawed in the United States—free cigarette giveaways, television advertising, promotional t-shirts and hats, sporting events and rock music concert sponsorships, etc. Other than laws of general proscription, such as those prohibiting bribery, there are no U.S. laws or regulations specifically governing the overseas activities of Big Tobacco. In fact, multinational cigarette companies like Philip Morris have long relied on the U.S. government to help them promote smoking overseas. Official U.S. promotion of tobacco exports to developing countries started in earnest after World War II. Under the guise of providing assistance to needy countries, the federal government's Food for Peace program shipped hundreds of millions of dollars worth of tobacco to developing countries until the end of the 1970s. In the 1980s, the Office of the U.S. Trade Representative (USTR), working hand-in-glove with U.S. cigarette companies, used the threat of trade sanctions to pry open key markets in Japan, Taiwan, South Korea, and Thailand. The Thai case went to the General Agreement on Tariffs and Trade (GATT), where a trade panel stated that Thailand must open its tobacco market but—in a rare move for the trade body—it also said that Thailand could maintain stringent health regulations. How that decision will impact potential future trade and tobacco decisions at the GATT's successor, the World Trade Organization (WTO), is unclear.

1.1 Tobacco In The South Asian Countries

The South Asia (SA) region includes 8 countries: Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka. In 2005, SA accounted for 3.4% of the World’s total cigarette consumption, with 23% of the world’s population. In the SA region, average cigarette consumption per person 15 years and older was only 10 packs in 2005. Actual use of tobacco products was more serious than cigarette consumption showed, since bidis and other tobacco products are widely used in this region.

1.1.1 Cigarette Consumption and Smoking Prevalence

In 2005, total cigarette consumption for the SA region was 174,875 million pieces, accounting for 3.4% of the world total consumption (SA’s population was around 23% of the world total in 2005).



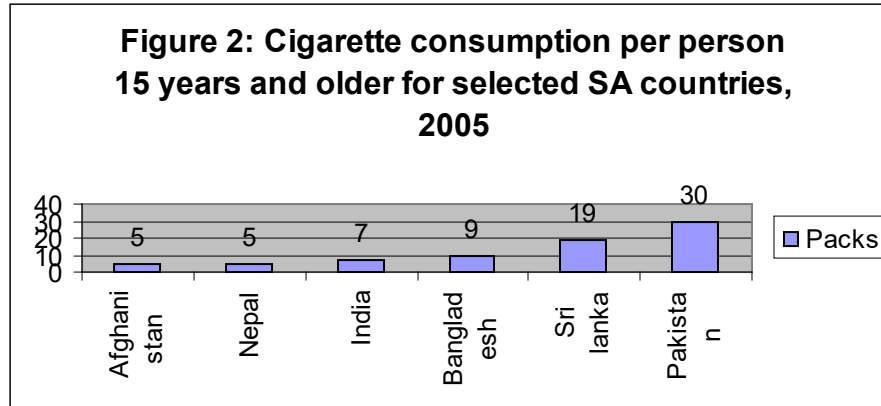
Sources: USDA and ILO

Note: Bhutan and Maldives are not included in the MNA total consumption due to lack of information.

1.1.2 Cigarette Consumption per Person 15 Years and Older, 2005

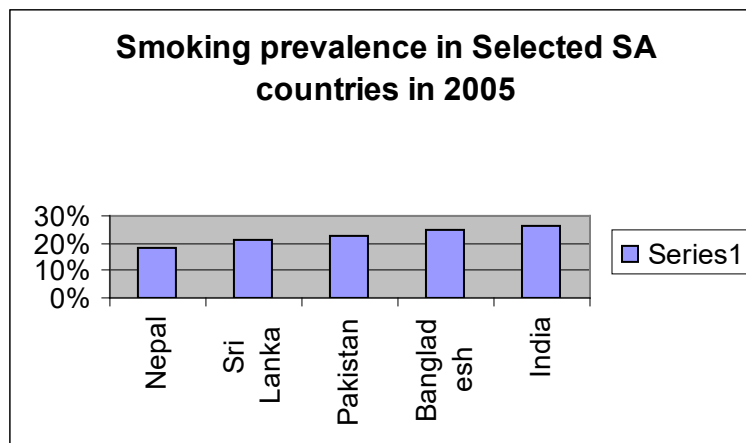
Not surprisingly, all SA countries show very low cigarette consumption per person 15 years and older. In 2005, Pakistan has the highest per 15+ consumption level of 30 packs. Smoking prevalence is not very different among SA countries, from 18% in Nepal to 26% in India. Overall, about 25% adults in the region are smokers and average annual consumption for these smokers was 10 packs in 2005.

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Source: World Bank Estimates

1.1.3 Overall Smoking Prevalence in Selected SA Countries, 2005

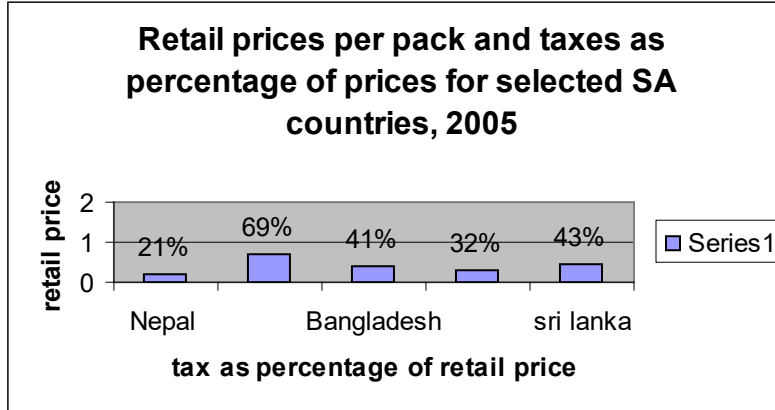


Source: World Bank Estimate

Cigarette Taxes and Prices

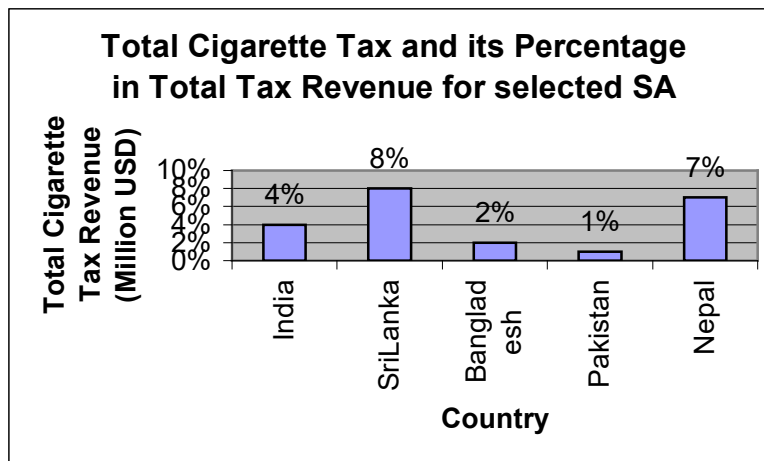
In 2005, total cigarette tax as percentage of retail price (excise and VAT) varied from 21% in Nepal to 69% in Pakistan.

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Source: World Bank Estimate

The importance of tobacco tax as a source of government revenue also differs widely across the SA region. For countries for which information is available, the share of cigarette taxes in total government revenue is shown below.



1.2 Demographics of Tobacco in Pakistan

Tobacco is an old crop. It was introduced in the Indian region around 1600 AD. According to an Indian mythology:

“In ancient times, when the land was barren and the people were starving, the Great Spirit sent forth a woman to save humanity. As she traveled over the world everywhere her right hand touched the soil, there grew potatoes. And everywhere her left hand touched the soil, there grew corn. And in the place where she had sat, there grew tobacco.”

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Tobacco can be used in both processed and unprocessed form. It can also classify as smoking and non-smoking form. The smoking form of tobacco includes manufacturing cigarettes, bidis, cigars, kreteks, pipes and sticks. The non smoking form of tobacco includes chewing tobacco, moist sniff and dry sniff.

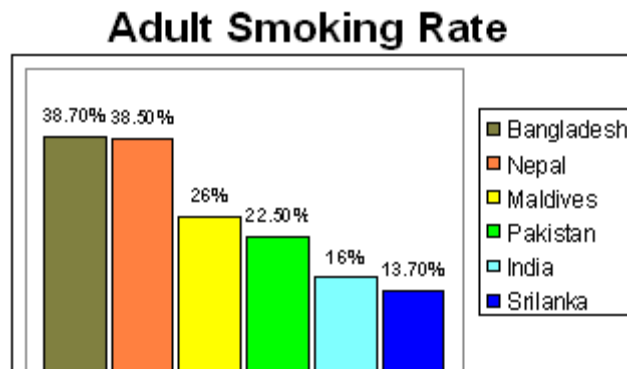
Area Production of Tobacco Crop					
	2003-04		2004-05 Provisional (July-March)		
Crops	Area (000 hectares)	Production (000 tons)	Area (000 hectares)	Production (000 tons)	% Change In production
Tobacco	46	86	45	84	-2.3

Source: Ministry of Food, Agriculture and Livestock; Federal Bureau of Statistics

Despite the decline in tobacco use in America and Europe, there has been an increasing rate of 1.7% of smoking in the developing countries. Pakistan is one of those countries where this rate is quiet high. According to the projections of World Health Organization, regional increase for cigarette consumption in Pakistan in 2008 as compared to 1998 would be +35.9%; Second highest in the Middle East region after Morocco. This percentage, however, is likely to reduce as the major tobacco companies in Pakistan have voluntarily agreed to follow 'International Tobacco Product Marketing Standards'.

Tobacco is a 'Rabi' crop. Federal Bureau of Statistics of Pakistan has shown a negative trend of 2.3% in growing tobacco during the year 2004 and 2005. About 45,000 hectares area is devoted to grow the tobacco crop and 86,000 metric tons of tobacco was produced last year.

The number of cigarette consumption per person per year in Pakistan is 564. It is estimated that 22.5% of the adult population smoke. About 36% of male adults and 9% of female adults are addicted to smoking. This figure is one of the highest in Asia. However in South Asia this figure is quiet moderate.

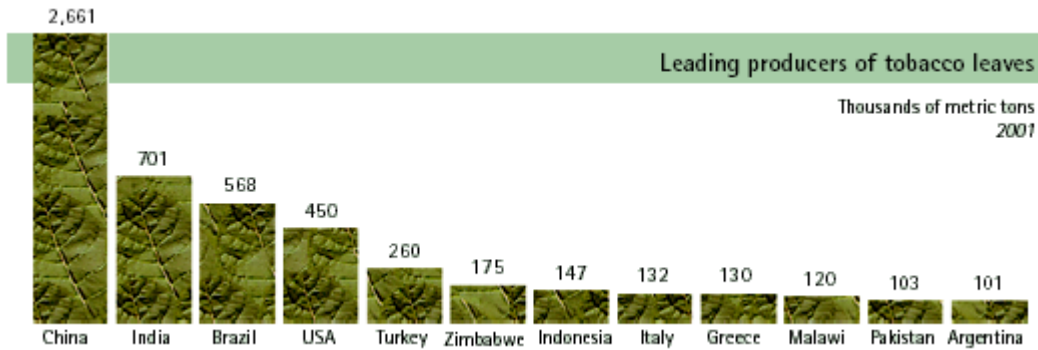


Source: Data taken from 'Tobacco Atlas'

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The ratio of cigarettes export to cigarettes import is exactly 1:10. Approximately 400 million cigarettes are being exported and 4,000 million cigarettes are being imported every year. However, in the case of tobacco leaf, exports are much higher than imports. Pakistan imports 180 metric tons of tobacco leaves and 2446 metric tons of tobacco leaves are exported every year.

Pakistan is among the leading producer of tobacco leaves. But only 0.3% of agriculture land is devoted to tobacco farming.



Source: World Health Organization

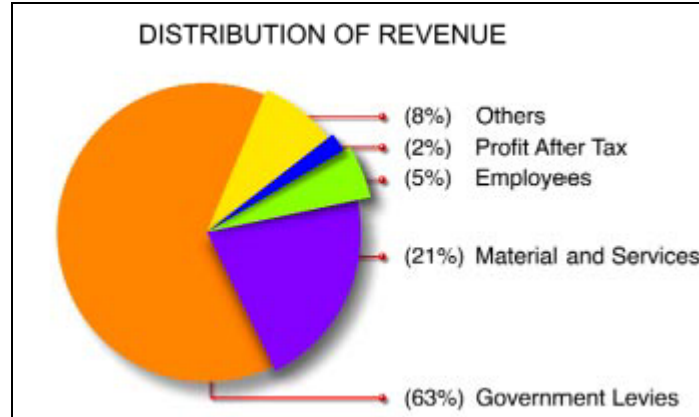
Cigarettes are the world's most widely smuggled legal consumer product. They are smuggled across almost every national border by constantly changing routes. Cigarette smuggling causes immeasurable harm to the economy. International brands become affordable to low income consumers and to image conscious young people in developing countries. It is quiet difficult to find the exact routes of smuggling. In Pakistan, cigarettes are smuggled mostly through Cyprus and Dubai.

Tobacco is considered as a controversial industry. But its contribution towards economy has always been quiet healthy. In 1776, the first US President George Washington requested to help finance the American Civil War by these famous words:

“I say, if you can't send money, send tobacco.”

Cigarette companies in Pakistan pay a big chunk of their revenue as taxes. It can be seen that more than 60% of their revenue goes into government taxes, which is a healthy sign for the economy

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Source: Pakistan Tobacco Company, Social Report 2004

2. Economy of Pakistan

Pakistan is amongst the developing countries of the world with the world's sixth largest population and an economic growth rate that has been consistently positive since a 1951 recession. Pakistan's GDP in 2005 was estimated at approximately \$393.4 billion at purchasing power parity which was larger than that of Saudi Arabia, but slightly smaller than the GDP of the Philippines¹.

2.1 Economic history - an overview

Pakistan, a developing country, is the sixth most populous in the world and is faced with a number of challenges on the political and economic fronts throughout its history. During much of its history, underdevelopment and poverty in parts of Pakistan - as well as fiscal mismanagement obscured the potential of a country with the resources and entrepreneurial skill to support rapid economic growth. However, the economy averaged an impressive growth rate of 6% per year during the 1980s and early 1990s. Throughout the Eighties, Pakistan was the third largest recipient of US developmental aid after Israel and Egypt. In the twentieth century overall, its economic growth rate was better than the world average, but imprudent policies led to a slowdown in the late 1990s². Since then, the Pakistani government has instituted wide-ranging reforms, and economic growth has accelerated in the current century. Pakistan's economic outlook has brightened and its manufacturing and financial services sectors have experienced rapid expansion. There has been a great improvement in its foreign exchange position and a rapid growth in hard currency reserves as a result of its current account surplus.

¹ [World Bank, Pakistan GDP Reference](#)

² [^ Pakistan Studies](#)

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2.2 Economic History 1980-2005:

This is a chart of trend of gross domestic product of Pakistan at market prices estimated by the International Monetary Fund with figures in millions of Pakistani Rupees.

Year	Gross Domestic Product	US Dollar Exchange³	Inflation Index (2000=100)
1980	335,917	9.90 Pakistani Rupees	21
1985	624,883	16.28 Pakistani Rupees	29
1990	1,127,300	22.75 Pakistani Rupees	41
1995	2,402,319	31.71 Pakistani Rupees	70
2000	3,978,045	53.74 Pakistani Rupees	100
2005	7,055,553	59.55 Pakistani Rupees	128

Economically, Pakistan was a very poor and predominantly agricultural country at the time of its independence in 1947 from British South Asia. Current GDP per capita grew 112% in the Sixties and 81% in the Seventies but this proved unsustainable and growth fell sharply to 22% in the Eighties and 18% in the Nineties.

Industrial-sector growth, including manufacturing, was also above average. In the early 1960s, Pakistan was seen as a model of economic development around the world, and there was much praise for the way its economy was progressing. Later, economic mismanagement in general and fiscally imprudent economic policies in particular, caused a large increase in the country's public debt and led to slower growth in the 1990s. The other significant factor that was responsible for the economic slowdown during the sixties and seventies was the two wars with India in 1965 and 1971 that severely made an impact on Pakistan's economy.⁴

³ For purchasing power parity comparisons, the US Dollar is exchanged at 17.93 Pakistani Rupees only.

⁴ [Pakistan Embassy](#)

2.3 Economic Resilience

Historically, Pakistan's overall economic output (GDP) has grown every year since a 1951 recession. Despite this record of sustained growth, Pakistan's economy had, until a few years ago, been characterized as unstable and highly vulnerable to external and internal shocks. However, the economy proved to be unexpectedly resilient in the face of multiple adverse events concentrated into a four-year period —

- the Asian financial crisis;
- economic sanctions — according to Colin Powell, Pakistan was "sanctioned to the eyeballs";
- global recession;
- severe rioting in the port city of Karachi;
- a severe drought — the worst in Pakistan's history, lasting four years;
- heightened perceptions of risk as a result of military tensions with India — with as many as a million troops on the border, and predictions of impending (potentially nuclear) war; and
- the post-9/11 military action in neighboring Afghanistan, with a massive influx of refugees from that country.

Despite these adverse events, Pakistan's economy kept growing, and economic growth accelerated towards the end of this period. This resilience has led to a change in perceptions of the economy, with leading international institutions such as the IMF, World Bank, and the ADB praising Pakistan's performance in the face of adversity.

2.4 Recent Economic History

Pakistan's economic outlook has brightened in recent years in conjunction with rapid economic growth and a dramatic improvement in its foreign exchange position as a result of its current account surplus and a consequent rapid growth in hard currency reserves. Pakistan's nuclear tests in May 1998 triggered the imposition of economic sanctions by the G-7. International default was narrowly averted by the partial waiver of sanctions and the subsequent reinstatement of Pakistan's IMF ESAF/EFF in early 1999, followed by Paris Club and London Club rescheduling. The Sharif government had difficulty meeting the conditionality of the IMF program, which was suspended in July 1999, and resumed later during Musharraf's administration. Having improved its finances, the government stated in 2004 that it would no longer require IMF assistance, and the assistance program ended in that year.⁵

The administration of President Pervez Musharraf has sought and received debt relief from international lenders, reducing its external debt from \$32 billion to a discounted present value less than half of that. The government is using Pakistan's surplus to prepay expensive debt and replace it with commercial debt, which it has been able to obtain at low interest rates as a result of its improved credit rating. Musharraf's economic agenda includes measures to widen the tax net, privatize public sector assets, and improve its balance of trade. Pakistan has made governance reforms, privatization, and deregulation the cornerstones of its economic revival.

⁵ [^ a b Pakistan ends 15-year ties with IMF; Daily Times, 7 September 2004](#)) Pakistani Newspaper Article, 2004

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Although it has received a positive endorsement from supranational financial institutions such as the World Bank, the International Monetary Fund and the Asian Development Bank, as well as improved credit ratings from Standard & Poor's and Moody's, Pakistan is still experiencing a costly dearth of foreign direct investment. Pakistan's Finance Minister, Shaukat Aziz, who has been credited with Pakistan's economic turnaround, was elected to the office of Prime Minister on 28 August 2004.

Pakistan's current account surplus put upward pressure on the Pakistani rupee, which rose from 64 rupees per dollar to 57 rupees per dollar. The State Bank of Pakistan (the central bank) stabilized the rise by lowering interest rates and buying dollars. After short-term Pakistani T-bond rates fell below 2%, with government borrowing having declined, banks greatly expanded their lending to businesses and consumers. Construction activity, sales of durable goods such as trucks and automobiles, and housing purchases have all jumped to record levels. Private sector credit expanded by 28.5% in 2003. Despite rapid growth in domestic automobile manufacturing, imports have also risen to meet the increased demand. Major automakers, such as BMW, Toyota, and Honda have invested in manufacturing facilities in the country.

2.5 Macroeconomic Reform And Prospects



According to many sources, the Pakistani government has made substantial economic reforms since 2000, and medium-term prospects for job creation and poverty reduction are the best in nearly a decade.

Government revenues have greatly improved in recent years, as a result of economic growth, tax reforms - with a broadening of the tax base, and more efficient tax collection as a result of self-assessment schemes and corruption controls in the Central Board of Revenue - and the privatization of public utilities and telecommunications. Pakistan is aggressively cutting tariffs and assisting exports by improving ports, roads, electricity supplies and irrigation projects. Islamabad has raised development spending from about 2% of GDP in the 1990s to 4% in 2003, a necessary step towards reversing the broad underdevelopment of its social sector. Liberalization in the international textile trade has already yielded benefits for Pakistan's exports, and the country also expects to profit from freer trade in agriculture. As a large country, Pakistan hopes to take advantage of significant economies of scale, and to replace China as the largest textile manufacturer as

the latter China moves up the value-added chain. These industries play to Pakistan's relative strengths in low labor costs.

A perception of stability in the nation's monetary policies has contributed to a reduction in money-market interest rates, and a great expansion in the quantity of credit, changing consumption and investment patterns in the nation. Pakistan's domestic natural gas production, and its significant use of CNG in automobiles, has cushioned the effect of the oil-price shock of 2004-2005. Pakistan is also moving away from the doctrine of import substitution which some developing countries (such as Iran) dogmatically pursued in the twentieth century. The Pakistani government is now pursuing an export-driven model of economic growth successfully implemented by South East Asia and now highly successful in China. In 2005, the World Bank reported that

*"Pakistan was the top reformer in the region and the number 10 reformer globally — making it easier to start a business, reducing the cost to register property, increasing penalties for violating corporate governance rules, and replacing a requirement to license every shipment with two-year duration licenses for traders."*⁶

In addition, reduced tensions with India and the ongoing peace process raise new hopes for a prosperous and stable South Asia, with more intra-regional trade.

Shahid Javed Burki, former vice president of World Bank and who was in charge of the bank's Latin American division when Mexico was hit by the crisis in 1994, said Pakistan is facing symptoms that preceded the Mexican financial crisis more than 10 years ago.⁷

He points to the nation's current account deficit, 'excessive' speculative business activity and weak banking system to name a few.

2.6 The Economy Today

2.7 Stock Market

In the first four years of the twenty-first century, Pakistan's KSE 100 Index was the best-performing stock market index in the world as declared by the international magazine "Business Week".

⁶ [^ Doing Business in 2006: South Asian Countries Pick up Reform Pace, says World Bank Group; India Ranks 116th, 25 Places After China; Pakistan Among Top 10 Reformers](#) (September 12, 2005). Retrieved on [2006-06-03](#).

⁷ [^ "Pakistan facing Mexican-style financial crunch"](#), *Daily Times*, April 26, 2006. Retrieved on [2006-06-03](#).



2.8 Karachi - THE FINANCIAL CAPITAL OF PAKISTAN

2.9 Manufacturing And Finance

Pakistan's manufacturing sector has experienced double-digit growth in recent years, with large-scale manufacturing growing by 18% in 2003. A reduction in the fiscal deficit has resulted in less government borrowing in the domestic money market, lower interest rates, and an expansion in private sector lending to businesses and consumers. Foreign exchange reserves continued to reach new levels in 2003, supported by robust export growth and steady worker remittances.

2.10 Growing Middle Class

Measured by purchasing power, Pakistan has a 30 million strong middle class enjoying per capita incomes of \$8000-\$10,000, according to Dr. Ishrat Husain, Ex-Governor (2nd December, 1999 - 1st December, 2005) of the State Bank of Pakistan. In addition, Pakistan has a growing upper class with relatively high per capita incomes. However, Pakistan has no individual with as much as a billion US dollars, according to Forbes magazine⁸ and has the distinction of being (by population) the largest nation to have no billionaires. Among countries that have never had billionaires, Pakistan has the largest economy. On measures of income inequality, the country ranks slightly better than the median.

2.11 Poverty Alleviation Expenditures

Pakistan government spent over 1 trillion Rupees (about \$16.7 billion) on poverty alleviation programs during the past four years, cutting poverty from 32.1 percent in 2000-01 to 25.4 percent in 2004-05. The rural poverty has declined from 39 percent to 31.8 percent and urban poverty from 22.7 percent to 17.1 percent.

⁸ [World's Billionaire List, 2005](#)

2.12 Demographics

With a per capita GDP of about \$2080 (PPP, 2003) the World Bank considers Pakistan a low-income country, although it is recorded as a "Medium Development Country" on the Human Development Index 2005. Pakistan has a large informal economy, which the government is trying to document and assess. Approximately 50% of adults are literate, and life expectancy is about 64 years or less. The population, about 155 million in 2004, is growing at about 1.96%.

Relatively few resources have been devoted to socio-economic development or infrastructure projects. Inadequate provision of social services and very high birth rates in the past have contributed to a persistence of poverty. An influential recent study by Fenech and Alam on Pakistan fertility (2003) concluded that the fertility rate peaked in the 1980s, and has since fallen sharply. Pakistan has a family-income Gini index of 41, close to the world average of 39.

2.13 Employment

The high population growth in the past few decades has ensured that a very large number of young people are now entering the labor market. Among the seven most populous Asian nations, Pakistan has a lower population density than Bangladesh, Japan, India, and the Philippines. In the past, excessive red tape made firing, and consequently hiring, difficult. Significant progress in taxation and business reforms has ensured that many firms now are not compelled to operate in the underground economy. The nations of Iran, Germany, France and previously Pakistan had one thing in common; high costs of entry into the market for firms and excessive restriction on labor. The result: high unemployment. In recent years, employment rates in Pakistan have been unexceptional compared to other countries.⁹

2.14 Economic Analysis

During much of its history, Underdevelopment and poverty in parts of Pakistan - as well as fiscal mismanagement obscured the potential of a country with the resources and entrepreneurial skill to support rapid economic growth. However, the economy averaged an impressive growth rate of 6% per year during the 1980s and early 1990s. In the twentieth century overall, its economic growth rate was better than the world average, but imprudent policies led to a slowdown in the late 1990s. Since then, the Pakistani government has instituted wide-ranging reforms, and economic growth did accelerate in the current century. However, the recent slump in stock market owes itself to a situation on the contrary. Growing imbalances in the economy are a source of market concern. Though premature, such apprehensions are based on fast widening current account deficit with implications for the stability of exchange and interest rates, impacting on cost of doing business, corporate profitability and equity investment.

2.15 Economic Statistics

This is a chart of trend of gross domestic product of Pakistan at market prices estimated by the International Monetary Fund with figures in millions of Pakistani Rupees.

⁹ [^ https://www.cia.gov/cia/publications/factbook/rankorder/2129rank.html](https://www.cia.gov/cia/publications/factbook/rankorder/2129rank.html)

THE DYNAMICS OF TOBACCO INDUSTRY IN PAKISTAN

Year	Gross Domestic Product	US Dollar Exchange
1980	335,917	9.90 Rupees
1985	624,883	16.28 Rupees
1990	1,127,300	22.75 Rupees
1995	2,402,319	31.71 Rupees
2000	3,978,045	53.74 Rupees
2005	7,055,553	59.55 Rupees

Sectoral contribution to GDP Growth				
Most of the recent acceleration in GDP growth has come from the industrial and service sectors.				
GDP growth by sector, as a percentage of GDP				
Sector	2001-02	2002-03	2003-04	2004-05
Agriculture	0.03	1.01	0.53	1.74
Industry	0.61	1.08	2.74	2.46
— Manufacturing	1.71	1.11	2.31	2.19
Service	2.47	2.75	3.16	4.16
Real GDP (fc)	3.1%	4.8%	6.4%	8.4%

2.16 Structure of Economy

In 1947, when Pakistan became independent, agriculture accounted for about 53% of its GDP. While per-capita agricultural output has grown since then, it has been outpaced by the growth of the non-agricultural sectors, and the share of agriculture has dropped to roughly one-fifth of Pakistan's economy.

In recent years, the country has seen rapid growth in industries (such as apparel, textiles, and cement) and services (such as telecommunications, transportation, advertising, and finance).

THE DYNAMICS OF TOBACCO INDUSTRY IN PAKISTAN

Structure of production					
Share of Various Sectors in GDP					
Sector	2000-01	2001-02	2002-03	2003-04	2004-05
Goods (1+2+3+4+5)	48.2	47.3	47.1	47.4	47.6
1. Agriculture	25.1	24.4	24.2	23.3	23.1
2. Mining	1.3	1.4	1.5	1.5	1.4
3. Manufacturing	15.9	16.1	16.4	17.6	18.3
4. Construction	2.4	2.4	2.4	2.1	2.0
5. Energy Distribution	3.4	3.0	2.5	2.9	2.7
Services (6+7+8+9+10+11)	51.8	52.7	52.9	52.6	52.4
6. Transportation & Comm.	11.7	11.5	11.5	11.4	11.1
7. Trade	18.1	18.0	18.2	18.5	19.1
8. Finance & Insurance	3.1	3.6	3.3	3.3	3.7
9. Ownership of Dwellings	3.2	3.2	3.2	3.1	2.9
10. Public Admin. & Defense	6.3	6.5	6.7	6.5	6.0

2.16 Structure of Economy

From modest beginnings, Pakistani economy has moved successfully to a low-inflation high-growth trajectory since 2000. The central bank has controlled inflation at around 3% per annum in recent years - a record since 1980.

THE DYNAMICS OF TOBACCO INDUSTRY IN PAKISTAN

Sectoral contribution to GDP Growth Most of the recent acceleration in GDP growth has come from the industrial and service sectors.				
Sector	2001-02	2002-03	2003-04	2004-05
Agriculture	0.03	1.01	0.53	1.74
Industry — <i>Manufacturing</i>	0.61 <i>1.71</i>	1.08 <i>1.11</i>	2.74 <i>2.31</i>	2.46 <i>2.19</i>
Service	2.47	2.75	3.16	4.16
Real GDP (fc)	3.1%	4.8%	6.4%	8.4%

Source: Economic Survey of Pakistan 2005

In 1947, when Pakistan became independent, agriculture accounted for about 53% of its GDP. While per-capita agricultural output has grown since then,

It has been outpaced by the growth of the non-agricultural sectors, and the share of agriculture has dropped to roughly one-fifth of Pakistan's economy.

In recent years, the country has seen rapid growth in industries (such as apparel, textiles, and cement) and services (such as telecommunications, transportation, advertising, and finance).

2.17 Services

Pakistan's service sector accounts for about 51% of GDP. Transport, storage, communications, finance, and insurance account for 24% of this sector, and wholesale and retail trade about 30%. Pakistan is trying to promote the information industry and other modern service industries through incentives such as long-term tax holidays.

The government is acutely conscious of the immense job growth opportunities in service sector and has launched aggressive privatisation of telecommunications, utilities and banking despite union unrest. As a result, Pakistan Telecom has emerged as a successful Forbes 2000 conglomerate with over \$1 billion in sales in 2005. Also, the mobile phone

market exploded fifteen-fold since 2000 to reach a subscriber base of over 42 million in 2006 ¹⁰. As a result, Pakistan won the prestigious Government Leadership award of GSM Association in 2006 ¹¹

2.18 Transport

Pakistan International Airlines, the flagship airline of Pakistan's civil aviation industry, has turnover exceeding \$1 billion as disclosed by world bank (2005). The government announced a new shipping policy in 2006 permitting banks and financial institutions to mortgage ships and a massive rehabilitation plan worth \$1 billion over 5 years for Pakistan Railways has been announced by the government in 2005 ¹².

2.19 Energy

In 2004, Access Group International announced plans to invest \$1 billion over the next 5 years in solar cell manufacture and wind farms. MOUs have been signed with Alternate Energy Development Board similarly in early 2005, the government approved a 25-year Energy Security Plan to boost electric capacity eight-fold ¹³.

2.20 Financial Services

A reduction in the fiscal deficit has resulted in less government borrowing in the domestic money market, lower interest rates, and an expansion in private sector lending to businesses and consumers. Foreign exchange reserves continued to reach new levels in 2003, supported by robust export growth and steady worker remittances. Credit card market continued its strong growth with sales crossing the 1 million mark in mid-2005

2.21 Banking

Since 2000, Pakistani banks have begun aggressive marketing of consumer finance to the emerging middle class, allowing for a consumption boom (more than a 7-month waiting list for certain car models) as well as a construction bonanza.

¹⁰ <http://www.heritage.org/research/features/index/country.cfm?id=Pakistan>

¹¹ <http://hdr.undp.org/statistics/data/countries.cfm?c=PAK>

¹³ <https://www.cia.gov/cia/publications/factbook/rankorder/2087rank.html>

2.22 Tax Incentives & IT Industry

The Government of Pakistan has, over the last few years, granted numerous incentives to technology companies wishing to do business in Pakistan. A combination of decade-plus tax holidays, zero duties on computer imports, government incentives for venture capital and a variety of programs for subsidizing technical education, are intended to give impetus to the nascent Information Technology industry. This in recent years has resulted in impressive growth in that sector. Pakistan saw an increase in IT exports of 50% from 2003-4 to 2004-5, with total exports standing at \$48.5 million. This year the government has set an export goal of \$72 million. Exports account for 11% of the total revenues of the IT sector in Pakistan. Compared to India, Pakistan's IT sector is still in the infantile stage, but recent trends have led economists to be optimistic about the IT industries future prospects in Pakistan.

Paging and mobile (cellular) telephone were adopted early and freely. Cellular phones and the Internet were adopted through a rather laissez-faire policy with a proliferation of private service providers that led to fast adoption. Both have taken off and in the last few years of the 1990s and first few years of the 2000s. With a rapid increase in the number of internet users and ISPs, and a large English-speaking population, Pakistani society has seen major changes.

- Pakistan has more than 20 million internet users as of 2005. The country is said to have a potential to absorb up to 50 million mobile phone Internet users in the next 5 years thus a potential of nearly 1 million connections per month.
- Almost all of the main government departments, organizations and institutions have their own websites.
- The use of search engines and instant messaging services is also booming. Pakistanis are some of the most ardent chatters on the Internet, communicating with users all over the world. Recent years have seen a huge increase in the use of online marriage services, for example, leading to a major re-alignment of the tradition of arranged marriages.
- As of 2005 there were 6 cell phone companies operating in the country with nearly 28 million mobile phone users in the country.
- Wireless local loop and the landline telephony sector has also been liberalized and private sector has entered thus increasing the teledensity rate from less than 3% to more than 10% in span of two years.

2.23 Agriculture and Livestock



2.24 Agriculture

Pakistan ranks fifth in the Muslim world and twentieth worldwide in farm output. Pakistan's principal natural resources are arable land and water. About 25% of Pakistan's total land area is under cultivation and is watered by one of the largest irrigation systems in the world. In fact Pakistan irrigates three times more acres than Russia now. Agriculture accounts for about 23% of GDP and employs about 44% of the labor force. The most important crops are wheat, sugarcane, cotton, and rice, which together account for more than 75% of the value of total crop output.

Pakistan's largest food crop is wheat. In 2005, Pakistan produced 21,591,400 metric tons of wheat, more than all of Africa (20,304,585 metric tons) and nearly as much as all of South America (24,557,784 metric tons), according to the FAO ¹⁴

Pakistan is a net food exporter, except in occasional years when its harvest is adversely affected by droughts. Pakistan exports rice, cotton, fish, fruits, and vegetables and imports vegetable oil, wheat, cotton, pulses and consumer foods. The country is Asia's largest camel market, second-largest apricot and ghee market and third-largest cotton, onion and milk market.

The economic importance of agriculture has declined since independence, when its share of GDP was around 53%. Following the poor harvest of 1993, the government introduced agriculture assistance policies, including increased support prices for many agricultural commodities and expanded availability of agricultural credit. From 1993 to 1997, real growth in the agricultural sector averaged 5.7% but has since declined to about 4%. Agricultural reforms, including increased wheat and oilseed production, play a central role in the government's economic reform package.

The value of processed retail food sales has grown 12 percent annually during the Nineties and was estimated at over \$1 billion in 2000 though supermarkets accounted for just over 10% of the outlets ¹⁵.

¹⁴ http://www.pakistan.gov.pk/divisions/ContentInfo.jsp?DivID=18&cPath=165_171&ContentID=2351

¹⁵ http://www.pakistan.gov.pk/divisions/ContentInfo.jsp?DivID=18&cPath=165_171&ContentID=2351

2.25 Energy

Pakistan has extensive energy resources, including fairly sizable natural gas reserves, some proven oil reserves, coal (Pakistan has the fourth-largest coal reserves in the world [23]), and a large hydropower potential. However, the exploitation of energy resources has been slow due to a shortage of capital and domestic political constraints. Domestic petroleum production totals only about half the country's oil needs, and the need to import oil has contributed to Pakistan's trade deficits and past shortages of foreign exchange. The current government has announced that privatization in the oil and gas sector is a priority, as is the substitution of indigenous gas for imported oil, especially in the production of power. Pakistan is a world leader in the use of compressed natural gas (CNG) for personal automobiles.

2.26 Minerals

Important minerals found in Pakistan are gypsum, limestone, chromites, iron ore, rock salt, silver, gold, precious stones, gems, marble, copper, coal, graphite, sulphur, fire clay, silica. The salt range in Punjab Province has large deposits of pure salt. Balochistan province is a mineral rich area having substantial mineral, oil and gas reserves which have not been exploited to their full capacity. The province has significant quantities of copper, chromite and iron, and pockets of antimony and zinc in the south and gold in the far west. Natural gas was discovered near Sui in 1952, and the province has been gradually developing its oil and gas projects over the past fifty years (Himala south asian, pakistan edition).

2.27 Industry:

Pakistan ranks thirteenth in the Muslim world and fifty-fifth worldwide in factory output. Pakistan's industrial sector accounts for about 24% of GDP. Cotton textile production and apparel manufacturing are Pakistan's largest industries, accounting for about 64% of total exports. Other major industries include cement, fertilizer, edible oil, sugar, steel, tobacco, chemicals, machinery, and food processing.

The government is privatizing large-scale parastatal units, and the public sector accounts for a shrinking proportion of industrial output, while growth in overall industrial output (including the private sector) has accelerated. Government policies aim to diversify the country's industrial base and bolster export industries.

Pakistan's 2 leading companies, as per Forbes Global 2000 ranking for 2005.	
Global ranking	Company Name
1,284	Oil & Gas Development
1,316	PTCL

Source: Forbes global 2000

2.28 Manufacturing

In FY 2002-03, real growth in manufacturing was 7.7%. In the twelve months ending 30 June 2004, large-scale manufacturing grew by more than 18% compared to the previous twelve-month period.

2.29 Construction

After the devastating 2005 Kashmir earthquake Pakistan has instituted stricter building codes. The cost of construction in Pakistan will increase 30 to 50% due to implementation of a new building code which requires strengthening of structures to withstand earthquake of 8 to 8.5 magnitude. The demand for cement has increased due to reconstruction after the earthquake. The prices of cement has increased by 50% and Pakistan government banned export of cement to lower the prices and the reconstruction costs.

Dubai Ports World, announced on June 1st, 2006 that it will spend \$10 billion to develop transport infrastructure and real estate in Pakistan.¹⁶ Dubai Ports World is also discussing the possibility of the company taking over operational management of Gwadar port in Balochistan , news relased in daily times (2006).

Emaar Properties, announced on May 31, 2006 three real estate developments in the cities of Islamabad and Karachi in Pakistan. The projects, with a total investment of AED 8.8 billion (US\$2.4 billion), will include a series of master planned communities that will set new benchmarks in commercial, residential and retail property within Pakistan.¹⁷

¹⁶ [^ http://www.ameinfo.com/87639.html](http://www.ameinfo.com/87639.html)

¹⁷ <http://www.emaar.com/MediaCenter/PressReleases/2006May31.asp>

2.30 Economic Aid

Pakistan receives economic aid from several sources as loans and grants. The International Monetary Fund (IMF), World Bank (WB), Asian Development Bank (ADB), etc provides long term loans to Pakistan. Pakistan also receives bilateral aid from developed and oil-rich countries.

The Asian Development Bank will provide close to \$4 billion development assistance to Pakistan during 2006-08 [Khaleej times, (2006)]. The World Bank unveiled a lending program of up to \$6.5 billion for Pakistan under a new four-year, 2006-2009, aid strategy showing a significant increase in funding aimed largely at beefing up the country's infrastructure [Forbes.com, (2006)]. Japan will provide \$500 million annual economic aid to Pakistan [the hindu news update service, (2006)].

2.31 Remittance

The remittance of Pakistanis living abroad has played important role in Pakistan's economy and foreign exchange reserves. The Pakistanis settled in Western Europe and North America are important sources of remittance to Pakistan. Since 1973 the Pakistani workers in the oil rich Arab states have been sources of billions dollars of remittance. Pakistan received nearly \$4 billion dollars in remittance in 2005.

An IMF research paper in daily times (2006) has revealed that workers' remittances contribute 4% to the GDP of Pakistan and are equivalent to about 22 percent of annual exports of goods and services.

The Foreign direct investment (FDI) in Pakistan soared by 180.6 per cent year-on-year to US\$2.22 billion and portfolio investment by 276 per cent to \$407.4 million during the first nine months of fiscal year 2006, the State Bank of Pakistan (SBP) reported on April 24. During July-March 2005-06, FDI year-on-year increased to \$2.224 billion from only \$792.6 million and portfolio investment to \$407.4 million, whereas it was \$108.1 million in the corresponding period last year, according to the latest statistics released by the State Bank.¹⁸

Pakistan is now the most investment-friendly nation in South Asia. Business regulations have been profoundly overhauled along liberal lines, especially since 1999. Most barriers to the flow of capital and international direct investment have been removed. Foreign investors do not face any restrictions on the inflow of capital, and investment of up to 100% of equity participation is allowed in most sectors (local partners must be brought in within 5 years and contribute up to 40% of the equity in the services and agriculture sectors). Unlimited remittance of profits, dividends, service fees or capital is now the rule. Business regulations are now among the most liberal in the region. On these grounds, Pakistan appears much more investor friendly than its larger neighbour, India.

Tariffs have been reduced to an average rate of 16%, with a maximum of 25% (except for the car industry). The privatisation process, which started in the early 1990s, has gained momentum, with most of the banking system privately owned, and the oil sector targeted to be the next big privatisation operation.

The recent improvements in the economy and the business environment have been recognised by international rating agencies such as Moody's and Standard and Poor's (country risk upgrade at the end of 2003).

¹⁸ <http://www.tmcnet.com/usubmit/-fdi-into-pakistan-jumps-1806-1st-9-months-2006/04/26/1610074.htm>

2.32 Foreign Trade

Pakistan is a member of the World Trade Organization, and has bilateral and multilateral trade agreements with many nations and international organizations.

Fluctuating world demand for its exports, domestic political uncertainty, and the impact of occasional droughts on its agricultural production have all contributed to variability in Pakistan's trade deficit. In the six months to December 2003, Pakistan recorded a current account surplus of \$1.761 billion, roughly 5% of GDP. Pakistan's exports continue to be dominated by cotton textiles and apparel, despite government diversification efforts. Exports grew by 19.1% in FY 2002-03. Major imports include petroleum and petroleum products, edible oil, chemicals, fertilizer, capital goods, industrial raw materials, and consumer products.

Past external imbalances left Pakistan with a large foreign debt burden. Principal and interest payments in FY 1998-99 totaled \$2.6 billion, more than double the amount paid in FY 1989-90. Annual debt service peaked at over 34% of export earnings before declining.

With a current account surplus in recent years, Pakistan's hard currency reserves have grown rapidly. Improved fiscal management, greater transparency and other governance reforms have led to upgrades in Pakistan's credit rating. Together with lower global interest rates, these factors have enabled Pakistan to prepay, refinance and reschedule its debts to its advantage. Despite the country's current account surplus and increased exports in recent years, Pakistan still has a large merchandise-trade deficit. The budget deficit in fiscal year 1996-97 was 6.4% of GDP. The budget deficit in fiscal year 2003-04 is expected to be around 4% of GDP.

A study conducted by Faisal Cheema on macro economic stability of Pakistan (May 2004) in the late 1990s, Pakistan received about \$2.5 billion per year in loan/grant assistance from international financial institutions (e.g., the IMF, the World Bank, and the Asian Development Bank) and bilateral donors. Increasingly, the composition of assistance to Pakistan shifted away from grants toward loans repayable in foreign exchange. All new U.S. economic assistance to Pakistan was suspended after October 1990, and additional sanctions were imposed after Pakistan's May 1998 nuclear weapons tests. The sanctions were lifted by president George W. Bush after Pakistani president Musharraf allied Pakistan with the U.S in its war on terror. Having improved its finances, the government refused further IMF assistance, and consequently the IMF program was ended.^[14] The government is also reducing tariff barriers with bilateral and multilateral agreements.

While the country has a current account surplus and both imports and exports have grown rapidly in recent years, it still has a large merchandise-trade deficit. The budget deficit in fiscal year 2004-2005 was 3.4% of GDP. The budget deficit in fiscal year 2005-06 is expected to be over 4% of GDP. Economists believe that the soaring trade deficit would have an adverse impact on Pakistani rupee by depreciating its value against dollar (1 US \$ = 60 Rupees (March 2006)) and other currencies.

One of the main reasons that contributed to the increase in trade deficit is the increased imports of earthquake relief related items, especially tents, tarpaulin and plastic sheets to provide temporary shelter to the survivors of earthquake of October 8th, 2005 in Azad

Jammu and Kashmir and parts of the NWFP, an official said. The rise in the trade gap was also fuelled by high oil import prices, food items, machinery and automobiles.

The Petroleum Ministry says that this year the bill of oil imports was expected to reach \$6.5 billion against \$4.6 billion in the last fiscal year, which is the main reason behind the all-time high trade deficit.

The EU is the single largest trading partner of Pakistan absorbing over one-third of the exports in 2003.

2.33 Exports

The exports in the 2006 financial year (July 2005 to June 2006) were \$16.47 billion showing an increase of 14.40% compared to \$14.39 billion last fiscal year.

Pakistan exports rice, furniture, cotton fiber, cement, tiles, marble, textiles, clothing, leather goods, sports goods (renowned for footballs/soccer balls), surgical instruments, electrical appliances, software, carpets, and rugs, ice cream, livestock meat, chicken, powdered milk, wheat, seafood (especially shrimp/prawns), vegetables, processed food items, Pakistani assembled Suzukis (to Afghanistan and other countries), defense equipment (submarines, tanks, radars), salt, marble, onyx, engineering goods, and many other items.

2.34 Imports

The imports in the 2006 financial year (July 2005 to June 2006) amounted to \$28.58 billion showing an increase of 38.80% compared to \$20.60 billion during the previous fiscal year.

Pakistan's single largest import category is petroleum and petroleum products. Other imports include: industrial machinery, construction machinery, trucks, automobiles, computers, computer parts, medicines, pharmaceutical products, food items, civilian aircraft, defense equipment, iron, steel, toys, electronics, and other consumer items.

2.35 Deficit

Pakistan's trade deficit was \$12.112 billion in fiscal year 2005-2006, almost 10 percent of Gross Domestic Product (GDP), due to its high import bill and the rise in prices.

Economists believe that the soaring trade deficit would depreciate the Pakistani rupee against dollar and other currencies. The demand by local importers for dollars in the coming months would increase to finance their surplus imports. The rise in the trade gap has been attributed to high oil import bill, and rise in the prices of food items, machinery and automobiles.

Bonds

Pakistan is expected to sell a dual-tranche sovereign bond worth \$750 million on March 23, 2006 that analysts said should ensure a favorable reception in the bond market. The 10-year tranche would be \$500 million and the 30-year portion \$250 million. Pricing is expected during New York trading hours on March 23, 2006. The sources said that the 10-year tranche was expected to be priced at around 7.125 percent, while the longer-

dated tranche was expected to be sold at around 7.875 percent, the top end of the indicative yield range of 7.75 to 7.875 percent.

A study revealed in daily times (2006) that the bonds, comprising 10-year and 30-year tranches, had generated \$1.5 billion in orders and a total size of as much as \$1.25 billion had been anticipated for what is Pakistan's third foray into the international debt market since 2004.

2.36 Fiscal budget

- Fiscal year: 1 July - 30 June
- Revenues: \$15.45 billion
- Expenditures: \$20.07.7 billion, including capital expenditures of \$NA (2005 est.)
- Debt - external: \$39.94 billion (2005 est.)
- Economic aid - recipient: \$2 billion (FY97/98)

2.37 Industrial Sector

- Industries: textiles (8.5% of the GDP), food processing, beverages, construction materials, clothing, paper products, shrimp
- Industrial production growth rate: 10.7% (2005)
- Large-scale manufacturing growth rate: 18% (2003)

2.38 Income Distribution

- Gini Index: 41
- Household income or consumption by percentage share:
 - lowest 10%: 4.1%
 - highest 10%: 27.7% (1996)

2.39 Electricity

Electricity Production

- Electricity - production: 451.92 billion kWh (2003)
- Electricity - production by source (2002)
 - fossil fuel: 63.05%
 - hydro: 36.31%
 - nuclear: 0.64%

Electricity Consumption

- Electricity - consumption: 71.54 billion kWh (2003)
- Electricity - exports: 0%

Electricity - imports: 0%

3.Literature Review

3.1 Dynamics of Tobacco Industry in Pakistan

The key economic questions relating to tobacco control policies – as to any policies – are the relative size of the benefits and costs, and their distributional impact, that is, which groups would bear costs and which groups would benefit. Specifically, we need to look at the economic contribution of tobacco to Pakistani national economy from jobs and incomes, foreign exchange and tax revenues, as well as the economic costs of the harm caused by tobacco, and consider how these will change as a result of measures to reduce tobacco use. Total cigarette production in Pakistan is about 71 billion sticks a year, of which legal production is approximately 77 per cent, and the government suffers a loss of Rs9.2 billion owing to illegal cigarette production.

Tobacco farming occupies 0.27% of the total irrigated land in Pakistan. The area under tobacco production has fallen from 57,300 hectares in 1998-99 to about 46,600 hectares in 2002-03 with tobacco production at about 88 million kg, 73% of which is from the North West Frontier Province (NWFP). During 2004-05, over PKR 28 billion were contributed to the federal revenues. Around 80,000 persons are involved in tobacco cultivation while 50,000 are engaged in 26 factories of the tobacco industry. The foreign exchange earnings for Pakistan during 2004-05 on account of tobacco exports amounted to USD \$11.61 million.

3.1.1 Farmers

At the farm level, tobacco is the dominant cash crop for many tobacco farmers in Africa and India , Pakistan etc but in several other large producing countries, tobacco is grown on a very small scale as part of a diversified farming strategy. For example, Turkey's 600,000 tobacco farmers plant less than half a hectare of tobacco each (Onder, 2002). Only 2.3% of China's farm households grow tobacco, on average less than 3 hectares each (Hu and Mao, 2002).

There are micro-level studies of whether farmers who rely heavily on tobacco for their cash incomes would be able to switch to alternative crops, and what the implications might be for their incomes. A study in Zimbabwe in January 2001 found that tobacco was a highly profitable cash crop for large and small farmers, providing considerably higher returns than alternative crops, but that even in the most suitable high labor requirements (Keyser, 2002). Studies in Pakistan conclude that mixed cropping of tobacco and other crops, and in some cases, mixed cropping without tobacco, provide higher net returns than mono-cropping tobacco, but that "farmers are partly carried away by the high gross return from tobacco" instead of comparing net returns (Malhotra, 2001, pg.15). Some local agricultural experts in China say that prevailing prices provide little incentive to farmers to grow tobacco, particularly since tobacco is a very labor intensive crop, and depletes soil fertility. However, sub-national authorities are allowed to tax the tobacco crop, and some set production quotas that farmers must fill.

Studies point out that tobacco farmers often receive subsidies, loans, inputs, technical, or other support from governments or the industry, that help make tobacco an attractive crop even when prices fall, and that farmers can face formidable barriers in switching to

alternative cash crops, including limited expertise and extension support, and difficult market access and uncertain prices for other crops. Tobacco prices have also been subject to fluctuations. In Malawi recently, prices and the profitability of tobacco cultivation have fallen sharply, sparking angry protests at tobacco auctions, high default rates on loans, and decisions by many farmers to stop growing tobacco (Jaffer, 2002).

The bottom line is that there are farmers who would be affected if global and/or national demand were to fall. However, there are many other commodities whose prices have been buffeted much more by global demand and supply trends and there is no reason to treat tobacco as a special case. And there are factors besides tobacco control that affect tobacco prices and profitability. Some countries may choose to provide special support and assistance to tobacco farmers if market conditions become adverse.

Paradoxically, tobacco control can help make this possible. However, tobacco farmers' livelihoods seem reasonably secure for many years to come, despite efforts to reduce tobacco use: a recent global tobacco market projection commissioned by the FAO concludes that global demand for tobacco leaf is likely to increase by about 2% per year over the coming decade, fuelled largely by population and income increases that are likely to maintain and even expand global demand for cigarettes. Demand (and tobacco leaf production) has been falling in high-income countries; low- and middle income countries show the opposite trend of increasing demand and supply. It would take extraordinary efforts for enough countries to achieve a sustained fall in tobacco product consumption large enough to offset these upward trends identifies the contributing factors as: falling yields, lower prices offered by monopolistic buyers because of a glut in world stocks, rising transport prices, relatively high transaction costs and inefficiencies, and adverse exchange rate movements.

3.1.2 Manufacturing Jobs

A fall in tobacco consumption that leads cigarette manufacturers, retailers and distributors to cut some jobs does not necessarily cause a fall in total employment.

Money no longer spent on cigarettes will be spent instead on other goods and services, generating new jobs to replace those lost from the tobacco industry. In fact, depending on the new pattern of consumption, more jobs could be created than lost¹⁹. Although tobacco growing is labor intensive, cigarette manufacturing is increasingly capital intensive, even in developing countries. To the extent that the things that consumers buy instead of cigarettes are more labor-intensive, there would be a positive net effect on employment.

In fact, in Pakistan, jobs in cigarette manufacturing have fallen dramatically as a result of upgrading to new more capital-intensive technology, even with increases in production levels (Van liemt, 2001). New technology has also reduced the amount of raw tobacco needed for each cigarette, as more efficient processes have reduced tobacco waste. These two factors could well have a bigger effect on employment in the tobacco industry Than tobacco control efforts.

¹⁹ See Table 1 in the Annex for a summary of empirical estimates of the employment impact of a fall in tobacco product consumption.

3.1.3 Foreign Exchange

Many countries have a net trade deficit from tobacco and tobacco products – more is spent on imports than the revenues from exports. In these countries, there would be foreign exchange savings if national consumption (and hence imports) fell, and a generally small impact if global demand fell and affected their exports. There are few developing countries that are net exporters of cigarettes (Bolivia, Venezuela, Croatia and Hungary), and in no cases are cigarettes an important source of export revenues.

The developing countries with a positive tobacco leaf trade balance (net exporters) are: Argentina, Brazil, Chile, Colombia, Guatemala, India, Kenya, Macedonia, Malawi, Mexico, Mozambique, Tanzania, Thailand, Pakistan, Turkey and Zimbabwe. These countries potentially have more to lose from a fall in global demand, although much will depend on how competitive their tobacco leaf exports are. Falling global tobacco prices could squeeze higher-price producers out, and increase the market share of lower-price producers, although profit margins might be lower. The impact on particular countries is not easy to predict. It should also be noted that even in the major growing countries, tobacco leaf exports make a modest contribution to total export revenues, except in Malawi (60%) and Zimbabwe (20-30%): the figures are 5-6% in Bulgaria, Dominican Republic, Kyrgyzstan and Tanzania, 1-2% in Brazil and Turkey, and well below 1% in all the other top tobacco-growing countries.

3.1.4 Fiscal Impact - Tax Revenues and Subsidies

Tobacco provides substantial tax revenues to governments. Revenues from tobacco excise taxes are especially significant in low-income countries whose income tax systems tend not to be well developed. Because there are usually a small number of cigarette manufacturers, it is relatively easy to levy and collect excise taxes on Cigarettes.

The argument is often heard that tobacco control would jeopardize these revenues. This may eventually occur, but in fact higher tobacco taxes will raise revenues in almost all countries for many years to come. Higher tobacco taxes that raise the price of cigarettes and other tobacco products have proved to be the single most effective tobacco control measure. The price rise causes consumption to fall, but by a smaller percentage than the price rise. Some smokers quit, others cut back, and would-be smokers are deterred from starting. Young people and adults with low incomes tend to be especially sensitive to prices. With higher taxes, smaller quantities of cigarettes are sold, but the tax per pack is higher, generating larger total revenues, 11 even in countries where taxes and prices are very high. Figure 2 shows how total revenues continued to rise in Norway as tax rates increased, despite continued falls in total and per capita consumption. Total consumption fell from 2.93 billion cigarettes in 1990, to 2.61 billion in 1995, to 2.58 billion in 1998. Annual per capita consumption fell from 853 to 743 to 726 cigarettes in these years. Tobacco revenues as a percentage of total government revenue have fallen to about 6-7% in Turkey in recent years.

3.1.5 Microeconomic (Household) Effects Of Tobacco Use – Poverty

There are important microeconomic or household level economic effects of tobacco use and tobacco control. High prevalence rates of tobacco use among low-income men in developing countries put them at high risk of serious diseases and premature death, and their side stream (“secondhand”) smoke can harm their children and wives. Part of a large

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recent study covering more than 20,000 poor men and women in 23 countries found that sickness or injury of a family member was by far the most frequent trigger for a downward slide into or exacerbating poverty. 20 Health care costs and lost income because of ill health and premature death are frequently cited by poor people as their gravest concerns.

Very few poor people have health insurance or unemployment benefits. Many poor people have few assets, apart from their ability to work. The poorer, less educated and less skilled people are, the more likely it is that their livelihood entails physical work. When a breadwinner in a poor family becomes too ill to work, the family's food and income supplies often stop. Paying for treatment further impoverishes the family, and may force them to sell animals, take children out of school, and forego buying food.

Medical care may be inaccessible, requiring many hours of walking and waiting; the quality of care may be poor, and drugs are often unavailable.²¹ This makes their chances of recovering from illness lower than for people better able to afford and access health care. Policies and interventions to help poor smokers quit, and to discourage others from starting are an important part of national and international efforts to improve the health and well-being of poor people, a core goal of development assistance.

4. ANALYSIS:

4.1 Tobacco Industry

The tobacco industry is very powerful economically and will adopt ways and means by friends and governments to keep tobacco use socially acceptable. There is a smoking ring in advertisements of cigarettes wherein government earns the money; consumers innocently enjoy smoking and benefits manufacturers and mass media earns money through advertisements. Again there is a "Political Trio" wherein government of developed countries; tobacco companies and industry through their politicians force the developing countries to accept advertisements under threat of "Trade Embargo". It is worth mentioning, for the interest of readers, that Pakistan Chest Foundation instituted a Constitutional Writ Petition in Lahore High Court that the Broadcasting and Telecasting on Pakistan Radio and Television promoting sale of cigarettes and sponsoring programmes displaying commercial and banners by cigarette companies may be declared illegal and without lawful authority in the year 1994. Pakistan Chest Foundation pursued the case for almost 9 years. Ultimately the Foundation succeeded in obtaining a verdict from the Lahore High Court in issuing a directive to Federal Government to issue an Ordinance and implement its enforcement within 3 months for the prohibition of smoking and protection of Non-smokers Health Ordinance, putting a complete ban on the advertisements of tobacco on radio and television.

Second to oil sector, tobacco sector is the biggest contributor to the national exchequer in the form of taxes. Tobacco industry in Pakistan is exposed to a mind-boggling 65% annual excise-tax rate. While members of the Pakistan Tobacco Board are always busy in their tax-concerned negotiations with the Central Board of Revenue, any positive result seems far from reality. As of now there is no legal importer of cigarettes in Pakistan, except for LTC and PTC. These two and other local manufacturers combined, manufacture at most 20 brands of cigarette. But still one can see more than 40 brands of cigarettes available in the market, all the remaining are either smuggled or forfeited products.

Available at almost the same prices, these illegally imported cigarettes eat away a major chunk of market shares of the *legitimate* brands. This puts the authorized manufacturers at a huge disadvantage, meaning that Parklane will now have to face added competition from smuggled brands of the same price range. Lakson Tobacco Company being a major player in Pakistani tobacco industry also goes through the same pain. Therefore, these continuing financial pressures on the company make the performance of each cigarette brand for the company even more critical. It may be understood that governments cannot make this a successful treaty without the help of the people. Organized civil societies must work in this respect to educate people about the hazards of tobacco and at the same time the government should monitor the behavior of the tobacco industry which will always try to undo the good affect and working of the treaty.

Pakistan's tobacco industry has been a traditionally dependable source of government income, contributing some 27.5 billion rupees per year - the equivalent of 4.4% of Pakistan's GDP. It has the largest yield of any crop in that country and employs some 1

million Pakistanis. Anti-tobacco campaigners accuse the government of being swayed by the tobacco industry. According to independent estimates, the Pakistani government collected over \$300 million in tobacco tax in 1990, slightly more than a tenth of the government's total revenue earnings that year.

4.2 Pakistan Tobacco Company

4.2.1 Company Profile

Pakistan Tobacco Company was incorporated in 1947 immediately after partition when it took over the business of **IMPERIAL TOBACCO COMPANY** of **India**; operational in subcontinent since 1926. Pakistan Tobacco Company was the first multinational company of Pakistan.

The company is the part of the world wide **BRITISH AMERICAN TOBACCO COMPANY (BAT) GROUP** which employees some 100,000 people with operations in around **180 countries**. **It is a market leader in more than 50 countries selling over 300 brands**. In 2001 the group sold about **15%** share of the world market of cigarettes.

4.2.2 Presence of PTC Is Well Felt In Industry

PTC is the largest revenue generator (outside the oil sector) in the country, paying more taxes than the entire textile sector.

In 2001 PTC paid the government over **12 billion** in taxes. This amounts to over **4 crores** per working day. Over **300000** people including growers and direct employees are dependent on the company for livelihood.

Pakistan tobacco co. Ltd is 100% owned by British American company. The second largest manufacturer of cigarettes which offers a tougher competition to it is the lakson tobacco company. Ltd. PTC is 40% owned by Philip Morris, 11% owned by Rothmans international and the company has a 56% market share. And the company belongs to the biggest industrial group of Pakistan.

A pilot production plant was set up in the warehouse near **KARACHI PORT** with a monthly production of **30 million cigarettes**, which however in 2005 are over **5 billion cigarettes per month**. The rapid expansion in the cigarette market over the years led to the establishment of our state of the art manufacturing facilities in **Jehlum** and **Akora**.

4.2.3 Drive of PTC on the Road of National Highway

PTC has come a long way from being just a single factory operation to a company, which is involved in every aspect of cigarette production from tobacco cultivation to packing. But what is most significant about these **55** tobacco industry.

Progress of Agriculture And Industrial Sector

PTC has played in the development of the country by spearheading the campaign for modern agricultural and industrial practices.

“We have been instrumental in the development and progress of industrial and agricultural sector in the country.”

PTC has been a leader in innovative marketing campaigns, which brought a competitive edge to Pakistan business world.

“We are also firm believers in returning to the nation our debt in the form of various altruistic activities.”

Over the last half century they have been supporting and giving donations to various causes of national interest. Educating growers in the latest techniques and technology in agriculture, a forestation and sponsorship of sports are a few examples.

4.2.4 Brands Offered By PTC

PTC is proud of its reputation for manufacturing high quality cigarette brands, which are enjoyed by millions of people. Their portfolio for different consumer practices.

Over the years the company has produced brands, which have reached a classic status. They have been meeting consumer expectation consistently for the past 55 years.

Benson & Hedges

John Player Gold Leaf

Wills

Gold Flake

Capstan

Embassy

They were the first one to introduce the filter cigarettes in 1955. More recently there is an increasing trend amongst consumer to move to light offers.

To fulfill this consumer need, **JPGL** lights have been introduced in the market.

They are always mindful that they are in business of serving their customers and customers therefore they continuously to improve their products and services to deliver world-class quality standard.

Through these **55** years PTC continual investment in brands, technology, innovation and communities in which it operates has borne fruit in the form of transforming themselves into a strong company stable enough to go through thick and thin. It makes me proud to claim that they are responsible for generating a lot of economic activity and introducing innovative ideas and breakthrough in Pakistan.

4.2.5 Competitive Environment

Lakson Tobacco Company is the biggest competitor of PTC. However, many differences can be evaluated. First of all Lakson Tobacco Company operates in local but PTC goes for 180 countries in the world. LTC offers low value brands and is a volume leader.

Whereas, PTC offers high value brands and is a value leader.

LTC has own quality standards, whereas, the international standards- quality, security and safety are followed by PTC.

PTC has international campaigns while LTC has local campaigns.

Now discussing the brands of both rivals

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<u>PTC</u>	<u>LTC</u>
Premium Brands Gold Leaf	Premium Brands Nil
Medium Brands Capstan	Medium Brands Red & White
Low Brands Gold Flake Embassy	Medium Brands K2 Diplomat Morven Gold Royal

4.2.6 Application and It's Implication on PTC

PTC is the largest excise taxpayer in private sector of the country. In 2005, the company contributed Rs 19.2 billion to the national exchequer in excise duty, sales tax and custom duties etc. – 18.9% higher than SPLY. More over, foreign exchange of Rs 263 million (24% higher than SPLY) was also generated through export of leaf.

In order to see how the company is the largest excise tax payer in the private sector of the country, in depth company analysis is done to throw light on it's ability to contribute this much to the government in terms of revenue and fiscal impact.

Total number of employees as at December 31, 2005 was 1,818 (2004: 1,745)

Revenue Distribution In Percentage

Revenue distribution	Percentage
Govt. levies	63%
Material & services	20%
Employees	4%
Profit after tax	4%
Others	9%

4.3 Industry Analysis

The industry does not have many players. Apart from the two players studied, namely, PTC and LTC, other names are Khyber Tobacco Industries, Sarhad Cigarettes Ltd., Tobacco Int. As such, PTC and LTC dominate the industry in terms of market share

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(98%) and trading volume on KSE. The trading volume PTC is 13,300 and that of LTC is 1,300.

Observing the trends of trading of tobacco shares on KSE, it is notable that it is one of the most volatile industry in terms of investments. The industry seems to be an attractive investment for speculators who may wish to benefit from the frequent bouts in the share prices. The cyclical nature of the industry spans only a few weeks in a row thus anyone investing at the low can earn valuable capital gains within a few weeks. The recent stock market slump has increased the volatility manifold and as such has made all investments in any industry, including tobacco, very risky.

The fact that tobacco is a controversial product and is subject to human rights movements does not favor the industry. The cigarette industry is also threatened by the many counterfeiters and legislations that impose huge Government levies. In 2005, the industry was responsible for taxes worth Rs. 29.6 billion as opposed to Rs. 24.9 billion in 2004. this was an increase of almost 18.86% in just one year. These and other factors, such as, regulations against advertisements, maybe contributing towards the volatility of the tobacco industry in the stock market.

The combined production of the tobacco industry is more than 57,100,100,101 thousand tonnes. According to Pakistan Tobacco Board, the tobacco export of Pakistan has increased since 2001 and if the growth continues, the country would reach a total export target of almost \$30 million by 2007. Pakistan had exported 8,270 tons of tobacco worth \$11.08 million during the financial year 2004-05.

The total earnings from the tobacco export and its manufactures amounted to \$13.23 million as compared to \$6.248 million during 2003-04 and \$4.659 million during 2002-2003.

With a contribution of nearly 30 billion rupees in Pakistan's economy, the tobacco industry is one of the most productive industrial sectors. This sector generates thousands of direct and hundreds of thousands indirect jobs. It contributes the equivalent of 4.4% of Pakistan's GDP and has the largest yield of any crop in that country.

Both the companies which have been taken as representative of the industry have stream lined their operations over the last five years, consolidating their operations and owing to the increase in the number of smokers enjoying great sales.

This growth in the Pakistani tobacco industry is fueled by external factors. The decline in smoking in North America, especially the United States, has been offset by a strong push from the large tobacco companies to find converts in the developing world. As tobacco control is tightening in the West, transnational tobacco companies are becoming more active in developing countries. The result is that tobacco use is declining at the rate of 1.5% in the West but at the same time it is increasing at the rate of 1.7% in the developing countries.

4.4 Fundamental Analysis

1. Relationship of Sales and COGS

The analysis reveals certain trends in the important measures of performance. Sales volume has grown steadily as can be seen from figure 1. The growth in sales over last year was that of 20%. This is a remarkable achievement in light of an expected growth rate of 3% for the tobacco industry in the long run. As shown by the graph, the cost of sales and the actual sales were both growing steadily at almost the same rate, but from year 2004, the cost of sales slumped mainly because of more efficient production process and this new trend of lower cost of sales is also visible in 2005. As a result, the gross profit has increased by 30% between 2004 and 2005.

2. Trends in Profitability

Trends similar to gross profit can be observed in other profitability measures as is evident from figure 2. However, higher government levies in years 2004 and 2005 have widened the gap between operating profit and net profit in these years. The rise in net profit between years 2003 and 2004 was 107% as opposed to 98% between 2004 and 2005. This downward trend in the growth of net profit owes itself to the higher government levies as has already been mentioned.

3. Trends in PPE

Observing figure 3, we find that Property, Plant and Equipment have grown with the rising sales. This clearly indicates that sales driven by higher demand led to a push in the investment in PPE. This was a result of the increase in the number of customers which can be traced to the marketing and distribution expenses which are to be discussed subsequently.

4. Trends in Operating Expenses

The rise has not only been in the profits but also in the related expenses. As figure 4 shows, admin and market and distribution expenses have grown over the last five years mainly owing to the company's emphasis on active promotion and the use of innovative and effective communication tools which have contributed to higher sales. As a result, the percentage of these expenses with respect to sales has declined from 5.6% to 5.2% for the marketing and distribution expenses and from 2.3% to 1.9% for administration expenses

5. EPS and Dividend Yield

Figure 5 indicates that although EPS declined between years 2002 and 2003, the company continued its upward trend of dividend yield. This presents a positive outlook to

the company's investors showing that the company enjoys a steadily growing dividend policy. Further adding to the company's appeal for the investors is the fact that EPS has jumped manifold, from year 2003 to 2005 rising from 2.6 to 5.17.

4.5 Ratio Analysis

The profitability ratios have been discussed earlier. In terms of liquidity ratios, it is 1.04 for the current ratio on an average and 0.08 for the quick ratio. Although, the company seems to be doing well on the current ratio, the quick ratio shows that its major portion of current assets comprises of stocks, spares and stores which does not reflect well on liquidity. This is further reinforced by the cash ratio which is a mere 0.013. In terms of activity ratios, the fixed asset turnover has been consistently hovering around 3 and the total asset turnover has increased from 7 to 8 between 2004 and 2005. The company has also improved its day's receivable and days payable. The latter has improved from 101 in 2003 to 45 in 2005. Other ratios can be seen in the appendices.

Figure 1

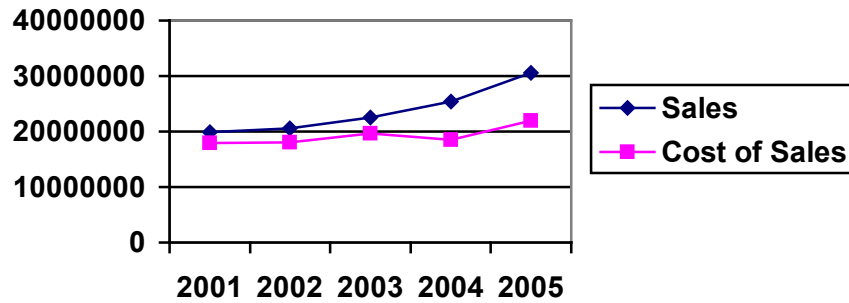


Figure 2

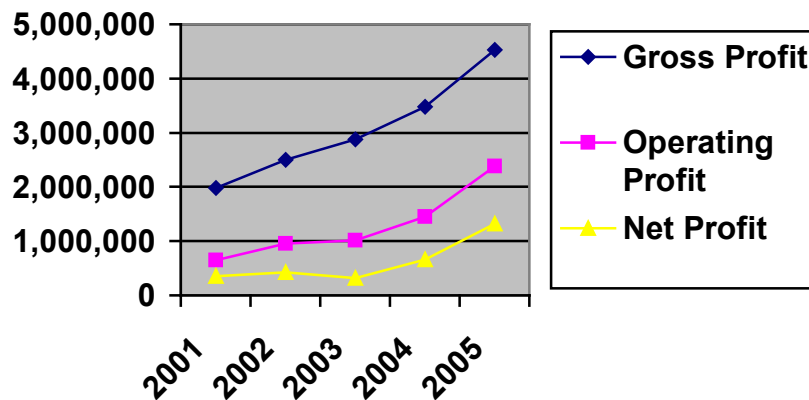


Figure 3

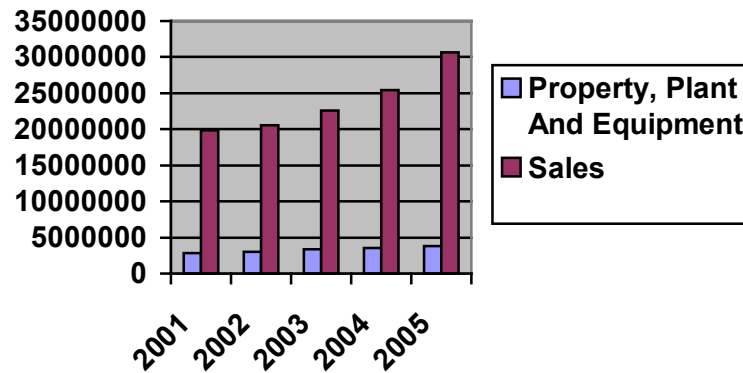


Figure 4

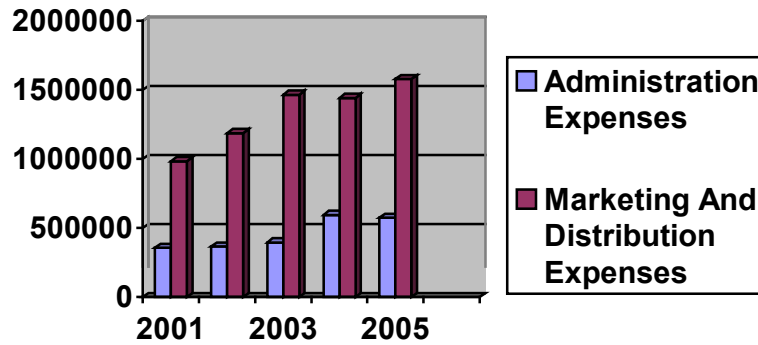
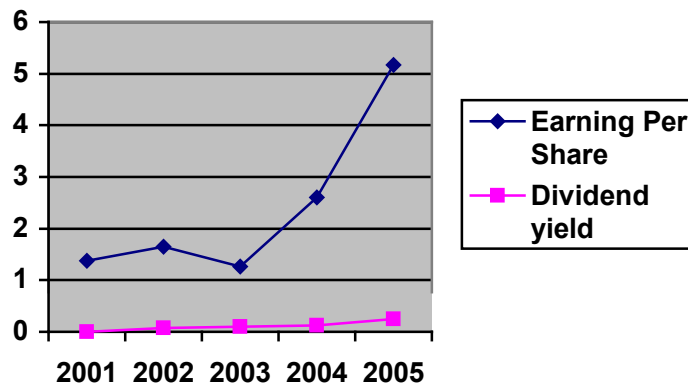


Figure 5



4.6 Future Analysis

Based on the past 5 year's financial statements, projections have been made from 2006 to 2010. These projections have been based on assumption made and trends that have been observed. The projected figures have been used to calculate the FCFF²⁰ and FCFE of the company; the latter being the same as the former since the company has no long term liabilities.

The basis on which trends have been formed are as follows:

- a. The operating expenses have remained fairly constant as a percentage of sales and therefore, an average of operating expenses as a percentage of sales has been used for future projections of these expenses. The percentage taken for marketing and distribution expenses was 5.6% and that for administration expenses was 1.91%.
- b. NWC has also been projected based on its size as a percentage of sales as have PPE. This percentage was 0.62% for NWC and 14.07% for PPE.
- c. Depreciation and capital expenditure have been projected as a percentage of PPE (10.4% for the former and 5.32% for the latter) since they seem to be proportional to the growth in PPE.
- d. Some figures such as the financial cost and other expenses have been carried over for loss of a sound basis for them in past trends.
- e. Other income has been projected based on its growth over the past five years and taking an average of this. This rate of growth was observed to be close to 72.15% and owes itself to the continuous sound investments being made by the company on behalf of its shareholders.
- f. The sales have been projected by first calculating the expected units for the next five years. This has been done by calculating the rate of increase in the last five years and then observing the rate at which the growth has increased. Rather than taking a constant increase in the units produced, the rate of increase of growth which came out to be 7.71% was added each year to the growth rate.

The price per unit for the last five years was calculated and the rate of growth was calculated which was 2.58%. This was then used to project the expected per unit price for every year till 2010. The same methodology was applied to calculate the COGS. The growth rate for COGS came out to be 2.35%.

The resulting projections were then used to calculate the FCFF and the Terminal Value for the company. The present values of these were calculated and added to achieve the Enterprise Value which came out to be 17607097. Dividing this by the number of shares outstanding yielded the fair value of each share which came out to be Rs.68.9. The WACC came out to be 11.80% and β was 0.225. Based on these, the share value of 68.9

²⁰ FCFF = Net Income + Depreciation + Amortization – Changes in NWC - Capex

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seems to be in accordance with the current market trends of the company's shares although at the point in time when the financial statements used in the analysis were published, the average price was close to Rs.50. This means that at that time, the stock was undervalued.

For further data on the growth rates, averages of these and trends formed, please consult the appendices.

4.7 Technical Analysis

The technical analysis has been conducted by observing KSE 100 and PTC trends both independently and also in comparison with each other to see the relative movements of the two. The graphs that have been used are based on 50-day moving average that is a reasonable time period that avoids both the impact of too much fluctuation and also prevents the smoothing out of important fluctuations. Then again for both KSE 100 and PTC, two graphs have been constructed; one for the whole year to incorporate a long term trend and another for the last 60 days to be able to observe the impact of the recent slump in Stock Exchange on each.

The following is a 360-Day graph of KSE 100.



The Bollinger Band depicted by the blue shaded area narrows down in July 2005 which shows that the market became less volatile. In January 2006 the Bollinger Band widens and remains wide as compared to the start of the year until today. This shows that the market turned volatile at that point and has remained so. There have, however, been instances when the Bollinger Band has narrowed slightly maybe due to minor reductions in volatility but it has not been significant.

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From Mid-September to Mid-October of 2005, the market was touching the upper band and then the market dropped significantly so that it now touched the lower band. This shows that after a one month period of over-buying the market became over-sold. However, the period of over-selling was brief and was a good investment point because after that the market picked up. Then again in February 2006 the market touched the upper band and almost immediately dipped so far that it broke the lower band. After picking up yet again the market touched the upper band in Mid-April 2006. However, after Mid-April 2006 the market has not been able to revive consistently or even significantly. The minor surges in market can be attributed to speculations that the market will pick up again as we can observe that on the last day of analysis the market is again rallying.

The RSI Index reinforces the Bollinger Band observations. The purple line below the RSI heading has crossed the 70 level at the same times that the market has touched the upper band indicating over-buying and has dipped to or below 30 at the same time the market has touched the the lower band indicating over-selling.

On the day before the current analysis the market closed below the opening which signifies a negative money flow. The Money Flow Index at the bottom of the graph again reinforces the trends of RSI and Bollinger Band. In fact, the market seems to be particularly bullish from Mid-November to Mid-December, 2006 and then again from start of April-2006 till the time it started dipping as April rolled into May. The bullish trend is indicated by the fact that the purple line of the index crossed the 80 level in these periods.

The following is a 60-Day graph of KSE 100.



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This shows the same trends that have already been discussed before. It, in fact, provides a closer view of what the market has been these last 60-days. The market has repeatedly broken the lower Bollinger Band, the RSI has repeatedly dipped below the 30 level as has the Money Flow Index. This shows that the market has been over-sold to a very large extent. And following each dip has been a period of rise. The fluctuations in the market that are clear in this graph reveal a Doji Star in them which is given on the right. A Star indicates a reversal and a Doji indicates indecision. This trend is indicated of a reversal following an indecisive period. One should wait for a confirmation before trading a Doji Star. Such trends depict a bearish market.

The Bollinger Band for PTC reveals that it has been very wide for the most part indicating the volatility of the stock. It has only narrowed down very briefly in October, 2005. However, this as well as the fact that the Bollinger Band did narrow permanently in August, 2005 is only in reaction to the reduction in the volatility of the overall market.



The RSI does not follow the KSE 100 to a large extent. Only the dip below level 30 in August, 2005 can be attributed to the overall market. The market was very healthy in October, 2005 with an over-buying trend but PTC saw an over-selling of its stock. Similar diversions from the market can be observed in the periods December, 2005 and February, 2006. Owing to the highly volatile nature of PTC's stock, one can only state that the periods when the stock touched the lower band and the RSI dipped below the 30 level were good investment points because the stock always seems to pick up after a drop.

The Money Flow Index although follows the RSI holds far longer than the RSI on periods of over-buying and is more brief on the periods of over-selling. It shows that the stock continues to close up for some time after over-selling begins and when over-buying begins the stock soon starts closing up. This holds true even in the latest slump period beginning in April, 2006. But when the slump was first encountered, Money Flow Index rose above level 80 very briefly unlike the rise in RSI. This means that the stock started

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closing down even before the over-buying period was over. This shows that the overall market's conditions posed a greater threat to PTC's stock in the beginning mainly because the stock is very volatile and thus risky. As the market has fallen into a pattern of over-buying and over-selling PTC has also stabilized.

The 60-Day PTC graph below shows an RSI in line with KSE 100 but the Money Flow Index shows that the stock closed up frequently in June, 2006 even though it was being over-sold.



The last day of the analysis shows a Dragon-Fly Doji which is indicative of a bearish trend. This line also signifies a turning point. It occurs when the open and close are the same, and the low is significantly lower than the open, high, and closing prices.

4.8 Lakson Tobacco Company

Lakson group is one of Pakistan's largest and most diverse conglomerates. Amin Lakhani, the head of the Lakson group is managing diverse businesses. Lakson group of companies includes Lakson Tobacco Company, Century Paper and Board Mills, Century Insurance, Colgate Palmolive Pakistan, Tetley Clover Pakistan, Siza Foods (Mc Donalds), Cabernet, and Accuray surgicals.

Their flagship company is the Lakson Tobacco Company (LTC). The principal activity of the Company is the manufacture and sale of cigarettes and tobacco in Pakistan. LTC also enjoys being the market leader, having "*Morven Gold*" as the most selling cigarette brand in Pakistan. The Company operates in five factories located in Karachi in the districts of Dadu, Sahiwal, Rawalpindi and Swabi.

Recently LTC has successfully launched its new brand "*Parklane*". I have also discussed the various limitations on tobacco industry and to see how Parklane has overcome these constraints.

4.9 The Constraints

According to the International Tobacco Marketing Standards (IMTS), there have been a lot of restrictions on tobacco products as far as their promotion is concerned .

4.9.1 Advertising Constraints

According to IMTS, no advertising should be aimed at or particularly appeal to youth, feature a celebrity or contain an endorsement, implied or express by a celebrity, depict any person under or appearing to be under 25 years of age, suggest that anything like sports or popularity can be enhanced by smoking.

4.9.2 Media Constraints

For print media, no advertisement shall be placed in any printed publication unless there is a reasonable basis upon which to believe that at least 75% of the readers of such publication are adults, and the number of youth who read it constitutes less than 10% of all youth in the country of circulation. No advertisement shall be placed on the packaging or outside cover of a magazine, newspaper or similar printed publication intended to be read by consumers. Reasonable measures shall be taken to ensure that no advertisement is placed in printed publications adjacent to material that particularly appeals to youth.

For outdoors and billboards, no advertisements shall be placed on any billboard, wall mural or transport stop or station which is located closer than 100 meters from any point of the perimeter of a school attended predominantly by youth, or either individually, or in deliberate combination with other such advertisements, exceeds 35 square meters in total size. For Cinemas, no advertisement shall be displayed in a cinema unless there is a reasonable basis upon which to believe that at least 75% of the audience is adult. For Television or Radio, no advertisement shall be placed on television or radio unless and until each person seeking access to the channel or Programme on which such advertisement is placed provides verification that he or she is an adult, and the broadcast is restricted to countries where such advertisements are not prohibited by law.

For Internet, no advertisement shall be placed on the Internet unless and until each person seeking access to the Internet site on which such advertisement is placed provides verification that he or she is an adult.

4.9.3 Promotion and Event Constraints

All activities and communications concerned with promotional offers, promotional events, promotional items or sampling shall comply with the Content Standards.

Promotional offers and programmes for specific brands which appear on the package, at the point of retail sale, by mail or through other communications shall be directed only to adults and, unless prohibited by law, only to smokers. Reasonable measures shall be taken to ensure that youth and (unless prohibited by law) non-smokers are excluded from direct mailing lists. Participation in promotional offers by the general public will be conditional upon evidence of age eligibility and (unless prohibited by law) confirmation of smoker status. Where promotional offers permit an adult smoker to be accompanied by other persons at a third party event or in an activity, such other persons shall be adults.

For promotional Items, no advertisements shall be placed on items where those particular items are marketed to, or intended to be used predominantly by youth, or shopping bags. No advertisement larger than 25 square centimeters either on its own or in deliberate combination with other advertisements and shall be placed on any items (other than on items with a smoking-related function) which are to be sold, distributed or offered to the general public. Any item of clothing which is offered for sale or distribution by or on behalf of a Participant shall only be offered in adult sizes.

4.9.4 Packaging, Sales and Distribution Constraints

Cigarettes shall not be sold or distributed to consumers in packages containing fewer than ten sticks. Fine cut tobacco shall not be sold or distributed to consumers in pouches smaller than 10 grams. No incentive or materials shall be provided to support the sale of cigarettes in single sticks. All cigarette packs and all primary packaging for other tobacco products shall carry a clearly visible health warning. All cartons and bundles offered for sale duty-free shall carry a clearly visible health warning. Reasonable measures shall be taken to prevent youth having access to cigarettes in vending machines. Any item of clothing which is offered for sale or distribution by or on behalf of a Participant shall only be offered in adult sizes.

4.9.5 Youth Access and Minimum Age Restrictions

The Participants shall make sustained efforts, in co-operation with governments and other regulatory agencies, customers and others to prevent youth having access to tobacco products. They shall also seek ways in which to reinforce and give effect to measures that will prevent youth having access to tobacco products.

The Participants are committed to the enactment and enforcement of minimum age restrictions for the lawful sale or purchase of tobacco products in every country in which their tobacco products are sold. The Participants support efforts by appropriate authorities, manufacturers of tobacco products, distributors and retailers to ensure the effective enforcement of such restrictions.

For Lakson Tobacco Company also, detailed fundamental and technical analysis is done to figure out what ever is contributed by Lakson to the government in the form of revenues is attributed to what factors.

4.10 Ratio Analysis

The profitability ratios have been discussed below. In terms of liquidity ratios, it is 1.77 for the current ratio on an average and 0.85 for the quick ratio. This shows that the company has a highly liquid stance. However, a major portion of this is cash since the cash ratio averages at 0.53 being 1.03 in 2005. The steady increase in cash ratio is not wise since the cash may be employed in profitable investments. In terms of activity ratios, the fixed asset turnover has declined from 16.36 in 2001 to 10.22 in 2005. This seems to indicate that assets are not being employed well in the generation of sales. The days receivables have increased to 13.65 from 2.79 in 2001. This shows a decline in efficiency in collecting receivables. The payables ratio has improved dramatically, on the other hand. Other ratios can be seen in the appendices.

4.11 Fundamental Analysis

1. Relationship of Sales and COGS

The analysis reveals certain trends in the important measures of performance. Sales volume has grown steadily as can be seen from figure 1. The growth in sales over last year was that of 18.93%. This is a remarkable achievement in light of an expected growth rate of 3% for the tobacco industry in the long run. As shown by the graph, the gap between Sales and Cost of Sales has been widening at a steady rate. This has resulted in an increase in the gross profit of 29.55% in the last year as opposed to an increase of 19.35% between 2004 and 2005.

2. Trends in Profitability

Trends similar to gross profit can be observed in other profitability measures as is evident from figure 2. However, higher government levies in years 2004 and 2005 have widened the gap between operating profit and net profit in these years. The rise in net profit between years 2003 and 2004 was 49.1% as opposed to 31.9% between 2004 and 2005. This downward trend in the growth of net profit owes itself to the higher government levies as has already been mentioned.

3. Trends in PPE

Observing figure 3, we find that Property, Plant and Equipment have grown with the rising sales. This clearly indicates that sales driven by higher demand led to a push in the investment in PPE. This was a result of the increase in the number of customers which can be traced to the marketing and distribution expenses which are to be discussed subsequently.

4. Trends in Operating Expenses

The rise has not only been in the profits but also in the related expenses. The company initially seems to have reduced its focus on Marketing and Distribution Expenses and saw a sharp rise in Administration Expenses in year 2003. Subsequently, the company regained composure and soon balanced the proportion of expenses which increased steadily with sales. However, the proportion of expenses as a percentage of sales is on the rise which needs to be controlled. Marketing and distribution expenses have increased from 5.11% to 5.18% and administration expenses from 1.1% to 1.34% between 2004 and 2005.

5. EPS and Dividend Yield

Figure 5 indicates that the company has a rising EPS. However, the proportion of dividends is very small in comparison with EPS. The year-on-year rise in dividend yield is in fact almost negligible. The fact the market price is high contributes to low dividend yield and the rising trend of price is based in the high EPS being offered which shows strong shareholder wealth. Resultantly, the company is attractive for those seeking capital gains.

Figure 2

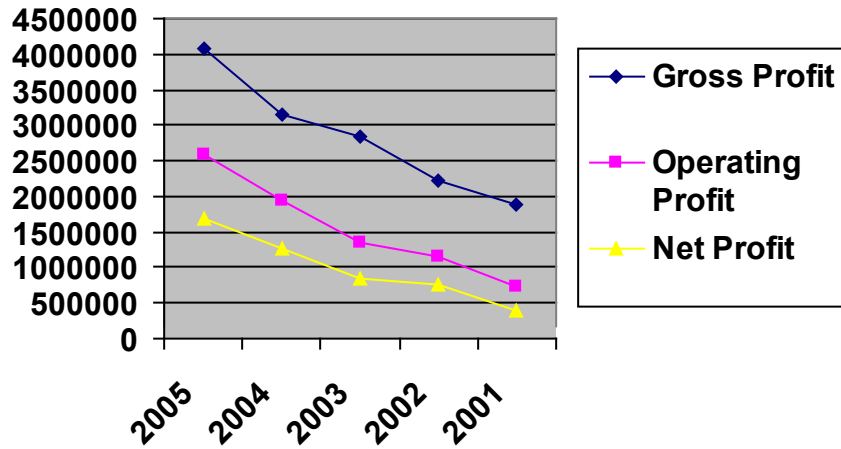


Figure 3

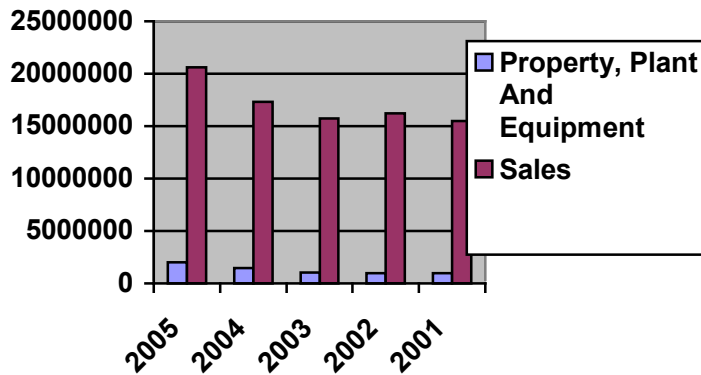


Figure 1

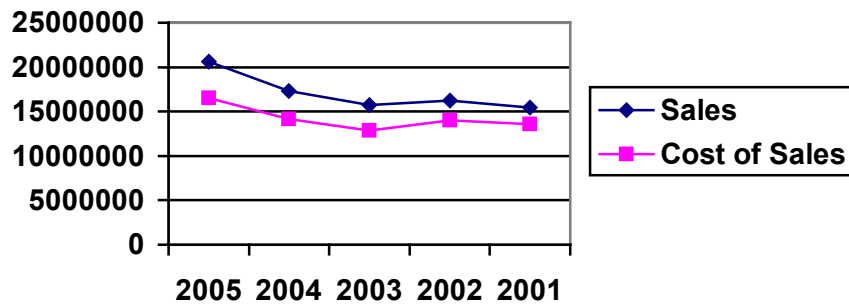


Figure 4

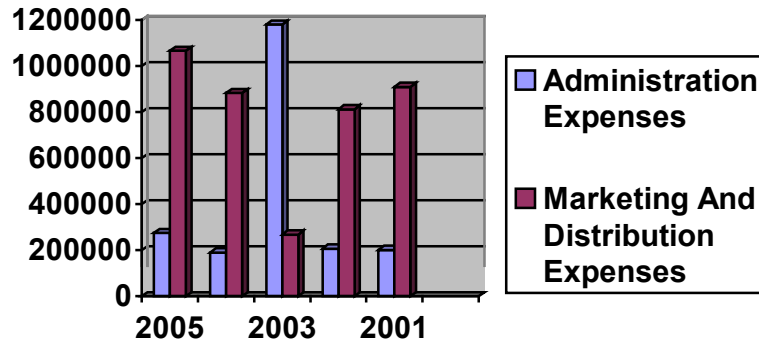
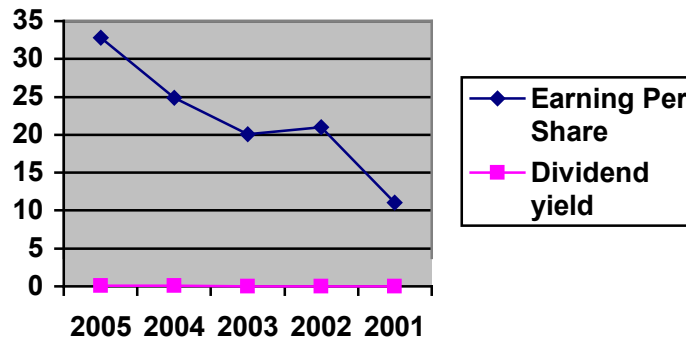


Figure 5



4.12 Future

Analysis:

Based on the past 5 year’s financial statements, projections have been made from 2006 to 2010. These projections have been based on assumption made and trends that have been observed. The projected figures have been used to calculate the FCFF²¹ and FCFE of the company; the latter being the same as the former since the company has no long term liabilities.

The basis on which trends have been formed are as follows:

The operating expenses have remained fairly constant as a percentage of sales and therefore, an average of operating expenses as a percentage of sales has been used for future projections of these expenses. The percentage taken for marketing and distribution expenses was 4.25% and that for administration expenses was 2.8%. The same methodology was applied for PPE and the percentage taken was 7.73%.

NWC has also been projected based on its size as a percentage of sales and then observing the rate at which the growth has increased. Rather than taking a constant percentage of sales, the rate of increase of growth which came out to be 1.9% was added each year to the percentage of NWC to sales.

²¹ FCFF = Net Income + Depreciation + Amortization – Changes in NWC - Capex

Depreciation and capital expenditure have been projected as a percentage of PPE (15.36% for the former and 6.59% for the latter) since they seem to be proportional to the growth in PPE.

Some figures such as the financial cost and other expenses have been carried over for loss of a sound basis for them in past trends.

Other income has been projected based on its growth over the past five years and taking an average of this. This rate of growth was observed to be close to 68.51% and owes itself to the continuous sound investments being made by the company on behalf of its shareholders. However, there is room for further investments as has been mentioned in ratio analysis.

The sales have been projected by first calculating the expected units for the next five years. This has been done by calculating the rate of increase in the last five years which averaged to 9.57%.

The price per unit for the last five years was calculated and the rate of growth was calculated which was 2.78%. This was then used to project the expected per unit price for every year till 2010. The same methodology was applied to calculate the COGS. The growth rate for COGS came out to be 2.45%.

The resulting projections were then used to calculate the FCFF and the Terminal Value for the company. The present values of these were calculated and added to achieve the Enterprise Value which came out to be 15305736. Dividing this by the number of shares outstanding yielded the fair value of each share which came out to be Rs.249. The WACC came out to be 11.87% and β was 0.234. Based on these, the share value was calculated which was exactly in accordance with the market price at the time.

For further data on the growth rates, averages of these and trends formed, please consult the appendices.

4.13 Technical Analysis

The technical analysis has been conducted by observing KSE 100 and LTC trends both independently and also in comparison with each other to see the relative movements of the two. The graphs that have been used are based on 50-day moving average which is a reasonable time period that avoids both the impact of too much fluctuation and also prevents the smoothing out of important fluctuations. Then again for both KSE 100 and LTC, two graphs have been constructed; one for the whole year to incorporate a long term trend and another for the last 60 days to be able to observe the impact of the recent slump in Stock Exchange on each.

The following is a 360-Day graph of KSE 100.

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The Bollinger Band depicted by the blue shaded area narrows down in July 2005 which shows that the market became less volatile. In January 2006 the Bollinger Band widens and remains wide as compared to the start of the year until today. This shows that the market turned volatile at that point and has remained so. There have, however, been instances when the Bollinger Band has narrowed slightly maybe due to minor reductions in volatility but it has not been significant.

From Mid-September to Mid-October of 2005, the market was touching the upper band and then the market dropped significantly so that it now touched the lower band. This shows that after a one month period of over-buying the market became over-sold. However, the period of over-selling was brief and was a good investment point because after that the market picked up. Then again in February 2006 the market touched the upper band and almost immediately dipped so far that it broke the lower band. After picking up yet again the market touched the upper band in Mid-April 2006. However, after Mid-April 2006 the market has not been able to revive consistently or even significantly. The minor surges in market can be attributed to speculations that the market will pick up again as we can observe that on the last day of analysis the market is again rallying.

The RSI Index reinforces the Bollinger Band observations. The purple line below the RSI heading has crossed the 70 level at the same times that the market has touched the upper band indicating over-buying and has dipped to or below 30 at the same time the market has touched the lower band indicating over-selling.

On the day before the current analysis the market closed below the opening which signifies a negative money flow. The Money Flow Index at the bottom of the graph again

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reinforces the trends of RSI and Bollinger Band. In fact, the market seems to be particularly bullish from Mid-November to Mid-December, 2006 and then again from start of April-2006 till the time it started dipping as April rolled into May. The bullish trend is indicated by the fact that the purple line of the index crossed the 80 level in these periods.

The following is a 60-Day graph of KSE 100.



This shows the same trends that have already been discussed before. It, in fact, provides a closer view of what the market has been these last 60-days. The market has repeatedly broken the lower Bollinger Band, the RSI has repeatedly dipped below the 30 level as has the Money Flow Index. This shows that the market has been over-sold to a very large extent. And following each dip has been a period of rise. The fluctuations in the market that are clear in this graph reveal a Doji Star in them which is given on the right. A Star indicates a reversal and a Doji indicates indecision. This trend is indicated of a reversal following an indecisive period. One should wait for a confirmation before trading a Doji Star. Such trends depict a bearish market.

The wide Bollinger Band for LTC shows the rather volatile nature of the stock throughout the year. The band narrowed in September due to a decrease in volatility which was true for the entire market and was only timely after which the band again started increasing. During December, the band shows the maximum width which in January returns back to the normal. Similarly abnormal rise in the width of the band is also seen in June.

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The RSI seems to follow the KSE 100 index to a certain extent. The over buying of LTC stock during November and December can be attributed to the overall market since the market was very healthy and saw an over-buying trend during most of that time. Similarly, in the month of April, KSE 100 saw a trend of over-buying and so did LTC stocks, which gradually seemed to fall down in May again similar to the KSE 100 index's trend. The slumps in the stocks during the months of February were a good investment points because the stock picked up after that drop.

The Money Flow Index although follows the RSI to reasonably big extent. The stock seems to maintain its closing up for a little longer then RSI in both the instances when the RSI rose to a level above 70. Even in the slumps, the stock continues to close up for some time after over-selling begins. Visible in the slumps in the RSI during the month of May, the Money Flow index continued to close relatively up and did not reach the lower 20. Generally speaking, as the market has fallen into a pattern of over-buying and over-selling LTC has also stabilized.

The 60-Day LTC graph below shows an RSI in line with KSE 100 but the Money Flow Index shows that the stock closed down frequently in the end of May till the mid of June , 2006 even though it was being over-sold.

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The last day of the analysis shows a Hammer because the pattern occurs after a downtrend. This pattern is called bearish if it occurs after an up trend. If this pattern occurs after a downtrend, it is called a Hammer.

5. CONCLUSION:

As in the rest of the corporate world, the imperatives of globalization have led to increasing consolidation within the cigarette and tobacco-leaf processing industries. As the size and power of the multinational tobacco companies grow, governments, responding to powerful commercial interests that advocate for completely open markets and unfettered trade, have become more reluctant to interfere in the workings of the market. Thus it remains to be seen whether arguments for either public health concerns or a longer-term cost-benefit analysis can be brought to bear in the debate over whether and how to regulate the activities of the multinational tobacco companies. Likewise, policymakers in developed countries concerned about these companies' overseas operations must look beyond regulating exports and must start finding ways to restrict their ability to invest abroad (for example, through the removal of tax breaks) if they want to truly stop them from "exporting death and disease".

Even if tobacco control efforts are highly successful, world tobacco demand will quite likely continue to grow, or to stagnate and then fall gradually. The global market in tobacco and cigarettes is not under immediate threat; there is *not* likely to be an abrupt transition. This makes it more likely that workers, farmers and companies involved in the tobacco industry will be able to adjust to gradual changes.

As the case for PTC and Lakson is concerned, they would continue to be regulated by stringent government policies even in the future one of which being the ban on advertising. However, along with that tobacco industry appear to be under extensive tax payment and government levies at least for another 5 years. Similarly the smuggled and counterfeited products offer it even tougher competition also in the future as is evident from the present scenario.

BALANCE SHEET

	2005	2004	2003
ASSETS			
NON-CURRENT ASSETS			
Fixed Assets			
Property, Plant and Equipment	2014013	1466889	1050986
Intangible Assets	125073	70549	
	2139086	1537438	1050986
Investment in a Subsidiary Company	1	1	1
Long Term Loans	1407	2202	2605
Long Term Deposits and Prepayments	14070	8628	38498
	2154564	1548269	1092090
CURRENT ASSETS			
Stores and Spares	102868	99126	88657
Stock-in-Trade	1104197	1466210	1650791
Trade Debts	769861	20657	49369
Loans and Advances	79140	32794	20274
Profit Accrued	8813	1130	
Deposits, Prepayments and Other Receivables	71757	181613	377869
Short Term Investments		88367	359664
Cash and Bank Balances	1401661	1584244	276123
	3538297	3474141	2822747
	5692861	5022410	3914837
TOTAL ASSETS			
EQUITY AND LIABILITIES			
SHARE CAPITAL AND RESERVES			
Share Capital	513169	513169	427641
Reserves	2041000	1403000	1488528
Unappropriated Profit	1591322	1177465	2013
	4145491	3093634	1918182
Surplus on Revaluation of Fixed Assets - Net of Tax	8273	13656	13998
NON CURRENT LIABILITIES			
Deferred Taxation	174078	157500	93500
Liabilities Against Assets Subject to Finance Lease			92133
	174078	157500	185633
CURRENT LIABILITIES			
Current Maturity of Liabilities Against Assets Subject to Financial Leases			69792
Trade and Other Payables	643043	190898	1275498
Provisions	721976	1017851	80268
Short Term Finances			
Dividends		548871	371466
	1365019	1757620	1797024
CONTINGENCIES AND COMMITMENTS			
TOTAL EQUITY AND LIABILITIES	5692861	5022410	3914837

2002 2001

969418 945592

969418 945592

1 1

1034 258

47123 42169

1017576 988020

87139 102260

1271508 1621662

71276 118184

16340 11200

128033 110175

1042392 19423

2616688 1982904

3634264 2970924

356367 356367

1119274 744993

967 412

1476608 1101772

51092 51092

82600 185585

195498 87700

278098 273285

74137 69553

1345936 837403

99560 40745

41 396279

308792 200795

1828466 1544775

3634264 2970924

PROFIT AND LOSS

	2005	2004	2003	2002	2001
Sales	20584637	17307599	15746083	16237960	15466198
Cost of Sales	16504350	14158084	12891964	14004147	13584619
Gross Profit	4080287	3149515	2854119	2233813	1881579
Distribution and Marketing Expenses	1066809	884051	267618	812443	910358
Administrative Expenses	274986	190311	1181137	206670	200994
	1341795	1074362	1448755	1019113	1111352
	2738492	2075153	1405364	1214700	770227
Other Operating Expenses	213117	158872	97100	82234	41800
	2525375	1916281	1308264	1132466	728427
Other Operating Income	55654	31992	32943	27657	9743
Operating Profit	2581029	1948273	1341207	1160123	738170
Financial Charges	9079	19166	39976	87206	133256
Profit Before Taxation	2571950	1929107	1301231	1072917	604914
Taxation	886913	651363	444448	323894	210206
Profit After Taxation	1685037	1277744	856783	749023	394708
Earning Per Share	32.83591	24.89909	20.0351	21.0183	11.07589

RATIO ANALYSIS

	2005	2004	2003	2002	2001
EPS	32.84	24.90	20.04	21.02	11.08
EBITDA Per Share	59.42	40.88	33.29	35.06	23.98
Book Value Per Share	80.78	60.28	44.85	41.44	30.92
P/E	7.60	5.89	4.29	2.86	5.56
Price to Book Value	3.09	2.43	1.92	1.45	1.99
Dividend Yield	0.07	0.05	0.04	0.04	0.02
Liquidity Ratios					
Current Ratio	2.59	1.98	1.57	1.43	1.28
Quick Ratio	1.71	1.09	0.60	0.69	0.17
Cash Ratio	1.03	0.90	0.15	0.57	0.01
Activity Ratios					
Payables Turnover	21.21	14.68	19.20	0.14	0.16
Days Payable (Days)	17.21	24.87	19.01	2575.92	2346.27
Receivables Turnover	26.74	837.86	318.95	227.82	130.87
Days Receivables (Days)	13.65	0.44	1.14	1.60	2.79
Fixed Assets Turnover	10.22	11.80	14.98	16.75	16.36
Profitability Ratios					
Gross Margin (Cash Basis)	19.82%	18.20%	18.13%	13.76%	12.17%
EBITDA Margin	14.51%	12.12%	9.04%	7.69%	5.53%
EBIT Margin	12.54%	11.26%	8.52%	7.14%	4.77%
Pre-Tax Margin	12.49%	11.15%	8.26%	6.61%	3.91%
Net Profit Margin	8.19%	7.38%	5.44%	4.61%	2.55%

Date	Closing	Returns %	R - ER	[R - ER] ²	KSE 100 INDEX	Returns %	R - ER	[R - ER] ²	X
24-Jul-00	55	0			1637	0			
25-Jul-00	53	-3.636363636	-4.03663171	16.29439556	1610	-1.649359	-1.963345346	3.8547249	7.92530208
26-Jul-00	53	0	-0.400268073	0.160214531	1591	-1.180124	-1.494110987	2.2323676	0.59804493
31-Jul-00	56	5.660377358	5.260109285	27.66874969	1555	-2.262728	-2.576714607	6.6394582	-13.5538
4-Aug-00	54	-3.571428571	-3.971696645	15.77437424	1562	0.4501608	0.136174009	0.0185434	-0.5408419
9-Aug-00	51	-5.555555556	-5.955823629	35.4718351	1572	0.6402049	0.326218102	0.1064183	-1.9428975
10-Aug-00	54	5.882352941	5.482084868	30.0532545	1573	0.0636132	-0.250373532	0.0626869	-1.3725689
15-Aug-00	55	1.851851852	1.451583779	2.107095466	1575	0.1271456	-0.186841181	0.0349096	-0.2712156
21-Aug-00	53	-3.636363636	-4.03663171	16.29439556	1555	-1.269841	-1.583828033	2.5085112	6.39333046
23-Aug-00	54.25	2.358490566	1.958222493	3.834635331	1531	-1.543408	-1.857395123	3.4499166	-3.6371929
25-Aug-00	55	1.382488479	0.982220406	0.964756926	1501	-1.959504	-2.273490356	5.1687584	-2.2330686
11-Sep-00	62	12.72727273	12.32700465	151.9550437	1586	5.6628914	5.348904643	28.610781	65.9359724
25-Sep-00	62	0	-0.400268073	0.160214531	1563	-1.450189	-1.764175918	3.1123167	0.7061433
6-Oct-00	64	3.225806452	2.825538378	7.983667127	1581	1.1516315	0.837644715	0.7016487	2.36679729
25-Oct-00	62	-3.125	-3.525268073	12.42751499	1515	-4.174573	-4.488559818	20.147169	15.8233766
26-Oct-00	62	0	-0.400268073	0.160214531	1495	-1.320132	-1.634118776	2.6703442	0.65408557
3-Nov-00	77.5	25	24.59973193	605.1468109	1520	1.6722408	1.35825404	1.844854	33.4126853
7-Nov-00	78.05	0.709677419	0.309409346	0.095734143	1501	-1.25	-1.563986763	2.4460546	-0.4839121
10-Nov-00	78.05	0	-0.400268073	0.160214531	1462	-2.598268	-2.912254585	8.4812268	1.16568253
17-Nov-00	80	2.498398463	2.098130389	4.40215113	1409	-3.625171	-3.939157762	15.516964	-8.2648666
29-Nov-00	80	0	-0.400268073	0.160214531	1307	-7.239177	-7.553163484	57.050279	3.0232902
30-Nov-00	75	-6.25	-6.650268073	44.22606545	1276	-2.371844	-2.68583068	7.2136864	17.861494
2-Dec-00	75	0	-0.400268073	0.160214531	1281	0.3918495	0.077862767	0.0060626	-0.031166
11-Dec-00	44.67	-40.44	-40.84026807	1667.927496	1381	7.8064012	7.492414486	56.136275	-305.99222
16-Dec-00	44.5	-0.380568614	-0.780836688	0.609705933	1417	2.6068067	2.292819899	5.2570231	-1.7903179
18-Dec-00	55.5	24.71910112	24.31883305	591.4056409	1444	1.905434	1.591447252	2.5327044	38.70214
19-Dec-00	55.5	0	-0.400268073	0.160214531	1438	-0.415512	-0.729499228	0.5321691	0.29199525
23-Dec-00	59	6.306306306	5.906038233	34.88128761	1538	6.9541029	6.640116158	44.091143	39.2167799
4-Jan-01	63	6.779661017	6.379392944	40.69665433	1550	0.7802341	0.466247307	0.2173866	2.97437478
10-Jan-01	70	11.11111111	10.71084304	114.7221586	1530	-1.290323	-1.604309344	2.5738085	-17.183506
11-Jan-01	66	-5.714285714	-6.114553788	37.38776802	1505	-1.633987	-1.947973691	3.7946015	11.9109899
12-Jan-01	68	3.03030303	2.630034957	6.917083875	1471	-2.259136	-2.573122976	6.6209618	-6.7674034
17-Jan-01	70	2.941176471	2.540908397	6.456215483	1464	-0.475867	-0.78985352	0.6238666	-2.0069454
31-Jan-01	70	0	-0.400268073	0.160214531	1462	-0.136612	-0.450598785	0.2030393	0.18036031
7-Feb-01	62	-11.42857143	-11.8288395	139.921444	1485	1.5731874	1.259200651	1.5855863	-14.894882
8-Feb-01	64	3.225806452	2.825538378	7.983667127	1489	0.2693603	-0.044626494	0.0019915	-0.1260939
13-Mar-01	65	1.5625	1.162231927	1.350783051	1407	-5.507052	-5.821038476	33.884489	-6.7653968
14-Mar-01	62	-4.615384615	-5.015652689	25.15677189	1401	-0.426439	-0.740425996	0.5482307	3.71371964
16-Mar-01	65	4.838709677	4.438441604	19.69976387	1396	-0.356888	-0.6708747	0.4500729	-2.9776382
20-Mar-01	60	-7.692307692	-8.092575766	65.48978252	1392	-0.286533	-0.600519714	0.3606239	4.85975129
21-Mar-01	62	3.333333333	2.93306526	8.602871819	1380	-0.862069	-1.176055729	1.3831071	-3.4494482
22-Mar-01	61	-1.612903226	-2.013171299	4.05285868	1351	-2.101449	-2.415436038	5.8343313	4.86268651
10-Apr-01	52	-14.75409836	-15.15436643	229.654822	1326	-1.850481	-2.164467888	4.6849212	32.8011395
11-Apr-01	61	17.30769231	16.90742423	285.8609942	1327	0.0754148	-0.238571982	0.0569166	-4.0336377
17-May-01	59	-3.278688525	-3.678956598	13.53472165	1372	3.3911078	3.077120999	9.4686736	-11.320595
31-May-01	55	-6.779661017	-7.17992909	51.55138174	1378	0.4373178	0.123331021	0.0152105	-0.885508
4-Jun-01	57	3.636363636	3.236095563	10.47231449	1416	2.7576197	2.443632976	5.9713421	7.90782983
6-Jun-01	59	3.50877193	3.108503857	9.662796226	1379	-2.612994	-2.926981113	8.5672184	-9.0985321
7-Jun-01	60	1.694915254	1.294647181	1.676111323	1375	-0.290065	-0.604052028	0.3648789	-0.7820343
8-Jun-01	60	0	-0.400268073	0.160214531	1367	-0.581818	-0.895804945	0.8024665	0.35856212
20-Jun-01	59	-1.666666667	-2.06693474	4.272219219	1368	0.0731529	-0.240833874	0.058001	0.4977879
29-Jun-01	65	10.16949153	9.769223452	95.43772686	1366	-0.146199	-0.460185594	0.2117708	-4.4956559
5-Jul-01	57	-12.30769231	-12.70796038	161.492257	1321	-3.29429	-3.608276661	13.01966	45.8538368
10-Jul-01	65	14.03508772	13.63481965	185.9083068	1298	-1.741105	-2.055091986	4.2234031	-28.020809
2-Aug-01	60	-7.692307692	-8.092575766	65.48978252	1248	-3.85208	-4.166066886	17.356113	33.7142119
3-Aug-01	63	5	4.599731927	21.1575338	1253	0.400641	0.086654263	0.007509	0.39858638
9-Aug-01	65	3.174603175	2.774335101	7.696935254	1223	-2.394254	-2.708240554	7.3345669	-7.5135668
16-Aug-01	64.8	-0.307692308	-0.707960381	0.501207901	1291	5.5600981	5.246111356	27.521684	-3.714039
28-Aug-01	56	-13.58024691	-13.98051499	195.4547993	1262	-2.246321	-2.560307445	6.5551742	35.7944166
7-Sep-01	55	-1.785714286	-2.185982359	4.778518874	1247	-1.18859	-1.502576304	2.2577355	3.28460529
24-Sep-01	60	9.090909091	8.690641018	75.5272413	1106	-11.30714	-11.62112389	135.05052	-100.99502
25-Sep-01	57	-5	-5.400268073	29.16289526	1105	-0.090416	-0.404402676	0.1635415	2.18388286
26-Sep-01	60	5.263157895	4.862889821	23.64769742	1124	1.719457	1.40547025	1.9753466	6.83464698
27-Sep-01	60	0	-0.400268073	0.160214531	1130	0.5338078	0.219821066	0.0483213	-0.0879874
1-Oct-01	62.75	4.583333333	4.18306526	17.49803497	1097	-2.920354	-3.234340745	10.46096	-13.529458
12-Oct-01	62.75	0	-0.400268073	0.160214531	1194	8.8422972	8.528310411	72.732078	-3.4136104

30-Oct-01	62.5	-0.398406375	-0.798674448	0.637880874	1412	18.257956	17.94396969	321.98605	-14.33139
31-Oct-01	65	4	3.599731927	12.95806994	1406	-0.424929	-0.738915942	0.5459968	-2.6598993
25-Sep-02	89	36.92307692	36.52280885	1333.915566	1995	41.891892	41.57790513	1728.7222	1518.54188
26-Sep-02	89.5	0.561797753	0.161529679	0.026091837	2014	0.952381	0.638394189	0.4075471	0.10311961
27-Sep-02	89.95	0.502793296	0.102525223	0.010511421	2019	0.2482622	-0.065724598	0.0043197	-0.0067384
30-Sep-02	89	-1.056142301	-1.456410375	2.121131179	2019	0	-0.313986763	0.0985877	0.45729358
2-Oct-02	90	1.123595506	0.723327432	0.523202574	2030	0.5448242	0.230837407	0.0532859	0.16697103
3-Oct-02	91	1.111111111	0.710843038	0.505297824	2013	-0.837438	-1.151425187	1.32578	-0.8184826
9-Oct-02	95	4.395604396	3.995336322	15.96271233	2099	4.2722305	3.958243739	15.667693	15.814515
11-Oct-02	99	4.210526316	3.810258242	14.51806787	2037	-2.953788	-3.267774281	10.678349	-12.451064
21-Oct-02	101	2.02020202	1.619933947	2.624185992	2119	4.0255277	3.711540974	13.775536	6.01245122
22-Oct-02	107	5.940594059	5.540325986	30.69521203	2142	1.0854176	0.771430887	0.5951056	4.27397859
23-Oct-02	110	2.803738318	2.403470244	5.776669216	2169	1.2605042	0.946517439	0.8958953	2.2749265
24-Oct-02	110	0	-0.400268073	0.160214531	2194	1.1526049	0.838618124	0.7032804	-0.3356721
28-Oct-02	89	-19.09090909	-19.49117716	379.9059872	2208	0.6381039	0.324117157	0.1050519	-6.3174249
30-Oct-02	88	-1.123595506	-1.523863579	2.322160207	2252	1.9927536	1.67876686	2.8182582	-2.5582117
4-Nov-02	85	-3.409090909	-3.809358982	14.51121586	2204	-2.131439	-2.445425484	5.9801058	9.31550353
5-Nov-02	85	0	-0.400268073	0.160214531	2258	2.4500907	2.136103981	4.5629402	-0.8550142
11-Nov-02	84	-1.176470588	-1.576738662	2.486104807	2212	-2.037201	-2.351187826	5.5280842	3.70720875
12-Nov-02	84	0	-0.400268073	0.160214531	2223	0.4972875	0.18330076	0.0335992	-0.0733694
19-Nov-02	85	1.19047619	0.790208117	0.624428868	2333	4.9482681	4.634281343	21.476564	3.66204673
22-Nov-02	80.75	-5	-5.400268073	29.16289526	2346	0.5572225	0.243235697	0.0591636	-1.313538
2-Dec-02	80	-0.92879257	-1.329060643	1.766402193	2306	-1.70503	-2.019016601	4.076428	2.6833955
17-Dec-02	80	0	-0.400268073	0.160214531	2497	8.2827407	7.968753913	63.501039	-3.1896378
19-Dec-02	80	0	-0.400268073	0.160214531	2535	1.5218262	1.207839428	1.4588761	-0.4834596
20-Dec-02	81	1.25	0.849731927	0.722044347	2525	-0.394477	-0.708464081	0.5019214	-0.6020045
26-Dec-02	82	1.234567901	0.834299828	0.696056203	2637	4.4356436	4.121656801	16.988055	3.43869756
31-Dec-02	81.75	-0.304878049	-0.705146122	0.497231054	2701	2.4270004	2.113013616	4.4648265	-1.4899834
1-Jan-03	80	-2.140672783	-2.540940856	6.456380435	2667	-1.258793	-1.572779803	2.4736363	3.99634046
6-Jan-03	79	-1.25	-1.650268073	2.723384714	2766	3.712036	3.398049232	11.546739	-5.6076922
7-Jan-03	79	0	-0.400268073	0.160214531	2780	0.5061461	0.192159296	0.0369252	-0.0769152
8-Jan-03	79	0	-0.400268073	0.160214531	2778	-0.071942	-0.385929209	0.1489414	0.15447514
10-Jan-03	79	0	-0.400268073	0.160214531	2869	3.2757379	2.961751178	8.77197	-1.1854944
15-Jan-03	79	0	-0.400268073	0.160214531	2950	2.8232834	2.509296611	6.2965695	-1.0043913
16-Jan-03	78	-1.265822785	-1.666090858	2.775858748	2956	0.2033898	-0.110596933	0.0122317	0.18426454
17-Jan-03	78	0	-0.400268073	0.160214531	2955	-0.033829	-0.347816262	0.109762	0.13921975
20-Jan-03	74.1	-5	-5.400268073	29.16289526	2921	-1.150592	-1.46457898	2.1449916	7.9091191
23-Jan-03	70.4	-4.993252362	-5.393520435	29.09006268	2617	-10.40739	-10.72138149	114.94802	57.8259902
28-Jan-03	66.9	-4.971590909	-5.371858982	28.85686893	2657	1.5284677	1.214480948	1.474964	-6.5240204
29-Jan-03	64	-4.334828102	-4.735096175	22.42113579	2627	-1.129093	-1.443079725	2.0824791	6.83312129
30-Jan-03	64	0	-0.400268073	0.160214531	2649	0.8374572	0.523470412	0.2740213	-0.2095285
31-Jan-03	63.65	-0.546875	-0.947143073	0.897080001	2545	-3.92601	-4.239996578	17.977571	4.01588339
3-Feb-03	62	-2.59230165	-2.992569723	8.955473547	2471	-2.907662	-3.221648846	10.379021	9.64100879
4-Feb-03	61	-1.612903226	-2.013171299	4.05285868	2477	0.2428167	-0.07117009	0.0050652	0.14327758
17-Feb-03	60.5	-0.819672131	-1.219940204	1.488254102	2509	1.2918853	0.977898582	0.9562856	-1.1929778
18-Feb-03	61.1	0.991735537	0.591467464	0.349833761	2547	1.5145476	1.200560865	1.4413464	0.71009269
19-Feb-03	65.6	7.36497545	6.964707377	48.50714884	2500	-1.845308	-2.159294969	4.6625548	-15.038858
20-Feb-03	62.55	-4.649390244	-5.049658317	25.49904912	2509	0.36	0.046013237	0.0021172	-0.2323511
21-Feb-03	62.75	0.319744205	-0.080523869	0.006484093	2528	0.7572738	0.443287051	0.1965034	-0.0356952
24-Feb-03	64	1.992031873	1.591763799	2.533711992	2489	-1.542722	-1.856708282	3.4473656	-2.955441
3-Mar-03	68.8	7.5	7.099731927	50.40619343	2521	1.2856569	0.971670127	0.9441428	6.89859742
5-Mar-03	68.9	0.145348837	-0.254919236	0.064983817	2470	-2.023007	-2.336993506	5.4615386	0.5957446
6-Mar-03	66	-4.208998549	-4.609266622	21.24533879	2480	0.4048583	0.090871536	0.0082576	-0.4188511
10-Mar-03	63	-4.545454545	-4.945722619	24.46017222	2452	-1.129032	-1.443019021	2.0823039	7.13677181
11-Mar-03	63	0	-0.400268073	0.160214531	2482	1.223491	0.909504265	0.827198	-0.3640455
19-Mar-03	63.55	0.873015873	0.4727478	0.223490482	2506	0.9669621	0.652975364	0.4263768	0.30869267
20-Mar-03	63.1	-0.708103855	-1.108371929	1.228488332	2590	3.3519553	3.037968544	9.2292529	-3.3671991
25-Mar-03	65	3.011093502	2.610825429	6.816409421	2633	1.6602317	1.346244897	1.8123753	3.51481041
26-Mar-03	66.85	2.846153846	2.445885773	5.982357214	2695	2.3547284	2.040741684	4.1646266	4.99142105
27-Mar-03	66.85	0	-0.400268073	0.160214531	2719	0.890538	0.57655127	0.3324114	-0.2307751
31-Mar-03	70.95	6.133133882	5.732865809	32.86575038	2716	-0.110335	-0.424321445	0.1800487	-2.4325779
1-Apr-03	75	5.708245243	5.30797717	28.17462164	2706	-0.368189	-0.682175276	0.4653631	-3.6209708
2-Apr-03	72	-4	-4.400268073	19.36235912	2754	1.7738359	1.459849157	2.1311596	-6.4237276
11-Apr-03	72.9	1.25	0.849731927	0.722044347	2871	4.248366	3.93437925	15.47934	3.34316766
14-Apr-03	73.5	0.823045267	0.422777194	0.178740556	2905	1.1842564	0.870269594	0.7573692	0.36793014
15-Apr-03	74	0.680272109	0.280004036	0.07840226	2901	-0.137694	-0.451680395	0.2040152	-0.1264723
16-Apr-03	74	0	-0.400268073	0.160214531	2944	1.4822475	1.168260738	1.3648332	-0.4676175

17-Apr-03	78	5.405405405	5.005137332	25.05139971	2921	-0.78125	-1.095236763	1.1995436	-5.4818104
18-Apr-03	83.85	7.5	7.099731927	50.40619343	2935	0.4792879	0.165301152	0.0273245	1.17359387
21-Apr-03	88	4.949314252	4.549046178	20.69382113	2967	1.0902896	0.776302845	0.6026461	3.53143749
22-Apr-03	90.05	2.329545455	1.929277381	3.722111214	2862	-3.538928	-3.852914973	14.844954	-7.4333417
23-Apr-03	87.5	-2.831760133	-3.232028207	10.44600633	2892	1.048218	0.734231266	0.5390956	-2.3730562
24-Apr-03	86	-1.714285714	-2.114553788	4.471337721	2834	-2.005533	-2.319519267	5.3801696	4.90474825
25-Apr-03	85	-1.162790698	-1.563058771	2.443152722	2859	0.8821454	0.568158614	0.3228042	-0.8880653
28-Apr-03	90	5.882352941	5.482084868	30.0532545	2873	0.4896817	0.175694944	0.0308687	0.96317459
29-Apr-03	85.5	-5	-5.400268073	29.16289526	2915	1.4618865	1.147899767	1.3176739	-6.1989665
30-Apr-03	85	-0.584795322	-0.985063395	0.970349892	2902	-0.445969	-0.759955888	0.577533	0.74860473
2-May-03	85.25	0.294117647	-0.106150426	0.011267913	2925	0.7925569	0.478570094	0.2290293	-0.0508004
5-May-03	89	4.398826979	3.998558906	15.98847333	2976	1.7435897	1.42960298	2.0437647	5.71635173
8-May-03	86.5	-2.808988764	-3.209256837	10.29932945	2963	-0.436828	-0.75081472	0.5637227	2.40955727
9-May-03	87.5	1.156069364	0.755801291	0.571235591	2972	0.3037462	-0.01024056	0.0001049	-0.0077398
12-May-03	89	1.714285714	1.314017641	1.726642361	2973	0.0336474	-0.280339388	0.0785902	-0.3683709
13-May-03	90	1.123595506	0.723327432	0.523202574	2956	-0.571813	-0.885799747	0.7846412	-0.6407233
14-May-03	95	5.555555556	5.155287482	26.57698902	2979	0.7780785	0.464091721	0.2153811	2.39252624
16-May-03	94	-1.052631579	-1.452899652	2.1109174	3003	0.8056395	0.491652713	0.2417224	-0.7143221
19-May-03	94.5	0.531914894	0.13164682	0.017330885	3005	0.0666001	-0.247386696	0.0612002	-0.0325677
20-May-03	91	-3.703703704	-4.103971777	16.84258435	2980	-0.831947	-1.145933519	1.3131636	4.70287882
21-May-03	94	3.296703297	2.896435223	8.389337003	3041	2.0469799	1.732993103	3.0032651	5.01950226
22-May-03	94	0	-0.400268073	0.160214531	3060	0.6247945	0.310807712	0.0966014	-0.1244064
23-May-03	97	3.191489362	2.791221288	7.790916281	3080	0.6535948	0.339608008	0.1153336	0.9479211
26-May-03	100	3.092783505	2.692515432	7.249639351	3106	0.8441558	0.530169081	0.2810793	1.42748843
27-May-03	107	7	6.599731927	43.5564615	3127	0.6761108	0.36212399	0.1311338	2.38992126
28-May-03	114.05	6.588785047	6.188516973	38.29774233	3093	-1.087304	-1.401290888	1.9636162	-8.6719124
29-May-03	115	0.832967996	0.432699923	0.187229224	3117	0.7759457	0.461958921	0.213406	0.19988959
30-May-03	112	-2.608695652	-3.008963725	9.053862701	3099	-0.577478	-0.891465108	0.79471	2.68238617
3-Jun-03	116	3.571428571	3.171160498	10.0562589	3109	0.3226847	0.008697974	7.565E-05	0.02758267
4-Jun-03	112.35	-3.146551724	-3.546819797	12.57993068	3128	0.611129	0.297142217	0.0882935	-1.0539099
5-Jun-03	110	-2.091677793	-2.491945866	6.209794199	3132	0.1278772	-0.186109525	0.0346368	0.46377486
6-Jun-03	104.5	-5	-5.400268073	29.16289526	3142	0.3192848	0.005298039	2.807E-05	-0.0286108
10-Jun-03	105	0.4784689	0.078200826	0.006115369	3212	2.2278803	1.913893568	3.6629886	0.14966806
11-Jun-03	103.05	-1.857142857	-2.25741093	5.095904109	3211	-0.031133	-0.345120013	0.1191078	0.77907769
12-Jun-03	105	1.892285298	1.492017225	2.2261154	3248	1.152289	0.838302243	0.0727507	1.25076139
13-Jun-03	105.5	0.476190476	0.075922403	0.005764211	3265	0.523399	0.209412252	0.0438535	0.01589908
16-Jun-03	110	4.265402844	3.86513477	14.93926679	3260	-0.153139	-0.46712612	0.2182068	-1.8055054
18-Jun-03	110	0	-0.400268073	0.160214531	3307	1.4417178	1.127731028	1.2717773	-0.4513947
19-Jun-03	106.1	-3.545454545	-3.945722619	15.56872698	3289	-0.5443	-0.858286733	0.7366561	3.38656138
20-Jun-03	110	3.675777568	3.275509495	10.72896245	3307	0.5472788	0.233292045	0.0544252	0.76415031
24-Jun-03	106.1	-3.545454545	-3.945722619	15.56872698	3346	1.1793166	0.865329838	0.7487957	-3.4143515
25-Jun-03	106.2	0.094250707	-0.306017366	0.093646629	3386	1.1954573	0.881470499	0.7769902	-0.2697453
26-Jun-03	106	-0.188323917	-0.58859199	0.346440531	3397	0.3248671	0.010880337	0.0001184	-0.0064041
27-Jun-03	106.1	0.094339623	-0.305928451	0.093592217	3400	0.0883132	-0.225673546	0.0509285	0.06903996
30-Jun-03	105.5	-0.565504241	-0.965772315	0.932716164	3402	0.0588235	-0.255163234	0.0651083	0.24642959
2-Jul-03	110	4.265402844	3.86513477	14.93926679	3460	1.7048795	1.39089272	1.9345826	5.37598781
3-Jul-03	110	0	-0.400268073	0.160214531	3481	0.6069364	0.292949653	0.0858195	-0.1172584
4-Jul-03	113.25	2.954545455	2.554277381	6.52433294	3478	-0.086182	-0.400168895	0.1601351	-1.0221424
8-Jul-03	115	1.545253863	1.14498579	1.310992459	3507	0.8338125	0.519825773	0.2702188	0.59519312
10-Jul-03	113	-1.739130435	-2.139398508	4.577025976	3597	2.566296	2.252309216	5.0728968	-4.818587
11-Jul-03	113.25	0.221238938	-0.179029135	0.032051431	3646	1.3622463	1.048259553	1.0988481	-0.187669
14-Jul-03	121.45	7.240618102	6.840350028	46.79038851	3685	1.0696654	0.755678624	0.5710502	5.16910629
15-Jul-03	117.1	-3.581720873	-3.981988946	15.85623597	3556	-3.500678	-3.814665189	14.551671	15.1899546
16-Jul-03	117	-0.085397096	-0.48566517	0.235870657	3637	2.2778403	1.963853507	3.8567206	-0.9537752
17-Jul-03	119.5	2.136752137	1.736484063	3.015376903	3711	2.0346439	1.720657174	2.9606611	2.98789376
21-Jul-03	116	-2.928870293	-3.329138366	11.08316226	3767	1.5090272	1.195040453	1.4281217	-3.978455
24-Jul-03	116	0	-0.400268073	0.160214531	3815	1.2742235	0.960236757	0.9220546	-0.3843521
28-Jul-03	116	0	-0.400268073	0.160214531	3849	0.8912189	0.57723211	0.3331969	-0.2310476
29-Jul-03	116.05	0.043103448	-0.357164625	0.127566569	3835	-0.363731	-0.677717602	0.4593011	0.24205675
30-Jul-03	124	6.850495476	6.450227403	41.60543355	3870	0.9126467	0.598659912	0.3583937	3.86149257
31-Jul-03	117.8	-5	-5.400268073	29.16289526	3933	1.627907	1.313920214	1.7263863	-7.0955214
1-Aug-03	125	6.112054329	5.711786256	32.62450223	4020	2.2120519	1.898065106	3.6026511	10.8413422
4-Aug-03	120	-4	-4.400268073	19.36235912	4045	0.6218905	0.307903784	0.0948047	-1.3548592
5-Aug-03	116	-3.333333333	-3.733601407	13.93977946	4010	-0.865266	-1.179252523	1.3906365	4.40285888
7-Aug-03	120	3.448275862	3.048007789	9.29035148	4204	4.8379052	4.523918474	20.465838	13.7889387
11-Aug-03	121	0.833333333	0.43306526	0.187545519	4306	2.4262607	2.112273941	4.4617012	0.91475246
12-Aug-03	125	3.305785124	2.905517051	8.442029332	4347	0.9521598	0.638173014	0.4072648	1.85422257

13-Aug-03	122.5	-2	-2.400268073	5.761286824	4245	-2.346446	-2.660432588	7.0779016	6.3857514
15-Aug-03	125	2.040816327	1.640548253	2.691398571	4142	-2.426384	-2.740370744	7.5096318	-4.4957104
18-Aug-03	125	0	-0.400268073	0.160214531	4268	3.0420087	2.728021928	7.4421036	-1.0919401
19-Aug-03	134.35	7.48	7.079731927	50.12260415	4305	0.8669166	0.552929825	0.3057314	3.91459494
20-Aug-03	144.4	7.480461481	7.080193408	50.12913869	4389	1.9512195	1.637232749	2.6805311	11.5919245
21-Aug-03	155.2	7.479224377	7.078956303	50.11162235	4392	0.0683527	-0.245634063	0.0603361	-1.7388328
22-Aug-03	166.5	7.280927835	6.880659762	47.34347876	4418	0.5919854	0.277998665	0.0772833	1.91281423
25-Aug-03	178.95	7.477477477	7.077209404	50.08689295	4382	-0.814848	-1.128835111	1.2742687	-7.9890025
26-Aug-03	190	6.174909193	5.774641119	33.34648006	4342	-0.912825	-1.226811957	1.5050676	-7.0843988
27-Aug-03	198	4.210526316	3.810258242	14.51806787	4377	0.8060801	0.492093384	0.2421559	1.87500287
28-Aug-03	189	-4.545454545	-4.945722619	24.46017222	4485	2.4674435	2.153456691	4.6373757	-10.650399
29-Aug-03	185	-2.116402116	-2.51667019	6.333628844	4461	-0.535117	-0.84910382	0.7209773	2.13691427
1-Sep-03	175.75	-5	-5.400268073	29.16289526	4524	1.4122394	1.098252645	1.20671589	-5.9308587
2-Sep-03	170	-3.271692745	-3.671960819	13.48329625	4564	0.8841733	0.570186535	0.3251127	-2.0937026
3-Sep-03	168	-1.176470588	-1.576738662	2.486104807	4528	-0.788782	-1.102768533	1.2160984	1.73877778
4-Sep-03	170	1.19047619	0.790208117	0.624428868	4465	-1.391343	-1.705329519	2.9081488	-1.3475652
5-Sep-03	170	0	-0.400268073	0.160214531	4463	-0.044793	-0.358779596	0.1287228	0.14368002
8-Sep-03	175	2.941176471	2.540908397	6.456215483	4506	0.9634775	0.649490718	0.4218382	1.65029642
9-Sep-03	175	0	-0.400268073	0.160214531	4547	0.9098979	0.595911151	0.3551101	-0.2385242
10-Sep-03	179	2.285714286	1.885446212	3.55490742	4581	0.7477458	0.433759003	0.1881469	0.81782927
11-Sep-03	182	1.675977654	1.27570958	1.627434933	4592	0.2401222	-0.073864519	0.005456	-0.0942297
12-Sep-03	190	4.395604396	3.995336322	15.96271233	4604	0.261324	-0.052662721	0.0027734	-0.2104053
15-Sep-03	190	0	-0.400268073	0.160214531	4593	-0.238923	-0.552909439	0.3057088	0.221312
16-Sep-03	180.5	-5	-5.400268073	29.16289526	4387	-4.485086	-4.799072764	23.031099	25.9162794
17-Sep-03	180	-0.27700831	-0.677276384	0.4587033	4293	-2.142694	-2.456681087	6.035282	1.66385208
18-Sep-03	135.8	-24.55555556	-24.95582363	622.793133	4475	4.2394596	3.925472822	15.409337	-97.963407
22-Sep-03	134.9	-0.662739323	-1.063007396	1.129984724	4212	-5.877095	-6.191081735	38.329493	6.58116567
30-Sep-03	133	-1.408450704	-1.808718778	3.271463616	4027	-4.392213	-4.706199489	22.148314	8.51219139
1-Oct-03	132	-0.751879699	-1.152147773	1.32744449	4068	1.0181276	0.704140875	0.4958144	-0.8112743
3-Oct-03	130	-1.515151515	-1.915419588	3.6688322	4192	3.0481809	2.734194161	7.4758177	-5.2371291
9-Oct-03	124	-4.615384615	-5.015652689	25.15677189	4131	-1.455153	-1.769139435	3.1298543	8.87338896
13-Oct-03	123	-0.806451613	-1.206719686	1.456172401	4087	-1.065117	-1.379104168	1.9019283	1.66419215
14-Oct-03	116.85	-5	-5.400268073	29.16289526	3947	-3.425495	-3.739482237	13.983727	20.1942065
15-Oct-03	111.05	-4.963628584	-5.363896657	28.77138735	4015	1.7228275	1.408840701	1.9848321	-7.5568759
16-Oct-03	105.5	-4.997748762	-5.398016835	29.13858575	4016	0.0249066	-0.289080163	0.0835673	1.56045959
17-Oct-03	100.25	-4.976303318	-5.376571391	28.90751992	3969	-1.170319	-1.484305488	2.27801628	7.98047442
20-Oct-03	98	-2.244389027	-2.644657101	6.994211181	4005	0.9070295	0.593042715	0.3516997	-1.5683946
23-Oct-03	105	7.142857143	6.74258907	45.46250736	3850	-3.870162	-4.18414906	17.507103	-28.211998
27-Oct-03	108	2.857142857	2.456874784	6.036233703	3952	2.6493506	2.335363886	5.4539245	5.73769664
28-Oct-03	115.5	6.944444444	6.544176371	42.82624438	3856	-2.42915	-2.743136561	7.5247982	-17.951569
29-Oct-03	120	3.896103896	3.495835823	12.2208681	3786	-1.815353	-2.12933946	4.5340865	-7.4438212
30-Oct-03	121	0.833333333	0.43306526	0.187545519	3796	0.264131	-0.049855754	0.0024856	-0.0215908
31-Oct-03	115	-4.958677686	-5.358945759	28.71829965	3781	-0.395153	-0.709139556	0.5028789	3.80024041
3-Nov-03	113	-1.739130435	-2.139398508	4.577025976	3794	0.3438244	0.029837622	0.0008903	-0.0638346
4-Nov-03	113	0	-0.400268073	0.160214531	3868	1.9504481	1.636461313	2.6780056	-0.6550232
5-Nov-03	108	-4.424778761	-4.825046834	23.28107695	3756	-2.895553	-3.209540021	10.301147	15.4861809
13-Nov-03	105.5	-2.314814815	-2.715082888	7.371675089	3843	2.3162939	2.002307167	4.009234	-5.4364299
17-Nov-03	108	2.369668246	1.969400173	3.878537042	3901	1.5092376	1.195250812	1.4286245	2.35392716
18-Nov-03	110	1.851851852	1.451583779	2.107095466	3886	-0.384517	-0.698503554	0.4879072	-1.0139364
20-Nov-03	114	3.636363636	3.236095563	10.47231449	3920	0.8749357	0.560948903	0.3146637	1.81528426
21-Nov-03	119.5	4.824561404	4.42429333	19.57437147	3975	1.4030612	1.089074461	1.1860832	4.81838488
24-Nov-03	119.9	0.334728033	-0.06554004	0.004295497	4067	2.3144654	2.000478646	4.0019148	-0.1311115
25-Nov-03	114	-4.920767306	-5.321035379	28.31341751	4068	0.0245881	-0.289398615	0.0837516	1.53990027
1-Dec-03	115	0.877192982	0.476924909	0.227457369	4263	4.7935103	4.479523561	20.066131	2.13639637
2-Dec-03	120	4.347826087	3.947558014	15.58321427	4305	0.9852217	0.671234912	0.4505563	2.64973876
3-Dec-03	120	0	-0.400268073	0.160214531	4266	-0.905923	-1.219910108	1.4881807	0.48829107
4-Dec-03	121	0.833333333	0.43306526	0.187545519	4250	-0.375059	-0.689045366	0.4747835	-0.2984016
5-Dec-03	120.5	-0.41322314	-0.813491214	0.661767955	4200	-1.176471	-1.490457351	2.2214631	1.21247396
8-Dec-03	114.5	-4.979253112	-5.379521185	28.93924818	4246	1.0952381	0.781251332	0.6103536	-4.2027581
9-Dec-03	116	1.310043668	0.909775595	0.827691633	4278	0.7536505	0.439663731	0.1933042	0.39999533
10-Dec-03	115	-0.862068966	-1.262337039	1.5934948	4311	0.7713885	0.457401736	0.2092163	-0.5773952
11-Dec-03	116	0.869565217	0.469297144	0.220239809	4264	-1.090234	-1.404221047	1.9718368	-0.6589969
12-Dec-03	116	0	-0.400268073	0.160214531	4305	0.9615385	0.647551698	0.4193232	-0.2591943
16-Dec-03	118.3	1.982758621	1.582490547	2.504276333	4278	-0.627178	-0.941164463	0.8857905	-1.4893839
17-Dec-03	117.25	-0.887573964	-1.287842038	1.658537114	4240	-0.888266	-1.202252308	1.4454106	1.54831106
18-Dec-03	118	0.639658849	0.239390775	0.057307943	4267	0.6367925	0.32280569	0.1042035	0.0772767
22-Dec-03	114.25	-3.177966102	-3.578234175	12.80375981	4367	2.3435669	2.029580146	4.1191956	-7.262313

23-Dec-03	114	-0.218818381	-0.619086454	0.383268038	4385	0.4121823	0.098195513	0.0096424	-0.0607915
24-Dec-03	116.5	2.192982456	1.792714383	3.213824858	4420	0.7981756	0.484188836	0.2344388	0.86801229
26-Dec-03	117	0.429184549	0.028916476	0.000836163	4393	-0.61086	-0.924846492	0.855341	-0.0267433
29-Dec-03	117.5	0.427350427	0.027082354	0.000733454	4459	1.5023902	1.188403403	1.4123026	0.03218476
30-Dec-03	123	4.680851064	4.280582991	18.32339074	4454	-0.112133	-0.426119528	0.1815779	-1.82404
31-Dec-03	129	4.87804878	4.477780707	20.05052006	4472	0.4041311	0.090144355	0.008126	0.40364665
1-Jan-04	125	-3.100775194	-3.501043267	12.25730396	4473	0.0223614	-0.291625404	0.0850454	1.02099316
2-Jan-04	128.5	2.8	2.399731927	5.75871332	4474	0.0223564	-0.291630403	0.0850483	-0.6998348
5-Jan-04	130	1.167315175	0.767047102	0.588361256	4501	0.6034868	0.28950005	0.0838103	0.22206017
6-Jan-04	133	2.307692308	1.907424234	3.63826721	4515	0.311042	-0.002944772	8.672E-06	-0.0056169
9-Jan-04	137	3.007518797	2.607250724	6.797756336	4570	1.2181617	0.90417492	0.8175323	2.35741071
12-Jan-04	141	2.919708029	2.519439956	6.347577691	4598	0.6126915	0.298704703	0.0892245	0.75256856
13-Jan-04	145	2.836879433	2.436611359	5.937074916	4608	0.2174859	-0.0965009	0.0093124	-0.2351352
14-Jan-04	146	0.689655172	0.289387099	0.083744893	4620	0.2604167	-0.053570096	0.0028698	-0.0155025
15-Jan-04	147	0.684931507	0.284663434	0.08103327	4635	0.3246753	0.010688562	0.0001142	0.00304264
16-Jan-04	144	-2.040816327	-2.4410844	5.958893047	4684	1.0571737	0.743186915	0.5523268	-1.814182
19-Jan-04	143	-0.694444444	-1.094712518	1.198395497	4688	0.0853971	-0.228589667	0.0522532	0.25023997
20-Jan-04	142.9	-0.06993007	-0.470198143	0.221086294	4688	0	-0.313986763	0.0985877	0.14763599
22-Jan-04	144	0.769769069	0.369500996	0.136530986	4769	1.7278157	1.413828937	1.9989123	0.5224112
23-Jan-04	143	-0.694444444	-1.094712518	1.198395497	4762	-0.146781	-0.460768059	0.2123072	0.50440856
26-Jan-04	140.25	-1.923076923	-2.323344996	5.397931972	4677	-1.784964	-2.098951064	4.4055956	4.87658745
28-Jan-04	144.75	3.20855615	2.808288076	7.88648192	4770	1.9884541	1.674467374	2.803841	4.70238676
29-Jan-04	145	0.172711572	-0.227556502	0.051781961	4804	0.7127883	0.398801497	0.1590426	-0.0907499
30-Jan-04	145	0	-0.400268073	0.160214531	4841	0.7701915	0.456204744	0.2081228	-0.1826042
9-Feb-04	145	0	-0.400268073	0.160214531	4848	0.1445982	-0.16938854	0.0286925	0.06780082
10-Feb-04	146.5	1.034482759	0.634214685	0.402228267	4908	1.2376238	0.923636999	0.8531053	0.58578415
11-Feb-04	147.95	0.989761092	0.589493019	0.347502019	4890	-0.366748	-0.680734929	0.4634	-0.4012885
13-Feb-04	148	0.033795201	-0.366472872	0.134302366	4875	-0.306748	-0.620735229	0.3853122	0.22748262
17-Feb-04	150	1.351351351	0.951083278	0.904559402	4832	-0.882051	-1.196038045	1.430507	-1.1375318
18-Feb-04	142.6	-4.933333333	-5.333601407	28.44730397	4900	1.4072848	1.093298005	1.1953005	-5.8312158
19-Feb-04	150	5.189340813	4.78907274	22.93521771	4894	-0.122449	-0.436435743	0.1904762	-2.0901225
20-Feb-04	150	0	-0.400268073	0.160214531	4869	-0.51083	-0.82481635	0.680322	0.33014765
23-Feb-04	149.6	-0.266666667	-0.66693474	0.444801947	4757	-2.300267	-2.614253758	6.8343227	1.74353665
25-Feb-04	149	-0.401069519	-0.801337592	0.642141936	4787	0.6306496	0.316662806	0.1002753	-0.2537538
26-Feb-04	148	-0.67114094	-1.071409013	1.147917273	4810	0.4804679	0.166481171	0.027716	-0.1783694
3-Mar-04	144	-2.702702703	-3.102970776	9.628427637	4854	0.9147609	0.600774152	0.3609296	-1.8641846
4-Mar-04	142.05	-1.354166667	-1.75443474	3.078041257	4888	0.7004532	0.386466471	0.1493563	-0.6780302
5-Mar-04	145	2.076733545	1.676465471	2.810536476	4900	0.2454992	-0.068487581	0.0046905	-0.1148171
9-Mar-04	146	0.689655172	0.289387099	0.083744893	4910	0.2040816	-0.10990513	0.0120791	-0.0318051
10-Mar-04	146	0	-0.400268073	0.160214531	4884	-0.529532	-0.843518331	0.1715232	0.33763346
11-Mar-04	148	1.369863014	0.96959494	0.940114348	4904	0.4095004	0.095513646	0.0091229	0.09260955
12-Mar-04	143.3	-3.175675676	-3.575943749	12.7873737	4915	0.2243067	-0.089680075	0.0080425	0.3206909
15-Mar-04	149	3.977669225	3.577401152	12.797799	4952	0.7527976	0.438810795	0.1925549	1.56980225
16-Mar-04	150	0.67114094	0.270872866	0.07337211	4980	0.5654281	0.251441347	0.0632228	0.06810864
17-Mar-04	150.1	0.066666667	-0.333601407	0.111289899	4982	0.0401606	-0.273826121	0.0749807	0.09134878
18-Mar-04	150	-0.066622252	-0.466890325	0.217986576	4974	-0.160578	-0.474564844	0.2252118	0.22156973
22-Mar-04	151	0.666666667	0.266398593	0.070968211	4998	0.482509	0.168522284	0.0283998	0.0448941
24-Mar-04	145	-3.973509934	-4.373778007	19.12993406	5045	0.9403762	0.626389387	0.3923637	-2.7396881
25-Mar-04	149	2.75862069	2.358352616	5.561827063	5113	1.3478692	1.033882414	1.0689128	2.4382593
29-Mar-04	143	-4.026845638	-4.427113711	19.59933581	5103	-0.19558	-0.509566657	0.2596582	2.25590954
30-Mar-04	143.2	0.13986014	-0.260407933	0.067812292	5103	0	-0.313986763	0.0985877	0.08176464
31-Mar-04	138.05	-3.596368715	-3.996636788	15.97310562	5107	0.0783853	-0.2356015	0.0555081	0.94161362
1-Apr-04	146.1	5.831220572	5.430952499	29.49524505	5141	0.6657529	0.351766125	0.1237394	1.91042512
2-Apr-04	141	-3.490759754	-3.891027827	15.14009755	5162	0.4084808	0.094494077	0.0089291	-0.3676791
5-Apr-04	145	2.836879433	2.436611359	5.937074916	5228	1.2785742	0.964587433	0.9304289	2.3503247
6-Apr-04	146	0.689655172	0.289387099	0.083744893	5267	0.7459832	0.431996404	0.1866209	0.12501419
7-Apr-04	148	1.369863014	0.96959494	0.940114348	5310	0.816404	0.502417262	0.2524231	0.48714124
8-Apr-04	147	-0.675675676	-1.075943749	1.157654951	5345	0.6591337	0.345146947	0.1191264	-0.3713587
9-Apr-04	149	1.360544218	0.960276144	0.922130273	5372	0.505145	0.191158232	0.0365415	0.18356469
12-Apr-04	149.5	0.33557047	-0.064697604	0.00418578	5444	1.3402829	1.026296186	1.0532839	-0.0663989
13-Apr-04	148	-1.003344482	-1.403612555	1.970128204	5429	-0.275533	-0.58951946	0.3475332	0.82745691
14-Apr-04	144.1	-2.635135135	-3.035403208	9.213672638	5458	0.5341684	0.220181592	0.0484799	-0.6683399
15-Apr-04	144	-0.069396253	-0.469664326	0.220584579	5508	0.9160865	0.602099715	0.3625241	-0.2827848
16-Apr-04	147	2.083333333	1.68306526	2.832708669	5582	1.3435004	1.0295136	1.0598983	1.73273857
19-Apr-04	146	-0.680272109	-1.080540182	1.167567085	5621	0.6986743	0.384687547	0.1479845	-0.4156704
20-Apr-04	144.5	-1.02739726	-1.427665334	2.038228305	5592	-0.515922	-0.829909197	0.6887493	1.18483259
21-Apr-04	145	0.346020761	-0.054247312	0.002942771	5433	-2.843348	-3.157334403	9.9687605	0.1712769

23-Apr-04	150	3.448275862	3.048007789	9.29035148	5407	-0.478557	-0.79254373	0.6281256	-2.4156795
26-Apr-04	155	3.333333333	2.93306526	8.602871819	5416	0.1664509	-0.147535866	0.0217668	-0.4327323
27-Apr-04	155	0	-0.400268073	0.160214531	5427	0.2031019	-0.110884843	0.0122954	0.04438366
28-Apr-04	152	-1.935483871	-2.335751944	5.455737145	5369	-1.06873	-1.382717185	1.9119068	3.22968435
29-Apr-04	152	0	-0.400268073	0.160214531	5347	-0.40976	-0.723746495	0.523809	0.28969262
30-Apr-04	152.95	0.625	0.224731927	0.050504439	5430	1.5522723	1.238285539	1.5333511	0.27828229
4-May-04	160	4.609349461	4.209081387	17.71636612	5526	1.7679558	1.453969038	2.114026	6.11987402
5-May-04	159.5	-0.3125	-0.712768073	0.508038326	5508	-0.325733	-0.639719662	0.4092412	0.45597175
6-May-04	164	2.821316614	2.421048541	5.861476038	5530	0.399419	0.085432264	0.0072987	0.20683566
7-May-04	169.5	3.353658537	2.953390463	8.722515229	5529	-0.018083	-0.332069946	0.1102704	-0.9807322
10-May-04	170.1	0.353982301	-0.046285772	0.002142373	5477	-0.940496	-1.254482332	1.5737259	0.05806468
11-May-04	172	1.116990006	0.716721933	0.513690329	5458	-0.346905	-0.660892003	0.4367782	-0.4736758
12-May-04	170	-1.162790698	-1.563058771	2.443152722	5354	-1.90546	-2.219446639	4.9259434	3.46912554
13-May-04	169.5	-0.294117647	-0.69438572	0.482171529	5381	0.5042959	0.19030909	0.0362175	-0.1321479
14-May-04	172.75	1.91740413	1.517136056	2.301701814	5455	1.3752091	1.061222306	1.1261928	1.61001862
18-May-04	165.25	-4.341534009	-4.741802082	22.48468698	5388	-1.228231	-1.542217744	2.3784356	7.31289131
19-May-04	167	1.059001513	0.65873344	0.433929744	5439	0.9465479	0.632561121	0.4001336	0.41668916
20-May-04	167.2	0.119760479	-0.280507594	0.07868451	5478	0.7170436	0.403056811	0.1624548	-0.1130605
21-May-04	168.5	0.777511962	0.377243888	0.142312951	5511	0.6024096	0.288422875	0.0831878	0.10880577
24-May-04	168	-0.296735905	-0.697003978	0.485814546	5465	-0.834694	-1.148681011	1.3194681	0.80063523
25-May-04	173	2.976190476	2.575922403	6.635376226	5465	0	-0.313986763	0.0985877	-0.8088055
26-May-04	171	-1.156069364	-1.556337437	2.422186219	5483	0.3293687	0.015381947	0.0002366	-0.0239395
27-May-04	170	-0.584795322	-0.985063395	0.970349892	5477	-0.109429	-0.423415908	0.179281	0.41709151
28-May-04	182.75	7.5	7.099731927	50.40619343	5503	0.4747124	0.160725671	0.0258327	1.14110918
31-May-04	196.45	7.496580027	7.096311954	50.35764335	5498	-0.09086	-0.404846294	0.1639005	-2.8729156
1-Jun-04	211.15	7.482820056	7.082551983	50.16254259	5454	-0.800291	-1.114277778	1.241615	-7.8919303
2-Jun-04	226.95	7.48283211	7.082564037	50.16271333	5462	0.1466813	-0.167305428	0.0279911	-1.1849514
3-Jun-04	220	-3.062348535	-3.462616608	11.98971378	5279	-3.350421	-3.664407854	13.427885	12.6884395
4-Jun-04	227	3.181818182	2.781550108	7.737021006	5363	1.5912105	1.277223693	1.6313004	3.5526617
7-Jun-04	236	3.964757709	3.564489636	12.70558636	5417	1.0068991	0.692912361	0.4801275	2.46987893
8-Jun-04	240	1.694915254	1.294647181	1.676111323	5464	0.8676389	0.553652151	0.3065307	0.7167842
9-Jun-04	240	0	-0.400268073	0.160214531	5464	0	-0.313986763	0.0985877	0.12567888
10-Jun-04	228	-5	-5.400268073	29.16289526	5371	-1.70205	-2.016036543	4.0644033	10.8871378
11-Jun-04	225	-1.315789474	-1.716057547	2.944853505	5384	0.2420406	-0.071946175	0.0051763	0.12346378
14-Jun-04	225	0	-0.400268073	0.160214531	5218	-3.08321	-3.397196273	11.540943	1.35978921
17-Jun-04	216.5	-3.777777778	-4.178045851	17.45606713	5265	0.9007282	0.586741485	0.3442656	-2.4514328
18-Jun-04	220	1.616628176	1.216360102	1.479531898	5249	-0.303894	-0.6178804	0.3817762	-0.7515651
22-Jun-04	216	-1.818181818	-2.218449892	4.921519921	5080	-3.219661	-3.533647651	12.486666	7.83922025
23-Jun-04	213.5	-1.157407407	-1.557675481	2.426352903	5089	0.1771654	-0.136821409	0.0187201	0.21312335
24-Jun-04	220	3.044496487	2.644228414	6.991943904	5151	1.218314	0.904327248	0.8178078	2.3912478
1-Jul-04	220	0	-0.400268073	0.160214531	5348	3.8245001	3.510513334	12.323704	-1.4051464
5-Jul-04	224	1.818181818	1.417913745	2.010479388	5400	0.9723261	0.65833934	0.4334107	0.9334684
8-Jul-04	228	1.785714286	1.385446212	1.919461207	5424	0.4444444	0.130457681	0.0170192	0.1807421
9-Jul-04	242.5	6.359649123	5.959381049	35.51422249	5454	0.5530973	0.239110582	0.0571739	1.42495107
12-Jul-04	250	3.092783505	2.692515432	7.249639351	5486	0.5867253	0.272738576	0.0743863	0.73435283
13-Jul-04	250	0	-0.400268073	0.160214531	5473	-0.236967	-0.550953588	0.3035499	0.22052913
14-Jul-04	250	0	-0.400268073	0.160214531	5474	0.0182715	-0.295715248	0.0874475	0.11836537
15-Jul-04	242	-3.2	-3.600268073	12.9619302	5439	-0.639386	-0.953372952	0.90892	3.4323982
16-Jul-04	255	5.371900826	4.971632753	24.71713223	5388	-0.937672	-1.251659129	1.5666506	-6.2227895
19-Jul-04	257	0.784313725	0.384045652	0.147491063	5379	-0.167038	-0.481024625	0.2313847	-0.1847354
20-Jul-04	255	-0.778210117	-1.17847819	1.388810844	5389	0.1859082	-0.128078602	0.0164041	0.15093784
21-Jul-04	265	3.921568627	3.521300554	12.39955759	5440	0.9463722	0.632385477	0.3999114	2.22681933
22-Jul-04	258	-2.641509434	-3.041777507	9.252410404	5426	-0.257353	-0.571339704	0.3264291	1.73788826
23-Jul-04	260	0.775193798	0.374925725	0.140569299	5409	-0.313306	-0.627293066	0.3934966	-0.2351883
26-Jul-04	255	-1.923076923	-2.323344996	5.397931972	5346	-1.164725	-1.478712221	2.1865898	3.43555864
27-Jul-04	245	-3.921568627	-4.321836701	18.67827247	5314	-0.598578	-0.912565139	0.8327751	3.94395751
28-Jul-04	241	-1.632653061	-2.032921135	4.132768339	5351	0.696274	0.38228723	0.1461435	-0.7771598
29-Jul-04	250	3.734439834	3.334171761	11.11670133	5304	-0.87834	-1.19232726	1.4216443	-3.9754239
30-Jul-04	250	0	-0.400268073	0.160214531	5290	-0.263952	-0.577938498	0.3340129	0.23133033
2-Aug-04	254	1.6	1.199731927	1.439356696	5207	-1.568998	-1.882984873	3.545632	-2.2590771
3-Aug-04	249	-1.968503937	-2.36877201	5.611080837	5263	1.0754753	0.761488559	0.5798648	-1.8037928
4-Aug-04	255	2.409638554	2.009370481	4.03756973	5309	0.8740262	0.560039458	0.3136442	1.12532675
5-Aug-04	255	0	-0.400268073	0.160214531	5304	-0.09418	-0.408166458	0.1665999	0.163376
6-Aug-04	259.75	1.862745098	1.462477025	2.138839048	5344	0.7541478	0.44016105	0.1937417	0.64372542
9-Aug-04	264	1.636188643	1.23592057	1.527499654	5364	0.3742515	0.060264734	0.0036318	0.07448242
10-Aug-04	270	2.272727273	1.872459199	3.506103453	5368	0.0745712	-0.239415548	0.0573198	-0.4482958
11-Aug-04	270	0	-0.400268073	0.160214531	5353	-0.279434	-0.593420444	0.3521478	0.23752726

12-Aug-04	275	1.851851852	1.451583779	2.107095466	5326	-0.50439	-0.818376825	0.6697406	-1.1879425
16-Aug-04	261.25	-5	-5.400268073	29.16289526	5330	0.0751033	-0.238883496	0.0570653	1.29003492
17-Aug-04	261	-0.09569378	-0.495961853	0.24597816	5378	0.9005629	0.586576089	0.3440715	-0.2909194
18-Aug-04	260	-0.383141762	-0.783409836	0.613730971	5417	0.7251766	0.411189882	0.1690771	-0.3221302
19-Aug-04	260.05	0.019230769	-0.381037304	0.145189427	5378	-0.719956	-1.033942458	1.069037	0.39397065
20-Aug-04	265	1.9034801	1.503212027	2.259646397	5409	0.5764225	0.262435699	0.0688725	0.3944965
23-Aug-04	272	2.641509434	2.241241361	5.023162837	5401	-0.147902	-0.461888409	0.2133409	-1.0352034
24-Aug-04	280	2.941176471	2.540908397	6.456215483	5368	-0.610998	-0.924984726	0.8555967	-2.3503015
25-Aug-04	270.25	-3.482142857	-3.88241093	15.07311463	5355	-0.242176	-0.55616262	0.3093169	2.15925184
27-Aug-04	270	-0.092506938	-0.492775011	0.242827212	5394	0.7282913	0.414304553	0.1716483	-0.2041589
30-Aug-04	265	-1.851851852	-2.252119925	5.072044157	5330	-1.186504	-1.500490286	2.2514711	3.37928407
31-Aug-04	270	1.886792453	1.48652438	2.209754731	5346	0.3001876	-0.013799146	0.0001904	-0.0205128
1-Sep-04	259.5	-3.888888889	-4.289156962	18.39686745	5320	-0.486345	-0.800331694	0.6405308	3.43274826
2-Sep-04	260	0.192678227	-0.207589846	0.043093544	5328	0.1503759	-0.163610823	0.0267685	0.03396395
3-Sep-04	260	0	-0.400268073	0.160214531	5319	-0.168919	-0.482905682	0.2331979	0.19329173
6-Sep-04	247	-5	-5.400268073	29.16289526	5195	-2.331265	-2.645252039	6.9973583	14.2850701
7-Sep-04	235.05	-4.83805668	-5.238324753	27.44004622	5169	-0.500481	-0.814467995	0.6633581	4.26644786
8-Sep-04	223.3	-4.998936397	-5.39920447	29.15140891	5199	0.5803831	0.26639629	0.070967	-1.438328
9-Sep-04	229.9	2.955665025	2.555396951	6.530053579	5184	-0.288517	-0.602503786	0.3630108	-1.5396363
10-Sep-04	220	-4.306220096	-4.706488169	22.15103089	5172	-0.231481	-0.545468245	0.2975356	2.56723984
13-Sep-04	219	-0.454545455	-0.854813528	0.730706167	5087	-1.643465	-1.957451574	3.8316167	1.67325609
20-Sep-04	215.05	-1.803652968	-2.203921041	4.857267957	5045	-0.825634	-1.139620732	1.2987354	2.51163411
22-Sep-04	210	-2.348291095	-2.748559168	7.554577502	4890	-3.072349	-3.386335623	11.467269	9.30754382
23-Sep-04	209	-0.476190476	-0.87645855	0.768179589	4971	1.6564417	1.342454955	1.8021853	-1.1766061
24-Sep-04	210.05	0.502392344	0.102124271	0.010429367	5081	2.2128344	1.898847677	3.6056225	0.19391844
27-Sep-04	224	6.641275887	6.241007813	38.95017853	5125	0.8659713	0.551984502	0.3046869	3.44493959
28-Sep-04	212.8	-5	-5.400268073	29.16289526	5128	0.0585366	-0.255450178	0.0652548	1.37949944
29-Sep-04	209.9	-1.362781955	-1.763050028	3.108345402	5196	1.326053	1.012066279	1.0242782	-1.7843235
30-Sep-04	210	0.047641734	-0.352626339	0.124345335	5218	0.4234026	0.109415854	0.0119718	-0.0385829
1-Oct-04	199.5	-5	-5.400268073	29.16289526	5246	0.5366041	0.2226173	0.0495585	-1.2021931
4-Oct-04	185	-7.268170426	-7.668438499	58.80494902	5268	0.4193671	0.105380374	0.0111105	-0.8081029
5-Oct-04	184	-0.540540541	-0.940808614	0.885120848	5233	-0.664389	-0.978375525	0.9572187	0.92046412
6-Oct-04	180	-2.173913043	-2.574181117	6.626408422	5300	1.2803363	0.966349564	0.9338315	-2.4875588
7-Oct-04	180	0	-0.400268073	0.160214531	5296	-0.075472	-0.389458461	0.1516779	0.15588779
8-Oct-04	180	0	-0.400268073	0.160214531	5343	0.8874622	0.573475473	0.3288741	-0.2295439
11-Oct-04	178	-1.111111111	-1.511379184	2.284267039	5372	0.5427662	0.228779473	0.05234	-0.3457725
12-Oct-04	180	1.123595506	0.723327432	0.523202574	5421	0.912137	0.598150244	0.3577837	0.43265848
13-Oct-04	190	5.555555556	5.155287482	26.57698902	5446	0.4611695	0.147182763	0.0216628	0.75876945
14-Oct-04	200	5.263157895	4.862889821	23.64769742	5470	0.4406904	0.126703652	0.0160538	0.6161459
15-Oct-04	210	5	4.599731927	21.1575338	5433	-0.676417	-0.990403582	0.9808993	-4.555591
18-Oct-04	225.75	7.5	7.099731927	50.40619343	5381	-0.957114	-1.271100696	1.615697	-9.0244742
19-Oct-04	230	1.882613511	1.482345437	2.197347995	5467	1.5982159	1.284229182	1.6492446	1.90367127
20-Oct-04	228	-0.869565217	-1.269833291	1.612476586	5465	-0.036583	-0.350569898	0.1228993	0.44516533
21-Oct-04	219	-3.947368421	-4.347636494	18.90194309	5453	-0.219579	-0.533565903	0.2846926	2.31975059
22-Oct-04	235.4	7.488584475	7.088316402	50.24422941	5458	0.0916926	-0.222294117	0.0494147	-1.575691
25-Oct-04	236	0.254885302	-0.145382772	0.02113615	5468	0.1832173	-0.130769467	0.0171007	0.01901163
26-Oct-04	225	-4.661016949	-5.061285022	25.61660608	5390	-1.426481	-1.740468109	3.0292292	8.80900517
29-Oct-04	225	0	-0.400268073	0.160214531	5332	-1.076067	-1.390053553	1.9322489	0.55639406
1-Nov-04	215	-4.444444444	-4.844712518	23.47123938	5247	-1.594149	-1.9081353	3.6409803	9.24436697
2-Nov-04	205	-4.651162791	-5.051430864	25.51695377	5330	1.5818563	1.267869536	1.6074932	-6.4045553
3-Nov-04	212.55	3.682926829	3.282658756	10.77584851	5352	0.412758	0.098771211	0.0097558	0.32423218
4-Nov-04	207	-2.611150318	-3.011418391	9.068640725	5348	-0.074738	-0.388725179	0.1511073	1.17061415
5-Nov-04	207	0	-0.400268073	0.160214531	5352	0.0747943	-0.239192447	0.057213	0.0957411
8-Nov-04	210	1.449275362	1.049007289	1.100416292	5379	0.5044843	0.190497542	0.0362893	0.19983331
10-Nov-04	222	5.714285714	5.314017641	28.23878349	5427	0.8923592	0.578372411	0.3345146	3.0734812
12-Nov-04	227	2.252252252	1.851984179	3.429845399	5484	1.050304	0.736317272	0.5421631	1.36364794
18-Nov-04	225	-0.881057269	-1.281325342	1.641794632	5515	0.5652808	0.251294054	0.0631487	-0.3219894
19-Nov-04	228	1.333333333	0.93306526	0.870610779	5520	0.0906618	-0.223324932	0.049874	-0.2083767
22-Nov-04	225.5	-1.096491228	-1.496759301	2.240288406	5503	-0.307971	-0.621957778	0.3868315	0.93092109
23-Nov-04	227.5	0.88691796	0.486649887	0.236828112	5514	0.199891	-0.114095795	0.0130179	-0.0555247
24-Nov-04	227	-0.21978022	-0.620048293	0.384459886	5533	0.3445774	0.030590676	0.0009358	-0.0189677
25-Nov-04	225	-0.881057269	-1.281325342	1.641794632	5523	-0.180734	-0.494720542	0.2447484	0.63389797
26-Nov-04	227	0.888888889	0.488620816	0.238750301	5557	0.6156075	0.301620697	0.090975	0.14737815
30-Nov-04	221	-2.643171806	-3.043439879	9.2625263	5568	0.1979485	-0.11603823	0.0134649	0.35315538
1-Dec-04	222	0.452488688	0.052220614	0.002726993	5561	-0.125718	-0.439705154	0.1933406	-0.0229617
2-Dec-04	222	0	-0.400268073	0.160214531	5553	-0.143859	-0.457845781	0.2096228	0.18326105
3-Dec-04	234.9	5.810810811	5.410542737	29.27397271	5576	0.4141905	0.100203765	0.0100408	0.54215675

6-Dec-04	252	7.279693487	6.879425413	47.32649402	5633	1.0222382	0.7082514	0.50162	4.87236268
7-Dec-04	270	7.142857143	6.74258907	45.46250736	5676	0.7633588	0.449372016	0.2019352	3.02993084
8-Dec-04	290	7.407407407	7.007139334	49.10000165	5699	0.4052149	0.091228177	0.0083226	0.63924855
9-Dec-04	290	0	-0.400268073	0.160214531	5738	0.6843306	0.370343821	0.1371545	-0.1482368
10-Dec-04	277	-4.482758621	-4.883026694	23.84394969	5701	-0.644824	-0.958810744	0.919318	4.68189846
13-Dec-04	280	1.083032491	0.682764418	0.46616725	5758	0.9998246	0.685837829	0.4703735	0.46826567
14-Dec-04	275	-1.785714286	-2.185982359	4.778518874	5767	0.1563043	-0.157682491	0.0248638	0.34469114
15-Dec-04	284	3.272727273	2.872459199	8.251021852	5824	0.9883822	0.674395411	0.4548092	1.9371733
16-Dec-04	280	-1.408450704	-1.808718778	3.271463616	5828	0.0686813	-0.245305444	0.0601748	0.44368856
17-Dec-04	275	-1.785714286	-2.185982359	4.778518874	5843	0.2573782	-0.056608589	0.0032045	0.12374538
20-Dec-04	284.95	3.618181818	3.217913745	10.35496887	5853	0.171145	-0.142841803	0.0204038	-0.4596526
21-Dec-04	277	-2.789963151	-3.190231225	10.17757527	5874	0.3587904	0.044803601	0.0020074	-0.1429338
23-Dec-04	276.95	-0.018050542	-0.418318615	0.174990464	5978	1.7705141	1.456527367	2.121472	-0.6092925
24-Dec-04	290	4.712041885	4.311773811	18.5913934	6046	1.1375042	0.823517419	0.6781809	3.55082084
27-Dec-04	284.95	-1.74137931	-2.141647384	4.586653516	6046	0	-0.313986763	0.0985877	0.67244893
28-Dec-04	277.05	-2.772416213	-3.172684287	10.06592558	6078	0.5292756	0.215288791	0.0463493	-0.6830434
29-Dec-04	277.8	0.270709258	-0.129558815	0.016785487	6124	0.7568279	0.442841141	0.1961083	-0.057374
30-Dec-04	285	2.591792657	2.191524583	4.802779999	6107	-0.277596	-0.591583105	0.3499706	-1.2964689
31-Dec-04	306	7.368421053	6.968152979	48.55515594	6218	1.8175864	1.503599613	2.2608118	10.4773121
3-Jan-05	300	-1.960784314	-2.361052387	5.574568374	6220	0.0321647	-0.28182208	0.0794237	0.66539669
4-Jan-05	305	1.666666667	1.266398593	1.603765397	6298	1.2540193	0.94003253	0.8836612	1.19045587
5-Jan-05	301	-1.31147541	-1.711743483	2.930065752	6286	-0.190537	-0.504523441	0.2545439	0.86361471
6-Jan-05	286	-4.983388704	-5.383656778	28.9837603	6353	1.0658606	0.75187388	0.5653143	-4.0478309
10-Jan-05	276.25	-3.409090909	-3.809358982	14.51121586	6484	2.0620179	1.748031181	3.055613	-6.6588783
11-Jan-05	280.05	1.375565611	0.975297538	0.951205287	6710	3.4855028	3.171516013	10.058514	3.09317176
19-Jan-05	286.2	2.196036422	1.795768349	3.224783962	6746	0.5365127	0.222525905	0.0495178	0.39960498
25-Jan-05	288	0.628930818	0.228662744	0.052286651	6888	2.1049511	1.790964319	3.2075532	0.40952682
26-Jan-05	305	5.902777778	5.502509704	30.27761305	6905	0.246806	-0.067180724	0.0045132	-0.3696626
27-Jan-05	310	1.639344262	1.239076189	1.535309802	6953	0.6951484	0.38116168	0.1452842	0.47228836
28-Jan-05	308	-0.64516129	-1.045429364	1.092922554	6798	-2.229254	-2.543240323	6.4680713	2.65877811
31-Jan-05	300	-2.597402597	-2.997670671	8.98602945	6747	-0.750221	-1.064207416	1.1325374	3.19014336
1-Feb-05	300	0	-0.400268073	0.160214531	6869	1.8082111	1.494224294	2.2327062	-0.5980903
2-Feb-05	302	0.666666667	0.266398593	0.070968211	6950	1.1792109	0.865224185	0.7486129	0.23049451
3-Feb-05	298	-1.324503311	-1.724771385	2.974836329	7015	0.9352518	0.621265035	0.3859702	-1.0715402
7-Feb-05	283.1	-5	-5.400268073	29.16289526	7091	1.0833927	0.769405967	0.5919855	-4.1549985
8-Feb-05	295	4.203461674	3.803193601	14.46428157	7155	0.9025525	0.588565768	0.3464097	2.23842956
9-Feb-05	300	1.694915254	1.294647181	1.676111323	7157	0.0279525	-0.286034282	0.0818156	-0.3703135
10-Feb-05	299.95	-0.016666667	-0.41693474	0.173834577	7197	0.5588934	0.244906628	0.0599793	-0.1021101
11-Feb-05	299.95	0	-0.400268073	0.160214531	7239	0.5835765	0.269589727	0.0726786	-0.1079082
14-Feb-05	297	-0.98349725	-1.383765323	1.914806469	7342	1.4228485	1.108861697	1.2295743	-1.5344044
15-Feb-05	297	0	-0.400268073	0.160214531	7403	0.8308363	0.516849521	0.2671334	-0.2068784
16-Feb-05	297	0	-0.400268073	0.160214531	7509	1.431852	1.117865189	1.2496226	-0.4474457
17-Feb-05	285	-4.04040404	-4.440672114	19.71956882	7580	0.945532	0.631545265	0.3988494	-2.8044854
24-Feb-05	280	-1.754385965	-2.154654038	4.642534024	8253	8.878628	8.564641205	73.353079	-18.453839
25-Feb-05	280	0	-0.400268073	0.160214531	8285	0.3877378	0.073751029	0.0054392	-0.0295202
7-Mar-05	264.1	-5.678571429	-6.078839502	36.95228969	8863	6.9764635	6.662476725	44.388596	-40.500127
8-Mar-05	265	0.340780008	-0.059488066	0.00353883	9219	4.0166986	3.702711872	13.710075	-0.2202672
9-Mar-05	283	6.79245283	6.392184757	40.86002597	9588	4.0026033	3.688616556	13.605892	23.5783185
11-Mar-05	270	-4.593639576	-4.993907649	24.93911361	9604	0.1668753	-0.147111502	0.0216418	0.73466126
21-Mar-05	256.5	-5	-5.400268073	29.16289526	9098	-5.268638	-5.582624831	31.1657	30.1476706
24-Mar-05	243.7	-4.990253411	-5.390521485	29.05772188	8314	-8.617279	-8.931265286	79.7675	48.1441774
28-Mar-05	235	-3.569963069	-3.970231143	15.76273533	7708	-7.28891	-7.602897035	57.804043	30.1852586
30-Mar-05	240	2.127659574	1.727391501	2.983881398	8086	4.9039958	4.590009085	21.068183	7.92874268
31-Mar-05	228	-5	-5.400268073	29.16289526	7770	-3.907989	-4.22197588	17.82508	22.7998016
1-Apr-05	228	0	-0.400268073	0.160214531	7597	-2.226512	-2.54049899	6.4541351	1.01688064
4-Apr-05	234	2.631578947	2.231310874	4.978748217	8050	5.9628801	5.648893321	31.909996	12.6044371
5-Apr-05	234	0	-0.400268073	0.160214531	7821	-2.84472	-3.15870726	9.9774316	1.26432967
6-Apr-05	234	0	-0.400268073	0.160214531	7614	-2.64672	-2.960707131	8.7657867	1.18507654
7-Apr-05	234	0	-0.400268073	0.160214531	7784	2.2327292	1.91874242	3.6815725	-0.7680113
11-Apr-05	229.1	-2.094017094	-2.494285167	6.221458496	7244	-6.937307	-7.25129406	52.581266	18.0867952
18-Apr-05	235	2.575294631	2.175026558	4.730740527	7234	-0.138045	-0.452032042	0.204333	-0.9831817
26-Apr-05	235	0	-0.400268073	0.160214531	7165	-0.953829	-1.267815903	1.6073572	0.50746623
2-May-05	230	-2.127659574	-2.527927648	6.390418192	6833	-4.633636	-4.947622492	24.478968	12.5072317
4-May-05	230.1	0.043478261	-0.356789812	0.12729897	6899	0.9659008	0.651914013	0.4249919	-0.2325963
5-May-05	230	-0.043459365	-0.443727439	0.19689404	7098	2.884476	2.570489248	6.607415	-1.1405966
10-May-05	230	0	-0.400268073	0.160214531	7368	3.8038884	3.489901656	12.179414	-1.3968962
11-May-05	235	2.173913043	1.77364497	3.14581648	7498	1.7643865	1.450399773	2.1036595	2.57249426

12-May-05	234	-0.425531915	-0.825799988	0.681945621	7284	-2.854094	-3.168081188	10.036738	2.61620141
18-May-05	234.5	0.213675214	-0.18659286	0.034816895	7348	0.8786381	0.564651348	0.3188311	-0.1053599
26-May-05	224	-4.47761194	-4.877880014	23.79371343	6665	-9.295046	-9.609033034	92.333516	46.8717102
27-May-05	224	0	-0.400268073	0.160214531	6467	-2.970743	-3.284729449	10.789448	1.31477233
8-Jun-05	223	-0.446428571	-0.846696645	0.716895208	7264	12.324107	12.01012024	144.24299	-10.168929
10-Jun-05	225	0.896860987	0.496592913	0.246604521	7345	1.1150881	0.801101343	0.6417634	0.39782125
13-Jun-05	234.5	4.222222222	3.821954149	14.60733352	7442	1.3206263	1.006639513	1.0133231	3.84733006
14-Jun-05	246	4.904051173	4.503783099	20.28406221	7369	-0.980919	-1.294905871	1.6767812	-5.8319752
16-Jun-05	258.3	5	4.599731927	21.1575338	7331	-0.515674	-0.829660532	0.6883366	-3.816216
		0.400268073		22.48998066		0.3139868		8.3423493	3.20118779
				4.742360242				2.8883125	

$$\beta = 0.2337074$$

BASIS FOR PROJECTIONS

	2005	2004	2003	2002	2001	Average
Actual Production	31361599	28433000	26124000	30004000	30789000	
Growth in Production	10.30%	8.84%	-12.93%	-2.55%		9.57%
Price per Unit	0.656364396	0.60871519	0.60274395	0.54119317	0.50232869	
Percentage Change in Price	7.83%	0.99%	11.37%	7.74%		6.98%
COGS per Unit	0.526259838	0.49794549	0.4934912	0.46674267	0.44121664	
Percentage Change in COGS	5.69%	0.90%	5.73%	5.79%		4.53%
NWC	2173278	1716521	1025723	788222	438129	
NWC as a Percentage of Sales	10.56%	9.92%	6.51%	4.85%	2.83%	
		0.64%	3.40%	1.66%	2.02%	1.90%
Capital Expenditure as a Percentage of Property	8.73%	5.73%	6.59%	5.31%	4.95%	6.59%
Depreciation as a Percentage of PPE	26.02%	12.38%	10.97%	12.06%	13.34%	15.36%
PPE as a Percentage of Sales	9.78%	8.48%	6.67%	5.97%	6.11%	7.73%
Distribution and Marketing Expenses as a Percentage of Sales	5.18%	5.11%	1.70%	5.00%	5.89%	4.25%
Administrative Expenses as a Percentage of Sales	1.34%	1.10%	7.50%	1.27%	1.30%	2.80%
Other Operating Expenses	213117					
Other Income	73.96%	-2.89%	19.11%	183.87%		68.51%
Financial Charges	9079					
Tax as a Percentage of PBT	34.48%	33.77%	34.16%	30.19%	34.75%	33.47%
Dividend Payout Ratio	49.94%	50.20%	52.41%	49.96%	49.66%	50.43%
Retention Ratio	50.06%	49.80%	47.59%	50.04%	50.34%	49.57%
ROE	40.65%	41.30%	44.67%	50.73%	35.82%	42.63%
Growth Rate	20.35%	20.57%	21.26%	25.38%	18.04%	21.12%
Share Capital	20.00%	20.00%				

WACC

Market Risk Premium	8.00%
Equity Risk Premium	1.87%
Cost of Equity	11.87%
WACC	11.87%

PROJECTED FCFF AND FCFE

	2006	2007	2008	2009	2010
Projected Units	34362687	37650958	41253894	45201607	49527088
Sales	23136349	26004376	29227930	32851081	36923365
Cost of Sales	18508669	20756396	23277092	26103905	29274012
Gross Profit	4627680	5247980	5950838	6747176	7649353
Distribution and Marketing Expenses	982911	1104755	1241702	1395626	1568631
Administrative Expenses	648360	728731	819066	920600	1034719
	1631271	1833486	2060769	2316226	2603350
	2996409	3414493	3890069	4430950	5046003
Other Operating Expenses	258125	312638	378664	458633	555491
	2738284	3101855	3511405	3972317	4490512
Other Operating Income	11753	11753	11753	11753	11753
Operating Profit	2750038	3113609	3523159	3984070	4502266
Financial Charges	10996	13319	16131	19538	23664
Profit Before Taxation	2739041	3100290	3507027	3964532	4478601
Taxation	916718	1037623	1173752	1326873	1498925
Profit After Taxation	1822323	2062667	2333275	2637659	2979677
Earning Per Share	29.59	33.50	38.97	52.87	59.72
NWC	2882548	3734267	4752853	5966588	7408202
Changes in NWC	709270	851719	1018586	1213735	1441614
PPE	1787521	2009106	2258159	2538085	2852711
Capex	117842	132450	148869	167323	188065
Depreciation	274497	308524	346770	389756	438071
FCFF	1258711	1373703	1496458	1626819	1764404
PV of FCFF	1125159	1097661	1068877	1038700	1007016
TV	17465606				
PV of TV	9968323				
EV	15305736				
Fair Price	249				

Balance Sheet 2001-2005

	2005	2004	2003	2002
Total Fixed Assets				
Property, Plant and Equipment	3,798,190	3,564,407	3410888	3013212
Deffered Taxation				
Investment In Subsidiary Company	5,000	5,000	5000	5000
Long Term Loans	17,782	16,324	16481	9996
Long Term Deposits and Prepayments	11,365	4,433	6934	14898
Current Assets				
Stocks	3,780,931	3,074,052	3227503	3219541
Stores and spares	125,232	121,464	127381	147177
Trade debts	2,894	12,486	145749	93086
Loans and advances	32,676	32,273	62826	21701
Prepayments	31,987	36,003	243875	113902
Other receivables	104,791	119,126		
Income Tax Refundables			4050	
Cash and bank balances	57,605	39,197	48069	31894
Total Current Assets	4,136,116	3,434,601	3,859,453	3,627,301
Total Assets	7,968,453	7,024,765	7,298,756	6,670,407
Current Liabilities				
Trade and other payables	2,515,824	2,056,298	2284001	1858503
Interest accrued	10,911	5,041		
Current Portion of Long Term Loans			200000	370000
Short term finance	400,662	996,579	1335539	1129374
Dividend Payable				204395
Income tax payable	676,969	79,549		
Total Current Liabilities	3,604,366	3,137,467	3,819,540	3,562,272
Financed By:				
Share Capital				
Authorised capital 300,000,000 ordinary shares of Rs 10 each	3,000,000	3,000,000	3000000	3000000
Issued, subscribed and paid-up capital	2,554,938	2,554,938	2554938	2554938
Revenue Reserves	1,084,476	707,885	553646	232565
Shareholders' Equity	3,639,414	3,262,823	3108584	2787503
Long Term Loans				200000
Deferred Taxation	724,673	624,475	370632	120632
Commitments and Contingencies				
Total Capital	4,364,087	3,887,298	3,479,216	3,108,135
Total Capital and Liabilities	7,968,453	7,024,765	7,298,756	6,670,407

2001

2815068
149077
5000
9310
21128

3322753
140813
48710
32725
144363

69063
3,758,427
6,758,010

1869300

200000
1747115

3,816,415

3000000
2554938
16657
2571595
370000

2,941,595
6,758,010

P & L 2001-2005

	2005	2004	2003	2002	2001
Gross turnover	30,615,062	25,452,634	22,572,247	20,555,500	19,879,795
Sales tax	4,103,324	3,413,146			
Turnover - net of sales tax	26,511,738	22,039,488	22,572,247	20,555,500	19,879,795
Cost of sales	21,982,134	18,556,867	19,700,706	18,050,674	17,896,366
Gross Profit	4,529,604	3,482,621	2,871,541	2,504,826	1,983,429
Marketing and distribution expenses	1,578,656	1,442,356	1,466,095	1,187,661	983,747
Administration expenses	573,285	595,637	395,178	365,103	356,362
	2,151,941	2,037,993	1,861,273	1,552,764	1,340,109
Operating Profit	2,377,663	1,444,628	1,010,268	952,062	643,320
Other income	34,417	14,590	6,717	11,863	6,632
Other expenses	284,665	366,637	310,335	384,18	56,614
	2,127,415	1,092,581	706,650	925,507	593,338
Finance cost	45,351	36,542	9,195	19,556	24,151
Profit Before Taxation	2,082,064	1,056,039	614,695	729,941	352,187
Tax charge	760,145	390,812	293,614	309,638	-15,17
Profit After Taxation	1,321,919	665,227	321,081	420,303	353,704
Earnings per share (Rupees)	5.17	2.6	1.26	1.65	1.38
		0.9871698	1.0718355		
EBITDA	2,804,550	1,834,838	1,354,208	1,258,163	913,303
Sum Of Depreciation and Amortization					
Cost of Sales Depreciation Part	257,590	226,389	196,226	178,168	168,730
Raw Material Purchases and Expenses	86,628	83,941	78,362	74,174	58,172
Marketing and Distribution Expenses	39,607	39,940	34,676	21,504	17,232
Administration Expenses	43,062	39,940	34,676	32,255	25,849
SUM	426,887	390,210	343,940	306,101	269,983
Purchases					
Purchases in Raw material	5,325,193	3,657,756	3,454,489	3,262,235	4,217,727
Account payable(creditors)	669,765	426,663	957,129	676,882	672,080

Ratio Analysis

	2005	2004	2003	2002	2001
Quick Ratio	0.063798	0.076203	0.132102	0.073151	0.077261
Cash Ratio	0.015982	0.012493	0.012585	0.008953	0.018096
Gross Profit Ratio	14.8	13.7	12.7	12.2	10
Earnings / (Loss) Per Share After Tax	5.17	2.6	1.26	1.65	1.38
Inventory Turnover Ratio	6.1	7	5.9	5.4	5.2
Fixed Assets Turnover Ratio	8.1	7.1	6.6	6.8	7.1
Total Assets Turnover Ratio	3.8	3.6	3.1	3.1	2.9
Break-up Value Per Share	14.24	12.77	12.17	10.91	10.07
Market Value Per Share at year end	68.95	61.5	27	23.8	10.5
Highest Market Value Per Share during the year	77	61.5	39	32.4	12.4
Lowest Market Value Per Share during the year	47.55	46.4	19.5	10.3	9.25
Payables Turnover	7.950838	8.572939	3.60922	4.819503	6.275632
Days Payable (days)	45.90711	42.57583	101.1299	75.73395	58.16147
Receivables Turnover (x)	9160.932	1765.136	154.8707	220.8227	408.1255
Days Receivables (days)	0.039843	0.206783	2.356805	1.65291	0.894333
Gross Margin (cash basis)	0.170853	0.158017	0.127216	0.121857	0.099771
EBITDA Margin	0.105785	0.083252	0.059994	0.061208	0.045941
EBIT Margin	0.089683	0.065547	0.044757	0.046317	0.03236
Pre-tax Margin	0.078534	0.047916	0.027232	0.035511	0.017716
Net Profit Margin	0.049862	0.030183	0.014225	0.020447	0.017792
Price-Earning Ratio	13.3	23.6	21.4	14.5	7.6
Dividend Per Share	3.7	2	0	0.8	0
Dividend Yield Ratio	5.4	3.3	0	3.4	0
Dividend Payout Ratio	71.5	76.9	0	48.5	0
Return on Capital Employed	30.3	17.1	9.2	13.5	12
Debt to Equity Ratio	0.3	0.3	0.5	0.6	0.9
Current Ratio	1.1	1.1	1	1	1
Interest Cover	46.9	29.9	7.7	4.7	2.5
Government Levies as a Percentage of Turnover	62.5	64	64	63.1	64.6

Average

0.084503

0.013622

12.68

2.412

5.92

7.14

3.3

12.032

38.35

44.46

26.6

6.245627

64.70165

2341.977

1.030135

0.135543

0.071236

0.055733

0.041382

0.026502

16.08

1.3

2.42

39.38

16.42

0.52

1.04

18.34

63.64

	2001	2002	2003	2004
Gross turnover	19879795	20555500	22572247	25,452,634
Sales tax				3,413,146
Turnover - net of sales tax	19,879,795	20,555,500	22,572,247	22,039,488
Cost of sales	17896366	18050674	19700706	18,556,867
Gross Profit	1,983,429	2,504,826	2,871,541	3,482,621
Marketing and distribution expenses	983747	1187661	1466095	1,442,356
Administration expenses	356362	365103	395178	595,637
	1,340,109	1,552,764	1,861,273	2,037,993
Operating Profit	643,320	952,062	1,010,268	1,444,628
Other income	6632	11863	6717	14,590
Other expenses	56614	38418	310335	366,637
	593,338	925,507	706,650	1,092,581
Finance cost	241151	195566	91955	36,542
Profit Before Taxation	352,187	729,941	614,695	1,056,039
Tax charge	-1517	309638	293614	390,812
Profit After Taxation	353,704	420,303	321,081	665,227
Earnings per share (Rupees)	1.38	1.65	1.26	2.6

EBITDA	913,303	1,258,163	1,354,208	1,834,838
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Cost of Sales Depreciation Part	168730	178168	196226	226,389
Raw Material Purchases and Expenses	58172	74174	78362	83,941
Marketing and Distribution Expenses	17232	21504	34676	39,940
Administration Expenses	25849	32255	34676	39,940
SUM	269,983	306,101	343,940	390,210

Purchases

Purchases in Raw material	4217727	3262235	3454489	3,657,756
Accounts payable(creditors)	672080	676882	957129	426,663

Basis for Projections

	2001	2002	2003	2004
Actual production	27,710,000	24110000	24639000	27001000
Cost Per cigarette	0.645845038	0.748679967	0.79957409	0.687265916
Price Per Cigarette	0.717423132	0.852571547	0.916118633	0.942655235

Growth in Cost Per Cigarette		15.92%	6.80%	-14.05%
Growth in Price Per Cigarette		18.84%	7.45%	2.90%
Increase in units Percentage		-12.99%	2.19%	9.59%
				7.39%
Marketing and distribution projections	4.95%	5.78%	6.50%	5.67%
Admin Exp Projections	1.79%	1.78%	1.75%	2.34%
Other income Projections		78.88%	-43.38%	117.21%
Other Expenses Carry over	284,665			
Financial Cost Carry over	45,351			

Tax Average projection		42.42%	47.77%	37.01%
Property Plant Equipment	14.16%	14.66%	15.11%	14.00%
Depreciation Percentage of PPE	9.59%	10.16%	10.08%	10.95%
Capex	135410	87641	373317	235953
Capex as percentage of PPE	4.81%	2.91%	10.94%	6.62%
Net working Capital	-57988	65029	39913	297134
NWC as a percentage of Sales	-0.29%	0.32%	0.18%	1.17%

	2001	2002	2003	2004
Total Fixed Assets				
Property, Plant and Equipment	2815068	3013212	3410888	3,564,407
Deffered Taxation	149077			
Investment In Subsidiary Company	5000	5000	5000	5,000
Long Term Loans	9310	9996	16481	16,324
Long Term Deposits and Prepayments	21128	14898	6934	4,433

Current Assets

Stocks	3322753	3219541	3227503	3,074,052
Stores and spares	140813	147177	127381	121,464
Trade debts	48710	93086	145749	12,486
Loans and advances	32725	21701	62826	32,273
Prepayments	144363	113902	243875	36,003
Other receivables				119,126
Income Tax Refundables			4050	
Cash and bank balances	69063	31894	48069	39,197
Total Current Assets	3,758,427	3,627,301	3,859,453	3,434,601
Total Assets	6,758,010	6,670,407	7,298,756	7,024,765

Current Liabilities

Trade and other payables	1869300	1858503	2284001	2,056,298
Interest accrued				5,041
Current Portion of Long Term Loans	200000	370000	200000	
Short term finance	1747115	1129374	1335539	996,579
Dividend Payable		204395		
Income tax payable				79,549
Total Current Liabilities	3,816,415	3,562,272	3,819,540	3,137,467

Financed By:

Share Capital				
Authorised capital 300,000,000 ordinary shares	3000000	3000000	3000000	3,000,000
Issued, subscribed and paid-up capital	2554938	2554938	2554938	2,554,938
Revenue Reserves	16657	232565	553646	707,885
Shareholders' Equity	2571595	2787503	3108584	3,262,823
Long Term Loans	370000	200000		
Deferred Taxation		120632	370632	624,475
Commitments and Contingencies				
Total Capital	2,941,595	3,108,135	3,479,216	3,887,298
Total Capital and Liabilities	6,758,010	6,670,407	7,298,756	7,024,765

Depreciation And Capex has been taken as a percentage of Property Plant And Equipment

2005		2006
		39802220
30,615,062	Gross Sales	39360127
4,103,324	0.134029583 Sales Tax	5275421
26,511,738	Net Sales	34084706
21,982,134	Cost of Sales	28196814
4,529,604	Gross Profit	5887892
1,578,656	Marketing and distribution expenses	1911792
573,285	Administration expenses	649806
2,151,941		2561598
2,377,663	Operating Profit	3326294
34,417	Other income	59249
284,665	Other expenses	284665
2,127,415		3100878
45,351	Finance cost	45351
2,082,064	Profit Before Taxation	3055527
760,145	Tax charge	1250489
1,321,919	Profit After Taxation	1805037
5.17	Earnings per share (Rupees)	7

FCFF=Net income + Depreciation + amortization - changes in net v

2,804,550	FCFF	1791844
	DFCFF	1602686
257,590	EV	22224540
86,628	Fair Value/Share	68.9
39,607		
43,062		
426,887		

5,325,193
669,765

2005	Average
31758000	
0.692176271	
0.964011021	
0.71%	2.35%
2.27%	2.58%
17.62%	4.10%
8.03%	7.71%
5.16%	5.61%
1.87%	1.91%
135.89%	72.15%

36.51%	40.93%	
12.41%	14.07%	4795083.827
11.24%	10.40%	498875.5608
49615		
1.31%	5.32%	254998.5711
531750		
1.74%	0.62%	211719.0787

2005

3,798,190

5,000

17,782

11,365

3,780,931

125,232

2,894

32,676

31,987

104,791

57,605

4,136,116

7,968,453

2,515,824

10,911

400,662

676,969

3,604,366

3,000,000

2,554,938

1,084,476

3,639,414

724,673

4,364,087

7,968,453

Projected FCFF and Fair Value

2007	2008	2009	2010
42251358	44700496	47149635	49598773
42860483	46515311	50330253	54311139
5744573	6234428	6745743	7279299
37115911	40280884	43584510	47031840
30634405	33170892	35809575	38553854
6481506	7109992	7774935	8477985
2081810	2259332	2444631	2637989
707595	767933	830915	896636
2789405	3027265	3275545	3534626
3692101	4082726	4499389	4943360
101997	175589	302276	520369
284665	284665	284665	284665
3509433	3973650	4517001	5179064
45351	45351	45351	45351
3464082	3928299	4471650	5133713
1417692	1607675	1830044	2100997
2046390	2320624	2641605	3032716
8	9	10	12
working capital - Capex			
2036056	2313276	2637375	3031738
1628869	1655283	1687970	1735533

5221517.984	5666770.779	6131529.571	6616504.661
543241.3292	589564.9695	637917.9934	688374.3
277675.985	301354.1585	326069.6446	351860.2166
230547.5809	250206.9894	270727.6532	292140.9346

Terminal Value 24306198
 13914198

Growth Rate Calculation

	2001	2002	2003	2004	2005	
Growth =						Retention Ratio * ROE
Dividends paid		204395	255494	306593	638735	
Net income	353,704	420,303	321,081	665,227	1,321,919	
Dividend payout Ratio	0	0.486304	0.795731	0.4608848	0.483188	
Retention Ratio	1	0.513696	0.204269	0.5391152	0.516812	
ROE	0.137543	0.150781	0.103289	0.2038808	0.363223	
Growth	0.137543	0.077456	0.021099	0.1099152	0.187718	Average Taken

Market price went to Rs.75 on 11th may 2006 but has recently declined due to the slump in the stock

0.106746
0.019

market to Rs.62

WACC

Market Risk Premium	8.00%
Equity Risk Premium	1.80%
Cost of Equity	11.80%
WACC	11.80%

Date	Closing	Returns %	R - ER	[R - ER] ²		KSE 100 INDEX	Returns %	R - ER	[R - ER] ²	X
3-Jul-01	10.2	0				1334				
4-Jul-01	10.35	1.470588235	1.186270767	1.40723833		1337	0.224888	-0.00353	1.24867E-05	-0.00419
9-Jul-01	10.05	-2.898550725	-3.18286819	10.1306499		1300	-2.76739	-2.99581	8.974882835	9.535271
18-Jul-01	9.5	-5.472636816	-5.75695428	33.1425226		1290	-0.76923	-0.99765	0.995309457	5.743437
19-Jul-01	10	5.263157895	4.978840426	24.788852		1284	-0.46512	-0.69354	0.480994239	-3.45301
24-Jul-01	9.5	-5	-5.28431747	27.9240111		1277	-0.54517	-0.77359	0.598445421	4.087909
31-Jul-01	9.25	-2.631578947	-2.91589642	8.50245191		1229	-3.75881	-3.98723	15.89801035	11.62635
1-Aug-01	9.4	1.621621622	1.337304153	1.7883824		1248	1.545972	1.317551	1.735940987	1.761967
2-Aug-01	10.5	11.70212766	11.41781019	130.36639		1248	0	-0.22842	0.052176246	-2.60807
3-Aug-01	9.5	-9.523809524	-9.80812699	96.1993551		1253	0.400641	0.17222	0.029659667	-1.68915
8-Aug-01	9.25	-2.631578947	-2.91589642	8.50245191		1234	-1.51636	-1.74478	3.044264007	5.087603
9-Aug-01	9.25	0	-0.28431747	0.08083642		1223	-0.89141	-1.11983	1.254022031	0.318388
15-Aug-01	10	8.108108108	7.82379064	61.21117		1268	3.679477	3.451055	11.90978402	27.00034
16-Aug-01	10	0	-0.28431747	0.08083642		1291	1.81388	1.585459	2.513679998	-0.45077
20-Aug-01	10.7	7	6.715682531	45.1003919		1282	-0.69713	-0.92556	0.856652442	-6.21573
21-Aug-01	10.1	-5.607476636	-5.8917941	34.7132378		1283	0.078003	-0.15042	0.0226256	0.886232
27-Aug-01	10.15	0.495049505	0.210732036	0.04440799		1270	-1.01325	-1.24167	1.541747859	-0.26166
31-Aug-01	10.25	0.985221675	0.700904206	0.49126671		1258	-0.94488	-1.1733	1.376640147	-0.82237
3-Sep-01	10.25	0	-0.28431747	0.08083642		1250	-0.63593	-0.86435	0.747103084	0.24575
5-Sep-01	10.5	2.43902439	2.154706922	4.64276192		1241	-0.0292	-0.94842	0.899502778	-2.04357
6-Sep-01	10.5	0	-0.28431747	0.08083642		1246	0.402901	0.17448	0.03044316	-0.04961
7-Sep-01	10.4	-0.952380952	-1.23669842	1.52942298		1247	0.080257	-0.14816	0.021952684	0.183235
10-Sep-01	10	-3.846153846	-4.13047131	17.0607933		1256	0.721732	0.493311	0.243355698	-2.03761
11-Sep-01	10.2	2	1.715682531	2.94356655		1256	0	-0.22842	0.052176246	-0.3919
27-Sep-01	10.15	-0.490196078	-0.77451355	0.59987123		1130	-10.0318	-10.2603	105.2731063	7.946717
28-Sep-01	10	-1.477832512	-1.76214998	3.10517256		1133	0.265487	0.037066	0.001373853	-0.06532
15-Oct-01	10.25	2.5	2.215682531	4.90924908		1238	9.267432	9.03901	81.70370892	20.02758
19-Oct-01	12	17.07317073	16.78885326	281.865594		1267	2.342488	2.114067	4.469277932	35.49276
22-Oct-01	13.5	12.5	12.1568253	149.2229		1351	6.629834	6.401413	40.97808906	78.19763
23-Oct-01	13	-3.703703704	-3.98802117	15.9043129		1360	0.666173	0.437752	0.191626816	-1.74576
24-Oct-01	13	0	-0.28431747	0.08083642		1400	2.941176	2.712755	7.359041144	-0.77128
30-Oct-01	12.4	-4.615384615	-4.89970208	24.0070805		1412	0.857143	0.628722	0.395290919	-3.08055
2-Nov-01	12.1	-2.419354839	-2.70367231	7.30984395		1400	-0.84986	-1.07828	1.162686809	2.915315
12-Nov-01	12.75	5.371900826	5.087583358	25.8835044		1369	-2.21429	-2.44271	5.966817082	-12.4275
27-Nov-01	12.15	-4.705882353	-4.99019982	24.9020943		1373	0.292184	0.063763	0.004065704	-0.31819
28-Nov-01	11.55	-4.938271605	-5.2258907	27.2754366		1376	0.2185	-0.00992	9.84375E-05	0.051816
29-Nov-01	11	-4.761904762	-5.04622223	25.4643588		1358	-1.30814	-1.53656	2.3610189	7.753827
1-Dec-01	10.5	-4.545454545	-4.82977201	23.3266977		1355	-0.22091	-0.44933	0.201901322	2.170182
4-Dec-01	10.5	0	-0.28431747	0.08083642		1366	0.811808	0.583387	0.340340293	-0.16587
5-Dec-01	10.05	-4.285714286	-4.57003175	20.8851902		1374	0.585652	0.35723	0.127613512	-1.63255
8-Dec-01	10.5	4.47761194	4.193294472	17.5837185		1383	0.655022	0.426601	0.181988099	1.788862
2-Jan-02	11	4.761904762	4.477587293	20.048788		1331	-3.75994	-3.98836	15.90704227	-17.8582
7-Jan-02	11.5	4.545454545	4.261137077	18.1572892		1398	5.033809	4.805388	23.09175348	20.47642
31-Jan-02	14	21.73913043	21.45481297	460.308999		1620	15.87983	15.65141	244.9665449	335.798
1-Feb-02	14	0	-0.28431747	0.08083642		1671	3.148148	2.919727	8.524805436	-0.83013
4-Feb-02	14.1	0.714285714	0.429968246	0.18487269		1682	0.658288	0.429867	0.18478585	0.184829
6-Feb-02	14.1	0	-0.28431747	0.08083642		1656	-1.54578	-1.7742	3.147785773	0.504436
7-Feb-02	14.25	1.063829787	0.779512319	0.60763945		1723	4.045894	3.817473	14.57309642	2.975767
8-Feb-02	14	-1.754385965	-2.03870343	4.15631169		1785	3.598375	3.369954	11.35658811	-6.87031
11-Feb-02	14	0	-0.28431747	0.08083642		1775	-0.56022	-0.78865	0.621961397	0.224226
12-Feb-02	12.55	-10.35714286	-10.6414603	113.240678		1752	-1.29577	-1.5242	2.323172991	16.21967
18-Feb-02	12.25	-2.390438247	-2.67475572	7.15431814		1655	-5.53653	-5.76495	33.23465868	15.41984
20-Feb-02	13.5	10.20408163	9.919764164	98.4017211		1715	3.625378	3.396956	11.53931306	33.69701
21-Feb-02	13.5	0	-0.28431747	0.08083642		1724	0.524781	0.29636	0.087829332	-0.08426
26-Feb-02	13.4	-0.740740741	-1.02505821	1.05074433		1718	-0.34803	-0.57645	0.332293501	0.590894
27-Feb-02	14.1	5.223880597	4.939563128	24.3992839		1759	2.386496	2.158075	4.657286509	10.65995
28-Feb-02	15.25	8.156028369	7.8717109	61.9638325		1766	0.397953	0.169532	0.02874116	1.334508
1-Mar-02	15.7	2.950819672	2.666502204	7.110234		1775	0.509626	0.281205	0.079076292	0.749834
4-Mar-02	15.75	0.318471338	0.034153869	0.00116649		1773	-0.11268	-0.3411	0.11634734	-0.01165
5-Mar-02	15.25	-3.174603175	-3.45892064	11.964132		1787	0.789622	0.561201	0.314946458	-1.94115
6-Mar-02	15	-1.639344262	-1.92366173	3.70047445		1829	2.350308	2.121887	4.50240264	-4.08179
8-Mar-02	15.4	2.666666667	2.382349198	5.6755877		1851	1.202843	0.974422	0.949498002	2.321413
11-Mar-02	15.1	-1.948051948	-2.23236942	4.98347321		1873	1.188547	0.960126	0.921841031	-2.14335
12-Mar-02	16.5	9.271523179	8.98720571	80.7698665		1888	0.800854	0.572433	0.327679587	5.144574
13-Mar-02	17.2	4.242424242	3.958106774	15.6666092		1860	-1.48305	-1.71147	2.929136578	-6.77419
14-Mar-02	17	-1.162790698	-1.44710817	2.09412204		1930	3.763441	3.53502	12.49636398	-5.11556
15-Mar-02	16.6	-2.352941176	-2.63725865	6.95513316		1887	-2.22798	-2.4564	6.033903305	6.478163
18-Mar-02	16.55	-0.301204819	-0.58552229	0.34283635		1861	-1.37785	-1.60627	2.580102154	0.940507
19-Mar-02	16	-3.32326284	-3.60758031	13.0146357		1885	1.289629	1.061208	1.126162481	-3.82839
20-Mar-02	16.3	1.875	1.590682531	2.53027092		1874	-0.58355	-0.81198	0.659304341	-1.2916
21-Mar-02	16.45	0.920245399	0.63592793	0.40440433		1884	0.533618	0.305197	0.093145042	0.194083
22-Mar-02	16.75	1.823708207	1.539390738	2.36972384		1894	0.530786	0.302364	0.091424206	0.465457
26-Mar-02	16.5	-1.492537313	-1.77685478	3.15721292		1866	-1.47835	-1.70677	2.91307713	3.032689
27-Mar-02	16.3	-1.212121212	-1.49643868	2.23932873		1828	-2.03644	-2.26486	5.129603453	3.389228
28-Mar-02	16.5	1.226993865	0.942676396	0.88863879		1852	1.31291	1.084489	1.176116568	1.022322
29-Mar-02	18	9.090909091	8.806591622	77.556056		1868	0.863931	0.63551	0.403872557	5.596674
1-Apr-02	19.5	8.333333333	8.049015865	64.7866564		1847	-1.1242	-1.35262	1.829576008	-10.8872
2-Apr-02	21	7.692307692	7.407990224	54.8783192		1861	0.757986	0.529565	0.280438793	3.92301

3-Apr-02	21.4	1.904761905	1.620444436	2.62584017		3-Apr-02	1870	0.483611	0.25519	0.065121813		0.413521
4-Apr-02	20.5	-4.205607477	-4.48992495	20.159426		4-Apr-02	1853	-0.90909	-1.13751	1.293933804		5.107344
5-Apr-02	22	7.317073171	7.032755702	49.4596528		5-Apr-02	1850	-0.1619	-0.39032	0.152350346		-2.745003
8-Apr-02	23.65	7.5	7.215682531	52.0660744		8-Apr-02	1847	-0.16216	-0.39058	0.152555365		-2.81833
9-Apr-02	25.4	7.399577167	7.115259698	50.6269206		9-Apr-02	1843	-0.21657	-0.44499	0.198014862		-3.16621
10-Apr-02	27.3	7.480314961	7.195997492	51.7823799		10-Apr-02	1826	-0.92241	-1.15083	1.324410421		-8.28137
11-Apr-02	28.75	5.311355311	5.027037843	25.2711095		11-Apr-02	1844	0.985761	0.75734	0.573563912		3.807177
12-Apr-02	29	0.869565217	0.585247749	0.34251493		12-Apr-02	1859	0.813449	0.585028	0.342257552		0.342386
15-Apr-02	27.5	-5.172413793	-5.45673126	29.7759161		15-Apr-02	1884	1.344809	1.116388	1.246321797		-6.09183
16-Apr-02	25.7	-6.545454545	-6.82977201	46.6457858		16-Apr-02	1891	0.37155	0.143129	0.020485822		-0.97754
17-Apr-02	24.2	-5.836575875	-6.12089334	37.4653353		17-Apr-02	1882	-0.47594	-0.70436	0.496122812		4.311312
18-Apr-02	24.25	0.20661157	-0.0777059	0.00603821		18-Apr-02	1878	-0.21254	-0.44096	0.194446651		0.034265
19-Apr-02	23.7	-2.268041237	-2.55235871	6.51453496		19-Apr-02	1864	-0.74547	-0.9739	0.948471687		2.48573
22-Apr-02	23.7	0	-0.28431747	0.08083642		22-Apr-02	1863	-0.05365	-0.28207	0.079563074		0.080197
23-Apr-02	23.25	-1.898734177	-2.18305165	4.76571449		23-Apr-02	1872	0.483092	0.254671	0.064857107		-0.55596
24-Apr-02	23.25	0	-0.28431747	0.08083642		24-Apr-02	1882	0.534188	0.305767	0.093493355		-0.08693
25-Apr-02	24.9	7.096774194	6.812456725	46.4095666		25-Apr-02	1866	-0.85016	-1.07858	1.163336127		-7.34778
26-Apr-02	25.45	2.208835341	1.924517873	3.70376904		26-Apr-02	1856	-0.53591	-0.76433	0.584195585		-1.47096
29-Apr-02	25.5	0.196463654	-0.08785381	0.00771829		29-Apr-02	1901	2.424569	2.196148	4.823064996		-0.19294
30-Apr-02	25	-1.960784314	-2.24510178	5.04048201		30-Apr-02	1899	-0.10521	-0.33363	0.111308302		0.749031
2-May-02	25.55	2.2	1.915682531	3.66983956		2-May-02	1896	-0.15798	-0.3864	0.149304253		-0.74022
3-May-02	25.5	-0.195694716	-0.48001218	0.2304117		3-May-02	1904	0.421941	0.19352	0.037449884		-0.09289
6-May-02	25.9	1.568627451	1.284309982	1.64945213		6-May-02	1884	-1.05042	-1.27884	1.635435252		-1.64243
7-May-02	25.25	-2.50965251	-2.79396998	7.80626824		7-May-02	1845	-2.07006	-2.29848	5.283032822		6.421898
8-May-02	25	-0.99009901	-1.27441648	1.62413736		8-May-02	1790	-2.98103	-3.20945	10.3005758		4.090177
9-May-02	25.15	0.6	0.315682531	0.09965546		9-May-02	1817	1.50838	1.279959	1.638294237		0.404061
10-May-02	26.75	6.361829026	6.077511557	36.9361467		10-May-02	1798	-1.04568	-1.2741	1.623333089		-7.74336
13-May-02	27	0.934579439	0.650261971	0.42284063		13-May-02	1801	0.166852	-0.06157	0.037907076		-0.04004
14-May-02	29	7.407407407	7.123089939	50.7384103		14-May-02	1794	-0.38867	-0.61709	0.380805205		-4.39562
15-May-02	31.15	7.413793103	7.129475635	50.8294228		15-May-02	1814	1.114827	0.886406	0.785715595		6.31961
16-May-02	31.45	0.963081862	0.678764393	0.4607211		16-May-02	1818	0.220507	-0.00791	6.2632E-05		-0.00537
17-May-02	31	-1.430842607	-1.71516008	2.94177409		17-May-02	1780	-2.09021	-2.31863	5.376046114		3.976822
20-May-02	28.8	-7.096774194	-7.38109166	54.4805141		20-May-02	1647	-7.47191	-7.70033	59.29510236		56.83685
21-May-02	27.45	-4.6875	-4.97181747	24.7189689		21-May-02	1598	-2.97511	-3.20353	10.26258816		15.92735
22-May-02	26.15	-4.735883424	-5.02020089	25.202417		22-May-02	1528	-4.38048	-4.6089	21.24192969		23.13759
24-May-02	28.1	7.456978967	7.172661499	51.440773		24-May-02	1663	8.835079	8.606657	74.07455042		61.73264
27-May-02	28.9	2.846975089	2.56265762	6.56721408		27-May-02	1715	3.126879	2.898458	8.40105838		7.427755
28-May-02	28.5	-1.384083045	-1.66840051	2.78356027		28-May-02	1673	-2.44898	-2.6774	7.168475015		4.466977
29-May-02	27.8	-2.456140351	-2.74045782	7.51010906		29-May-02	1700	1.613867	1.385446	1.9194609		-3.79676
30-May-02	27.15	-2.338129496	-2.62244696	6.87722808		30-May-02	1670	-1.76471	-1.99313	3.972555577		5.22687
31-May-02	26.5	-2.394106814	-2.67842428	7.17395664		31-May-02	1663	-0.41916	-0.64758	0.419363586		1.734502
3-Jun-02	25.85	-2.452830189	-2.73714766	7.4919773		3-Jun-02	1648	-0.90198	-1.13041	1.277816749		3.094087
4-Jun-02	25.25	-2.321083172	-2.60540064	6.7881125		4-Jun-02	1676	1.699029	1.470608	2.162687665		-8.33152
5-Jun-02	26	2.97029703	2.685979561	7.2144862		5-Jun-02	1724	2.863962	2.635541	6.946074313		7.079008
6-Jun-02	25.5	-1.923076923	-2.20739439	4.87259		6-Jun-02	1715	-0.52204	-0.75046	0.563194663		1.656568
7-Jun-02	25.25	-0.980392157	-1.26470963	1.59949044		7-Jun-02	1691	-1.39942	-1.62784	2.64985692		2.058743
10-Jun-02	26.5	4.95049505	4.666177581	21.7732132		10-Jun-02	1792	5.972797	5.744376	32.99785516		26.80428
11-Jun-02	26.5	0	-0.28431747	0.08083642		11-Jun-02	1789	-0.16741	-0.39583	0.156682906		0.112542
12-Jun-02	26.85	1.320754717	1.036437248	1.07420217		12-Jun-02	1785	-0.22359	-0.45201	0.204312859		-0.46848
13-Jun-02	28	4.283054004	3.998736535	15.9898939		13-Jun-02	1784	-0.05602	-0.28444	0.080908168		-1.13742
14-Jun-02	29.25	4.464285714	4.179968246	17.4721345		14-Jun-02	1768	-0.89686	-1.12528	1.266260005		-4.70364
17-Jun-02	29.7	1.538461538	1.25414407	1.57287735		17-Jun-02	1766	-0.11312	-0.34154	0.116651877		-0.42834
18-Jun-02	29.4	-1.01010101	-1.29441848	1.6755192		18-Jun-02	1764	-0.11325	-0.34167	0.116739404		0.442266
19-Jun-02	31.35	6.632653061	6.348335593	40.3013648		19-Jun-02	1760	-0.22676	-0.45518	0.207187533		-2.88963
20-Jun-02	32.4	3.349282297	3.064964828	9.3940094		20-Jun-02	1788	1.590909	1.362488	1.856373246		4.175977
21-Jun-02	32.05	-1.080246914	-1.36456438	1.86203595		21-Jun-02	1779	-0.50336	-0.73178	0.535497442		0.998557
24-Jun-02	31.25	-2.496099844	-2.78041731	7.73072043		24-Jun-02	1768	-0.61832	-0.84675	0.716978965		2.354308
25-Jun-02	30.7	-1.76	-2.04431747	4.17923391		25-Jun-02	1776	0.452489	0.224067	0.050206238		-0.45807
26-Jun-02	30	-2.280130293	-2.56444776	6.57639232		26-Jun-02	1775	-0.05631	-0.28473	0.081069754		0.730169
27-Jun-02	29.75	-0.833333333	-1.1176508	1.24914332		27-Jun-02	1767	-0.4507	-0.67913	0.461211347		0.759025
28-Jun-02	29.65	-0.336134454	-0.62045192	0.38496059		28-Jun-02	1770	0.169779	-0.05864	0.003438874		0.036384
1-Jul-02	29.4	-0.84317032	-1.12748779	1.27122871		1-Jul-02	1785	0.847458	0.619036	0.383206095		-0.69796
2-Jul-02	29.45	0.170068027	-0.11424944	0.01305293		2-Jul-02	1805	1.120448	0.892027	0.795712127		-0.10191
3-Jul-02	29.1	-1.188455008	-1.47277248	2.16905877		3-Jul-02	1800	-0.27701	-0.50543	0.255458993		0.744383
4-Jul-02	29.05	-0.171821306	-0.45613877	0.20806258		4-Jul-02	1792	-0.44444	-0.67287	0.452748179		0.30692
5-Jul-02	28.7	-1.204819277	-1.48913675	2.21752825		5-Jul-02	1800	0.446429	0.218007	0.047527213		-0.32464
8-Jul-02	28.9	0.696864111	0.412546643	0.17019473		8-Jul-02	1800	0	-0.22842	0.052176246		-0.09423
9-Jul-02	28.55	-1.211072664	-1.49539013	2.23619165		9-Jul-02	1796	-0.22222	-0.45064	0.203079496		0.673888
10-Jul-02	28.9	1.22591944	0.941601971	0.88661427		10-Jul-02	1794	-0.11136	-0.33978	0.115450297		-0.31994
11-Jul-02	28.6	-1.038062284	-1.32237975	1.74868821		11-Jul-02	1783	-0.61315	-0.84158	0.708250439		1.112883
15-Jul-02	27.65	-3.321678322	-3.60599579	13.0032056		15-Jul-02	1735	-2.69209	-2.92051	8.529397249		10.53136
16-Jul-02	28.65	3.616636528	3.332319059	11.1043503		16-Jul-02	1762	1.556196	1.327775	1.762985821		4.424569
17-Jul-02	28.4	-0.872600349	-1.15691782	1.33845884		17-Jul-02	1791	1.645857	1.417436	2.009124185		-1.63986
18-Jul-02	28.65	0.88028169	0.595964222	0.35517335		18-Jul-02	1787	-0.22334	-0.45176	0.204087206		-0.26923
22-Jul-02	28.5	-0.523560209	-0.80787768	0.65266634		22-Jul-02	1802	0.839396	0.610974	0.373289757		-0.49359
23-Jul-02	28.35	-0.526315789	-0.81063326	0.65712628		23-Jul-02	1795	-0.38846	-0.61688	0.38053905		0.500662
26-Jul-02	28.15	-0.705467372	-0.98978484	0.97967403		26-Jul-02	1783	-0.66852	-0.89694	0.804510117		0.887782
30-Jul-02	27.7	-1.598579041	-1.88289651	3.54529927		30-Jul-02	1779	-0.22434	-0.45276	0.204993611		0.852504
6-Aug-02	28	1.083032491	0.798715022	0.63794569		6-Aug-02	1781	0.112423	-0.116	0.01345565		-0.09265

7-Aug-02	27.75	-0.892857143	-1.17717461	1.38574007		7-Aug-02	1793	0.673779	0.445358	0.198343368		-0.52426
8-Aug-02	27.9	0.540540541	0.256223072	0.06565026		9-Aug-02	1816	1.282766	1.054345	1.111643613		0.270148
12-Aug-02	26.55	-4.838709677	-5.12302715	26.2454071		12-Aug-02	1843	1.486784	1.258363	1.583477284		-6.44663
13-Aug-02	26.45	-0.376647834	-0.6609653	0.43687513		13-Aug-02	1846	0.162778	-0.06564	0.00430902		0.043388
15-Aug-02	26.5	0.189035917	-0.09528155	0.00907857		15-Aug-02	1841	-0.27086	-0.49928	0.24927763		0.047572
16-Aug-02	26.25	-0.943396226	-1.2277137	1.50728092		16-Aug-02	1843	0.108637	-0.11978	0.014348349		0.147061
19-Aug-02	26	-0.952380952	-1.23669842	1.52942298		19-Aug-02	1856	0.705372	0.47695	0.227481755		-0.58984
20-Aug-02	25.6	-1.538461538	-1.82277901	3.32252331		20-Aug-02	1867	0.592672	0.364251	0.132678945		-0.66395
21-Aug-02	24.35	-4.8828125	-5.16712997	26.6992321		21-Aug-02	1873	0.321371	0.09295	0.008639699		-0.48028
22-Aug-02	23.5	-3.490759754	-3.77507722	14.251208		22-Aug-02	1925	2.776295	2.547874	6.491659431		-9.61842
23-Aug-02	23.9	1.70212766	1.417810191	2.01018574		23-Aug-02	1926	0.051948	-0.17647	0.031142773		-0.25021
26-Aug-02	24.5	2.510460251	2.226142782	4.95571169		26-Aug-02	1910	-0.83074	-1.05916	1.12181669		-2.35784
27-Aug-02	24.9	1.632653061	1.348335593	1.81800887		27-Aug-02	1926	0.837696	0.609275	0.371216187		0.821507
28-Aug-02	24.45	-1.807228916	-2.09154638	4.37456628		28-Aug-02	1936	0.519211	0.29079	0.08455859		-0.6082
29-Aug-02	23.75	-2.862985685	-3.14730315	9.90551714		29-Aug-02	1951	0.774793	0.546372	0.298522565		-1.7196
30-Aug-02	24.45	2.947368421	2.663050952	7.09184038		30-Aug-02	1975	1.230138	1.001717	1.003437324		2.667624
2-Sep-02	24.2	-1.022494888	-1.30681236	1.70775853		2-Sep-02	1953	-1.11392	-1.34235	1.801890779		1.754193
3-Sep-02	24.2	0	-0.28431747	0.08083642		3-Sep-02	1975	1.126472	0.898051	0.806495404		-0.25533
4-Sep-02	24.05	-0.619834711	-0.90415218	0.81749116		4-Sep-02	1987	0.607595	0.379174	0.143772721		-0.34283
5-Sep-02	24.05	0	-0.28431747	0.08083642		5-Sep-02	1992	0.251636	0.023214	0.00053891		-0.0066
6-Sep-02	24.5	1.871101871	1.586784403	2.51788474		6-Sep-02	2009	0.853414	0.624992	0.390615565		0.991728
9-Sep-02	24.05	-1.836734694	-2.12105216	4.49886228		9-Sep-02	1981	-1.39373	-1.62215	2.631368759		3.440664
10-Sep-02	23.65	-1.663201663	-1.94751913	3.79283077		10-Sep-02	1962	-0.95911	-1.18753	1.410234062		2.312743
11-Sep-02	23.85	0.845665962	0.561348493	0.31511213		11-Sep-02	1962	0	-0.22842	0.052176246		-0.12822
12-Sep-02	25	4.821802935	4.537485466	20.5887744		12-Sep-02	1955	-0.35678	-0.5852	0.34245904		-2.65534
13-Sep-02	25.5	2	1.715682531	2.94356655		13-Sep-02	1955	0	-0.22842	0.052176246		-0.3919
16-Sep-02	25.45	-0.196078431	-0.4803959	0.23078022		16-Sep-02	1939	-0.81841	-1.04684	1.095864616		0.502895
17-Sep-02	26	2.161100196	1.876782728	3.52231341		17-Sep-02	1962	1.186178	0.957757	0.91729893		1.797502
18-Sep-02	25.85	-0.576923077	-0.86124055	0.74173528		18-Sep-02	1963	0.050968	-0.17745	0.031489497		0.15283
19-Sep-02	27.75	7.350096712	7.065779243	49.9252363		19-Sep-02	1989	1.324503	1.096082	1.201395989		7.744674
20-Sep-02	27	-2.702702703	-2.98702017	8.9222895		20-Sep-02	1981	-0.40221	-0.63063	0.397698447		1.883715
23-Sep-02	27.8	2.962962963	2.678645494	7.17514168		23-Sep-02	1989	0.403836	0.175415	0.030770508		0.469875
24-Sep-02	28.3	1.798561151	1.514243682	2.29293393		24-Sep-02	2004	0.754148	0.525727	0.276388469		0.796078
25-Sep-02	27.7	-2.120141343	-2.40445881	5.78142218		25-Sep-02	1995	-0.4491	-0.67752	0.459037414		1.629076
26-Sep-02	27	-2.527075812	-2.81139328	7.90393218		26-Sep-02	2014	0.952381	0.72396	0.524117719		-2.03534
27-Sep-02	27	0	-0.28431747	0.08083642		27-Sep-02	2019	0.248262	0.019841	0.000393664		-0.00564
30-Sep-02	26.65	-1.296296296	-1.58061376	2.49833987		30-Sep-02	2019	0	-0.22842	0.052176246		0.361046
1-Oct-02	26.95	1.125703565	0.841386096	0.70793056		1-Oct-02	2005	-0.69341	-0.92183	0.849777524		-0.77562
2-Oct-02	26.9	-0.185528757	-0.46984623	0.22075548		2-Oct-02	2030	1.246883	1.018462	1.037264011		-0.47852
3-Oct-02	25.75	-4.275092937	-4.55941041	20.7882232		3-Oct-02	2013	-0.83744	-1.06586	1.136056743		4.859691
4-Oct-02	25.5	-0.970873786	-1.25519125	1.57550509		4-Oct-02	2028	0.745156	0.516735	0.26701535		-0.6486
7-Oct-02	25.95	1.764705882	1.480388414	2.19154986		7-Oct-02	2047	0.936884	0.708462	0.50191901		1.0488
8-Oct-02	27.85	7.32177264	7.037455171	49.5257753		8-Oct-02	2067	0.97704	0.748618	0.56042946		5.268368
9-Oct-02	28.5	2.333931777	2.049614309	4.20091881		9-Oct-02	2099	1.548137	1.319716	1.741650834		2.704909
11-Oct-02	27.3	-4.210526316	-4.49484378	20.2036206		11-Oct-02	2037	-2.95379	-3.18221	10.12645234		14.30353
14-Oct-02	27.25	-0.183150183	-0.46746765	0.21852601		14-Oct-02	2040	0.147275	-0.08115	0.00658464		0.037933
15-Oct-02	29.05	6.605504587	6.321187119	39.9574066		15-Oct-02	2063	1.127451	0.89903	0.808254541		5.682935
16-Oct-02	28.35	-2.409638554	-2.69395602	7.25739905		16-Oct-02	2082	0.920989	0.692568	0.479649948		-1.86575
17-Oct-02	26.95	-4.938271605	-5.22258907	27.2754366		17-Oct-02	2093	0.528338	0.299917	0.089950167		-1.56634
18-Oct-02	25.65	-4.823747681	-5.10806515	26.0923296		18-Oct-02	2112	0.907788	0.679367	0.461539061		-3.47025
21-Oct-02	26.1	1.754385965	1.470068496	2.16110138		21-Oct-02	2119	0.331439	0.103018	0.010612748		0.151444
22-Oct-02	25.65	-1.724137931	-2.0084554	4.03389309		22-Oct-02	2142	1.085418	0.856996	0.73444291		-1.72124
23-Oct-02	25.5	-0.584795322	-0.86911279	0.75535704		23-Oct-02	2169	1.260504	1.032083	1.065195317		-0.897
24-Oct-02	26.25	2.941176471	2.656859002	7.05889976		24-Oct-02	2194	1.152605	0.924184	0.854115482		2.455426
25-Oct-02	25.4	-3.238095238	-3.52241271	12.4073913		25-Oct-02	2237	1.959891	1.731469	2.997986311		-0.09895
28-Oct-02	25	-1.57480315	-1.85912062	3.45632947		28-Oct-02	2208	-1.29638	-1.5248	2.325015899		2.834788
29-Oct-02	24.75	-1	-1.28431747	1.64947136		29-Oct-02	2214	0.271739	0.043318	0.001876443		-0.05563
30-Oct-02	25.3	2.222222222	1.937904754	3.75547483		30-Oct-02	2252	1.71635	1.487929	2.213933584		2.883465
31-Oct-02	24.5	-3.162055336	-3.4463728	11.8774855		31-Oct-02	2279	1.198934	0.970513	0.941895634		-3.34475
1-Nov-02	24	-2.040816327	-2.3251338	5.40624717		1-Nov-02	2295	0.702062	0.473641	0.224335897		-1.10128
4-Nov-02	22.8	-5	-5.28431747	27.9240111		4-Nov-02	2204	-3.96514	-4.19356	17.58596908		22.16012
5-Nov-02	24	5.263157895	4.978840426	24.788852		5-Nov-02	2258	2.450091	2.22167	4.935815551		11.06134
6-Nov-02	23.9	-0.416666667	-0.70098414	0.49137876		6-Nov-02	2223	-1.55004	-1.77847	3.162939498		1.246676
7-Nov-02	23.9	0	-0.28431747	0.08083642		7-Nov-02	2229	0.269906	0.041484	0.00172095		-0.01179
8-Nov-02	24	0.418410042	0.134092573	0.01798082		8-Nov-02	2227	-0.08973	-0.31815	0.101217856		-0.04266
11-Nov-02	24	0	-0.28431747	0.08083642		11-Nov-02	2212	-0.67355	-0.90197	0.813555412		0.256447
12-Nov-02	23.2	-3.333333333	-3.6176508	13.0873973		12-Nov-02	2223	0.497288	0.268866	0.072289098		-0.97266
13-Nov-02	24.9	7.327586207	7.043268738	49.6076345		13-Nov-02	2265	1.889339	1.660919	2.758647037		11.69829
14-Nov-02	25	0.401606426	0.117288957	0.0137567		14-Nov-02	2270	0.220751	-0.00767	5.88389E-05		-0.0009
15-Nov-02	24.9	-0.4	-0.68431747	0.4682904		15-Nov-02	2272	0.088106	-0.14032	0.019688433		0.09602
18-Nov-02	25.25	1.405622449	1.121305021	1.25732495		18-Nov-02	2300	1.232394	1.003973	1.007962113		1.12576
19-Nov-02	25.25	0	-0.28431747	0.08083642		19-Nov-02	2333	1.434783	1.206361	1.455307842		-0.34299
20-Nov-02	25.45	0.792079208	0.507761739	0.25782198		20-Nov-02	2357	1.028718	0.800297	0.640475585		0.40636
21-Nov-02	24.75	-2.750491159	-3.03480863	9.21006341		21-Nov-02	2352	-0.21213	-0.44056	0.194088947		1.337001
22-Nov-02	24.5	-1.01010101	-1.29441848	1.6755192		22-Nov-02	2346	-0.2551	-0.48352	0.233794727		0.625881
25-Nov-02	26	6.12244898	5.838131511	34.0837795		25-Nov-02	2357	0.468883	0.240462	0.057821975		1.403849
26-Nov-02	25.5	-1.923076923	-2.20739439	4.87259		26-Nov-02	2339	-0.76368	-0.9921	0.984270049		2.189964
27-Nov-02	25.15	-1.37254902	-1.65686649	2.74520656		27-Nov-02	2285	-2.30868	-2.5371	6.436877046		4.203636
28-Nov-02	25.25	0.397614314	0.113296846	0.01283618		28-Nov-02	2238	-2.05689	-2.28531	5.222659995		-0.25892

29-Nov-02	24	-4.95049505	-5.23481252	27.4032621		29-Nov-02	2286	2.144772	1.916351	3.67240083		-10.0317
2-Dec-02	24.65	2.708333333	2.424015865	5.87585291		2-Dec-02	2306	0.874891	0.646469	0.417922732		1.567052
4-Dec-02	24.6	-0.202839757	-0.48715723	0.23732216		4-Dec-02	2345	1.69124	1.462819	2.139839544		-0.71262
9-Dec-02	24.75	0.609756098	0.325438629	0.1059103		9-Dec-02	2400	2.345416	2.116995	4.481666033		0.688952
10-Dec-02	24.5	-1.01010101	-1.29441848	1.6755192		10-Dec-02	2390	-0.41667	-0.64509	0.416138359		0.835014
11-Dec-02	24	-2.040816327	-2.3251338	5.40624717		11-Dec-02	2402	0.502092	0.273671	0.074895733		-0.63632
12-Dec-02	24	0	-0.28431747	0.08083642		12-Dec-02	2429	1.124063	0.895642	0.802174732		-0.25465
13-Dec-02	23.75	-1.041666667	-1.32598414	1.75823393		13-Dec-02	2452	0.946892	0.718471	0.516199891		-0.95268
16-Dec-02	24.5	3.157894737	2.873577268	8.25744632		16-Dec-02	2488	1.468189	1.239768	1.53702477		3.562569
17-Dec-02	24.5	0	-0.28431747	0.08083642		17-Dec-02	2497	0.361736	0.133315	0.017772924		-0.0379
18-Dec-02	24.65	0.612244898	0.327927429	0.1075364		18-Dec-02	2501	0.160192	-0.06823	0.004655193		-0.02237
19-Dec-02	24.2	-1.825557809	-2.10987528	4.45157369		19-Dec-02	2535	1.359456	1.131035	1.279240205		-2.38634
20-Dec-02	24.2	0	-0.28431747	0.08083642		20-Dec-02	2525	-0.39448	-0.6229	0.388002567		0.177101
23-Dec-02	23.75	-1.859504132	-2.1438216	4.59597106		23-Dec-02	2509	-0.63366	-0.86208	0.743189804		1.848156
24-Dec-02	24.2	1.894736842	1.610419374	2.59345056		24-Dec-02	2551	1.673974	1.445552	2.089622007		2.327946
26-Dec-02	24.3	0.41322314	0.128905672	0.01661667		26-Dec-02	2637	3.371227	3.142806	9.87722809		0.405125
27-Dec-02	24	-1.234567901	-1.51888537	2.30701277		27-Dec-02	2661	0.910125	0.681704	0.464720261		-1.03543
30-Dec-02	24	0	-0.28431747	0.08083642		30-Dec-02	2694	1.240135	1.011714	1.023565389		-0.28765
31-Dec-02	23.8	-0.833333333	-1.1176508	1.24914332		31-Dec-02	2701	0.259837	0.031415	0.000986932		-0.03511
1-Jan-03	23.55	-1.050420168	-1.33473764	1.78152456		1-Jan-03	2667	-1.25879	-1.48721	2.211806203		1.985041
3-Jan-03	24	1.910828025	1.626510557	2.64553659		3-Jan-03	2745	2.924634	2.696213	7.269565717		4.385419
6-Jan-03	25.8	7.5	7.215682531	52.0660744		6-Jan-03	2766	0.765027	0.536606	0.287946128		3.871979
7-Jan-03	25.8	0	-0.28431747	0.08083642		7-Jan-03	2780	0.506146	0.277725	0.077131096		-0.07896
8-Jan-03	25.1	-2.713178295	-2.99749576	8.98498085		8-Jan-03	2778	-0.07194	-0.30036	0.090218321		0.900339
9-Jan-03	26.95	7.370517928	7.08620046	50.214237		9-Jan-03	2830	1.87185	1.643429	2.70085904		11.64567
10-Jan-03	28.6	6.12244898	5.838131511	34.0837795		10-Jan-03	2869	1.378092	1.149671	1.32174265		6.711929
13-Jan-03	29.75	4.020979021	3.736661552	13.9626396		13-Jan-03	2854	-0.52283	-0.75125	0.564378752		-2.80717
14-Jan-03	29.55	-0.672268908	-0.95658638	0.9150575		14-Jan-03	2850	-0.14015	-0.36858	0.135847805		0.352574
15-Jan-03	29.75	0.676818951	0.392501482	0.15405741		15-Jan-03	2950	3.508772	3.280351	10.76070089		1.287543
16-Jan-03	28.9	-2.857142857	-3.14146033	9.86877298		16-Jan-03	2956	0.20339	-0.02503	0.00062657		0.078635
17-Jan-03	28.95	0.173010381	-0.11130709	0.01238927		17-Jan-03	2955	-0.03383	-0.26225	0.068775431		0.02919
20-Jan-03	28.6	-1.208981002	-1.49329847	2.22994032		20-Jan-03	2921	-1.15059	-1.37901	1.901678011		2.059279
21-Jan-03	27.9	-2.447552448	-2.73186992	7.46311324		21-Jan-03	2795	-4.31359	-4.54201	20.62987699		12.40819
22-Jan-03	26.55	-4.838709677	-5.12302715	26.2454071		22-Jan-03	2739	-2.00358	-2.232	4.981819626		11.43459
23-Jan-03	25.25	-4.896421846	-5.18073931	26.8400598		23-Jan-03	2617	-4.45418	-4.6826	21.92675737		24.25934
24-Jan-03	25.5	0.99009901	0.705781541	0.49812758		24-Jan-03	2609	-0.30569	-0.53411	0.285278561		-0.37697
27-Jan-03	25	-1.960784314	-2.24510178	5.04048201		27-Jan-03	2747	5.289383	5.060962	25.61333336		-11.3624
28-Jan-03	23.9	-4.4	-4.68431747	21.9428301		28-Jan-03	2657	-3.2763	-3.50472	12.28308066		16.41723
29-Jan-03	22.75	-4.811715481	-5.09603295	25.9695518		29-Jan-03	2627	-1.12909	-1.35751	1.842844707		6.917937
30-Jan-03	23.5	3.296703297	3.012385828	9.07446838		30-Jan-03	2649	0.837457	0.609036	0.370928416		1.834651
31-Jan-03	22.35	-4.893617021	-5.17793449	26.8110056		31-Jan-03	2545	-3.92601	-4.15443	17.25929708		21.51137
3-Feb-03	22.25	-0.447427293	-0.73174476	0.5354504		3-Feb-03	2471	-2.90766	-3.13608	9.835018372		2.294813
6-Feb-03	21.15	-4.943820225	-5.22813769	27.3334237		6-Feb-03	2483	0.485633	0.257212	0.066158087		-1.34474
7-Feb-03	21.45	1.418439716	1.134122248	1.28623327		7-Feb-03	2481	-0.08055	-0.30897	0.095461798		-0.35041
10-Feb-03	20.4	-4.895104895	-5.17942236	26.826416		10-Feb-03	2418	-2.5393	-2.76772	7.660273293		14.33519
17-Feb-03	20.95	2.696078431	2.411760963	5.81659094		17-Feb-03	2509	3.763441	3.53502	12.49636398		8.525622
18-Feb-03	21.5	2.625298329	2.340980861	5.48019139		18-Feb-03	2547	1.514548	1.286126	1.654121183		3.010797
19-Feb-03	21	-2.325581395	-2.60989886	6.81157208		19-Feb-03	2500	-1.84531	-2.07373	4.300353659		5.412224
20-Feb-03	21	0	-0.28431747	0.08083642		20-Feb-03	2509	0.36	0.131579	0.01731298		-0.03741
21-Feb-03	21.45	2.142857143	1.858539674	3.45416972		21-Feb-03	2528	0.757274	0.528853	0.279685085		0.982894
24-Feb-03	21.45	0	-0.28431747	0.08083642		24-Feb-03	2489	-1.54272	-1.77114	3.136946541		0.503567
25-Feb-03	21	-2.097902098	-2.38221957	5.67497006		25-Feb-03	2428	-2.45078	-2.6792	7.178137556		6.382454
26-Feb-03	21	0	-0.28431747	0.08083642		26-Feb-03	2397	-1.27677	-1.50519	2.265603582		0.427952
3-Mar-03	20.9	-0.476190476	-0.76050794	0.57837233		3-Mar-03	2521	5.173133	4.944712	24.45017558		-3.76049
4-Mar-03	21	0.4784689	0.194151431	0.03769478		4-Mar-03	2447	-2.93534	-3.16376	10.00940468		-0.61425
5-Mar-03	21.1	0.476190476	0.191873008	0.03681525		5-Mar-03	2470	0.939926	0.711505	0.506239703		0.136519
6-Mar-03	21	-0.473933649	-0.75825112	0.57494476		6-Mar-03	2480	0.404858	0.176437	0.031130049		-0.13378
7-Mar-03	20.95	-0.238095238	-0.52241271	0.27291504		7-Mar-03	2449	-1.25	-1.47842	2.185729253		0.772346
10-Mar-03	20.9	-0.238663484	-0.52298095	0.27350908		10-Mar-03	2452	0.122499	-0.10592	0.011219517		0.055395
11-Mar-03	20.1	-3.827751196	-4.11206866	16.9091087		11-Mar-03	2482	1.223491	0.99507	0.990163957		-4.0918
12-Mar-03	20.5	1.990049751	1.705732283	2.90952262		12-Mar-03	2540	2.336825	2.108404	4.445367167		3.596373
17-Mar-03	19.75	-3.658536585	-3.94285405	15.5460981		17-Mar-03	2486	-2.12598	-2.35441	5.543225045		9.283077
18-Mar-03	20.5	3.797468354	3.513150886	12.3422291		18-Mar-03	2526	1.60901	1.380589	1.906026693		4.850218
19-Mar-03	20.75	1.219512195	0.935194727	0.87458918		19-Mar-03	2506	-0.79177	-1.02019	1.040781189		-0.95407
20-Mar-03	20.5	-1.204819277	-1.48913675	2.21752825		20-Mar-03	2590	3.351955	3.123534	9.756465302		-4.65137
21-Mar-03	21	2.43902439	2.154706922	4.64276192		21-Mar-03	2652	2.393822	2.165401	4.688962319		4.665805
24-Mar-03	21.5	2.380952381	2.096634912	4.39587796		24-Mar-03	2634	-0.67873	-0.90715	0.822928805		-1.90197
25-Mar-03	21.5	0	-0.28431747	0.08083642		25-Mar-03	2633	-0.03797	-0.26639	0.070961647		0.075738
26-Mar-03	22.5	4.651162791	4.366845322	19.0693382		26-Mar-03	2695	2.354728	2.126307	4.521182496		9.285255
27-Mar-03	24	6.666666667	6.382349198	40.7343813		27-Mar-03	2719	0.890538	0.662117	0.438398698		4.225861
28-Mar-03	23.5	-2.083333333	-2.3676508	5.60577032		28-Mar-03	2744	0.919456	0.691034	0.477528652		-1.63613
31-Mar-03	22.75	-3.191489362	-3.47580683	12.0812331		31-Mar-03	2716	-1.02041	-1.24883	1.559574785		4.34069
1-Apr-03	22.4	-1.538461538	-1.82277901	3.32252331		1-Apr-03	2706	-0.36819	-0.59661	0.355943152		1.087488
2-Apr-03	23.8	6.25	5.965682531	35.5893681		2-Apr-03	2754	1.773836	1.545415	2.388306649		9.219454
3-Apr-03	25	5.042016807	4.757699338	22.635703		3-Apr-03	2753	-0.03631	-0.26473	0.070083044		-1.25952
4-Apr-03	25.9	3.6	3.315682531	10.9937506		4-Apr-03	2779	0.944424	0.716003	0.512660384		2.374039
7-Apr-03	26.25	1.351351351	1.067033883	1.13856131		7-Apr-03	2823	1.583303	1.354882	1.835705624		1.445705
8-Apr-03	26.15	-0.380952381	-0.66526985	0.44258397		8-Apr-03	2853	1.062699	0.834278	0.69601987		-0.55502
9-Apr-03	25.35	-3.059273423	-3.34359089	11.1796		9-Apr-03	2846	-0.24536	-0.47378	0.224464616		1.584116

10-Apr-03	24.5	-3.353057199	-3.63737467	13.2304945		10-Apr-03	2845	-0.03514	-0.26356	0.069462944		0.95866
11-Apr-03	24.05	-1.836734694	-2.12105216	4.49886228		11-Apr-03	2871	0.913884	0.685463	0.469859256		-1.4539
14-Apr-03	24	-0.207900208	-0.49221768	0.24227824		14-Apr-03	2905	1.184256	0.955835	0.913620842		-0.47048
15-Apr-03	23.7	-1.25	-1.53431747	2.35413009		15-Apr-03	2901	-0.13769	-0.36611	0.134040072		0.561736
16-Apr-03	25.35	6.962025316	6.677707848	44.5917821		16-Apr-03	2944	1.482248	1.253826	1.572080386		8.372868
17-Apr-03	26.8	5.719921105	5.435603636	29.5457869		17-Apr-03	2921	-0.78125	-1.00967	1.019435938		-5.48817
18-Apr-03	27.35	2.052238806	1.767921337	3.12554586		18-Apr-03	2935	0.479288	0.250867	0.062934107		0.443513
21-Apr-03	29.4	7.495429616	7.211112148	52.0001384		21-Apr-03	2967	1.09029	0.861868	0.742817148		6.21503
22-Apr-03	27.95	-4.931972789	-5.21629026	27.2096841		22-Apr-03	2862	-3.53893	-3.76735	14.1929216		19.65159
23-Apr-03	26.6	-4.830053667	-5.11437114	26.1567921		23-Apr-03	2892	1.048218	0.819797	0.672066837		-4.19275
24-Apr-03	25.95	-2.443609023	-2.72792649	7.44158294		24-Apr-03	2834	-2.00553	-2.23395	4.990549161		6.094061
25-Apr-03	26	0.192678227	-0.09163924	0.00839775		25-Apr-03	2859	0.882145	0.653724	0.427355297		-0.05991
28-Apr-03	25.7	-1.153846154	-1.43816362	2.0683146		28-Apr-03	2873	0.489682	0.261261	0.068257051		-0.37574
29-Apr-03	26.45	2.918287938	2.633970469	6.93780043		29-Apr-03	2915	1.461887	1.233465	1.521436713		3.248911
30-Apr-03	25.9	-2.079395085	-2.36371255	5.58713704		30-Apr-03	2902	-0.44597	-0.67439	0.454802314		1.594065
2-May-03	26.5	2.316602317	2.032284848	4.1301817		2-May-03	2925	0.792557	0.564136	0.318249037		1.146484
5-May-03	26.5	0	-0.28431747	0.08083642		5-May-03	2976	1.74359	1.515169	2.295735707		-0.43079
6-May-03	26	-1.886792453	-2.17110992	4.71371829		6-May-03	2973	-0.10081	-0.32923	0.108390848		0.714789
7-May-03	26	0	-0.28431747	0.08083642		7-May-03	2953	-0.67272	-0.90114	0.812057553		0.256211
8-May-03	25	-3.846153846	-4.13047131	17.0607933		8-May-03	2963	0.338639	0.110217	0.012147891		-0.45525
9-May-03	26.25	5	4.715682531	22.2376617		9-May-03	2972	0.303746	0.075325	0.005673856		0.355209
12-May-03	28.2	7.428571429	7.14425396	51.0403646		12-May-03	2973	0.033647	-0.19477	0.037936844		-1.39151
13-May-03	28	-0.709219858	-0.99353733	0.98711642		13-May-03	2956	-0.57181	-0.80023	0.640374753		0.795063
14-May-03	28.25	0.892857143	0.608539674	0.37032054		14-May-03	2979	0.778078	0.549657	0.302123127		0.334488
16-May-03	28	-0.884955752	-1.16927322	1.36719986		16-May-03	3003	0.805639	0.577218	0.333180935		-0.67493
19-May-03	27	-3.571428571	-3.85574604	14.8667775		19-May-03	3005	0.0666	-0.16182	0.02618608		0.623941
20-May-03	26	-3.703703704	-3.98802117	15.9043129		20-May-03	2980	-0.83195	-1.06037	1.124380207		4.22877
21-May-03	27	3.846153846	3.561836378	12.6866784		21-May-03	3041	2.04698	1.818559	0.3207155611		6.477408
22-May-03	26.5	-1.851851852	-2.13616932	4.56321937		22-May-03	3060	0.624794	0.396373	0.157111771		-0.84672
23-May-03	26.5	0	-0.28431747	0.08083642		23-May-03	3080	0.653595	0.425174	0.180772563		-0.12088
26-May-03	26.5	0	-0.28431747	0.08083642		26-May-03	3106	0.844156	0.615735	0.379129149		-0.17506
27-May-03	27.25	2.830188679	2.545871211	6.48146022		27-May-03	3127	0.676111	0.44769	0.200425934		1.13976
28-May-03	26.25	-3.669724771	-3.95404224	15.63445		28-May-03	3093	-1.0873	-1.31573	1.731133139		5.202434
29-May-03	27.1	3.238095238	2.953777777	8.72480311		29-May-03	3117	0.775946	0.547524	0.298783057		1.617266
30-May-03	26.3	-2.95202952	-3.23634699	10.4739418		30-May-03	3099	-0.57748	-0.8059	0.64947408		2.608171
2-Jun-03	26.15	-0.570342205	-0.85465967	0.73044316		2-Jun-03	3104	0.161342	-0.06708	0.00449957		0.05733
3-Jun-03	26.15	0	-0.28431747	0.08083642		3-Jun-03	3109	0.161082	-0.06734	0.004534504		0.019146
4-Jun-03	26.1	-0.191204589	-0.47552206	0.22612123		4-Jun-03	3128	0.611129	0.382708	0.146465243		-0.18199
5-Jun-03	26.3	0.766283525	0.481966056	0.23229128		5-Jun-03	3132	0.127877	-0.10054	0.010109089		-0.04846
6-Jun-03	27	2.661596958	2.37727949	5.65145777		6-Jun-03	3142	0.319285	0.090864	0.008256194		0.216008
9-Jun-03	26.8	-0.740740741	-1.02505821	1.05074433		9-Jun-03	3197	1.750477	1.522056	2.316655077		-1.5602
10-Jun-03	26.6	-0.746268657	-1.03058613	1.06210776		10-Jun-03	3212	0.46919	0.240769	0.057969549		-0.24813
11-Jun-03	26.25	-1.315789474	-1.60010694	2.56034223		11-Jun-03	3211	-0.03113	-0.25955	0.067368514		0.415315
12-Jun-03	26.4	0.571428571	0.287111103	0.08243279		12-Jun-03	3248	1.152289	0.923868	0.853531719		0.265253
13-Jun-03	27.95	5.871212121	5.586894653	31.2133919		13-Jun-03	3265	0.523399	0.294978	0.08701191		1.64801
16-Jun-03	27.5	-1.610017889	-1.89433536	3.58850645		16-Jun-03	3260	-0.15314	-0.38156	0.145588461		0.722804
17-Jun-03	28.15	2.363636364	2.079318895	4.32356707		17-Jun-03	3272	0.368098	0.139677	0.019509652		0.290433
18-Jun-03	30.25	7.460035524	7.175718055	51.4909296		18-Jun-03	3307	1.069682	0.841261	0.707719984		6.036651
19-Jun-03	30	-0.826446281	-1.11076375	1.23379611		19-Jun-03	3289	-0.5443	-0.77272	0.59709801		0.858311
20-Jun-03	31.9	6.333333333	6.049015865	36.5905929		20-Jun-03	3307	0.547279	0.318858	0.101670173		1.928775
23-Jun-03	31.5	-1.253918495	-1.53823596	2.36616988		23-Jun-03	3345	1.149078	0.920657	0.847608412		-1.41619
24-Jun-03	31	-1.587301587	-1.87161906	3.50295789		24-Jun-03	3346	0.029895	-0.19853	0.039412508		0.371565
25-Jun-03	30.5	-1.612903226	-1.89722069	3.59944636		25-Jun-03	3386	1.195457	0.967036	0.935158741		-1.83468
26-Jun-03	29.75	-2.459016393	-2.74333386	7.52588066		26-Jun-03	3397	0.324867	0.096446	0.009301811		-0.26458
27-Jun-03	28.5	-4.201680672	-4.48599814	20.1241793		27-Jun-03	3400	0.088313	-0.14011	0.019630248		0.628524
30-Jun-03	29	1.754385965	1.470068496	2.16110138		30-Jun-03	3402	0.058824	-0.1696	0.028763371		-0.24932
1-Jul-03	29	0	-0.28431747	0.08083642		1-Jul-03	3433	0.911229	0.682807	0.466226063		-0.19413
2-Jul-03	29.75	2.586206897	2.301889428	5.29869494		2-Jul-03	3460	0.786484	0.558063	0.311434225		1.284599
3-Jul-03	29.75	0	-0.28431747	0.08083642		3-Jul-03	3481	0.606936	0.378515	0.143273767		-0.10762
4-Jul-03	30.45	2.352941176	2.068623708	4.27920404		4-Jul-03	3478	-0.08618	-0.3146	0.098975258		-0.6508
7-Jul-03	31	1.806239737	1.521922269	2.31624739		7-Jul-03	3470	-0.23002	-0.45844	0.210165816		-0.69771
8-Jul-03	31.9	2.903225806	2.618908338	6.85868088		8-Jul-03	3507	1.066282	0.837861	0.702011421		2.194282
9-Jul-03	32.35	1.410658307	1.126340839	1.26864368		9-Jul-03	3552	1.283148	1.054727	1.112448595		1.187982
10-Jul-03	32.4	0.154559505	-0.12975796	0.01683713		10-Jul-03	3597	1.266892	1.038471	1.078421372		1.013475
11-Jul-03	34.75	7.25308642	6.968768951	48.5637407		11-Jul-03	3646	1.362246	1.133825	1.285559388		7.901365
14-Jul-03	35.65	2.589928058	2.305610589	5.31584019		14-Jul-03	3685	1.069665	0.841244	0.707691777		1.939581
15-Jul-03	33.9	-4.908835905	-5.19315337	26.968842		15-Jul-03	3556	-3.50068	-3.7291	13.90618404		19.36579
16-Jul-03	34.5	1.769911504	1.485594036	2.20698964		16-Jul-03	3637	2.27784	2.04919	4.200118513		3.044605
17-Jul-03	34.4	-0.289855072	-0.57417254	0.32967411		17-Jul-03	3711	3.234644	1.806223	3.262440567		-1.03708
18-Jul-03	36.5	6.104651163	5.820333694	33.8762843		18-Jul-03	3752	1.104823	0.876402	0.768080983		5.100954
21-Jul-03	35.25	-3.424657534	-3.708975	13.7564956		21-Jul-03	3767	0.399787	0.171366	0.029366161		-0.63559
22-Jul-03	34	-3.546099291	-3.83041676	14.6720926		22-Jul-03	3739	-0.7433	-0.97172	0.944236369		3.722086
23-Jul-03	35	2.941176471	2.656859002	7.05889976		23-Jul-03	3788	1.310511	1.08209	1.170917965		2.87496
24-Jul-03	34.85	-0.428571429	-0.7128889	0.50821058		24-Jul-03	3815	0.712777	0.484356	0.234600724		-0.34529
25-Jul-03	34.2	-1.865136298	-2.14945377	4.6201515		25-Jul-03	3808	-0.18349	-0.41191	0.16966774		0.885376
28-Jul-03	33.9	-0.877192982	-1.16151045	1.34910653		28-Jul-03	3849	1.076681	0.848259	0.719544128		-0.98526
29-Jul-03	33.8	-0.294985251	-0.57930272	0.33559164		29-Jul-03	3835	-0.36373	-0.59215	0.350644041		0.343035
30-Jul-03	33	-2.366863905	-2.65118137	7.02876268		30-Jul-03	3870	0.912647	0.684225	0.468164497		-1.81401
31-Jul-03	32.85	-0.454545455	-0.73886292	0.54591842		31-Jul-03	3933	1.627907	1.399486	1.958560432		-1.03403

1-Aug-03	33	0.456621005	0.172303536	0.02968851				1-Aug-03		4020	2.212052	1.983631	3.93479062			0.341787
4-Aug-03	33	0	-0.28431747	0.08083642				4-Aug-03		4045	0.621891	0.393469	0.154818125			-0.11187
5-Aug-03	34	3.03030303	2.745985562	7.54043671				5-Aug-03		4010	-0.86527	-1.09369	1.196151173			-3.00325
6-Aug-03	32.5	-4.411764706	-4.69608217	22.0531878				6-Aug-03		4092	2.044888	1.816467	3.299550828			-8.53028
7-Aug-03	33	1.538461538	1.25414407	1.57287735				7-Aug-03		4204	2.737048	2.508627	6.293207898			3.146179
8-Aug-03	32.95	-0.151515152	-0.43583262	0.18995007				8-Aug-03		4323	2.830637	2.602216	6.771529596			-1.13413
11-Aug-03	32.4	-1.669195751	-1.95351322	3.8162139				11-Aug-03		4306	-0.39325	-0.62167	0.386469404			1.214434
12-Aug-03	31.9	-1.543209877	-1.82752735	3.3398562				12-Aug-03		4347	0.95216	0.723739	0.523797524			-1.32265
13-Aug-03	31.45	-1.410658307	-1.69497578	2.87294288				13-Aug-03		4245	-2.34645	-2.57487	6.629940209			4.364337
15-Aug-03	29.9	-4.92845787	-5.21277534	27.1730267				15-Aug-03		4142	-2.42638	-2.65481	7.047990564			13.8389
18-Aug-03	29.9	0	-0.28431747	0.08083642				18-Aug-03		4268	3.042009	2.813587	7.916274557			-0.79995
19-Aug-03	30.05	0.501672241	0.217354772	0.0472431				19-Aug-03		4305	0.866917	0.638495	0.407676358			0.13878
20-Aug-03	32.3	7.487520799	7.20320333	51.8861382				20-Aug-03		4389	1.95122	1.722798	2.968034015			12.40967
21-Aug-03	33.3	3.095975232	2.811657764	7.90541938				21-Aug-03		4392	0.068353	-0.16007	0.025621926			-0.45006
22-Aug-03	32.55	-2.25225252	-2.53656972	6.43418595				22-Aug-03		4418	0.591985	0.363564	0.132178946			-0.92221
25-Aug-03	32.5	-0.153609831	-0.4379273	0.19178032				25-Aug-03		4382	-0.81485	-1.04327	1.088411355			0.456876
26-Aug-03	34.9	7.384615385	7.100297916	50.4142305				26-Aug-03		4342	-0.91283	-1.14125	1.302443338			-8.10319
27-Aug-03	37.5	7.449856734	7.165539265	51.344953				27-Aug-03		4377	0.80608	0.577659	0.333689856			4.139238
28-Aug-03	39	4	3.715682531	13.8062967				28-Aug-03		4485	2.467443	2.239022	5.013220644			8.319496
29-Aug-03	37.25	-4.487179487	-4.771496696	22.7671832				29-Aug-03		4461	-0.53512	-0.76354	0.582990674			3.64322
1-Sep-03	36.5	-2.013422819	-2.29774029	5.27961043				1-Sep-03		4524	1.412239	1.183818	1.401425544			-2.72011
2-Sep-03	35.75	-2.054794521	-2.33911199	5.4714449				2-Sep-03		4564	0.884173	0.655752	0.43001081			-1.53388
3-Sep-03	34.5	-3.496503497	-3.78082097	14.2946072				3-Sep-03		4528	-0.78878	-1.0172	1.034701888			3.845862
4-Sep-03	34	-1.449275362	-1.73359283	3.0053441				4-Sep-03		4465	-1.39134	-1.61976	2.623635282			2.808011
5-Sep-03	33.75	-0.735294118	-1.01961159	1.03960779				5-Sep-03		4463	-0.04479	-0.27321	0.074645909			0.278572
8-Sep-03	34.1	1.037037037	0.752719568	0.56658675				8-Sep-03		4506	0.963477	0.735056	0.540307733			0.553291
9-Sep-03	34.75	1.906158358	1.621840889	2.63036787				9-Sep-03		4547	0.909898	0.681477	0.464410508			1.105247
10-Sep-03	34.5	-0.71942446	-1.00374193	1.00749786				10-Sep-03		4581	0.747746	0.519325	0.69698003			-0.52127
11-Sep-03	34.5	0	-0.28431747	0.08083642				11-Sep-03		4592	0.240122	0.011701	0.000136914			-0.00333
12-Sep-03	34.05	-1.304347826	-1.58866529	2.52385742				12-Sep-03		4604	0.261324	0.032903	0.010182597			-0.05227
15-Sep-03	32.5	-4.552129222	-4.83644669	23.3912166				15-Sep-03		4593	-0.23892	-0.46734	0.218410301			2.260284
16-Sep-03	31	-4.615384615	-4.89970208	24.0070805				16-Sep-03		4387	-4.48509	-4.71351	22.21715015			23.09478
17-Sep-03	31.7	2.258064516	1.973747048	3.89567741				17-Sep-03		4293	-2.14269	-2.37112	5.622188842			-4.67998
18-Sep-03	31.5	-0.630914826	-0.9152323	0.83765015				18-Sep-03		4475	4.23946	4.011038	16.08842891			-3.67103
19-Sep-03	30	-4.761904762	-5.04622223	25.4643588				19-Sep-03		4389	-1.92179	-2.15021	4.623398366			10.85043
22-Sep-03	28.5	-5	-5.28431747	27.9240111				22-Sep-03		4212	-4.03281	-4.26123	18.15808536			22.51769
23-Sep-03	28.85	1.228070175	0.943752707	0.89066917				23-Sep-03		4138	-1.75689	-1.98531	3.941441077			-1.87364
24-Sep-03	28	-2.94627383	-3.2305913	10.4367201				24-Sep-03		4120	-0.43499	-0.66341	0.440118073			2.143219
25-Sep-03	29.9	6.785714286	6.501396817	42.2681606				25-Sep-03		4271	3.665049	3.436627	11.81040748			22.34288
26-Sep-03	28.45	-4.849498328	-5.1338158	26.3560646				26-Sep-03		4163	-2.52868	-2.7571	7.601617009			14.15446
29-Sep-03	27.85	-2.108963093	-2.39328056	5.72779185				29-Sep-03		3988	-4.2037	-4.43212	19.64369175			10.60731
30-Sep-03	28.65	2.872531418	2.58821395	6.69885145				30-Sep-03		4027	0.977934	0.749513	0.561769136			1.939899
1-Oct-03	27.3	-4.712041885	-4.99635935	24.9630668				1-Oct-03		4068	1.018128	0.789706	0.623636255			-3.94566
2-Oct-03	28.15	3.113553114	2.829235645	8.00457433				2-Oct-03		4179	2.728614	2.500192	6.25096187			7.073633
3-Oct-03	28.1	-0.177619893	-0.46193736	0.21338613				3-Oct-03		4192	0.311079	0.082658	0.006832345			-0.03818
6-Oct-03	27.95	-0.533807829	-0.8181253	0.669329				6-Oct-03		4214	0.524809	0.296388	0.087845821			-0.24248
7-Oct-03	27.5	-1.610017889	-1.89433536	3.58850645				7-Oct-03		4198	-0.37969	-0.60811	0.369795292			1.15196
8-Oct-03	26.9	-2.181818182	-2.46613565	6.08182505				8-Oct-03		4187	-0.26203	-0.49045	0.240541929			1.209518
9-Oct-03	27.2	1.115241636	0.830924167	0.69043497				9-Oct-03		4131	-1.33747	-1.56589	2.452025065			-1.30114
10-Oct-03	27.95	2.757352941	2.473035473	6.11590445				10-Oct-03		4143	0.290487	0.062065	0.003852109			0.15349
13-Oct-03	27.5	-1.610017889	-1.89433536	3.58850645				13-Oct-03		4087	-1.35168	-1.5801	2.496712			2.993237
15-Oct-03	26.85	-2.363636364	-2.64795383	7.0116595				15-Oct-03		4015	-1.76168	-1.9901	3.960516275			5.269705
16-Oct-03	26.5	-1.303538175	-1.58785564	2.52128555				16-Oct-03		4016	0.024907	-0.20351	0.041418193			0.323152
17-Oct-03	26.45	-0.188679245	-0.47299671	0.22372589				17-Oct-03		3969	-1.17032	-1.39874	1.956473386			0.661599
20-Oct-03	25.2	-4.725897921	-5.01021539	25.1022582				20-Oct-03		4005	0.907029	0.678608	0.460509192			-3.39997
21-Oct-03	25.2	0	-0.28431747	0.08083642				21-Oct-03		4002	-0.07491	-0.30333	0.092007615			0.086241
22-Oct-03	24.7	-1.984126984	-2.26844445	5.14584024				22-Oct-03		3927	-1.87406	-2.10248	4.42043969			4.769369
23-Oct-03	24	-2.834008097	-3.11832557	9.72395433				23-Oct-03		3850	-1.96078	-2.18921	4.792620793			6.826656
24-Oct-03	24.25	1.041666667	0.757349198	0.5357781				24-Oct-03		3945	2.467532	2.239111	5.013619256			1.695789
27-Oct-03	24.2	-0.206185567	-0.49050304	0.24059323				27-Oct-03		3952	0.17744	-0.05098	0.002599104			0.025007
28-Oct-03	23	-4.958677686	-5.24299515	27.4889982				28-Oct-03		3856	-2.42915	-2.65757	7.062683621			13.93363
29-Oct-03	21.85	-5	-5.28431747	27.9240111				29-Oct-03		3786	-1.81535	-2.04377	4.177011753			10.79995
30-Oct-03	20.85	-4.576659039	-4.86097651	23.6290926				30-Oct-03		3796	0.264131	0.03571	0.00127519			-0.17358
31-Oct-03	20.05	-3.836930456	-4.12124792	16.9846845				31-Oct-03		3781	-0.39515	-0.62357	0.388844527			2.569903
3-Nov-03	19.5	-2.743142145	-3.02745961	9.16551171				3-Nov-03		3794	0.343824	0.115403	0.013317895			-0.34938
4-Nov-03	20.5	5.128205128	4.84388766	23.4632477				4-Nov-03		3868	1.950448	1.722027	2.965376552			8.341305
5-Nov-03	20.5	0	-0.28431747	0.08083642				5-Nov-03		3756	-2.89555	-3.12397	9.759216428			0.888201
6-Nov-03	21	2.43902439	2.154706922	4.64276192				6-Nov-03		3732	-0.63898	-0.8674	0.752380745			-1.86899
7-Nov-03	20.25	-3.571428571	-3.85574604	14.8667775				7-Nov-03		3763	0.830654	0.602233	0.362884107			-2.32206
12-Nov-03	21.5	6.172839506	5.888522038	34.6746918				12-Nov-03		3884	3.21552	2.987098	8.922756431			17.58959
13-Nov-03	23	6.976744186	6.692426717	44.7885754				13-Nov-03		3843	-1.05561	-1.28403	1.648743244			-8.5933
14-Nov-03	23	0	-0.28431747	0.08083642				14-Nov-03		3853	0.260213	0.031792	0.001010742			-0.00904
17-Nov-03	23.5	2.173913043	1.889595575	3.57057144				17-Nov-03		3901	1.245783	1.017361	1.035024024			1.922401
18-Nov-03	23.95	1.914893617	1.630576148	2.65877858				18-Nov-03		3886	-0.38452	-0.61294	0.375692984			-0.99944
19-Nov-03	23.75	-0.835073069	-1													

1-Dec-03	26.75	5.940594059	5.656276591	31.9934649		1-Dec-03	4263	4.79351	4.565089	20.84003869		25.82141
2-Dec-03	26.25	-1.869158879	-2.15347635	4.63746038		2-Dec-03	4305	0.985222	0.7568	0.572746955		-1.62975
3-Dec-03	26.25	0	-0.28431747	0.08083642		3-Dec-03	4266	-0.90592	-1.13434	1.286737553		0.322514
4-Dec-03	26.3	0.19047619	-0.09384128	0.00880619		4-Dec-03	4250	-0.37506	-0.60348	0.364187876		0.056631
5-Dec-03	26	-1.140684411	-1.42500188	2.03063036		5-Dec-03	4200	-1.17647	-1.40489	1.973720944		2.001973
8-Dec-03	27.45	5.576923077	5.292605608	28.0116741		8-Dec-03	4246	1.095238	0.866817	1.751371525		4.58772
9-Dec-03	27	-1.639344262	-1.92366173	3.70047445		9-Dec-03	4278	0.75365	0.525229	0.275865809		-1.01036
10-Dec-03	26.2	-2.962962963	-3.24728043	10.5448302		10-Dec-03	4311	0.771388	0.542967	0.294813485		-1.76317
11-Dec-03	26.15	-0.190839695	-0.47515716	0.22577433		11-Dec-03	4264	-1.09023	-1.31866	1.738852294		0.626569
12-Dec-03	26	-0.573613767	-0.85793124	0.736046		12-Dec-03	4305	0.961538	0.733117	0.537460915		-0.62896
16-Dec-03	25.5	-1.923076923	-2.20739439	4.87259		16-Dec-03	4278	-0.62718	-0.8556	0.732049483		1.888644
17-Dec-03	25.5	0	-0.28431747	0.08083642		17-Dec-03	4240	-0.88827	-1.11669	1.246989292		0.317494
18-Dec-03	25	-1.960784314	-2.24510178	5.04048201		18-Dec-03	4267	0.636792	0.408371	0.166767078		-0.91684
19-Dec-03	25.9	3.6	3.315682531	10.9937506		19-Dec-03	4311	1.031169	0.802748	0.644404732		2.661658
22-Dec-03	25.3	-2.316602317	-2.60091979	6.76478373		22-Dec-03	4367	1.299003	1.070581	1.166144425		-2.7845
23-Dec-03	25.95	2.56916996	2.284852492	5.22055091		23-Dec-03	4385	0.412182	0.183761	0.033768132		0.419867
24-Dec-03	26.35	1.541425819	1.25710835	1.5803214		24-Dec-03	4420	0.798176	0.569754	0.324620072		0.716243
26-Dec-03	26	-1.328273245	-1.61259071	2.60044881		26-Dec-03	4393	-0.61086	-0.83928	0.704392481		1.353417
29-Dec-03	26	0	-0.28431747	0.08083642		29-Dec-03	4459	1.50239	1.273969	1.62299692		-0.36221
30-Dec-03	26	0	-0.28431747	0.08083642		30-Dec-03	4454	-0.11213	-0.34055	0.115977005		0.096825
31-Dec-03	27	3.846153846	3.561836378	12.6866784		31-Dec-03	4472	0.404131	0.17571	0.030873974		0.62585
1-Jan-04	27	0	-0.28431747	0.08083642		1-Jan-04	4473	0.022361	-0.20606	0.042460659		0.058586
2-Jan-04	27.4	1.481481481	1.197164013	1.43320167		2-Jan-04	4474	0.022356	-0.20606	0.042462719		-0.24669
5-Jan-04	29.45	7.481751825	7.197434356	51.8030613		5-Jan-04	4501	0.603487	0.375066	0.140674212		2.69951
6-Jan-04	29.9	1.528013582	1.243696114	1.54678002		6-Jan-04	4515	0.311042	0.082621	0.006826195		0.102755
7-Jan-04	31.15	4.180602007	3.896284538	15.1810332		7-Jan-04	4565	1.10742	0.878999	0.772638379		3.424828
8-Jan-04	32	2.728731942	2.444414474	5.97516212		8-Jan-04	4564	-0.02191	-0.25033	0.062663611		-0.6119
9-Jan-04	32	0	-0.28431747	0.08083642		9-Jan-04	4570	0.131464	-0.09696	0.009400771		0.027567
12-Jan-04	34.4	7.5	7.215682531	52.0660744		12-Jan-04	4598	0.612691	0.38427	0.147663635		2.772772
13-Jan-04	33.5	-2.61627907	-2.90059654	8.41346028		13-Jan-04	4608	0.217486	-0.01094	0.000119582		0.031719
14-Jan-04	32.95	-1.641791045	-1.92610851	3.70989401		14-Jan-04	4620	0.260417	0.031995	0.00102371		-0.06163
15-Jan-04	32	-2.883156297	-3.16747377	10.0328901		15-Jan-04	4635	0.324675	0.096254	0.009264856		-0.30488
16-Jan-04	32.6	1.875	1.590682531	2.53027092		16-Jan-04	4684	1.057174	0.828752	0.686830666		1.318282
19-Jan-04	32.05	-1.687116564	-1.97143403	3.88655215		19-Jan-04	4688	0.085397	-0.14302	0.020455895		0.281963
20-Jan-04	31.9	-0.468018721	-0.75233619	0.56600974		20-Jan-04	4688	0	-0.22842	0.052176246		0.17185
21-Jan-04	32	0.313479624	0.029162155	0.00085043		21-Jan-04	4722	0.725256	0.496835	0.246844789		0.014489
22-Jan-04	31.75	-0.78125	-1.06556747	1.13543403		22-Jan-04	4769	0.995341	0.76692	0.58816591		-0.8172
23-Jan-04	31.8	0.157480315	-0.12683715	0.01608766		23-Jan-04	4762	-0.14678	-0.3752	0.140776915		0.04759
26-Jan-04	32	0.628930818	0.344613349	0.11875836		26-Jan-04	4677	-1.78496	-2.01339	4.053721185		-0.69384
27-Jan-04	32.3	0.9375	0.653182531	4.28664742		27-Jan-04	4748	1.518067	1.289646	1.663186636		0.842374
28-Jan-04	32.25	-0.154798762	-0.43911623	0.19282306		28-Jan-04	4770	0.463353	0.234932	0.055192945		-0.10316
29-Jan-04	32.75	1.550387597	1.266070128	1.60293357		29-Jan-04	4804	0.712788	0.484367	0.234611446		0.613243
30-Jan-04	32.3	-1.374045802	-1.65836327	2.75016674		30-Jan-04	4841	0.770192	0.541177	0.293515063		-0.89845
6-Feb-04	32.5	0.619195046	0.334877578	0.11214299		6-Feb-04	4888	0.970874	0.742453	0.551235839		0.248631
9-Feb-04	32.1	-1.230769231	-1.5150867	2.29548771		9-Feb-04	4848	-0.81833	-1.04675	1.095689348		1.58592
10-Feb-04	32	-0.31152648	-0.59584395	0.35503001		10-Feb-04	4908	1.237624	1.009203	1.018489806		-0.60133
11-Feb-04	31.75	-0.78125	-1.06556747	1.13543403		11-Feb-04	4890	-0.36675	-0.59517	0.354226578		0.634193
12-Feb-04	30.25	-4.724409449	-5.00872692	25.0873453		12-Feb-04	4805	-1.73824	-1.96666	3.867761434		9.850475
13-Feb-04	31	2.479338843	2.195021374	4.81811883		13-Feb-04	4875	1.456816	1.228395	1.508953328		2.696352
17-Feb-04	34.45	11.12903226	10.84471479	117.607839		17-Feb-04	4832	-0.88205	-1.11047	1.233149139		-12.0428
18-Feb-04	37	7.40203193	7.117714462	50.6618592		18-Feb-04	4900	1.407285	1.178864	1.389719306		8.390814
19-Feb-04	39.75	7.432432432	7.148114964	51.0955475		19-Feb-04	4894	-0.12245	-0.35087	0.123109885		-2.50806
20-Feb-04	40	0.628930818	0.344613349	0.11875836		20-Feb-04	4869	-0.51083	-0.73925	0.54649173		-0.25476
23-Feb-04	38	-5	-5.28431747	27.9240111		23-Feb-04	4757	-2.30027	-2.52869	6.394264003		13.36239
24-Feb-04	37	-2.631578947	-2.91589642	8.50245191		24-Feb-04	4787	0.63065	0.402228	0.161787659		-1.17286
25-Feb-04	38.35	3.648648649	3.36433118	11.3187243		25-Feb-04	4790	0.06267	-0.16575	0.027473551		-0.55764
26-Feb-04	38.5	0.391134289	0.106816821	0.01140983		26-Feb-04	4810	0.417537	0.189115	0.035764609		0.020201
27-Feb-04	40.5	5.194805195	4.910487726	24.1128897		27-Feb-04	4840	0.623701	0.395279	0.156245821		1.941015
3-Mar-04	38.5	-4.938271605	-5.22258907	27.2754366		3-Mar-04	4854	0.289256	0.060835	0.003700897		-0.31772
4-Mar-04	37.25	-3.246753247	-3.53107072	12.4684604		4-Mar-04	4888	0.700453	0.472032	0.222814239		-1.66678
5-Mar-04	35.9	-3.624161074	-3.90847854	15.2762045		5-Mar-04	4900	0.245499	0.017078	0.000291657		-0.06675
8-Mar-04	37	3.064066852	2.779749384	7.72700664		8-Mar-04	4918	0.367347	0.138926	0.01930036		0.386179
9-Mar-04	37.25	0.675675676	0.391358207	0.15316125		9-Mar-04	4910	-0.16267	-0.39109	0.15295057		-0.15306
10-Mar-04	36.5	-2.013422819	-2.29774029	5.27961043		10-Mar-04	4884	-0.52953	-0.75795	0.574492403		1.741579
11-Mar-04	36.05	-1.232876712	-1.51719418	2.30187818		11-Mar-04	4904	0.4095	0.181079	0.032789679		-0.27473
12-Mar-04	37.05	2.773925104	2.489607635	6.19814618		12-Mar-04	4915	0.224307	-0.00411	1.69292E-05		-0.01024
15-Mar-04	37.75	1.889338731	1.605021263	2.57609325		15-Mar-04	4952	0.752798	0.524376	0.274970563		0.841635
16-Mar-04	38.45	1.854304636	1.569987167	2.46485971		16-Mar-04	4980	0.565428	0.337007	0.113573655		0.529097
17-Mar-04	38.95	1.300390117	1.016072648	1.03240363		17-Mar-04	4982	0.040161	-0.18826	0.035442038		-0.19129
18-Mar-04	39	0.128369705	-0.15594776	0.02431971		18-Mar-04	4974	-0.16058	-0.389	0.151320443		0.060664
19-Mar-04	38.8	-0.512820513	-0.79713798	0.63542896		19-Mar-04	5000	0.522718	0.294297	0.086610684		-0.2346
22-Mar-04	38.5	-0.773195876	-1.05751334	1.11833447		22-Mar-04	4998	-0.04	-0.26842	0.072049942		0.283859
24-Mar-04	39.5	2.597402597	2.313085129	5.35036281		24-Mar-04	5045	0.940376	0.711955	0.506879848		1.646812
25-Mar-04	39.4	-0.253164557	-0.53748203	0.28888693		25-Mar-04	5113	1.347869	1.119448	1.253163768		-0.60168
26-Mar-04	38.95	-1.14213198	-1.42644945	2.03475803		26-Mar-04	5118	0.09779	-0.13063	0.017064525		0.186339
29-Mar-04	37.5	-3.722721438	-4.00703891	16.0563608		29-Mar-04	5103	-0.29308	-0.5215	0.271966879		2.089689
30-Mar-04	37	-1.333333333	-1.6176508	2.61679412		30-Mar-04	5103	0	-0.22842	0.052176246		0.369506
31-Mar-04	37	0	-0.28431747	0.08083642		31-Mar-04	5107	0.078385	-0.15004	0.022510783		0.042658
1-Apr-04	37.95	2.567567568	2.283250099	5.21323101		1-Apr-04	5141	0.665753	0.437332	0.191259003		0.998538

2-Apr-04	38	0.131752306	-0.15256516	0.02327613	2-Apr-04	5162	0.408481	0.18006	0.032421473	-0.02747
5-Apr-04	38.5	1.315789474	1.031472005	1.0639345	5-Apr-04	5228	1.278574	1.050153	1.102821309	1.083203
6-Apr-04	38.95	1.168831169	0.8845137	0.78236449	6-Apr-04	5267	0.745983	0.517562	0.267870387	0.457791
7-Apr-04	39	0.128369705	-0.15594776	0.02431971	7-Apr-04	5310	0.816404	0.587983	0.345723799	-0.09169
8-Apr-04	38	-2.564102564	-2.84842003	8.11349668	8-Apr-04	5345	0.659134	0.430713	0.185513264	-1.22685
12-Apr-04	38.75	1.973684211	1.689366742	2.85395999	12-Apr-04	5444	1.852198	1.623777	2.636652114	2.743155
13-Apr-04	37	-4.516129032	-4.8004465	23.0442866	13-Apr-04	5429	-0.27553	-0.50395	0.253969533	2.419204
14-Apr-04	36.5	-1.351351351	-1.63566882	2.67541249	14-Apr-04	5458	0.534168	0.305747	0.093481321	-0.5001
16-Apr-04	36.25	-0.684931507	-0.96924898	0.93944358	16-Apr-04	5582	2.271894	2.043473	4.175782981	-1.98063
19-Apr-04	35	-3.448275862	-3.73259333	13.932253	19-Apr-04	5621	0.698674	0.470253	0.221137985	-1.75526
20-Apr-04	37.6	7.428571429	7.14425396	51.0403646	20-Apr-04	5592	-0.51592	-0.74434	0.554047449	-5.31778
21-Apr-04	39	3.723404255	3.439086787	11.8273179	21-Apr-04	5433	-2.84335	-3.07177	9.43576382	-10.5641
22-Apr-04	41.9	7.435897436	7.151579967	51.145096	22-Apr-04	5576	2.632063	2.403642	5.777495413	17.18984
23-Apr-04	41.25	-1.551312649	-1.83563012	3.36953793	23-Apr-04	5407	-3.03085	-3.25927	10.62282586	5.98281
26-Apr-04	43.5	5.454545455	5.170227986	26.7312574	26-Apr-04	5416	0.166451	-0.06197	0.003840319	-0.3204
27-Apr-04	46.75	7.471264368	7.186946899	51.6522057	27-Apr-04	5427	0.203102	-0.02532	0.000641066	-0.18197
28-Apr-04	47.85	2.352941176	2.068623708	4.27920404	28-Apr-04	5369	-1.06873	-1.29715	1.682602337	-2.68332
29-Apr-04	51.4	7.419017764	7.134700295	50.9039483	29-Apr-04	5347	-0.40976	-0.63818	0.407274905	-4.55323
30-Apr-04	55.15	7.295719844	7.011402376	49.1597633	30-Apr-04	5430	1.552272	1.323851	1.552581734	9.282053
4-May-04	55	-0.271985494	-0.55630296	0.30947299	4-May-04	5526	1.767956	1.539535	2.37016678	-0.85645
5-May-04	53	-3.636363636	-3.9206811	15.3717403	5-May-04	5508	-0.32573	-0.55415	0.307086768	2.172662
6-May-04	52.5	-0.943396226	-1.22771137	1.50728092	6-May-04	5530	0.399419	0.170998	0.029240256	-0.20994
7-May-04	50	-4.761904762	-5.04622223	25.4643588	7-May-04	5529	-0.01808	-0.2465	0.060764412	1.243916
10-May-04	48	-4	-4.28431747	18.3553762	10-May-04	5477	-0.9405	-1.16892	1.366366419	5.008011
11-May-04	48	0	-0.28431747	0.08083642	11-May-04	5458	-0.34691	-0.57533	0.331000516	0.163575
12-May-04	45.6	-5	-5.28431747	27.9240111	12-May-04	5354	-1.90546	-2.13388	4.553448455	11.27611
13-May-04	44.75	-1.864035088	-2.14835256	4.61541871	13-May-04	5381	0.504296	0.275875	0.076106823	-0.59268
14-May-04	45.95	2.681564246	2.397246777	5.74679211	14-May-04	5455	1.375209	1.146788	1.31512241	2.749134
17-May-04	45.4	-1.19695321	-1.48127068	2.19416282	17-May-04	5412	-0.78827	-1.01669	1.033656212	1.505991
18-May-04	45	-0.881057269	-1.16537474	1.35809828	18-May-04	5388	-0.44346	-0.67188	0.45142298	0.782992
19-May-04	46	2.222222222	1.937904754	3.75547483	19-May-04	5439	0.946548	0.718127	0.515705931	1.391661
20-May-04	47.9	4.130434783	3.846117314	14.7926184	20-May-04	5478	0.717044	0.488622	0.238751822	1.879299
21-May-04	48.65	1.565762004	1.281444536	1.6421001	21-May-04	5511	0.60241	0.373988	0.13986735	0.479245
24-May-04	48	-1.336073998	-1.62039147	2.62566885	24-May-04	5465	-0.83469	-1.06312	1.130214461	1.722663
25-May-04	48.9	1.875	1.590682531	2.53027092	25-May-04	5465	0	-0.22842	0.052176246	-0.36335
26-May-04	48	-1.840490798	-2.12480827	4.51481017	26-May-04	5483	0.329369	0.100948	0.010190399	-0.21449
27-May-04	46.5	-3.125	-3.40931747	11.6234456	27-May-04	5477	-0.10943	-0.33785	0.114142857	1.151839
28-May-04	46.75	0.537634409	0.25331694	0.06416947	28-May-04	5503	0.474712	0.246291	0.060659371	0.06239
31-May-04	46.45	-0.641711223	-0.9260287	0.85752915	31-May-04	5498	-0.09086	-0.31928	0.101940187	0.295663
1-Jun-04	45.95	-1.076426265	-1.36074373	1.85162351	1-Jun-04	5454	-0.80029	-1.02871	1.058248827	1.399814
2-Jun-04	49.35	7.399347116	7.115029648	50.6236469	2-Jun-04	5462	0.146681	-0.08174	0.006681406	-0.58158
3-Jun-04	47.5	-3.748733536	-4.033051	16.2655004	3-Jun-04	5279	-3.35042	-3.57884	12.80811216	14.43365
4-Jun-04	51	7.368421053	7.084103584	50.1845236	4-Jun-04	5363	1.59121	1.362789	1.85719455	9.65414
7-Jun-04	52	1.960784314	1.676466845	2.81054108	7-Jun-04	5417	1.006899	0.778478	0.8606027873	1.305092
8-Jun-04	51.25	-1.442307692	-1.72662516	2.98123445	9-Jun-04	5464	0.867639	0.639218	0.408599283	-1.10369
9-Jun-04	51.8	1.073170732	0.788853263	0.62228947	10-Jun-04	5371	-1.70205	-1.93047	3.726718216	-1.52286
10-Jun-04	51	-1.544401544	-1.82871901	3.34421323	11-Jun-04	5384	-0.242041	0.013619	0.000185488	-0.020491
11-Jun-04	50.1	-1.764705882	-2.04902335	4.19849669	14-Jun-04	5218	-3.08321	-3.31163	10.96689797	6.785609
14-Jun-04	47.6	-4.99001996	-5.27433743	27.8186353	15-Jun-04	5318	1.916443	1.688022	2.849417864	-8.9032
15-Jun-04	48.5	1.890756303	1.606438834	2.58064573	16-Jun-04	5305	-0.24445	-0.47287	0.223609824	-0.75964
16-Jun-04	47	-3.092783505	-3.37710097	11.404811	17-Jun-04	5265	-0.75401	-0.98243	0.965162531	3.317755
17-Jun-04	48.5	3.191489362	2.907171893	8.45164842	18-Jun-04	5249	-0.30389	-0.53231	0.283359089	-1.54753
18-Jun-04	46.75	-3.608247423	-3.89256489	15.1520614	21-Jun-04	5104	-2.76243	-2.99085	8.945196535	11.64209
22-Jun-04	44.5	-4.812834225	-5.09715169	25.9809554	22-Jun-04	5080	-0.47022	-0.69864	0.488098742	3.561077
23-Jun-04	44	-1.123595506	-1.40791297	1.98221894	23-Jun-04	5089	0.177165	-0.05126	0.002627162	0.072164
24-Jun-04	45	2.272727273	1.988409804	3.95377355	24-Jun-04	5151	1.218314	0.989893	0.979887771	1.968313
25-Jun-04	44	-2.222222222	-2.50653969	6.28274122	25-Jun-04	5106	-0.87362	-1.10204	1.214487701	2.762302
28-Jun-04	47.3	7.5	7.215682531	52.0660744	28-Jun-04	5279	3.388171	3.15975	9.984017388	22.79975
29-Jun-04	45.15	-4.545454545	-4.82977201	23.3266977	29-Jun-04	5265	-0.2652	-0.49362	0.243663612	2.384086
30-Jun-04	44	-2.547065338	-2.83138281	8.0167286	30-Jun-04	5279	0.265907	0.037486	0.00140518	-0.10614
1-Jul-04	45	2.272727273	1.988409804	3.95377355	1-Jul-04	5348	1.307066	1.078645	1.163474021	2.144787
2-Jul-04	45	0	-0.28431747	0.08083642	2-Jul-04	5353	0.093493	-0.13493	0.018205648	0.038362
5-Jul-04	46.5	3.333333333	3.049015865	9.29649774	5-Jul-04	5400	0.878012	0.649591	0.421968632	1.980614
6-Jul-04	47.5	2.150537634	1.866220166	3.48277771	6-Jul-04	5391	-0.16667	-0.39509	0.156094425	-0.73732
7-Jul-04	48	1.052631579	0.76831411	0.59030657	7-Jul-04	5409	0.33389	0.105469	0.011123628	0.081033
8-Jul-04	49.75	3.645833333	3.361515865	11.2997889	8-Jul-04	5424	0.277316	0.048894	0.002390661	0.164359
9-Jul-04	49.05	-1.407035176	-1.69135264	2.86067377	9-Jul-04	5454	0.553097	0.324676	0.105414597	-0.54914
12-Jul-04	50	1.936799185	1.652481716	2.73069582	12-Jul-04	5486	0.586725	0.358304	0.128381854	0.592091
13-Jul-04	48.5	-3	-3.28431747	10.7867412	13-Jul-04	5473	-0.23697	-0.46539	0.216586016	1.528482
14-Jul-04	49	1.030927835	0.746610366	0.55742704	14-Jul-04	5474	0.018272	-0.21015	0.044162891	-0.1569
15-Jul-04	48	-2.040816327	-2.3251338	5.40624717	15-Jul-04	5439	-0.63939	-0.86781	0.75308967	2.017768
16-Jul-04	45.6	-5	-5.28431747	27.9240111	16-Jul-04	5388	-0.93767	-1.16609	1.359774212	6.162009
19-Jul-04	45	-1.315789474	-1.60010694	2.56034223	19-Jul-04	5379	-0.16704	-0.39546	0.156387872	0.632777
20-Jul-04	45.25	0.555555556	0.271238087	0.0735701	20-Jul-04	5389	0.185908	-0.04251	0.001807359	-0.01153
22-Jul-04	46	1.657458564	1.373141095	1.88551647	22-Jul-04	5426	0.686584	0.458163	0.209912949	0.629122
23-Jul-04	46	0	-0.28431747	0.08083642	23-Jul-04	5409	-0.31331	-0.54173	0.29346869	0.154023
26-Jul-04	45.7	-0.652173913	-0.93649138	0.87701611	26-Jul-04	5346	-1.16473	-1.39315	1.940857617	1.30467
27-Jul-04	45.15	-1.203501094	-1.48781856	2.21360408	27-Jul-04	5314	-0.59858	-0.827	0.683928304	1.230425
29-Jul-04	45	-0.332225914	-0.61654338	0.38012574	29-Jul-04	5304	-0.18818	-0.4166	0.173558362	0.256854

2-Aug-04	44	-2.222222222	-2.50653969	6.28274122	2-Aug-04	5207	-1.82881	-2.05723	4.232193829	5.156528
3-Aug-04	44	0	-0.28431747	0.08083642	3-Aug-04	5263	1.075475	0.847054	0.717500681	-0.24083
4-Aug-04	46.5	5.681818182	5.397500713	29.1330139	4-Aug-04	5309	0.874026	0.645605	0.416805839	3.484654
5-Aug-04	45	-3.225806452	-3.51012392	12.3209699	5-Aug-04	5304	-0.09418	-0.3226	0.104071339	1.132369
9-Aug-04	46.5	3.333333333	3.049015865	9.29649774	9-Aug-04	5364	1.131222	0.902801	0.815048773	2.752653
10-Aug-04	48.5	4.301075269	4.0167578	16.1343432	10-Aug-04	5368	0.074571	-0.15385	0.023669819	-0.61798
11-Aug-04	50	3.092783505	2.808466037	7.88748148	11-Aug-04	5353	-0.27943	-0.50785	0.257916583	-1.42629
12-Aug-04	47.5	-5	-5.28431747	27.9240111	12-Aug-04	5326	-0.50439	-0.73281	0.537012349	3.872407
13-Aug-04	47.95	0.947368421	0.663050952	0.43963657	13-Aug-04	5336	0.187758	-0.04066	0.001653482	-0.02696
16-Aug-04	45.9	-4.275286757	-4.55960423	20.7899907	16-Aug-04	5330	-0.11244	-0.34086	0.116188935	1.554209
17-Aug-04	46	0.217864924	-0.06645254	0.00441594	17-Aug-04	5378	0.900563	0.672142	0.451774396	-0.04467
18-Aug-04	46	0	-0.28431747	0.08083642	18-Aug-04	5417	0.725177	0.496755	0.24676597	-0.14124
19-Aug-04	46	0	-0.28431747	0.08083642	19-Aug-04	5378	-0.71996	-0.94838	0.89941874	0.26964
20-Aug-04	46	0	-0.28431747	0.08083642	20-Aug-04	5409	0.576422	0.348001	0.121104876	-0.09894
23-Aug-04	47.3	2.826086957	2.541769488	6.46059213	23-Aug-04	5401	-0.1479	-0.37632	0.141618886	-0.95653
24-Aug-04	46.05	-2.642706131	-2.9270236	8.56746715	24-Aug-04	5368	-0.611	-0.83942	0.704624536	2.457
25-Aug-04	47.45	3.040173724	2.755856256	7.5947437	25-Aug-04	5355	-0.24218	-0.4706	0.221461593	-1.2969
26-Aug-04	47.4	-0.105374078	-0.38969155	0.1518595	26-Aug-04	5381	0.485528	0.257106	0.066103671	-0.10019
27-Aug-04	46.75	-1.371308017	-1.65562549	2.74109575	27-Aug-04	5394	0.241591	0.01317	0.510890626	-0.0218
30-Aug-04	47	0.534759358	0.25044189	0.06272114	30-Aug-04	5330	-1.1865	-1.41492	2.002011978	-0.35436
31-Aug-04	49	4.255319149	3.97100168	15.7688543	31-Aug-04	5346	0.300188	0.071766	0.005150418	0.284985
1-Sep-04	48.5	-1.020408163	-1.30472563	1.70230897	1-Sep-04	5320	-0.48634	-0.71477	0.510890626	0.932574
2-Sep-04	49.2	1.443298969	1.1589815	1.34323812	2-Sep-04	5328	0.150376	-0.07805	0.006091063	-0.09045
3-Sep-04	48.25	-1.930894309	-2.21521178	4.90716322	3-Sep-04	5319	-0.16892	-0.39734	0.157879172	0.880193
6-Sep-04	46	-4.663212435	-4.9475299	24.4780521	6-Sep-04	5195	-2.33127	-2.55969	6.551994866	12.66413
7-Sep-04	46	0	-0.28431747	0.08083642	7-Sep-04	5169	-0.50048	-0.7289	0.531298759	0.20724
8-Sep-04	48.1	4.565217391	4.280899923	18.3261041	8-Sep-04	5199	0.580383	0.351962	0.123877144	1.506713
9-Sep-04	48	-0.207900208	-0.49221768	0.24227824	9-Sep-04	5184	-0.28852	-0.51694	0.672225129	0.254446
10-Sep-04	47	-2.083333333	-2.3676508	5.60577032	10-Sep-04	5172	-0.23148	-0.4599	0.211510479	1.088889
13-Sep-04	48	2.127659574	1.843342106	3.39791012	14-Sep-04	5087	-1.64346	-1.87189	3.503957246	-3.45053
14-Sep-04	46	-4.166666667	-4.45098414	19.8112598	15-Sep-04	4997	-1.76922	-1.99764	3.990552986	8.89145
15-Sep-04	45	-2.173913043	-2.45823051	6.04289725	20-Sep-04	5045	0.960576	0.732155	0.536051154	-1.79981
20-Sep-04	45.5	1.111111111	0.826793643	0.68358773	21-Sep-04	4958	-1.72448	-1.9529	3.813821869	-1.61465
21-Sep-04	46.15	1.428571429	1.14425396	1.30931712	22-Sep-04	4890	-1.37152	-1.59994	2.55981433	-1.83074
22-Sep-04	44.95	-2.600216685	-2.88453415	8.32053728	23-Sep-04	4971	1.656442	1.428021	2.039242592	-4.11917
23-Sep-04	46.95	4.449388209	4.165070741	17.3478143	24-Sep-04	5081	2.212834	1.984413	3.937895895	8.265222
24-Sep-04	48	2.236421725	1.952104257	3.81071103	27-Sep-04	5125	0.865971	0.63755	0.406470083	1.244564
27-Sep-04	47.65	-0.729166667	-1.01348414	1.02715009	28-Sep-04	5128	0.058537	-0.16988	0.028860783	0.172175
29-Sep-04	48	0.73452256	0.450205092	0.20268462	29-Sep-04	5196	1.326053	1.097632	1.204795655	0.494159
30-Sep-04	49.5	3.125	2.840682531	8.06947724	30-Sep-04	5218	0.423403	0.194981	0.038017752	0.55388
1-Oct-04	49	-1.01010101	-1.29441848	1.6755192	1-Oct-04	5246	0.536604	0.308183	0.094976675	-0.39892
4-Oct-04	48.5	-1.020408163	-1.30472563	1.70230897	4-Oct-04	5268	0.419367	0.190946	0.03646035	-0.24913
5-Oct-04	48.95	0.927835052	0.643517583	0.41411488	5-Oct-04	5233	-0.66439	-0.89281	0.797109634	-0.57454
7-Oct-04	47.5	-2.962206333	-3.2465238	10.5399168	7-Oct-04	5296	1.203898	0.975477	0.95155564	-3.16691
12-Oct-04	47	-1.052631579	-1.33694905	1.78743276	12-Oct-04	5421	2.360272	2.131851	4.54478741	-2.85018
14-Oct-04	48.95	4.14893617	3.864618702	14.9352777	14-Oct-04	5470	0.903892	0.675471	0.456261164	2.610438
15-Oct-04	48.5	-0.919305414	-1.20362288	1.44870804	15-Oct-04	5433	-0.67642	-0.90484	0.818731846	1.089084
18-Oct-04	46.2	-4.742268041	-5.02658551	25.2665619	18-Oct-04	5381	-0.95711	-1.18554	1.405493559	5.959194
19-Oct-04	49.65	7.467532468	7.183214999	51.5985777	19-Oct-04	5467	1.598216	1.369795	1.876337636	9.83953
20-Oct-04	49.75	0.201409869	-0.0829076	0.00687367	20-Oct-04	5465	-0.03658	-0.265	0.070227299	0.021971
21-Oct-04	48.15	-3.216080402	-3.50039787	12.2527853	21-Oct-04	5453	-0.21958	-0.448	0.200704307	1.568179
22-Oct-04	49.5	2.803738318	2.519420849	6.34748142	22-Oct-04	5458	0.091693	-0.13673	0.018694698	-0.34448
25-Oct-04	48.05	-2.929292929	-3.2136104	10.3272918	25-Oct-04	5468	0.183217	-0.0452	0.002043393	0.145268
26-Oct-04	48	-0.104058273	-0.38837574	0.15083572	26-Oct-04	5390	-1.42648	-1.6549	2.738702446	0.642724
27-Oct-04	48.5	1.041666667	0.757349198	0.57357781	27-Oct-04	5383	-0.12987	-0.35829	0.128372679	-0.27135
29-Oct-04	48.5	0	-0.28431747	0.08083642	29-Oct-04	5332	-0.94743	-1.17585	1.382619196	0.334314
1-Nov-04	48	-1.030927835	-1.3152453	1.72987021	1-Nov-04	5247	-1.59415	-1.82257	3.321760457	2.397126
2-Nov-04	48.9	1.875	1.590682531	2.53027092	2-Nov-04	5330	1.581856	1.353435	1.831786559	2.152886
3-Nov-04	48	-1.840490798	-2.12480827	4.51481017	3-Nov-04	5352	0.412758	0.184337	0.033980045	-0.39168
4-Nov-04	47.5	-1.041666667	-1.32598414	1.75823393	4-Nov-04	5348	-0.07474	-0.30316	0.091905754	0.401985
8-Nov-04	48	1.052631579	0.76831411	0.59030657	8-Nov-04	5379	0.579656	0.351235	0.123365845	0.269859
12-Nov-04	50	4.166666667	3.882349198	15.0726353	12-Nov-04	5484	1.952036	1.723614	2.970846916	6.691673
18-Nov-04	49	-2	-2.28431747	5.2181063	18-Nov-04	5515	0.565281	0.33686	0.1134744	-0.76949
19-Nov-04	49.95	1.93877551	1.654458042	2.73723141	19-Nov-04	5520	0.090662	-0.13776	0.018977644	-0.22792
22-Nov-04	49.5	-0.900900901	-1.18521837	1.40474258	22-Nov-04	5503	-0.30797	-0.53639	0.287716611	0.635742
23-Nov-04	49.5	0	-0.28431747	0.08083642	23-Nov-04	5514	0.199891	-0.02853	0.000813974	0.008112
24-Nov-04	49	-1.01010101	-1.29441848	1.6755192	24-Nov-04	5533	0.344577	0.116156	0.013492271	-0.15035
25-Nov-04	48.75	-0.510204082	-0.79452155	0.63126449	25-Nov-04	5523	-0.18073	-0.40915	0.167407799	0.325082
26-Nov-04	48.6	-0.307692308	-0.59200978	0.35047558	26-Nov-04	5557	0.615607	0.387186	0.149913198	-0.22922
1-Dec-04	46.4	-4.526748971	-4.81106644	23.1463603	1-Dec-04	5561	0.071981	-0.15644	0.024473448	0.752643
2-Dec-04	48.1	3.663793103	3.379475635	11.4208556	2-Dec-04	5553	-0.14386	-0.37228	0.138592563	-1.25811
3-Dec-04	49.3	2.494802495	2.210485026	4.88624405	3-Dec-04	5576	0.414191	0.185769	0.034510242	0.41064
6-Dec-04	51.35	4.15821501	3.873897542	15.0070822	6-Dec-04	5633	1.022238	0.793817	0.630145367	3.075166
7-Dec-04	53.5	4.186952288	3.90263482	15.2305585	7-Dec-04	5676	0.763359	0.534938	0.28615821	2.087666
8-Dec-04	52	-2.803738318	-3.08805579	9.53608854	8-Dec-04	5699	0.405215	0.176794	0.031256026	-0.54595
9-Dec-04	53	1.923076923	1.638759454	2.68553255	9-Dec-04	5738	0.684331	0.455909	0.207853364	0.747126
10-Dec-04	55	3.773584906	3.489267437	12.1749872	10-Dec-04	5701	-0.64482	-0.87325	0.76255715	-3.04699
13-Dec-04	56.5	2.727272727	2.442955259	5.9680304	13-Dec-04	5758	0.999825	0.771403	0.595063189	1.884504
14-Dec-04	55.1	-2.477876106	-2.76219357	7.62971334	14-Dec-04	5767	0.156304	-0.07212	0.005200852	0.199201

15-Dec-04	57.15	3.720508167	3.436190698	11.8074065		15-Dec-04	5824	0.988382	0.759961	0.577540679		2.611371
16-Dec-04	55.4	-3.062117235	-3.3464347	11.1986252		16-Dec-04	5828	0.068681	-0.15974	0.025516831		0.534559
17-Dec-04	54.2	-2.166064982	-2.45038245	6.00437415		17-Dec-04	5843	0.257378	0.028957	0.000838506		-0.07096
20-Dec-04	55.75	2.859778598	2.575461129	6.63300003		20-Dec-04	5853	0.171145	-0.05728	0.003280568		-0.14751
21-Dec-04	56.5	1.34529148	1.060974011	1.12566585		21-Dec-04	5874	0.35879	0.130369	0.016996118		0.138318
22-Dec-04	57.15	1.150442478	0.866125009	0.75017253		22-Dec-04	5965	1.5492	1.320779	1.744456272		1.143959
23-Dec-04	55.3	-3.237095363	-3.52141283	12.4003483		23-Dec-04	5978	0.217938	-0.01048	0.000109898		0.036916
24-Dec-04	56	1.265822785	0.981505316	0.96335269		24-Dec-04	6046	1.137504	0.909083	0.826431863		0.89227
27-Dec-04	56.9	1.607142857	1.322825389	1.74986701		27-Dec-04	6046	0	-0.22842	0.052176246		-0.30216
28-Dec-04	56	-1.58172232	-1.86603979	3.48210449		28-Dec-04	6078	0.529276	0.300854	0.090513341		-0.56141
29-Dec-04	60	7.142857143	6.858539674	47.0395665		29-Dec-04	6124	0.756828	0.528407	0.279213642		3.624098
30-Dec-04	60.25	0.416666667	0.132349198	0.01751631		30-Dec-04	6107	-0.2776	-0.50602	0.256053756		-0.06697
31-Dec-04	61.5	2.074688797	1.790371328	3.20542949		31-Dec-04	6218	1.817586	1.589165	2.525445949		2.845196
3-Jan-05	62	0.81300813	0.528690661	0.27951382		3-Jan-05	6220	0.032165	-0.19626	0.038516621		-0.10376
4-Jan-05	62	0	-0.28431747	0.08083642		4-Jan-05	6298	1.254019	1.025598	1.051851442		-0.2916
5-Jan-05	62	0	-0.28431747	0.08083642		5-Jan-05	6286	-0.19054	-0.41896	0.175525706		0.119117
6-Jan-05	62.45	0.725806452	0.441488983	0.19491252		6-Jan-05	6353	1.065861	0.837439	0.701304816		0.36972
7-Jan-05	60	-3.923138511	-4.20745598	17.7026858		7-Jan-05	6319	-0.53518	-0.7636	0.583087148		3.212819
10-Jan-05	60.65	1.083333333	0.799015865	0.63842635		10-Jan-05	6484	2.611173	2.382751	5.677504478		1.903856
11-Jan-05	62.3	2.720527617	2.436210149	5.93511989		11-Jan-05	6710	3.485503	3.257082	10.60858038		7.934935
12-Jan-05	62	-0.481540931	-0.7658584	0.58653909		12-Jan-05	6657	-0.78987	-1.01829	1.036908566		0.779864
14-Jan-05	61.9	-0.161290323	-0.44560779	0.1985663		14-Jan-05	6560	-1.45711	-1.68553	2.84102492		0.751087
17-Jan-05	61	-1.453957997	-1.73827547	3.02160159		17-Jan-05	6633	1.112805	0.884384	0.782134485		-1.5373
18-Jan-05	60	-1.639344262	-1.92366173	3.70047445		18-Jan-05	6604	-0.43721	-0.66563	0.443062102		1.280445
19-Jan-05	60	0	-0.28431747	0.08083642		19-Jan-05	6746	2.150212	1.921791	3.693279841		-0.5464
24-Jan-05	61	1.666666667	1.382349198	1.91088931		24-Jan-05	6862	1.719538	1.491116	2.223427823		2.061243
25-Jan-05	60	-1.639344262	-1.92366173	3.70047445		25-Jan-05	6888	0.378898	0.150477	0.022643351		-0.28947
26-Jan-05	64.5	7.5	7.215682531	52.0660744		26-Jan-05	6905	0.246806	0.018385	0.000338002		0.132659
27-Jan-05	67.5	4.651162791	4.366845322	19.0693381		27-Jan-05	6953	0.695148	0.466727	0.217834317		2.038126
28-Jan-05	67	-0.740740741	-1.02505821	1.05074433		28-Jan-05	6798	-2.22925	-2.45767	6.040165237		2.51926
31-Jan-05	65	-2.985074627	-3.2693921	10.6889247		31-Jan-05	6747	-0.75022	-0.97864	0.957739882		3.199564
1-Feb-05	65	0	-0.28431747	0.08083642		1-Feb-05	6869	1.808211	1.57979	2.495735983		-0.44916
2-Feb-05	65.5	0.769230769	0.484913301	0.23514091		2-Feb-05	6950	1.179211	0.95079	0.904001139		0.461051
3-Feb-05	68.9	5.190839695	4.906522226	24.0739604		3-Feb-05	7015	0.935252	0.706831	0.499609491		3.46808
4-Feb-05	67.5	-2.031930334	-2.3162478	5.36500388		4-Feb-05	6968	-0.66999	-0.89841	0.80714785		2.08095
7-Feb-05	68	0.740740741	0.456423272	0.2083222		7-Feb-05	7091	1.765212	1.536791	2.361727183		0.701427
8-Feb-05	68	0	-0.28431747	0.08083642		8-Feb-05	7155	0.902553	0.674131	0.454453048		-0.19167
9-Feb-05	69	1.470588235	1.186270767	1.40723833		9-Feb-05	7157	0.027952	-0.20047	0.040187708		-0.23781
10-Feb-05	69.2	0.289855072	0.005537604	3.0665E-05		10-Feb-05	7197	0.558893	0.330472	0.109211867		0.00183
11-Feb-05	69.2	0	-0.28431747	0.08083642		11-Feb-05	7239	0.583576	0.355155	0.012952278		-0.10098
14-Feb-05	71	2.601156069	2.316838601	5.3677411		14-Feb-05	7342	1.422848	1.194427	1.426656472		2.767295
15-Feb-05	69.75	-1.76056338	-2.04488085	4.18153769		15-Feb-05	7403	0.830836	0.602415	0.362903931		-1.23187
16-Feb-05	69.75	0	-0.28431747	0.08083642		16-Feb-05	7509	1.431852	1.203431	1.448245568		-0.34216
17-Feb-05	68	-2.508960573	-2.79327804	7.80240222		17-Feb-05	7580	0.945532	0.717111	0.514247936		-2.00309
18-Feb-05	66.1	-2.794117647	-3.07843512	9.47676276		18-Feb-05	7734	2.031662	1.803241	3.251678344		-5.55116
21-Feb-05	65	-1.664145234	-1.9484627	3.79650691		21-Feb-05	7866	1.706749	1.478328	2.185454313		-2.88047
22-Feb-05	65.5	0.769230769	0.484913301	0.23514091		22-Feb-05	7926	0.762777	0.534355	0.285535591		0.259116
23-Feb-05	64	-2.290076336	-2.5743938	6.62750346		23-Feb-05	8181	3.21726	2.988838	8.933155275		-7.69445
24-Feb-05	64	0	-0.28431747	0.08083642		24-Feb-05	8253	0.880088	0.651667	0.424669626		-0.18528
25-Feb-05	63.8	-0.3125	-0.59681747	0.35619109		25-Feb-05	8285	0.387738	0.159317	0.025381776		-0.09508
28-Feb-05	62.5	-2.037617555	-2.32193502	5.39138225		28-Feb-05	8260	-0.30175	-0.53017	0.281081664		1.231023
2-Mar-05	59.5	-4.8	-5.08431747	25.8502841		2-Mar-05	8206	-0.65375	-0.88217	0.778231371		4.485254
3-Mar-05	61.5	3.361344538	3.077027069	9.46809558		3-Mar-05	8497	3.546186	3.317765	11.00756138		10.20885
9-Mar-05	62	0.81300813	0.528690661	0.27951382		9-Mar-05	9588	12.83983	12.6114	159.0475264		6.667532
10-Mar-05	60	-3.225806452	-3.51012392	12.3209699		10-Mar-05	9572	-0.16688	-0.3953	0.156259294		1.38754
11-Mar-05	64.5	7.5	7.215682531	52.0660744		11-Mar-05	9604	0.334308	0.105887	0.011212098		0.764048
14-Mar-05	62.5	-3.100775194	-3.38509266	11.4588523		14-Mar-05	9998	4.102457	3.874036	15.00815576		-13.114
15-Mar-05	60.9	-2.56	-2.84431747	8.09014186		15-Mar-05	10303	3.05061	2.822189	7.964750296		-8.0272
16-Mar-05	60.3	-0.985221675	-1.26953914	1.61172964		16-Mar-05	10078	-2.18383	-2.41225	5.818955635		3.062447
17-Mar-05	59.5	-1.326699834	-1.6110173	2.59537675		17-Mar-05	9636	-4.38579	-4.61421	21.2909527		7.433575
18-Mar-05	57	-4.201680672	-4.48599814	20.1241793		18-Mar-05	9499	-1.42175	-1.65017	2.723070821		7.402673
21-Mar-05	57	0	-0.28431747	0.08083642		21-Mar-05	9098	-4.2215	-4.44992	19.80177201		1.265189
22-Mar-05	54.15	-5	-5.28431747	27.9240111		22-Mar-05	8695	-4.42954	-4.65797	21.69664873		24.61417
25-Mar-05	51.5	-4.893813481	-5.17813095	26.8130401		25-Mar-05	7965	-8.39563	-8.62405	74.37425349		44.65646
29-Mar-05	55	6.796116505	6.511799036	42.4035267		29-Mar-05	7855	-1.38104	-1.60946	2.590371991		-10.4805
30-Mar-05	58.5	6.363636364	6.079318895	36.9581182		30-Mar-05	8086	2.940802	2.712381	7.35700979		16.48943
31-Mar-05	57	-2.564102564	-2.84842003	8.11349668		31-Mar-05	7770	-3.90799	-4.13641	17.10989033		11.78223
1-Apr-05	54.15	-5	-5.28431747	27.9240111		1-Apr-05	7597	-2.2651	-2.45493	6.026698142		12.97265
4-Apr-05	51.45	-4.986149584	-5.27046705	27.777823		4-Apr-05	8050	5.96288	5.734459	32.88401866		-30.2233
6-Apr-05	53	3.012633625	2.728316156	7.44370905		6-Apr-05	7614	-5.41615	-5.64457	31.86117354		-15.4002
7-Apr-05	51	-3.773584906	-4.05790237	16.4665717		7-Apr-05	7784	2.232729	2.004308	4.01725048		-8.13329
8-Apr-05	51	0	-0.28431747	0.08083642		8-Apr-05	7593	-2.45375	-2.68217	7.194049252		0.762588
11-Apr-05	52	1.960784314	1.676466845	2.81054108		11-Apr-05	7244	-4.59634	-4.82476	23.27830844		-8.08855
14-Apr-05	51.9	-0.192307692	-0.47662516	0.22717154		14-Apr-05	7203	-0.56599	-0.79441	0.631082237		0.378634

19-Apr-05	49.35	-4.913294798	-5.19761227	27.0151733		19-Apr-05	6953	-3.47078	-3.6992	13.68406043		19.22699
20-Apr-05	53.05	7.497467072	7.213149603	52.0295272		20-Apr-05	7031	1.121818	0.893397	0.798157695		6.444204
21-Apr-05	56.95	7.351555137	7.067237668	49.9458483		21-Apr-05	7101	0.995591	0.767117	0.588549428		5.421771
25-Apr-05	55.25	-2.985074627	-3.2693921	10.6889247		25-Apr-05	6997	-1.46458	-1.693	2.866261379		5.535093
26-Apr-05	58	4.977375566	4.693058097	22.0247943		26-Apr-05	7165	2.401029	2.172608	4.720224695		10.196117
27-Apr-05	56	-3.448275862	-3.73259333	13.932253		27-Apr-05	7276	1.549197	1.320776	1.744449995		-4.92992
28-Apr-05	57	1.785714286	1.501396817	2.2541924		28-Apr-05	7144	-1.81418	-2.0426	4.172234451		-3.06676
2-May-05	54.25	-4.824561404	-5.10887887	26.1006433		2-May-05	6833	-4.3533	-4.58172	20.99220099		23.40748
3-May-05	51.6	-4.884792627	-5.1691101	26.7196992		3-May-05	6888	0.804917	0.576496	0.332347765		-2.97997
5-May-05	54	4.651162791	4.366845322	19.0693381		5-May-05	7098	3.04878	2.820359	7.954426497		12.31607
6-May-05	56.7		5	4.715682531	22.2376617	6-May-05	7183	1.19752	0.969099	0.939153309		4.569964
9-May-05	59.5	4.938271605	4.653954136	21.6592891		9-May-05	7385	2.812195	2.583774	6.675889421		12.02477
10-May-05	57.05	-4.117647059	-4.40196453	19.3772917		10-May-05	7368	-0.2302	-0.45862	0.210330054		2.018818
11-May-05	55	-3.593339176	-3.87765664	15.0362211		11-May-05	7498	1.764387	1.535965	2.359189506		-5.95595
12-May-05	55		0	-0.28431747	0.08083642	12-May-05	7284	-2.85409	-3.08252	9.501902596		0.876413
16-May-05	55		0	-0.28431747	0.08083642	16-May-05	7316	0.439319	0.210898	0.044477904		-0.05996
17-May-05	52.25		-5	-5.28431747	27.9240111	17-May-05	7438	1.667578	1.439157	2.071172032		-7.60496
23-May-05	49.65	-4.976076555	-5.26039402	27.6717453		23-May-05	6983	-6.11724	-6.34566	40.267363		33.38066
24-May-05	47.55	-4.229607251	-4.51392472	20.3755164		24-May-05	7035	0.744666	0.516244	0.266508295		-2.33029
30-May-05	49.9	4.942166141	4.657848672	21.6955543		30-May-05	6708	-4.64819	-4.87661	23.78131374		-22.7145
31-May-05	52.35	4.909819639	4.625502171	21.3952703		31-May-05	6858	2.236136	2.007715	4.030918535		9.286689
1-Jun-05	54.95	4.966571156	4.682253687	21.9234996		1-Jun-05	7020	2.362205	2.133784	4.553032118		9.990916
2-Jun-05	56.85	3.457688808	3.173371339	10.0702857		2-Jun-05	7322	4.301994	4.073573	16.5939978		12.92696
3-Jun-05	55	-3.254177661	-3.53849513	12.5209478		3-Jun-05	7213	-1.48866	-1.71709	2.948382621		6.075899
7-Jun-05	57.75		5	4.715682531	22.2376617	7-Jun-05	7391	2.467767	2.239345	5.014667507		10.56004
8-Jun-05	60.6	4.935064935	4.650747466	21.629452		8-Jun-05	7264	-1.71831	-1.94673	3.789746988		-9.05374
9-Jun-05	63.5	4.785478548	4.501161079	20.2604511		9-Jun-05	7307	0.59196	0.363539	0.132160713		1.636348
13-Jun-05	63.4	-0.157480315	-0.44179778	0.19518528		13-Jun-05	7442	1.847543	1.619122	2.621556857		-0.71532
14-Jun-05	66	4.100946372	3.816628904	14.5666562		14-Jun-05	7369	-0.98092	-1.20934	1.462503986		-4.6156
15-Jun-05	66		0	-0.28431747	0.08083642	15-Jun-05	7489	1.628443	1.400022	1.960062375		-0.39805
16-Jun-05	65	-1.515151515	-1.79946898	3.23808862		16-Jun-05	7331	-2.10976	-2.33818	5.467095932		4.207486
20-Jun-05	67	3.076923077	2.792605608	7.79864608		20-Jun-05	7663	4.528714	4.300292	18.4925154		12.00902
21-Jun-05	64	-4.47761194	-4.76192941	22.6759717		21-Jun-05	7490	-2.2576	-2.48602	6.180308687		11.83826
	E(R_{IMCL})	0.284317469	Variance	12.121453			E(R_{KSE-100})	0.228421	Variance	3.384463168		2.310923
	Average		σ_{IMCL}	6.06072652			Average		σ_{KSE-100}	1.692231584		

WACC

Cost of Equity 0.11803

Since there is no long term debt in the company and the cost of equity itself is the WACC

WACC 11.80%

BIBLIOGRAPHY

- <https://www.cia.gov/cia/publications/factbook/rankorder/2129rank.html>
- http://ww1.transparency.org/cpi/2005/cpi2005_infocus.html#cpi,
- <http://www.heritage.org/research/features/index/country.cfm?id=Pakistan>
- <http://hdr.undp.org/statistics/data/countries.cfm?c=PAK>
- http://www.worldbank.org/data/databytopic/GDP_PPP.pdf^
- <https://www.cia.gov/cia/publications/factbook/rankorder/2003rank.html>
- <https://www.cia.gov/cia/publications/factbook/rankorder/2087rank.html>
- <https://www.cia.gov/cia/publications/factbook/geos/pk.html#Econ>
- <https://www.cia.gov/cia/publications/factbook/fields/2046.html>
- <https://www.cia.gov/cia/publications/factbook/rankorder/2078rank.html>
- http://www.pakistan.gov.pk/divisions/ContentInfo.jsp?DivID=18&cPath=165_171&ContentID=2351
- [^http://www.pakistan.gov.pk/divisions/ContentInfo.jsp?DivID=18&cPath=165_171&ContentID=2351](http://www.pakistan.gov.pk/divisions/ContentInfo.jsp?DivID=18&cPath=165_171&ContentID=2351)
- <http://www.forbes.com/lists/2005/03/30/05f2000land.html>
- <http://www.ameinfo.com/87639.html>
- http://www.dailytimes.com.pk/default.asp?page=2006%5C06%5C02%5Cstory_2-6-2006_pg1_4
- <http://www.emaar.com/MediaCenter/PressReleases/2006May31.asp>
- http://www.dailytimes.com.pk/default.asp?page=2006\06\03\story_3-6-2006_pg5_1
- <http://www.tmcnet.com/usubmit/-fdi-into-pakistan-jumps-1806-1st-9-months-/2006/04/26/1610074.htm>
- [^
http://www.dailytimes.com.pk/default.asp?page=2006%5C03%5C24%5Cstory_24-3-2006_pg5_4](http://www.dailytimes.com.pk/default.asp?page=2006%5C03%5C24%5Cstory_24-3-2006_pg5_4)
- Petkova R, Ileva R, Rusenov A, Slavov, S and Sredkova, L. Evaluating the Impact of Tobacco Control Policies on Employment, Bulgarian Case, (unpublished, commissioned by WHO Kobe Centre for Health Development), December
- Sayginsoy Ö. An Analysis of the links between Poverty and Tobacco in Egypt (unpublished work for the World Bank), 2002.
- Sayginsoy Ö, Yürekli A, de Beyer J. Cigarette Demand, Taxation and the Poor; A Case Study of Bulgaria, Economics of Tobacco Discussion Paper No 4, Health, Nutrition and Population, World Bank, December 2002.
- van Liemt G. The world tobacco industry: Trends and prospects. International Labour Office, Sectoral Activities Programme Working Paper, 2001

- van Walbeek CP. The distributional impact of changes in tobacco prices: Some preliminary findings. Economics of Tobacco Control Project (Phase II), University of Cape Town, South Africa (unpublished) 2000.
- World Bank, *PRSP Source book* Health chapter, 2001, available on-line www.worldbank.org/hnp
- World Bank. Curbing the Epidemic: governments and the economics of tobacco control. Development in Practice, Washington DC; 1999.
- World Bank. World Development Indicators 2000. World Bank, 2000
- Yürekli, A. (forthcoming) Cigarette smuggling – new analysis of its impact on tax rate and revenue increases. World Bank Economics of Tobacco Discussion Paper. World Bank, 2003.
- Basheer RA. The Economics of Tobacco and its consumption in India. Report prepared for the World Bank. (unpublished) May 1993.
- Corrao MA, Guindon GE, Sharma N, Shokoohi DF (eds). Tobacco Control Country Profiles, American Cancer Society, Atlanta, GA 2000
- de Beyer J, Yürekli A and Lovelace C. Poverty and tobacco, *Tobacco Control* 2001 10: 210-211
- Efroymsen D, Ahmed S, Townsend J, et al. Hungry for tobacco: an analysis of the economic impact of tobacco consumption on the poor in Bangladesh. *Tobacco Control* 2001;10:212-217
- Gong LY, Koplan JP, Feng W, Chen CH, Zheng P, Harris JR. Cigarette smoking in China. Prevalence, characteristics and attitudes in Minhang District. *JAMA* 1995; 274:1232-4.
- Hu, TW and Mao, Z. Economic Analysis of Tobacco and Options for Tobacco Control: China Case Study, Economics of Tobacco Discussion Paper No 3, Health, Nutrition and Population, World Bank, November 2002
- Jaffee, S. Malawi's Tobacco Sector: Standing on One Strong Leg is Better Than on None, World Bank, June 2002
- Jha P and Chaloupka, F. Tobacco Control in Developing Countries, OUP for the World Bank and WHO, 2000
- Keyser, J. The Costs and Profitability of Tobacco Compared to other Crops in Zimbabwe, Economics of Tobacco Discussion Paper No 1, Health, Nutrition and Population, World Bank, June 2002
- Krasovsky K, Andreeva T, Krisanov D, Mashliakivsky and Rud G. Economics of Tobacco Control in Ukraine from the Public Health Perspective, Alcohol and Drug Information Center, Kiev, 2002
- Malhotra, SP. Tobacco in India: Long term Perspective”, unpublished manuscript commissioned by the FAO, 2001
- Mergos G. Tobacco: Supply, Demand and Trade Projections, 2005-2010. Unpublished paper prepared for the FAO, 2001
- Narayan D, Chambers R, Shah M and Petesch P. Voices of the Poor Crying Out for Change. World Bank, Washington DC, 2000
- Önder, Z. The Economics of Tobacco in Turkey: New evidence and demand estimates, Economics of Tobacco Discussion Paper No 2, Health, Nutrition and Population, World Bank, November 2002.

- **Groom B. Battling bootleggers disturb Dover's calm. Financial Times, March 18 1998**
- **Joossens L, Raw M. Cigarette smuggling in Europe: who really benefits? Tobacco control, 1998;7:66-71.**
- **Committee of inquiry into the community transit system. Brussels: European Parliament, 1997 (4 volumes).**
- **Barford MF. New dimensions boost cigarette smuggling. Tobacco Journal International, 1993; 3:16-18.**
- **Committee of inquiry into the community transit system. Brussels: European Parliament, 1997 (4 volumes).**
- **Committee of inquiry into the community transit system. Brussels: European Parliament, 1997 (4 volumes).**
- **European Commission, Fight against fraud, COM (98) 276 final, Brussels: CEC, May 1998.**
- **Merriman D, Yurekli A, Chaloupka F. How big is the worldwide smuggling problem? NBER Working Paper, Cambridge, Mass. National Bureau of Economic Research, in press**
- **Jha P, Chaloupka F. Curbing the epidemic: governments and the economics of tobacco control. Washington, USA: World Bank, 1999**
- **Canadians and smoking: an update. Ottawa: Health and Welfare Canada, 1991 and Health Canada, Survey on smoking in Canada, Cycle 1 Fact Sheets, Ottawa: Health Canada, 1994.**
- **Sweanor D. The smuggling of tobacco products. Ottawa: Smoking and Health Foundation, 1997.**
- **Non-smokers' right association. Two years later: The high cost of the 1994 tobacco tax cuts. Press Release, Toronto, February 8 1996.**
- **Wendleby M, Nordgren P. Balancing the price: Sweden. In: Lipponen S, Hara M, Waller M, Piha T (Eds), Non-taxable imports of tobacco. Helsinki: Ministry of Social Affairs and Health, 1998**
- **Personal communication: Paul Nordgren, National Institute of Public Health, Stockholm, June 17 1998**
- **Chollat-Tracquet, C. (1996) Evaluating Tobacco Control Activities, World Health Organization, Geneva, p. 32**
- **ITGA (1996) Tobacco -- a major world crop, ITGA Issues Paper No. 2, East Grinstead, England**
- **US Department of Agriculture (1994) World Tobacco Situation Report, Foreign Agriculture Service.**
- **Reuters, April 18, 1996**
- **UN ECOSOC (1994) Annex II - Position Paper of the Food and Agriculture Organization of the United Nations on Tobacco Cultivation, Multisectoral Collaboration on Tobacco or Health UN Economic and Social Council, 21 June 1994, p. 23.**
- **Rooney, M & Ellis, M. (1994) Zimbabwe Tobacco -An Important Economic Impact Study, unpublished paper, Harare, p. 2.**
- **Reemstma (1995) Tobacco -- Driving Forces for Economic Development.**

- **Chollat-Traquet, C. (1996) Evaluating Tobacco Control Activities, World Health Organization, Geneva, p. 32-36 10 - ibid, p. 33.**
- **FAO (1989 The Economic Significance of Tobacco, FAO Economic and Social Development Paper 85, Rome.**
- **Ibid.**
- **Chollat-Traquet, C. op. cit., p. 38.**
- **Agro-Economic Services Ltd and Tabacosmos Ltd, The employment, tax revenue and wealth that the tobacco industry creates. London, 1987, Table A 3.6.**
- **Chollat-Tracquet, C. op. cit., p. 33.**
- **World Bank (1994) Commodity Markets and the Developing Countries, Washington.**
- **Patchett, D. Alternatives to Tobacco Tobacco Forum, ITGA, Col 2, No. 2**
- **AFUBRA (1996) Brazilian Tobacco Grower Profile, Santa Cruz do Sul.**
- **Oyugi, L.A., Mukhebi, A.W. and Mwangi, W.M. (1987) The Impact of Cash Cropping on Food Production: A Case Study of Tobacco and Maize in Migari Division, South Nyanza District of Kenya. East African Economic Review, Volume 3, No. 1.**
- **Global tobacco market. Tobacco Journal International [poster], 2005.**
- **Up in smokes. Retail Newsagent, 15 April 2005 .**
- **Tobacco market shares. AC Nielsen, cited in The Grocer, 25 February 2006**
- **Gallaher Group plc Annual Review and Summary Financial Statement 2004**
- **Imperial Tobacco Group plc Annual Report and Accounts 2004**
- **British American Tobacco Review & Summary Financial statement 2004**
- **Teather, D. BAT escapes US smoking lawsuits. The Guardian, 24 June 2004**
- **Japan Tobacco International Annual Report 2005.**
- **HM Revenue and Customs Annual Report, 2004-05. The Stationery Office, 2005.**
- **Product Sales and Trade: Tobacco Products PRA 1600. National Statistics, 2004**
- **Buck, D. et al. Tobacco and jobs - the impact of reducing consumption on employment in the UK. Centre for Health Economics, University of York, 1995.**
- **Godfrey, C. & Hartley, K. Employment. In Maynard, A. & Tether, P. Preventing alcohol and tobacco problems, Vol. 1. Aldershot, Avebury Gower, 1990.**
- **Annual Employment Survey, Great Britain. ONS, 2003.**

APPENDICES

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