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Creating the Value Invest Magazine

When we started forming the Value Invest Magazine at VRS (Valuation & Research Specialists) a few months ago, we had in mind a "new generation" magazine that incorporates new voices and ideas destined for the international market of professionals in the securities and investment banking industry.

This magazine is written and applied by practitioners. We wish to offer the readers, insights from some of our favorite commentators in the finance area, from both the professional and the academic community.

As we are professionals in financial analysis and valuation of listed and non-listed companies, with extensive insight in several businesses, our magazine's mission is also to serve our business philosophy and vision. As a result, we have put a lot of effort on presenting a number of relevant issues and real case studies that we believe will provide useful information, way of thinking and methodologies to the readers. In the current issue, as well as future ones, we will try to present "fresh" financial tools and business ideas that combine innovation and technology featuring small and medium sized organizations.

Here at Value Invest Magazine, we have made a concerted effort to deliver more valuable information to readers like you.

Nicholas I. Georgiadis Christophoros J. Makrias Panayiotis L. Zarifis



We wish to offer the readers, insights from some of our favorite commentators in the finance area, from both the professional and the academic community.

Value Invest magazine Issue 1, 2nd Semester 2007

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Value Invest magazine



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DYNAMIC SECURITIES VALUATION & RESEARCH SPECIALISTS

Greek Economy & Equities Quarterly Review, April 2007

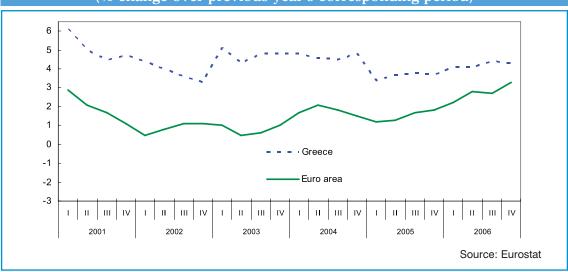
The Greek Economy

The Greek economy continued to expand at a buoyant rate, recording a real GDP growth of 4.3% y-o-y in Q4 2006 and of 4.2% in 2006 as a whole, despite the high and volatile energy prices and the tightening of the fiscal and the monetary policy. This annual rate of growth was significantly higher than the respective rate of 2.6% of the euro area and 3.2% of the EU-27, placing Greece amongst the fastest growing advanced economies in Europe. The main factors that have supported the strong and continuous growth over the last decade (4.1% period average), i.e. the high rates of private consumption and investment growth, are still in effect. Indeed, private consumption grew by 3.4% in 2006, underpinned by rising real disposable income -which grew roughly by 4.0% in 2006 compared to 2.0% in 2005-, increasing household wealth, due to the rising market value of real estate property, and continued rapid credit expansion. In the same vein, gross fixed capital formation increased by 6.3% in 2006, driven mainly by strong corporate investment and private investment in the housing sector.



The improved profitability of the business sector, supported by robust domestic and foreign demand, coupled with the favourable lending conditions and the considerable investment incentives within the framework of the Investment Law (in effect since March 2005) have resulted in acceleration of corporate investment by 6 to 8% in 2006. On the other hand, the annual contribution of net exports to GDP growth continued to be negative. Consistent with sustained growth, in Q4 2006 unemployment fell sharply to 8.8% (from 9.7% in Q4 2005), while employment further increased. Looking forward, growth is projected to decelerate in 2007, but remain





strong (3.8% from 4.2% in 2006), despite the envisaged tightening of monetary conditions. Economic activity is likely to be almost exclusively driven by domestic demand. In particular, private consumption will remain robust, with disposable income supported by direct income tax cuts (to

be implemented in 2007-2009) and continued rapid credit expansion, while investment growth will benefit, amongst others, from the flow of the EU structural funds under the CSF 2007-2013. The exceptionally high growth of investment in housing recorded in 2006 (above 10%) is

Community Support Framework (CSF) 2007-2013

On 30.3.2007, Greece became the second Member State, after Malta, to have its national plan and priorities for Cohesion policy 2007-2013 agreed with the Commission. Greece sent its National Strategic Reference Framework (NSRF) to the European Commission on 26 January 2007. The document lays out how EU cohesion policy will be used to deliver growth and jobs in the new programming period 2007-2013, while it provides indicative annual allocations and the list of operational programmes. The strategy lies in the heart of the Lisbon strategy and it involves a total amount of 20.12 billion euros of EU funds' transfers. In particular the priorities focus on the need to foster the competitiveness of the Greek economy, develop its human resources and promote employment, deliver fully operational and adequate economic and environmental infrastructures and implement reforms in order to increase the efficiency and modernise the public administration and invest in knowledge society and innovation. Greece intends to translate the broad priorities contained in the NSRF into 13 operational programmes, 5 regional and 8 thematic, to which should be added the programme on technical assistance.

expected to ease somewhat in 2007, as the stock of available houses has increased along with the households' mortgage repayment burden, due to the interest rates rise. Exports' volume of goods and services is likely to increase as well, due to the sustained growth of the international economy and trade. The annual unemployment rate is projected to drop towards 8.3%, the lowest of the last decade. The Greek authorities revised upwards the level of GDP by 25.7% in 2006. The Greek Statistical Office has explained that this major revision is, amongst others, the result of improved measurement of the fastgrowing services sector. The revised GDP figures are currently being examined thoroughly by Eurostat, so the final approval should not be expected earlier than autumn 2007. Turning to price developments, the

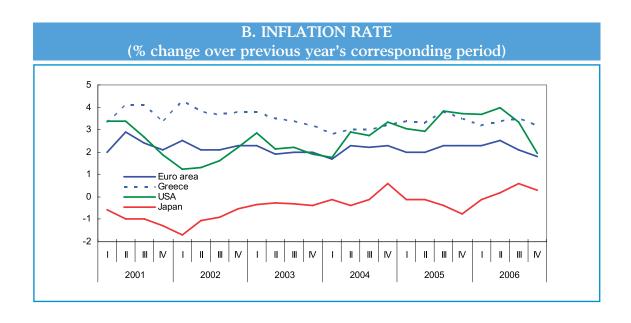
fall in oil prices has had a sizeable

September 2006, while indirect tax

effect on headline inflation since

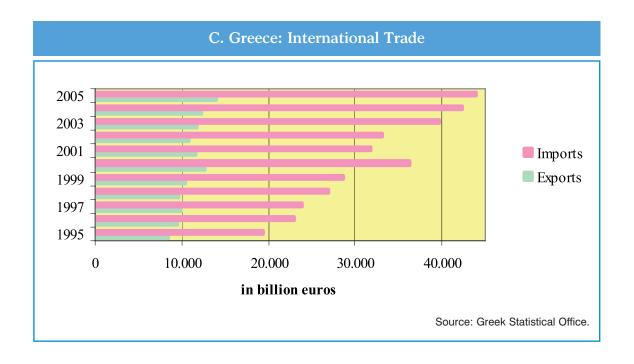
increases and secondary effects from high energy prices and high unit labour cost growth have resulted in relative high core inflation (i.e. headline inflation excluding fresh food and energy prices). Headline inflation fell to 3.2% in 2006 (from 3.5% in 2005) and is expected to continue its downward trend in 2007, but remain elevated (2.9%) - while core inflation reached 2.7%. Given the favourable economic environment, monetary policy continues to be on the accommodative side, with the key ECB interest rates moderate, money and credit growth vigorous, and liquidity in the euro area as a whole ample. However, as upside risks on the demand side remain, the ECB raised once again its policy rate on 14 March 2007 by 25 basis points to 3.75%.

The implementation of the 2006 budget may be considered as satisfactory with current revenues growing at rates of 10.4% in 2006 from 5.6% in 2005, considerably above the rate of nomi-



nal GDP growth (7.8%), aided by the recovery of VAT revenues and, to a lesser extent, the increased settlement rates of overdue tax liabilities. There is still room, however, for the government to cash in larger part of the substantial amount of overdue tax liabilities, which have ballooned during the past few years. The negative effect on the fiscal revenues from the reduction of corporate tax rate from 32% in 2005 to 29% in 2006 was partly offset by some indirect tax increases on tobacco, mobile phones and gasoline in July 2006, the introduction of VAT on real estate transactions and some lump sum revenues, such as the 315 million euros from the taxation of commercial banks' reserves. Primary expenditure decelerated significantly to 3.7% in 2006, from the substantially elevated levels in 2004-2005, while the deficit of the public investment budget has been retained to 2.3% of

GDP, due to increased flows of EU funds and reduced public investment expenditure. Overall, the general government deficit fell substantially to 2.6% of GDP in 2006 from 5.5% of GDP in 2005 and 7.9% of GDP in 2004, as recently confirmed by Eurostat. In structural terms, the adjustment has been expenditure-driven, but also several measures introduced in order to tackle tax fraud and evasion, like the improvement of tax administration, combined with the broadening of tax bases have raised the level of revenues. According to the European Commission's estimates, Greek fiscal deficit will remain in 2007 below the Maastricht Treaty's 3% of GDP limit, increasing thus the likelihood of Greece soon exiting from the Excessive Deficit Procedure. The longterm consolidation and sustainability of public finances, however, will not be possible without wide-range



reforms of the pension and health care systems.

On the external front, despite the relative strong growth of exports of goods (13.8%) and of tourist receipts (4.8%), the current account deficit further worsened to 12.1% of GDP in 2006, as imports of goods accelerated to 23.2%, mainly due to increased oil and shipping payments [Note 1] and robust private consumption. Recent BoG data indicate that in January-February 2007, the current account deficit widened by €1,136 million over the same period of 2006 and reached €5,913 million, reflecting mainly a hike in the trade deficit. In the same period, direct investment showed a net outflow of €1,901 million (compared with a net inflow of €364 million in the same period of 2006). Overall, developments in the balance of payments indicate that the high growth of domestic demand and the continuous worsening of competitiveness with respect to unit labour costs are the cause of the rapid deterioration of the current account balance. In fact, real effective exchange rate has appreciated by 20-30% on a unit labour cost basis and by 10% on a CPI basis since EMU accession [Note 2]. In the same vein, conjectural indicators point to continuing robust growth in domestic demand. According to the latest figures, the turnover in retail trade recorded a rise by 14.7% at current prices in December 2006 as compared to December 2005, while the volume of retail trade (i.e. turnover in

retail trade at constant prices) increased by 10.5% in the respective period. The increase derived mainly from furniture, electrical equipment, household equipment, clothes and footwear sales.

Several of the large global retailers who have recently entered the market are already expanding rapidly across the country, attempting to gain market share through highly competitive offers, boosting durable goods sales. Growth in manufacturing production rose by 1.4% in 2006, despite the continuing substantial decline in the production of textiles and clothing as a result of international competition that affects both Greece's domestic market and its main trading partners. Amongst the main industrial groupings, of particular importance was the production increase in capital goods and consumer durables. Business confidence as measured by the PMI index moved above the neutral 50 mark in January 2007 to 51.8, after having fallen to 49.9 in December. The volume of residential construction activity (as measured by building permits)



registered a decrease of 14.4% in 2006, as the frenzied activity in permit issuance in 2005 cooled down significantly in the course of 2006. In 2005, prospective home owners attempted to secure a permit prior to the introduction of the new tax measures, which came into effect at the start of 2006 (19% VAT in combination with a substantial rise in tax-assessed values of houses).

Total credit expansion continued to grow at double-digit rates in Q4 2006 (14.5%), despite the increase in interest rates, but is expected to slow down gradually to more sustainable levels in 2007 and 2008. In January 2007, total credit eased somewhat at 12.9% y-o-y, reflecting, to a great extent, the decrease in credit supplied to the general government (January 2007: -8.1%, Q4 2006: -3.0%). Indeed, total credit to the general government showed high volatility in 2006 and negative growth from October and onwards, due, primarily, to the lower net borrowing needs of the public sector and, secondarily, to the MFIs' portfolio adjustments in holdings of

securities issued by the Greek state. Meanwhile, credit growth to enterprises and households slightly decelerated in 2006 to 20.6% from 21.8% in 2005 (January 2007: 19.9%, compared to 21.0% a year earlier), but remained strong [Note 3]. This development is linked with the buoyant growth of corporate investment during 2006 supported by improved business confidence, favourable terms of borrowing, relatively relaxed credit screening criteria and low interest rates, despite the increases. Also, corporate bonds have gradually gained ground as a preferred method of funding due mainly to tax exemptions [Note 4]. Loans to domestic households reached 44.0% of GDP at end-December 2006, from 38.0% at end-December 2005 (incl. securitized loans), compared to 54.3% of GDP in the euro-zone over the same period. Mortgage lending growth, although it cooled down compared to the 2005 hikes (Q4 2006: 28%, Q4 2005: 31.5%), remained well above the respective one in the euro area (December 2006: 9.5%).

| Main economic indicators Greece (annual % change. unless otherwise stated) | | | | | | | |
|--|------|------|------|------|--|--|--|
| | 2004 | 2005 | 2006 | 2007 | | | |
| GDP at constant prices | 4.7 | 3.7 | 4.2 | 3.8 | | | |
| Private Consumption | 4.7 | 3.7 | 3.4 | 3.2 | | | |
| Public Consumption | 2.8 | 3.1 | 1.9 | 1.7 | | | |
| Gross fixed capital formation | 5.7 | -1.4 | 6.3 | 6.2 | | | |
| Exports (goods and services) | 11.7 | 2.9 | 6.6 | 5.9 | | | |
| Imports (goods and services) | 9.3 | -1.2 | 6.3 | 5.1 | | | |

Macroeconomic projections: Comparison between Greece and other main economies

| | 2005 | 2006 | 2007 |
|------------------------|--------------|------|------|
| Real GDP growth (annua | ıl % change) | | |
| Advanced economies | 2.5 | 3.1 | 2.5 |
| Eurozone | 1.4 | 2.6 | 2.3 |
| USA | 3.2 | 3.3 | 2.2 |
| Japan | 1.9 | 2.2 | 2.3 |
| Greece | 3.7 | 4.2 | 3.8 |
| Inflation (annual % | change) | | |
| Advanced economies | 2.3 | 2.3 | 1.8 |
| Eurozone | 2.2 | 2.2 | 2.0 |
| USA | 3.4 | 3.2 | 1.9 |
| Japan | -0.6 | 0.2 | 0.3 |
| Greece | 3.5 | 3.2 | 2.9 |

| Unemployment (as % of labour force) | | | | | |
|-------------------------------------|-----|-----|-----|--|--|
| Advanced economies | 6.0 | 5.5 | 5.4 | | |
| Eurozone | 8.6 | 7.7 | 7.3 | | |
| USA | 5.1 | 4.6 | 4.8 | | |
| Japan | 4.4 | 4.1 | 4.0 | | |
| Greece | 9.8 | 8.9 | 8.3 | | |

| Current account balance (as % of GDP) | | | | |
|---------------------------------------|------|------|------|--|
| Advanced economies | -1.4 | -1.6 | -1.6 | |
| Eurozone | 0.1 | -0.3 | -0.3 | |
| USA | -6.4 | -6.5 | -6.1 | |
| Japan | 3.6 | 3.9 | 3.9 | |
| Greece | 8.1 | 12.1 | 10.1 | |

| General government balance (as % of GDP) | | | | | |
|--|------|------|------|--|--|
| Advanced economies | -2.5 | -1.8 | -1.6 | | |
| Eurozone | -2.4 | -1.6 | -1.2 | | |
| USA | -3.7 | -2.6 | -2.5 | | |
| Japan | -4.8 | -4.3 | -3.8 | | |
| Greece | -5.5 | -2.6 | -2.4 | | |

Sources: IMF, European Commission, Bank of Greece, OECD, Ministry of Finance

Note on South-eastern Europe (Bulgaria, Romania, Albania, FYROM, Serbia and Montenegro) and Mediterranean countries (Turkey, Egypt)

Bulgaria:

Bulgaria's economy expanded by 6.2% in 2006 (compared to 5.5% in 2005) and is projected to achieve the same level of growth in 2007. Despite the restrictive measures undertaken to restraint credit expansion and the rise in consumer prices, private consumption expanded, as well as investment, which had only marginally slowed in H2 2006. The economy currently enjoys large capital inflows, which are projected to increase further in the following years, benefiting from EU accession and transfers and the announced cut of the corporate tax rate from its current level of 15% to 10% in 2007. Developments in the export market improved, but growth of imports' outpaced that of exports, resulting in further deterioration of the current account deficit to 15.9% of GDP in 2006 from 11.3% of GDP in 2005. Although these deficits have been largely financed by inflows of foreign direct investment in recent years, they are associated with strong domestic demand growth and represent an important challenge for the authorities. Inflation, as measured by the CPI, increased to 7.3% in 2006 (from 5.0% in 2005), mainly due to a hike of excise duties, as a result of tax harmonization with the EU, and high international energy prices. CPI inflation is forecasted to decrease at 5.3% in 2007. Unemployment fell in 2006 for the first time in recent years to one-digit figure (9.0%) and is expected to continue its downward trend. Turning to fiscal policy, the government, mimicking developments in its neighbour and accession partner Romania, approved a future reduction of the budget surplus, which exceeded the target budget surplus of 3% in

The Burgas - Alexandroupolis oil pipeline project

The construction and operation of the Burgas-Alexandroupolis oil pipeline is a project of major significance for Russia, Bulgaria and Greece, the greater region, as well as the international oil community. The pipeline is 279 km long (135 klm on Greek territory) and the initial annual throughput is estimated at 35 million tons with potential extension to 50 million tons. The total budget of the project amounts to €950–1000 million, with Russian funds representing the 51% and Greek and Bulgarian funds the 24.5% of total funds. After the completion of Burgas - Alexandroupolis oil pipeline, Greece will position itself firmly on the international oil map, benefiting from numerous financial and social returns. The construction works are scheduled to begin in 2008 and are expected to be completed in 2011.

2006, to 0.8% of GDP in 2007 and 0.6% in 2008, on the basis of needed EU accession-related infrastructure investments. Government also plans to enter the Exchange Rate Mechanism- 2 (ERM-II) around spring 2007 with the aim to adopt euro by 2012.

Romania:

Economic activity in 2006 bounced back strongly to 7.7%, after the slowdown to 4.1% in 2005, driven by a broad-based recovery in industrial activity, construction and agriculture. Particularly in Romania, total output is generated to a relatively large degree in agriculture (14.3%) and industry (36.8%, including construction), compared with 1.9% and 26.2% respectively in the EU-25. Since the start of the transition process towards a market economy, however, a profound structural reorientation has taken place from agriculture and industry towards services. Domestic demand, fostered by rapid private consumption and investment growth, has been the main engine of growth in the post-flooding reconstruction period. Net exports remained a drag on the economy with imports growing almost twice as fast as exports. Despite the growth in export volumes, after the slump in 2005 due to the removal of trade and textile quotas on Chinese imports, the current account deficit widened considerably in 2006 to 10.3% of GDP. CPI Inflation fell to 6.6% in 2006 (from 9.0% in 2005), as

a result of lower oil and food prices and the appreciation of the Leu (7% vs the euro and 16% vs the dollar). Unemployment increased only moderately to 7.4% in 2006 (from 7.2% in 2005) and is foreseen to remain broadly stable. The fiscal authorities ran a general government budget deficit of 1.7% of GDP in 2006, targeting a deficit of 2.8% in 2007 as a result of the EU-accession related expenditure needs. The Romanian government has set as target date for entry in the euro area the year 2014, in order to secure that all necessary preparations will have been completed till then.

Albania:

Albania's macroeconomic performance has remained strong. Inflation is low, the external position has improved, and economic growth was robust, although real GDP decreased to 5.0% in 2006 from 5.5% in 2005. Economic expansion has continued to be driven by private consumption and investment, based on rapid household credit expansion and strong remittance inflows. Although activity in construction slowed down—in part owing to a sharp reduction in the number of construction permits and delays in the execution of public investment—a faster-than-anticipated recovery in electricity production and an improvement of exports served as mitigating factors. Inflation over the past year has generally been close to the Bank of Albania's lower boundary of the 2-4% target range, while the

current account deficit decreased to 5.9% from 6.5% in 2005, as traditional exports such as footwear recovered and new export opportunities emerged. These favourable developments owe much to sound macroeconomic policies and continued strong commitment to program implementation, but maintaining these gains alongside further reduction in poverty requires additional growth-enhancing structural reforms. The authorities are committed to fiscal discipline, and are implementing a fiscal program that aims to reduce public debt while providing adequate funding for priority projects in infrastructure, health, and education. The recent measures taken by the Bank of Albania to strengthen the regulatory and prudential frameworks will further reduce the risks posed by rapid credit growth. In the energy sector, the International Finance Corporation has been selected as an advisor for the privatization of the distribution arm of the national electricity company (KESH). Concerted efforts are needed to ensure stable energy supply and further improve the financial performance of KESH.

FYROM:

Economic growth slightly accelerated in 2006 to 4.0% from 3.8% in 2005 and is expected reach 4.5% in 2007. Economic expansion is driven by private consumption and investment supported by improved confidence, increasing real disposable income and

rapid credit expansion, benefiting from the country's candidate status for EU membership. Export activity still remains weak, but workers remittances form a significant part of the private transfers' inflow. These have helped to reduce the current account deficit from 7.7% of GDP in 2004 to 1.3% of GDP in 2005. In 2006, the current account balance turned positive (0.5%). Inflation picked up to 3.2% in 2006 from 0.5% in 2005, reflecting higher transport prices, due to elevated energy prices, and large increases in excise taxes on tobacco and beverages, as a result of EU harmonization policies. The currency peg and the very tight fiscal policies, partly contained the inflationary pressures, but their effect was limited. Unemployment remained excessively high at 36.1% by mid-2006. The public finances continued to remain close to balance, but future efforts should focus on improving tax administration and containing upward wage pressures.

Serbia:

Economic activity decreased at 5.4% in 2006 (from 6.2% in 2005), but still remains on positive track supported by continued credit expansion and rising wages. Inflation despite its sharp drop at 12.7% in 2006 from 17.3% in 2005 still remains high, while the current account deficit dramatically widened to 12.3% of GDP in 2006 from 9.5% of GDP in 2005, despite enhanced export activity, strong

remittances and privatization-oriented FDI inflows. The high inflation and current account deficits need to be brought under control without damaging the real economy through an appropriate mix of policies. The National Bank of Serbia (NBS) undertook a policy shift in 2006, opting for greater exchange rate flexibility through a new focus on inflation targeting. The NBS reduced the key policy rate to 11.5% in February 2007 (from 18% in September 2006), but there seems to be no room for an expansionary monetary policy, given the current high inflation rate. The IMF noted recently that government needs to proceed with tax and pension system reform, as well as the privatization of state owned monopolies. Political uncertainties, especially concerning the future of Kosovo and how to resume association talks with the EU (suspended in May 2006) remain in the spotlight. Since the general elections on 21 January 2007, there has been no official government formed, but only an interim one.

Montenegro:

Real GDP grew by 5.5% in 2006, recording the strongest performance since the start of transition. Consumer prices increased to 3.5% from 2.6% in 2005, but still compared to the hyperinflation of the past years (2000: 97.1%), inflationary pressures appear to be well contained. The fiscal and current account deficits continued

their declining trend. Severe unemployment remains a key political and economic problem for this entire region. Montenegro is in a similar situation to other transition countries that attempt fundamental reforms. The reform process initially generates hardship and pressures on the budget. A stable currency and a balanced budget are only first steps towards the establishment of a market economy. Currently, the government is also launching further comprehensive reforms, including the judicial system, education, public sector, and privatisation of the remaining state owned enterprises. There have already been some important privatizations (aluminium complex KAP and financial sector), as well as significant inflows of foreign investments that are expected to enhance private sector led growth. This especially relates to service sectors (tourism, trade and transport) which have great potential. On 18 January 2007, Montenegro joined the World Bank and IMF. Montenegro is also pursuing membership in the World Trade Organization and is negotiating a Stabilization and Association agreement with the European Union in anticipation of eventual membership.

Turkey:

In Turkey, concerns about the widening current account deficit led to sharp downward pressure on the lira during the May-June 2006 emerging

market correction, triggering an abrupt tightening of monetary policy. Growth has subsequently decelerated significantly from 7.4% in 2005 to 5.5%. Domestic demand continued to slow down in response to rapid interest rate increases (by 425 bps) and is expected to contract further, lowering GDP growth forecast to 5.0% in 2007. The most worrying development has been the dramatic increase in inflation to 9.6% in 2006 (year's target: 5%) from 8.2% in 2005, reflecting in large part the high oil prices and the depreciation of the Turkish lira vis-à-vis the euro and the dollar, estimated to be as much as 30%, but inflation is expected to fall to 8.0% in 2007. The exchange rate pass-through to inflation is high and a source of future concern, as it makes the Turkish economy vulnerable to external shocks. Unemployment recorded a small fall to below 10.0%, while the public finances worsened. The general government deficit exceeded 4.0% of GDP, affected by excessive public sector wage increases and contraction of GDP growth, and is projected to be even higher in 2007 due to expected increased public spending prior to the presidential and parliamentary elections. Current account deficit has deteriorated in 2006 to 8.0% of GDP, the highest level in recent years, reflecting strong domestic demand and import growth. Nevertheless, it is expected to be financed relatively easy through private debt and FDI, although the level of risk aversion of portfolio investors

towards the emerging markets has increased globally. Turkey continues to be oriented towards future EU membership, but no comprehensible efforts have been initiated yet.

Egypt:

GDP growth has gathered additional momentum in 2006 (6.8% from 4.5% in 2005) and is projected to remain at the same level in 2007. Surprisingly, inflation has considerably cooled down to 4.2% in 2006 from 8.8% in 2005, perhaps as a result of the timely and appropriate tightening of monetary policy by the Central Bank of Egypt, but is forecasted to pick up again to double-digit rates (12.3% in 2007). The current account balance has remained in surplus (0.9% in 2006). Overall, the Egyptian reforms launched in 2004 appear to have focused well on the most critical constraints—reducing red tape and tax rates, and improving access to foreign exchange—thereby getting a strong growth response out of a limited set of reforms. However, inefficient bureaucracy remains an important obstacle to higher growth and reforms in this area should continue to have high payoffs. Ongoing reforms are also addressing constraints that are likely to become binding soon (or have become so already), such as inefficient financial intermediation and high public debt. Improvements in education may rapidly become a critical factor for sustaining higher growth.

With so many MBA programmes on offer, your choice of school is crucial. An MBA from the University of Strathclyde's Graduate School of Business, a constituent part of the Strathclyde Business School faculty, is the best investment you can make in your career as a professional manager. Strathclyde's international reputation, combined with its high academic and selection standards, is your guarantee that your MBA will retain its value in the years to come.

The Strathclyde MBA has been available outside the UK since 1988. Over 2000 course participants have now graduated, and over 1500 are currently studying the programme in their own country. This success is due to the unique delivery structure developed with the local partner incorporating elements of full-time, part-time and open learning modes of study.

The programme has been available in Greece since 1996, and is run in partnership with International Management Studies (IMS).

IMS — Greece Centre

International Management Studies was set up in Greece by a team of British management education specialists to provide high quality management development programmes to experienced and talented professionals. IMS runs a wide range of business seminars for both companies and individuals and offers a number of British postgraduate management degrees, including the MSc in Finance and the MSc in Marketing with the University of Strathclyde.

Located at 85 Dinokratous in Kolonaki, IMS houses seminar rooms, a computer network and a management education library. Locally appointed tutors combine excellent academic qualifications with solid professional experience.

International Management Studies is responsible for promoting the MBA in Greece, handling enquiries, providing information and receiving applications. In order to maintain high standards of consistency throughout the world, all admissions decisions are made by the University of Strathclyde. IMS provides local administrative services as well as holding counselling sessions, seminars and examinations. USGSB provides core teaching materials and sends Strathclyde University faculty members to Greece to run intensive seminars. IMS also has a number of local management education specialists who provide ongoing counselling support. All assessment is the responsibility of Strathclyde and successful participants will be awarded a University of Strathclyde Master of Business Administration.

2 Methods of study

The Strathclyde University MBA in Greece incorporates a flexible style of delivery — full-time, part-time and open learning elements in a 180 credit format. Many participants continue to work while taking the course over two years. This makes the programme a viable and valuable alternative for the busy professional and his company since it combines the benefits of learning with immediate practical application to his working environment.

How does the programme work?

Each year is divided into two six-month semesters. For the first four months participants will study core learning materials and attend local counselling sessions. Strathclyde staff then come to Athens to run intensive seminars. Examinations are held in the sixth month.

These intensive seminars ensure that all MBA students have the same learning experience and reach the same standards. They also enable Strathclyde staff to modify their teaching so that it is relevant to the contexts in which the course participants are working. The intensive seminars are mainly based around the core learning elements, but also cover business simulations and management skills i.e. the development of managerial competence. This flexibility allows busy executives to gain a first class international MBA in their own country, without interrupting their careers.

Accreditation

Accreditation is a good guide to how a business school is regarded by its peers. This year has seen the business school gain full international accreditation, with all three accrediting bodies around the world - EQUIS (Europe), AMBA (International MBA quality assurance) and AACSB (North America) — approving the school as offering excellent management education.

As one of only 23 business schools in the world with this standing, and the only business school in Scotland to be accredited so highly, Strathclyde continues to lead the way in high quality business education. We also hold excellent ratings for both our research and the quality of our teaching.

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AACSB (The Association to Advance Collegiate Schools of Business)

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While offered in partnership with IMS, responsibility for academic quality control resides with Strathclyde, and is the same as for the United Kingdom programmes. Successful MBA students (via international centres) will be awarded the same Strathclyde University MBA as all UK students and will be invited to attend the graduation ceremony held annually at Strathclyde University, Glasgow.

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Intake dates

There are two intakes for the Strathclyde MBA in Greece each year — in April and October. Finalised course dates and timetables are available from IMS.

Applications

Entry requirements are a good first degree, proficiency in English and several years' work experience (a minimum of 3 years is mandatory). Candidates who do not hold the normal requirements but are clearly of MBA potential may be offered entry to the MBA via the Diploma route.

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Southeastern Europe – Summary of economic indicators

| | | | 1 | |
|----------------------------|--------|--------|--------|-------|
| Greece | 2004 | 2005 | 2006 | 2007 |
| Real GDP | 4.7 | 3.7 | 4.2 | 3.8 |
| Consumer Prices | 3.0 | 3.5 | 3.2 | 2.9 |
| Unemployment | 10.5 | 9.8 | 8.9 | 8.3 |
| Current account (% of GDP) | 6.4 | 8.1 | 12.1 | 10.1 |
| Fiscal Balance (% of GDP) | -7.9 | -5.5 | -2.6 | -2.4 |
| Public Debt (% of GDP) | 108.5 | 107.5 | 104.6 | 100.1 |
| FDI (net, US \$ mill.) | 1074.2 | -844.7 | 1197.6 | _ |

| Bulgaria | 2004 | 2005 | 2006 | 2007 |
|----------------------------|--------|--------|--------|--------|
| Real GDP | 5.7 | 5.5 | 6.2 | 6.0 |
| Consumer Prices | 6.1 | 5.0 | 7.3 | 5.3 |
| Unemployment | 12.0 | 10.1 | 9.0 | 7.7 |
| Current account (% of GDP) | -5.8 | -11.3 | -15.9 | -15.7 |
| Fiscal Balance (% of GDP) | 2.2 | 1.9 | 3.3 | 0.8 |
| Public Debt (% of GDP) | 37.9 | 29.2 | 22.8 | 21.8 |
| FDI (net, US \$ mill.) | 2777.0 | 2298.0 | 3000.0 | 2800.0 |

| - | | | 2006 | *** |
|----------------------------|--------|--------|--------|--------|
| Romania | 2004 | 2005 | 2006 | 2007 |
| Real GDP | 8.4 | 4.1 | 7.7 | 6.5 |
| Consumer Prices | 11.9 | 9.0 | 6.6 | 4.5 |
| Unemployment | 8.1 | 7.2 | 7.4 | 7.5 |
| Current account (% of GDP) | -8.4 | -8.7 | -10.3 | -10.3 |
| Fiscal Balance (% of GDP) | -1.5 | -1,4 | -1,9 | -2.6 |
| Public Debt (% of GDP) | 18.8 | 15.8 | 12.4 | 13.9 |
| FDI (net, US \$ mill.) | 6368.0 | 6587.0 | 8652.0 | 7300.0 |
| | | | | |
| Albania | 2004 | 2005 | 2006 | 2007 |
| Real GDP | 5.9 | 5.5 | 5.0 | 6.0 |
| Consumer Prices | 2.9 | 2.4 | 2.2 | 3.4 |
| Unemployment | 14.5 | 14.7 | 14.1 | 13.8 |
| Current account | -3.9 | -6.5 | -5.9 | -6.2 |
| Fiscal Balance | -5.1 | -3.6 | -4.1 | -4.8 |
| Public Debt | 55.9 | 54.8 | 55.1 | 54.7 |
| FDI (net, US \$ mill.) | 332.0 | 265.0 | 350.0 | 484.0 |
| | | | | |
| FYROM | 2004 | 2005 | 2006 | 2007 |
| Real GDP | 4.1 | 3.8 | 4.0 | 4.5 |
| Consumer Prices | 0.1 | 0.5 | 3.2 | 2.5 |
| Unemployment | 37.2 | 37.3 | 37.1 | 36.2 |
| Current account | -7.7 | -1.3 | 0.4 | -3.2 |
| Fiscal Balance | 0.0 | 0.3 | -0.6 | -1.2 |
| Public Debt | 36.6 | 40.9 | 35.6 | 34.6 |
| FDI (net, US \$ mill.) | 156.0 | 97.0 | 300.0 | 202.0 |

| Serbia | 2004 | 2005 | 2006 | 2007 |
|------------------------|-------|--------|--------|--------|
| Real GDP | 8.4 | 6.2 | 5.4 | 5.0 |
| Consumer Prices | 10.1 | 17.3 | 12.7 | 4.7 |
| Unemployment | 31.7 | 32.6 | 32.3 | 32.0 |
| Current account | -11.6 | -9.5 | -12.3 | -9.9 |
| Fiscal Balance | 0.0 | 0.9 | 2.7 | 2.3 |
| Public Debt | 60.2 | 53.1 | 51.8 | 49.4 |
| FDI (net, US \$ mill.) | 966.0 | 1481.0 | 3500.0 | 1610.0 |

| Turkey | 2004 | 2005 | 2006 | 2007 |
|------------------------|--------|--------|---------|---------|
| Real GDP | 8.9 | 7.4 | 5.5 | 5.0 |
| Consumer Prices | 8.6 | 8.2 | 9.6 | 8.0 |
| Unemployment | 10.3 | 10.2 | 9.7 | 9.1 |
| Current account | -5.2 | -6.3 | -8.0 | -7.3 |
| Fiscal Balance | -5.7 | -1.2 | -3.6 | -4.0 |
| Public Debt | 76.9 | 69.6 | 69.4 | 66.1 |
| FDI (net, US \$ mill.) | 1800.0 | 8600.0 | 13700.0 | 12100.0 |

| Egypt | 2004 | 2005 | 2006 | 2007 |
|------------------------|-------|--------|--------|--------|
| Real GDP | 4.1 | 4.5 | 6.8 | 6.7 |
| Consumer Prices | 8.1 | 8.8 | 4.2 | 12.3 |
| Unemployment | 9.2 | 9.1 | 9.0 | 8.8 |
| Current account | 4.3 | 3.2 | 0.8 | 0.7 |
| Fiscal Balance | 9.5 | 9.0 | 9.0 | 8.4 |
| Public Debt | 65.7 | 64.6 | 64.3 | 63.8 |
| FDI (net, US \$ mill.) | 400.0 | 3900.0 | 5600.0 | 6400.0 |

Sources: European Commission, IMF, EBRD, NBG.

Notes:

[Note 1] These, in return, were a result of the increase of international oil prices and of the purchasing of vessels to renew the ocean-going fleet.

[Note 2] IMF, "Greece: Selected Issues", January 2007. [Note 3] These figures include loans, holdings of corporate bonds, securitized loans, as well as loan write-offs.

[Note 4] The net funds raised through corporate bonds issuance reached 4.3 billion euros in 2006 from 3.9 in 2005, accounting for an increase of 12%.

The Greek Equity Market in the First Quarter 2007

In tandem with the other developed stock markets across the globe, the positive sentiment remained in Athens Exchange in the first months of 2007 despite the short-period sell-off observed at the end of February as investors worried about the status of the US economy and the drop in Shanghai stock exchange.

The high growth rates of the global economy, the remaining excess liquidity and the corporate profitability supported the rebound in prices and in April the global stock market indices re-gained their highs. Following this trend, the Athens stock exchange composite index climbed to 7-year highs in April supported by strong corporate profitability that approached 30% y-o-y. M&A deals maintained the interest while foreign investors increased their participation in total market capitalization. Overall, the composite index ended 9.6% up y-t-d (for the period January the 1st till April the 23rd). The Mid-cap 40 index continued its impressive performance (17.1%), while FTSE-20 and FTSE-80 indices, although remained in positive grounds, lagged the composite index. Chemicals reported an impressive 40.8% followed by Industrial goods (26.4%) and Basic resources (24%), while six sectoral indices reported losses for the year. Looking at the performance of individual companies that constitute the three FTSE indices, Viohalco group of companies continued its strong performance reporting a 40.3% y-t-d return supported by the corporate developments of its subsidiaries, while banking shares are back in fashion following the developments in their profitability especially to the part that is attributed to Balkans. Five FTSE-20 members reported negative performance as they were hit by unsuccessful corporate developments. Healthy mid-cap companies reported substantial double digit performance figures as corporate deals continued, and only 11 out of 40 companies that constitute the FTSE-40 reported negative performance.

Notes: Year to date performance concerns the period 30 December 2005 – 23 April 2007.

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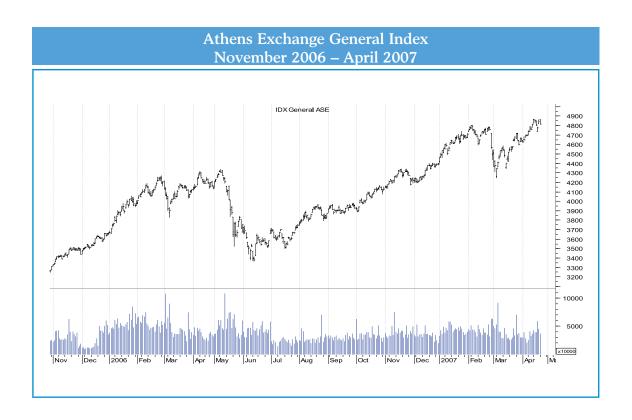


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Greek Equities - Statistics

| | Price | | | Price | | | |
|--------------------------|-----------|-----------|----------|------------|-----------|-----------|-------|
| NAME | 23/4/2007 | 52W High | 52W Low | 29/12/2006 | %52W High | % 52W Low | %YTD |
| FTSE/ASE MIDCAP 40 INDEX | 6,142.12 | 6,172.66 | 3,578.85 | 5,245.31 | -0.5% | 71.6% | 17.1% |
| ASE GENERAL INDEX | 4,818.12 | 4,869.01 | 3,362.24 | 4,394.13 | -1.0% | 43.3% | 9.6% |
| FTSE/ASE 20 INDEX | 2,573.50 | 2,616.37 | 1,831.75 | 2,377.11 | -1.6% | 40.5% | 8.3% |
| FTSE/ASE SMALL CAP 80 IX | 939.69 | 943.70 | 623.32 | 880.58 | -0.4% | 50.8% | 6.7% |
| FTSE/ATHEX CHEMICALS | 14,051.67 | 14,051.67 | 7,216.46 | 9,978.52 | 0.0% | 94.7% | 40.8% |
| FTSE/ATHEX IND GOODS SRV | 8,363.72 | 8,504.25 | 4,443.12 | 6,617.56 | -1.7% | 88.2% | 26.4% |
| FTSE/ATHEX BASIC RESOURC | 9,492.88 | 9,585.75 | 4,408.89 | 7,653.45 | -1.0% | 115.3% | 24.0% |
| FTSE/ATHEX FINC SERVICES | 10,525.22 | 10,835.33 | 5,903.79 | 8,805.55 | -2.9% | 78.3% | 19.5% |
| FTSE/ATHEX FOOD & BEV | 7,200.30 | 7,403.75 | 4,521.78 | 6,275.57 | -2.7% | 59.2% | 14.7% |
| FTSE/ATHEX PER HOUS GOOD | 7,200.55 | 7,225.72 | 4,381.81 | 6,295.76 | -0.3% | 64.3% | 14.4% |
| FTSE/ATHEX BANKS INDEX | 6,973.40 | 7,104.49 | 4,597.65 | 6,194.47 | -1.8% | 51.7% | 12.6% |
| FTSE/ATHEX RETAIL | 7,215.45 | 7,237.74 | 5,632.51 | 6,563.94 | -0.3% | 28.1% | 9.9% |
| FTSE/ATHEX CONST & MATER | 7,318.06 | 7,830.63 | 5,307.47 | 6,688.11 | -6.5% | 37.9% | 9.4% |
| FTSE/ATHEX OIL & GAS IDX | 4,885.92 | 5,760.55 | 4,061.53 | 4,602.04 | -15.2% | 20.3% | 6.2% |
| FTSE/ATHEX HEALTH CARE | 12,594.19 | 13,762.42 | 7,187.58 | 12,596.69 | -8.5% | 75.2% | 0.0% |
| FTSE/ATHEX TRAVEL & LEIS | 5,567.62 | 5,964.90 | 4,492.83 | 5,585.53 | -6.7% | 23.9% | -0.3% |
| FTSE/ATHEX INSURANCE IDX | 6,008.09 | 7,145.11 | 4,856.25 | 6,127.97 | -15.9% | 23.7% | -2.0% |
| FTSE/ATHEX UTILITIES | 5,119.17 | 5,983.49 | 4,673.19 | 5,262.74 | -14.4% | 9.5% | -2.7% |
| FTSE/ATHEX TELECOM INDEX | 6,016.91 | 6,646.82 | 4,314.70 | 6,204.84 | -9.5% | 39.5% | -3.0% |
| FTSE/ATHEX MEDIA | 5,075.39 | 6,335.72 | 4,180.79 | 5,289.49 | -19.9% | 21.4% | -4.0% |
| FTSE/ATHEX TECHNOLOGY | 4,677.40 | 6,193.10 | 3,862.14 | 4,946.66 | -24.5% | 21.1% | -5.4% |

| | Price | | | Price | | | |
|-------------------------------|-----------|----------|---------|------------|-----------|-----------|-------|
| FTSE-20 MEMBERS | 23/4/2007 | 52W High | 52W Low | 29/12/2006 | %52W High | % 52W Low | %YTD |
| VIOHALCO | 13.24 | 13.86 | 6.40 | 9.44 | -4.5% | 106.9% | 40.3% |
| HELLENIC TECHNODOMIKI TEV SA | 10.22 | 11.80 | 6.60 | 8.46 | -13.4% | 54.8% | 20.8% |
| NATIONAL BANK OF GREECE | 42.00 | 43.60 | 25.88 | 34.90 | -3.7% | 62.3% | 20.3% |
| EFG EUROBANK ERGASIAS | 31.16 | 31.98 | 20.40 | 27.44 | -2.6% | 52.7% | 13.6% |
| PIRAEUS BANK S.A. | 27.48 | 28.10 | 15.78 | 24.42 | -2.2% | 74.2% | 12.5% |
| BANK OF CYPRUS LTD | 11.58 | 12.36 | 6.10 | 10.36 | -6.3% | 89.8% | 11.8% |
| COCA-COLA HELLENIC BOTTLING | 32.50 | 33.98 | 21.70 | 29.60 | -4.4% | 49.8% | 9.8% |
| HELLENIC PETROLEUM SA | 11.14 | 12.68 | 9.00 | 10.44 | -12.1% | 23.8% | 6.7% |
| MOTOR OIL (HELLAS) SA | 20.60 | 26.00 | 17.54 | 19.52 | -20.8% | 17.4% | 5.5% |
| ALPHA BANK A.E. | 24.16 | 25.86 | 18.02 | 22.90 | -6.6% | 34.1% | 5.5% |
| TITAN CEMENT CO. S.A. | 43.00 | 46.98 | 34.46 | 41.30 | -8.5% | 24.8% | 4.1% |
| COSMOTE | 23.16 | 24.46 | 16.58 | 22.40 | -5.3% | 39.7% | 3.4% |
| FOLLI-FOLLIE SA-REG | 30.30 | 31.96 | 16.62 | 29.90 | -5.2% | 82.3% | 1.3% |
| AGRICULTURAL BANK OF GREECE | 3.92 | 5.27 | 3.38 | 3.90 | -25.5% | 16.0% | 0.5% |
| GREEK POSTAL SAVINGS BANK | 17.76 | 22.10 | 12.50 | 17.86 | -19.6% | 42.1% | -0.6% |
| OPAP SA | 28.24 | 31.10 | 24.08 | 29.28 | -9.2% | 17.3% | -3.6% |
| PUBLIC POWER CORP | 18.48 | 22.42 | 17.26 | 19.20 | -17.6% | 7.1% | -3.7% |
| HELLENIC TELECOMMUN. ORGANIZ. | 21.60 | 24.52 | 15.40 | 22.76 | -11.9% | 40.3% | -5.1% |
| EMPORIKI BANK OF GREECE SA | 21.20 | 28.00 | 20.20 | 23.30 | -24.3% | 5.0% | -9.0% |
| INTRALOT S.AINTEGRATED LOT | 24.04 | 29.32 | 18.34 | 26.50 | -18.0% | 31.1% | -9.3% |

| | Price | | | Price | | | |
|------------------------------|-----------|----------|---------|------------|-----------|-----------|--------|
| FTSE-40 MEMBERS | 23/4/2007 | 52W High | 52W Low | 29/12/2006 | %52W High | % 52W Low | %YTD |
| SIDENOR STEEL PROD.&MANUF.CO | 15.04 | 16.48 | 3.94 | 8.88 | -8.7% | 281.7% | 69.4% |
| METKA SA | 15.10 | 15.30 | 5.78 | 10.20 | -1.3% | 161.2% | 48.0% |
| NEOCHIMIKI LV LAVRENTIADIS | 23.00 | 23.00 | 10.64 | 15.78 | 0.0% | 116.2% | 45.8% |
| HALCOR S.A. | 5.98 | 6.86 | 2.83 | 4.14 | -12.8% | 111.3% | 44.4% |
| GEK GROUP OF COS SA | 12.00 | 12.38 | 4.82 | 8.32 | -3.1% | 149.0% | 44.2% |
| JUMBO SA | 23.60 | 25.10 | 9.10 | 16.58 | -6.0% | 159.3% | 42.3% |
| VIVARTIA SA | 18.02 | 18.60 | 8.51 | 13.13 | -3.1% | 111.8% | 37.3% |
| ELVAL ALUMINUM PROCESS CO. | 4.68 | 5.30 | 2.04 | 3.48 | -11.7% | 129.4% | 34.5% |
| J&P-AVAX SA | 7.96 | 8.18 | 4.02 | 6.00 | -2.7% | 98.0% | 32.7% |
| HELLENIC EXCHANGES SA HOLDIN | 18.22 | 19.70 | 10.92 | 13.94 | -7.5% | 66.9% | 30.7% |
| MYTILINEOS HOLDINGS S.A. | 38.30 | 38.96 | 14.18 | 30.00 | -1.7% | 170.1% | 27.7% |
| LAMDA DEVELOPMENT SA | 14.76 | 15.50 | 5.68 | 11.76 | -4.8% | 159.9% | 25.5% |
| BLUE STAR MARITIME SA | 3.76 | 3.94 | 2.40 | 3.10 | -4.6% | 56.7% | 21.3% |
| FOURLIS SA | 19.44 | 19.78 | 8.90 | 16.06 | -1.7% | 118.4% | 21.0% |
| IASO S.A. | 9.30 | 9.56 | 4.44 | 7.72 | -2.7% | 109.5% | 20.5% |
| FRIGOGLASS SA | 20.10 | 21.06 | 9.24 | 16.72 | -4.6% | 117.5% | 20.2% |
| ATTICA HOLDINGS S.A. | 4.78 | 4.98 | 3.06 | 4.00 | -4.0% | 56.2% | 19.5% |
| INFO-QUEST SA | 4.46 | 4.80 | 2.86 | 3.92 | -7.1% | 55.9% | 13.8% |
| ASTIR PALACE HOTELS SA | 6.96 | 8.26 | 5.24 | 6.26 | -15.7% | 32.8% | 11.2% |
| S & B INDUSTRIAL MINERALS SA | 10.92 | 11.44 | 8.04 | 9.90 | -4.5% | 35.8% | 10.3% |
| HERACLES GENERAL CEMENT COMP | 17.86 | 19.36 | 12.30 | 16.24 | -7.7% | 45.2% | 10.0% |
| NOTOS COM HOLDINGS S.AREG | 3.80 | 3.94 | 2.52 | 3.54 | -3.6% | 50.8% | 7.3% |
| FORTHNET SA | 11.52 | 12.90 | 6.40 | 10.80 | -10.7% | 80.0% | 6.7% |
| SARANTIS SA | 8.46 | 9.46 | 6.54 | 8.04 | -10.6% | 29.4% | 5.2% |
| ATHENS WATER SUPPLY & SEWAGE | 7.44 | 8.16 | 5.62 | 7.22 | -8.8% | 32.4% | 3.0% |
| ETHNIKI GENERAL INSURANCE CO | 5.70 | 7.54 | 5.00 | 5.58 | -24.4% | 14.0% | 2.2% |
| EUROBANK PROPERTIES REAL EST | 17.26 | 17.74 | 13.40 | 17.02 | -2.7% | 28.8% | 1.4% |
| C. ROKAS S.A. | 19.46 | 23.40 | 15.30 | 19.30 | -16.8% | 27.2% | 0.8% |
| HELLENIC DUTY FREE SHOPS SA | 15.92 | 16.46 | 11.30 | 15.80 | -3.3% | 40.9% | 0.8% |
| PROTON BANK SA | 10.84 | 11.44 | 8.38 | 10.96 | -5.2% | 29.4% | -1.1% |
| ATHENS MEDICAL CENTER | 4.90 | 5.30 | 3.26 | 5.00 | -7.5% | 50.3% | -2.0% |
| TERNA SA | 12.44 | 14.14 | 7.90 | 12.80 | -12.0% | 57.5% | -2.8% |
| BABIS VOVOS INTL CONSTRUCT | 27.78 | 32.40 | 16.00 | 29.20 | -14.3% | 73.6% | -4.9% |
| LAMBRAKIS PRESS SA | 2.67 | 3.80 | 2.40 | 2.82 | -29.7% | 11.3% | -5.3% |
| M.J. MAILLIS S.A. | 2.54 | 3.70 | 2.25 | 2.70 | -31.4% | 12.9% | -5.9% |
| GENIKI BANK SA | 8.10 | 12.10 | 7.00 | 8.80 | -33.1% | 15.7% | -8.0% |
| TELETYPOS SA MEGA CHANNEL | 4.34 | 5.22 | 3.22 | 4.76 | -16.8% | 34.9% | -8.8% |
| INTRACOM HOLDINGS SA-REG | 4.40 | 6.92 | 3.88 | 5.14 | -36.4% | 13.4% | -14.4% |
| ALUMINIUM OF GREECE S.A.I.C. | 15.26 | 21.90 | 13.38 | 18.14 | -30.3% | 14.1% | -15.9% |
| TECHNICAL OLYMPIC S.A. | 1.68 | 5.52 | 1.44 | 2.54 | -69.6% | 16.7% | -33.9% |

| FTSE 80 MEMBERS | Price 23/4/2007 | 52W High | 52W Low | Price 29/12/2006 | %52W High | % 52W Low | %YTD |
|--|--------------------|--------------|--------------|---------------------|------------------|------------------|------------------|
| DAIOS PLASTICS SA | 12.48 | 14.48 | 4.02 | 6.36 | -13.8% | 210.4% | 96.2% |
| PARNASSOS ENTERPRISES S.A. | 1.89 | 1.99 | 0.75 | 1.20 | -5.0% | 152.0% | 57.5% |
| KEGO SA | 2.75 | 3.24 | 1.30 | 1.79 | -15.1% | 111.5% 82.0% | 53.6% 45.8% |
| ANEK LINES SA SPYROU AGRICULTURAL PRODUCTS | 1.58 2.82 | 1.62 2.85 | 0.87 1.30 | 1.08 1.95 | -2.5% -1.1% | 82.0% 116.9% | 45.8% 44.6% |
| PEGASUS PUBLISHING S.A. | 2.72 | 2.83 | 1.64 | 1.95 | -7.2% | 65.9% | 39.5% |
| LIGHT METALS INDUSTRY | 3.64 | 3.88 | 1.40 | 2.61 | -6.2% | 160.0% | 39.5% |
| ATTIKAT S.A. | 1.54 | 1.57 | 0.73 | 1.13 | -1.9% | 111.0% | 36.3% |
| ELTRAK S.A. | 4.10 | 4.22 | 1.83 | 3.10 | -2.8% | 124.0% | 32.3% |
| ALLATINI IND. & COM CO. | 2.98 | 3.06 | 1.40 | 2.26 | -2.6% | 112.9% | 31.9% |
| EBIK SA | 8.60 | 8.66 | 5.50 | 6.70 | -0.7% | 56.4% | 28.4% |
| SELONDA AQUACULTURES S.A. | 3.60 | 3.68 | 1.63 | 2.91 | -2.2% | 120.9% | 23.7% |
| KRI-KRI MILK INDUSTRY SA HATZIIOANNOU HOLDINGS SA | 4.06 | 4.24 | 2.41 | 3.32 | -4.2% | 68.5% | 22.3% |
| ATHENA SA | 1.54 1.47 | 1.85 1.61 | 0.82 0.84 | 1.28 1.23 | -16.8% -8.7% | 87.8% 75.0% | 20.3% 19.5% |
| LOULIS MILLS S.A. | 3.30 | 4.22 | 1.86 | 2.78 | -21.8% | 77.4% | 18.7% |
| BIOKARPET SA | 2.57 | 2.60 | 1.18 | 2.18 | -1.2% | 117.8% | 17.9% |
| CRETA FARM S.A. | 8.12 | 8.72 | 5.38 | 6.96 | -6.9% | 50.9% | 16.7% |
| HELLENIC SUGAR INDUSTRY (CB) | 4.04 | 4.12 | 2.23 | 3.48 | -1.9% | 81.6% | 16.1% |
| BITROS S.A. | 3.32 | 3.78 | 1.90 | 2.89 | -12.2% | 74.7% | 14.9% |
| FLEXOPACK S.A. | 8.20 | 9.10 | 5.80 | 7.14 | -9.9% | 41.4% | 14.8% |
| I KLOUKINAS-I LAPPAS SA | 6.00 | 6.02 | 2.78 | 5.24 | -0.3% | 115.8% | 14.5% |
| LIVANI PUBLISHING ORGANIZATI | 2.13 | 3.10 | 1.60 | 1.87 | -31.3% | 33.1% | 13.9% |
| DIAS AQUACULTURE SA-REG SIDMA SA | 2.54 | 2.74 | 1.25 2.90 | 2.26 5.96 | -7.3% | 103.2% 130.3% | 12.4% |
| DROMEAS SA-REGD | 6.68 2.10 | 7.16 2.39 | 1.05 | 1.88 | -6.7% -12.1% | 130.3% | 12.1% 11.7% |
| SANYO HELLAS HOLDINGS S.A. | 1.38 | 1.59 | 0.86 | 1.24 | -12.176 | 60.5% | 11.7% |
| HELLENIC CABLES S.A. | 5.40 | 6.20 | 2.67 | 4.90 | -12.9% | 102.2% | 10.2% |
| ELGEKA SA | 1.53 | 1.89 | 1.05 | 1.39 | -19.0% | 46.4% | 10.1% |
| VETERIN S.A. | 4.38 | 5.84 | 1.05 | 3.98 | -25.0% | 317.1% | 10.1% |
| ALPHA ASTIKA AKINITA S.A. | 7.68 | 8.28 | 6.82 | 7.10 | -7.2% | 12.6% | 8.2% |
| EDRASIS CPSALLIDAS TECHNIC | 1.30 | 1.56 | 0.79 | 1.24 | -16.7% | 64.6% | 4.8% |
| ALUMIL MILONAS ALUMINIUM IND | 4.42 | 4.86 | 2.44 | 4.26 | -9.1% | 81.1% | 3.8% |
| UNISYSTEMS INFO. SYSTEMS SA | 2.05 | 2.53 | 1.64 | 1.98 | -19.0% | 25.0% | 3.5% |
| PETROPOULOS | 5.24 | 5.56 | 3.72 | 5.10 | -5.8% | 41.0% | 2.7% |
| FHL MANUFACTUR-TRADING CO SA A. KALPINIS-N. SIMOS STEEL | 2.21 4.80 | 2.41 5.30 | 1.31 2.55 | 2.16 4.72 | -8.3% -9.4% | 68.7% 88.2% | 2.3% 1.7% |
| ELINOIL HELLENIC PETROLEUM | 10.14 | 11.00 | 7.96 | 10.00 | -7.8% | 27.4% | 1.4% |
| KEKROPS S.A. | 11.96 | 19.74 | 10.30 | 11.84 | -39.4% | 16.1% | 1.0% |
| KATSELIS SONS SA BREAD IND. | 3.36 | 4.24 | 2.78 | 3.34 | -20.8% | 21.0% | 0.6% |
| DIEKAT S.A. | 1.26 | 2.04 | 1.10 | 1.26 | -38.2% | 14.5% | 0.0% |
| IKTINOS HELLAS S.AREG | 1.54 | 1.80 | 0.53 | 1.54 | -14.4% | 188.9% | 0.0% |
| INTERTECH S.A. INTER. TECHNO | 3.10 | 3.74 | 2.41 | 3.10 | -17.1% | 28.6% | 0.0% |
| INTRACOM S.A TECHNICAL & STE | 1.20 | 1.68 | 0.94 | 1.20 | -28.6% | 27.7% | 0.0% |
| THRACE PLASTICS CO SA | 2.24 | 2.79 | 1.76 | 2.24 | -19.7% | 27.3% | 0.0% |
| ALCO HELLAS S.A. VIOTER S.A. | 1.37 1.18 | 1.56 1.38 | 0.94 0.80 | 1.38 1.20 | -12.4% -14.5% | 46.4% 47.5% | -0.7% -1.7% |
| CYCLON HELLAS SA | 1.75 | 2.13 | 0.84 | 1.78 | -14.3% | 108.3% | -1.7% |
| PIRAEUS PORT AUTHORITY | 17.40 | 19.60 | 14.00 | 17.86 | -11.2% | 24.3% | -2.6% |
| KOUMBAS SYNERGY GROUP S.A. | 2.35 | 2.69 | 1.34 | 2.43 | -12.6% | 75.4% | -3.3% |
| BYTE COMPUTER S.A. | 3.16 | 3.58 | 1.92 | 3.28 | -11.7% | 64.6% | -3.7% |
| SATO SA | 3.02 | 3.50 | 1.73 | 3.16 | -13.7% | 75.1% | -4.4% |
| AUDIO VISUAL ENTERPRISES SA | 4.86 | 5.98 | 3.34 | 5.10 | -18.7% | 45.5% | -4.7% |
| SPIDER METAL IND. PETSIOS | 1.10 | 1.77 | 0.82 | 1.16 | -37.9% | 34.1% | -5.2% |
| RIDENCO HOLDINGS S.A. | 1.19 | 1.42 | 0.85 | 1.26 | -16.2% | 40.0% | -5.6% |
| NEORION NEW SA HOLDINGS | 2.14 | 2.87 | 0.77 | 2.27 | -25.4% | 177.9% | -5.7% |
| EVEREST SA DRUCKFARBEN HELLAS A.E.B.E. | 2.21 3.12 | 2.53 3.42 | 1.45 2.40 | 2.35 3.36 | -12.6% -8.8% | 52.4% 30.0% | -6.0% -7.1% |
| MICROLAND COMPUTERS SA | 6.20 | 8.48 | 5.60 | 6.68 | -26.9% | 10.7% | -7.1% |
| AEGEK S.A. | 0.69 | 1.72 | 0.61 | 0.75 | -59.9% | 13.1% | -8.0% |
| KARATZI SA (HELLASNET) | 1.94 | 2.57 | 1.68 | 2.13 | -24.5% | 15.5% | -8.9% |
| SHELMAN | 1.71 | 2.29 | 1.20 | 1.88 | -25.3% | 42.5% | -9.0% |
| HELLENIC FISH FARMING SA | 1.28 | 2.29 | 0.67 | 1.41 | -44.1% | 91.0% | -9.2% |
| HELLENIC FABRICS S.A. | 2.48 | 3.66 | 2.39 | 2.75 | -32.2% | 3.8% | -9.8% |
| AGRICULTURAL INSURANCE SA | 4.10 | 5.18 | 3.20 | 4.56 | -20.8% | 28.1% | -10.1% |
| EUROPEAN RELIANCE GEN INSURA | 2.76 | 3.46 | 1.23 | 3.08 | -20.2% | 124.4% | -10.4% |
| INFORM P. LYKOS S.A. | 4.28 | 5.22 | 3.60 | 4.80 | -18.0% | 18.9% | -10.8% |
| ASPIS PRONIA GENERAL INS SA | 1.39 | 1.77 | 0.97 | 1.56 | -21.5% | 43.3% | -10.9% |
| EURODRIP SA PERSEYS SA | 1.11 1.25 | 1.64 1.94 | 0.90 0.60 | 1.25 1.42 | -32.3% -35.6% | 23.3% 108.3% | -11.2% -12.0% |
| DOMIKI KRITIS S.A. | 2.26 | 3.00 | 0.69 | 2.59 | -33.0% | 227.5% | -12.0% |
| BANK OF ATTICA | 4.60 | 6.44 | 4.22 | 5.46 | -28.6% | 9.0% | -15.8% |
| BETANET S.A. | 2.60 | 3.34 | 2.21 | 3.12 | -22.2% | 17.4% | -16.7% |
| X. BENRUBI S.A. | 3.24 | 4.78 | 2.91 | 3.94 | -32.2% | 11.3% | -17.8% |
| ELTON CHEMICALS-REG | 1.24 | 1.87 | 0.78 | 1.53 | -33.8% | 58.8% | -19.1% |
| NEWSPHONE HELLAS SA | 1.69 | 4.38 | 1.39 | 2.09 | -61.4% | 21.6% | -19.1% |
| EL. D. MOUZAKIS S.A. | 1.78 | 2.61 | 0.75 | 2.25 | -31.8% | 137.3% | -20.9% |
| LAN-NET SA | 0.82 | 1.61 | 0.70 | 1.16 | -49.1% | 17.1% | -29.3% |
| LAVIPHARM S.A. | 3.72 | 7.14 | 1.03 | 6.58 | -47.9% | 261.2% | -43.5% |

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Quantifying market risk: an evaluation of alternative techniques

Introduction

Market risk, as defined by the Basel Committee, is the risk of losses in onand off-balance-sheet positions arising from movements in market prices. The issue has become of special importance as the increased exposure of financial institutions to a wide range of financial products ignited an era of increased market risk. Value-at-Risk (VaR) has become the main theoretical tool for quantifying market risk for the trading book of financial institutions, and the traditional methodologies applied for the estimation of VaR (variance-covariance, Historical Simulation, Monte Carlo) utilise the standard deviation as a measure of the variability of trading or theoretical values of many products.

Over the years, many attempts have emerged as alternatives in forecasting financial volatility, the main input in VAR models. RiskMetricsTM approach to forecast volatility with the IGARCH model often proved ineffective against the classic method of equally weighted volatility [Alexander και Leigh (1997)]. Additionally, conventional methods to estimate VaR such as variance-covariance and historical simulation do not account for market dynamics, het-

eroscedastic behaviour and the distribution of risk factors [Kuester et al. (2003)]. For the application of historical simulation (HS) some alternative methodologies were proposed by [Barone–Adesi et al. (1999)] to account for the heteroscedasticity of market risk factors.

Despite their relative advantages and disadvantages, none of the conventional approaches to estimate VaR is focused completely on the extreme values of the market risk factors distributions. Danielsson and de Vries (1997) showed that the estimation of VaR with EVT produces better results to that of HS coupled with IGARCH, mainly because it combines some of the advantages of both parametric (IGARCH) and non-parametric (HS) models. [Gencay and Selcuk (2004)] demonstrated that Extreme Value Theory (EVT) is more efficient compared to Variance Covariance (VC) and HS on the estimation of the daily VaR values from the stock market of nine emerging markets for higher confidence intervals. [McNeil and Frey (2000)] when trying to account static forecasts produced by parametric [Kellezi and Gilli (2000)] and semiparametric [Dacorogna et al. (1995)] variations of EVT, suggested the use of conditional EVT that accounts for heteroscedastic effects of the residuals and creates the respective quintiles to estimate VaR. Within the aforementioned framework, the present study presents an evaluation of three methodologies to estimate VaR that account for heteroscedasticity (conditional EVT) and conventional models (VC and HS) on a combined portfolio of two financial products, stocks as represented by the S&P500 index and open exchange rate position in US dollars (the \$/€ exchange rate). The data cover the period from January 2, 1997 to March 14, 2004 and the combined portfolio was formed using random positions which change on a daily basis.

Methodology

Internal VaR models attempt to estimate the losses of a portfolio that may arise during a predefined interval (usually next working day) and not exceed a specified frequency of appearances (e.g. confidence level of 99%, 95%, etc.). Every VaR tool assumes the modelling of logarithmic returns as:

$$r_t = \ln\left(\frac{X_t}{X_{t-1}}\right)$$

where, X_t and X_{t-1} the value of a product at time t and its first lag respectively.

The simplest method for a VaR estimate is the HS one, mainly due to the least computational resources that are required, and according to which the next day VaR for a confidence level q, is found from the empirical quintile Qq of a sorted sample of n sorted and i.i.d. observations up to this day:

$$^{HS}VaR_{t+1} = \hat{Q}_q(r_t, r_{t-1}, ..., r_{t-n+1})$$

The second method tested, the VC one, is based on equation (3)

$${}^{VC}VaR_{t+1} = \sqrt{{}^{VC}\overrightarrow{UVaR_{t+1}^T}} \times C \times {}^{VC}\overrightarrow{UVaR_{t+1}}$$

where the correlation matrix C details the correlations between the portfolio products and $^{vc}UVaR_{t+1}$ includes the respective VaR estimate for each product. Each product's VaR with an open position $w_{i,t}$ (in \in) is found from a sensitivity coefficient $L_{i,t}$ and the future variability of returns $\sigma_{i,t+1}$ for a quintile Q_q based on the confidence level q of the normal distribution:

$$^{VC}UVaR_{i,t+1} = L_{i,t} \times Q_q \times \sigma_{i,t+1} \times w_{i,t}$$

Third, we applied the Conditional EVT by which we measured the distribution of exceedances (Y) above a threshold reference (u) based on equation (5), where its parameters are estimated using maximum likelihood:

$$^{EVT}VaR_{q} = u + \frac{\hat{\beta}}{\hat{\xi}} \left\{ \left[(1 - q) \frac{n}{N_{u}} \right]^{-\xi} - 1 \right\}$$

Using equation (5), the conditional EVT approach is approached by using the standardized residuals that result from a AR(1)-GARCH(1,1) model:

$$^{CEVT}VaR_{a} = \hat{a}_{0} + \hat{a}_{1}r_{t-1} + \hat{\sigma}_{t+1}^{EVT}VaR(e)_{a}$$

Results

In the literature there are two main approaches that evaluate the VaR esti-

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mates of any method: statistical, such as root mean square error (RMSE), mean error (ME), mean absolute error (MAE), etc., and economic, such as the number of exceedances of predictions from real values, the success of a trading rule and etc. However, the former are often biased and noisy estimators [Christodoulakis and Satchell (2004)]. Thus, in the present study the financial measures included in the **Basel Committee Amendment were** selected. This approach shows the most efficient model as the one with the least number of over-shootings using back-testing [Kalyvas et al. (2006)].

The results reported that EVT is the most conservative method reporting by far the highest daily VaR estimate during the entire 7 years period. The biggest percentage difference between the VaR estimates of the three models for the same day was found between EVT and VC, in favour of the first, while the respective difference between the estimates of EVT to the other models was much smaller on average. The other two models (VC, and HS) exhibit, on average, similar estimates. Accordingly, the resulting capital requirements according to the EVT are higher compared to the other models.

In addition, EVT appears to produce the least number of over-shootings on 'back-testing' (9) when these are estimated using a moving window of the last 250 observations against 22 for the VC and 20 for the HS. The maximum number produced by EVT was found equal to 4 where as the other models produce a maximum of 7 (Figure 1).

Conclusion

This study was focused in the study of portfolios created by open positions in foreign exchange and stock products that are traded in spot market compareing three different methodologies to estimate VaR, namely VC, HS, and conditional EVT, for randomly selected portfolios. EVT was found to produce the most conservative estimates of VaR against the other methods, a result that may impose some disadvantages for its daily calculation by financial institutions.

The findings of this study are in accordance with those found in the literature according to which the semiparametric EVT is the optimal estimator of VaR against other methodologies. Adding to the conclusions of other studies, the empirical findings showed that novel methodologies in the estimation of VaR appear to be effective for every risk factor they have been applied to, but for the moment they do not seem to be the optimal solution, in terms of capital requirements, for financial institutions, when their portfolios is comprised from the examined products. However, since EVT includes the element of extreme events, the benefits to other portfolios with highly risk products (e.g. options, swaps etc.) should be thoroughly examined. Furthermore, the fact that EVT is also to model crisis situations should also be accounted for, which may significantly reduce operational risk.

Figure 1: Overshootings of VaR estimates against observed losses Conditional EVT **Historical Simulation** 5 3 2 1 Variance Covariance 7 6 5 4 3 2

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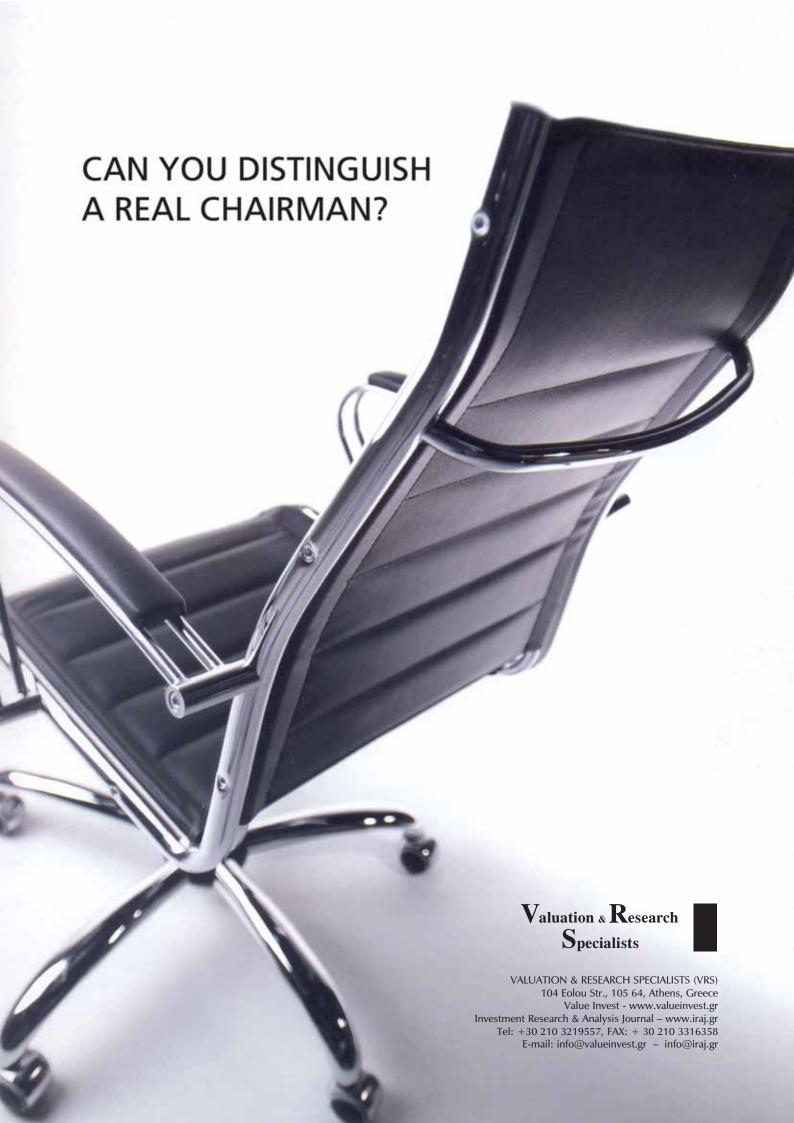
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Konstantinos Vergos

Real Options and the pricing of shares: empirical evidence from the Athens Stock Exhange

ABSTRACT

In some cases, option theory is believed to be superior to the naïve discounted cash flow approach to valuation because it captures the value of real options arising from managerial and strategic flexibility. Bearing this in mind, we investigate the extend to which company valuation of listed companies is associated with the existence of real options. In particular, the study evaluates the real options of companies listed on the Athens Stock Exchange during the time period of January 1990 to December 1999. Initially, we examine the events that reveal the existence of real options held by the companies and eventually their exercise. For this purpose, plans and decisions about company-wide capital expenditure and about specific projects are included into the sample. In addition, plans or decisions, which include funds for the purpose of acquisitions and tender offers and plans or decisions by corporate subsidiaries, are included. The original sample of events was compiled by examining the company capital increase leaflets and company annual reports, information revealed to the

press and discussion with the company management. First, it is shown that the presence of growth options is associated with excessive returns during the event period. The results reject the hypothesis that real options are not recognised in the market place and indicate that market participants are normally informed one day before the announcement. The value of companies that have growth options increases till the third day after real option announcement. Furthermore we examine whether the real options are value relevant in the context of residual income valuation model following mainly the Ohlson (1995) residual income model and methodology developed in Green, Stark and Thomas (1996). Our study indicates that the growth options are a significant explanatory variable in the context of the residual income valuation model. Our results provide some support of the predictive ability of the residual income model and are generally in line with findings from UK and USA researchers. Besides there is some support over the hypothesis that growth options are value relevant,

since they contribute in the predictive ability of residual income models. Also, our findings from cross-sectional models match to our findings from the examination of the effect of option announcements to companies' value. Our findings are also similar to findings over the effect of R&D announcements in other markets. Overall our study should provide a link between the real option theory and market valuation. Moreover, these findings are promising, because they reveal that market valuation practices and the real option theory converge in the case of the growth options.

1. Introduction

In our study we will examine events that reveal the existence and exercising of real options of companies listed on the Athens Stock Exchange. For this purpose, plans and decisions about company-wide capital expenditures and about specific projects are included into the sample. In addition, plans or decisions, which include funds for the purpose of acquisitions and tender offers and plans or decisions by corporate subsidiaries, are included. We will examine events for the 1989-1999 period. We examined daily closing share prices and only one type of share of every company, the most marketable one. To be included in the sample, the share of a company that is examined in our study had to be listed on the Athens Stock Exchange at the time the management's intentions were revealed and at the time the announcement was made. The share prices are adjusted for capital increases and dividends.

We use data from the electronic EFFECT database. The original sample of events was compiled by the examination of the companies' capital increase leaflets and companies' annual reports, information revealed to the press and discussion with the company's management. The articles were collected from daily and weekly newspapers. We also use the electronic database of Reuters Business Briefing to crosscheck the time of information releases.

2. Classification of business Decisions

We examine five types of business decisions that have growth option characteristics and their economic effect can be quantified. These are the options

- to acquire other companies,
- to take an exclusive representation of a series of products,
- to expand production capacity/ distribution network,
- to develop a production unit in a new area,
- to launch an advertisement campaign.

The management considers acquiring other companies so as to expand the company's production capacity, to extend its distribution network, or to enter new markets. If acquisition leads to the entry in new markets, then the company holds a corporate growth option.

Similarly, the option to acquire other companies or the option to merge is examined in cases the acquisition (or merger) may induce identifiable bene-

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fits for the potential acquirer (or for potentially merging companies). Also, the expansion of the company's distribution network in another country is regarded as a growth option. Finaly, when the company plans to launch an advertisement campaign, or

to develop a production unit in a new area, then a growth option is evident. A summary of classification of the examined cases to growth options(or to other type of real options) is provided in the table 1.

We made an effort to examine most

Table 1. Classification of managerial plans to growth options

| Managerial plans | Scope | Growth option |
|---|--|-----------------|
| To acquire other companies | to expand the company's production capacity to extend its distribution network or to enter new markets | No No Yes |
| To take an exclusive representation of a series of products | it is associated with a considerable expansion of products/services it is not associated with a considerable expansion of products/services | Yes No |
| To expand production capacity/distribution network | in countries the company already operates in countries where the company does not already operate | No Yes |
| To develop a production unit in a new area | | Yes |
| To launch an advertisement campaign | | Yes |

important business cases that have real option characteristics in the examined period. In total we examined 61 out of the 251 officially listed on the Athens Stock Exchange companies by December 1999. However, on average there were 147 companies, whose shares were traded in the examined period, ranging from 93 companies in January 1990 to 235

Table 2. Number of examined cases by option type

| NUMBER OF CASES EXAMINED (TOTAL) | 75 |
|----------------------------------|----|
| NUMBER OF EXPIRED REAL OPTIONS | 23 |
| NUMBER OF EXERCISED REAL OPTIONS | 52 |

companies in December 1999. The number of examined cases by option type is illustrated in the table 2.

There are two main research questions to investigate. First, we investigate whether real options are recognised by the marketplace. Second, we examine contribution of real options to company's value in the context of residual income valuation.

3. Real Option Recognition

An important assumption made by finance researchers (e.g. Trigeorgis (1991)) is that the real options contribute significantly to a firm's value. We test the hypothesis that growth options, a type of real options, are recognised by the ASE market, by examining the abnormal returns over the real option announcement period

(or real option signalling period). We examine the abnormal returns during 8-day real option signalling period, i.e. the period that starts five days before real option announcement and finishes three days after the announcement. The following table gives an indication that the announcement period is associated with abnormal returns. Descriptive statistics are also illustrated.

Companies that possess growth options, have significant positive average abnormal returns 2.73% for the period (-5,3). The table 3 presents the results.

Thus, our study provides an indication that the growth options are recognised by the marketplace in the Athens stock exchange, since the announcement of the growth options is, on average, associated with a premium over an eight-day period.

| Table 3. | Cumulative Abnormal returns during 8-day |
|----------|---|
| | Growth Option signaling period |

| PERIOD | MEAN | SEMEAN | STDEV |
|---------|--------|--------|--------|
| (-5,-4) | 0.60%* | 0.34% | 2.92% |
| (-5,-3) | 1.10%* | 0.62% | 5.36% |
| (-5,-2) | 1.25% | 0.77% | 6.70% |
| (-5,-1) | 1.84%* | 0.94% | 8.17% |
| (-5,0) | 1.97%* | 1.03% | 8.90% |
| (-5,1) | 2.24%* | 1.20% | 10.36% |
| (-5,2) | 1.99% | 1.25% | 10.82% |
| (-5,3) | 2.73%* | 1.40% | 12.16% |

An asterisk (*) indicates that the null hypothesis is rejected at 10% level. Two asterisks (**) indicate that the null hypothesis is rejected at 5% level. Three asterisks (***) indicate that the null hypothesis is rejected at 1% level.

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4. Contribution of real options to company's value in the context of residual income valuation

According to the "clean surplus equation", as presented by Ohlson (1995), the market value of a company can be modelled as a linear function of Earnings, Closing Book Value and net Dividends,

$$b_{t-1} = b_t - x_t + d_t (1)$$

and

$$x_t^a = x_t - rb_{t-1}(2)$$

given that d_t are net dividends at time t x_t are earnings in period t b_t is book value at time t x_t are abnormal earnings t is the risk-free interest t A less restricted form of the "clean surplus equation", allows for other control variables.

$$P_{t} = Y_{t} + \beta(X_{t} - rY_{t-1}) + \gamma Z_{t}(3)$$

where

Pt is the market value of the firm's stock at time t

 Y_t is the book value of equity at time t X_t is reported accounting earnings at time t

r is the risk-free interest (Xt-rYt-1) is abnormal earnings Zt is a vector of other information variables at time t

We investigate the value relevance of real options by incorporating factors

in these models. Equation (3), can be transformed to the following equation that is deflated by Book Value, so as to allow for control for size factors.

$$\left(\frac{MV_{i,t} - BV_{i,t}}{BV_{i,t}}\right) = \alpha_0 + \alpha_1\left(\frac{1}{BV_{i,t}}\right) + \beta\left(\frac{RI_{i,t}}{BV_{i,t}}\right) + \gamma Z_t + \varepsilon_{i,t}(4)$$

To examine whether the real options contribute during their lifetime to the company's value in the share market, in the context of "clean surplus" literature we compute regression coefficients and t-statistics of the following regression.

$$\left(\frac{MV_{i,j} - BV_{i,t}}{BV_{i,t}}\right) = \alpha_0 + \alpha_1\left(\frac{1}{BV_{i,t}}\right) + \beta\left(\frac{RI_{i,t}}{BV_{i,t}}\right) + \lambda_1GRO + \lambda_2GRO_{ct} + \varepsilon_{i,t}$$

where

MV_{i,t} is market value for firm I six months after the end of year t BV_{i,t} is book value for firm I at the end of financial year t

 $RI_{i,t}$ is residual income for firm I in year t

GRO is the number of months of presence of growth option before it became exercised

GRO is the number of months of presence of growth option before it expired unexercised

Our results, expressed on Table 4 provide some evidence that leads to the support of clean surplus hypothesis. Both the coefficients of 1/BV and RI/BV are positive (0.38 and 1.153 respectively) and significant at 1% level of significance. The presence of the growth options for a month increases the company's Market Value by 0.265 times the Book Value(Coefficient of GRO variable). Growth options that expired unexercised had an insignificant effect on

Table 4. Regression statistics over the period 1990-1998, Examined model:

$$\left(\frac{MV_{i,i}-BV_{i,i}}{BV_{i,i}}\right)=\alpha_{\theta}+\alpha_{I}\left(\frac{I}{BV_{i,i}}\right)+\beta\left(\frac{RI_{i,i}}{BV_{i,i}}\right)+\lambda_{I}GRO+\lambda_{2}GRO_{xt}+\varepsilon_{i,t}$$

Sample requirements: Companies having MV/BV>9 or BV<0 are excluded

| PERIOD | 1990-199 |
|---------------------|----------|
| Intercept | 1.597*** |
| t-stat | 22.258 |
| $1/BV_{i,t}$ | 0.38*** |
| t-stat | 5.229 |
| $RI_{i,t}/BV_{i,t}$ | 1.153*** |
| t-stat | 5.472 |
| GRO | 0.265*** |
| t-stat | 4.286 |
| GROXT | 0.106 |
| t-stat | 0.780 |
| R-sq-adj | 5.06% |
| Sample | 1150 |
| | |

An asterisk (*) indicates that the null hypothesis is rejected at 10% level.

Two asterisks (**) indicate that the null hypothesis is rejected at 5% level.

Three asterisks (***) indicate that the null hypothesis is rejected at 1% level.

company value. The Regression fit is low (R square adjusted is 5.05%).

Equally, the effect of the real options on companies' value is weak and insignificant when we examine data on an annual base (Table 5). The growth options have positive effect on corporate market value in most of the years (five out of

seven). Nevertheless, regression coefficients are unstable over time. The small sample size at an annual base, may give an explanation to real option coefficient instability as well as to their generally low statistical significance in annual regressions. Our findings can be partly compared to other studies in the area of

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Table 5. Annual Regression statistics over the period 1990-1998, Examined model:

$$\left(\frac{MV_{i,t}-BV_{i,t}}{BV_{i,t}}\right) = \alpha_{\theta} + \alpha_{I}\left(\frac{I}{BV_{i,t}}\right) + \beta\left(\frac{RI_{i,t}}{BV_{i,t}}\right) + \lambda_{I}GRO + \lambda_{2}GRO_{xt} + \varepsilon_{I,t}$$

Sample requirements: Companies having MV/BV>9 or BV<0 are excluded

| PERIOD | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 |
|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Intercept | 1.692*** | 1.187*** | 0.809*** | 1.178*** | 0.82*** | 0.31** | 0.93*** | 1.695*** | 4.327*** |
| t-stat | 7.924 | 5.345 | 4.052 | 6.761 | 6.728 | 2.452 | 5.653 | 8.900 | 17.324 |
| 1/BVi,t | -0.023 | -0.416 | 0.552*** | 0.674*** | 1.038*** | 1.683*** | 0.32 | 0.512* | 4.304*** |
| t-stat | -0.228 | -1.624 | 3.947 | 4.063 | 8.313 | 8.201 | 0.857 | 1.929 | 3.645 |
| RIi,t/BVi,t | 5.518*** | 0.769 | 0.532 | 2.366*** | 1.518*** | 0.858*** | 5.172*** | 4.751*** | 1.605 |
| t-stat | 5.062 | 1.561 | 1.569 | 3.609 | 3.675 | 3.283 | 6.760 | 4.232 | 1.632 |
| GRO | | | 0 | -0.231 | 0.088 | 0.275 | -0.116 | 0.215** | 0.095 |
| t-stat | | | 0.003 | -0.146 | 0.319 | 1.644 | -0.337 | 2.104 | 1.048 |
| GROXT | 0.21 | | 0.006 | | | -0.054 | 2.036 | 0.073 | 0.19 |
| t-stat | 0.795 | | 0.018 | | | -0.335 | 1.285 | 0.291 | 0.567 |
| R-sq-adj | 23.98% | 8.84% | 12.06% | 18.96% | 30.02% | 31.23% | 21.45% | 11.49% | 9.37% |
| Sample | 75 | 59 | 100 | 107 | 149 | 165 | 180 | 181 | 137 |
| | | | | | | | | | |

An asterisk (*) indicates that the null hypothesis is rejected at 10% level.

Two asterisks (**) indicate that the null hypothesis is rejected at 5% level.

Three asterisks (***) indicate that the null hypothesis is rejected at 1% level.

residual income valuation. Regressing deflated Residual Income, Book Value and real Options against the difference of Book Value from Market Value leads to lower predictive ability compared to the predictive ability of the models examined in Sougiannis(1994) and Green, Stark and Thomas (1996). The R-sq in our study is 5.7% while in Green, Stark and Thomas (1996) it is 91.4% - 91.7% and in Sougiannis it is 32%. The coefficient of residual income (RI) is higher than the unity (1.153) and significant at 1% level. However, the coefficient of RI is high-

er in previous studies (in Sougiannis study it is 2.75 and in Green, Stark and Thomas study it is 4.65 and 4.77). Maybe the inclusion of growth option variable captures an important part of residual income value. Nevertheless, intercept, closing Book Value and residual income are found statistically significant and positive as in Green, Stark and Thomas (1996) study. The regression coefficient of Book Value is found higher in our study (1.59 versus 0.86 and 0.91 found in the Green, Stark and Thomas (1996) study).



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5. Limitations and Conclusions

An important assumption made in this study is that market efficiency exists. If market efficiency is not evident, investors do not form their expectations in terms of risk and return or at least they do not form these expectations with uniform criteria. If this is evident, our model simply breaks down.

Not including additional control variables in cross-sectional regressions is also a limitation. However, R&D expenditures, which is the single most important factor included in other studies, were particularly small and made by less than 5% of the examined companies, whilst part of these expenditures is associated with real options. Similarly, we did not find sufficient data to examine the effect of advertising expenditure on companies' market value, examined in Shah and Stark (2001). Also, although pooled data provide some support over real option value relevance, annual data are somewhat unstable, probably due to small sample deficiencies. Nevertheless, our research design includes all sectors, so it leads to the generalization of our conclusions. Our data include financial companies since past studies do not provide any evidence that earnings, book value and real options are not determinants of the value of financial institutions. We do not account for the role of information costs. According to Bellalah (2003) there are sunk costs incurred during the phase of gathering information about the project and the opportunity to invest. Bellalah (2003) proposes some models that provide some insights into the importance of

these costs and may explain why companies that let their growth options expire do not have market premium. Also, the models developed by Lint and Pennings (2003) may provide a rationale to part of our findings. Lint and Pennings (2003) use an option approach to the New Product Development process to develop a framework that incorporates market and technology uncertainties in all go/no-go decisions. According to Lint and Pennings (2003) the projects during the R&D phase or after the R&D stage that combine negative Net present Value and low uncertainty will be abandoned. In our view these cases may fit to the growth options that the management let them expired. Also, issues useful to be examined in the future should be the benefits of first movers. Tsekrekos (2003) develops an equilibrium framework for real option exercise where the focus is on the effect of first-mover's advantages. First-mover advantages are found to have an asymmetric effect on rival firms' values. The more volatile industries should experience more separated firm entries over time the more substantial the first-mover privileges. Paxson and Pinto (2003) model the leader and follower value functions for a duopoly environment. Assuming the leader's market share evolves according to an immigration and death process, the follower's value function is less sensitive than the leader's value function to market share until the expected revenue exceeds the follower's trigger investment level. Besides, the follower's trigger increases with market share and

revenue volatility.

Overall, our study leads to some indications. First, it is shown that the presence of growth options is associated with abnormal returns during the event period. The results reject the hypothesis that real options are not recognised in the market place and indicate that market participants are normally informed before the announcement. The value of companies that have real options increases till the third day after real option announcement. Second, there is some support over the hypothesis that the growth options are value relevant during their life, since they can explain a significant part of the appreciation of Market Value over Book Value. Third there is some support of the predictive ability of the residual income model. Also, our findings over the predictive ability of residual income model are generally in line with findings from UK and USA researchers. Therefore, our study provides some support over the validity of residual income market in the Greek share market. Furthermore, our study shows that market seems to compensate the growth options that were finally exercised. Besides, the longer the duration of the growth options, the higher the appreciation of companies' market value. The latter finding is in line with observed practices of market value appreciation of companies having high duration growth options, like Internet companies. Therefore our findings may partly give validity the continuous appreciation of Internet companies. Finally, our findings from crosssectional models match to our findings from the part of our study that

examines the effect of option announcements to companies' value. In particular, our event study finds that exercised growth options compensate to company market value. These findings are also similar to findings over the effect of R&D announcements in other markets. Overall our study should provide a link between the real option theory and market valuation. Moreover, these findings are promising, because they reveal that market valuation practices and the real option theory converge in the case of the growth options.

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Konstantinos Vergos, PhD President of Hellenic Association of Certified Stock Market Analyst Head of Research, Pentedekas Securities S.A., Greece Presented in 1st International Seminar in Quantitative Methods in Industry and Commerce, 26-27 May 2003, TEI of Athens, Athens, Greece

¹The variables are deflated by Closing Book Value

 $^{^2}$ (MV-BV)/BV= $\alpha_0+\alpha_1(1/BV)+\alpha_2(E/BV)+\alpha_3$ (RI/BV)+ λ_1 $Z_1+\lambda_2$ $Z_2+\lambda_3$ $Z_3+\lambda_4$ $Z_4+\lambda_5$ $Z_5+\lambda_6$ $Z_6+\epsilon_i$,t, given that z1 is the market share possessed by firm I in year t,z2 is the degree of concentration for the industry to which firm i belongs in year t,z3 is the ratio of short- and long-term debt to shareholders' equity plus reserves for firm i in year t,z4 is the ratio of short- and long-term debt to shareholders' equity plus reserves for the industry to which firm I belongs in year t,z5 is (z3-z4)2,, z6 is the average variance of the stock returns for firm I for the four quarters ending in the quarter of the financial year-end.



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Creating an Effective Investor Relations (IR) Paradigm

"Not things, but opinions about things, trouble men" Epictetus

1.0 IR and Corporate Voluntary Disclosure

Investor relations (IR) is becoming slowly but progressively a discipline and/or an art between a rock and a hard place. In other words a function that makes the difference for the listed companies' communication process to the markets. Especially nowadays with so many issues on corporate accountability and effectiveness, the IR function is the one that arises beyond and above the corporate governance guidelines, which are universal and standardised to many national equity markets and countries, especially to the economic building blocks such as European Union, NAFTA, etc. It is the one that makes the investment case of a listed company and its listed stock to be recognised and be on the radar system of the fund managers.

The objective of this article is to pinpoint/identify the involuntary and voluntary disclosure strategies used by listed companies and to evaluate their effectiveness. As a consequence, I try to extract an effective IR path/method in order to attain the predetermined goals such as increase firm visibility, improve its liquidity and share price through upgraded disclosure. However to measure the effectiveness of the IR activities is a difficult task as well as a dilemma and there is no standard answer to it. I believe, as an IR practitioner that, ultimately the IR is measured up with some identifiable factors. These factors mostly belong to the voluntary disclosure pool that the IRO and the senior management can use. The friendly, interactive and well-informed company's web site, the increasing number of private meetings with investors especially institutional investors, the implementation of a roadshow policy, even the adequate and timely feedback to analysts are variables which the IRO can intensify or minimize well beyond the Corporate Governance principles and regulations. Other factors are more obvious and simpler such as the number of institutional investors year by year, the retaining of existing investors, the number of people (end users, institutional and individual investors) that know the company well (through constant communication and disclosure) and the increase of the share price of the underlying stock.

Furthermore, as the local and global money managers and analysts indicate, the Investor Relations Officer (IRO) has to plan strategy and tactics



on a global scale with clarity, resourcefulness and flexibility. For a small, periphery but somehow dynamic market such as Greece, the IRO must add professionalism, seriousness and reputation. Then, if properly orchestrate his/her IR options, activities and communication effectiveness even the most disbelieving, pessimistic and suspicious targeted local and especially global fund manager will invest in the underlying Greek stock. Nevertheless, in order to attract US and European pension funds and other institutional investors into a market such as Greece, which in reality is still an emerging market, better disclosure, transparency and high governance standards and practices are also key elements. Indeed, global experience indicates that investors ultimately pay more if they are comfortable with good returns coupled with disclosure.

2.0 IR and Effective Corporate Communication

IR is a multidisciplinary function that combines principles, methods and tools from sciences and arts such as finance, accounting, marketing, economics, game theory, public relations and psychology.

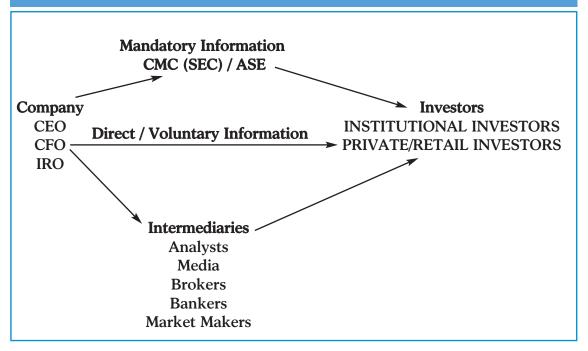
Most people accept that the IR function does help the information flow between the listed companies and their audience (figure 1.1). It comes out of the basic need of communicating the company's information to the market but as a silo of information can be used by the different interested parties to their benefits. Exactly then the regulators appear in order to control and direct the communication channel to a/the mutually benefit of the market.

Managers run the listed firms (in trust), who plan and implement the strategic and marketing plans and therefore control all vital company information. On the other side, all shareholders and stakeholders (i.e. suppliers, bankers, customers, etc) have little or no information on the company's activities and performance. Thus this information asymmetry, between the two groups, creates the need for an information processor such as the IR function. And the IR adventure begins, since as processor, is always between a hard place and a rock.

The basic aim of the Investor Relations (IR) department, according to my experience is: 1) the creation and cultivation of relations of trust with the investors, 2) the direct, correct, valid and timely disclosure of company's activities to the market (analysts, institutional investors, bro-

turn effective communication provides the opportunity for companies to broaden their investor base in line with investment trends.

Figure 1.1: Direct and indirect information to investors



kers, bankers, etc.), and 3) the strategic planning and programming of IR activities, which have as ultimate goal to optimize the company's share price.

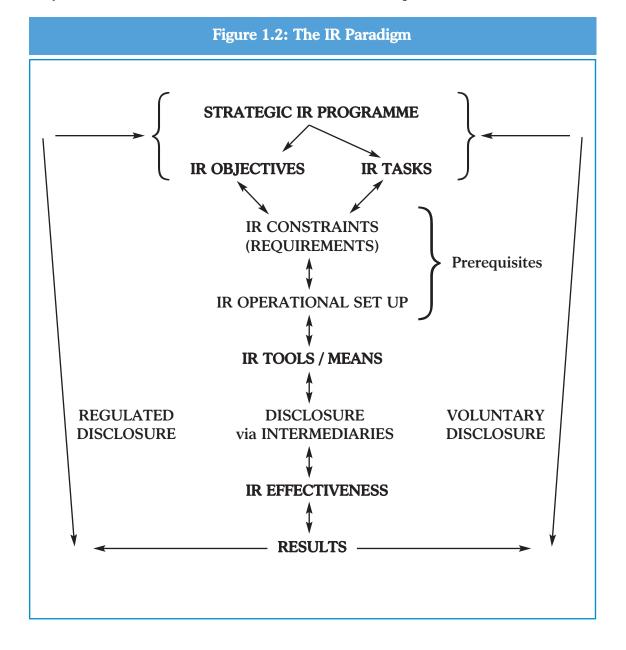
In order to achieve the IR and company goals, the IRO must establish direct contact with investors both retail and institutional investors, such as Mutual Funds, Pension Funds, Hedge Funds, etc. He/she can also convey messages and get points across to the end users via intermediaries such as analysts and journalists.

Therefore, the core objective of the investor relations activity is to communicate accurately and fully the strategy and prospects of the business, thereby ensuring that the share price fairly reflects the company's value. In

Furthermore, Investor Relations help listed companies to attain and retain the optimal or highest share price that is consistent with an accurate and informed view of the company's performance and its realistic potential. In addition, the IR's responsibility is to communicate internally, to provide the top management and the Board of Directors (BoD), with market intelligence and perceptions on the company, related industry and consequently financial market(s) and economy.

3.0 IR in the Greek market

As current research indicates, the Greek IR model focuses mostly on corporate public mandatory disclosure (i.e. quarterly and yearly accounts, press releases, etc) according to bylaws and regulation and on any "impulsive action" internally by the people from the registry (metochologio) department. In addition, in the Greek model we observe that the media people not only substitute the internal people who process the information but also affect at a large scale the message given to the market directly or via the sell side analysts' dailys. Moreover, it looks as if most Greek companies, especially the small ones, ignore the requirements of the particular IR position and rush to fill them with non-qualified individuals. Instead of hiring individuals with a strong personality who combine market, sector, company and even some legal knowledge, and have some experience in portfolio management, public relations and marketing, they attempt to fill the IRO positions with individuals



whose most important asset may be their relationship with the owners or the top executives of the company, or analysts or brokers simply trying to flee the shrinking brokerage business. These people, as a whole, fail to impress foreign institutional investors. Adopting voluntary and mostly involuntary disclosure policies and engaging in pre-marketing and proactive roadshows abroad should be part of the listed firms' "tool kit." Failing to do so in an increasingly competitive landscape for international institutional funds may result in stock underperformance, which could possibly hurt the firm's image among shareholders and on aggregate undermine the Athens bourse's future.

Experience and opinions indicate that a number of factors may deter active foreign funds from investing in Athens. The small sizes of the local stock market, its lack of depth in liquidity, etc are some of them. However, the biggest problem facing local firms is their inability to "sell themselves" to the group of active international investors. This is the job of the Investor Relations Officer (IRO) but most Greek firms do not have one. Although it is necessary for Greek firms to go out, market themselves and attract the foreign funds by pursuing active and proactive IR strategies, few seem to have taken notice and tried to comply.

4.0 Proposing an Effective IR Paradigm (figure 1.2)

The basic attributes for the effectiveness of the IR activity is the appropriate diagnosis of the specific firm's needs as well as the creative strategic planning by the IR department combined with the personal attributes and characteristics of the IRO. Indeed, the implementation of a strategic IR program might be good for one company but marginal and detrimental for other listed companies. For instance, the main target for a small cap firm is usually the hedge and venture capital fund manager, while for a mature company is the dividend institutional investor.

4.1 The Strategic IR Programme

An effective IR programme can be separated in to five primary sections, which come to a fundamental marketing strategic planning. A detailed step by step process is exposed in our upcoming book.

Firstly, strategic planning. The planning process involves creating a local but most importantly a global communications framework and forward strategy. The strategy will then be refined geographically as local market conditions dictate. Central to the strategy will be agreeing objectives and specific benchmarks.

Secondly, the IR programme includes the creation of overall positioning and messaging. Specifically this will entail grafting compelling business definitions and central marketing themes to be used across all communication material. Given the intense competition for news as well as space in the global financial market, the ability for the top management to precisely, succinctly and creatively define the company in a variety of market situations is crucial.

Thirdly, the IR programme is responsible for executing global strategy at a

local level. Every market has its own idiosyncrasies. For example, in Greece top big capitalization companies are split into joint-stock (government) companies, family controlled conglomerates and subsidiaries of multinationals. In the USA, publicity restrictions are particularly stringent. This can have wide ranging implications for activity in other markets. Fourthly, the IR programme provides an ongoing issues and crisis management element to the project. Finally, the IR programme plays an important role on a day-to-day basis identifying opportunities, managing the local and global communications and providing a sounding advice for the company. This kind of proactive approach is fundamental to a solid IR programme and style of project management and ensures the avoidance at all times of being placed in a reactive or defensive position.

4.2 IR Objectives and Goals

The IR office should focus mainly on:

- Targeting fund managers / prospective shareholders The main IR target and job is to thoroughly and extensively know the shareholders inside out and effectively in person by visiting them regularly. Our goal should be to ADD TARGETS AND PROSPECTS on the existing "funds".
- Increasing the company's share price
- Minimizing the IR expenses

4.3 IR Prerequisites

The requirements for an effective IR policy could be distinguished into company's related constraints and people related prerequisites. Similarly, we can identify financial and nonfinancial requirements. Giving these constraints the IR office should:

- Develop a compelling investment rationale -- Why should an investor buy the company's stock? Primarily, a company's investment rationale needs to be communicated throughout all mandatory and voluntary disclosure forums.
- Disclose timely company's information -- When to disclose; Why disclose; Who should disclose; and How to disclose.

It is extremely important for every listed firm to be aware and cater for the different requirements of different audiences. For example, institutional investors require information on strategy and prospects while equity research analysts demand information on accounting and forecasting. It is clear that by adjusting the content of its corporate communications, a listed company can

- Attract potential investors
- Empower the long term relationships with the current shareholders
- Differentiate itself from its peer group
- Demonstrate its future growth potential
- Focus on the implicit under valuation at which its shares trade

 Create positive news flow, which will have an immediate impact on share price

4.4 IR Tools

a) Regulated corporate disclosure & IR

When rules and regulations create information controlled and disclosure standardized environment the need and existence of the IR is deteriorating if not disappearing.

Disclosure tools such as:

- a. Annual Report (in Greek)
- **b.** Annual Report (in English)
- c. AGM voting decisions
- d. AGM vote participation
- e. AGM vote execution

leave limited space to the IRO while does not pinpoint the agency issues and information asymmetries nor speculates on the insiders' use of information.

b) IR via Intermediaries

Major IR goals is also to

- Target sell-side analysts The IR program would begin with the identification of a "target list" for a proactive investor communications effort. Moreover, the IR office should use extensively databases of analysts who follow companies with similar profiles.
- Increase sell side analyst coverage –
 If one Global Analyst and two Greek
 Analysts cover the stock, this is a
 mediocre success and the IRO
 should double the number of
 Analysts covering the stock.

- Build relationship with stockbrokers / market makers – The "middle" people can become important and vital marketing elements to promote the story, the high calibre and quality of the management and the group prospects.
- Empower media relations -- Finally, the IR office should continuously build solid relationships with the major national and international business media. Working with the local editors of the newspapers and magazines as well as the editors of The Wall Street Journal, The New York Times, Business Week, Forbes, Barron 's and Fortune has led to major placements.

c) Voluntary IR

The most effective tools belong to the IRO's arsenal ready to be used discretionary in order to get high visibility status and capital placement in the company's share.

Therefore, the IRO should:

- Set group and one-on-one meetings

 Establishing an active program of individual and group meetings to expand interest in the company.

 Management would provide a strategic overview of the market and the company. The IR office would coordinate the meetings, provide counsel on the presentation, and follow up with attendees to encourage investment and to build lasting relationships with the company.
- Target buy-side analysts The IR program would begin with the identification of a "target list" for a

proactive investor communications effort. Moreover, the IR office should use extensively databases of analysts and money managers who follow companies with similar profiles.

- Prepare interesting and motivating corporate materials — The IR office should have an in-house graphics department that can produce computer-generated slide presentations that correlate with the theme and direction of management's strategy.
- Direct mail/surveys -- The conduct of periodic surveys of analysts to obtain opinions and impressions about the company that can help to strengthen management presentation.

5.0 Conclusion

By synthesizing the aforementioned parts, we create a benchmark for measuring the IR effectiveness that could bring about the expected results for the senior management as well as the investors.

Indeed the significant value the IR

office might add to the company is based on the voluntary disclosure policies. With this I mean that each company creates its own communication and disclosure strategy for investors, analysts, bankers, brokers, etc., always within the framework of the market's regulations.

The foreign institutional investors, analysts and other market players, have formed a perception of Greece and the Greek stock market. Historically, their bias is entrenched in the uncertainty, lack of confidence, poor information, inconsistency etc. In order for the Greek companies to clarify any info and dissolve any uncertainty either itself alone or along with the Greek state officials (i.e. the Ministry of Finance or Development) they should apply voluntary disclosure policies and their IR departments should implement very proactive marketing plan.

The concept not only of disclosing brutally and bluntly the proper information but also of visiting the FMs' offices and briefing on the company's history and perspective is the best way of selling the company's share.

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Saving Versus Investing

In simple economies, there is little distinction between savings and investments

One saves by reducing present consumption, while he invests in the hope of increasing future consumption. Therefore, a fisherman who spares a fish for the next catch reduces his present consumption in the hope of increasing it in the future.

Most of the people probably have savings accounts with ATMs to access their hard-earned cash and be able to store away any extra cash in a place a little safer than a mattress. A few of you may even have some stocks or bonds.

Let me explain why while a savings account in the bank may seem like a safer place than the mattress to store your money, in the long-term it is a losing proposition!

If you open a savings account at the bank, they will pay you interest on your savings. So you think that your savings are guaranteed to grow and that makes you feel extremely good! But wait until you see what inflation will do to your investment in the long-term!

The bank may pay you 5 percent interest a year on your money, if inflation is at 4 percent though, your investment is only growing at a mere 1 percent annually.

Saving and investing are often used interchangeably, but they are quite different!

Saving is storing money safely, such as in a bank or money market account, for short-term needs such as upcoming expenses or emergencies. Typically, you earn a low, fixed rate of return and can withdraw your money easily.

Investing is taking a risk with a portion of your savings such as by buying stocks or bonds, in hopes of realizing higher long-term returns.

Unlike bank savings, stocks and bonds over the long term have returned enough to outpace inflation, but they also decline in value from time to time.

The rate of returns and risk for savings are often lower than for other forms of investment.

Return is the income from an investment.

Risk is the uncertainty that you will receive an expected return and preservation of capital.

Savings are also usually more liquid. That is, you may quickly and easily convert your investment to cash. The decision about which investment to choose is influenced by factors such as yield, risk, and liquidity. Investments may produce current income while you own the investment through the payment of interest, dividends or rent payments.

When you sell an investment for more than its purchase price, the profit is known as a capital gain, also called growth or capital appreciation. O.10 EUronidan.

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Markos Komondouros

Crossing the Aegean: Greek M&A investment into Turkey

Greece and Turkey have experienced strong growth in recent years and are expected to continue to attract further international capital as well as generate internal corporate activity as family groups rationalise, governments divest and industries consolidate:

- Both have become major centres of inward investment - Greece as the cornerstone EU economy in South East Europe and Turkey as a major economy in its own right with major successful recent institutional reforms; and
- Both are increasingly becoming regional centres of investment for the surrounding areas of the Balkans and, in the case of Turkey, the Turkic Republics.

With both markets of such interest, it is worth addressing some of the key issues in Greek-Turkish investment flows. After all, these are two attractive, large, contiguous markets, with many similarities. It is natural therefore to consider that cross-border investments could give rise both to growth opportunities, in accessing new markets, and to cost synergies, in such areas as manufacturing, distribution and logistics.

Historically, however, political reality



belied this commercial opportunity: national and personal prejudices played a big role in curtailing potential flows. In more recent years, through a combination of factors, this situation has improved considerably, though some obstacles still remain. In terms of direction, investments seem to flow more easily to the East (ie from Greece into Turkey); and there have been more of them. The largest, by a long shot, was the €4.5 billion acquisition of Finansbank by

National Bank of Greece just under a year ago. This was a watershed transaction and, as such, tested perceptions. Rumours and newspaper gossip about customer withdrawals at Finansbank abounded on the news, but in practice were insignificant and the noise quickly died down. Today, it is doubtful that many customers of Finansbank register that they are dealing with a Greek bank. Follow-up acquisitions by both Eurobank and Alpha Bank in the Turkish banking sector reinforce this point. Other, longstanding Greek investors in

through distributors; and some Turkish food and clothes retailers have successfully set up shop here. A more significant industrial investment has yet to happen but that day will also come.

Against this background, we focus on some of the key factors that a Greek company may consider in evaluating a potential investment in Turkey.

Growth and stability:

For decades Turkey seemed unable to break out of the notorious boom-andbust cycles of heady growth followed

Against this background, we focus on some of the key factors that a Greek company may consider in evaluating a potential investment in Turkey.

Turkey include Intracom, Intralot and Silver & Baryte.

On the other hand, Turkcell's attempt to acquire TIM Hellas a few months ago from TPG and Apax was more controversial, and they received a quiet word from the authorities to desist. Newspaper reports in Greece suggested " it is one thing for a Greek bank to buy a Turkish one, and quite another for a Turkish company to buy into such a strategically sensitive sector as telecoms". The fact that the target in question represented only 10% of the mobile telecoms market, and was of course itself already foreignowned, was not commented on! Interestingly, TIM Hellas has now been sold to an Egyptian buyer. Turkish companies do of course operate in Greece but, to date, principally

regularly by sharp downturns, devaluations and financial crises. Successive weak coalition governments were mainly responsible for this, lacking the political will and determination to push through necessary reforms. This changed in November 2002 with the AKP party winning a majority in parliament. Their political agenda was not necessarily popular with the Turkish business world. The government has nevertheless delivered a series of structural reforms, which, in combination with a strict IMF programme, have produced remarkable stability and encouraged inward investment. FDI in each of 2005 and 2006 exceeded US\$10 billion, compared to an average annual figure of less than US\$1 billion over the ten previous years.

2007 was generally expected to be a more difficult year, with creeping paralysis due to presidential and parliamentary elections in May and November (now brought forward to July) respectively, and uncertainty surrounding the outcome of both. Nevertheless, for those more familiar with Turkey, the fundamentals of the economy (a young and growing population, a broad industrial base, dynamic private sector and skilled, relatively low-cost workforce) underpin continued growth and suggest 2007 may be a buying opportunity if anything.

EU accession:

Another issue is whether the difficult path towards EU accession may undermine investment stability. Over the past few months the accession progress seems to have got stuck in the mud, over Cyprus primarily, with EU entry becoming a distant if not completely fading prospect. Clearly the EU accession path has played an important role in guiding Turkey towards reforms and in encouraging foreign investment to date. The thesis could be made, though, that the Turkish economy is now so intertwined with the European markets, and that there is so much fixed foreign investment in Turkey, in both services and manufacturing, that Turkey is effectively already integrated with Europe; and that integration is so deep as to appear irreversible. This could be the strongest guarantee of continuing stability and discipline in the markets.

Currency exposure:

Persisting high local currency interest

rates (currently around 20%) continue to tempt Turkish borrowers to fund their operations by borrowing in foreign currency. In the case of exporters, this can provide a natural hedge. However, for most companies, this practice, while boosting profitability in the short-term, creates a currency exposure which can be quite painful in the case of sharp falls in the Turkish Lira, as most recently happened last May. Turkish entrepreneurs and managers claim to be experienced at managing and taking advantage of this exposure; on the other hand, a potential investor needs to be clear whether he is making a business investment or taking a view on currencies, and structure a potential investment or partnership accordingly.

Inflation and interest rates:

Institutional reforms, particularly in the banking sector, seem to have succeeded in breaking inflation expectations after decades, and have brought annual price changes close to single digit territory. This has in turn had a beneficial impact on the domestic lending market, with Turkish Lira borrowing beginning to be available for longer-term maturities. Over the past two years, this has mainly operated in a virtuous circle, with falling inflation figures helping drive foreign investment flows, thereby counterbalancing the pressure on the currency of other potential imbalances such as the significant current account deficit. In general, this downward trend is expected to continue, albeit with some possible turbulence due to the difficult political calendar mentioned above.

Target sectors:

A further flow of Greek investment into financial services could be expected. Banks like Piraeus and Marfin both have stated regional expansion strategies, and targeting the largest regional market would seem natural. We would also expect Greek flows into other financial services sectors such as insurance, factoring and leasing. Other diverse areas where Greek interest in Turkey could reasonably be expected are in food, retailing, transport, IT services and building materials. In tourism, another natural target area, there have been some minor efforts at cooperation, but no major investments as yet. Amongst some hoteliers, the reaction has been heard that they would not want to "take tourists away from Greece" by investing in Turkey; others may however take a more constructive view and look at the significant opportunities created by covering both markets.

Professional services and human resources:

For those less familiar with Turkey, a pleasant surprise is often the quality and depth of professional management available. Western-style (often Western-trained) managers are plentiful and experienced. This is critical because Turkey is a market with its own particularities and having strong local management is an essential part of a successful investment. There is also a high quality supply of professional services firms that can advise on transactions, be they lawyers, accountants or consultants. All these aspects suggest to us that there is significant further potential in the short to medium term for Greek investment into Turkey. With respect to helping such transactions happen, we believe that in regional markets such as Greece and Turkey there is a niche for high-level advice to international standards but with an in-depth local understanding and capability. The combination of experienced, internationally-accomplished investment bankers providing a tailored, specialised financial advisory service on a small-scale, local and committed basis addresses this need. This is what Vector Partners, a financial advisory boutique with offices in London, Athens and Istanbul, provides. Vector Partners' aim is simple: to provide top-quality financial advice to the highest international standards in relation to the Greek, Turkish and regional markets. It has been set up by professionals with decades of experience in the international financial and capital markets with leading global investment banks. One of Vector Partners' founders established and ran UBS's business in Turkey for five years. We therefore have an intimate understanding of the market, speak the local language in all senses of the word, and can offer the contacts and ideas that a Greek potential investor into Turkey needs.

The author:

Markos Komondouros is a principal of Vector Partners (www.vectorpartners.eu). He spent 15 years with S.G. Warburg/UBS, including 5 years in charge of their Turkish business, before moving to Greece recently to co-found Vector Partners.





postgraduate taught course:opportunities

Finance & Management

| Course Directors: | Professor Costas Milas |
|-------------------|--|
| Contact Names: | Vickey Letto |
| Position: | MSc Course Administrator & PGT Progs Team Co-Ordinator |
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| Telephone: | 01782 583089 |
| Fax: | 01782 584277 |
| Email: | v.m.lello@mngt.keele.ac.uk |
| Website: | www.keele.ac.uk/depts/ec/prospective/homelindexmsc.htm |

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School of Economic and Management Studies MSc, PgD, PgC Full Time



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The MSc in Finance and Management is designed to provide the systematic understanding of finance, financing and the modern organisation. It provides the analytical and technical skills in finance combined with the professional and management techniques of operational, strategic and financial management.

Successful students will gain

- A systematic understanding of knowledge in the relevant areas of finance and critical management thinking.
- A command of analytical techniques, computing and appropriate software in the relevant areas of finance and management.
- Increased confidence in the analysis, synthesis and evaluation of problems and their solutions.
- Improved employment prospects through enhanced professional and practical skills.

Course Structure and Content

Correct at time of going to printing

The MSc programme starts in September and lasts 12 months. During the first semester (September to January) students take four core modules, followed in the second semester (January to May) by a further four modules, some of which are chosen by the student. Each taught module is worth 15 credits. From May to September students undertake a project or a dissertation, which is worth 60 credits.

Students gaining 120 credits from taught modules and successfully completing the dissertation will be awarded a MSc. Students gaining 120 credits but not proceeding to the dissertation/project will be awarded a Postgraduate Diploma. Students who do not gain 120 credits but pass modules worth 60 credits will be awarded a Postgraduate Certificate.



Course Modules

The following indicate the range of modules that may be offered:

Corporate Finance: Analyses the capital structure, dividend policy and capital budgeting decisions of corporations.

Entrepreneurship: Develops an understanding of the theories of entrepreneurship within the areas of finance, management and marketing. Real world examples are used and particular emphasis placed on IT startups and the knowledge economy.

Financial Accounting: Financial accounts provide needed information about an organisation for external decision makers such as shareholders, banks, suppliers and government. This module provides an understanding of the underlying business transactions that are needed in constructing financial accounts.

Financial Markets: Studies national and international financial markets and introduces the basis for asset pricing and portfolio choice.

Quantitative Methods in Finance: Introduces the key mathematical and statistical techniques used in finance. Practical use of software tools is made.

Financial Modelling: Studies the modelling of bonds, stocks and derivatives. Appropriate computer software is used throughout the module.

Applied Finance: Analyses the modelling of financial data using statistical techniques. Practical use of relevant computer software is made.

Strategy and Information Management: This module aims to provide an overview and understanding of the process and procedures of strategy management, including the identification, extraction and use of relevant business information.

Marketing & Operations Management: This module aims to introduce students to key concepts and aspects pertaining to marketing and the management of design and operations in business organisations.

International Finance: This module studies and analyses foreign exchange markets, including risk factors and the implications of exchange rate risk.

Financial Instruments: This module studies financial engineering techniques. It examines in detail how financial derivatives are valued and their use by firms, individual investors and governments to minimise risk exposure.

Teaching and Assessment

The Course Director is responsible for running the programme and providing support and information for students. Modules are taught in lectures, tutorials and computer laboratory classes. Practical use is made of standard software and data sources. Taught modules are usually assessed by a combination of unseen examination and coursework which may include essays, mini projects and tests. Guidance is provided on dissertation /project topics and each student will be assigned a supervisor.

Recent topics have included:

- An evaluation of trade-off and pecking order predictions about dividends and debt.
- Estimates from an ARCH/GARCH model of stock market returns using daily data.
- The relationship between high quality products and successful companies.

Career Destination Information

It is anticipated that at the end of this course the majority of graduates will progress directly into related employment. Typical career destinations may include corporate treasury functions (such as cash management, risk management, capital budgeting), fund management and investment banking. Some graduates are likely to be employed in the management, control or design or development of information systems within these sectors.

Funding

UK students may consider a career development loan and overseas students may wish to visit the British Council's website http://www.educationuk.org where information on scholarships can be found.

Application Procedure

Details of application procedures are given on the postgraduate website at www.keele.ac.uk/ postgraduate. If you are unable to access this then an application form and the Postgraduate Study Guide can be requested via email, telephone or post:

Email: postgrad@keele.ac.uk

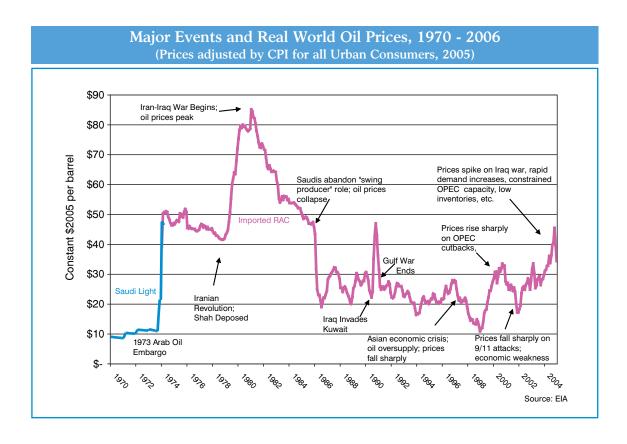
Tel: 01782 584472

The Postgraduate Office Keele University Staffordshire ST5 5BG

Past Oil Crises A quick overview

Originally published in 2005

The chart below shows the real prices in oil adjusted to inflation until 2004. It shows clearly how oil behaved the past 35 years amid significant geopolitical developments. What can one observe by looking at the chart at first



glance is that on real terms crude oil has gone up to almost \$90 per barrel in early 80's which was a result of the panic in the oil industry due to the Iraq-Iran war that was declared in 1980 following a seizure of power in Iran from Ayatollah Khomeini in 1979. That was the 5th post war oil crisis.

Before that another great increase in

oil prices happened in 1973 at the Arab Oil Embargo when prices rose from \$2.90 in September 1973 to \$11.65 in December of the same year. That was the 4th post war oil crisis. (Just for the readers interest the previous first 3 post war oil crisis were: 1st - In 1951 when Iran nationalized the Anglo-Iranian oil industry. 2nd – In 1956 at the Suez crisis.

3d – In 1967 and the Suez canal closure due to the Six Day War).

The invasion of Iraq into Kuwait in 1990 caused the Gulf War in 1991 that put in risk a total production of almost 6 million barrels per day (Iraq + Kuwait) and resulted in the sabotage of the Kuwaiti oil fields by the Iraqi army that kept burning for more

than a year! That was the 6th post war oil crisis that drove prices at \$40 (something less than \$50 in 2004 real prices).

It was a major oil crisis since 2 big OPEC producers were at war which led to the sabotage of the huge Kuwaiti oil fields.

The 7th oil crisis and the 2003 US led Iraqi Invasion.



What can trigger an oil crisis?

From the past 6 oil crises since 1951, five of them included a war and/or an embargo, and all of them were driven from fears of a sudden loss of significant oil supply – (major supply shock).

The 7th oil crisis and the 2003 US led Iraqi Invasion.

According to past oil crisis trigger factors, what may have contributed to today's major oil crisis was the US led invasion in Iraq in 2003. It lead to a temporary loss of all of Iraqi oil production and to permanent loss of oil

H&F Analysis

supply of almost 1 million barrels per day since Iraq never restored pre-war production levels of 2.8 mbpd. It also triggered a spree of sabotage actions against oil installations in the Middle East.

The 2003 Iraqi war followed the major general strike of a major OPEC producer Venezuela, that caused the permanent loss of something between 500,000 – 1,000,000 million barrels per day since 12,000 employees of PDVSA (national oil company) were fired and the oil industry of Venezuela never fully recovered production at the pre-strike levels of 3.4 mpd. Analysts estimate current production between 2.4 – 3.0 mbpd.

As a result we can say that the current 7th oil crisis which is caused due to the inability of supply to cover demand, may find it's origins at the 2003 Iraqi war and the Venezuelan strike which shaved-off 2 million barrels per day of existing spare capacity and minimized the world's cushion against price shocks such as the ones we are experiencing today!

What is the winter outlook?

A lack of supply cushion means that any geopolitical change, any terrorist act or a major hurricane (like last year's Ivan) will be hard to be anticipated by global supply.

The only supplier with spare capacity for the winter of 2005 is Saudi Arabia (another 1-1.5 mbpd) and the Emergency Reserves of IEA and USA (Strategic Petroleum Reserve – SPR) which are used only under an extreme emergency.

What is clear from current world's supply/demand balance is that for the winter of 2005, the world is vulnerable to any supply shock since the available cushion is minimal.

Anything from a heavy winter to a natural disaster or geopolitical development will push prices higher.

Unfortunately in the oil industry additional supply takes year to come on stream while supply shock only need a few hours or less sometimes!



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Nicholas I. Georgiadis

Valuing banking stocks A Synopsis on the Basic Models

The Pros & Cons Utilizing Evidence from European Equity Research Practices

Over the past decade, a central method used by equity analysts to value banks was a variant of the Gordon Growth Model. In various reports, analysts across many European financial institutions were observed to derive the price / book value multiple that a banking stock should trade at, by comparing the bank's profitability to its cost of equity capital adjusted for the growth rate. The above method is shown in the following formula:

[Implied or Target P / BV = (ROE - g) / (CoE - g)]

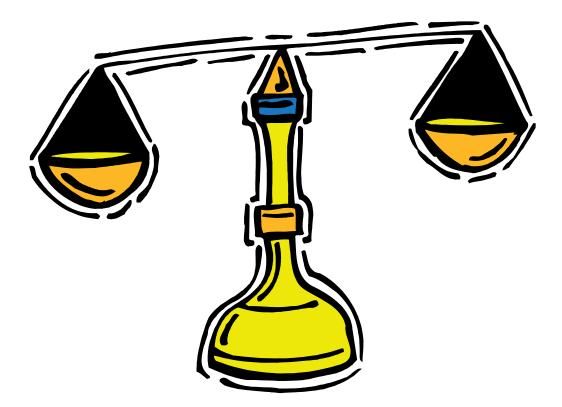
where,

P = Share Price BV = Book Value per Share ROE = Return on Equity CoE = Cost of (Equity) Capital g = Long Term Growth Rate

The above equation – also known as the "Net Asset Value Approach" – has for years been a simple method to gauge a bank's fair value by using straightforward numbers with the minimum complexity.

Although the constituents of the equation are relatively easy to calculate, they are still very critical numbers. To measure a bank's profitability analysts use "Return on Equity" (net profit divided by net shareholders' funds), one of the most popular and meaningful ratios among shareholders. Also, to calculate the "Cost of Capital" (or "Cost of Equity") they only have to add market (or equity) risk premium, adjusted for beta, to risk free rate $(CoE = RF + MRP \times Beta)$. Finally, to estimate the long-term growth rate or "g" analysts have to use not only a bank's historic performance but also their intuition with regard to its future prospects. In other words, it seems impossible for analysts to unanimously agree on one target (fair) price when they analyze a particular bank. The implied price of a banking stock is derived through the following equation:

[Fair Price of a Banking Stock = Target P / BV times Current BV]



Divergence of opinion does not appear to be a serious obstacle for an efficient market; however, no model or valuation method is flawless, despite the extent to which it is being used by equity analysts.

In the case of the valuation method under review, criticism is focused upon the assumptions that have to be made and their reliability in the longer term. More specifically, this model seems to be especially sensitive to many assumptions, possessing high leverage. Meaning, that it is easy to make small changes in its assumptions and produce big differences in the final valuation number. In addition, assumptions are quite subjective and consequently cannot be verified or even rejected. For example, a range of 8% - 9% in sustainable ROE may produce a range of 0% to 20% in the

upside potential of a banking stock, when other parameters are held constant

As equally important weaknesses with regard to this model, we should highlight the following:

- a) The model is biased towards short term and medium term profitability. When analysts estimate "g" for short-term periods, the rate tends to be higher, producing larger valuation numbers (when ROE > CoE).
- b) The model is not very well suited for banks operating in emerging markets or regions that provide financial data for short periods. This makes some parameters either difficult to calculate or meaningless to use (risk free rate or beta for example).

Nicholas I. Georgiadis

c) The final valuation number tends to come out bigger since the formula is being adjusted for "g" (this also applies when ROE > CoE).

The following table presents the key assumptions which analysts must make applying this model:

Country Risk
Cost of Equity
Equity Risk Premium
Long Term ROE
Long Term Growth (G)

On the other hand it is important to note that the model does demonstrate some key advantages:

- a) It takes into account the most critical factors highlighting the financial performance of a banking institution (ROE, CoE, g, BV).
- b) It has a focus on shareholder value.
- c) It incorporates the risk factor.
- d) It incorporates expectations of growth in earnings and / or dividends.

The Model Application

Analysts use this model mainly as support to strengthen their arguments over the fair value of a banking stock. Under this perspective, assumptions have to be clearly stated and sometimes thoroughly explained in terms of calculation. However, "...the more sophisticated and theoretically sound a model is, the more inputs it relies on, and consequently but not para-

doxically as many analysts believe, the less accountable it becomes... " for both analysts and investors. When analysts use this model in their reports, they also construct a sensitivity matrix, showing how the target (fair or implied) price of a banking stock changes due to small changes in "g" or "ROE."

Some Ideas to Estimate the Constituents of the Model

There are many different paths followed by equity analysts to estimate the appropriate values of the model's parameters:

"g": It reflects the prospective growth of the bank in the long term. It is estimated by taking into account dividend or net profit CAGR (for historic as well as future periods). Many analysts assume this rate above the long-term GDP growth of a country, when the latter is under-banked and vice versa. "Cost of Capital": It is calculated as the sum of risk free rate and market risk premium² (adjusted for beta). Based on the level of disclosure transparency, the free float, and the market cap, the equity risk premium can be adjusted accordingly. For example, a history of negative news surprises implies higher risk.

"ROE" Sustainable or Achievable: This estimate can become especially subjective. It reflects the bank's ability to deliver profitability under stable market conditions in the long term. Looking at the bank's history may be enlightening.

Some versions of the model often used by analysts to value banking stocks are presented below:

| Valuation Model 1 | | | | | | |
|-------------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|--|
| | Projected Year 1 | Projected Year 2 | Projected Year 3 | Projected Year 4 | Projected Year 5 | |
| ROE (Return on Equity) | % | % | % | % | % | |
| BV / S (Book Value per Share) | Amount | Amount | Amount | Amount | Amount | |
| Dividends | Amount | Amount | Amount | Amount | Amount | |
| Terminal Value | 0 | 0 | 0 | 0 | Amount | |

| | Valuation M | Iodel 2 | | |
|---------------------------|---------------------|---------------------|---------------------|---------------------|
| Projected Year 1 | Projected Year 2 | Projected Year 3 | Projected Year 4 | Projected Year 5 |
| Discounted Dividends | | Amount | | |
| Discounted Terminal Value | | Amount | | |
| 12 – Month Target Value | | Price | | |

| \ | /aluation Model 3 / | Sensitivity Matrix | |
|--------------------|---------------------|--------------------|---------------|
| | ROE | ROE | ROE |
| | Level 1 (%) | Level 2 (%) | Level 3 (%) |
| Growth Level 1 (%) | Implied Price | Implied Price | Implied Price |
| Growth Level 2 (%) | Implied Price | Implied Price | Implied Price |
| Growth Level 3 (%) | Implied Price | Implied Price | Implied Price |

Analysts choose the most appropriate value according to the most likely scenario at the time of issuing the research report.

Sources: Financial analysis bibliography, European equity research reports.

Author Nicholas I. Georgiadis Director of Research - "VRS" ("Valuation & Research Specialists")

¹It usually stands for the long-term government bond yield.

²The yield on long-term sovereign bonds is used as proxy.

³Significant corporate activity may distort price behaviour and weaken reliability of beta.

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Nicholas I. Georgiadis Partner – Valuation Research Specialists (VRS)

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- The Competition Commission
- The Substantial Acquisition Rules

Chapter 11 - Companies Act and the Combined Code

- The Companies Act 1985
- Corporate Governance

Chapter 12 - Equity Capital Markets

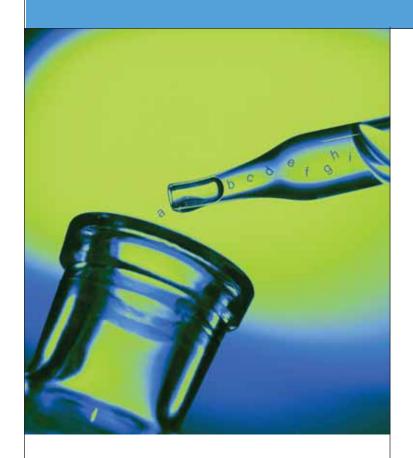
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CASE STUDIES

- Electroniki Athinon
- Sarantis

case study

ELECTRONIKI ATHINON S.A. [ELC:AT]

Strong retail network and selective expansion abroad drive growth



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ELECTRONIKI ATHINON SA

Greek Equities - February 27th, 2007

Nicholas I. Georgiadis Christophoros J. Makrias CA. HCMC

Company Description:

Contact: info@valueinvest.gr

Electroniki Athinon is a retailer of electric, electronic and audio - video appliances, telecommunication (fixed & mobile) devices, other products & services, offering at the same time after sales services. The Group operates 48 stores in Greece and 2 in Cyprus, on a total selling area of about 31,500 m². The Group's stores have one of the broadest ranges of electrical goods and home audio products including almost all top brand names like Philips, Sony, Bosch and Miele.

| | 2005/06 | 2006/07 E | 2007/08 F |
|-------------|---------|-----------|-----------|
| (in mil. €) | 11121 | 100 00 | 199.73 |
| Turnover | 145.54 | 170,73 | 199.73 |
| EBITDA | 11.16 | 13.04 | 14.39 |
| Margin % | 7.67% | 7.64% | 7.21% |
| Net Income | 6.11 | 6.89 | 7.59 |
| Margin % | 4.20% | 4.04% | 3.80% |

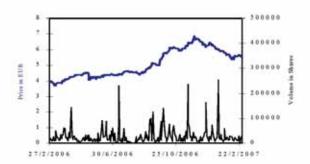
| Price (27/02/ | Price (27/02/2007) | | | | | | |
|----------------|--------------------|-----------|-----------|--|--|--|--|
| Shares (outsta | 17.25 | | | | | | |
| MktCap (in: | 95.565 | | | | | | |
| Hist. Beta | | | 0.80 | | | | |
| Div. 05/06 (ii | 0.20 | | | | | | |
| | 2005/06 | 2006/07 E | 2007/08 F | | | | |
| P/E | 15.65x | 13,87x | 12.58x | | | | |
| P/BV | 4.13x | 3.62x | 3.16x | | | | |
| | | 1000000 | 100,000 | | | | |
| Debt/Eq. | 0.03 | 0.04 | 0.03 | | | | |

Source: Company Data & VRS Projections

Key Investment Points

- Electroniki Athinon (EA) is one of the most recognized brand names in the Greek electric & electronic retail appliances market, holding about 12% share and targeting at least 16% in the next 3-years.
- The operation of new stores generates the domestic growth. Until the end of fiscal 2006-2007, the Group is planning to add 3 new stores in Greece reaching a total of 51. The future expansion of the EA retail network will target the total geographical coverage of Greece, with stores having an average surface selling area of 1,500 – 2,000 m².
- One of the most significant drivers for future growth is the international expansion in markets where EA can identify profitable opportunities. The Group is about to launch a 2,500 m² Megastore in Serbia, targeting about €7 million during the first year of operations.
- At the end of fiscal 2005-2006, total revenue for the Group settled at approximately € 5,390 / m². According to our estimates this return will settle at € 5,200 / m² by the end of fiscal 2010/11 due to store expansion.
- Our valuation model derives a fair price of € 7.14 per share for EA based on the DCF method and comparative earnings multiples.

Share Price Graph (52 weeks) Min.: € 3.70 - Max.: € 6.86



Please see important disclosure and disclaimer statements at the end of this report

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Investment Case & Growth Drivers

Investment Summary

Electroniki Athinon (EA) is one of the most recognized brand names in the Greek electric & electronic retail appliances market, holding about 12% market share. The Group is the largest under Greek ownership retail chain of electronics and electrical household appliances in the country. Its enviable reputation has been established since its foundation in 1989, and it is built upon the well-founded principles of respecting its customers and offering value for money. The Group has an experienced management team, which knows the retail market very well and performs its expansion strategy focusing on cost containment.

The Group targets to increase its domestic market share to at least 16% in the next 3-years, and expand operations internationally utilizing the know-how of its experienced management. EA will also benefit from the modest however steady growth of the domestic electric and electronic household market, which is estimated at € 1.3-1.4 million. Domestic annual growth is estimated at 1.5%-2% in volume and slightly higher, at 2.5%, in value for the next 5-year period.

At the end of fiscal 2005-2006, total revenue for the Group settled at approximately € 5,390 / m². According to our estimates this return will settle at € 5,200 / m² by the end of fiscal 2010/11 due to store expansion. The Group's strategy applies for domestic expansion, measured approach to international expansion, which is seen as significant engine in future growth, focus on capital management, margin "protection" and greater cost efficiency.

Expansion of Store Network and Selling Area

As of June 30, 2006 (the closing date of the last available fiscal year results), Electroniki Athinon operated about 27,000 m² through a network of 46 stores in Greece and 2 in Cyprus. Opening new stores generates the domestic growth. During the fiscal year 2006/07, the Group is planning to increase its network by 3 new stores in Greece (2 in Athens and 1 in Thessalonica) and 1 in Serbia raising its total selling area by 10,500 m². The expansion of Group's network will continue in fiscal 2007/08 with the launching of at least 4 new stores and the potential opening of 2 more stores in Cyprus (as soon as current stores turn positive). All new stores will satisfy the condition of an average 1,500 - 1,700 m² selling area. In addition, the Group examines the potential of increasing the selling

area in selected older stores.

In terms of geographic expansion, the future development of EA retail network will target the total geographical coverage of Greece, with stores having an average surface selling area of 1,700 m². The megastore format has the potential to generate a much higher profit per m² as it appears to attract more customers by displaying a broader range of products. The large store size creates savings in fixed store costs including rent, labor, service, and overhead.

Electroniki Athinon is also examining the benefits from potential acquisition of smaller domestic players in order to expand its geographical presence into areas of low penetration. This is only a potential growth driver for EA and is not included in our valuation model.

Stronger Efficiency and Greater Customer Attraction

The Group is seeking to increase the return / m² per year for the wellestablished stores (for the whole network, return / m² demonstrates a different pattern as illustrated in our model due to expansion of total stores), applying the concept of aggressive marketing, efficient product mix & merchandising and high quality service through well-organized operations.

- Implementation of strong & aggressive marketing. The Group is spending about 3.5%-4.0% of total turnover for its marketing campaign that is mostly expressed with advertisements in all form of media (leaflets in newspapers, TV spots, radio spots, ads in magazines) and other promotion techniques like stock days and special offers.
- Constant improvement of operations and services. Electroniki Athinon aims at constant improvement of operations and services to customers, unfolding its strategy on two key areas:
 - Efficient Logistics Centre. EA operates a modem 16,000 m² central warehouse closely monitoring the inventory flow and the ordering of stock. Thus, the Group realizes fast delivery of goods retaining the minimum possible stock, achieving at the same time cost efficiencies.
 - Personnel Training. EA has a well-trained staff that is committed to quality service. At the same time, the Group is seeking ways to improve the staff's performance and provide innovative retail operations, through frequent training sessions.
- Alternative product sales. The Group's top product sales category is household appliances with the "Electroniki Athinon" name being among the

first in customer's mind. The Group's stores have one of the broadest ranges of electrical goods and home audio products including the majority of top brand names like Philips, Sony, Bosch and Miele.

The Group has low presence in the PC market due to management's latest decision to expand only modestly in this area, since competition is high, margins are low and there is requirement for extra staff training. However, this is about to change beginning from this year, as Electroniki places now greater emphasis on information technology and digital products.

Furthermore, the management sees strong growth potential on telecommunication market, examining new trends in order to identify opportunities. Sales are generated from telecom devices and equipment as well as services regarding the connection with mobile and Internet operators. The Group is seeking to become distributor of the majority of operators, satisfying the needs of a broader customer group. In addition, interesting opportunities appear in the new technology products, such as digital products, gadgets and games.

Benefits from the Withdraw of Major Competitors

The bankrupt and gradual withdraw of the second largest retail chain 'Radio Korasidis' and 'Elephant' from the market during fiscal 2005 gave EA the potential to capture a large part of their market share and become the second player in the domestic market place. Total turnover of Radio Korasidis Group at the end of fiscal 2004 accounted for € 229 million, implying about 17%-18% market share. Furthermore, a market share of 4% was recently "disposed" into the domestic market when other smaller players terminated their retail operations.

However, the entrance of large international players in the Greek market –Fnac and Media Markt have almost one year of operations— increases competition in the Greek market. Overall, the competitive advantage of EA is long experience and knowledge of the Greek market and flexibility to implement alternative strategies in order to benefit or avoid losses from market changes.

International Expansion

International expansion is one of the most significant engines in Group's future growth. At this time however, its strategy calls for a measured expansion of international operations, focusing on markets where EA can identify profitable opportunities due to low competition, low penetration of new technology products and favorable consumer spending trends.

The Group recently established a $2,500 \text{ m}^2$ Megastore in Serbia. Total sales for the first year of operations are estimated to reach about \in 7 million with the breakeven level standing at \in 10 million.

The Group will proceed with the operation of a second store in the country, targeting for synergies since total breakeven with 2 stores is estimated at € 15 million.

The successful course of the Serbia investment will signal whether further expansion in other South European countries is appropriate. Such markets are Bulgaria, Albania and FYROM standing first in the list among other foreign markets.

We believe that the above development will not realize before fiscal year 2008. The management will first monitor the progress of Serbia and based on the potential success of the first Megastore, it will then take the risk to invest on a more aggressive pattern. According to our projections, total international revenues will account for 11% of total consolidated turnover at the end of fiscal 2010/11.

Sector's Outlook & Financial Analysis

Electroniki Athinon targets the Greek electric and electronic appliances market, which is estimated at over € 1.3 billion. The patterns observed in the historic development of this market imply one-digit growth potential, which according to our estimates can materialize at around 2.5% on average for the next 5-year period. We expect a relatively stable demand, which, if inflation is included, may lead to a market size of € 1.5 billion approximately by the end of 2011. Based on store expansion, Electroniki Athinon may see its market share advancing from 11%-12% currently, to approximately 18.00% at the end of the next 5-year period.

Following a retreat in 2006/07 due to store expansion, revenue per square meter is expected to steadily advance in the 5-year period due to aggressive advertising campaign and a more efficient work force that will be created after the Company's strategic decision to run in-house advanced training programs.

Historic & Projected Market Statistics & Company's Revenues

| | 2005 / 06 | 2006 / 07 E | 2007 / 08 E | 2008 / 09 E | 2009 / 10 E | 2010 / 11 E |
|---------------------------------|-----------|-------------|-------------|-------------|-------------|-------------|
| Greek Market Size (EUR thous.) | 1,300,000 | 1,332,500 | 1,365,813 | 1,399,958 | 1,434,957 | 1,470,831 |
| y-o-y Change % | 4.0% | 2.50% | 2,50% | 2.50% | 2.50% | 2.50% |
| Market Share | 10.77% | 12.10% | 13.32% | 14.67% | 16.22% | 17.95% |
| Number of Stores | 46 | 52 | 56 | 60 | 64 | 68 |
| y-o-y Change % | 4.5% | 13.0% | 7.7% | 7.1% | 6.7% | 6.3% |
| Revenue per Store (EUR thous.) | 3,164 | 3,283 | 3,567 | 3,835 | 4,215 | 4,620 |
| Total Square Meters (in thous.) | 27 | 37 | 43 | 49 | 55 | 61 |
| y-o-y Change % | 12.5% | 37.8% | 16.1% | 13.9% | 12.2% | 10.9% |
| Revenue per Square Meter (EUR) | 5,390 | 4,589 | 4,623 | 4,676 | 4,887 | 5,134 |

Source: Company accounts, VRS.

Turnover Forecasts

White appliances, vision & sound, and micro appliances are the major drivers behind the Group's revenue expansion and earnings growth in the following 5-year period. Over the course of this period, we also expect a significant contribution to come from related services, international revenues and air-conditioning. It is noted that our model includes Cyprus in the domestic revenues and not in the international activities.

As far as white and micro appliances are concerned, we forecast revenue growth of around 15% annually, anticipating Electroniki to take advantage of its lifetime specialization and strong brand recognition in these areas. Vision & sound is a more promising market in terms of future revenue growth, however with stronger competition. Therefore, we apply a relatively lower growth rate, of 12% annually, in our model, making the assumption that despite competition, Electroniki will continue generating strong revenues from vision & sound due to its large product spectrum and attractive offering terms to consumers. Revenues from vision & sound may accelerate in the event of faster materialization of Electroniki's investment plan. By the end of 2011, we anticipate revenues from appliances and vision & sound to exceed 75% of total consolidated turnover.

Our model applies moderate growth rates in telecommunications related products and personal computers, areas where the Management has decided not to focus its growth strategy, without however excluding them from its "Megastore" expansion concept. Air-conditioning revenues are expected to grow on a double-digit rate, since it is an area where Electroniki intensifies its efforts to gain market share. International activities are related to the successful launch of the Serbian Megastore, which we assume that will lead to the opening of new stores abroad, bringing international revenues (excluding Cyprus) to 11% of total by 2011. In this projection, we also take into account the management's conservative approach, implying that Electroniki proceeds only cautiously and step-by-step with its international expansion plan.

Finally, related services is an area where Electroniki is building a competitive advantage against competition, offering after sales and other related services (transportation, security, etc.) that grow in line with the revenues generated from its major business categories. In-house training of the Company's workforce is also serving this mission, leading to an overall strong double-digit growth rate, of

25%-30%, in our model.

Greek Electric & Electronic Appliances Market

| | Market Size (€ million) | Growth Potential |
|------------------|----------------------------|------------------|
| White Appliances | 470 - 510 | =/+* |
| Vision & Sound | 600 - 640 | ++ ' |
| Air-Conditioning | 80 - 90 | = 1 |
| Home PCs | 150 | + * |
| Total | 1,300 - 1,390 | + * |

Source: Company's Presentation & VRS estimates.

Gross Profit Margin Evolution

Overall, in view of strong competition – mainly expressed as offers at discount for certain and not all products - domestically, and expansion internationally, we anticipate a deterioration in the gross profit margin of the Group over the following 5-year period. Individual factors that will affect either positively or negatively the Group's gross profit margin, are presented below:

- Store network expansion should strengthen Electroniki's purchasing power in the domestic market.
- Renovation of stores and more efficient merchandising may affect positively the Group's gross profit margin.
- Charging services implies the realization of revenues with higher and more stable profit margins.
- Network expansion should make strong advertising expenditures as requirement in the following years. The Management estimates advertising expenses at 3.5% of total revenues per annum in the following years.

Among the Group's revenue streams, we highlight the related services, white appliances, vision & sound, as well as air-conditioning as the ones with the highest gross profit margins on consolidated basis.

Profit Margin Evolution (Consolidated)

| | 2005 / 06 | 2006 / 07 E | 2007 / 08 E | 2008 / 09 E | 2009 / 10 E | 2010 / 11 E |
|-----------------------|-----------|-------------|-------------|-------------|-------------|-------------|
| Gross Margin | 25.31% | 25.44% | 25.11% | 24.80% | 24.10% | 23.58% |
| EBITDA Margin | 7.67% | 7.64% | 7.21% | 7.00% | 6.90% | 7.03% |
| EBIT Margin | 6.26% | 6.30% | 5.83% | 5.65% | 5.59% | 5.77% |
| Pre-tax profit margin | 5.21% | 5.68% | 5.36% | 5.28% | 5.33% | 5.59% |
| Net Profit margin | 4.20% | 4.04% | 3.80% | 3.96% | 4.00% | 4.20% |

Source: Company accounts, VRS.

Operating expenses are projected to grow on double-digit -though deceleratingrates, and represent a lower overall charge of total consolidated revenues in the 5year period. The following factors may justify the above development:

- Store network's efficiency gains due to better merchandising and well-trained personnel.
- Stabilization of distribution costs as percentage of total turnover due to tighter monitoring of the Group's logistics capacity.

The Group is almost debt-free and operates on a healthy working capital cycle, implying lower financing needs in the following years. Finally, we have assumed effective tax rates of 29% for the first two years and 25% of the remaining three of our explicit 5-year forecasting period in line with the management's guidance.

On bottom line, earnings after taxes and minorities are projected to evolve on a compounded average growth rate (CAGR) of 16.6% between 2005/06 and 2010/11, in line with a 16.7% rate in the case of the Group's total turnover.

Historic & Projected Turnover Breakdown (Consolidated)

| (in € ,000) | 2005/06 | 2006 / 07 E | 2007 / 08 E | 2008 / 09 E | 2009 / 10 E | 2010 / 11 E |
|--------------------------|---------|-------------|-------------|-------------|-------------|-------------|
| White Appliances | 52,118 | 61,760 | 71,024 | 81,677 | 93,929 | 108,018 |
| y-o-y Change % | 35.0% | 18.50% | 15.00% | 15.00% | 15.00% | 15.00% |
| % of Total | 35.8% | 36.2% | 35.6% | 35.5% | 34.8% | 34.4% |
| Micro Appliances | 13,400 | 15,275 | 17,567 | 20,202 | 23,434 | 27,184 |
| y-o-y Change % | 30.4% | 14.00% | 15.00% | 15.00% | 16.00% | 16.00% |
| % of Total | 9.2% | 8.9% | 8.8% | 8.8% | 8.7% | 8.7% |
| Vision & Sound | 55,595 | 65,047 | 72,852 | 81,594 | 91,386 | 102,352 |
| y-o-y Change % | 20.7% | 17.00% | 12.00% | 12.00% | 12.00% | 12.00% |
| % of Total | 38.2% | 38.1% | 36.5% | 35.5% | 33.9% | 32,6% |
| Mobile Handsets | 1,787 | 1,832 | 1,878 | 1,925 | 1,973 | 2,022 |
| y-o-y Change % | -6.4% | 2.50% | 2.50% | 2.50% | 2.50% | 2.50% |
| % of Total | 1.2% | 1.1% | 0.9% | 0.8% | 0.7% | 0.6% |
| Telephone - Fax Machines | 924 | 942 | 961 | 980 | 1,000 | 1,020 |
| y-o-y Change % | -7.7% | 2.00% | 2.00% | 2.00% | 2.00% | 2.00% |
| % of Total | 0.6% | 0.6% | 0.5% | 0.4% | 0.4% | 0.3% |
| Air-Conditioning | 7,539 | 8,293 | 9,372 | 10,590 | 12,178 | 14,005 |
| y-o-y Change % | 37.6% | 10.00% | 13.00% | 13.00% | 15.00% | 15.00% |
| % of Total | 5.2% | 4.9% | 4.7% | 4.6% | 4.5% | 4.5% |
| Personal Computers | 10,494 | 9,969 | 10,069 | 10,271 | 10,579 | 10,896 |
| y-o-y Change % | -11.9% | -5.00% | 1.00% | 2.00% | 3.00% | 3.00% |
| % of Total | 7.2% | 5.8% | 5.0% | 4.5% | 3.9% | 3.5% |
| Other Appliances | 2 | 7 | 20 | 59 | 178 | 535 |
| y-o-y Change % | -84.2% | 200.00% | 200,00% | 200.00% | 200,00% | 200.00% |
| % of Total | 0.0% | 0.0% | 0.0% | 0.0% | 0.1% | 0.2% |
| Related Services | 3,683 | 4,604 | 5,985 | 7,780 | 10,114 | 13,148 |
| y-o-y Change % | 28.2% | 25.00% | 30.00% | 30.00% | 30.00% | 30.00% |
| % of Total | 2.5% | 2.7% | 3.0% | 3.4% | 3.7% | 4.2% |
| International Activities | 0 | 3,000 | 10,000 | 15,000 | 25,000 | 35,000 |
| y-o-y Change % | | | 233.3% | 50.0% | 66.7% | 40.0% |
| % of Total | 0.0% | 1.8% | 5.0% | 6.5% | 9.3% | 11.1% |
| TOTAL TURNOVER | 145,542 | 170,729 | 199,727 | 230,078 | 269,771 | 314,180 |
| y-o-y Change % | 23.18% | 17.31% | 16.98% | 15.20% | 17.25% | 16:46% |

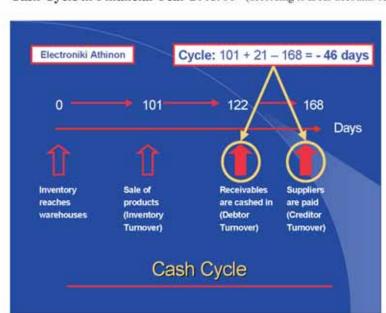
Note 1: 2005/06 is according to the revised IFRS accounts. Note 2: International revenues do not include Cyprus. Source: Company accounts, Valuation & Research Specialists (VRS).

Capital Expenditures

The Group has planned significant capital expenditures for the next 5-year period, in view of its strategic goal to bring the total network of stores to 68 in the financial year 2010/11 from 46 in 2005/06. The financing scheme of this plan is mainly based on the Company's strong operating cash flows, which are projected to settle at over € 10 million on average in the next 5-year period.

Balance Sheet Analysis

Electroniki Athinon has an exceptional capital structure highlighted by zero bank debt, favorable working capital cycle and healthy current ratio. We anticipate that own capital due to strong cash flows, and competitive suppliers agreements due to high purchasing power will finance future asset growth, both the current and the non-current items. Currently, the Company's cash cycle is negative (counted in days), which is impressive when compared to similar retailers in the Greek market. Methods of customers' payment to the Company consist of cash, credit card (EA receives cash minus bank's commission) and bank loan, ensuring a rich cash position. In this context, Electroniki Athinon proceeded with a cash return to shareholders in first half 2006 (€ 0.50 per share following a decrease in the Company's capital reserves).



Cash Cycle in Financial Year 2005/06 (according to IFRS accounts of 30 June '06)

Source: Company accounts, VRS,

On the fixed asset side, the Company's real estate assets are valued at a discount compared to current market standards, which leaves Electroniki with another alternative financial mechanism, when it comes to value or cash enhancement. No assumption related to the above has been made in our model.

In December 2006, the Annual Shareholders' Meeting approved the issuance of a convertible bond amounting up to € 20 million, which is to be utilized for the Group's investment plan. As the Management has not yet disclosed any intention to use this alternative financing scheme in the near future, we have not incorporated any relevant assumption in our model.

Key Elements of Balance Sheet (Consolidated)

| | 2005 / 06 | 2006 / 07 E | 2007 / 08 E | 2008 / 09 E | 2009 / 10 E | 2010 / 11 E |
|---------------------------------|-----------|-------------|-------------|-------------|-------------|-------------|
| Stock Days | 100.8 | 105.0 | 105.0 | 104.0 | 101.0 | 98.0 |
| Debtors Days | 20.7 | 23.0 | 24.0 | 22.0 | 21.0 | 21.0 |
| Creditors Days | 167.5 | 160.0 | 155.0 | 145.0 | 135.0 | 125.0 |
| Total Liab. / Total Equity | 2.42 | 2.36 | 2.33 | 2.15 | 1.99 | 1.78 |
| Bank Loans / Total Equity | 0.03 | 0.04 | 0.03 | 0.03 | 0.02 | 0.02 |
| Net fixed Assets / Total Assets | 26.22% | 24.87% | 24.69% | 24.65% | 23.46% | 21.94% |
| Interest Coverage | -4.68 | -6.52 | -7.20 | -8.05 | -9.54 | -11.32 |

Source: Company accounts, VRS.

Quarterly Results (July - December 2006)

Electroniki Athinon published annual financial statements under IFRS for the first time in 2005/06 (covering the period 1 July 2005 until 30 June 2006). Electroniki Athinon Group's financial results for the first half (period July – December 2006) of the new financial year are presented below:

| | IFRS Accounts | Change | IFRS Accounts |
|--------------------|----------------|---------|----------------|
| (in €,000s) | 1/7-31/12/2006 | (%) | 1/7-31/12/2005 |
| | | | |
| Turnover | 94,576 | 19.06% | 79,434 |
| Gross Profit | 24,094 | 23.55% | 19,501 |
| Operating Expenses | 16,625 | 18.55% | 14,024 |
| Financial Expenses | 1,814 | 58.87% | 1,142 |
| EBT | 6,085 | 26.34% | 4.816 |
| EAT | 3,875 | 11.73% | 3,468 |
| Fixed Assets | 17,348 | 8.47% | 15,994 |
| Inventory | 32,691 | 8.92% | 30,014 |
| Receivables | 13,736 | 66.52% | 8,249 |
| Cash | 34,981 | 107.55% | 16,855 |
| Total Assets | 109,112 | 37.93% | 79,108 |
| Equity | 23,589 | 1.85% | 23,159 |
| Total Liabilities | 85,523 | 52.86% | 55,949 |

Source: Revised Financial Statements under IFRS.

It is noted that consolidated accounts derive from the parent company "Electroniki Athinon" and the fully owned (100%) subsidiaries "Electroniki Athinon Cyprus Ltd" (Cyprus) and "Megastores Electronica Doo" (Serbia) based on the full consolidation method.

Management's Guidance and VRS View

| | Management's Guidance | VRS View |
|---|---|---|
| 1 | Electroniki targets 16% share of the Greek market by 2008, following network expansion and aggressive advertising strategy. | In our view, Electroniki is in position to take advantage of the experienced management team with deep market knowledge and good track record, capturing a larger market share. However, this should take longer due to strong market fragmentation and competition on the one hand, as well as the expectation that the sector will continue growing as a whole. |
| 2 | The Management anticipates double-digit growth in white appliances, micro appliances and vision & sound. | Electroniki is focusing on these areas to boost growth. The Company is known as specialist in white appliances, whereas vision & sound post favorable growth trends. Therefore, we expect Electroniki to realize double-digit growth in these business segments. |
| 3 | The Management anticipates profit contraction in the future in view of strong competition. | We adopt the same view in our model, given the Greek market's dynamics with the entrance of foreign retailers, which apply an aggressive pricing policy. It is important to note that competition is mainly in the form of different offering terms to consumers. |
| 4 | Net profit growth is targeted at 10%-15% annually in the following years. | We believe the Company's overall strategy – both commercial and financial – allows for compounded annual growth in the upper neighborhood of this range or even higher. |

Source: Valuation & Research Specialists (VRS)

Valuation

DCF Methodology

The fair value for Electroniki Athinon settles at EUR 122.75 million or € 7.12 per share, based on our DCF model. The following important assumptions have been made in the model:

- Cost of capital at 8.2%,
- Infinity Sales Growth of 1.0%,
- Infinity EBIT Margin of 6%.

| | 2006/07 | 2007/08 | 2008/09 | 2009/10 | 2010/11 | L-Term Assumptions |
|---------------------------------|---------|---------|---------------|------------------|---------|-----------------------|
| ASSUMPTIONS | | | | | | |
| Growth Rate (Sales) | 17.3% | 17.0% | 15.2% | 17.3% | 16.5% | 1.0% |
| EBIT Margin | 6.3% | 5.8% | 5.6% | 5.6% | 5.8% | 6.0% |
| Tax Rate | 29.0% | 29.0% | 25,0% | 25.0% | 25.0% | 25.0% |
| Working Capital (% of sales) | 1.9% | 0.5% | 0.7% | 0.7% | 1.2% | 1.5% |
| Capex (% of sales) | 4.4% | 2.8% | 2.5% | 2.0% | 1.8% | 1.0% |
| Cost of Capital | 8.3% | 8.3% | 8.4% | 8.4% | 8.4% | 8.4% |
| Depreciation (% of sales) | 1.4% | 1.3% | 1.4% | 1.3% | 1.3% | 1.0% |
| CASH FLOW STATEMENT | 15.4,9 | | | | | |
| Turnover | 170.7 | 199.7 | 230.1 | 269.8 | 314.2 | 317.3 |
| EBIT | 10.8 | 11.7 | 13.0 | 15.1 | 18.1 | 19.0 |
| Less: Adjusted Tax | 3.1 | 3.4 | 3.2 | 3.8 | 4.5 | 4.8 |
| Adjusted Operating Profit | 7.6 | 8.3 | 9.7 | 11.3 | 13.6 | 14.3 |
| Plus: Depreciation | 2.3 | 2.7 | 3.1 | 3.5 | 3.9 | 3.2 |
| Operating Cash Flow | 9.9 | 11.0 | 12.9 | 14.8 | 17.5 | 17.5 |
| Less: Change in Working Capital | 3.2 | 1.0 | 1.6 | 1.8 | 3.7 | 4.8 |
| Less: Capex | 7.5 | 5.5 | 5.7 | 5.5 | 5.5 | 3.2 |
| Cash Flow to the Firm (FCFF) | -0.8 | 4.5 | 5.5 | 7.5 | 8.3 | 9.5 |
| Discount Factor | 0.92 | 0.85 | 0.79 | 0.72 | 0.67 | 0.67 |
| Present Value of Cash Flows | -0.70 | 3.82 | 4.32 | 5.42 | 5.57 | |
| Accumulated Present Value | -0.70 | 3.12 | 7.44 | 12.86 | 18.43 | |
| Residual Value | | | | | | 131.4 |
| Present Value of Residual Value | | | | | | 88.0 |
| VALUATION | | | WACC CALC | ULATION | | |
| Enterprise Value | 106.41 | | | Risk Free Rate | | 4.5% |
| % Residual Value of Total | 82.7% | | | Beta Factor | | 0.8 |
| Less: Net Debt | -16.34 | | M | arket risk Premi | um | 5.0% |
| | | | | Cost of Equity | | 8.5% |
| | | | D | ebt / Debt + Equ | ity | 5.0% |
| Value of firm | 122,75 | 1 | | Cost of Debt | | 4.5% |
| Outstanding # of shares (000) | 17,250 | | | Tax Rate | | 25.0% |
| Value of share | 7.12 | | Weighted Aver | age Cost of Car | nital | 8.2% |

Source: Company Accounts and VRS Estimates

The model's assumptions relate to the following conditions:

- EA completes store network expansion as planned.
- EA gains market share due to network expansion, market concentration and rising demand.
- Group's profitability remains solid in the following 5 years.
- EA applies an efficient financial policy in terms of investments and working capital cycle.

Sensitivity Analysis

The table below presents the sensitivity analysis on the DCF model showing the valuation of the Company based on different growth rates and different values for weighted average cost of capital (WACC).

| | | W | ACC (Implic | it Period) | | |
|----------------|-------|-------|-------------|------------|-------|--------|
| | | 6.20% | 7.20% | 8.20% | 9.20% | 10.20% |
| WTH Period) | 0.50% | 8.47 | 7.50 | 6.76 | 6.24 | 5.81 |
| | 0.75% | 8.78 | 7.73 | 6.93 | 6.38 | 5.92 |
| H D | 1.00% | 9.12 | 7.97 | 7.12 | 6.52 | 6.03 |
| (Implicit | 1.25% | 9.50 | 8.21 | 7.31 | 6.67 | 6.15 |
| 9.5 | 1.50% | 9.92 | 8.53 | 7.52 | 6.84 | 6.28 |

Source: Company Accounts and VRS Estimates

Peer Group Valuation

The peer group comparison unveils a two-side coin in Electroniki Athinon's valuation as compared to 5 major retail players in the US and UK. In terms of price / earnings ratio there is a significant upside for the Greek stock, whereas when it comes to P/BV ratio, the valuation outlook is the opposite.

| P/BV '07 (times) | P/E '07 (times) | Market Cap EUR mn | Country | Company |
|---------------------|--------------------|----------------------|---------|------------------|
| 2.35 | 14.29 | 3,159 | UK | Dixons Group |
| 3.64 | 16.95 | 22,602 | US | Best Buy |
| 1.61 | 28.72 | 3,397 | US | Circuit City Inc |
| 1.34 | 22.22 | 5,921 | UK | Kingfisher |
| 5.66 | 16.15 | 1,787 | UK | Kesa Electr. |
| 3.62 | 13.87 | 96 | Greece | Electroniki |
| | | | 535 | . 0.000 |

Source: Bloomberg, Reuters and VRS estimates,

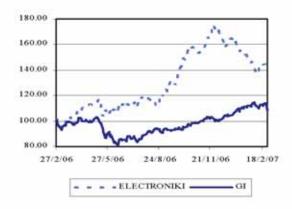
Combined Valuation

The combined valuation, based on the P/E and P/BV multiples, as well as on the DCF methodology, derives an implied target price of € 7.13 per share.

| | P/E (times) | P/BV (times) | DCF (times) |
|--|----------------|-----------------|----------------|
| Peer Group Avg | 19.67 | 2.92 | |
| Market Cap Weighted Average | 18.60 | 3.07 | |
| Implied Target Price (Weighted) (in €) | 7.43 | 4.71 | 7.12 |
| Weights | 45.00% | 5.00% | 50.00% |
| Implied Target Price (in €) | | 7.14 | |
| Current Share Price (in €) | | 5.54 | |
| Upside Potential | | 28.83% | |

Source: Valuation & Research Specialists (VRS).

Share Price Performance vs. General Index (base=100)



Valuation Ratios

| | 2005/06 | 2006 / 07 E | 2007 / 08 E | 2008 / 09 E | 2009 / 10 E | 2010 / 11 E |
|------------------------------|------------|-------------|-------------|-------------|-------------|-------------|
| Price (in €) | € 5.54 | | | | | |
| Shares Outstanding | 17,250,000 | | | | | |
| Market Capitalization (in €) | 95,565 | | | | | |
| EPS (in €) | 0.35 | 0.40 | 0.44 | 0.53 | 0.63 | 0.76 |
| Book Value / Share (x) | 1.3 | 1.5 | 1.8 | 2.1 | 2.4 | 3.0 |
| EV (in € mn) | 78 | 79 | 79 | 78 | 75 | 72 |
| P/E (a.t.& m.i.) | 15.65x | 13.87x | 12.58x | 10.49x | 8.86x | 7.25x |
| P/BV | 4.13x | 3.62x | 3.16x | 2.70x | 2.27x | 1.88x |
| EV/EBITDA | 6.99x | 6.08x | 5.50x | 4.86x | 4.05x | 3.24x |
| EV/Sales | 0.54x | 0.46x | 0.40x | 0.34x | 0.28x | 0.23x |
| Dividend / Share (in €) | 0.20 | 0.21 | 0.22 | 0.23 | 0.24 | 0.25 |
| Dividend Yield | 3.6% | 3.8% | 4.0% | 4.2% | 4.3% | 4.5% |

Source: Company Accounts and VRS Estimates

Shareholders' Structure

The shareholders' structure of Electroniki SA, the parent company listed on the Athens Exchange, is presented below:

| Shareholder | Participation Stake (As of Feb. 2007) |
|----------------------------------|---------------------------------------|
| Stroutsis Ioannis | 57.04% |
| Limberopoulou-Stroutsi Paraskevi | 17.18% |
| Free Float | 25.78% |
| Total | 100.00% |

Source: Athens Exchange.

Company Profile

Electroniki Athinon SA was founded on 25 July 1989. The Group specializes in the sale of high technology consumer electronics, household electric appliances, personal computers, photographic equipment, communication products and related services, and after sales services. The following products and product categories are sold through the outlets of the Company:

- White appliances (refrigerators, deep freezers, electric stoves, washing machines etc).
- Built-in appliances (refrigerators, electric stoves, cooker hoods etc), which demonstrate rising trend in the Greek market.
- Small electric appliances (mixers, microwave ovens, electric irons, coffee machines etc).
- Video products (TVs, video recorders, video cameras, DVDs, home cinemas etc).
- Audio products (compact stereo systems, amplifiers, CD players, mini discs, car audio systems, loudspeakers etc).
- 6. Air conditioners of several kinds.
- Personal computers and peripherals (notebooks, printers, scanners, screens etc).
- Mobile phones, and related products and services.

In August 2000, Electroniki Athinon completed a 16,000 m² warehouse. In 2002, the Company entered the Cypriot market by establishing the 100% subsidiary Electroniki Athinon (Cyprus) Ltd. The Company operates two stores, holding about 6% share of the Cyprian retail electric and electronic appliances market.

Investment Risks / Mitigating Factors

| | Investment Risks / Concerns | Mitigating Factors / Important Notes |
|---|--|---|
| 1 | Competition in the retail electric and electronic market in Greece remains strong. International players and hypermarkets have already entered into the market place. Any significant pressures on prices might seriously affect the Company's profit margins. | EA has a long experience and deep knowledge of the Greek market possessing flexibility to implement alternative strategies in order to benefit or avoid losses from market changes. |
| 2 | Changes in technology and consumer behavior tendencies might affect inventories and consequently cash position of the Group. | The Group has historically strong financial position and healthy balance sheet, even in periods of adverse market conditions. In addition, it has a well-organized warehouse and strong logistics capacity. |
| 3 | Negative conditions in the macroeconomic environment (interest rates, demand, and disposable income) may affect consumers' purchasing power and consequently Group's earnings. | The Group is diversifying its risk by expanding into the Balkans and the broader area of South East Europe - on a slow pace though - seeking opportunities from rising consumer spending. |
| 4 | Lack of considerable knowledge of international markets may jeopardize Group's geographic expansion plans. | The Group expands in the Balkans making small steps, avoiding strong investment expenditures and cautiously evaluating the potential for further development in those markets. |

Source: Valuation & Research Specialists (VRS)

Retail Electronic Appliances Market in Greece

For the fiscal year 2005, the domestic electric and electronic household market was estimated at € 1.30-1.35 million. The following players are active in the Greek market:

- Internationally recognized players like Dixons (through its participation in 'Kotsovolos' chain), Fnac and Media Markt that hold about 30% of the market.
- Large and medium domestic chains like Electoniki Athinon and Sarafidis holding about 15%-16% market share.
- Partnerships or joint ventures like Expert and Electronet holding about 24% market share.
- International hypermarkets like Carrefour and Praktiker holding about 14% market share.
- Independent stores.

It is evident the Greek market is significantly concentrated around the major players characterized of international or domestic origination. According to market surveys, large retail chains currently control about 50% of the total market, whereas this share may advance to 60% in the following 2 years.

Since 1997, the annual growth of the market was estimated at 5.1% in value, while for fiscal 2005 the annual growth reached about 2.9%. In our model, domestic annual growth is estimated at 1.5%-2% in volume and slightly higher, at 2.5%, in value for the next 5-year period.

We believe that in the following years, the strong competition among the leaders of the market will put pressures on operating margins and force smaller players to leave the market through acquisitions or withdraws. The above development is expected to "shrink" the sector and "allow" 5-6 large chains to dominate the market. Electroniki Athinon has the financial strategy and experience to remain a major domestic player and enhance its market position capturing at least 20% market share in the longer run.

Group Historic & Projected Profit & Loss Account

| € million | 2005 / 06 | 2006 / 07 E | 2007 / 08 E | 2008 / 09 E | 2009 / 10 E | 2010 / 11 E |
|----------------------------------|-----------|-------------|-------------|-------------|-------------|-------------|
| Turnover | 145.54 | 170.73 | 199.73 | 230.08 | 269.77 | 314.18 |
| y-o-y Change, % | 23.18% | 17.31% | 16.98% | 15.20% | 17.25% | 16.46% |
| Cost of Sales | 108.70 | 127.30 | 149.58 | 173.02 | 204.77 | 240.10 |
| % of Turnover | 74.69% | 74,56% | 74.89% | 75.20% | 75.90% | 76.42% |
| y-o-y Change, % | 23.87% | 17.11% | 17.51% | 15.67% | 18.35% | 17.26% |
| Other operating income / expense | 0.17 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Operating Expenses | 25.85 | 30.39 | 35.75 | 40.95 | 46.40 | 52.00 |
| % of Turnover | 17.76% | 17.80% | 17.90% | 17.80% | 17.20% | 16.55% |
| y-o-y Change, % | 17.15% | 17.54% | 17.64% | 14.55% | 13.30% | 12.06% |
| EBITDA | 11.16 | 13.04 | 14.39 | 16.10 | 18,60 | 22.08 |
| EBITDA Margin | 7.67% | 7.64% | 7.21% | 7.00% | 6.90% | 7.03% |
| y-o-y Change. % | 34.00% | 16.86% | 10.37% | 11,88% | 15.56% | 18.70% |
| Depreciation | 2.05 | 2.28 | 2.74 | 3.10 | 3.53 | 3.95 |
| % of Turnover | 1.41% | 1.34% | 1.37% | 1.35% | 1.31% | 1.26% |
| EBIT | 9.11 | 10.76 | 11.65 | 13.00 | 15.08 | 18.14 |
| % of Turnover | 6.26% | 6.30% | 5.83% | 5.65% | 5.59% | 5.77% |
| y-o-y Change. % | 89.26% | 18.09% | 8.32% | 11.54% | 16.00% | 20.29% |
| Net Financial Results | -1.52 | -1.05 | -0.96 | -0.85 | -0.69 | -0.56 |
| Net Results Before Taxes | 7.59 | 9.71 | 10.70 | 12.15 | 14.39 | 17.57 |
| EBT Margin | 5.21% | 5.68% | 5.36% | 5.28% | 5.33% | 5.59% |
| y-o-y Change. % | 92.37% | 27.89% | 10.20% | 13.55% | 18.48% | 22.14% |
| ncome Tax & Deferred Taxes | 1.48 | 2.81 | 3.10 | 3.04 | 3.60 | 4.39 |
| Effective Tax Rate | 19.55% | 29.00% | 29.00% | 25.00% | 25.00% | 25.00% |
| Net Results After Taxes | 6.11 | 6.89 | 7.59 | 9.11 | 10.79 | 13.18 |
| EAT Margin | 4.20% | 4.04% | 3.80% | 3.96% | 4.00% | 4.20% |
| y-o-y Change. % | 152.70% | 12.86% | 10.20% | 19.95% | 18.48% | 22.14% |
| Proportion of Minority rights | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Net Results (a.t.&m.i.) | 6.11 | 6.89 | 7.59 | 9.11 | 10.79 | 13.18 |
| Net Margin | 4.20% | 4.04% | 3.80% | 3.96% | 4.00% | 4.20% |
| y-o-y Change. % | 152.70% | 12.86% | 10.20% | 19.95% | 18.48% | 22.14% |

Note: 2005/06 is according to the revised IFRS accounts. Source: Company Accounts and VRS Estimates

Group Historic & Projected Balance Sheet

| € million | 2005 / 06 | 2006 / 07 E | 2007 / 08 E | 2008 / 09 E | 2009 / 10 E | 2010 / 11 E |
|--|-----------------|---------------------|-----------------|-----------------|-------------|-------------|
| Assets | | | | | | |
| Net Intangible Assets | 0.08 | 0.07 | 0.06 | 0.04 | 0.03 | 0.02 |
| Net Tangible Assets | 15.99 | 21.24 | 24.02 | 26.65 | 28.64 | 30.22 |
| Deferred Taxation | 1.28 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 |
| Other L-term assets | 3.39 | 0.30 | 0.30 | 0.30 | 0.30 | 0.30 |
| Total Non-Current Assets | 20.74 | 22.11 | 24.88 | 27.49 | 29.47 | 31.04 |
| % Total Assets | 26.22% | 24.87% | 24.69% | 24.65% | 23.46% | 21.94% |
| Inventories | 30.01 | 36.62 | 43.03 | 49.30 | 56.66 | 64.47 |
| Trade Receivables | 8.25 | 10.76 | 13.13 | 13.87 | 15.52 | 18.08 |
| Other Receivables | 1.85 | 2.07 | 2.31 | 2.50 | 2.70 | 2.94 |
| Cash in bank and at hand | 18.26 | 17.34 | 17.41 | 18.36 | 21.26 | 24.94 |
| Total Current Assets | 58.36 | 66.79 | 75.89 | 84.03 | 96.14 | 110.42 |
| % Total Assets | 73.78% | 75.13% | 75.31% | 75.35% | 76.54% | 78.06% |
| TOTAL ASSETS | 79.11 | 88.89 | 100.77 | 111.52 | 125.61 | 141.46 |
| Equity & Liabilities Shareholder's Equity | 23.16 | 26.43 | 30.23 | 35.37 | 42.02 | 50.89 |
| Equity & Liabilities | | | | | | |
| | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Minority Rights | 23.16 | 26.43 | 30.23 | 35.37 | 42.02 | 50.89 |
| Total Equity % Total Equity & Liabilities | 29.28% | 29.73% | 30.00% | 31.71% | 33,45% | 35.97% |
| 1 11/2 | 1990/1990 | | 10.000.000 | | 0.500.000 | 100001001 |
| L-Term Bank Loans | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Provisions for Staff Retirement | 0.55 | 0.60 | 0.66 | 0.73 | 0.80 | 0.88 |
| Deferred Tax Liabilities | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Other long term debts | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total L-Term Liabilities | 549 | 604 | 664 | 730 | 803 | 884 |
| Suppliers | 49.89 | 55.80 | 63.52 | 68.74 | 75.74 | 82.23 |
| Banks | 0.71 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| l'axes-duties | 3.01 | 3.31 | 3.64 | 4.00 | 4.40 | 4.84 |
| Other Payables | 1.79 | 1.75 | 1.72 | 1.68 | 1.65 | 1.62 |
| Total Current Liabilities | 55.40 | 61.86 | 69.88 | 75.42 | 82.79 | 89.69 |
| | | | | 2500 | 22.50 | 90.57 |
| Total Liabilities | 55,95 | 62.47 | 70.54 | 76.15 | 83.59 | 90.57 |
| Total Liabilities % Total Equity & Liabilities | 55.95 70.72% | 62.47 70.27% | 70.54 70.00% | 76.15 68.29% | 66.55% | 64.03% |

Note: 2005/06 is according to the revised IFRS accounts. Source: Company Accounts and VRS Estimates

Group Historic & Projected Cash Flows

| (in € ,000) | 2005 / 06 | 2006 / 07 E | 2007 / 08 E | 2008 / 09 E | 2009 / 10 E | 2010 / 11 E |
|---|-----------|-------------|-------------|-------------|-------------|-------------|
| Profit after tax | 6,106 | 6,891 | 7,594 | 9,109 | 10,792 | 13,181 |
| Plus: Change of Depreciation | 2,025 | 2,281 | 2,737 | 3,102 | 3,526 | 3,945 |
| Gross Cash Flow | 8,130 | 9,172 | 10,331 | 12,210 | 14,318 | 17,126 |
| Change in | | | | | | |
| (-) Trade Debtors | -2,759 | 2,509 | 2,374 | 735 | 1,653 | 2,555 |
| (-) Inventory | 4,538 | 6,607 | 6,411 | 6,269 | 7,361 | 7,804 |
| (-) Other Receivables | -172 | 221 | 248 | 185 | 200 | 243 |
| (+) Trade Creditors | 19,177 | 5,910 | 7,719 | 5,213 | 7,000 | 6,491 |
| (+) Liabilities for taxes | 610 | 301 | 331 | 364 | 400 | 440 |
| (+) Other Short - term liabilities | 789 | -36 | -35 | -34 | -34 | -33 |
| Change in Working Capital | 18,970 | -3,163 | -1,018 | -1,646 | -1,848 | -3,704 |
| Operating Cash Flow | 27,100 | 6,008 | 9,313 | 10,564 | 12,470 | 13,422 |
| Change in: | | | | | | |
| (-) Intangible Assets | 64 | 50 | 50 | 50 | 50 | 50 |
| (-) Tangible Assets | 3,952 | 7,460 | 5,460 | 5,660 | 5,460 | 5,460 |
| (-) Other long - term receivables | 2,951 | -3,866 | 0 | 0 | 0 | 0 |
| (+) Other Long - term liabilities | -267 | 55 | 60 | 66 | 73 | 80 |
| (+) Cons. diff./ Minority Interests | .0 | 0 | 0 | 0 | 0 | .0 |
| Cash Flow from Investment | -7,234 | -3,589 | -5,450 | -5,644 | -5,437 | -5,430 |
| Net Cash Flow Before Financing Activities | 19,866 | 2,420 | 3,864 | 4,921 | 7,033 | 7,993 |
| Increase in Share Capital | 690 | 0 | 0 | 0 | 0 | 0 |
| Increase in Share Premium Account | -8,821 | 0 | 0 | 0 | 0 | 0 |
| Net Change in Reserves | -33 | 0 | 0 | 0 | 0 | 0 |
| Change in Long - Term Debt | .0 | . 0 | 0 | 0 | 0 | 0 |
| Change in Short - Term Debt | -102 | 288 | 0 | 0 | 0 | 0 |
| Dividends | 3,450 | 3,623 | 3,795 | 3,968 | 4,140 | 4,313 |
| Minority Interests on Profit | 0 | 0 | 0 | 0 | 0 | 0 |
| Net Cash Flow from Financing | -11,716 | -3,334 | -3,795 | -3,968 | -4,140 | -4,313 |
| Cash at Beginning | 10,105 | 18,256 | 17,341 | 17,410 | 18,363 | 21,256 |
| Change in Cash and Marketable Securities | 8,151 | -914 | 69 | 953 | 2,893 | 3,680 |
| Cash at End | 18,256 | 17,341 | 17,410 | 18,363 | 21,256 | 24,937 |

Note: 2005/06 is according to the revised IFRS accounts. Source: Company Accounts and VRS Estimates.

Notes

Notes

VALUATION & RESEARCH SPECIALISTS

Value Invest - www.valueinvest.gr Investment Research & Analysis Journal - www.iraj.gr

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VALUATION & RESEARCH SPECIALISTS (VRS) is an independent firm providing advanced equity research, quality valuations and valuerelated advisory services to local and international business entities and / or communities. VRS services include valuations of intangible assets, business enterprises, and fixed assets. VRS's focus business is in providing independent equity research to its institutional and retail clients / subscribers.

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DISCLOSURE CHECKLIST

| Covered Company | Reuters | Price | Price Close Date | Disclosure | |
|---------------------|---------|--------|------------------|------------|--|
| Electroniki Athinon | ELCr.AT | € 5.54 | 27 February 2007 | 2.3,6 | |

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- VRS has received compensation from the covered company for the preparation of this research report.
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case study

VALUATION & RESEARCH SPECIALISTS

Value Invest - www.valueinvest.gr

Investment Research & Analysis Journal - www.iraj.gr

Sarantis Group S.A.

Nicholas I. Georgiadis Christophoros Makrias

Greece - Sector : Household / Cosmetics

CA, HCMC

Company Description:

Contact: info@valueinvest.gr

Sarantis Group of Companies is a multinational organization, specializing in manufacturing and distributing consumer goods in more than 20 countries. The company is one of the leading producers of mass market cosmetics and household products in Greece whereas through strategic alliances it holds a leading position in the Greek luxury cosmetics market. The Group has strong presence in Eastern European Countries such as Poland, Romania, Bulgaria, Serbia, Czech Rep., F.Y.R.O.M., Ukraine, Russia and Hungary (2006).

Ownership Structure

| Sarantis Family | 47.00% |
|----------------------------------|--------|
| Greek Institutional Inv. | 14.00% |
| International Institutional Inv. | |
| 30.00% | |
| Free Float | 9.00% |

| Date | 27 July 2006 |
|-------------------------|--------------|
| Share Price (in €) | 7.94 |
| Shares Outstanding (mn) | 38.15 |
| Mark. Cap. (in € mn) | 302.89 |

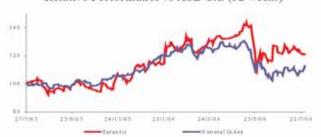
| | 2005 | 2006 | 2007 |
|-------------------|--------|--------|--------|
| P/E | 15.67 | 14.55 | 12.31 |
| P/BV | 4.97 | 3.98 | 3.23 |
| EV/EBITDA | 11.94 | 10.78 | 9.59 |
| D/Y | 1.64% | 1.89% | 2.27% |
| ROE | 40.45% | 30.41% | 28.98% |
| ROIC | 12.93% | 12.09% | 12.82% |
| Net debt / Equity | 1.22 | 1.03 | 0.86 |
| Pay out (%) | 25.65% | 27.48% | 27.91% |

Source: Company Data & VRS Projections

Investment Highlights

- Sarantis Group has captured the leading position in Greek market of consumer products. A 40% share in the luxury cosmetics market and 5-7% in mass-market cosmetics designate Sarantis' domestic market leadership.
- Sarantis' investment case illustrates the ability of the Group to utilize a diversified product portfolio in several developing and emerging markets, aiming at leading market shares in countries with high population rates and therefore, significant potential in terms of consumption.
- The expansion of Sarantis abroad is adding significantly on total Group turnover, with expected revenues representing approximately 67.34% by the end of 2010 (from 44.75% in 2005), rising on a 5-year CAGR of 22%. During 2005, the Group initiated operations in Turkey and Ukraine and recently in Russia and Hungary, making way for new development opportunities. These four markets represent a total market of approximately 300 mn inhabitants that will boost Group's existing target market.
- Sarantis Group has been in a long-lasting partnership with Estee Lauder, activating in the very competitive luxury cosmetics market of Greece increasing at the same time its bargaining power with retailers.
- The major growth drivers for Sarantis Group are the mass-market cosmetics, household products, and health & care products. All 3 revenue streams are generated from Sarantis own product portfolio, which attracts the Group's greater attention as opposed to the generation of revenues through partnerships with third parties.

Relative Performance vs ASE G.I. (52 weeks)



Please see important disclosure and disclaimer statements at the end of this report

VALUATION & RESEARCH SPECIALISTS: 104 Eolou Str., 105 64, Athens, Greece

Tel: + 30 210 32 19 557 FAX: + 30 210 33 16 358 E-mail: info@valueinvest.gr - info@iraj.gr

Investment Case

The Management's vision is "Go for Great" with "Great Products", implying the Group's evolution as a major player in the Southeastern European consumer market over the next 10-year period. "Great Products" for Sarantis illustrate that the Group utilizes its own product portfolio, consisting of the three categories of mass-market cosmetics, household products and health & care products, which historically generate the highest profit margins and strong bottom-line performance. Other business activities (luxury cosmetics, car accessories, etc.), which, until recently, the Group carried out, are now designated as "strategic alliances" and are of secondary importance.

We believe that Sarantis Group will post strong growth rate in the next 5-year period, attributed mainly to the Eastern Europe operations, given countries' economic prospects and Group's organized and effective distribution network. The Group's strategic plan include the gradual improvement of profit margins through changing the product mix in the Group's portfolio, despite current pressures due to high promotional and start-up costs in East Europe.

Comparative Ratios

We compare Sarantis Group with a peer group of international household/personal care companies. The analysis demonstrates that its earnings multiples trade lower compared to its peers (based on projected fiscal 2006 multiples P/E). The company can be partially compared to its peers, as there are considerable differences in size and scope.

| Company | Country | Mkt Cap (mn) | P/E '06 | P/BV '06 | |
|---------------------|---------|--------------|---------|----------|--|
| Procter & Gamble Co | US | 183.99 | 21.34 | 3.50 | |
| Colgate Palmolive | US | 31.95 | 21.49 | 30.63 | |
| Kimberly Clark Corp | US | 27.15 | 15.22 | 4.79 | |
| Estee Lauder | US | 7.71 | 19.21 | 5.89 | |
| L' Oreal | France | 49.57 | 25.80 | 3.31 | |
| Henkel | Germany | 11.93 | 13.57 | 2.12 | |

Data: Bloomberg estimates for fiscal 2006. Share prices as of July 27th 2006

| P&L (in mil €) | 2004 | 2005 | 2006 E | 2007 E | BS (in mil €) | 2004 | 2005 | 2006 E | 2007 E |
|------------------|--------|--------|--------|--------|--------------------|--------|--------|--------|--------|
| Revenues | 187.63 | 208.66 | 231.76 | 262.94 | Net Fixed Assets | 64.16 | 70.01 | 77.66 | 85.61 |
| Gross Profit | 86.08 | 100.09 | 109.41 | 121.48 | Total Cur. Assets | 128,97 | 147.55 | 165.85 | 182.20 |
| OPEX | 69.22 | 80.42 | 84.49 | 90.40 | Cash & Equivalent | 23.81 | 26.42 | 29.03 | 26.39 |
| Gross Profit | 27.53 | 31.59 | 35.34 | 40.00 | Total Assets | 193.13 | 217.56 | 243.51 | 267.80 |
| Finan. Results | -2.59 | -2.87 | -3.41 | -3.49 | Total Equity | 34,65 | 60.93 | 76.03 | 93.76 |
| Depreciations | 2.98 | 3.44 | 3.83 | 4.36 | L-Term Liabilities | 103.77 | 98.32 | 105.51 | 105.51 |
| EBT | 21.95 | 25.28 | 28.11 | 32.15 | S-term Liabilities | 52.72 | 56.46 | 59.49 | 65,34 |
| EAT & Minorities | 16.97 | 19.33 | 20.82 | 24.60 | Liability & Equity | 193.13 | 217.56 | 243.51 | 267.80 |

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Managing Director - Karamanof Securities

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Module 1 **Investment Management**

Chapter 1 - Economics

- Microeconomic Theory
- Macroeconomic Analysis

Chapter 2 - Financial Mathematics & Statistics

- Financial Mathematics
- Statistics

Chapter 3 - Regulation

- Trustee Act 2000
- Corporate Governance
- The Companies Act 1985/89
- Mergers and Acquisitions

Chapter 4 - Asset Classes

- Equities
- Fixed Interest
- Cash
- Derivatives
- Property

Chapter 5 - Financial Markets

- Stock Exchanges
- Dealing and Settlement
- International Markets
- Foreign Exchange

Chapter 6 - Accounting

- Basic Principles
- Balance Sheet
- Profit and Loss Account
- Cash-flow Statement
- Consolidated Company Reports
- Accounting Developments

Module 2 - Regulation

Chapter 1 - Regulatory Environment

Chapter 2 - Financial Services and Markets Act 2000

Chapter 3 - Associated Legislation and Regulation

Chapter 7 - Investment Analysis

- Fundamental and Technical
- Ratio Analysis
- Yields and Ratios
- Valuation

Chapter 8 - Taxation and Trusts

- Corporation Tax
- Personal Taxes
- Overseas Taxation
- Trusts

Chapter 9 - Portfolio Management

- Risk and Return
- Role of the Portfolio Manager
- Fund Characteristics

Chapter 10 - Performance

- Measurement
- Performance Benchmarks
- Performance Attribution

- Performance Measurement

- Chapter 11 Industry Roles - Role of the Actuarial
- Consultant
- Role of the Financial Adviser - Role of Credit Rating Agencies
- Role of the Custodian and Administrators
- Role of Trade Bodies

Chapter 4 - European Union Legislation

Chapter 5 - FSA Handbook

Chapter 6 - FSA Conduct of Business Sourcebook

Chapter 7 - Complaints and Redress

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Antigoni Lymperopoulou

Investment Manager - New Economy Development Fund SA.

Article

MINIMALISM

ENIGMA (gallery



Frank Stella, Hyena Stomp 1962

Minimalism boomed in the 60's and 70's with Donald Judd, Dan Flavin, Carl Andre, Sol LeWitt and Robert Morris becoming the movement's key innovators. During the 60's, a period marked by intense social tension, artists with political conscience sought for a way to escape from modernism that would lead to simplicity and minimalism. Within the deep of conceptual art, the first signs of Minimalism made their timid entry into the art scene and mainly into sculpture. Simple or inexpensive materials due to the strictness and repetition resulted in the beginning of the influence of abstract expressionism. The artists of minimal art believed that basic repetitive geometric shapes arose the beholder's senses.



ELENA CHIRDARIS, Red drop

Article



GEORGE KEDIKOGLOU, Placidity

With Minimalism, no effort is made to show reality, the artist wishes the viewer to react only to what is in front of them. Minimalist painter Frank Stella said about his paintings, 'What you see is what you see'. Often, their works participated with the principles of symbolism and all types of postmodernism. From the birth of minimalism, two centuries have elapsed since the wave penetrated architecture and other forms of art.



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IR Module

- > Dynamic Investor Relation Sites
- > Dynamic Charting
- >Events Calendar
- >Web Site Management
- >Interactive Annual Report

Financial Reputation Management (FI.R.M.) Consulting

- >Strategy FIRM (IR & CC)
- >Monitor Guidelines
- >Financial Q Reporting Module
- >Road Shows (Europe, Middle
- East)
- >Financial Media
- > Media Relations + Strategy

Corporate Communication (CC)

- **>Corporate Presentations**
- > Fact Sheet
- >Annual Report
- >Newsletters
- > Social Responsibility Profile
- -Disclosure Policy
- >Pre- IPO material

Research

- >Shareholder Identification
- >Perception Studies
- > Media Audits
- >Management monthly reports
- >Databases
- >Peer Group Analysis





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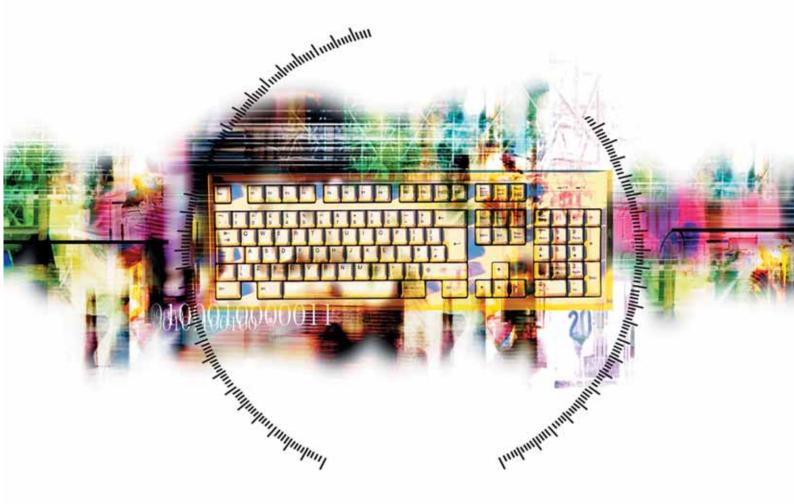
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