Global Investment Returns Yearbook 2005

The Global Investment Returns Yearbook (originally known as *The Millennium Book*) was launched in 2000. It is produced by London Business School experts Elroy Dimson, Paul Marsh and Mike Staunton in conjunction with ABN AMRO. ABN AMRO distributes the *Yearbook* to investment professionals and London Business School makes it available to other users. This abstract outlines the contents of the 2005 *Yearbook* and highlights some of its key findings.

The core of the *Yearbook* is provided by a long-run study covering 105 years of investment since 1900 in all the main asset categories in Australia, Belgium, Canada, Denmark, France, Germany, Ireland, Italy, Japan, the Netherlands, Norway, South Africa, Spain, Sweden, Switzerland, the United Kingdom, and the United States. These markets today make up over 92% of world equity market capitalisation. With the unrivalled quality and breadth of its database, the *Yearbook* has established itself as the global authority on long-run stock, bond, bill and foreign exchange performance.

In the 2005 *Yearbook*, the authors address some of the most important questions in investment.

- **Chapter 1** analyses the performance of global markets over 2004 and over the first five years of the new millennium, highlighting what happened and why.

- **Chapter 2** provides a comprehensive update on the long-term record of stocks, bonds, bills, inflation, and risk premia around the world.

- **Chapter 3** addresses the issue of how economic growth in countries like China and India should be reflected in equity portfolios, by examining the long run relationship between economic development and stock market returns. The research findings from this study are important for portfolio strategy.

- **Chapter 4** by Rolf Elgeti, ABN AMRO's Head of European Strategy, takes a forward-looking view, analysing structural changes taking place in European economies, especially Germany, and their implications for global investors.

- **Chapters 5–23** cover each of the 17 countries, with a separate chapter for the combined world index, providing in depth statistical analysis of the performance of each of five asset classes spanned by the authors' 105-year history of asset returns.

Overview of Chapter 1

The Yearbook begins by analysing the recent performance of equities and bonds in all major world markets over 2004 and over the first five years of the new millennium. Findings include:

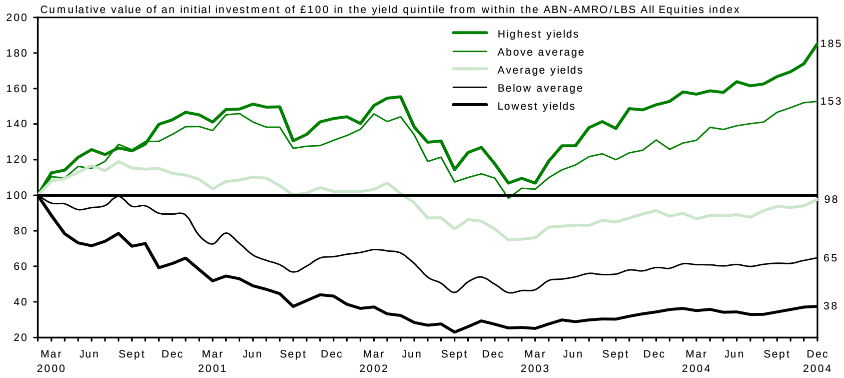
- During 2004, real (i.e., inflation adjusted) equity returns were at least 5% in all markets except China, and a majority of countries saw double-digit returns. Bond investors also had a good year, with real returns of around 5–10% in all the main markets except Japan.

- Despite the strong recovery since March 2003, the 2000–02 bear market was so severe that bonds have been the best-performing asset class in all countries except Australia since the start of 2000.

- There are now major differences across countries in their equity market performance since the millennium. Some countries (Australia, Canada, Denmark, Ireland, Norway, South Africa), ended 2004 at, or close to, all-time highs. In contrast, the cumulative real returns over 2000–04 in Japan, Germany and The Netherlands were –29%, -38%, and –44%, respectively.

- Value investing in 2004 beat growth investing for the fifth consecutive year in the UK. Figure 1 shows that since March 2000, high-yield equities have returned +85%, compared to low-yield equities, which returned –62%. By 2005, the value of the high-yielders was five times the value of the low-yielders.

Figure 1: Performance of UK equities by yield quintile from mid-March 2000 until end-2004

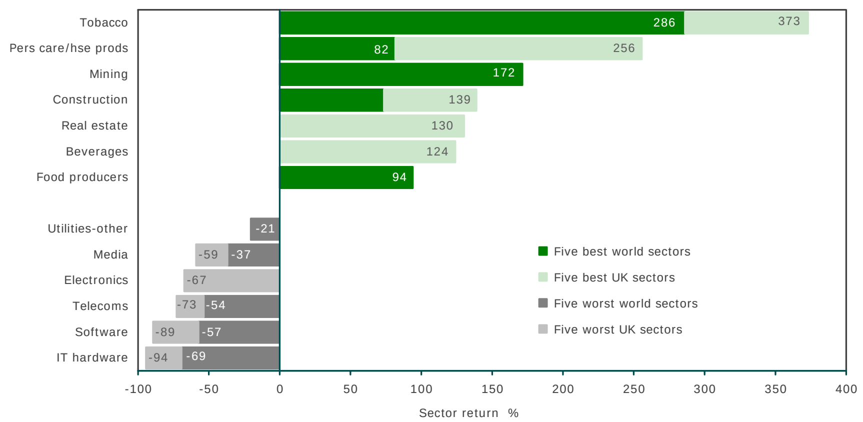


Source: ABN AMRO/LBS Global Investment Returns Yearbook 2005, chart 5

- There was a stark contrast between the top performing UK sectors in 2004 (utilities, +29%) and the worst (information technology, –4%). However, this was a complete reversal of sector fortunes from 2003, when utilities performed worst and information technology the best.

- A huge gap has now opened up in sector performance since the technology bubble burst in March 2000. Figure 2 shows that an investment in the top performing sector—tobacco—would now be worth 13 times (World index) and 85 times (UK market) more than an equivalent amount invested in the worst performing sector, namely, IT hardware.

Figure 2: Returns on best and worst performing sectors from mid-March 2000 until end-2004



Source: ABN AMRO/LBS Global Investment Returns Yearbook 2005, data from Table 2

- In 2004, small-cap equities outperformed large-caps in most countries. Over 2000–04, small-caps beat large-caps in all countries except Norway, and gave positive absolute returns in all but three countries. For small-cap investors in most countries, it is as though there never was a bear market.

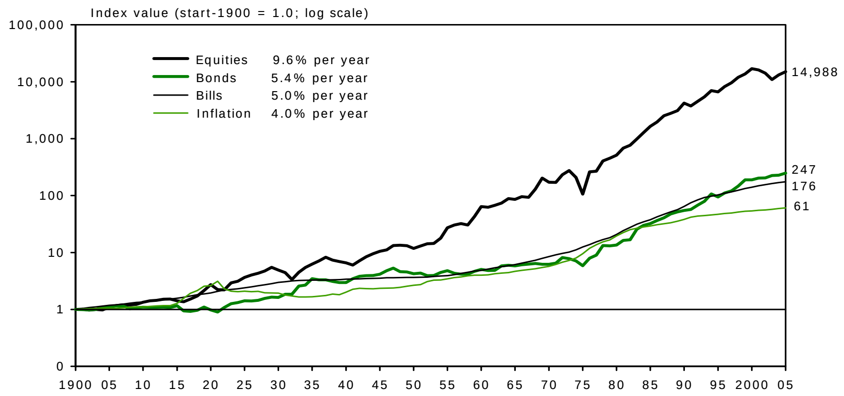
- In 2004, stock market volatility settled down in all the major markets. In the UK, volatility was getting close to the lowest level recorded since the 1960s.

Overview of Chapter 2

Chapter 2 provides a comprehensive analysis of the long-term record of stocks, bonds, bills, inflation, and risk premia around the world over the 105-years from 1900–2004. It also provides long-run evidence on stock market anomalies such as the size effect and value versus growth. Key findings are that:

- An investment in UK equities of GBP100 at the start of 1900 would, with dividends reinvested, have grown to almost GBP1.5 million by the end of 2004, a return of 9.6% p.a. (see Figure 3). Long bonds and treasury bills gave lower returns of 5.4% and 5.0% p.a., respectively, although they beat inflation.

Figure 3: Cumulative returns on UK asset classes in nominal returns, 1900–2004

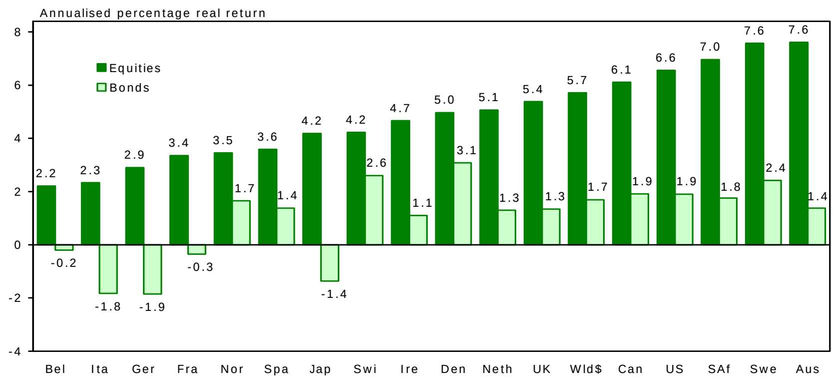


Source: ABN AMRO/LBS Global Investment Returns Yearbook 2005, chart 13

- The *Yearbook* provides charts similar to Figure 3, in both nominal and real terms, for all 17 countries and for the world index. They show that since the start of 1900, equities have been the best-performing asset class in every country. Similarly, bonds beat bills except in Germany and Norway.

- Figure 4 shows that of the 17 countries for which the authors have 105 years of data, the best performers for equities over the very long term are Australia and Sweden, with an annualised percentage real return of 7.6% since 1900, compared to a world average of 5.7%.

Figure 4: Real returns on equities and bonds internationally, 1900-2004



Source: ABN AMRO/LBS Global Investment Returns Yearbook 2005, chart 15

- Over the long run, small-cap equities have outperformed large-caps in most countries, with very low-caps performing best of all. For example, since 1955, UK MicroCap^{TM} stocks (the smallest 1% of the market) returned 20.2% p.a. versus 16.2% p.a. for small-caps and 13.4% for UK equities as a whole.

- Historically, value stocks (defined as those with high yields and/or high book to market value ratios and/or low PE ratios) have outperformed growth stocks in most countries. From 1900–2004, UK value stocks returned 11.2% p.a. versus 7.9% p.a. from growth stocks.

- Real dividend growth has been lower than is often assumed, and from 1900–2004, real dividends on the world index grew by just 0.6% p.a.. From 1950–2004, however, real dividend growth was positive in all 17 countries, and real dividends on the world index grew by 2.5% p.a.

- From 1900–2004, the annualised (geometric) equity risk premium relative to bills was 5.5% for the US, 4.3% for the UK, and 4.7% for the world index—somewhat lower than was previously believed.

- The authors estimate that a plausible, forward-looking risk premium for the world's major markets would be of the order of 3% relative to bills on a geometric mean basis, while the corresponding arithmetic mean risk premium would be around 5%.

Overview of Chapter 3

Today, many investors are asking how economic growth in countries like China and India should be reflected in equity portfolios. Chapter 3 reports on a new research study by the authors into the relationship between economic growth and stock market performance. Its key findings are that:

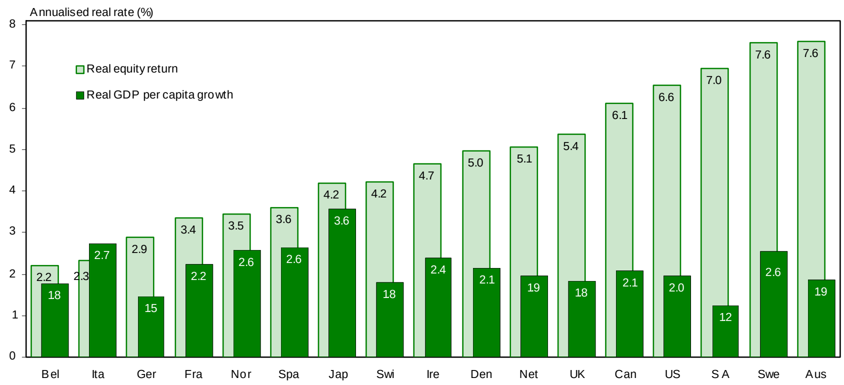
- Disappointment may be in store for investors who believe that rapid economic growth in emerging markets will lead to extended out-performance from their stock markets.

- The study's findings challenge the widely held view that corporate profits represent a constant share of GDP and that an economy growing at a rapid rate will see an equally rapid rise in profits, dividends and hence returns to investors.

- Using data for all 17 countries, including that for the rapid post-war expansion period in the German and Japanese economies, the authors demonstrate that there is no apparent relationship between equity returns and GDP growth.

- The study found that long-term dividend growth was below per capita GDP growth in almost all countries. Furthermore, higher economic growth was not associated with higher dividend growth. If anything, over the period since 1900, the relationship was perverse: lower growth economies experienced superior stock market performance and vice versa. Figure 5 illustrates the negative relationship between per capita GDP growth and stock market returns.

Figure 5: Real GDP growth and real equity returns, 1900-2004

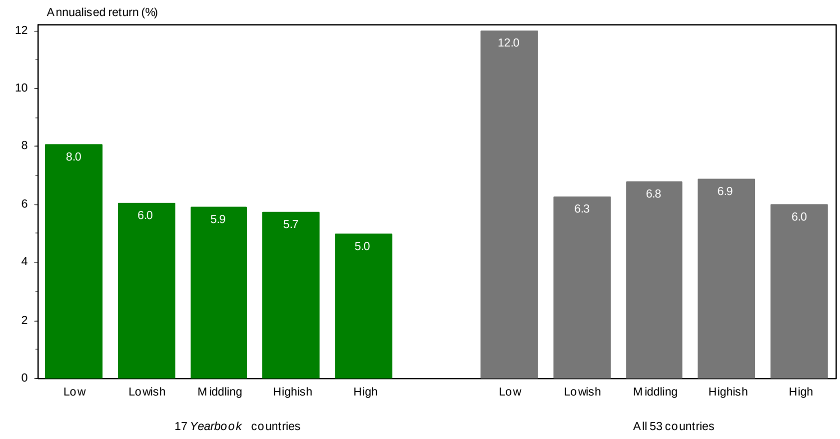


Source: ABN AMRO/LBS Global Investment Returns Yearbook 2005, chart 28

- The study also analyses additional countries where data is available, but for fewer than 105 years. Using this extended group of 53 countries, the authors again find no relationship between economic growth and stock returns.

- Finally, the authors use their 105-year history of stock returns to test a trading rule. Each year, they rank countries by their GDP growth over the previous five years. They find that a strategy of always investing in the 20% of countries with the lowest GDP growth led to higher returns than one of investing in the quintile of highest GDP growth countries, as is shown in Figure 6.

Figure 6: Annualised returns from buying a country's equities based on recent GDP growth



Source: ABN AMRO/LBS Global Investment Returns Yearbook 2005, chart 34

- The authors, Elroy Dimson, Paul Marsh and Mike Staunton of London Business School, conclude: "Our findings are unambiguous. Investors who allocate assets to countries with high expected GDP growth do not, on average, achieve superior returns. Historically, buying into equity markets with a high GDP growth rate has given a return that is below the return of markets with a low GDP growth rate".

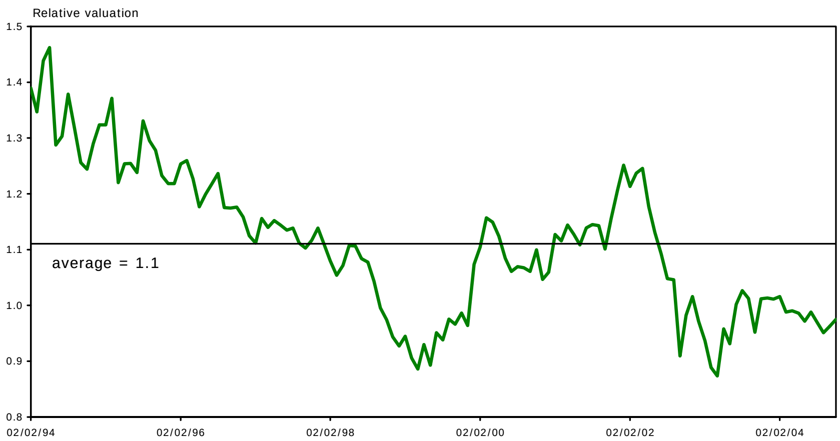
Overview of Chapter 4

ABN AMRO's Head of European Strategy, Rolf Elgeti, builds on the findings of Chapter 3. In a forward-looking chapter he discusses structural changes taking place in European economies that could increase profitability and boost equities, such as German labour market reform and changes to the country's pensions and healthcare systems. His views and conclusions are that:

- Sentiment is changing as indicated by the increasing interest of private equity firms in German assets, such as Kohlberg Kravis Roberts' purchase of automotive component company Auto-Teile-Unger just before the company was scheduled to go public,

- Change is finally happening in Germany after many years of stagnation, but the market underestimates the extent of what has been accomplished. The steps taken will have very positive long term effects; at some point the valuation discount of German equities (see Figure 7) should reverse – even becoming a premium.

Figure 7: Relative PE Germany versus Europe



Source: ABN AMRO/LBS Global Investment Returns Yearbook 2005, chart 45

- Rolf Elgeti believes that there will be knock-on effects across Europe and concludes that equity investors will be in a good position to benefit from the structural change.

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Obtaining copies of the Yearbook and the underlying data:

ABN AMRO distributes the Yearbook to its institutional investment clients, journalists and the media while London Business School makes it available to other users. To obtain a complimentary copy, institutional clients of ABN AMRO should contact Jackie Shenton (Jackie.Shenton@uk.abnamro.com), while members of the press and media should contact Adrian Rimmer (Adrian.Rimmer@uk.abnamro.com). All others should contact Stefania Uccheddu (succheddu@london.edu) who can provide copies of the Yearbook at £100 each.

The underlying data are now distributed through Ibbotson Associates of Chicago (contact Jim Ulbrich on julbrich@Ibbotson.com and ask for the DMS module of the EnCorr system).

Further information on long run rates of return is provided in Dimson, Marsh, and Staunton's book *Triumph of the Optimists* (Princeton University Press). The *Yearbook* authors have also analysed the equity risk premium, the long-run risks of equity investment, international diversification and many other strategic issues in investment. Their most recent research, exploring more aspects of the *Yearbook* data, was published during 2004 in *Financial Analysts Journal*, *Journal of Portfolio Management* and *Journal of Applied Corporate Finance*.

Background information on ABN AMRO and London Business School:

ABN AMRO
Netherlands-based ABN AMRO is a leading international bank with total assets of EUR 637.5 bln (as at 30 September 2004). It has over 3,000 branches in more than 60 countries and territories, and has a staff of about 104,000 full-time equivalents worldwide. ABN AMRO is listed on the Euronext and New York stock exchanges.

ABN AMRO operates through three Strategic Business Units, each responsible for managing a distinct client segment. Wholesale Clients provides integrated corporate and investment banking services to corporate, institutional and public sector clients worldwide. Consumer & Commercial Clients focuses on retail and SME clients in three home markets – the Netherlands, the US Midwest and Brazil and in a number of selected growth markets. Private Clients & Asset Management provides private banking services to wealthy clients and investment products to financial intermediaries and institutional clients.

London Business School
London Business School's vision is to be the pre-eminent global business school, nurturing talent and advancing knowledge in a multi-national, multi-cultural environment. Founded in 1965, the School graduated over 800 MBAs, Masters in Finance, Sloan Fellows and PhDs from over 70 countries last year. The School's executive education department serves 5,000 executives and 60 corporate clients on its programmes every year. London Business School is based in the most accessible and international city in the world.