



# The world's first electronic stock market

## Introduction

The Nasdaq Stock Market® is a world famous stock market, based in the US. Nasdaq® uses computer and telecommunications networks to trade and monitor thousands of **listed stocks**, sometimes also referred to as **securities**. It was the first stock market in the world to trade electronically, as opposed to people dealing from a trading floor in a physical location. Today, Nasdaq's systems handle over 60% of all share dealing volume and value of shares traded in US publicly listed companies.

Nasdaq's vision is to create a truly global securities market, without geographic boundaries or time limits, that will put leading companies in contact with a broadening pool of investors worldwide. Nasdaq continues to expand globally, there is now a market in Japan, a trading platform in Canada and plans to introduce a market in Europe.\*

\* A market lists companies, a trading platform simply trades shares listed elsewhere.

## Business Purpose

The traditional function of a stock exchange is to provide a central **market place** in which companies that wish to raise money are put in touch with individuals and institutions that have funds to invest.

One of Nasdaq's principal roles is to offer companies the opportunity to grow by raising **capital**. Companies wishing to raise money can issue new shares that are sold to investors through the market. Stock markets mainly facilitate the exchange of shares; when existing shareholders sell their shares to whoever wants to buy them, usually with the aim of making a profit on their investment.

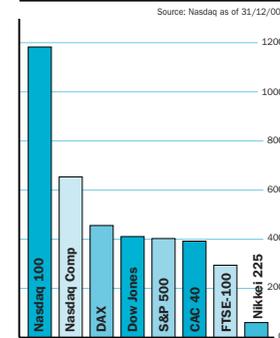
## Growth and Performance

Nasdaq began operating on 8 February 1971 with 250 listed companies. On that day, the **Nasdaq Composite Index®** started at 100, this index tracks all companies listed on the market.

Since this time, the Nasdaq Composite has outperformed other major market indices, see below:

### 10 Year Index Performance

Since 1990 Nasdaq's indices have outperformed all other major markets



In the period 1989-2000, the US economy experienced almost continuous growth. At the same time, rapid developments in information technology drove down costs for many businesses and improved their competitiveness. As a result, the Nasdaq Composite Index soared during this period and the volume of trades made through Nasdaq increased remarkably.

Today Nasdaq is a highly developed stock market with around 4,500 listed companies, of those 479 are non-US companies i.e. they are from all around the globe (as of March 2001).

In recent years, 89% of all initial public offerings of shares in the US have been through Nasdaq. Nasdaq has provided a home for 'growing' companies to raise capital and trade. Younger, faster moving firms tend to reinvest the bulk of their profits into expanding the business rather than pay dividends. Most Nasdaq companies are committed to this dynamic philosophy. Shares in these types of firms are known as 'growth stocks'.

In 1996, Nasdaq trading volumes were around 500 million shares per day. Since February 2000 more than two billion shares have regularly been traded on the market and on 3rd January 2001 the market hit its first 3 billion-share day (3.19 billion to be precise). In 2000, the dollar volume traded reached 20.4 trillion dollars, an 85% increase on the previous year.

Nasdaq also lists more **Initial Public Offerings (IPOs)**, and non-US companies than any other major market. In 2000, there were 398 IPO listings raising over \$50 billion. In addition, 300 secondary offerings raised over \$80 billion for the companies. Of these numbers one hundred non-US companies raised over \$10 billion.

## Nasdaq by Industry

	NUMBER OF COMPANIES LISTED	PERCENTAGE OF NASDAQ
1 Manufacturing	1,236	26%
2 Finance, Insurance & Real Estate	883	19%
3 Computer Software	750	16%
4 Services	492	10%
5 Retail/Wholesale Trade	429	9%
6 Transportation & Communications	371	8%
7 Drugs	287	6%
8 Other*	154	3%
9 Computer Hardware & Office Equipment	132	3%

## Market Diversity

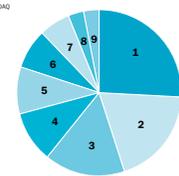
Nasdaq is well known for dealing in high-tech shares and many famous technology companies are listed on the market (eg Apple, Dell, Microsoft, Cisco, Intel). However, Nasdaq also deals in shares of companies from a broad range of market sectors, for example, the retail warehouse chain Costco and Starbucks coffee shop chain. In number, there are indeed many more manufacturing and finance companies listed, see pie chart.

Many associate Nasdaq with dynamic sectors of the US and world economies. Financial experts and economists carefully monitor changes in the Nasdaq Composite Index because they feel it gives a good indication of the present and future state of the US economy.

Companies listed on Nasdaq are divided into two groups, based on their **market capitalisation**:

- The Nasdaq National Market comprises large companies with high levels of capital.
- The Nasdaq SmallCap Market comprises small and medium-sized companies.

The Nasdaq Stock Market lists companies from all major sectors:



Source: NASD Economic Research as of 31/12/00. Based on the U.S. Standard Industrial Classification System. \*Includes Agriculture, Forestry and Fisheries; Mining; Construction; Public Administration.

## The Nasdaq-100 Index®

To be included in the Nasdaq-100 Index a business must have:

- a minimum average daily trading volume of 100,000 shares
- been listed for at least two years
- a market capitalisation of at least \$10 billion.

For foreign shares to be included, the company needs to have:

- a worldwide market of at least \$10bn
- a US market value of at least \$4bn
- and an average trading volume of at least 200,000 shares per day.

## Nasdaq's Market Model

Nasdaq operates a computer screen-based market model: market participants, both registered Market Makers and ECNs (Electronic Communications Networks) communicate through its private network of computer links. Indeed, this network was one of the world's first business to business intranets. This network broadcasts trading information to over 7,000 terminals at 600 market making firms worldwide. The system regularly handles 3 billion shares traded per day and can handle trading up to 4 billion shares in one day – 3,000 transactions per second.

Nasdaq Market Makers are member firms that buy and sell Nasdaq securities at prices they display on the Nasdaq computer system. They trade for their own account and risk, as well as on behalf of their customers. More than 600 member firms act as Nasdaq Market Makers. They use their own capital

to buy and maintain an **inventory** of company shares, which they can use to fulfil an order for a customer. No company can list on Nasdaq without having at least two Market Makers agree to "make a market" in their shares. This means that when requested, they have to quote to buy and sell that stock.

Market Makers will buy and sell shares at different prices. This makes the market competitive and very **liquid**. Market Makers must quote two prices – their buying price and their selling price, the difference between the two is known as the Market Maker spread – effectively this is the market makers' profit for undertaking the trading of those securities. They must report any trade they have made electronically within 90 seconds.

Services offered by Market Makers include:

- generating research reports on the shares they trade
- matching buyers and sellers
- advising investors on opportunities to buy new and secondhand shares and on other investment possibilities.

Other market participants include Electronic Communications Networks (ECNs). These are trading systems that bring additional customer orders to the market. As Nasdaq market participants, ECNs display either one-sided or two-sided quotes, which reflect actual orders. ECNs provide institutions and Market Makers with an anonymous way to enter orders for stock into the marketplace. This anonymity increases genuine competition within the market and ensures investors get the best price available.

## The Role of Technology

The Internet offers instant global communications. In an increasingly globalised market place, companies often seek to raise capital worldwide. Investors are also becoming less concerned about national frontiers and capital movement is now increasingly more international. The barriers to the free flow of capital are becoming a thing of the past. Investors are now better informed about investment opportunities in other countries.

Investors need information in order to make more informed investment decisions. The Internet and other communications-based technologies enable individuals to gain fingertip access to large quantities of up-to-date information. The Nasdaq web-site, [www.nasdaq.com](http://www.nasdaq.com) is heavily used as a source of information. Averaging 7 million page views per day, [nasdaq.com](http://nasdaq.com) is one of the most heavily trafficked investor sites in the world, offering high quality information to potential investors and existing shareholders.

The site profiles Nasdaq's listed companies by providing key information, e.g. historical charts showing relative share performance, reports on companies and consensus analysts' recommendations of whether to buy or to sell.

One of the most unique ways in which Nasdaq communicates information about its market is through the Nasdaq MarketSite™, located in Times Square, New York.

The MarketSite Tower soars eight storeys high and is illuminated with video market highlights and Nasdaq's unique LogoTicker™. This identifies listed companies by their most recognisable symbol: their corporate logo. MarketSite features a high-tech interactive exhibition centre and a broadcast facility that is popular for live broadcasts on market activity. Top US television broadcasters such as CNN and CNBC among others, regularly use the facility to provide market updates.

## Summary

The world's first electronic stock market, Nasdaq, now trades more shares in terms of volume and value than any other major exchange in the world. Nasdaq lists a wide range of companies covering the complete economic spectrum from agriculture, mining, construction and manufacturing to transportation, retail, banking, insurance and high tech.

Nasdaq has been highly successful in helping to support growing companies in the late twentieth century. In future years Nasdaq will be helping, at a global level, to bring capital to organisations worldwide that are at the leading edge of change.

## Glossary of Keywords

**Capital:** Finance that enables a business to set up and grow.

**Initial public offerings:** Stocks and shares being offered for sale to the public by a company for the first time.

**Inventory:** A stockpile or reservoir - in this case of shares.

**Liquid:** Markets that can absorb volume buying or selling, without dramatic fluctuation in price.

**Listed:** Companies whose shares feature on Nasdaq.

**Market capitalisation:** The price of a stock multiplied by the total number of shares outstanding. Also, the market's total valuation of a public company.

**Market place:** Medium through which buyers and sellers come into contact.

**Nasdaq Composite Index:** This index measures all Nasdaq domestic and non-US based common stocks listed on the Nasdaq Stock Market. Each company's security affects the index in proportion to its market value. An index is based on a start date at which the index is set at 100. Subsequent changes are then monitored relative to the start point of 100.

**Securities:** Shares/equities/stocks.

**Self-regulatory:** An organisation that is responsible for regulating its members through the adoption and enforcement of rules and regulations governing the business conduct of its members.

**SM:** This is a US intellectual property protection device - similar to a trademark, but for a service, hence service mark.

FTSE	Nasdaq Equivalent
<b>FTSE 100:</b> this gives the general share value for companies quoted on the London Stock Exchange	<b>Nasdaq-100 Index®:</b> this is made up of the biggest non-financial companies listed on Nasdaq
<b>All Share Index:</b> The UK general level of business performance is often measured by the FTSE All-Share Index	<b>The Nasdaq Composite Index:</b> This monitors all companies listed on Nasdaq

## Ownership

The Nasdaq Stock Market was originally owned and operated by the National Association of Securities Dealers (NASD®). NASD is a **self-regulatory** securities industry group to which every US broker and dealer must belong. Nasdaq is moving to become a separate entity from the NASD by mid 2002. As of January 2001, strategic investors own 60% and NASD only owns 40%.



**1** What is a stock market?

**2** Why do you think that the Nasdaq web-site receives so much traffic?

**3** Why is it important for stock markets like Nasdaq to tap into global markets for capital?

**4** How does competition between Market Makers help investors?

**5** Why is the Nasdaq Composite Index seen as an indicator of global business trends?

- Answers to the questions
- To download this case study
- A profile of the organisation
- Revision help

Browse the Web

[www.thetimes100.co.uk](http://www.thetimes100.co.uk)

• Information on the organisation

[www.nasdaq.com](http://www.nasdaq.com)

• Information from The Times

[www.thetimes.co.uk](http://www.thetimes.co.uk)

Questions