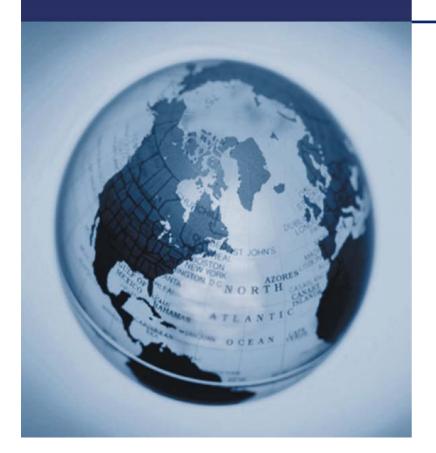
# MSCI®

# EAFE®



Presented by: Giovanni J. Ford Vice President, MSCI

January, 16, 2003

### **Agenda**

- Overview of MSCI
- MSCI Enhanced Methodology
  - Executive Summary
  - Building an MSCI Index
  - Global Industry Classification Standard (GICS)<sup>SM</sup>
  - Index Building Blocks
- What is in EAFE
  - Past and Present
- MSCI EAFE Index Advantages
- New Product Developments



### **Overview of MSCI**



#### Who is MSCI?

- Established in 1968, the first provider of global benchmarks
- Independent company majority owned by Morgan Stanley, minority owned by The Capital Group
- Benchmark specialists and consultants for 33+ years
- Distributor of index data and company-level information
- Licensor of MSCI products and intellectual property
- MSCI Organization Over 200 dedicated resources
  - Research
  - Index Construction
  - Index Maintenance
  - Product Development
  - Information Technology
  - Sales
  - Marketing
  - 24-hour Člient Service



#### **MSCI -- Global Position**

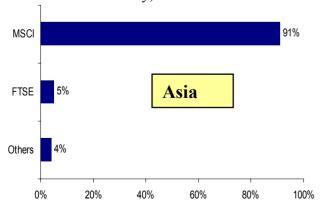
- 9/10 leading institutions use MSCI as their international benchmark
- Approximately \$3 trillion USD benchmarked to MSCI indices globally
- \$600 billion USD indexed to MSCI benchmarks globally

#### MARKET SHARE

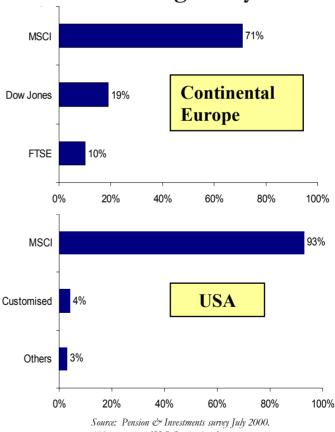


"MSCI continues to put daylight between itself and the rest of the field. This is true for both benchmarking and tracking." Thomson Extel

Survey, June 2001



Source: Independent research conducted January 2001. What is your primary global or international benchmark?



- - -

Source: Merrill Lynch/Gallup

respondents - Who is your cross-

horder Index Provider now?

Survey - February 2001.

Continental European

Source: Pension & Investments survey July 2000 179 managers of U.S. Institutional, tax-exempt global/international assets

5

# **MSCI Enhanced Methodology**



# **MSCI Enhanced Index Methodology Executive Summary**

- Free float-adjust the constituents' index weights [captured in the Foreign Inclusion Factor (FIF)]
  - Results in a more investable and replicable index
- Increase the target market representation of the MSCI Standard Equity Indices
  - from 60% of total market capitalization
  - to 85% of <u>free float-adjusted market capitalization</u> within each industry group, within each country
  - Results in better industry representation



# **Enhanced Methodology - Guiding Principles**

- MSCI adheres to the following guiding principles in the design and implementation of its index construction and maintenance methodology:
  - Broad and fair market representation
  - Investability and replicability
  - Consistency of approach
  - Continuity and index turnover
  - Disciplined approach: principles, rules and guidelines
  - Transparency
  - Independence and objectivity



# **Enhanced Methodology - Float**

#### Foreign Inclusion Factors (FIFs)

- MSCI free float-adjusts constituent weights using an adjustment factor, referred to as the Foreign Inclusion Factor (FIF)
  - A constituent's FIF is equal to its estimated free float rounded-up to the closest 5%
- Where Foreign Ownership Limits (FOL's) are more restrictive than Free Float, the FIF is equal to the FOL, rounded to the nearest 1%
- Securities of companies with free float less than 15% are typically not eligible for inclusion, except in significant cases
  - If the security is included, the FIF is equal to the estimated free float, rounded to the closest percentage point (1%)



#### **MSCI's Definition of Free Float**

Total number of shares outstanding less shareholdings classified as strategic and/or non-free float

#### Strategic shareholdings include, for example:

- Government holdings
- Controlling shareholders and their families' stakes
- Company management stakes
- Other companies' holdings

#### • Free float available to *non-domestic* investors

- Reflects foreign ownership limitations imposed by governments and/or by the company itself
- Other investment restrictions which materially limit the ability of international investors to freely invest in a particular market are accounted for through the use of a Limited Investability Factor (LIF)



# **EAFE®** Foreign Inclusion Factors (FIF)

Region	FII
Kegion	r <sub>1</sub>

USA	0.95
Europe ex UK	0.73
United Kingdom	0.97
Japan	0.65

EAFE	0.75
World	0.85
EM Asia	0.41
EM EMEA	0.56
EM Latin America	0.60
EMF	0.48
ACWI	0.83

Country	FIF	Country	FIF
Austria	0.45	Italy	0.55
Australia	0.78	Japan	0.65
Belgium	0.53	<b>Netherlands</b>	0.84
Denmark	0.67	New Zealand	0.72
Finland	0.93	Norway	0.61
France	0.69	Portugal	0.63
Germany	0.66	Singapore	0.55
Greece	0.57	Spain	0.83
Hong Kong	0.53	Sweden	0.81
Ireland	0.92	<b>Switzerland</b>	0.89
		<b>United Kingdom</b>	0.97

Note: The FIF adjusts a constituent's weight for free float and other investment restrictions.



# **Building an MSCI Index - The Steps**

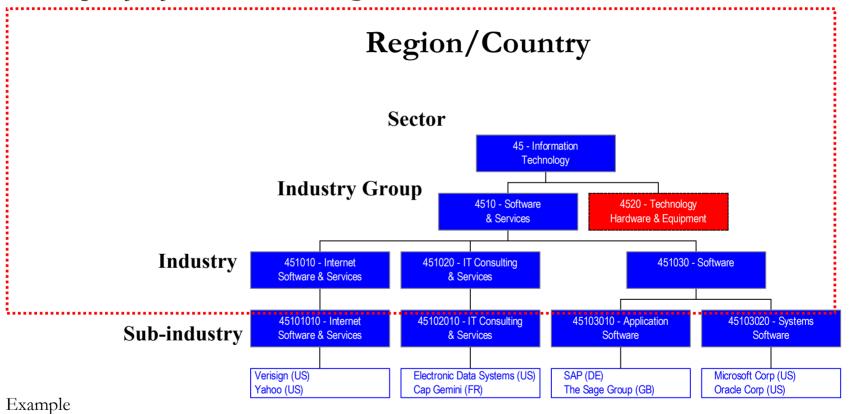
- Classify securities by country
- Free float-adjust securities
- Classify securities according to the Global Industry Classification Standard (GICS)
  - 122 sub-industries
  - 59 industries
  - 23 industry groups
  - 10 sectors
- Screen securities for size and liquidity
- Initiate security selection process to target 85% free floatadjusted market capitalization for each industry group within each country



#### **Global Industry Classification Standard**

Example of Information Technology Sector

constituents...

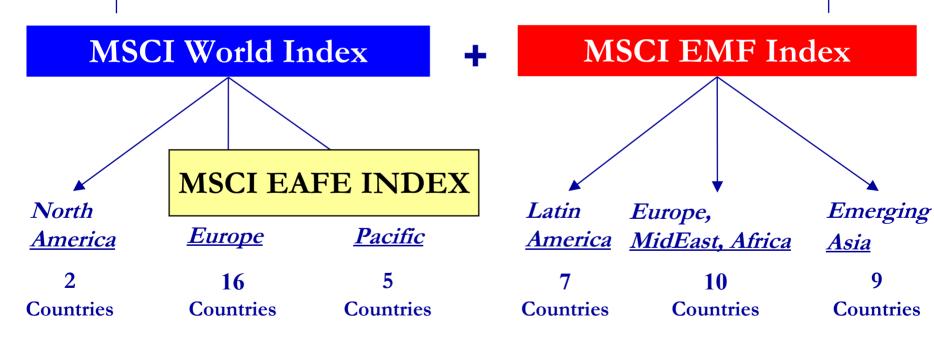


All Country Sector breakdown



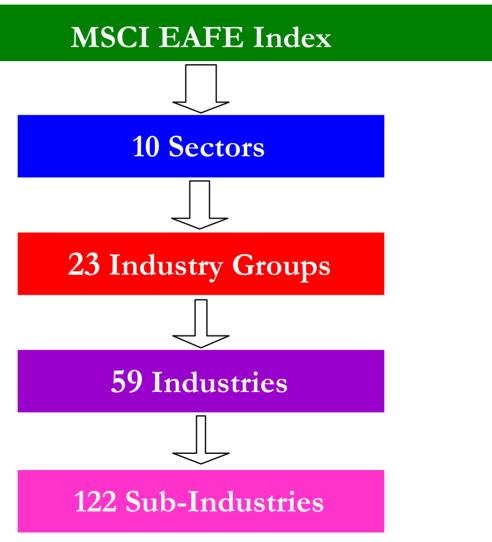
#### **MSCI Indices - Building Blocks**

#### MSCI All Country World Index Free





#### **MSCI Indices - Building Blocks**



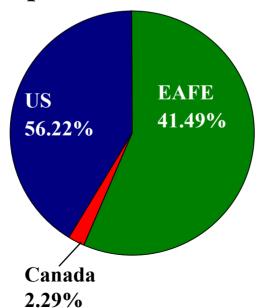


# What is in EAFE®?



#### What is in EAFE®?

- First International Equity Index
- Established in 1968
- Live time series from December 31, 1969
- All capitalization ranges
- Developed markets only
- 1,000 companies



	B \$USD
Largest	154.3
Mean	5.3
Median	1.6
Smallest	0.06



#### What is in EAFE®?

Austria Italy Belgium Netherlands Europe Denmark Norway Finland Portugal France Spain Germany Sweden Switzerland Greece Ireland United Kingdom

Australasia Australasia

Australia New Zealand

 $\begin{array}{c} F_{ar} \\ E_{ast} \end{array} \quad \begin{array}{c} {}_{\text{Hong Kong}} \\ {}_{\text{Japan}} \\ {}_{\text{Singapore}} \end{array}$ 



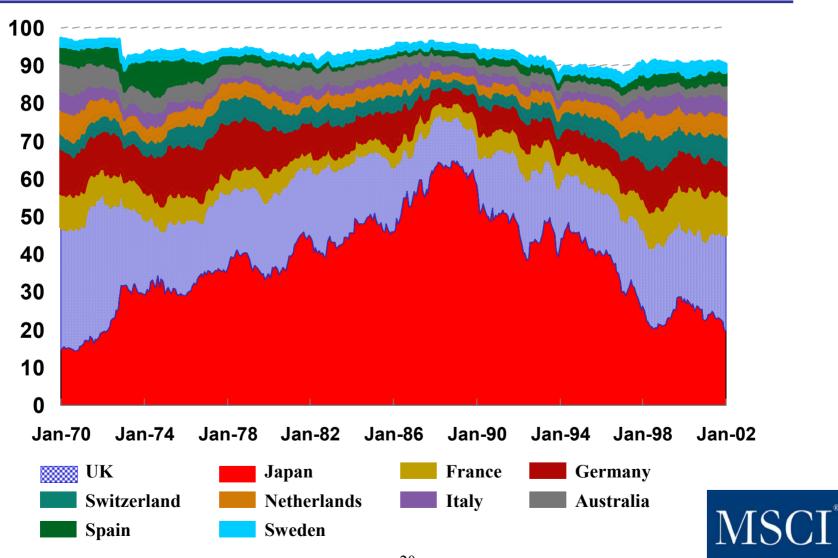
# **How EAFE® Has Evolved Over Time-- Country Perspective**



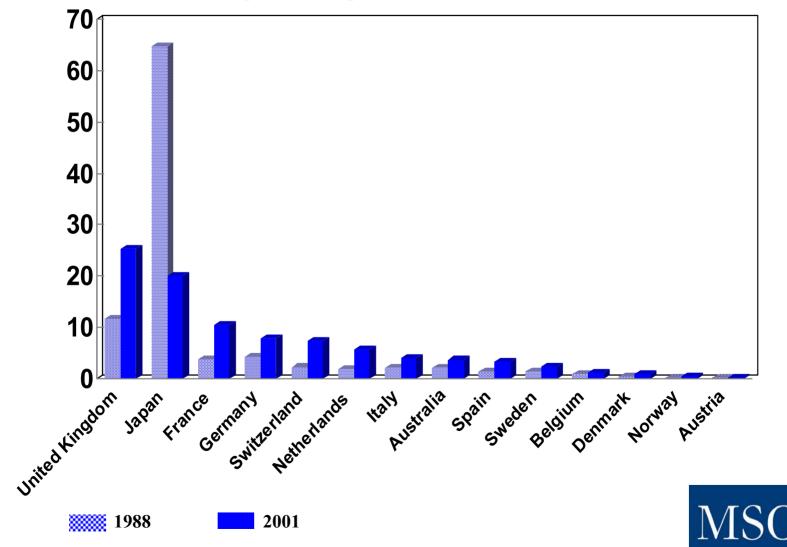
		1987	1989	1993	1997	2001
				Ire la n d	Ire la n d	Ire la n d
		Gre e c e	Greece	Gre e c e	Gre e c e	Gre e c e
		Portugal	Portugal	P o rtug a l	P o rtug a l	P o rtugal
	1972	Finland	Finland	Finland	Finland	Finland
		New Zealand	New Zealand	New Zealand	New Zealand	New Zealand
1969	Hong Kong	Hong Kong	Hong Kong	Hong Kong	Hong Kong	Hong Kong
	Malaysia/Singapore	Malaysia/Singapore	Malays ia/S ing apo re	Singapore	S ing a po re	S ing a po re
A us tra lia	A u s tra lia	A us tra lia	A us tra lia	A us tralia	A us tra lia	A us tra lia
A us tria	Austria	A us tria	A us tria	A us tria	Austria	A us tria
Belgium	Belgium	Belgium	Belgium	Belgium	Belgium	Belgium
D e n m a r k	Denmark	D e n m a rk	D e n m a rk	D e n m a rk	D e n m a rk	D e n m a rk
France	France	France	France	France	France	France
Ge rm a ny	Ge rm a ny	Ge rm a n y	Ge rm a n y	Germany	Germany	Ge rm a ny
Italy	It a ly	Ita ly	It a ly	<b>Italy</b>	Italy	Italy
Japan	Japan	Japan	Japan	Japan	Japan	Japan
Netherlands	Netherlands	Netherlands	Netherlands	Ne the rlands	Ne the rlands	Netherlands
No rwa y	No rwa y	No rwa y	No rwa y	No rwa y	No rwa y	No rwa y
Spain	Spain	Spain	Spain	Spain	Spain	Spain
S we de n	S we de n	S we de n	S we de n	S we de n	S we de n	S we de n
S witze rland	S witze rland	S witze rland	S witze rla nd	S witze rla nd	S witze rla nd	S witze rland



# Changes in Select EAFE® Countries Over Time -- Country Weights



# Changes in Select EAFE® Countries Over Time -- Country Weights



# What is in EAFE® As of December 31, 2002?

Country	Weight	# of Constituents
AUSTRIA	0.1%	11
BELGIUM	1.0%	17
DENMARK	0.7%	24
FINLAND	2.0%	18
FRANCE	9.3%	54
GERMANY	5.8%	47
GREECE	0.4%	23
IRELAND	0.7%	11
ITALY	3.9%	42
NETHERLANDS	5.5%	24
NORWAY	0.5%	20
PORTUGAL	0.4%	10
SPAIN	3.3%	30
SWEDEN	1.9%	37
SWITZERLAND	8.1%	36
UNITED KINGDOM	27.7%	128
Europe	71.5%	532
AUSTRALIA	4.7%	72
NEW ZEALAND	0.2%	13
Australasia	4.9%	85
HONG KONG	1.6%	29
JAPAN	21.2%	319
SINGAPORE	0.8%	35
Far East	23.6%	383
EAFE	100.0%	1,000



# What is in EAFE® As of December 31, 2002?

Sector	Weight	# of Constituents
ENERGY	9.7%	26
MATERIALS	6.4%	111
INDUSTRIALS	8.5%	212
CONSUMER DISCRETIONARY	13.1%	188
CONSUMER STAPLES	9.5%	81
HEALTH CARE	10.4%	61
FINANCIALS	24.0%	170
INFORMATION TECHNOLOGY	6.0%	84
TELECOMMUNICATION SERVICES	7.5%	27
UTILITIES	5.0%	40
EAFE	100.0%	1,000

Data as of December 31, 2002



#### **MSCI Index Performance**

	Average Annualized Returns			
	<u>1 YR</u>	<u>5 YR</u>	10 YR	
EAFE	-15.66%	-2.62%	4.30%	
USA	-22.71%	-0.99%	9.40%	
EMF	-6.00%	-4.58%	1.31%	

Data as of December 31, 2002 - Gross Returns





#### Consistency

- MSCI executes a consistent methodology across all markets making the MSCI indices fully comparable
- In the progression of countries from EM to DM (e.g. Portugal and Greece), as a Country Index leaves the EM Indices it immediately joins the DM Indices

#### Float analysis and data

• MSCI analyses float information to the most granular level available, enhancing the accuracy of the investability of the indices

#### Industry and Country Distribution

• MSCI's consistently applied methodology helps to ensure that the indices accurately reflect the weight of industries and countries in the investment universe

#### Historical data

• MSCI provides investable historical data from **1969** - longer than any other multi country developed market index series



#### Real Time Indices

• MSCI provides real time indices for all markets, enabling intra-day analysis

#### Sector Indices

• MSCI provides thousands of sector indices, enabling sector analysis and research

#### GICS Direct

• GICS Direct provides security classifications in accordance with GICS



#### Index linked products

- MSCI indices are being used as the basis of index linked products, including:
  - Exchange Traded Funds based upon
    - MSCI EAFE Index, as well as the
    - MSCI Australia, Austria, Belgium, Canada, EMU, France, Germany, Hong Kong, Italy, Japan, Netherlands, Pacific ex-Japan, Singapore, Spain, Sweden, Switzerland, and UK Indices
    - ETFs tracking select emerging markets (Brazil, Korea, Malaysia, Mexico, Taiwan) are also available
  - Options based on the iShares MSCI EAFE ETF on the CBOE



# **New Product Developments and Initiatives**



#### **MSCI Global Value and Growth Indices**

- Enhanced methodology for Global Value and Growth Index Series
  - more effectively reflects the evolving views on style definition and segmentation in the international markets
  - provides an improved representation of the opportunity sets for global style managers
- The enhanced methodology features a number of innovations including
  - two-dimensional framework for style segmentation where value and growth securities are specified using different attributes
  - use of 8 different variables (3 for value and 5 for growth)
  - partial attribution of index market cap of securities depicting either both value and growth characteristics or neither, to each of the value and growth indices, unless one of the style characteristics clearly dominates
  - buffer zones that reduce index turnover
- Planned launch date: As of the close of May 31, 2003



# Real Time MSCI Security Level Data

- MSCI Real Time Indices and MSCI Real Time Constituents: the perfect combination in today's dynamic marketplace, giving clients the edge by bringing them the data they need – fast
  - Dynamic real time prices and weights, calculated by Bloomberg
  - Constituents of more than 1,400 MSCI regional, country and sector indices
  - Includes both real time and official daily index levels and constituent data
  - Available in 3 modules DM, EM and Small Cap



GRAB Govt MXCT



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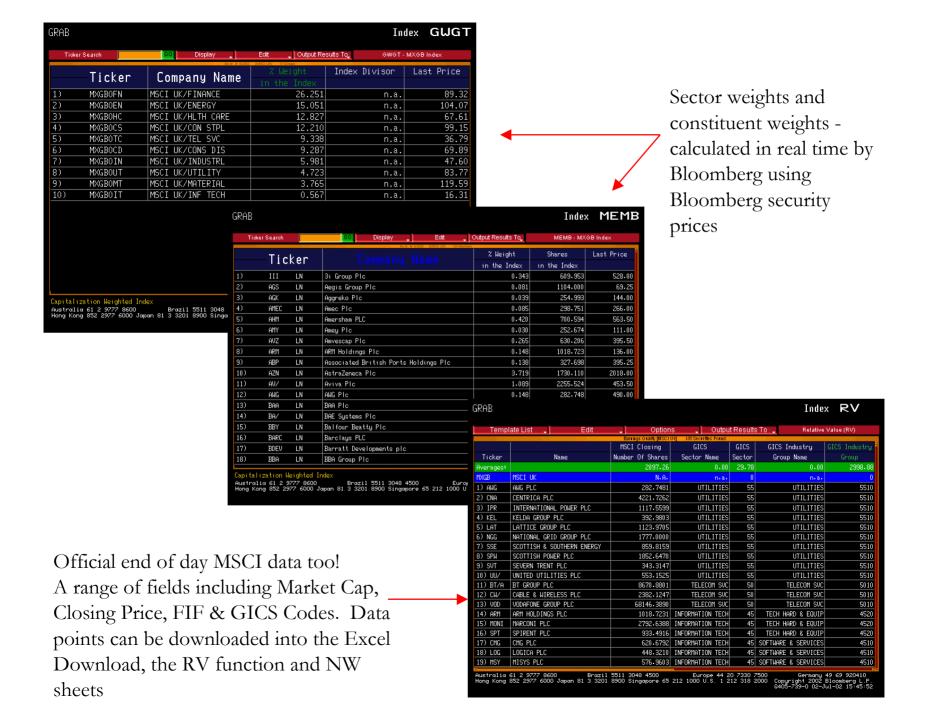
#### MSCI CONSTITUENT DATA





MXCT - Menu and free trial application DES page - host of pertinent information Index DES At 10:08 Op 1028.53 Hi 1043.46 Lo 1026.02 INDEX DESCRIPTION PAGE MXEA - MSCI EAFE The MSCI EAFE Index is a free-float weighted equity index. The index was developed with a base value of 100 as of December 31 1969. The MSCI EAFE region covers DM countries in Europe Australasia and the Far East. DGIP Prices 4)GRPS 10 Industry Groups Year\_to\_Date 1154.96 5MEMB 1020 Members ↑708 ↓229 →83 2)TRA 52 Weeks Ago 3)GPO 52 Week High 1241.29 **DMOV** Today's Movers by Index Pts 1252.79 52 Week Low on 08/06/02 Leading 8) BP PLO 930.30 Movers 9) ROYAL DUTCH PETR Fundamental Information \* Price/Earnings 66.82 Ex-Dvd -.0072 11) NOVARTIS-REG SHS \* Dividend Yield 2.52 on 08/22/02 Lagging 12) VESTAS WIND SYST Index Information Movers 13) DAIMLERCHRYSLER 14) SWISS RE-R 4.09BLN on 08/21/02 15CN News on Today's Movers 7.26TRI No Options Available Calculated by Bloomberg Australia 61 2 9777 8600 Brazil 5511 3048 4500 Europe 44 20 7330 7500 Hona Kona 852 2977 6000 Japan 81 3 3201 8900 Singapore 65 212 1000 U.S. 1 212 318 2000

Real Time Index Level



### **Real-Time Equity Indices**

- MSCI Regional, Country and Sector REAL TIME indices
  - Over **1200** indices
  - Calculated every 60 seconds
- Investors are able to view the state of the global equity markets in real time - with fully comparable data across countries, regions and sectors.
- Available on Bloomberg (MXRT, <GO>) and Reuters (MSCI200)



# **Customized Equity Benchmarks - examples**

#### Custom Indices - as many variations as investment styles

- Regional, Country or Sectors
  - Exclusion / Inclusion
- Capped
  - Country or Sector
  - Individual securities
- Hedged
  - Full / Partial
- Alternative Weighting Scenarios
  - Equal weighted
- Multiple Asset Classes
- Stock Selection
  - Client defined list of securities



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