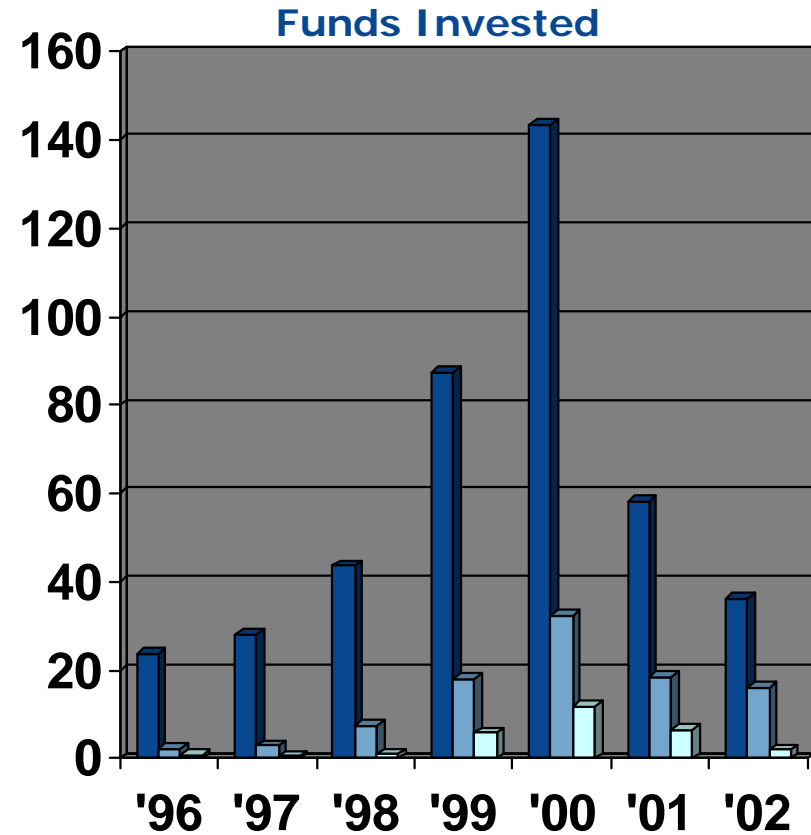
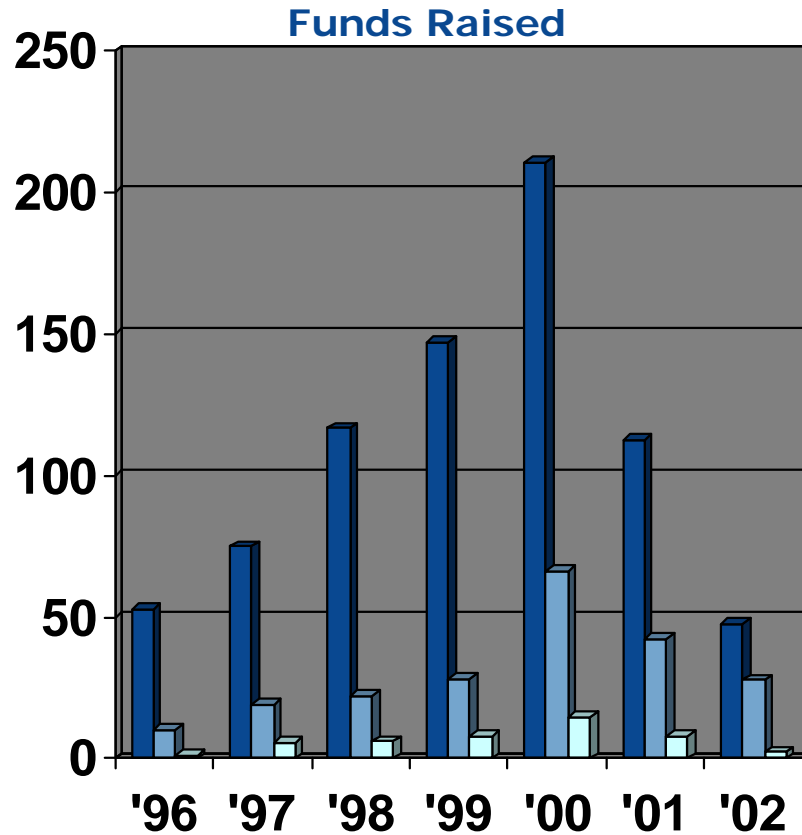


# Future Trends In Private Equity Investment

Torsten Krumm  
Apax Partners  
27 October 2003, Zurich

# Private Equity\* Funds Raised & Invested (US\$bn)

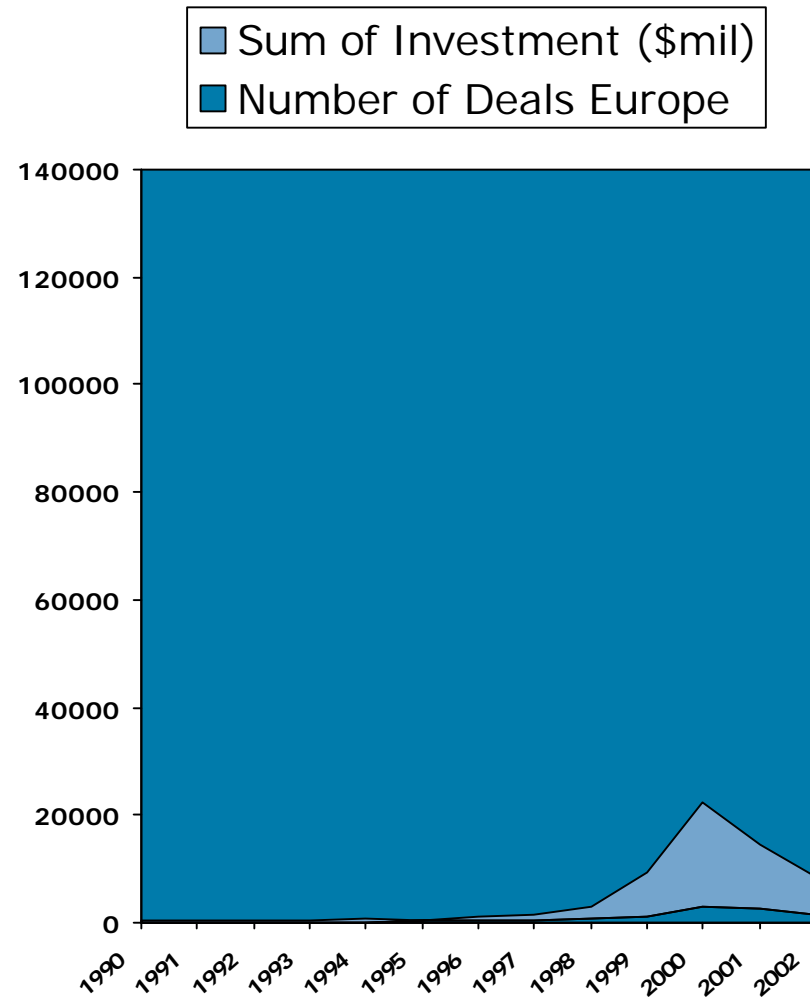
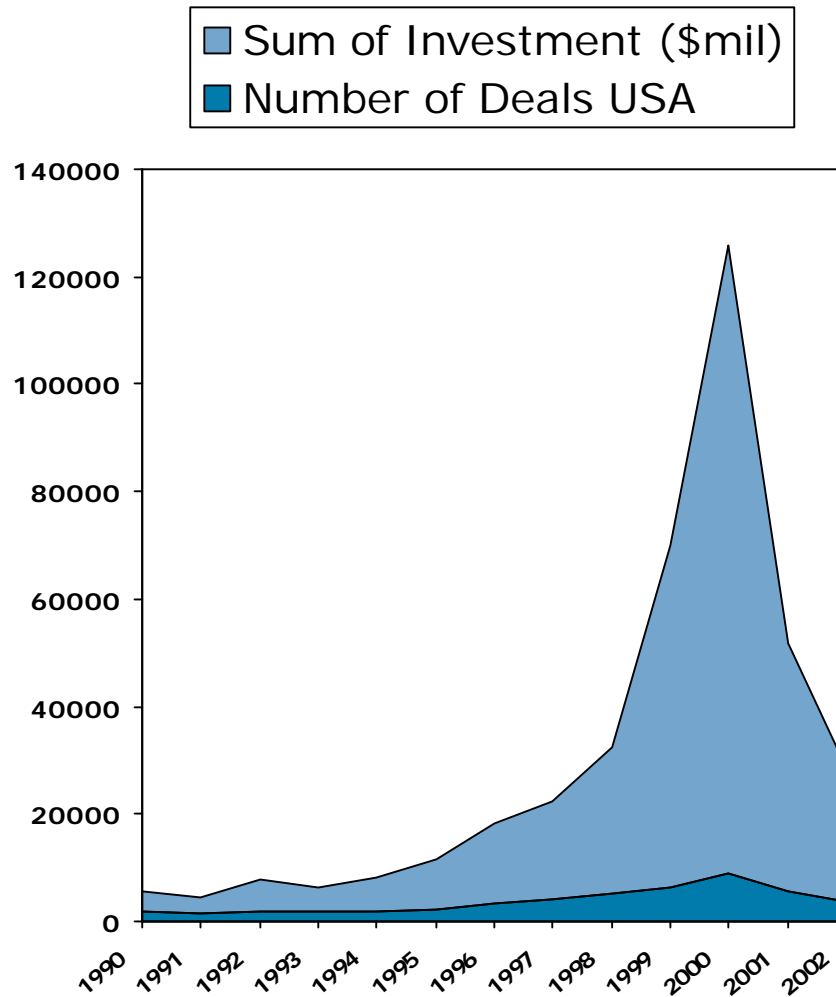


■ USA ■ Europe ■ Asia

■ USA ■ Europe ■ Asia

\*Includes all private equity – both venture capital and management buyouts. Sources: Thomson Financial Venture Economics/NVCA

# Venture Capital Investment 1990-2002



Sources: Thomson Financial Venture Economics/NVCA

# Private Equity Returns

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10 year net return to investors (IRR) 1991 - 2001:

US	17.4%	Europe	16.3%
VC	26.5%	VC	15.7%
Buyout	11%	Buyout	18.2%

(Source: Thomson Financial Venture Economics and NVCA)

# Obstacles to Private Equity Returns

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- ✍ Banking environment
- ✍ Taxation
- ✍ Greater efficiency of market
- ✍ Overhang of money raised
- ✍ Legislation
- ✍ Weak European growth company stock markets

# Private equity is primed for rapid growth

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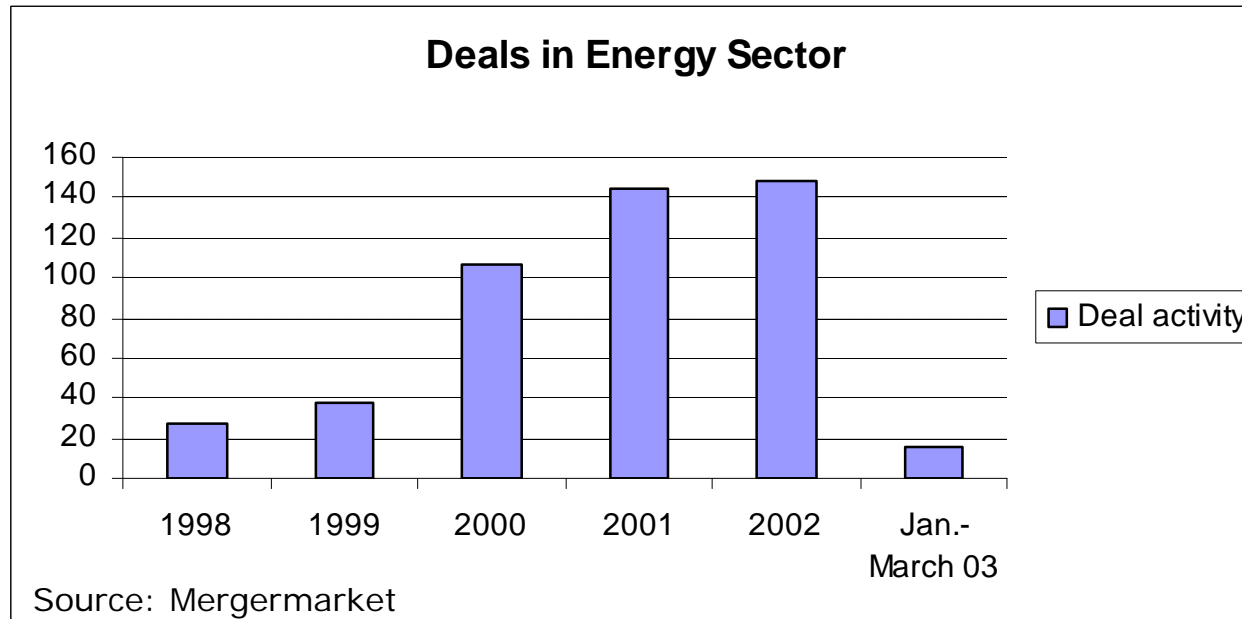
- ✍ Public and private pension funds could well double average allocation to private equity over the next ten years
  - ✍ US → 15%
  - ✍ Europe → 7%
- ✍ Over the past ten years, commitments to private equity rose 15x in the US and 9x in Europe

# Private Equity Trends

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- ✍ Industry specialization and global reach should deliver significant competitive advantage
- ✍ Private equity industry structure is changing – a handful of global firms at one end of the market and hundreds of specialist boutiques at the other.
- ✍ Private equity is now a key investor of corporate restructuring – transaction size continues to grow
- ✍ Top quartile firms should continue to return more than public equities over the long term

# High Levels of Deal Activity



- ✍ Deal activity levels have been high
  - ✍ Transaction value of c. €450bn since 1998
  - ✍ Sustained high number of transactions since January 2001
- ✍ No strong evidence of VC funds and inflow of new funds dedicated to the sector
- ✍ Private equity represent < 5% of sector deal value and 5% of deals made within the sector (24 PE deals with a transaction volume of €15B)

# Renewable Energy Market

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- ✍ The renewable energy market is a fast emerging new sector with an annual turnover of more than €10B in Europe alone
- ✍ EU aims to increase renewable energy share of market from 6% to 12% by 2010
- ✍ Cost of renewable technologies will reduce with experience and scale
- ✍ Renewable technologies are not all the same
  - ✍ Stage of development
  - ✍ Potential cost
  - ✍ Performance characteristics – intermittency
- ✍ Regulations and subsidies are driving renewable technologies and is the highest risk for private equity – not technology risk

# Private Equity Themes exist

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1. Spin out of poorly-fitting subsidiary

## Description of Opportunity

Business units with poor synergy with parent and buying out. Gains from with improved efficiency or access to broader customer base

## Examples

- Meter-reading services
- Operational maintenance

2. Change in energy mix

Businesses / operations set to benefit from shifting energy usage

- CHP
- Gas turbine plants

3. Areas promoted by key drivers

Investment-specific "nodes" within primary, secondary or tertiary value chart where growth is stimulated by specific drivers can provide good investment opportunities

- Efficiency retro-fits
- Emission monitoring services

4. New energy sources

The inherently unregulated value chain, associated with new energy types, provides opportunities in any number of fast-growing sectors

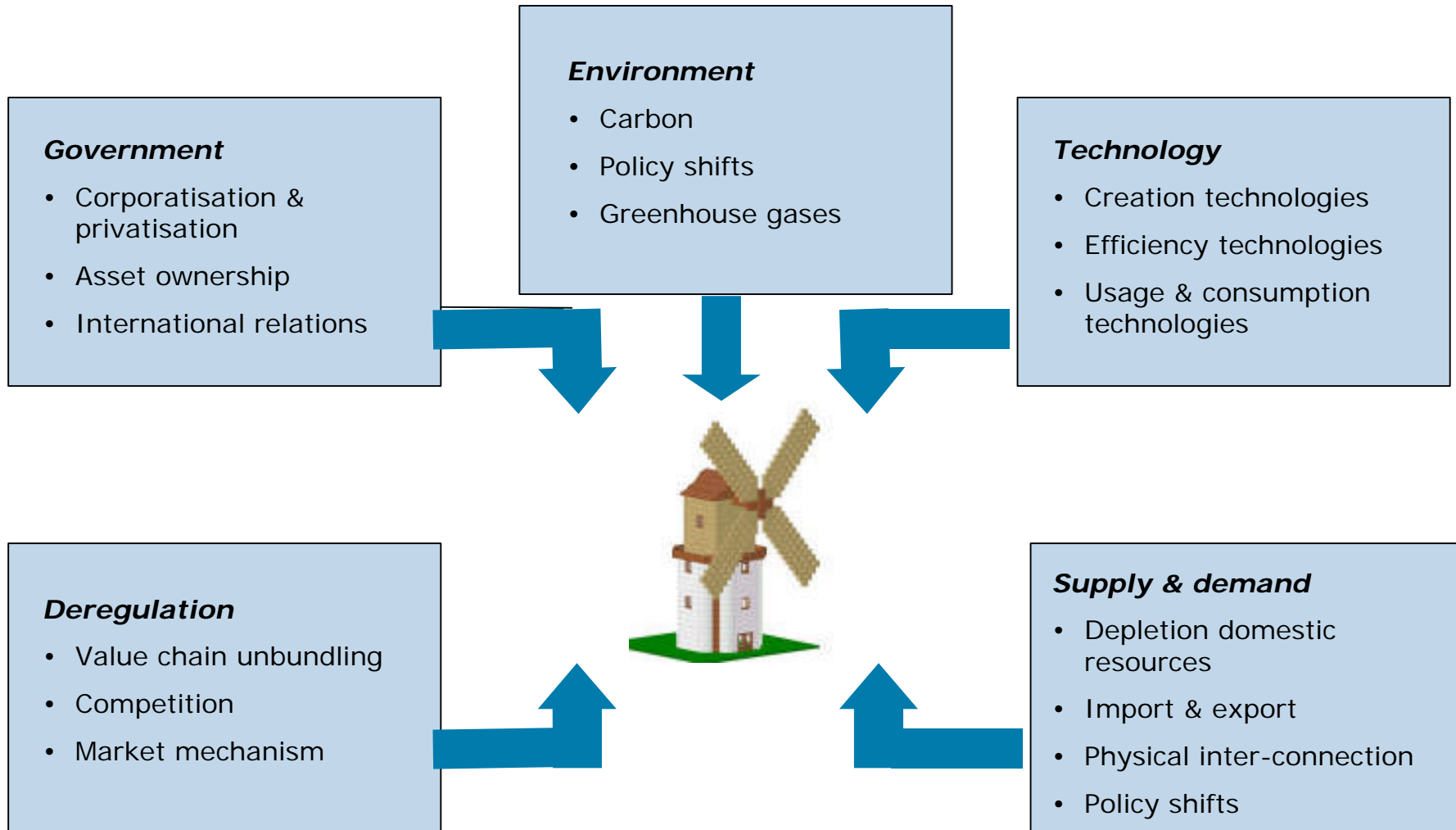
- Wind farms
- Solar cells

5. Cross-medium consolidation

Conducting a roll-up of tertiary value chain service provides across energy types

- Statement printing
- Credit and collection
- High volume processing

# Change Drivers Impact



# Summary Financial and Performance Data for Renewable Sectors

	Current European Market Size (\$m)	Projected CAGR to 2010 (%)	Estimated European 2010 Market Size	Levelized Operating Cost (/mWh)	Capital Cost (\$/mWh)
Wind	4800	10.1%	12600	6	1
Solar	1200	11.9%	3700	5	2
Municipal waste	850	4.0%	1260		
Small hydro	2200	1.9%	2660	3	2
Biomass (electricity)	1300	2.1%	1600	6	2
Landfill gas	450	(4.2%)	293		
Geothermal	480	1.9%	583	7	3
Wave	40	12.4%	125	7	2
Tidal	20	0%	20	11	2
Liquid biofuels	150	0%	150		
Agricultural waste	2	16.1%	12		

- Wind and solar energy present the most interesting opportunities in the renewable energy arena
  - Together represent €6bn market opportunity
  - Projected to grow to reach a size of €16.4bn by 2010
- Wave energy represents one of the newest and fastest growing opportunities
  - While currently a very small market (c.€40m) it is expected to develop into a mainstream renewable energy resource in the coming decade, growing at a CAGR of c.15%

# Summary

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- ✍ Renewable energy companies represent a wide spectrum of deal-making opportunities
  - ✍ Starting from small technology based companies
  - ✍ To large energy companies in financial distress, sale of assets at significant discount or divest non core subsidiaries
  - ✍ Potential of consolidation play or financing could develop the cash constrained company/technology to a market leader
- ✍ APAX considers early and late stage investments in the energy sector

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# A Leading Global Private Equity Firm

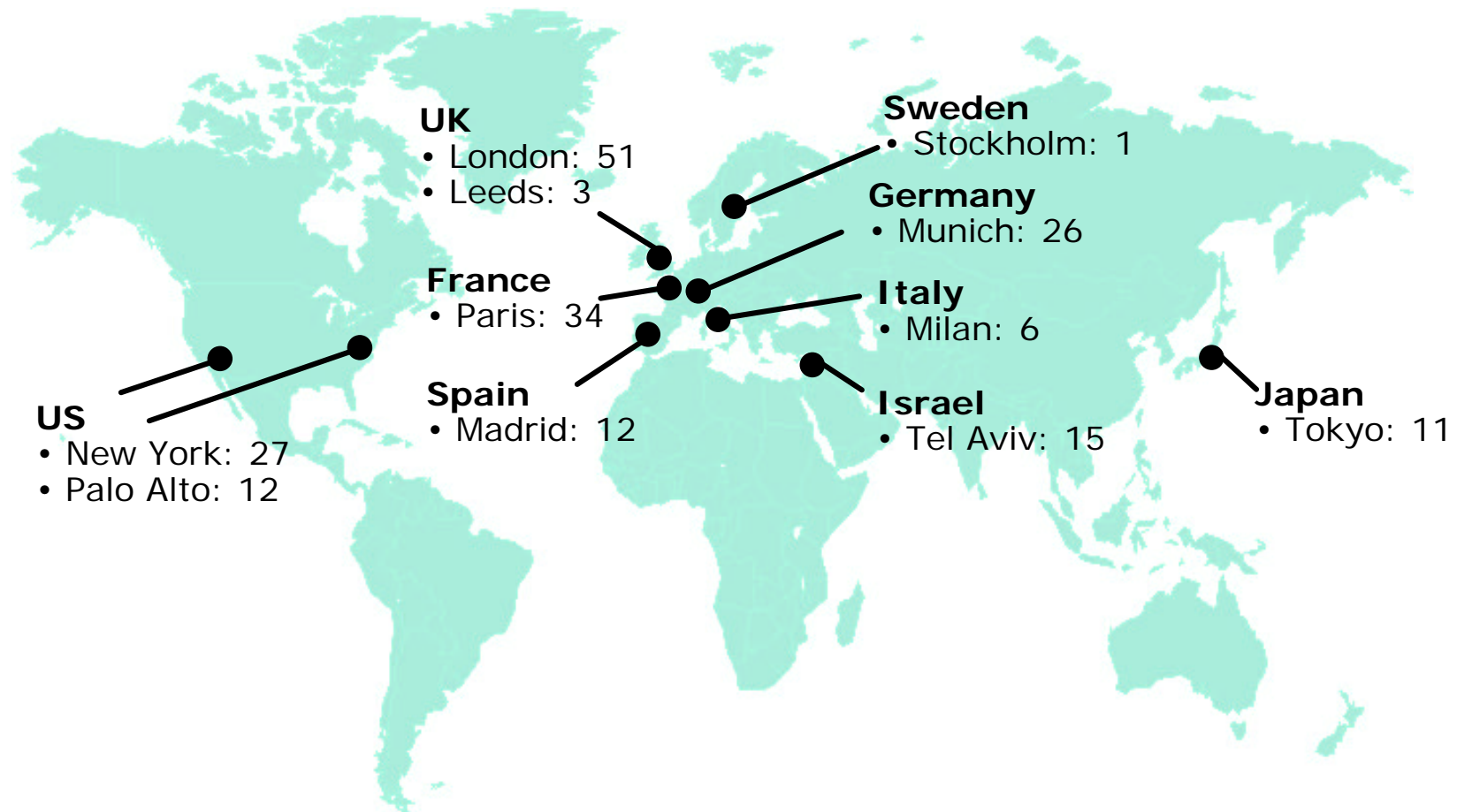
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- 30 years of experience
- Global reach and €12bn under management
- Latest European fund: €4.4bn
- Over 330 portfolio companies
- Very successful track record
- Distinctive investment strategy



An **Apax** chance of success.

# Global Reach



190 investment executives globally in 11 offices