The Massachusetts Financial Services Sector

A Complete Portfolio – Partners in Managing Assets and Fostering Innovation

June 2012

Mass Insight
GLOBAL PARTNERSHIPS

Boston Financial Services
Leadership Council

The Boston Financial Services Leadership Council, formed in 2010, brings together executives from the Boston financial services community with academic partners to advocate for the sector in Massachusetts, to shape relevant state and national policy, and to establish regional and global partnerships to support Boston's role as a global finance center.

BOSTON PRIVATE
FINANCIAL HOLDINGS, INC.

NATIXIS
GLOBAL ASSOCIATES

STATE STREET.

Fidelity
INVESTMENTS

Sovereign | Santander

Putnam
INVESTMENTS

pwc

Association Partners

aim
Associated Industries of Massachusetts

THE NEW ENGLAND COUNCIL

The Massachusetts Financial Services Sector Report was produced on behalf of the Boston Financial Services Leadership Council by:

PwC:

PwC provides industry-focused assurance, tax and advisory services to build public trust and enhance value for its clients and their stakeholders. More than 163,000 people within 151 countries across PwC's network share their thinking, expertise and solutions to develop fresh perspectives and practical advice.

Mass Insight Global Partnerships:

Mass Insight creates competitive advantage for Massachusetts' organizations through leadership groups, policy initiatives and partnerships that expand market opportunities. Key Initiatives include:

- **Boston Financial Services Leadership Council.** The Boston Financial Services Leadership Council, formed in 2010, brings together executives from the Boston financial services community with academic partners to advocate for the sector in Massachusetts, to shape relevant state and national policy, and to establish regional and global partnerships to support Boston's role as a global finance center. The CEO-led Council is committed to advocating for national policy reform to improve the effectiveness of retirement savings programs and extend these programs to all Americans.

- **Global Partnerships.** Mass Insight and the council are working with Governor Deval Patrick and his administration to support the Commonwealth trade missions and expand partnerships with other major finance centers including London, Beijing, Shanghai and San Paolo.

- **Advanced Cyber Security Center.** A cross-sector collaboration hosted by the MITRE Corporation to address the most critical and sophisticated cyber security challenges.

Mass Insight Education is a nationally recognized non-profit affiliate which organizes education reform initiatives to raise math and science achievement and turn around failing schools.

A letter from the Chairman of Mass Insight Global Partnerships

In the Fall 2010, Mass Insight and PwC issued our first Financial Services Sector impact report. With new data for 2011, we are pleased to report continued progress for this critical sector in Massachusetts.

Massachusetts financial services firms are a key pillar of the state's economy. Indeed, the financial services sector is the top contributor to Gross State Product (GSP) of the five most clearly defined sectors and a major provider of jobs, tax revenue, and financing for business growth. Since our initial publication of this report in 2010 Financial Services GSP has increased from $35.5 billion to $40.7 billion.

Mass Finance—our shorthand for the full range of businesses in financial services—represents a remarkable portfolio:

From community banks lending to small businesses…to venture capital and private equity funding the innovations in life sciences and technology…to global asset managers, mutual funds and insurance companies investing money and managing risk for businesses, institutions and individuals, in the region and around the world.

The opportunity for growth lies in helping to solve national—and global—retirement savings and risk management challenges as people live longer and need more savings and better investment choices—and institutions, businesses and government need more sophisticated ways to manage risk. The Boston Financial Services Leadership Council's CEOs and executives are committed to new national policies to expand access to retirement savings in the U.S. and to helping emerging countries like China build their own version of retirement and risk management systems. In doing so, Massachusetts firms will create the opportunities to grow our talent, our products, and our track record to compete for the management of these expanding national and global savings.

This economic impact report developed with the assistance of PwC attests to the strength of Mass Finance, which supports close to 170,000 direct jobs, including a leading share of middle-income, middle-class positions in our companies.

- Boston and the state's financial services sector, which was the founder of venture capital and mutual funds, continues to be a national leader in these areas, as well as in asset management and insurance, and a surprising and growing competitor with Connecticut in hedge funds.

- Mass Finance is the region's window on the world. Along with our universities and teaching hospitals and our reputation for innovation, the sector is our most significant global network as our firms are hired by China and other countries to manage their new assets.

Finally, it's important to note the exceptional civic leadership role that Boston's financial services firms and executives play. Mass Insight has organized leadership for 20 years. One constant factor has been the participation of financial services executives who, due to the nature of their business supporting communities across all sectors, instinctively understand the importance of civic leadership.

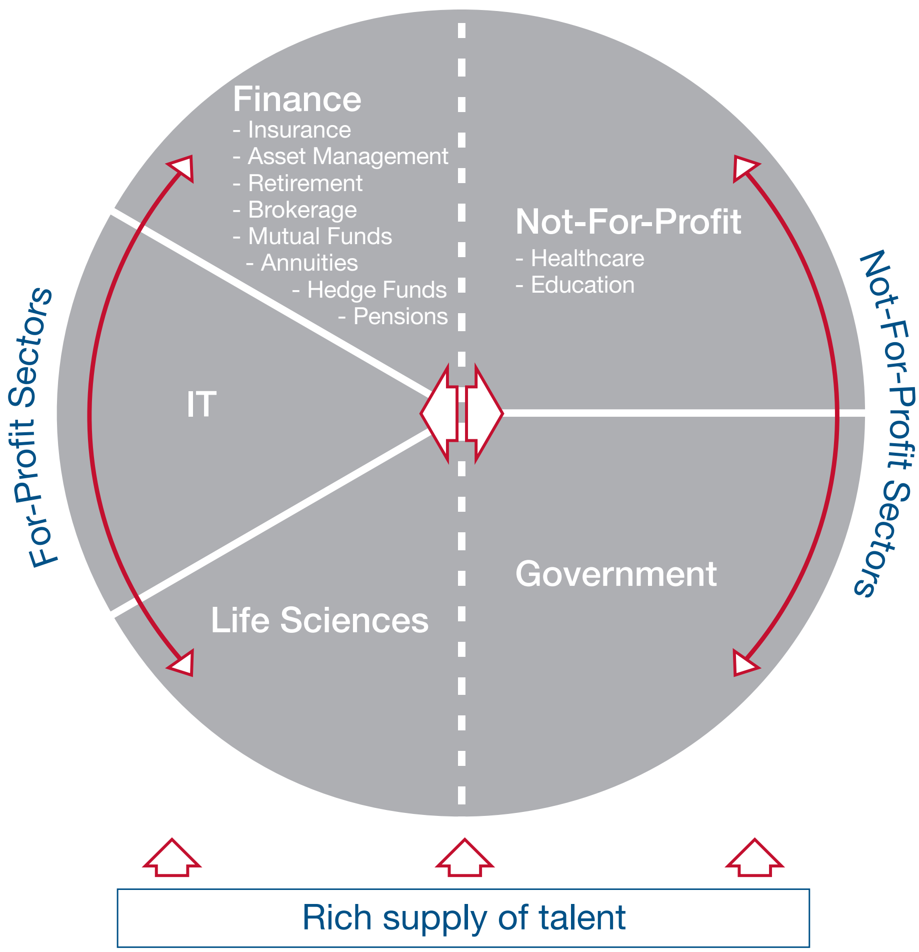
William H. Guenther
Chairman, CEO and Founder
Mass Insight Global Partnerships
June 2012

The Mass Finance Sector: A Complete Portfolio

Finance is a key sector in Massachusetts, creating business value and innovation. It is a critical component of the eco-system in Massachusetts, as it supplies innovating companies (e.g., Life Sciences firms) with needed capital, and provides supporting industries, such as IT, with jobs and opportunities.

The breadth and proximity of the businesses comprising the Mass finance sector buffer the state and the economy from changes in market dynamics. Supporting industries and a rich supply of talent both foster growth of the sector and are sustained by it.

A Diverse & Balanced Economy



The Mass Finance Sector:
A cornerstone of our economy

- 170,000 jobs—5.3% of total state employment
- $40.7 billion in Gross State Product (GSP)—10% of the state's total output
- Top three GSP driver, along with Real Estate and Professional and Technical Services
- Average income of $115,000 per year, which is more than double the state average

Mass Finance is a for-profit employment leader and perform better than our competitors and the U.S. as a whole

Employing approximately 170,000

- Finance is a key industry sector in Massachusetts, accounting for 5.3% of employment.
- Finance forms the backbone of Massachusetts' economy, along with the for-profit industries of IT and Life Sciences, as well as not-for-profit industries, such as Healthcare and Education.
- In addition, industries that directly touch Finance, such as Legal Services, Consulting Services, Computer Systems and Design, and Accounting and Payroll Services represent another 5.4% of employment.

For-Profit:

Industry	Employed	Percent of total MA employment
Finance & Insurance	168,134	5.3%
IT*	144,560	4.6%
Life Sciences**	67,916	2.1%

Not-For-Profit:

Industry	Employed	Percent of total MA employment
Health Care & Social Assistance	527,658	16.5%
Educational Services	340,814	10.7%

* Includes the following: Computer and Electronic Product Manufacturing; Software Publishers; ISPs, Search Portals and Data Processing, and Computer Systems Design and related services.

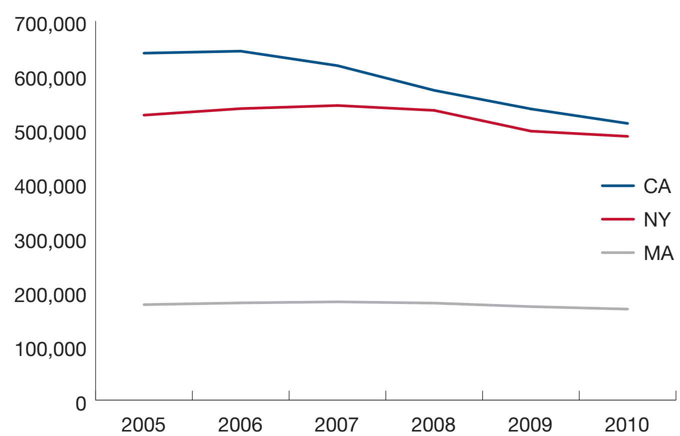
** Includes the following: Pharmaceutical and Medicine Manufacturing, Medical Equipment and Supplies Manufacturing and Scientific R&D services.

Source: Bureau of Labor Statistics, May 2011

Employment Trends: Mass Finance outperformed other states

- While the U.S. Finance industry was hit hard by the recession, Mass Finance employment was relatively stable compared to the country as a whole, and other large domestic Finance markets.
- Finance and Insurance jobs in Massachusetts were down by 2% from 2005 – 2009. Over the same period, Finance and Insurance jobs were down by 5% in New York, down by 16% in California and down by 5% across the U.S. From 2009 to 2010, Mass Finance jobs were down 2.7% compared to down 1.9% for New York, down 5.3% for California and down 1.5% for the U.S.

Finance Employment Trending



Source: Bureau of Labor Statistics, May 2011

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Mass Finance supports more middle income jobs

Wages are above average

The average wages for employees working in the Finance industry in Massachusetts are well above the state average. This results in additional tax revenue for the state, as well as additional disposable income among its citizens that is reinvested in the state.

- In 2011, the average salary for Massachusetts employees across all industries was $55,000.
- The average 2011 wage for Massachusetts employees in the Finance and Insurance industry was $115,000. This represents a 17% increase from the average wage in this industry in 2005.

Source: Bureau of Labor Statistics, May 2011

Finance delivers more middle income jobs than other sectors

- Most of the citizens employed by the Finance industry have middle or high paying jobs. The chart below depicts some representative jobs in Finance and its supporting industries.
- The median wages for these occupations are presented meaning that half of employees with these occupations earn more than the salaries indicated. Additionally, the chart indicates that 75% of employees in these occupations earn in excess of the salaries presented on the right.

Financial services	Median	75%*
Financial Advisors	$85,150	$56,430
Financial Managers	$117,270	$87,020
Securities, Commodities, & financial services sales agents	$89,940	$60,530
Financial Analysts	$79,030	$58,710

Supporting industries	Median	75%*
Management Analysts	$89,730	$67,550
Legal Occupations	$80,750	$52,930
Accountants and Auditors	$71,480	$55,840

* 75% of jobs earn higher than the amount indicated

Source: Bureau of Labor Statistics, May 2011

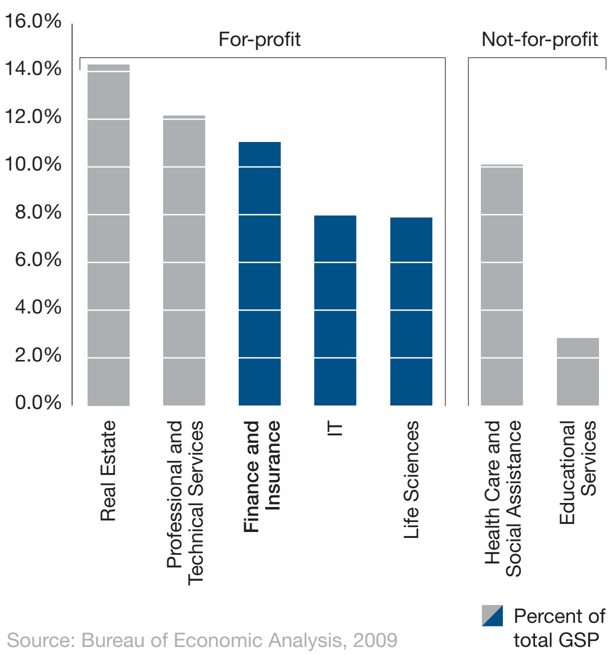
Mass Finance makes the leading contribution to Gross State Product of the five key sectors

The strength of the Mass Finance industry has resulted in revenue for the state

Of the five key industries in Massachusetts (Financial Services, Life Sciences, IT, Healthcare and Education), Finance and Insurance had the largest contribution to GSP in 2009, with 10% of total state output. This is third in the state behind Real Estate and Professional Services (of which a portion supports the Finance industry).

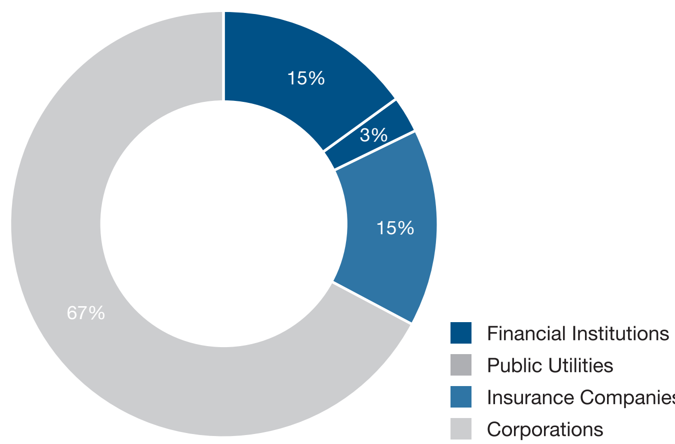
According to the Massachusetts Department of Revenue's FY2010 Annual Report, the Finance industry has contributed approximately 30% of the taxes on Massachusetts businesses to the state over the last five years.

Percent of total Massachusetts GSP in 2009 by Industry



Source: Bureau of Economic Analysis, 2009

Taxes on Massachusetts Business 2006 – 2010 (average)



Source: Massachusetts Department of Revenue, FY2010 Annual Report

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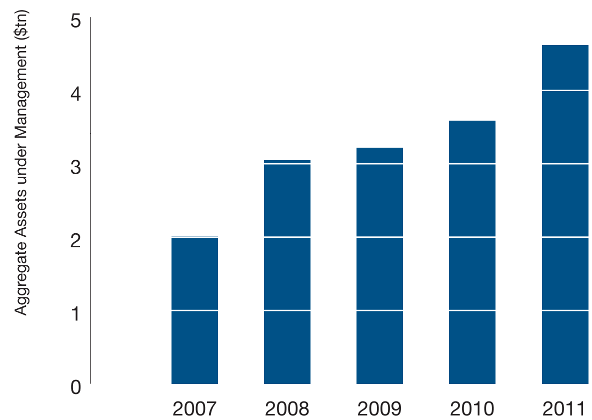
Mass Finance is a window to the global economy—with a New England footprint and a national presence in all key subsectors

Sovereign wealth fund management continues to grow

Massachusetts is among the top Financial Centers in the world, along with the cities indicated on the map below.

As one of these top financial centers, with significant asset management capabilities, Massachusetts is well positioned to manage the assets of foreign investors through vehicles such as Sovereign Wealth Funds, which continue to experience growth. From 2010 to 2011 alone, Sovereign Wealth Fund assets rose 28% from $3.6 trillion to $4.6 trillion. Massachusetts firms are well positioned to take advantage of this development.

Growth in Aggregate Sovereign Wealth Fund Assets under Management: 2007–2011

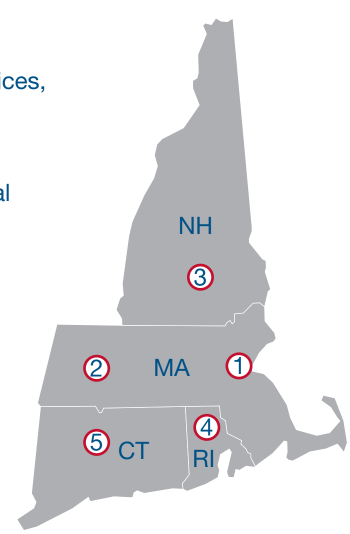


Source: Preqin, 2011

Finance footprint in New England

Mass Finance creates jobs in areas across the state and New England…where talent is plentiful and costs are competitive. In addition to their headquarters, several key operations for Finance companies are located in the region. Some examples follow:

1. **Greater Boston Area:**
   JP Morgan, State Street,
   Brown Brothers Harriman,
   Boston Data Financial Services,
   Fidelity Investments
2. **Western Mass:**
   Liberty Mutual, Mass Mutual
3. **Southern NH:**
   Fidelity Investments
   Liberty Mutual
4. **Rhode Island:**
   Fidelity Investments
5. **Hartford, CT:**
   The Hartford, Travelers



Mass Finance:
A retirement savings leader

While Massachusetts has long been the mutual fund capital and its birth place, it has also become a leader in managing retirement assets and alternative funds, and in servicing these products.

Boston is home to 3 of the top 10 retirement money managers, making it the number one cluster of market leaders

- Boston is home to 3 of the top 10 defined benefit/defined contribution money managers, per Pensions and Investments.
- In addition, Massachusetts is home to the top firm in Recordkeeping for Retirement Assets with $838B in assets and over 14 million participants. The next highest firm recordkeeps $300B in assets with 3 million participants, according to Pensions and Investments.

Top 10 Defined Benefit/Defined Contribution Money Managers

Company name	Defined Benefit AUM	Defined Contribution AUM	Total	Location
1. BlackRock Inc.	$421,951	$275,789	$697,740	NY
2. State Street Global Advisors	$394,929	$155,593	$550,522	MA
3. Fidelity Investments	$40,405	$452,432	$492,837	MA
4. TIAA-CREF		$372,285	$372,285	NY
5. Vanguard Group Inc.	$18,434	$320,083	$338,517	PA
6. Northern Trust Global Investments	$275,290	$36,753	$312,043	IL
7. Pacific Investment Management Co. LLC	$160,439	$131,416	$291,855	CA
8. BNY Mellon Asset Management*	$196,425	$58,503	$254,928	MA
9. Prudential Financial	$107,836	$127,880	$235,716	NJ
10. Capital Research & Management Co.		$215,945	$215,945	CA

All dollar values are in $ millions

* BNY Mellon's asset management is based in Boston, while its headquarters is in New York

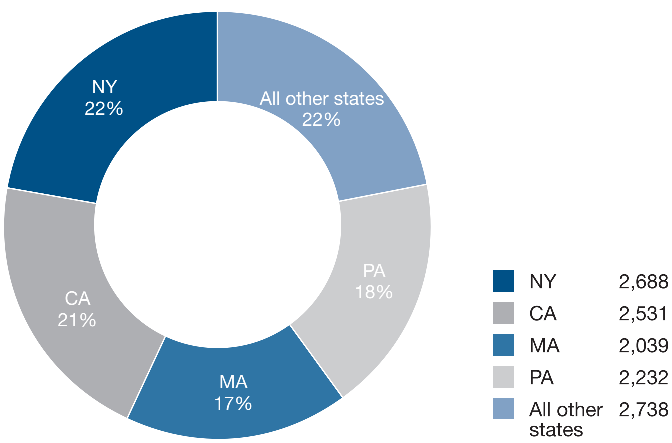
Source: Pensions and Investments

Mass Finance remains a mutual fund leader and is a major player in new products

Mass Finance, the home of the mutual fund, remains a national leader

- Of the total mutual fund assets under management in the U.S., Massachusetts accounts for 17% of assets under management, making the state a mutual fund leader with NY, PA and CA.

2011 Mutual Fund AUM ($b)

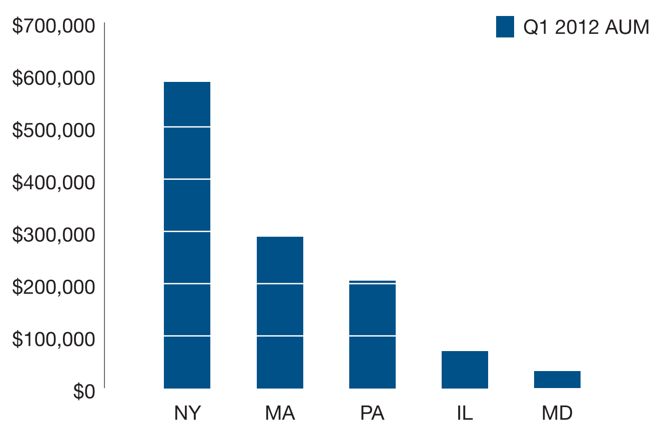


Source: Strategic Insight/Simfund, April 2012

Massachusetts is also a market leader in ETFs, a next generation mutual fund product

- The fastest growing segment in the mutual fund industry is in exchange traded funds. Massachusetts is also at the forefront of the industry with respect to these products, with 24% of total assets under management.
- In addition, absolute return funds that offer a target percentage return with less projected volatility represent a new product that has gained market share with Massachusetts firms as pioneers. Lifecycle funds are also quickly becoming the largest share of workplace savings plans, led by Fidelity Investments, among others.

2012 Top Five ETF AUM ($mm)



Source: Strategic Insight/Simfund, June 2012

Mass Finance is a national leader for private equity funds…and now competes with Connecticut as a hedge fund location

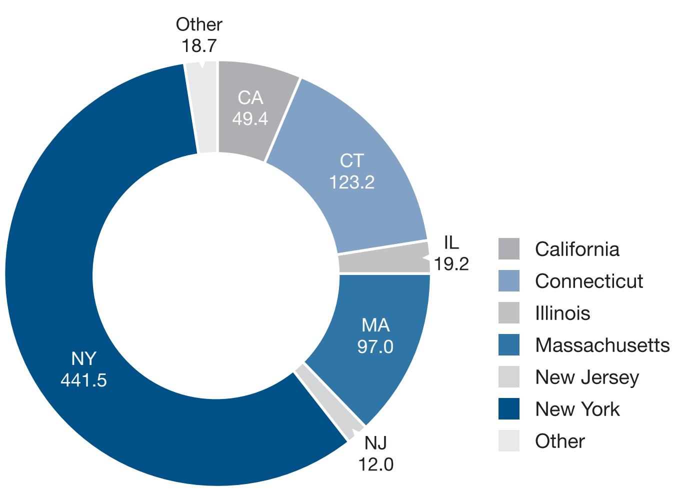
Hedge funds

- Massachusetts is home to 7 of the top 50 hedge fund managers in the U.S. ranked by assets under management. Chicago's Citadel has opened a Boston office to tap into the city's talent. Since January 2010, the assets under management for these firms rose 23% to $97 billion. Top hedge fund managers include:

MA Hedge Fund Managers in Top 50

- Baupost Group
- Wellington Management
- Bain Capital
- Highfields Capital Management
- Grantham, Mayo, Van Otterloo
- Adage Capital Management
- Convexity Capital Management

2012 Top 50 Hedge Funds AUM ($b) by Location

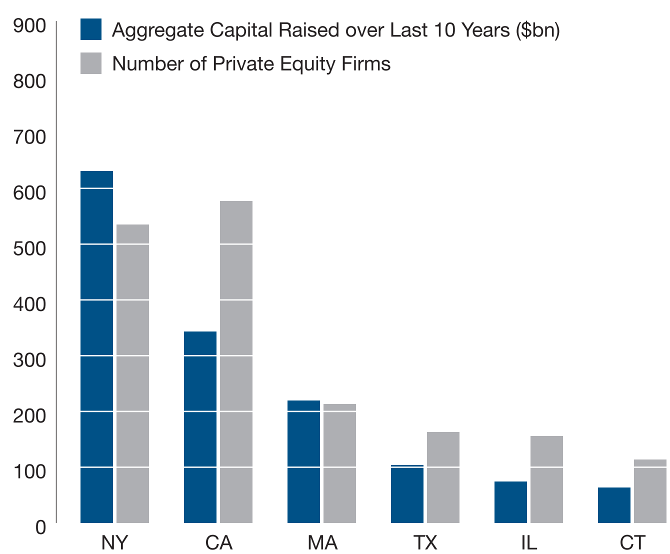


Source: Absolute Return, March 2012

Private equity

- Massachusetts is home to 213 private equity firms, which is third behind NY and CA. Massachusetts is also third in aggregate capital raised over the last 10 years, with $219 billion.
- Massachusetts is home to 2 of the top 10 private equity firms in terms of total funds raised over the last 10 years, including Bain Capital (7) and Harbourvest Partners (10).

Number and Aggregate Capital Raised by U.S.-Based Private Equity Firms by State



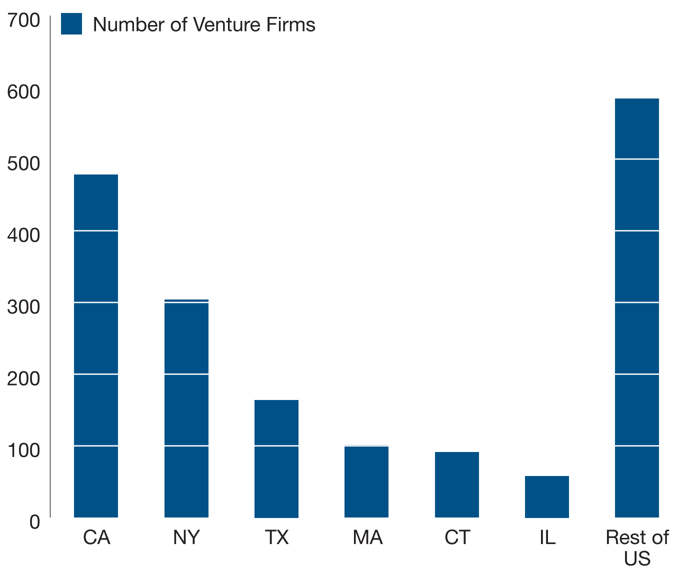
Source: Preqin, 2010

Massachusetts is a national leader for business-building venture capital

Venture Capital

Massachusetts is home to 101 Venture Capital firms, which is 4th in the U.S., behind CA, NY and TX.

Number of U.S.-Based Venture Firms by State



Source: Preqin, 2010

Venture Capital – the Finance Sector funds the industries of the future

The capital raised from these activities is put to use by New England-based companies across a variety of industries, such as Biotechnology, IT and Life Sciences. Of the $29 billion invested by the VC sector in 2011, $3.1 billion, or 11%, was invested in New England-based firms. The amount invested in New England rose 45% to $3.2 billion from 2009 to 2011.

2011 VC Investments	Amount
Total Invested in U.S.	$29,119,041,600
Total Invested in New England	$3,248,030,900
– Biotechnology	$1,127,738,600
– Software	$505,902,500
– Medical Devices & Equipment	$308,283,400
– Industrial/Energy	$404,750,000
– IT Services	$245,853,500
– All Others	$655,502,900
Total % of U.S. invested in New England	**11%**

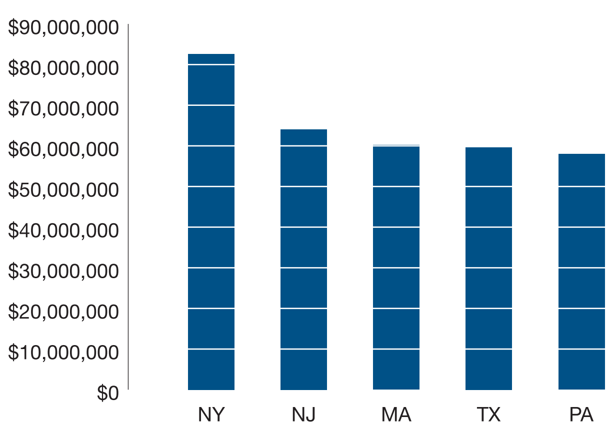
Source: The MoneyTreeTM Report from PricewaterhouseCoopers and the National Venture Capital Association based on data provided by Thomson Reuters

Mass Finance:
A competitive banking sector

Massachusetts has a competitive banking sector with two of the nation's largest banks in the region, and is an industry leader in "savings banks".

- State Street is the largest bank headquarters in Massachusetts followed by Boston Private Bank which focuses on wealth management, a major Massachusetts brand.
- Massachusetts is a leader in the U.S. with respect to "savings banks", with over $60 billion in total deposits. The top savings banks in Massachusetts include:
  - Eastern Bank
  - Middlesex Savings Bank
  - Berkshire Bank
  - Brookline Bank

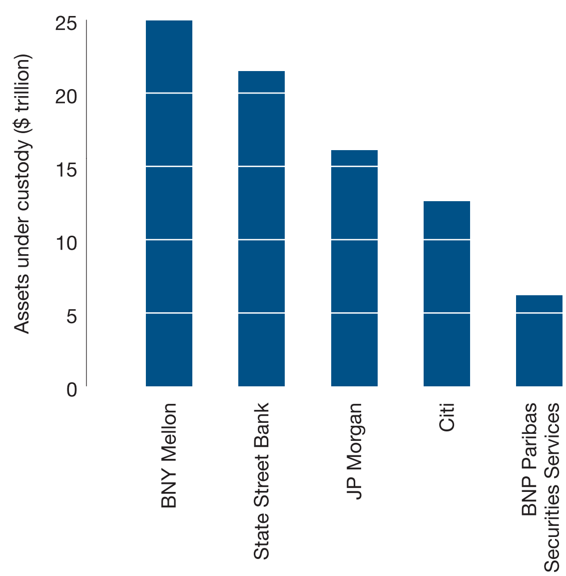
Total Deposits in Savings Banks by State 2010 Q2



Source: SNL Financial, 2011

- As the largest custodian in the world, BNY Mellon has approximately $26.3 trillion in assets under custody and administration. Additionally, State Street Bank has approximately $16.8 trillion in assets under custody and administration, and Brown Brothers Harriman has close to $3.1 trillion in custody assets under management, making Massachusetts a leader in custody and administration services (per company websites)

Top US custodians



Source: 2010 Annual Reports

Mass Finance:
A strong presence in insurance

Massachusetts also has a strong presence in the insurance sector. As sponsors of asset management products (e.g. mutual funds, retirement vehicles) the sector further strengthens the Finance "ecosystem" in Massachusetts.

Massachusetts is home to top 10 insurers in each of the Property & Casualty and Life sectors, including Liberty Mutual Insurance Group, the overall second largest Property & Casualty insurer in the U.S. as well as John Hancock, the seventh largest U.S. Life, Accident and Health Insurer.

Top U.S. Property & Casualty Insurers

Company name	Net Premiums Written ($m)	US Market Share %	Location
1. State Farm Mutl Automobile Ins.	52,594	10.5%	IL
2. Liberty Mutual	**26,659**	**5.3%**	**MA**
3. Allstate Corp.	26,437	5.3%	IL
4. American International Group	25,324	5.0%	NY
5. Travelers Companies Inc.	22,207	4.4%	MN
6. Berkshire Hathaway Inc.	17,957	3.6%	NE
7. Farmers Insurance Group of Cos.	17,621	3.5%	CA
8. Nationwide Mutual Group	16,241	3.2%	OH
9. Progressive Corp.	15,335	3.1%	OH
10. USAA Insurance Group	12,126	2.4%	TX
24. Hanover Insurance Group Inc.	**3,487**	**0.7%**	**MA**

Source: SNL Financial, 2011

Top U.S. Life, Accident & Health Insurers

Company name	Net Total Assets ($m)	US Market Share %	Location
1. MetLife Inc.	612,346	21.0%	NY
2. Prudential Financial Inc.	423,905	8.1%	NJ
3. New York Life Insurance Group	228,318	4.2%	NY
4. ING Groep N.V.	181,669	3.9%	PA
5. Jackson National Life Group	108,222	3.6%	MI
6. American International Group	233,885	3.6%	NY
7. Manulife Financial Corp.	**243,306**	**3.5%**	**MA**
8. Lincoln National Corp.	176,676	3.5%	PA
9. AEGON NV	180,218	3.4%	IA
10. Principal Financial Group Inc.	121,456	2.8%	IA
11. Massachusetts Mutl Life Ins Co	**148,662**	**2.5%**	**MA**
26. Sun Life Financial Inc.	**63,754**	**0.9%**	**MA**
47. FMR LLC	**18,495**	**0.3%**	**MA**

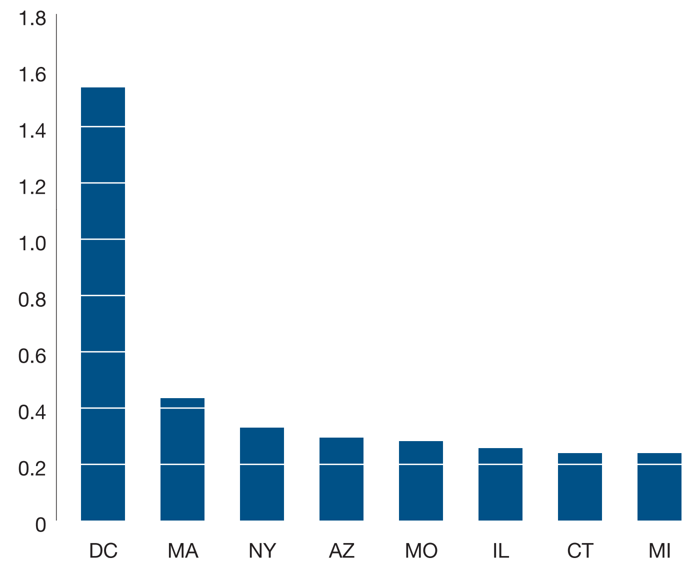
Source: SNL Financial, 2011

Education: Cultivating and retaining top talent for Mass Finance

The Finance sector in Massachusetts has long had connections to academia and has employed and cultivated the top talent in finance along with the strong universities in the region.

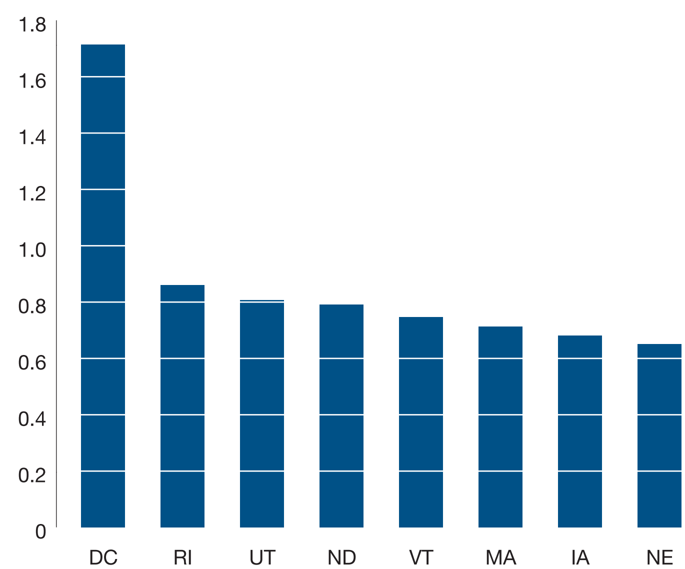
- Massachusetts has been able to supply top talent to the Finance sector and is a critical piece of the "ecosystem", as the state's residents are among the most educated in the country.
- Massachusetts is home to the country's top graduate business schools including:
  - Harvard University
  - Massachusetts Institute of Technology
  - Babson College
  - Bentley University
  - Boston College
  - Boston University
  - Brandeis University
  - Northeastern University
  - University of Massachusetts

Masters Degrees Awarded (per capita) by State



Source: U.S. Department of Education, 2010

Bachelors Degrees Awarded (per capita) by State



Source: U.S. Department of Education, 2010

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