

Making Sense of the Services Offshoring Numbers

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History of This Research

- Bardhan, Kroll and Jaffee, “Growing Role of Foreign Trade in California’s Economy,” 1995.
- Kroll et al, Foreign Trade and California’s Economic Growth (monograph and 7 working papers) 1997.
- Bardhan, Jaffee and Kroll, Globalization and a High-Tech Economy, Kluwer Academic Press, 2003.
- Bardhan and Kroll, “The New Wave of Outsourcing” October 2003.
- Ongoing research, Grant to Jaffee, Kroll and Bardhan from the California Policy Research Center, 2004-2005.

An Agenda for Understanding Offshoring

- Outsourcing vs Offshoring—confusion and comprehension
- Defining At-Risk Occupations--Some basic numbers
- What “At-Risk” means for a state or metro area
- Policy and Research Issues

Outsourcing VS Offshoring

What Are We Talking About Here?

	Domestic Production	Foreign Production
Within-firm	Domestic Branch	Offshore Branch/ Subsidiary
Between Firms	Domestic Outsourcing	Offshore Outsourcing

Two Types of Offshoring

Manufacturing

- **Blue-collar jobs**
- **By industry**
- **Similar and contiguous skills, occupations**
- **Wage and production networks driven**
- **Increases in services employment**
- **Increased Inequality between Blue and White Collar occupations**
- **High capital investment; logistically, structurally complex**

Services

- **White-collar jobs**
- **Across industries.**
- **Dissimilar, unrelated skills and occupations**
- **Driven by wages, English language, Institutional adaptability and compatibility**
- **Reshuffling within services**
- **Increased Inequality within White Collar occupations?**
- **Low capital requirements; logistically simpler**

Source: Modified from Bardhan and Kroll (2003) and various later presentations.

Identifying the Newly “Tradable” Occupations

- No face-to-face customer service requirement
- Information the major component of the “product”
- Work via remote communications: telecommunications and Internet
- Low set-up barriers
- High wage differentials
- Low social networking requirement

Services Occupations At-Risk to Offshoring/Outsourcing

(Revised Definition, 9/2004)

- Office Support
 - 22 subcategories of 43-0000, Office and administrative support occupations
- Business & Financial Support
 - 10 subcategories of 13-0000, Business and financial operations occupations
- Computer and Math
 - All 14 subcategories of 15-0000
- Other
 - Medical (2 codes)
 - Legal (1 code)
 - Sales (1 code)
 - Graphics and Design (4 codes)
 - Writing, Translating (2 codes)

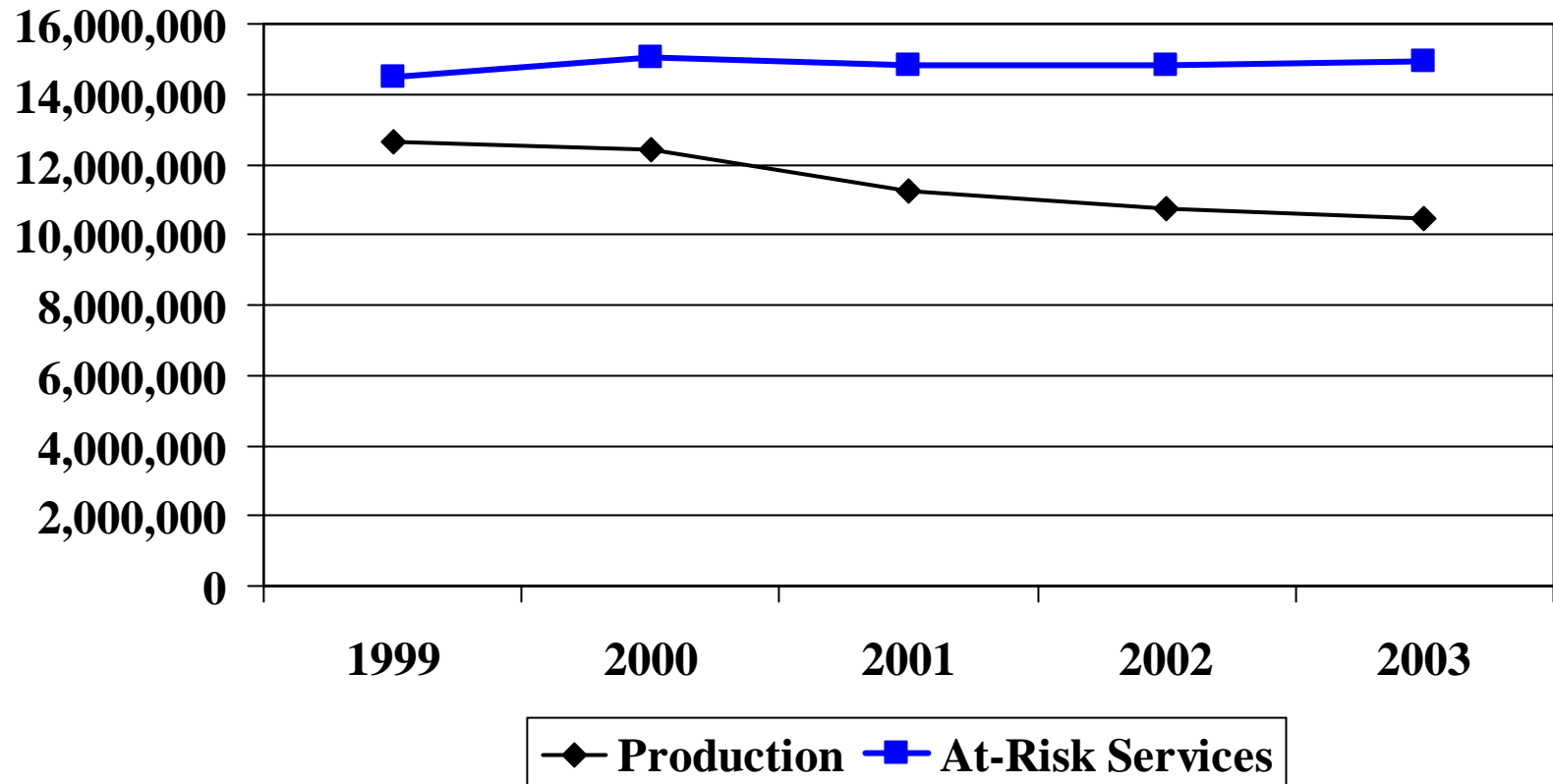
Source: Fisher Center for Real Estate and Urban Economics

Trends in At-Risk Occupations Vary Widely

Occupation	Emp 2000	Emp 2003	% Change
All At-Risk	15046610 11.6%	14940821 11.7%	-0.7% [All US: -1.7%; Prod'n: -15.4%; Other (than Prod/ Serv At-Risk): - 0.2%]
Programmers	530730	431640	-18.7%
Med Transcr.	97330	97810	0.5%
Telemarketer	461890	404150	-12.5%
Account/Audit	863320	924640	7.1%
Comp Eng/Sys	264610	285760	8.0%
Drafters	92610	97800	5.6%

Source: Kroll from BLS OES data.

Employment Trends in Production and At-Risk Services Occupations



Source: Kroll from Bureau of Labor Statistics OES data.

Questions for States and Metro Areas

- Different occupations are now “traded”—will this have uneven impacts on geographic areas?
- Will the vulnerable geographic areas also be those with opportunities?
- Does the policy framework meet regional needs?

State At-Risk Shares 2003— Top 5/Bottom 5

- Highest At-Risk Shares

- Delaware 14.5%
- Virginia 13.9%
- Connecticut 13.7%
- Colorado 13.2%
- New Jersey 12.9%

- Lowest At-Risk Shares

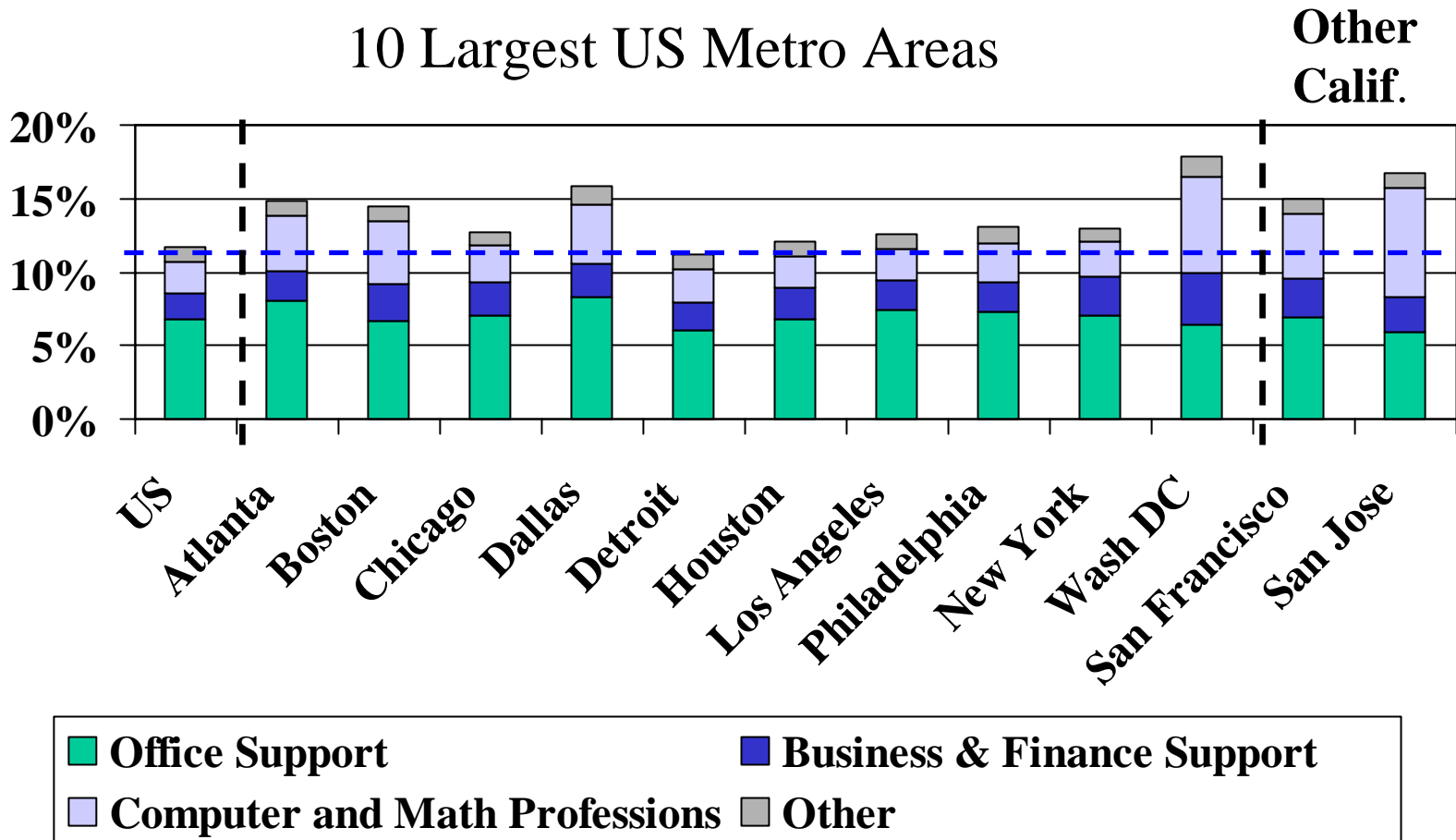
- Montana 8.4%
- Arkansas 8.3%
- Louisiana 8.2%
- Mississippi 7.9%
- Wyoming 6.7%

TAA/NAFTA Certifications by State SICs 357, 367 and 73+87, 2003-2004(Q1)

States with Largest Shares of Employees		
357	367	73 + 87
South Dakota 26%	Texas 12%	California 24%
Texas 20%	Massachusetts 8%	New York 24%
N. Carolina 10%	Pennsylvania 8%	Tennessee 18%
Kentucky 9%	California 7%	N. Carolina 16%
Virginia 7%	N. Carolina 10%	Texas 10%
Top 5: 72%	Top 5: 43%	Top 5: 92%
19 States	32 States	9 States

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Source: FCREUE from publiccitizen.com data bases.

Percent of Total Jobs in Tradable Services Occupations: US MSAs



Source: FCREUE from Bureau of Labor Statistics data.

Metro Areas with the Highest Shares Employed in At-Risk Occupations

Metropolitan Area	Total Emp	Share At-Risk
Stamford-Norwalk, CT PMSA	200220	18.58%
Sioux Falls, SD MSA	112290	17.96%
Washington, DC-MD-VA-WV PMSA*	2694130	17.80%
Des Moines, IA MSA*	280360	17.02%
San Jose, CA PMSA	877640	16.67%
Hartford, CT MSA*	597390	16.39%
Seattle-Bellevue-Everett, WA PMSA	1298550	16.34%
Tallahassee, FL MSA*	157020	16.32%
Bloomington-Normal, IL MSA	78530	15.85%
Austin-San Marcos, TX MSA*	651670	15.83%
Dallas, TX PMSA	1890340	15.79%
Denver, CO PMSA*	1136190	15.66%
Jacksonville, FL MSA	536190	15.65%
Colorado Springs, CO MSA	232660	15.61%
Jersey City, NJ PMSA	241520	15.59%
Boulder-Longmont, CO PMSA	154950	15.50%
Middlesex-Som.-Hunt. NJ PMSA	624420	15.37%
Omaha, NE-IA MSA	409760	15.35%
San Francisco, CA PMSA	975850	15.11%

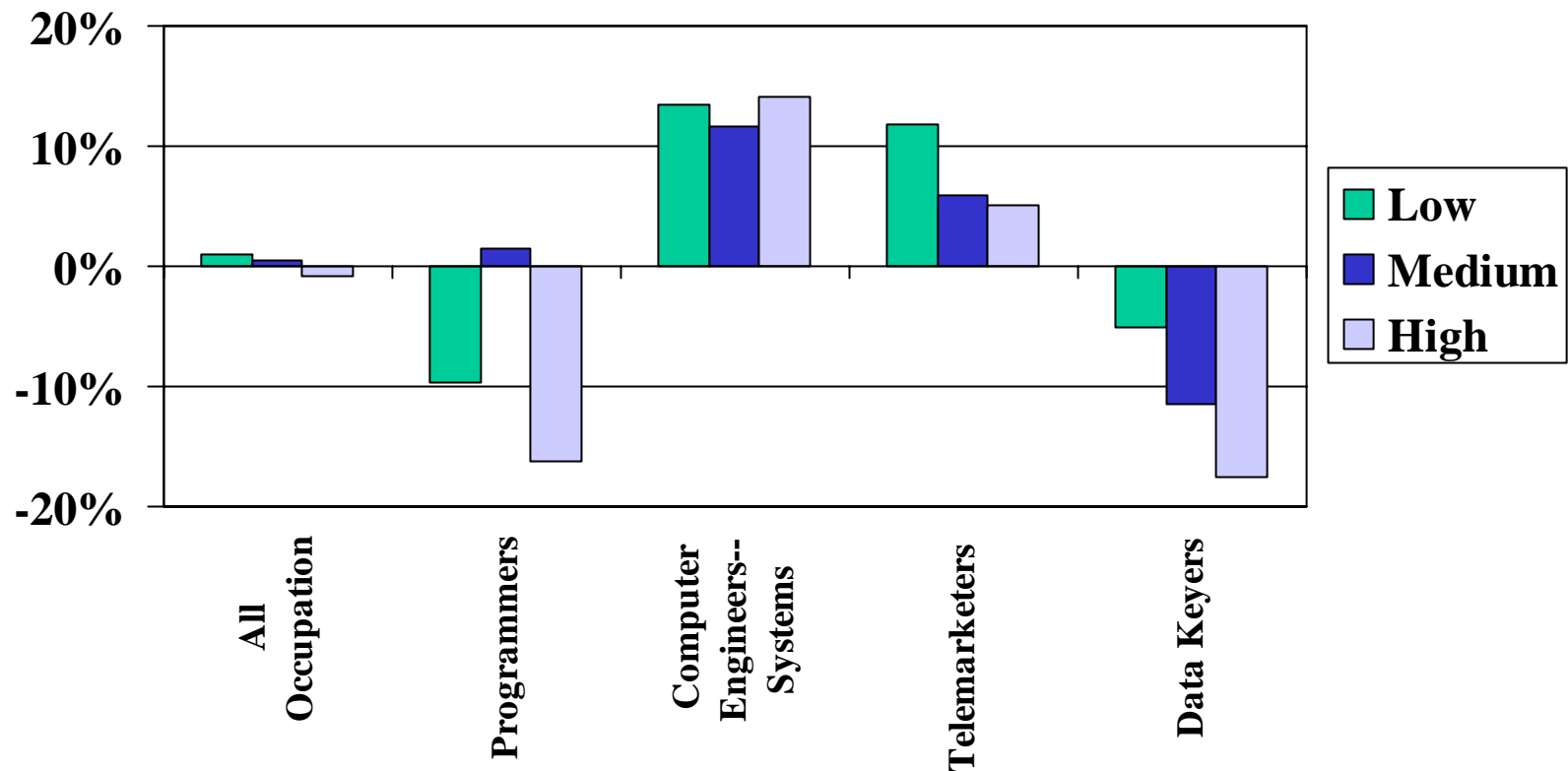
* Includes capitol city.

Educational Attainment and Wage Levels for MSAs with Low, Middle and High Shares of At-Risk White-Collar Jobs



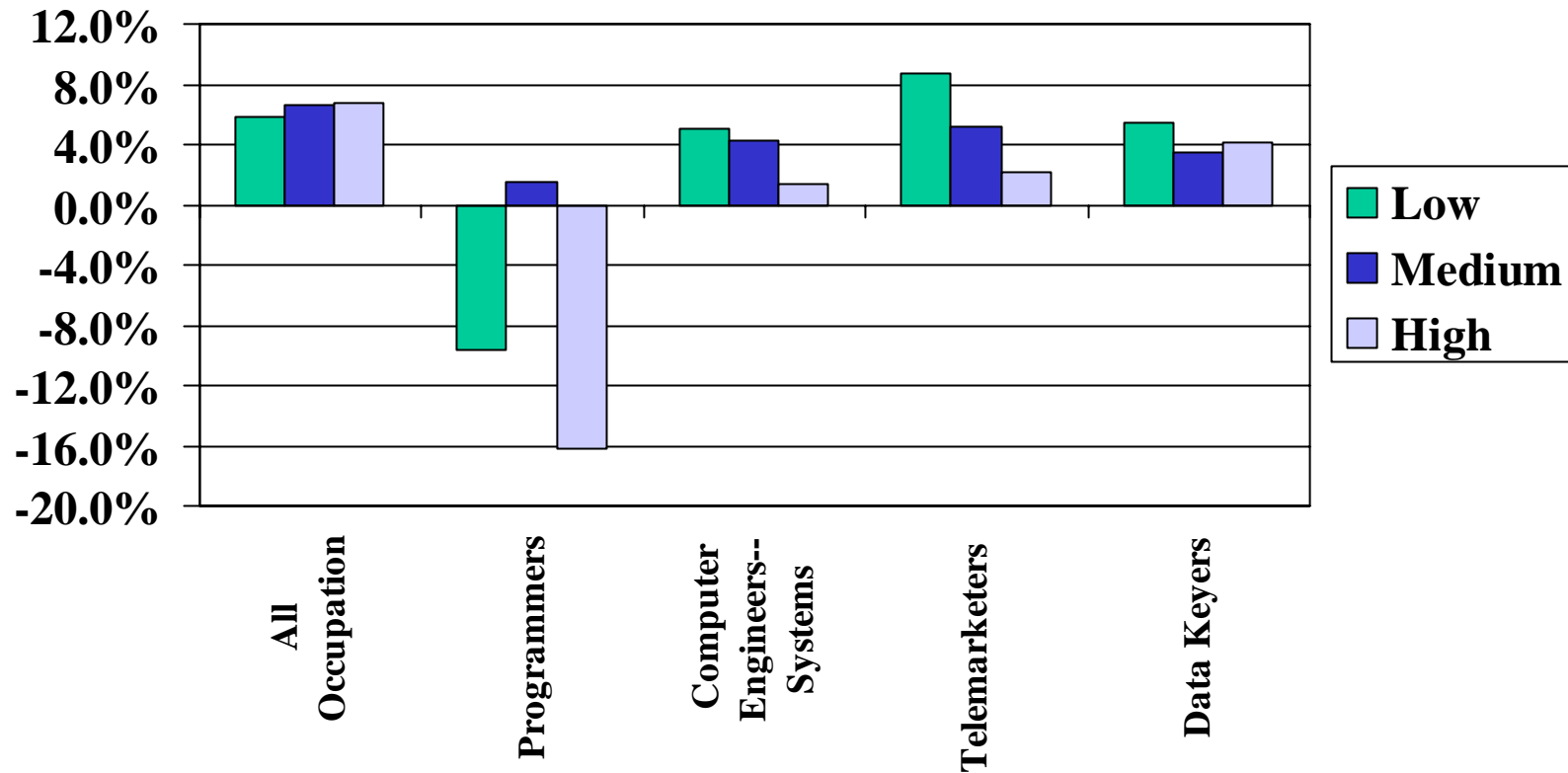
Source: Speaker, using data from the US Bureau of the Census, Bureau of Labor Statistics OES files, and risk indices defined by FCREUE.

Differences in Employment Growth, MSAs with Low, Medium and High Shares of White-Collar At-Risk Jobs, 2001-2003



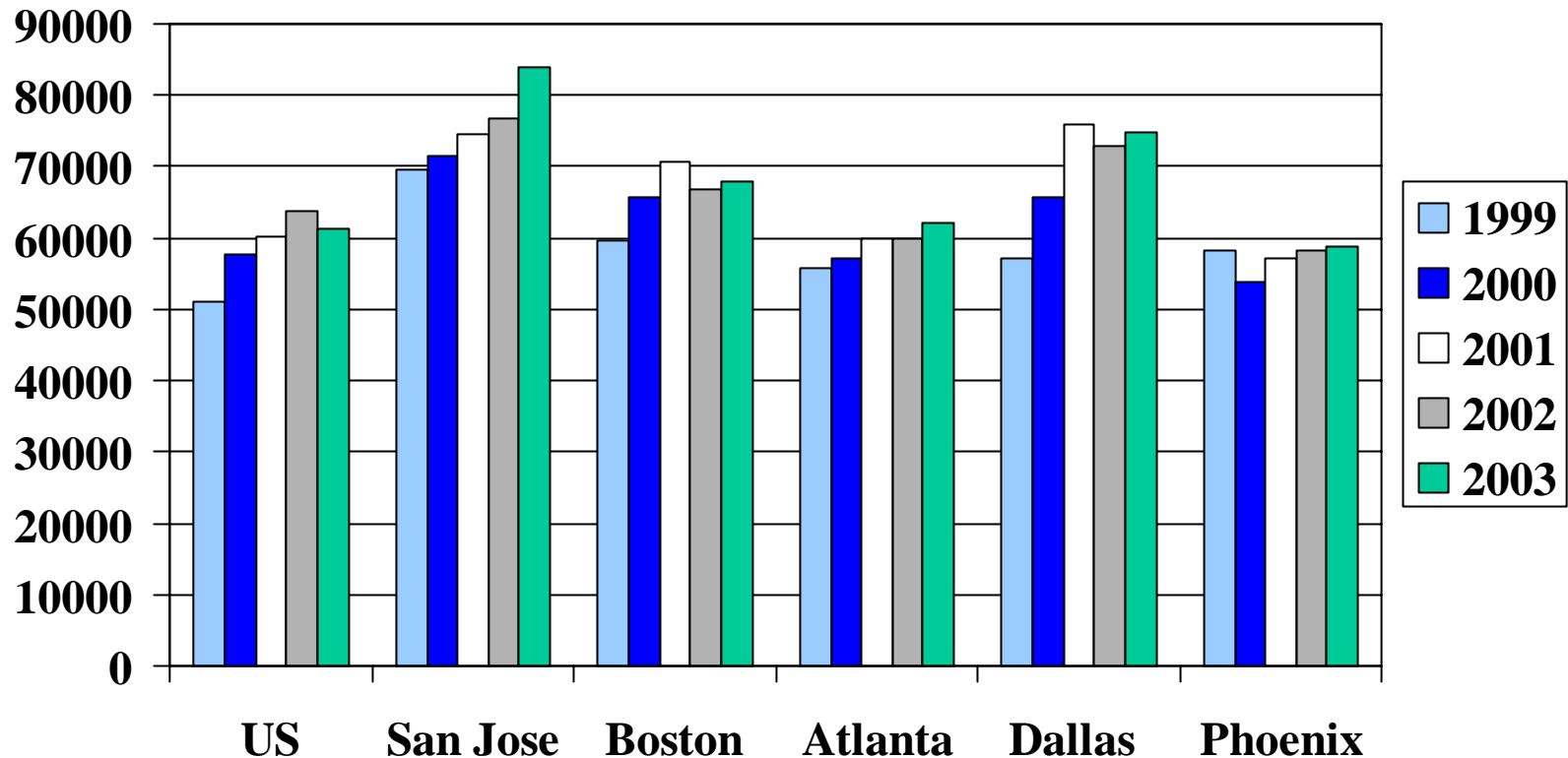
Source: Speaker's calculations from BLS OES data.

Differences in Wage Growth, MSAs with Low, Medium and High Shares of White-Collar At-Risk Jobs, 2001-2003



Source: Author calculations from BLS OES data.

Median Programmer Salaries Selected MSAs 1999-2003



Source: Author from BLS OES data. © C. Kroll, FCREUE

Example: SF Bay Area Strengths and Weaknesses

STRENGTHS

- New Business Creation and Entrepreneurship
- Research in Advanced Technologies
- Cross-disciplinary Research
- Concept and Market Development
- Global Integrated Management

WEAKNESSES

- Routine manufacturing and assembly
- Back office
 - Office Support
 - Business and financial processing
 - IT Support and Administrators
 - Legal Assistants
 - Statistical Analysts
- Product and Process Related Engineering
 - Computer and software (entry level)
 - Quality Assurance, Testing
 - Product and Process Engineers.

Source: AT Kearney, The Future of Bay Area Jobs: The Impact of Offshoring and Other Key Trends. <http://www.bayeconfor.org/pdf/FBAJoffshore04B&WFINAL2.pdf>

Key Points

- Offshoring is a contributing factor to services and white-collar occupational restructuring
- Metropolitan areas with high at-risk shares are large, services based, with educated, high-earning populations
- At-risk metro areas have experienced slower employment growth and some dampening of wage growth in the latest “recovery”
- Restructuring for some MSAs may intensify high-wage, technical/admin mix of jobs, but full job recovery uncertain.
- Policies need to address displaced workers, displaced businesses, long-term competitiveness and innovation

Thank You

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