

Globalization and Local Development: The Case of Offshore Outsourcing

Cynthia A. Kroll, Senior Regional Economist
Fisher Center for Real Estate and Urban Economics
Haas School of Business
University of California Berkeley

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Abstract

Services offshoring (in-firm and outsourced) is changing business structure, occupation structure and employment opportunities. The research addresses how these changes may affect metropolitan areas by identifying areas with high concentrations of people employed in tradable service occupations and discusses implications for state and local economic development and human resources policy.

Key Points

- Offshoring and outsourcing are different but related
- Services occupations that are becoming tradable span many occupational groupings and industries
- Metropolitan areas vary in their degree of concentration of tradable services occupations. A place with a high share of tradable services occupations is also likely to be larger, have a more educated population, and have higher incomes.
- Effects are complex—places with higher concentrations of “at-risk” jobs have slower growth, but offshoring alone is not the cause; many of these occupations continue to grow, despite offshoring, automation, and other factors.
- Offshoring and outsourcing of services occupations may contribute to local restructuring—with benefits as well as costs.
- State and local policy responses need to recognize that gains and losses from increasing globalization of services will be spread quite differently from manufacturing gains and losses. Some areas losing specific types of jobs to offshore providers may also be the same places gaining from the process.

Offshoring and Outsourcing Concepts

- Outsourcing is not offshoring, although the two may coincide. Most of the discussion about services “outsourcing” in fact is referring to offshoring—either through a firm affiliate or through an independent supplier.

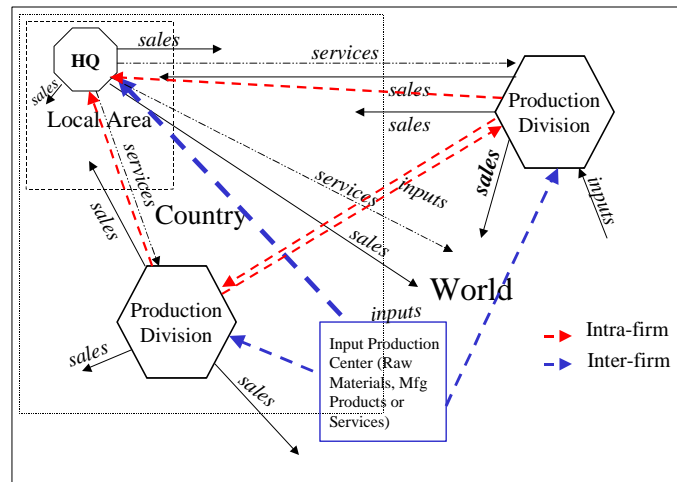
Figure 1
Forms of Offshore and Outsourced Production

	Domestic Production	Foreign Production
Within Firm	Domestic Branch	Offshore Branch/ Affiliate
Between Firms	Domestic Outsourcing	Offshore Outsourcing

Most of the discussion about services “outsourcing” in fact is referring to offshoring—either through firm affiliates or through an outsourcing arrangement.

- Offshoring is part of a complex production structure

Figure 2
Global Production Linkages and Outsourcing



- Services offshoring differs from earlier periods of manufacturing offshoring.

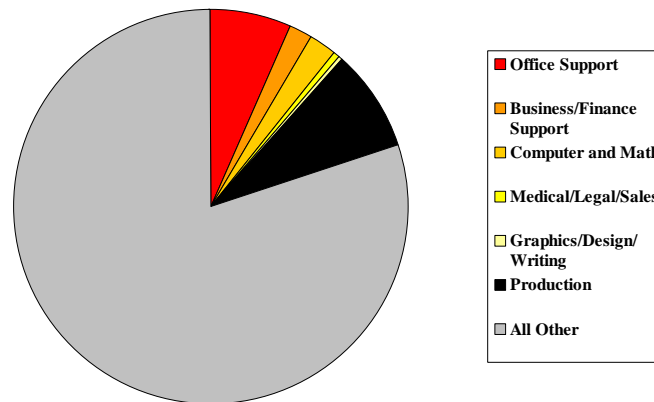
Figure 3
Two Types of Offshoring

<u>Manufacturing Offshoring</u>	<u>Services Offshoring</u>
<ul style="list-style-type: none"> • Primarily blue-collar jobs • Primarily in manufacturing • Similar and contiguous skills, occupations affected, leading to “hollowing” out of manufacturing • Wage and production networks driven • Led to spillover increases in services employment • Led to Increased Inequality between Blue and White Collar occupations • High capital investment required; logistically and structurally complex 	<ul style="list-style-type: none"> • Primarily white-collar jobs • Occurring across industries, including services jobs within manufacturing. • Dissimilar, unrelated skills and occupations affected, leading to “pockmarking” of many sectors across the economy • Driven by wages, English language, Institutional adaptability and compatibility • May lead to reshuffling within services • May lead to Increased Inequality within White Collar occupations • Low capital requirements; logistically simpler

US Services Offshoring Trends

- The number of services jobs now becoming tradable is significant—of a similar order of magnitude to manufacturing production jobs.

Figure 5
US Occupational Mix 2003



Source: Author from Bureau of Labor Statistics Occupation Employment Statistics (OES).

- Growth history varies among occupations. Occupations where offshoring is well established (rather than “potential”) have the highest rates of job loss. Some other “at-risk” sectors have gained instead of lost jobs. This is of key importance in assessing issues at the metropolitan level.

Figure 6			
At-Risk is not “Enroute”—Some At-Risk Occupations Have Growing Employment			
<i>(Selected Sample Occupations in Italics)</i>			
Occupation	Employment 2000 (US)	Employment 2003 (US)	Percent Change
Office Support	8729670	8585471	-1.7%
<i>Payroll Clerks</i>	<i>191310</i>	<i>194330</i>	<i>1.6%</i>
<i>Data Entry</i>	<i>458720</i>	<i>339010</i>	<i>-26.1%</i>
Business and Finance Support	2138510	2290970	7.1%
<i>Account/Auditors</i>	<i>863320</i>	<i>924640</i>	<i>7.1%</i>
<i>Tax Preparers</i>	<i>65280</i>	<i>50410</i>	<i>-22.8%</i>
Computer/math	2932810	2827010	-3.6%
<i>Programmers</i>	<i>530730</i>	<i>431640</i>	<i>-18.7%</i>
<i>Sys. Software Eng</i>	<i>264610</i>	<i>285760</i>	<i>8.0%</i>
Medical, Legal and Sales	910630	878690	-3.5%
<i>Medical Transc</i>	<i>97330</i>	<i>97810</i>	<i>0.5%</i>
<i>Telemarketers</i>	<i>461890</i>	<i>404150</i>	<i>-12.5%</i>
Graphics, Design, and Writing	334990	358680	7.1%
<i>Drafters</i>	<i>92610</i>	<i>97800</i>	<i>5.6%</i>
<i>Technical Writers</i>	<i>50700</i>	<i>44690</i>	<i>-11.9%</i>
At-Risk Total/ Share of US jobs	15046610 11.6%	14940821 11.7%	-0.7% All US Jobs: -1.7%
Source: Computed by the author from US Bureau of Labor Statistics, Occupation Employment Statistics(OES); definitions build on Bardhan and Kroll (2003) but were revised to include additional categories in September 2004.			

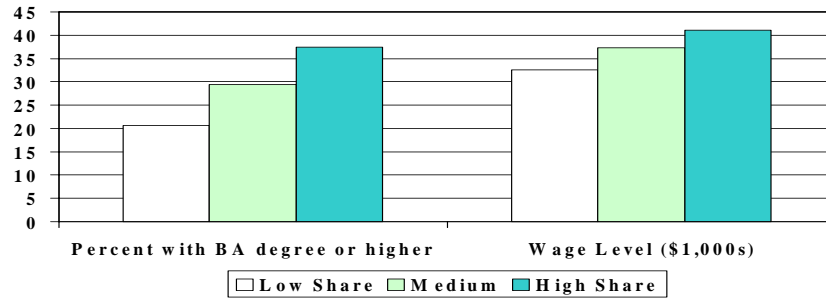
Offshoring at the Metropolitan Level

- Concentration of tradable services occupations varies among metropolitan areas.

Figure 7				
What is Your Metropolitan Area Profile of Occupations At-Risk to Services Offshoring?				
Size Category (Emp't)	High Share			Low Share
	Business/ Technology	Office Support	Mixed/Other	
500,000+	Austin, TX Bergen-Passaic, NJ Boston, MA Hartford, CT Middlesex, NJ Raleigh Durham, NC San Francisco, CA San Jose, CA Seattle, WA Washington DC	Jacksonville, FL Tampa, FL	Atlanta, GA Columbus, OH Dallas, TX Denver, CO Ft. Lauderdale, FL Kansas City, MO Phoenix, AZ Sacramento, CA Salt Lake City, UT	Las Vegas, NV-AZ Riverside-S.B., CA
250,000 – 499,999	Madison, WI		Des Moines, IA Omaha, NE-IA Wilmington-New., DE-MD	Fresno, CA Gary, IN Greenville, SC Knoxville, TN
100,000 – 249,999	Boulder, CO Colorado Springs, CO Dutchess Co., NY Lowell, MA Tallahassee, FL Trenton, NJ	Sioux Falls, SD	Cedar Rapids, IA Jersey City, NJ Provo-Orem, UT Stamford-Norwalk, CT	(largest 10, of 37) El Paso, TX Charleston, SC Bakersfield, CA Youngstown-Warren, OH Tacoma, WA P Lancaster, PA Mobile, AL Kalamazoo-Battle Creek, MI Stockton-Lodi, CA Augusta-Aiken, GA-SC
Note: High share have a ratio of 1.2 or higher compared to US share; Low share have a ratio of 0.8 or lower compared to US Share.				
Source: Computed from Bureau of Labor Statistics Occupations data.				

- Many places with high shares of services occupations which could be offshored start with the advantage of educated workers, high incomes.

Figure 8
Educational Attainment and Wage Levels
for MSAs with Low, Middle and High
Shares of At-Risk White-Collar Jobs



Source: Author, using data from the US Bureau of the Census, Bureau of Labor Statistics OES files, and author's risk indices.

- Places with high shares of at-risk services or production workers have slower growth, due to many factors in addition to offshoring.

Figure 9
MSAs with Largest Shares Employed in At-Risk Services Occupations

MSA Name	Total Employment 2003	% at-risk service occupations	Employment Change 2001-2004
Stamford-Norwalk, CT PMSA	200220	18.6%	-4.6%
Sioux Falls, SD MSA	112290	18.0%	2.5%
Washington, DC-MD-VA-WV PMSA	2694130	17.8%	3.8%
Des Moines, IA MSA	280360	17.0%	1.4%
San Jose, CA PMSA	877640	16.7%	-16.4%
Hartford, CT MSA	597390	16.4%	-4.1%
Seattle-Bellevue-Everett, WA PMSA	1298550	16.3%	-2.9%
Tallahassee, FL MSA	157020	16.3%	1.3%
Austin-San Marcos, TX MSA	651670	15.8%	-2.6%
Dallas, TX PMSA	1890340	15.8%	-3.9%
Denver, CO PMSA	1136190	15.7%	-2.9%
Jacksonville, FL MSA	536190	15.7%	2.0%
Colorado Springs, CO MSA	232660	15.6%	-2.0%
Jersey City, NJ PMSA	241520	15.6%	-1.0%
Boulder-Longmont, CO PMSA	154950	15.5%	-17.9%
Middlesex-Somerset-Hunterdon, NJ PMSA	624420	15.4%	-2.5%
Omaha, NE-IA MSA	409760	15.4%	-3.5%
San Francisco, CA PMSA	975850	15.1%	-10.0%
Columbus, OH MSA	850370	15.1%	-2.3%
Trenton, NJ PMSA	208630	15.0%	3.5%
United States		11.7%	-0.3%

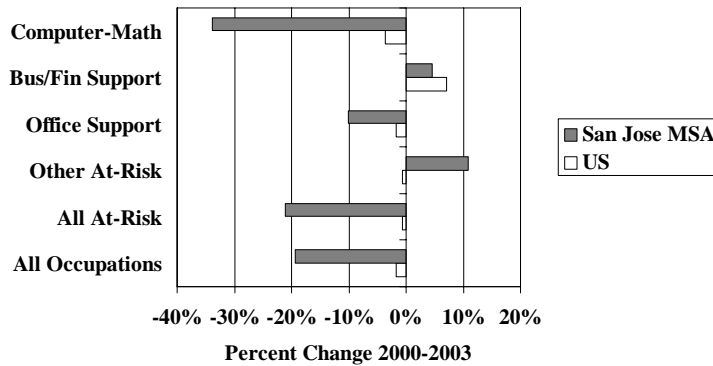
Figure 10
MSAs with Largest Shares Employed in Production Occupations

MSA Name	Total Employment 2003	% Production Occupations	Employment Change 2001-2004
Elkhart-Goshen, IN MSA	115530	34.2%	3.2%
Rockford, IL MSA	167690	16.9%	-3.3%
Greenville-Spartanburg-Anderson, SC MSA	460480	16.2%	0.5%
Fort Wayne, IN MSA	258610	16.2%	-1.5%
Grand Rapids-Muskegon-Holland, MI MSA	542470	16.0%	-2.2%
Appleton-Oshkosh-Neenah, WI MSA	197560	15.5%	-0.6%
York, PA MSA	163380	15.5%	-0.8%
Fayetteville-Springdale-Rogers, AR MSA	164010	14.4%	4.7%
Lancaster, PA MSA	218920	14.3%	0.3%
Greensboro--Winston-Salem--High Point, NC MSA	632030	14.1%	-1.5%
Erie, PA MSA	127040	13.9%	-0.5%
Youngstown-Warren, OH MSA	225580	13.7%	-2.4%
Johnson City-Kingsport-Bristol, TN-VA MSA	188690	13.1%	1.7%
Canton-Massillon, OH MSA	176920	13.1%	-3.3%
Kalamazoo-Battle Creek, MI MSA	199260	12.8%	-1.0%
Green Bay, WI MSA	142380	12.7%	5.6%
Reading, PA MSA	157980	12.6%	-3.2%
Wichita, KS MSA	272150	12.2%	-5.2%
Chattanooga, TN-GA MSA	217750	12.2%	1.0%
Milwaukee -Waukesha, WI PMSA	817420	12.0%	-2.0%

Structural Change and Offshoring at the Metropolitan Level

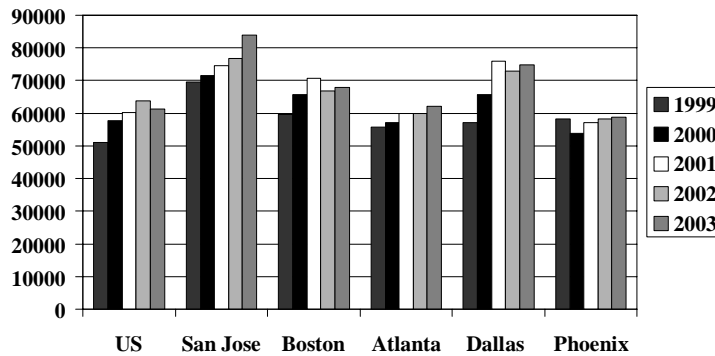
- Offshoring may change the structure of an MSA’s employment base. A community may lose some types of jobs while gaining others. Silicon Valley, for example had sharp losses in programming jobs, but gains in wage levels, indicating that those remaining were in the highest skill categories

Figure 11
**Employment Change in At-Risk Occupations
 San Jose MSA and US, 2000-2003**



Source: Author from Bureau of Labor Statistics occupations data.

Figure 12
**Median Programmer Salaries
 US and Selected MSAs 1999-2003**



Source: Author from Bureau of Labor Statistics occupations data.

State and Local Policy Concerns and Implications

- State and local responses need to distinguish between the serious problems related to globalization, such as worker displacement, and the opportunities for global business expansion, which may affect the same labor markets where problems arise or may be occurring in separate locations.

Policy Approach	State Activity	Local Activity	Concerns	Opportunities
Restrict Offshoring	Proposals in 34 state legislatures. Include: <ul style="list-style-type: none"> • Bans • Incentives • Contract preferences 	None documented	Direct bans and restrictions on trade may contradict existing treaties, restrict trade gains for state.	Focus on potential benefits (eg. integrate state/local contracting into state/local development goals)
Privacy and Security	At least 10 states have proposed some restrictions to protect: <ul style="list-style-type: none"> • personal data • medical records • financial records • homeland security 	None documented	<ul style="list-style-type: none"> • Issues best addressed at national level • Need careful crafting to protect where needed and avoid unintended costs to business. 	This is a time for legal and institutional systems to “catch up” with changing technology.

Figure 13
State and Local Policy Approaches to Offshoring

Policy Approach	State Activity	Local Activity	Concerns	Opportunities
Assistance / Protections for Displaced Workers	<ul style="list-style-type: none"> • 2 states have proposed layoff notification • Existing unemployment and retraining programs 	Many retraining programs are locally based	<ul style="list-style-type: none"> • Do retraining programs put laid off workers in at-risk occupations? • Do programs address needs of services workers? 	Combine worker assistance with business needs to allow on-the-job training and share resources with local employers
Related Policies: <ul style="list-style-type: none"> • Competitiveness • Business Support • Land use changes 	States have supported: <ul style="list-style-type: none"> • technological development • venture capital 	Local area supports include: <ul style="list-style-type: none"> • tax incentives • incubators 	New business growth often tied to globalization—is this a conflict for local areas? Will changing worker demand affect land use needs?	Better understanding of changing local economic needs may lead to more effective business supports and land use controls. Opportunity to develop programs for firms losing business to offshore contractors.

Research Request

One aspect of our current research is to identify local area responses to changing employment or business needs related to the offshoring of services. We are looking for examples of communities and/or workers and businesses affected by offshoring, and how state and local programs have responded to these changes. Please contact me with examples, at kroll@haas.berkeley.edu or Haas School of Business F602-#6105, University of California, Berkeley, CA 94720-6105. Further research available at <http://staff.haas.berkeley.edu/kroll/pubs/pubs.htm>.