

Education for What: The Rising Demand for Skill and the Decline of Manual Labor

Stephen J. Rose
Center on Education and the Workforce
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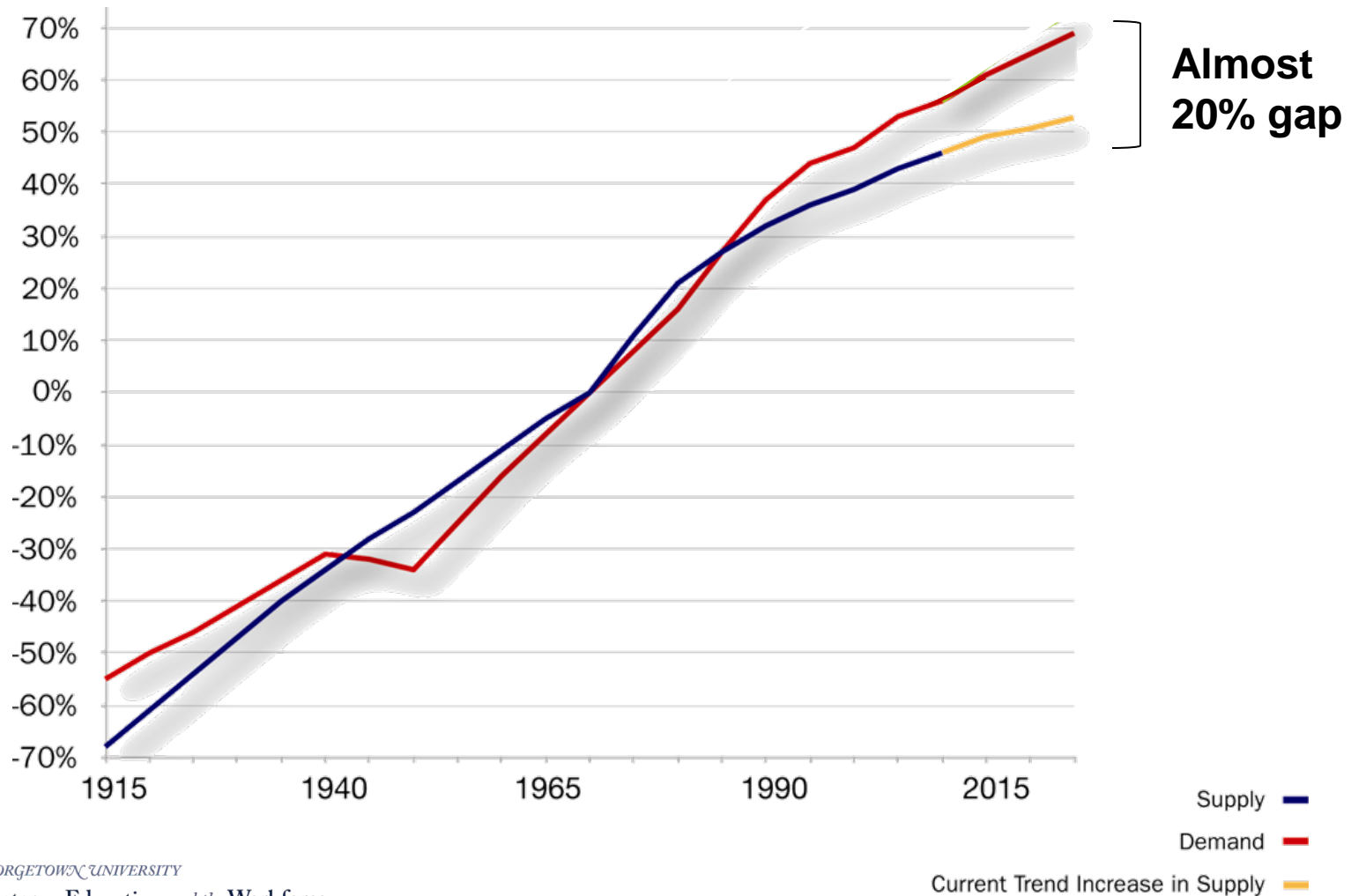


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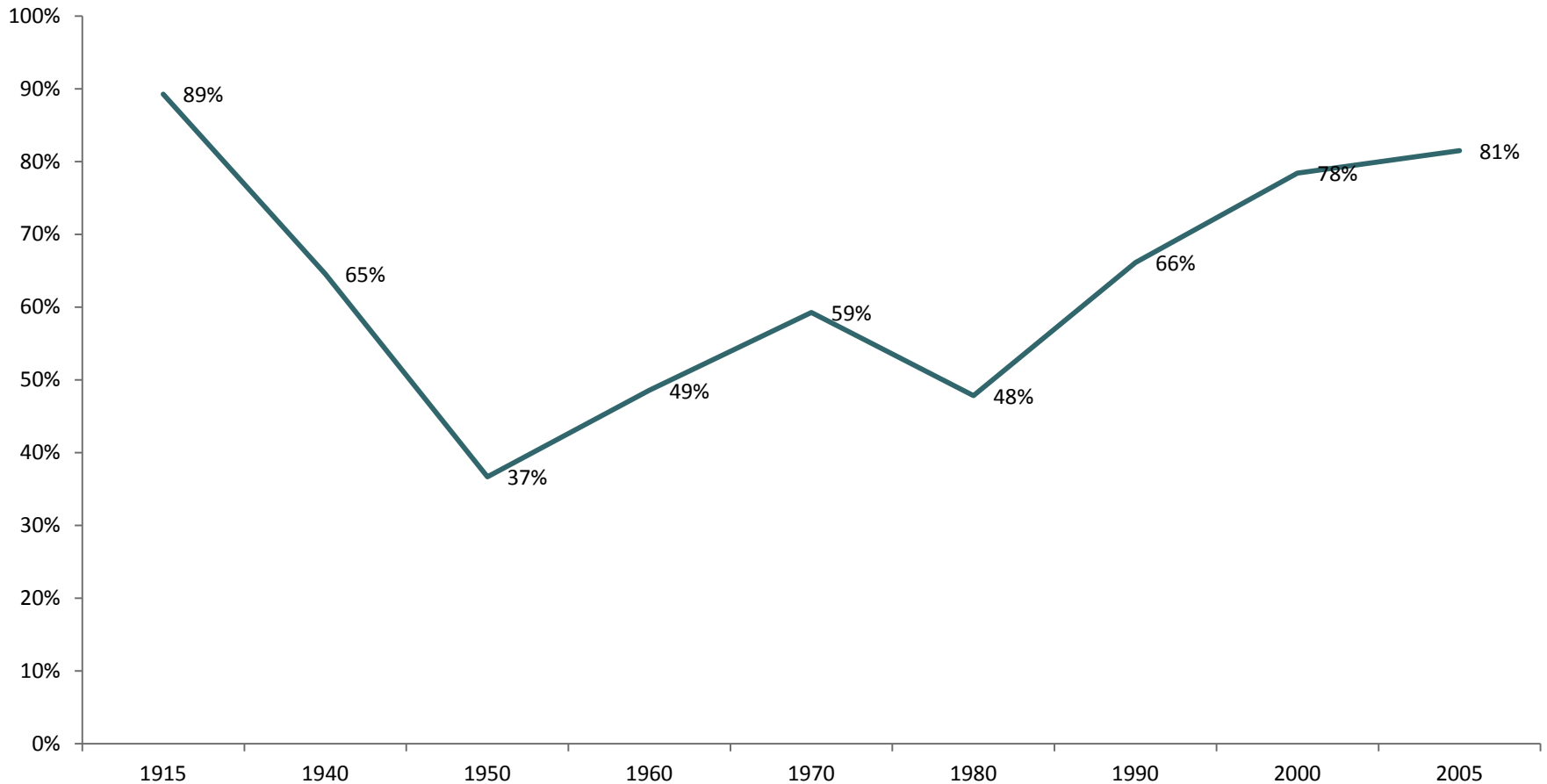
college-educated workers, with change in trend after 1980.

Source: Center on Education and the Workforce Analysis



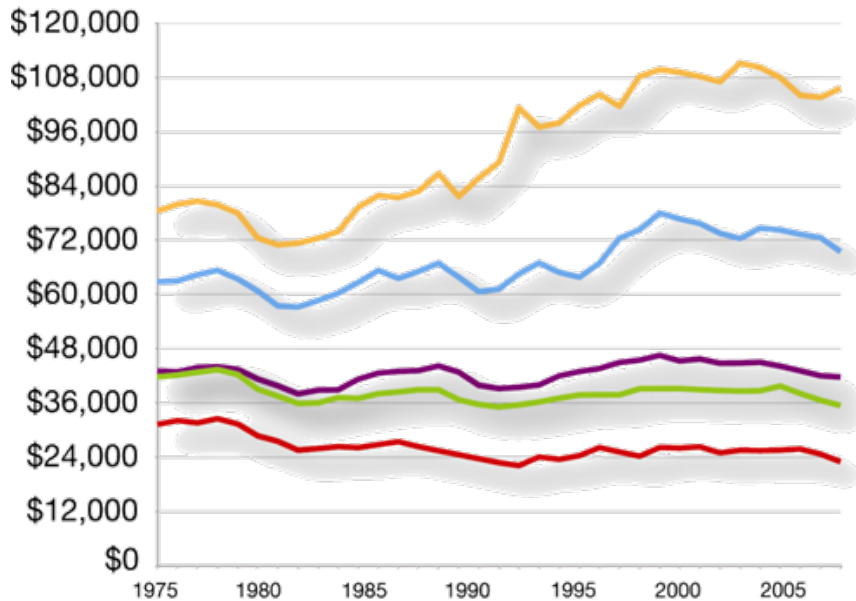
on the basis of educational attainment has risen dramatically since 1980 and will continue to rise if we continue on our current trend.

College Wage Premium Over High School, 1915-2005

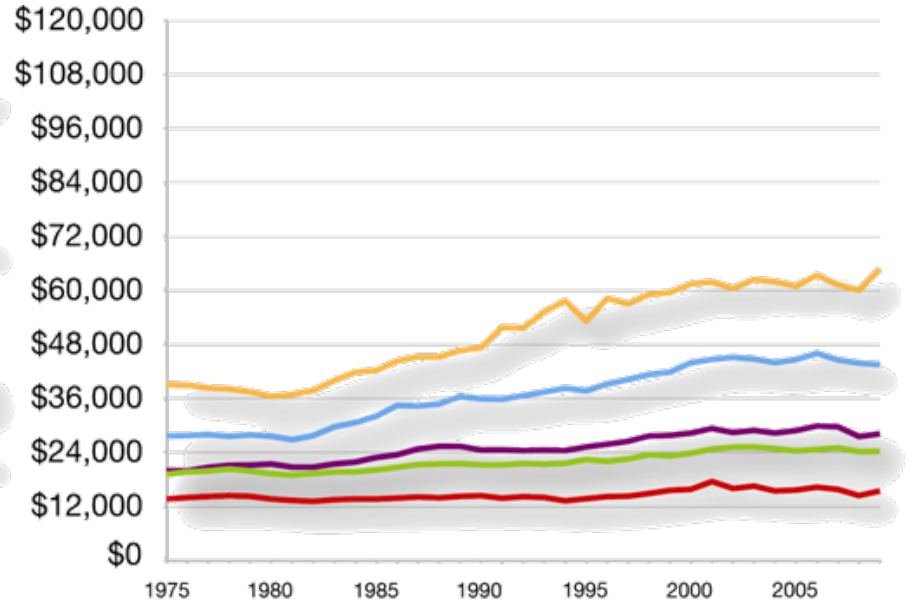


education have increased relative to the earnings of those without any college education.

Wage growth by education level for men



Wage growth by education level for women



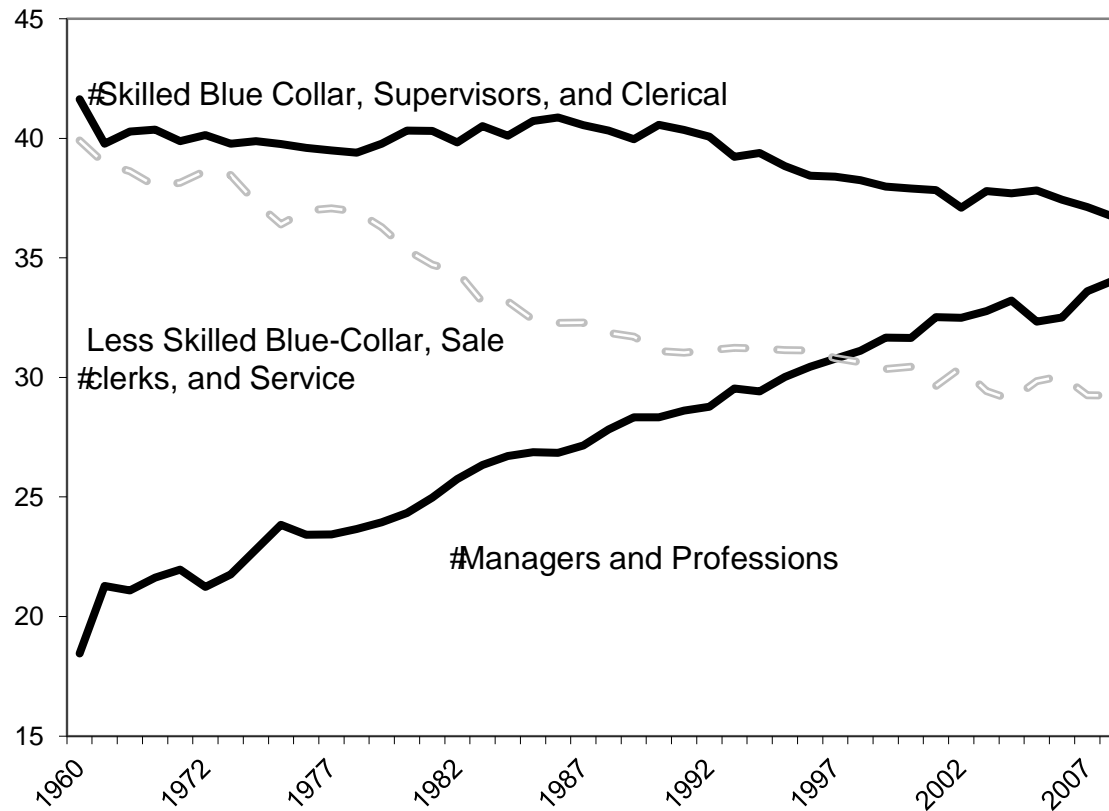
Source: Center on Education and the Workforce Analysis



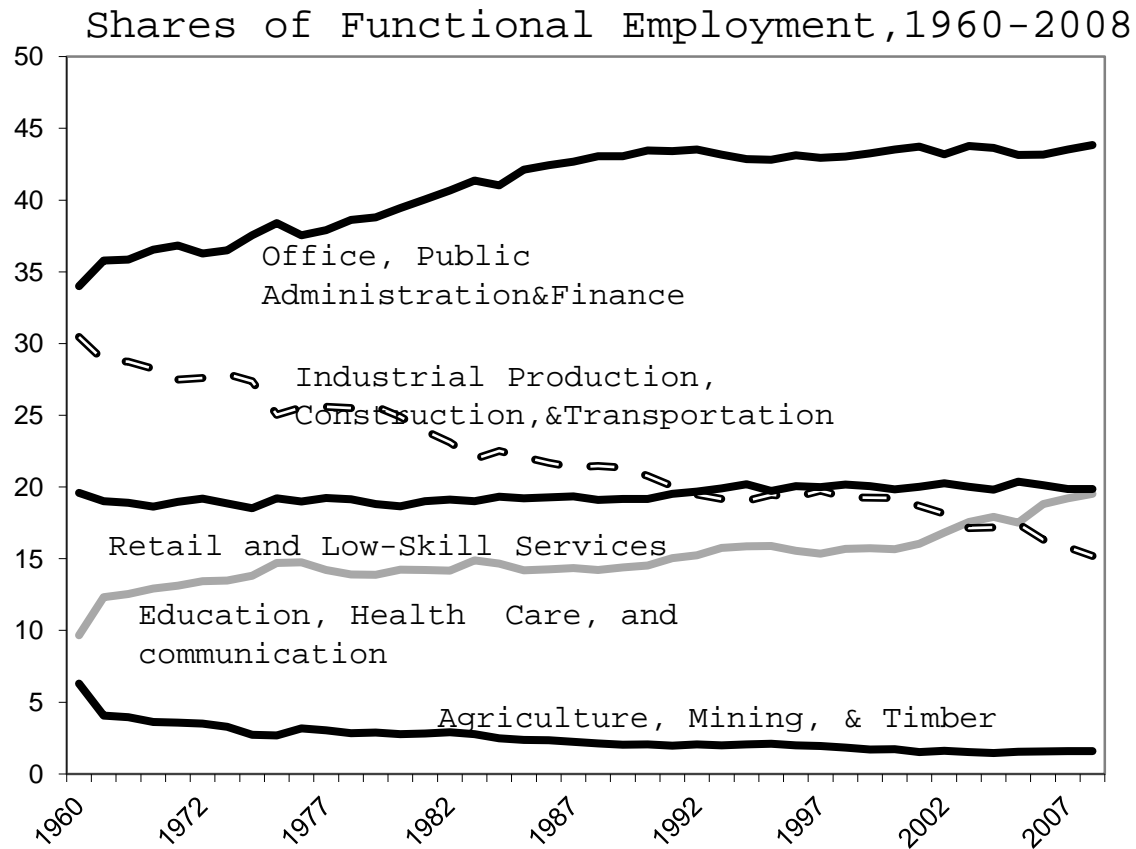
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- Graduate —
- Bachelor's —
- Some College/Associate's —
- High School Graduates —
- High School Dropouts —

Professional Jobs, Three Occupation Tiers, 1960-2008



office work and high end services, areas that benefit more from greater skills associated with postsecondary education.



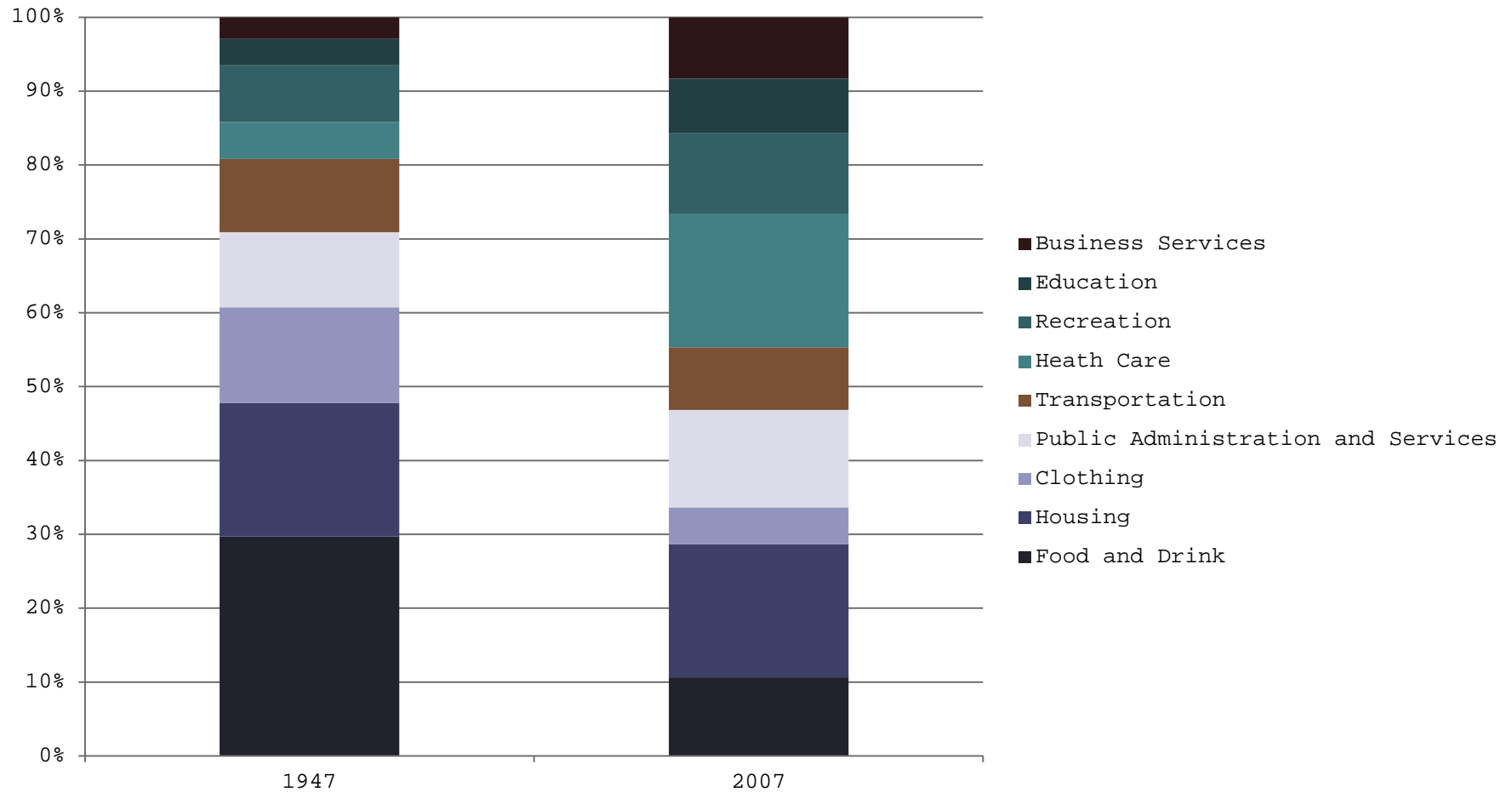
Deconstructing Value Chains over Time

Using Input-Output Tables to show complete “value chains”—the direct and indirect inputs needed to produce final output.

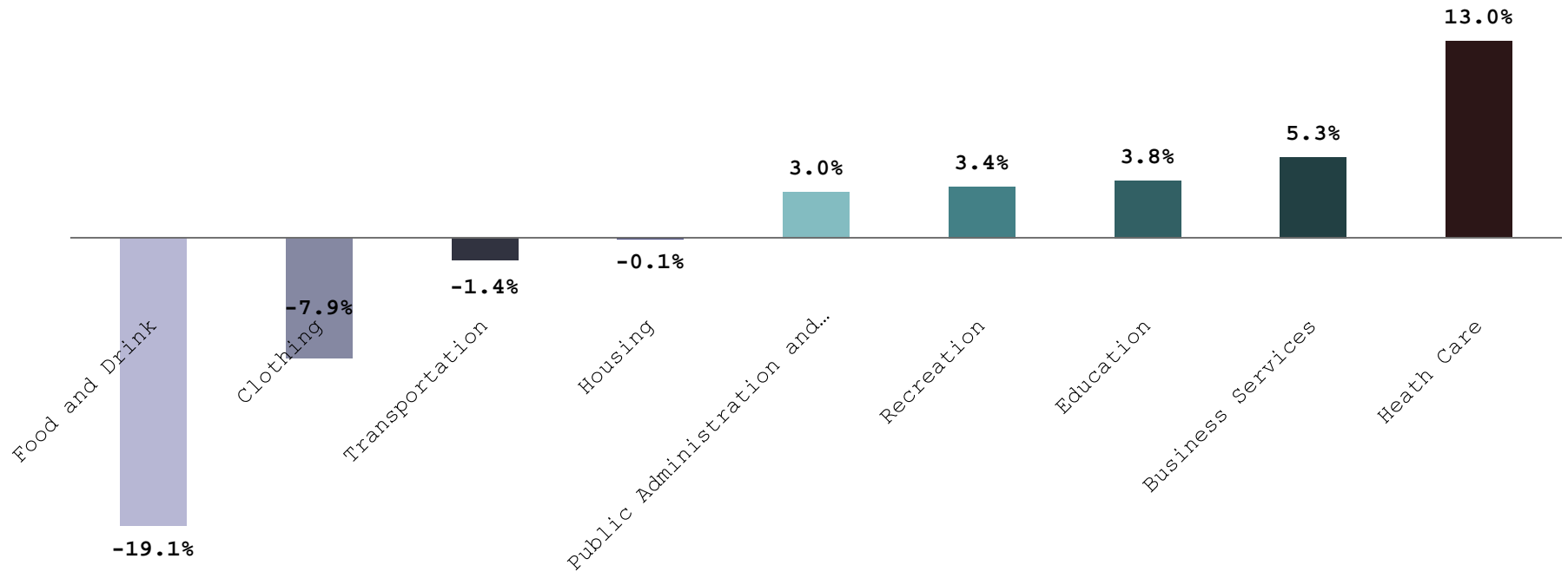
Technological change means that it takes a smaller share of our resources to produce common goods and services. For example, in 1947, food and clothing were 43% of what we consumed; the comparable figure in 2007 was



The Changing Composition of What We Consume, 1947 - 2007



Consumption, 1947-2007

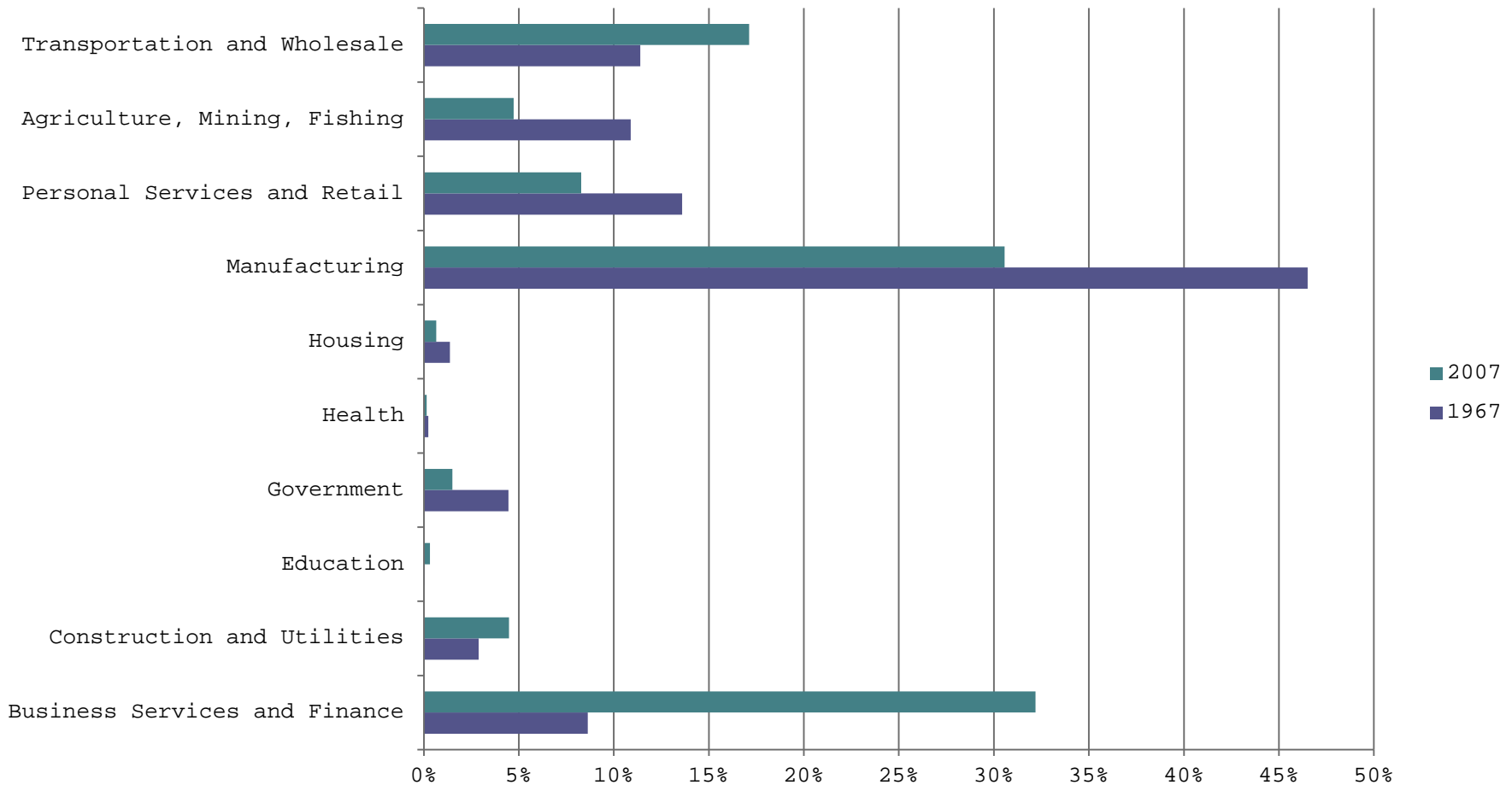


Outputs, 1967-2007

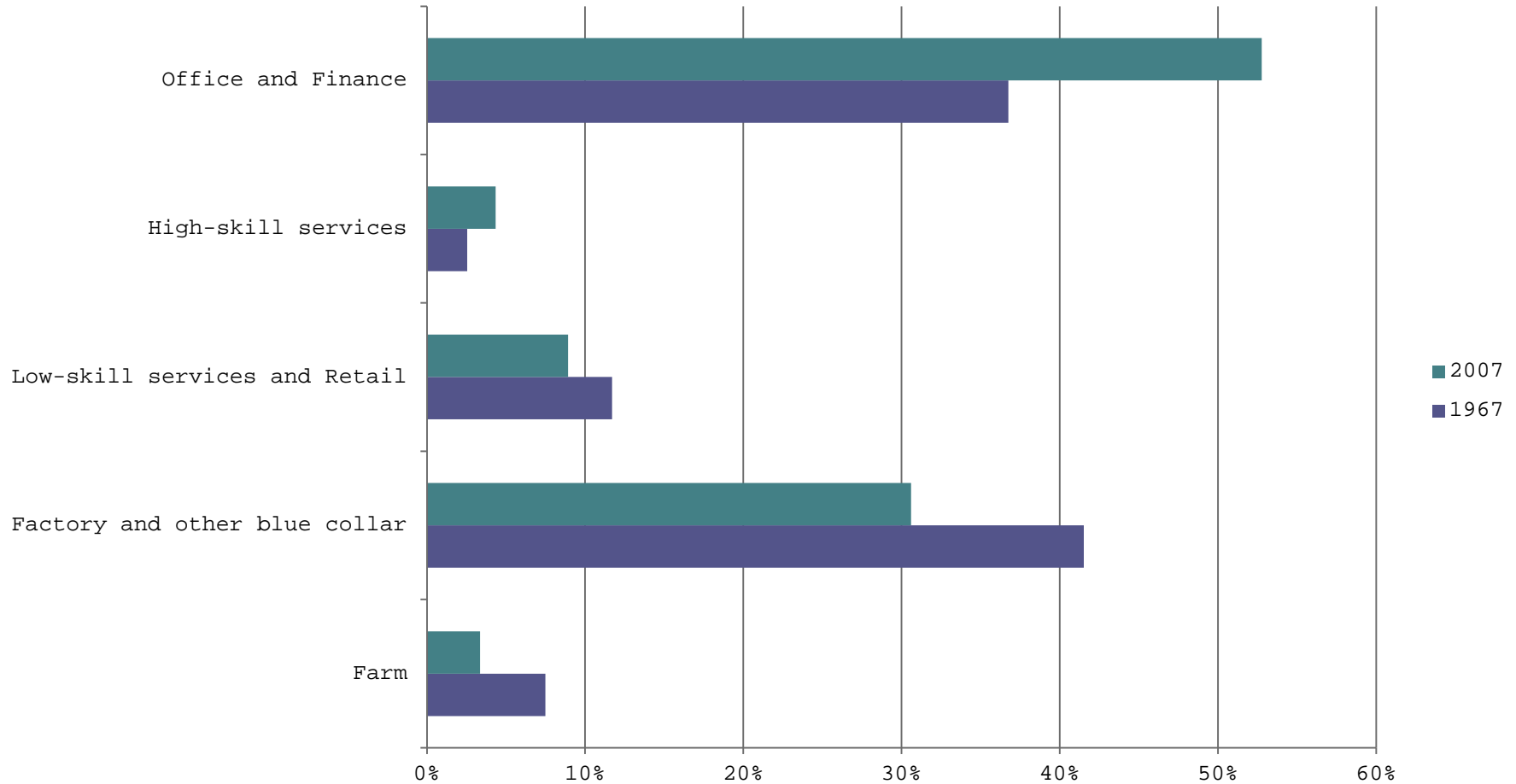
	1967	2007	Change	
Business Services & Finance			11.7%	
26.3%	14.5%			
Health Care		4.0%	7.3%	3.2%
Government	3.3%	6.0%	2.7%	
Housing		10.4%		11.1%
0.7%				
Construction & Utilities			7.4%	7.7%
0.4%				
Education	3.9%	4.2%	0.3%	
Personal Services & Retail			12.3%	
11.0%	-1.3%			
Agriculture & Mining		5.0%	2.8%	-2.2%
Transportation & Wholesale			12.0%	
7.8%	-4.2%			



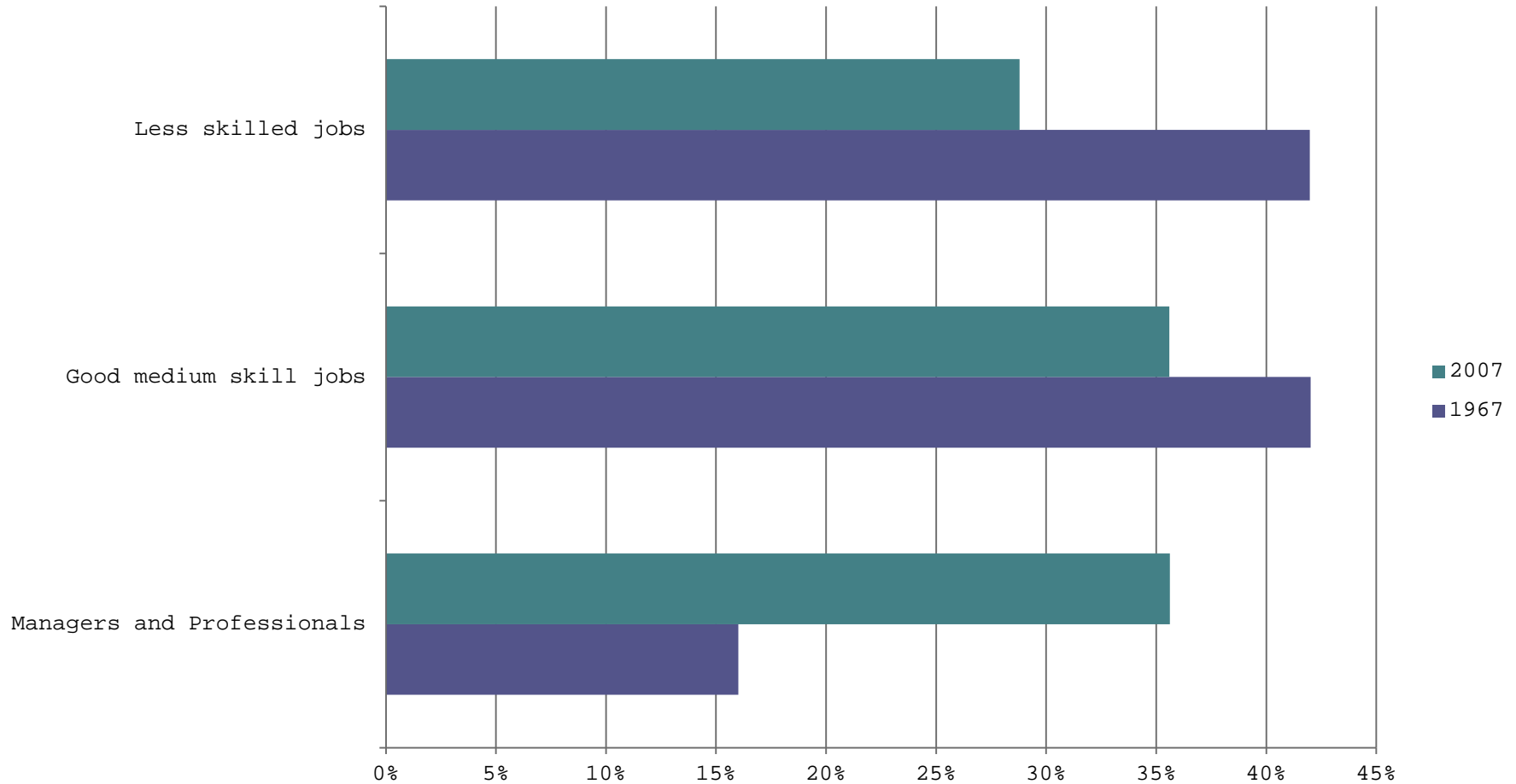
Changing Industry Composition in Producing Exports, 1967 and 2007



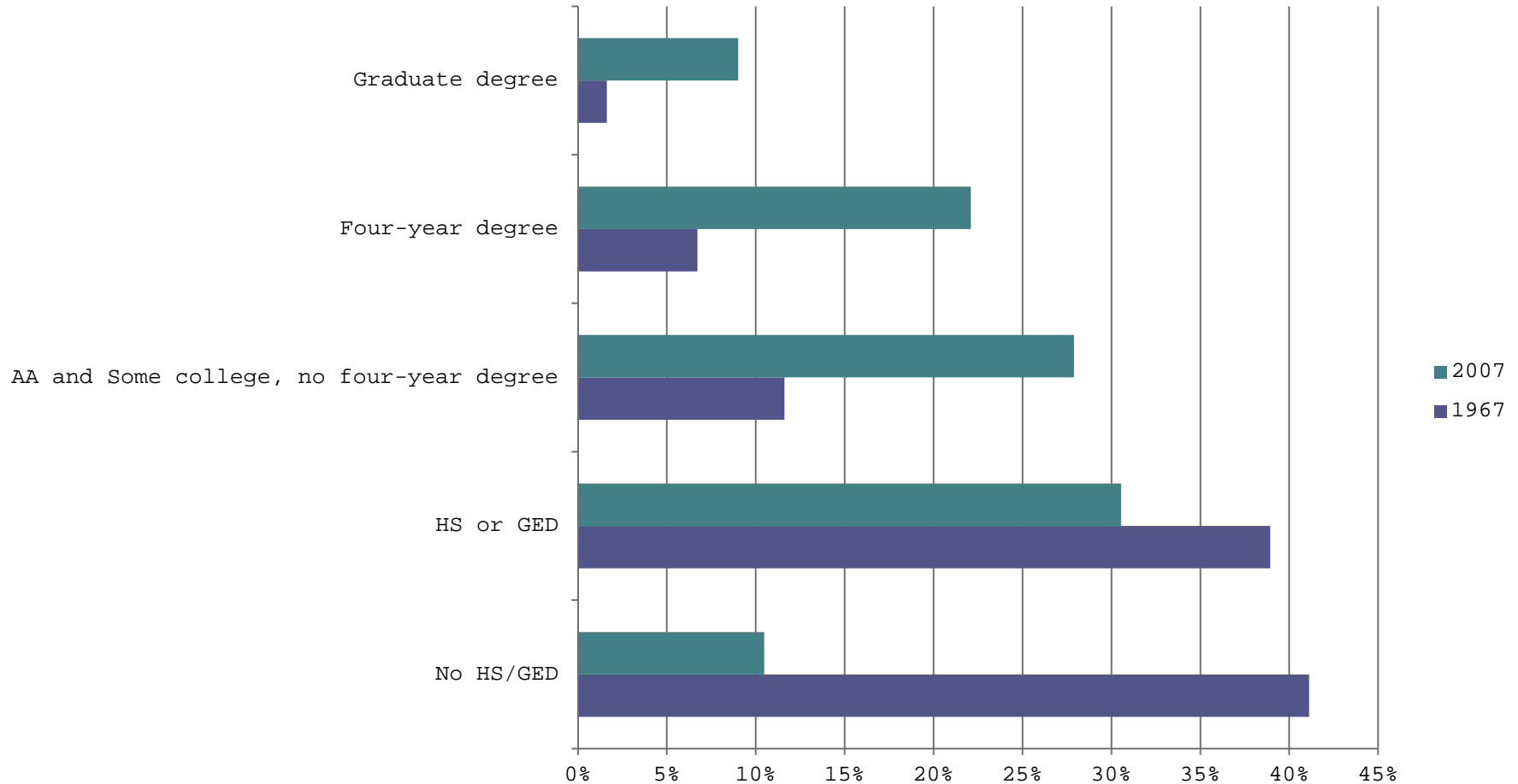
Changing Functional Composition in Producing Exports, 1967-2007



Changing Occupational Composition in Producing Exports, 1967-2007



Changing Educational Composition in Producing Exports, 1967-2007



Triple Whammy for Manual Workers

- First, final output has shifted from goods production (food, clothing, transportation) to services (health care, business services, and education).
- Second, within each activity, the industrial share of raw material and manufacturing industries needed to produce final output has declined: e.g., in 1967, 26% of the value of food and drink came from farming and food manufacturing industries; in 2007, the comparable figure was 13%.



Third, within manufacturing industries

Questions?

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