## Session 19 A Labor Market for All!

## Why Manufacturing will not Provide the Jobs Unskilled Workers Need Robert Z. Lawrence Harvard Kennedy School

In many discussions about how to generate increased employed opportunities, the focus is often framed through a mindset that sees employment in manufacturing as playing a vital role and improvements in national competitiveness as the key to success. In this comment I want to argue that as we think about training workers for the jobs of the future, it is important to appreciate that regardless of how competitive we make our economies, only a small share of jobs are going to be available in manufacturing and an ever shrinking share of this small share will be available for unskilled workers. Accordingly our training and adjustment assistance needs to be concentrated on other sectors.

Trade —especially with emerging markets such as China— and technological change are often pointed to as the most important reasons why the share of jobs in manufacturing jobs have declined, but for a complete understanding of the trends as well as predicting the future, it is necessary to incorporate the role played by demand. Basically I will argue that declining opportunities for workers in manufacturing reflect the way consumers chose to spend their money, and that this is unlikely to change.

In the first few decades of the postwar period, employment in the manufacturing sector played a key role in making US (and French) growth more inclusive. The sector provided many opportunities, especially for men without a college education, to acquire skills and earn incomes that allowed them to support themselves and their families with middle-class lifestyles. Manufacturing factories and clusters served as the mainstay of many communities. Manufacturing jobs also provide higher weekly earnings, because the work-week is typically longer than in the rest of the economy, and in some sectors, such as steel and autos, powerful unions were able to obtain wage premiums. In 1960, for example, almost 35 percent of all US males had a job in manufacturing and for men with less than a college degree, manufacturing employment was even more important in providing work.

By 2010 that share had plunged to about 10 percent with detrimental consequences for the prospects of US workers with less than college education and the cities they lived in. The political populism that has emerged in the current US election and elsewhere is in no small part due to these trends.

Yet while many point to deficiencies in their own domestic policies, they ignore the pervasive nature of this development. The US decline in the share of manufacturing employment was quite actually quite typical of every other developed country. Indeed, they all experienced declines between 1973 and 2010 of about fifteen percentage points in their manufacturing employment share. In France for example after remaining around a quarter of employment between 1950 and 1975, the share has been cut in half. And in 2010 the US employment share in manufacturing was also similar to most industrial countries. It was the same as in Canada (10.3), and the Netherlands (10.6), somewhat higher than Australia (8.9), and lower than Sweden (12.7) and France (13.1).

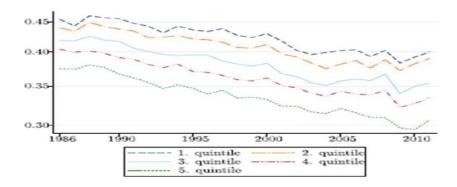
Share of employment in manufacturing, 1973-2010 (percent)

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Country	1973	1990	2000	2010	Change
	(1)	(2)	(3)	(4)	(4) - (1)
United States	24.8	18.0	14.4	10.1	-14.7
Canada	22.0	15.8	15.3	10.3	-11.7
Australia	23.3	14.4	12.0	8.9	-14.4
Japan	27.8	24.3	20.7	16.9	-10.9
France	28.8	21.0	17.6	13.1	-15.7
Germany	36.7	31.6	23.9	21.2	-15.5
Italy	27.9	22.6	23.6	18.8	-9.1
Netherlands	25.3	19.1	14.8	10.6	-14.7
Sweden	27.6	21.0	18.0	12.7	-14.9

Source: Bureau of Labor Statistics.

Thus the experience of all these countries has been similar. Two forces are in operation. The first is that at higher incomes, consumers allocate increasing shares of their expenditures to purchase services. (See chart below). The second is that as a result of relatively rapid technological change – productivity in goods has increased more rapidly than in services— the prices of manufactured goods have declined relative to services, but the response of consumers to these lower prices is relatively small – i.e. inelastic.

Share of US Spending on Goods by Quintile



Source: Boppart (2014, Econometrica)

The combination of these low income and price elasticities has led the share of consumption spending on goods to decline and the share of employment to follow. In 1960, for example, almost half of all US consumption was spent on goods; fifty years later that share had fallen to a third. In France in 1980 60 percent of consumer spending was allocated to goods, by 2010 the share had fallen to 47 percent.

Table 3 Share of consumption spending on goods in total consumption, advanced economies, 1970-2010 (percent)

Country	1970	1980	1990	2000	2010	Annual change, 1980-2010
Australia	53	50	44	40	37	-0.45
Canada	58	56	51	47	46	-0.36
Denmark		57	51	50	47	-0.35
France	62	60	54	51	47	-0.42
Italy	68	66	59	54	49	-0.56
Korea	69	66	54	46	42	-0.8
Netherlands		59	57	51	49	-0.34
United Kingdom		69	61	56	53	-0.54
United States	50	46	40	37	34	-0.42
Average						-0.46

Source: OECD National Income Accounts.

While international trade has played a role in some countries in leading to higher *levels* of manufacturing employment in countries with trade surpluses in manufacturing, and somewhat lower levels in countries with manufacturing trade deficits -- the impact of trade balances has not offset the underlying forces of rapid technological change combined with low income and low price elasticities. Thus regardless of whether they have manufacturing trade deficits or surpluses in manufactured goods, *the percentage point declines* in manufacturing employment in industrial countries have actually been quite similar.

Manufacturing is also becoming increasingly skill intensive. Although low and medium skill workers continue account for a higher share in manufacturing employment than in the economy as whole, the shift towards a higher share of skilled workers and a lower share of low-skilled workers has been more rapid in manufacturing than in the economy as a whole. In 1995, for example, the shares of work-hours performed by high and low skilled workers in manufacturing were 19.9 and 15 percent respectively. By 2009, the share of high-skilled workers had risen to 27.9 percent while the share of low skilled workers had fallen to just 10.9 percent. This 37 percent increase in the share of highly skilled workers is far larger than the 23.8 percent increase in the share of such workers in the work-hours in the US economy as a whole. And the 28.6 percent decline in the share of low skilled workers in manufacturing exceeded the 20.6 percent drop in the economy-wide share. In sum, the jobs unskilled workers need will continue to disappear and the imperative of training and education becomes ever more important.