



VET in the New Global Economy

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Antecedents

- VET systems are imbedded in long-standing political and social arrangements with developed vested interests.
- Some, like the Dual Systems of Germany, Switzerland, Austria, and other countries, are “directed,” early selection, company-based apprenticeships, and focus on successfully incorporating young people into skilled work early.
- The US system is the opposite, relying on longer general education and OJT, considerable private post-secondary VET, and more choice and trial and error by youth and employers--focus on flexibility.



The Issue

- In past three decades, major change in world economy--more competition, shift to multi-tasking, change in work structures, change in youth population, more rapid change in the types of skills needed--new products.
- How do these VET system fit into the changes taking place?
- Is the US system, with greater flexibility and longer general education, more adapted to new conditions, or is the Dual System still more efficient in preparing youth for the new workplace and more socially effective?



VET System Goals Across Societies

- To prepare young people with work and civic skills that—on one hand—contribute to the productivity of capital and to national cultural/political values, and—on the other—increase the employability of labor and individuals' belief in the political system.
- To allocate young people across jobs and professions according to their academic performance and taste for different kinds of work.



Alternative VET Systems, Early 1990s

<i>System</i>	<i>Country</i>	<i>Basic Characteristics/Issues</i>
Apprenticeship training	Germany, Austria, Switzerland, Denmark, Netherlands	Co-determination (employers, unions, and government) Co-investment Certification of skills
Low employee turnover and extensive firm training	Japan	Lifetime employment lowers turnover Firms provide general & specific training Training embedded in production process High degree of homogeneity in literacy and numeracy
Government-led/school-based	Sweden, Norway, United Kingdom	Government-funded general training Government may also fund firm-specific training Relevance of school-based programs
Employer training tax	France, Australia	Distributes costs over wide range of employers Does not guarantee training of unskilled and those in small firms
School-based/learning-by-doing	United States, Canada	Individual autonomy on training investments Multiple sources of training Few nationally recognized qualifications outside formal schooling Employer training is primarily firm specific (and highly concentrated in higher educated workers and large firms)

Source: Lisa Lynch (ed.). 1994. *Training and the Private Sector: International Comparisons*. Cambridge, MA: National Bureau of Economic Research, Table 2 (slightly modified by author).



Some Dilemmas

- In meeting economic objectives of preparing youth for work, VET systems also reproduce economic and social inequality in particular ways.
- The earlier that decisions are made about allocating youth to educational tracks and particular occupations, the more likely that early endowments determine future economic and social position.
- In the 20th century, the typical way developed countries have gotten around this problem is to use fiscal policy to reduce the cost of restricting mobility. It has become increasingly difficult to use this policy tool with economic globalization and movements of labor from low to high income countries--both of which exacerbate income inequality in the developed countries and reduce the capacity to use fiscal policy to correct the problem.



Benefits and Costs of the Dual System

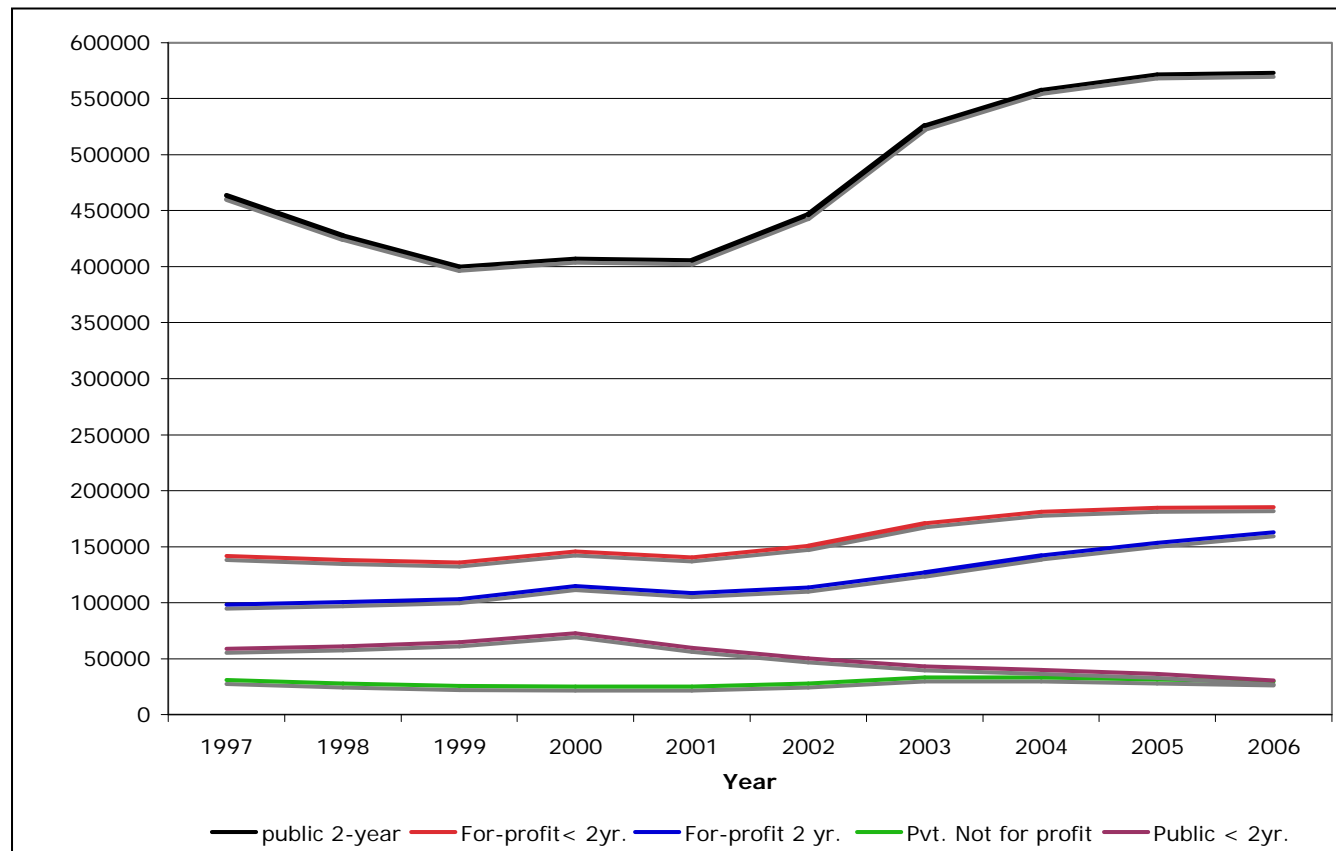
- Under certain stringent conditions, the Dual System can produce large benefits: a) employers get generally skilled workers prepared largely at state expense; b) employers contribute to specific skill training, but pay lower wages than productivity for much of the apprenticeship period; c) young workers increase likelihood of getting stable job at reasonable pay; d) society may get benefits of lower costs of education because lower proportion go to university.
- But also costs: may increase risk-averting behavior of firms and youth; quality of enterprise training varies greatly; only about 30 percent of vocationally trained youth get placed in apprenticeships; reduces chance of “late blooming,” so may increase social inequality.



Benefits and Costs of US System

- US system is highly education centered. It increases choice, extends general academic education, is highly flexible in allowing career change and multiple paths to careers, places much more responsibility on firms to select talent, and gives more flexibility to firms to change the kind of talent it hires over time; possibly greater equality of opportunity.
- Costs: places much more responsibility on youth to find paths to skill acquisition and job search; emphasizes more private cost routes to training, with high risk of using those skills in appropriate jobs. Greater risk of job loss or displacement later in life; specific skills in work force may end up being lower.

VET in the US

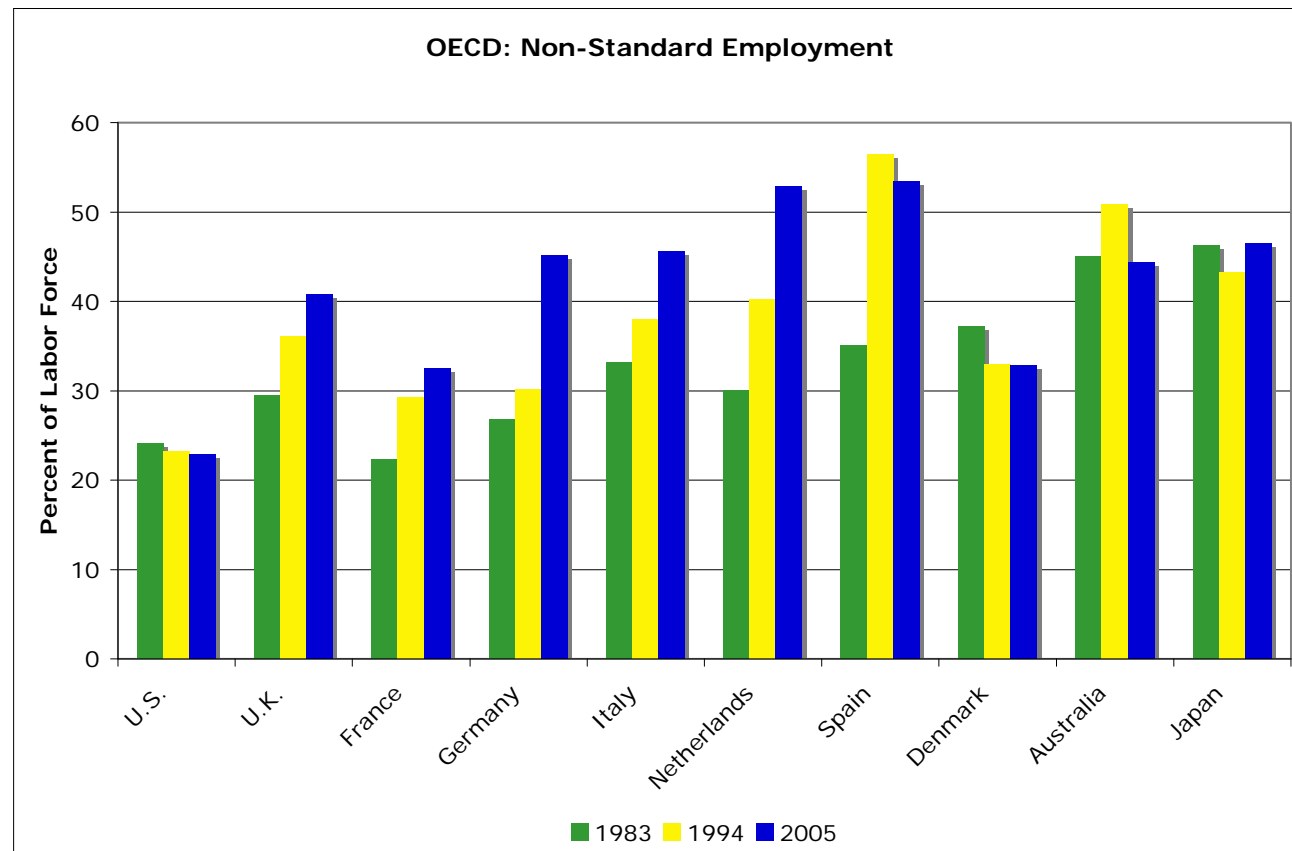




Globalization and the Changing Demand for Skills

- Increased competition, more flexibility in work; increased use of temp and part-time labor in more “rigid” labor markets.
- In new flexible labor markets, specialization takes on new meaning—young workers need to be able to learn to do multiple tasks and to learn new specialties as they change jobs possibly several times before they are 30-35 years-old. Older workers may have to redefine themselves as well when their “lifetime” work becomes obsolete, or their skills become obsolete.

Non-standard Work in the OECD





Implications for VET Systems

- Little evidence that the U.S. VET system has adverse impact on U.S. productivity. Many factors affect productivity besides the way that countries educate and train their youth, but if the type of VET system countries employed dominated productivity growth, we would expect to see significant differences between the countries grouped by type of VET system.
- If a worker is likely to have several different jobs over his or her work life requiring somewhat different specific and even general skills, an important question is whether more general training as represented by more years of schooling and the possibility of taking higher levels of schooling in a series of interrupted periods of education and work does not make more sense than channeling students at a rather early age into specific types of occupations and fewer years of general schooling?



Economic Growth in Various Countries with Various VET Systems

Table 2. Growth in Inflation-Adjusted Output per Person Employed, by Country, 1980-2006

<i>Country</i>	Growth in Real Gross Domestic Product/Person Employed (percent)			Annual Growth Rate in GDP/PE (%/)
	<i>1980-1990</i>	<i>1990-2000</i>	<i>2000-2006</i>	<i>1980-2006</i>
Austria	23	22	10	1.9
Denmark	21	24	8	1.9
Germany	24	16	6	1.6
Netherlands	17	28	6	1.8
Switzerland	14	4	5	0.9
Japan	40	10	8	2
Sweden	18	17	16	1.8
Norway	22	36	12	2.4
United Kingdom	27	23	14	2.2
France	20	16	7	1.5
Australia	19	26	14	2.1
United States	25	22	10	2
Canada	17	18	10	1.6

Source: World Bank (2008). *World Bank Indicators*.



Implications for VET Systems

- Two main arguments against moving in this direction are that youth will tend to over-invest in general academic skills at high cost to the State and will under-invest in work experience. It could also increase the job search and risk costs to firms and the likelihood that many youth will drop out of more academic secondary school because of boredom and lack of direction.
- Dual System incorporates youth early into the discipline and security of a job, creates a structure in which (lower and middle class and immigrant) youth are supervised into learning good habits and into a structure that teaches collective values of hard work rewarded with security and a sense of commitment, solidarity, and mutual respect.
- In a rapidly changing, insecure world, it may be more important to focus on these values than on greater flexibility and choice.



Implications for VET Systems

- But increased part-time and temporary work plus the increased pay-offs to those with higher education degrees—particularly in certain fields—increases pre-tax, pre-public spending income inequality, and the increased globalization of production makes it more difficult to raise tax revenue by taxing productive activities in the national space.
- Increased heterogeneity of population (Swiss workforce 20 percent immigrant).
- More attention needs to be paid to equalizing opportunities through education.
- Less room in Europe for equalization through fiscal policies, and more room for equalization through fiscal policies in the US, and less through educational reform than in Europe.



Final Point on Adaptation

- Adapting the Dual System, or for that matter any VET system, to other economies and corporate cultures is difficult.
- Key to the System is the corporate culture of belief and commitment to training, as well as the neo-corporatist political structures absent in most countries.
- Likely will never find their way into the U.S. education/labor market.
- Similar statements could be made about the transportability of U.S. market-based, individual choice systems becoming the norm in Switzerland or Germany.
- More flexibility will certainly spread through the German and Swiss VET systems, but they will undoubtedly retain much of their present shape for a long time to come.