

Research Department
Federal Reserve
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Idle Minds

According to government statistics, there is little reason to be concerned about joblessness among society's more highly trained people. For one thing, there is a general tendency for unemployment rates to decline as one moves up the educational ladder. Last March, for example, the jobless rate was only 3.3 percent for workers with at least a college degree, compared with 7.5 percent for high-school graduates and 10.3 percent for primary-school graduates. Again, the unemployment rate for professional and technical workers — generally the most highly-educated occupational group — has averaged about 3½ percentage points below the overall unemployment rate for the past two decades.

Unemployment, Underemployment
In contrast to this statistical picture, one often hears of the employment difficulties faced by holders of graduate degrees. Actually, the problem among such individuals is probably more of underemployment than of unemployment. Everyone knows (or knows someone who knows) a Ph.D. in History or English who is driving a taxi while awaiting that teaching position to turn up. Anecdotes are more abundant than statistics in this area, but there are a few studies which suggest the dimensions of the problem. For example, a survey by the Modern Language Association found that 39 percent of last year's Ph.D.s in English were unable to find teaching positions. Also, Professor Ernest May of Harvard reports that roughly 90 percent of all new Ph.D.'s in the hu-

manities found academic jobs over the past several decades, but that only 10 percent of similar graduates in the next two decades may find academic jobs.

The problem does not seem to affect all disciplines equally, but appears to be concentrated in the humanities and a few social sciences — those fields which traditionally recycle most of their graduates back into the university. The physical sciences are much less troubled by this type of problem, as evidenced by the National Science Foundation finding that the unemployment rate for Ph.D. scientists and engineers was just under one percent in the recession year 1975.

With considerably more dramatic unemployment problems faced by other groups, such as the 35–40 percent rate among black teenagers, why should we be concerned with the job problems of such a seemingly privileged group as advanced-degree receivers? For one reason, society has made a sizable investment in this group. Practically all education in the United States involves a substantial subsidy to the student, since tuition at most covers only a fraction of the true cost of the student's education. The further the student treads up the educational hill, the larger is the public investment embodied in his "human capital," and it can average more than \$20,000 for the college graduate who decides to go on for a Ph.D. When this individual is found in the unemployment lines, the large public investment is not reaping any social benefits. And

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F R B S F Weekly Letter

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when he or she is underemployed, the return on this social investment becomes less than was originally anticipated.

Causes

What are the causes of unemployment among the highly educated? First there is apparently a lack of useful job-market information. When people decide to enter advanced-degree programs, they typically have some impressions concerning future employment opportunities. These impressions are generally based upon information gleaned from newspapers, magazines, and conversations with knowledgeable people. However, such information may not be very helpful, because it is typically based on individual cases rather than on overall surveys of the relevant field. Again, even when the quality of the information is high, it may not be a very good guide to the state of the market three to six years hence, when the student will be completing his or her degree.

Even in cases where there is sufficient information and a relatively stable job market, the graduate may become unemployed because he doesn't give proper weight to the available information. If a student enjoys his field, his decision to remain in graduate school may have a large consumption component and a relatively small investment component. In other words, he may not really care very much whether he gets a job when he graduates, because of his intense interest in French literature or whatever else he may be studying at the time. The pursuit of any sort of knowledge can easily become an end in itself.

Some evidence suggests that those who choose the humanities — the field in which the unemployment/underemployment problem is the greatest — give the least weight to the state of the job market. Thus, between 1971 and 1973, long after the job market had begun to send signals back to the universities, graduate enrollments in physics declined 11 percent while graduate enrollments in the humanities expanded by 15 percent.

Even when the individual does have some interest in post-degree job prospects, the university atmosphere doesn't always promote full disclosure of employment opportunities. University departments, like other bureaucracies, resemble biological organisms — they are interested in growth, or at the very least, in survival. When the market for a particular field is expanding, university departments are happy to grow with the increased student demand for instruction. However, when the market for that field begins to contract, university departments are reluctant to join in the downturn. In order to maintain their jobs, professors need students. And while altruism may lead departments to inform potential students of the dim job prospects at the other end of the educational tunnel, self-preservation may lead them to downplay the employment problem.

Another cause of Ph.D. unemployment involves the values held by new degree-holders. Typically, most Ph.D. graduates desire university research and teaching positions more than anything else. This is understandable, because for several years the student has interacted largely with university pro-

fessors, who become increasingly important role models. Graduate school is really an apprenticeship program, and like any other apprentice, the graduate student wants someday to become a journeyman like the professor under whom he or she has worked. To accept any sort of non-academic employment is often considered a second-rate choice.

Solutions?

The immediate problem to be solved is the un- and underemployment of thousands who have already received Ph.D.'s in surplus fields. Many of them have skills (often related to research, administration or communication) which are readily transferable to non-academic jobs. But prejudices must first be overcome among both potential employees and potential employers. In one such step, the Modern Language Association has assigned a full-time staff member to explore non-academic job opportunities for its unemployed members. On a larger scale, the Mellon Foundation has developed a 7-week orientation program at the N.Y.U. School of Business, to help provide 50 unemployed humanities Ph.D.'s with a useful introduction to the business world.

But a long-run solution to the problem must concentrate on the entry rather than the exit to graduate education. Most importantly, complete information on the job market must be made available to potential students, especially when it is pessimistic. For example, when a student applies for a graduate program in English, the university could send the applicant a short statement assessing the current and future market for English Ph.D.'s. Such

a statement might be updated once a year, simply using information on the placement of that university's recent graduates or information from broader surveys and Department of Labor studies.

As we've seen, not everyone will put much weight on such information — especially those individuals who view education as a consumption good rather than an investment good. Of course they have every right to do so, but it doesn't automatically follow that taxpayers should heavily subsidize such consumption when it fails to yield any social payoff. Methods of eliminating unprofitable social subsidies can become administrative and political nightmares, but when public funds have other pressing uses, such education subsidies begin to appear rather inequitable.

Some thought should be given to reducing the social subsidy to those fields where the subsidy has contributed to an oversupply of graduates. This could be done by setting quotas on entry (and letting students compete on merit) or raising the tuition in those fields (and having students compete by income and willingness to pay). Both methods improve the survivors' job prospects, their relative salaries, and the social return to the remaining public subsidy. Whatever methods are used, either to employ the currently un- or underemployed or to restructure incentives to deal with the problem in the longer run, it is clear that some creative thinking is necessary to alleviate what could become a serious social and economic problem in the decades ahead.

Michael Gorham and John Norton

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BANKING DATA—TWELFTH FEDERAL RESERVE DISTRICT

(Dollar amounts in millions)

Selected Assets and Liabilities Large Commercial Banks	Amount Outstanding 1/18/78	Change from 1/11/78	Change from year ago	
			Dollar	Percent
Loans (gross, adjusted) and investments*	104,707	- 1,663	+ 11,908	+ 12.83
Loans (gross, adjusted) — total	82,779	- 1,514	+ 12,557	+ 17.88
Security loans	1,928	- 1,076	+ 431	+ 28.79
Commercial and industrial	25,168	- 215	+ 2,248	+ 9.81
Real estate	27,641	+ 118	+ 5,892	+ 27.09
Consumer instalment	14,773	+ 56	+ 2,554	+ 20.90
U.S. Treasury securities	7,571	+ 67	- 2,050	- 21.31
Other securities	14,357	- 216	+ 1,401	+ 10.81
Deposits (less cash items) — total*	103,894	- 450	+ 10,603	+ 11.37
Demand deposits (adjusted)	29,596	- 441	+ 3,245	+ 12.31
U.S. Government deposits	560	+ 199	- 33	- 5.56
Time deposits — total*	72,205	- 93	+ 7,148	+ 10.99
States and political subdivisions	6,692	+ 47	+ 737	+ 12.38
Savings deposits	31,543	- 6	+ 635	+ 2.05
Other time deposits ‡	31,421	+ 56	+ 5,487	+ 21.16
Large negotiable CD's	13,531	- 272	+ 3,586	+ 36.06
Weekly Averages of Daily Figures	Week ended 1/18/78	Week ended 1/11/78	Comparable year-ago period	
Member Bank Reserve Position				
Excess Reserves(+)/Deficiency (-)	+ 14	- 13	-	51
Borrowings	4	53	-	2
Net free(+)/Net borrowed (-)	+ 10	- 66	-	53
Federal Funds—Seven Large Banks				
Interbank Federal fund transactions				
Net purchases (+)/Net sales(-)	+ 694	+ 823		+ 1,263
Transactions with U.S. security dealers	+ 426	+ 863		+ 351
Net loans (+)/Net borrowings (-)				

*Includes items not shown separately. ‡Individuals, partnerships and corporations.

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