



# From Bad to Good Jobs?

**An Analysis of the Prospects for  
Career Ladders in the Service Industries**

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## An Analysis of the Prospects for Career Ladders in the Service Industries

### EXECUTIVE SUMMARY

In today's service-dominated economy it has become very difficult for people without college degrees, still a majority of the population, to get middle-class jobs. Most of them have to take low- or poverty-wage jobs, and face reduced chances of upward mobility. Which policies could ensure progress out of poverty and low-wage jobs? The question is pivotal in welfare, poverty, and labor market policy. One currently popular strategy is to build industry-based career ladders. This report addresses two key issues in considering these career ladders. First, we discuss what career ladders are supposed to do. Second, we carefully consider the ways that the very structure of many service industries can stand in the way of this approach.

#### Bad jobs: The problem and its doubters

In 2000 there were more than 29 million people older than 17 in poverty-wage jobs, and almost 31 million in low-wage jobs. This means that better than half of all jobs were bad jobs. Some skeptics, however, do not see any pressing social problem in the proliferation of bad jobs. Their main argument is that bad jobs are not a problem because they are stepping stones to better jobs, not the beginning of dead-end careers. This argument cuts little ice, since all available evidence shows that a substantial number of people are being condemned not just to poverty- and low-wage jobs for a limited time, but to poverty- and low-wage careers and to long-term poverty traps.

#### A proposed solution: Building industry-based career ladders

In response to the twin-problems of the poor quality of the employment structure, and of the people trapped in poverty- and low-wage jobs, a large number of career ladder initiatives are being pursued around the country. There are three different scenarios:

- Under the “targeting access scenario,” career ladder initiatives aim at improving the advancement opportunities of workers within the industry by making the good jobs less open to people coming from outside the industry, by relaxing educational and other employment barriers, and by reducing information asymmetries regarding existing opportunities and pathways for advancement.
- Under the “targeting skill scarcities scenario,” career ladders aim at moving people to better-paying positions that remain unfilled due to skill scarcities, by placing these positions in the upper rungs of a ladder, and helping workers in lower rungs acquire the skills and credentials required to take the unfilled vacancies.

- Lastly, in the “targeting job quality scenario,” career ladder initiatives are just one component of sectoral partnerships that induce firms to modernize (upgrade their technology, reorganize their labor process, develop competitiveness-enhancing capacities, etc.). Career ladders contribute by helping produce the skills required by such modernization, so that potential unmet labor demands, which would discourage firms from modernizing, are avoided.

When a career ladder program is able to move people to better-paying positions previously unfilled due to skill scarcities, or to positions that would not have existed without the program (as is the case under the targeting job quality scenario), it is a win-win situation: employers and all workers benefit. Things are quite different under the targeting access scenario, because here career ladders simply redistribute among workers the costs imposed by a low-quality employment structure.

In the service industries, with the exception of the healthcare industries in which skill scarcities have been common, career ladders are most likely to target access. Thus, their normative appeal in these industries would mainly come from two sources. First, they may reduce the number of people stuck in bad jobs for long periods of time, by making the expected time in bad jobs across workers less unequal. Second, they may have equalizing effects over the upward mobility chances of different education-, sex-, race-, nationality- or ethnicity-based groups, even if the total number of people stuck in bad jobs is not altered.

These normative justifications for career ladders give rise to very serious problems, both for the promoters of the policy and for those simply interested in assessing their actual or potential results. Movements between jobs are linked by complex vacancy chains, i.e., strings of vacancies generated by an initial move. Although it might be the case that those ultimately displaced by career ladder-induced upward movements are such that the effects of the policy are normatively desirable, the theoretical and statistical models needed to assess whether this is the case are not yet available. Given what we know today, the sobering conclusion has to be that although under the targeting-access scenario the career-ladder policy may have normatively desirable effects, it is also possible that it will have little or even no desirable effects at all.

## **Structural Constraints on Career Ladders in the Service Sector Industries**

Is building career ladders a feasible strategy in the service industries, given the constraints that these industries’ employment structures entail? In this report we attempt to answer this question by examining the employment structure of, and opportunities for advancement in, ten service-sector industries: hospitals; eating and drinking places; food stores; nursing and personal care facilities; child day care services; elementary and secondary schools; business services; banking and savings institutions; hotels, motels and lodging places; and non-food retail. We have also included in our study two industries outside the service sector: construction and durable manufacturing, in order to provide “yardsticks” for comparison.

Our service industries differ in the quality of their employment structures and in the possibilities for advancement they offer. Schools, hospitals, and banking all have relatively good-quality employment structures because, as in construction and durable manufacturing, their proportion of good jobs is equal to or greater than their proportion of bad jobs. In addition, these three industries have “upstairs” employment structures, that is, employment structures in which there are significantly more jobs at each wage level (poverty-, low-, and good-wage) compared to the preceding one. As a result, the average upward mobility rates from bad to good jobs in these industries are comparable to or higher than those of construction and durable manufacturing.

Unlike our yardstick industries, however, schools offer very few good employment opportunities to workers without college education—the upward mobility rates for dropouts and high-school graduates is much lower here than in the yardstick industries. Examining the occupational distribution of jobs in this industry indicates why this is the case: the overwhelming majority of its good jobs require college credentials on technical and/or legal grounds, four-year degrees in most cases. In schools there are far too many non-college workers in bad jobs per opening accessible to them at the good-wage level.

As in schools, the upward mobility rates for those without college are much lower in hospitals than in the yardstick industries. However, for the goal of building career ladders, the situation is a little better in hospitals than in schools. Although in hospitals, as in schools, it is the case that most good jobs require college education, unlike in schools a significant proportion of them are accessible for people with two-year associate degrees, and some for people with one-year certificates. Hence, if career ladder programs are able to provide the support workers require to get these degrees and certificates, they may be able to move them to good jobs. This would entail, however, that the level of support that career ladder programs typically provide to workers be considerably ratcheted up, and that the amount of resources for operating them be increased accordingly.

The situation might be different in banking. Although in this industry the high-school graduate upward mobility rate is much lower than in the yardstick industries, our analysis of the occupational distribution of good jobs in this industry suggests that it might offer better prospects for building within-industry career ladders under the targeting-access scenario than both schools and hospitals. However, a more extensive study of banking’s occupational structure would be needed to confirm this very preliminary assessment.

Business services, eating and drinking places, childcare, food stores, nursing, hotels, and non-food retail all have poor-quality employment structures—in all of them the proportion of bad jobs is much higher than the proportion of good jobs. In addition, all of them but business services have “downstairs” employment structures; that is, employment structures in which there are significantly fewer jobs at each wage-level compared to the level one step below. And even in business services, which has an upstairs employment structure, this structure is much flatter than those of the good industries. The result is that in all these service industries both the average upward mobility rate and the rates for dropouts and high school graduates are substantively lower than in the yardstick industries.

In summary, with the possible exception of banking, our service industries have employment structures either dominated by poverty- and low-wage jobs or, when this is not the case, employment structures in which the overwhelming majority of good jobs require at least some college education and often four-year college degrees. As a result, seven of our ten service industries offer very few opportunities for advancement for those without college education, while all but two of them (hospitals and banking) have employment structures that, at least in the targeting-access scenario, seem very inimical to the development of career ladders.

## Conclusions

Under the scenario most relevant for the service industries, the targeting-access scenario, building career ladders is not a win-win strategy—here career ladders do not broaden opportunities, but just reshuffle them. Under this scenario career ladders' potential appeal comes from the fact that they might be able to redistribute among workers the costs imposed by a low-quality employment structure in ways deemed desirable. Unfortunately, we have no way yet of establishing whether this is the case or not.

Moving from the question of the normative foundations of the career ladder policy to the issue of whether this policy could be implemented at any significant scale in the service industries, it is clear that not all service industries are equal. In effect, in nursing, hotels, food stores, non-food retail, business services, childcare, and eating and drinking, the employment structure is such that career ladder programs cannot reasonably be expected to raise mobility rates substantially, much less take them anywhere close to those of the yardstick industries. Therefore, to the extent that workers are in any of these industries, the best way to help them move up will most likely be to help them move out—to other industries.

Non-college-educated workers holding bad jobs in schools, hospitals or banking have a much better chance of moving to better-paying work in their industries than equally educated workers in any of the other seven service industries examined here. However, this does not mean that building career ladders in these three industries is equally advisable, because to be potentially worthwhile career ladders should significantly boost the advancement chances of disadvantaged workers over their current chances. Unfortunately, our analysis of the occupational distributions of good jobs in schools and hospitals indicates that there are serious educational barriers to increasing them. These barriers are, however, much more overwhelming in schools than in hospitals. Further studies are needed to determine whether banking is a more propitious place for building career ladders, as very preliminary evidence suggests it may be the case.

Overall, the fact that the effects of career ladders are undetermined plus the fact that the employment structure of service sector industries seem largely inimical to building career ladders lead to skepticism about the potential of the career ladder policy.

The promoters of career ladder policies need to take more seriously the existing constraints on building career ladders and making them produce the expected results. They also have to keep in mind that most often career ladders will simply redistribute opportunities across workers, and that even this modest goal confronts formidable structural constraints. For these reasons, building career ladders in the service industries is unlikely to take us very far.

# 1

## Introduction

Over the last thirty years, most growth in employment in the U.S. occurred in the service sector. The service sector produces many low-skill, badly-paid jobs and many high-skill, very well-paid jobs, but few jobs in between. Thus, in today’s services-dominated economy it has become very difficult for people without college degrees—who still are a majority of the population—to get middle-class jobs. Most have to take low- or poverty-wage jobs, and face reduced chances of upward mobility.

Welfare reform, with its emphasis on rapid attachment to work or “work first,” has made this problem of job quality in America a particularly pressing one. Studies of welfare leavers consistently show that many are in poverty-wage jobs long after getting their first job. Attachment to the labor market does not guarantee self-sufficiency for welfare leavers, nor for the millions of other workers who find themselves not only in poverty- or low-wage jobs, but also in careers dominated by such jobs.

Which policies could ensure progress out of poverty- and low-wage jobs? The question is pivotal for welfare, poverty, and labor market policy, but the answers are elusive. One currently popular strategy is to build industry-based career ladders. However, insufficient attention has been paid to key issues raised by this approach. First, we focus on the implicit strategies embedded in career ladders. Second, we shed more light on the structural constraints that service industries often provide. Indeed, the employment structure of those service industries in which people are most likely to get stuck in bad jobs may be unfavorable to building industry-based career ladders. This report focuses on these two issues.

The structure of the report is the following:

- In the next section, we present some basic facts about the employment structure of the economy as a whole.
- The third section debunks some common myths about poverty-wage workers.
- The fourth section explains what a career ladder is, offers a rationale for the career ladder strategy, and describes the conditions that have to be met for such a strategy to help poverty- and low-wage workers.
- The fifth section explores whether and when career ladders are a feasible strategy in the service industries. To this end, it examines the employment structure of ten service industries in which poverty- and low-wage jobs are concentrated, and the opportunities for advancement they currently offer. It also assesses the prospects for building within-industry career ladders given the constraints that their employment structures entail.
- The final section distills the main conclusions of the analysis.

### Data sources

Most of the data for this paper come from the Current Population Survey (CPS) for the years 2000 and 2001. We also employed the March supplement of the CPS for 2001 (income year 2000) and data from the Panel Study on Income Dynamics for the years 1991, 1996 and 2001 (income years 1990, 1995 and 2000). Throughout the report we use the term “wage” to designate the hourly earnings of both hourly workers and non-hourly workers. When appropriate, we included tips, commissions, overtime, etc. in our calculations. More details on data sources and methodology can be found in the Appendix.

# 2

## Bad Jobs: The Problem...

### Job quality thresholds

We define poverty-wage jobs as those paying less than a single, full-time worker would need to earn to keep a family of four out of poverty: \$8.40 per hour in 2000. We define low-wage jobs as those paying less than 1.5 times the poverty-wage cut-off, which was \$12.59 per hour in 2000. Jobs paying above \$12.59, which in 2000 was (coincidentally) almost the exact value of the median wage, we consider good-wage jobs. Sometimes we will call poverty- and low-wage jobs together “bad jobs,” and we will refer to “good-wage jobs” as “good jobs.” To summarize:

#### Poverty-wage jobs:

Less than \$ 8.40 per hour (in 2000 dollars)

#### Low-wage jobs:

Less than \$12.59 per hour but at least \$ 8.40 per hour

#### Good-wage jobs:

At least \$12.59. per hour

#### Bad jobs:

Poverty-wage jobs + Low-wage jobs

#### Good jobs:

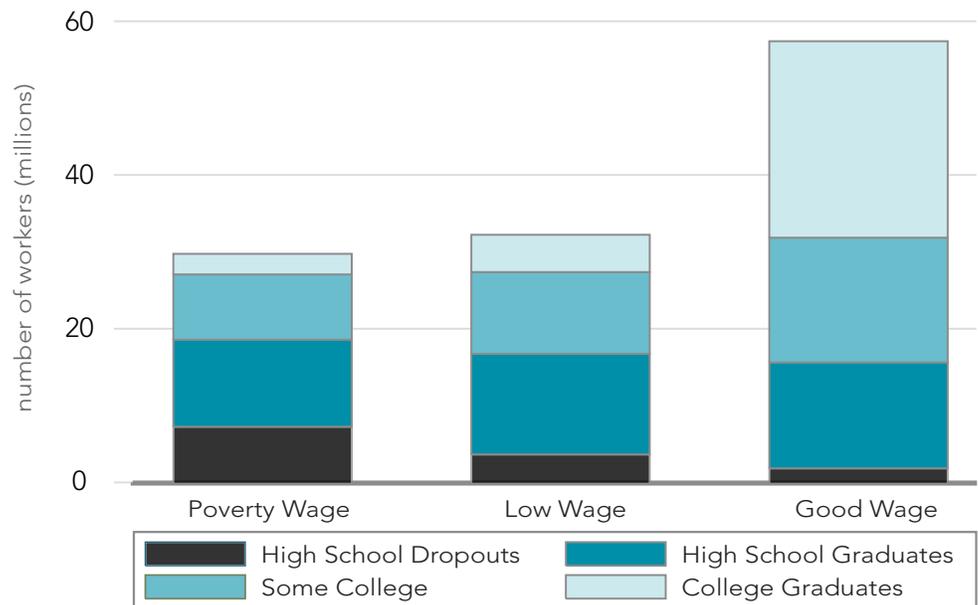
Good-wage jobs

It is possible to offer a simple but informative characterization of the U.S. employment structure by calculating the relative proportion of poverty-, low-, and good-wage jobs it includes. In Figure 1 we see that in 2000 there were more than 29 million people older than 17 in poverty-wage jobs, and almost 31 million in low-wage jobs. This means that better than half of all jobs were poverty- or low-wage. This figure also shows that the majority of high-school dropouts hold poverty-wage jobs, and that almost two-thirds of high-school graduates hold poverty- or low-wage jobs. Lastly, it indicates that people with some college education are more or less evenly distributed among good-wage and either poverty- or low-wage jobs, and that most college graduates have good-wage jobs—although about one out of five have either poverty- or low-wage jobs.

According to employment growth projections to the year 2012, the bad job problem is here to stay. As Table 1 shows, of the ten occupations expected to generate the most jobs, five are poverty-wage and two are low-wage.

Figure 1

### Employment Structure of the Entire Economy by Workers' Education, 2000



Source: Authors' analysis of data from CPS-ORG 2000.

Table 1

**Poverty- and Low-Wage Occupations among the Ten Occupations with Largest Expected Job Growth, 2002–2012**

Occupation	Poverty-Wage	Low-Wage	Good-Wage
Waiters and waitresses	X		
Combined food preparation and serving workers, including fast food	X		
Cashiers	X		
Retail salespersons	X		
Janitors and cleaners	X		
Customer service representatives		X	
Nursing aides, orderlies, and attendants		X	
Postsecondary teachers			X
Registered nurses			X
General and operations managers			X

**Source:** Projections are from Hecker (2004). Data on median wages are from the Occupational Employment Statistics program of the U.S. Bureau of Labor Statistics, 2003.

**Note:** Poverty-wage occupations are those in which the median wage was less than \$8.97 in 2003; good-wage occupations are those in which the median wage was higher than \$13.45 in 2003; occupations with median wages between \$8.97 and 13.45 in 2003 are low-wage.

# 3

## ...And Its Doubters

Some skeptics do not see any pressing social problem in the proliferation of poverty- and low-wage jobs, not even in the fact that one out of every four workers holds a poverty-wage job. Let's focus our analysis on this type of jobs. The critics have several arguments for denying that they are a cause of concern.

### The teen argument

Let's begin with the "teen argument," according to which mainly (or perhaps only) teenagers and other young workers without family responsibilities actually fill poverty-wage jobs. Table 2 shows that this oft-repeated argument is incorrect. It presents the distribution of poverty-wage workers by age and sex in 2000, for workers older than 15. We see that less than 19 percent of poverty-wage workers are teenagers, while almost 62 percent are at least 25 years old (56 percent of men and 67 percent of women), and 43 percent are at least 35 years old (35 percent of men and 48 percent of women). It is clear, then, that the argument that poverty-wage jobs are not a problem because they are filled by teenagers without family responsibilities is contradicted by the available evidence.

Table 2

**Poverty-Wage Workers by Age and Sex, 2000**

Age	All	Male	Female
16-19	18.5	21.9	16.1
19-24	19.2	22.4	16.9
25-34	19.6	20.6	19.0
35-44	17.8	14.2	20.4
45-54	12.9	9.7	15.2
55-64	7.7	6.6	8.5
65+	4.2	4.7	4.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

**Source:** Authors' calculations using data from CPS-ORG 2000.

**Note:** Poverty-wage workers are those making less than \$8.40 in 2000.

## The real welfare argument

The “real welfare argument” relies on a potential lack of correspondence between wages and welfare. According to this argument, the fact that one quarter of all workers are poverty-wage implies nothing in terms of welfare. People filling poverty-wage jobs, the argument goes, may live in families with more than one earner, may have other sources of income, may receive food stamps, income from welfare programs or the Earned Income Tax Credit program, may own their homes or even stocks and bonds, and thus may need less cash earnings of their own to avoid poverty.

Table 3 shows that this argument is mistaken. Almost one out of every two poverty-wage workers, and one out of every five low-wage workers, lives in a poor family. Moreover, the proportion of prime-age poverty-wage workers whose families are poor is still higher. Conversely, less than one in twenty-five good-wage workers lives in a poor family. Thus, it is clear that holding a poverty-wage job is strongly associated with poverty, and that the proliferation of bad jobs does have an important effect on people’s welfare.

Table 3

### Job Quality and Poverty, 2000

	Share of Workers Living in a Poor Family	
	All	Prime-age (25–54)
Poverty-wage Workers	46.0	54.3
Low-wage Workers	19.0	19.8
Good-wage Workers	3.8	3.6

**Source:** Authors’ calculations using data from the March supplement of CPS 2001 (income year 2000).

**Notes:** Poverty-wage workers are those making less than \$8.40 in 2000; good-wage workers are those making more than \$12.60 in 2000; workers making between \$8.40 and \$12.60 in 2000 are low-wage. A family is deemed poor if its total income is below twice the federal poverty line for a family of its size and composition (see Appendix A for details).

## The skills argument

According to the “skills argument,” the reason why some people are not earning better wages is because they lack skills. Although the ample supply of low-skilled labor in the U.S. is likely to have some role in explaining poverty wages, this argument is also mistaken. Let’s look first at the educational level—the usual proxy for skills—of poverty-wage workers. Table 4 shows that, in 2000, less than 31 percent of these workers lacked a high school diploma, better than 35 percent had it, and the remaining almost 34 percent had at least some college education. And the figures are even more conclusive when we look at prime-age poverty-wage workers, who comprise more than half of all poverty-wage workers. Among these workers, only one quarter were not high-school graduates, and almost 35 percent had at least some college education.

Moreover, projections by the Bureau of Labor Statistics (BLS) to 2010 indicate that 58 percent of job growth will occur in jobs requiring a high school degree or less, while 42.7 percent will occur in jobs that only require short-term training (a short demonstration of duties or one month or less of training). Likewise, projections to 2012, also by the BLS, indicate that half of the thirty occupations with the largest projected job growth will only require short-term training. It is thus clear that the relationship between education and wages is not what this supply-side argument entails, and that the bad-job problem involves things other than deficits in skills.

Table 4

### Poverty-Wage Workers by Educational Level, 2000

Educational Level	All	Young Workers (16–24)	Prime-age Workers (25–64)	Older Workers (65+)
Less than High School	30.7	39.6	24.6	28.2
High school Graduate	35.5	27.4	40.0	41.8
Some College	26.5	30.5	25.1	19.4
College Graduate	7.4	2.6	10.3	10.7
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

**Source:** Authors’ calculations using data from CPS-ORG 2000.

**Note:** Poverty-wage workers are those making less than \$8.40 in 2000.

## The stepping-stone argument

This argument contends that poverty-wage jobs are not a problem because they are stepping stones to better jobs, not the beginning of dead-end careers. The American dream of social mobility for all is still in good shape, the argument continues. The fact that some people have poverty-wage jobs in the first part of their careers or occasionally in other stages is not something to be worried about; before long, most people will move up.

Is this true? All the available evidence indicates that it is not:

- Duncan et al. (1996) estimated that only 17 percent of workers who turned 21 between 1980 and 1991 were able to attain earnings better than twice the poverty level for a family of three by age 25, and that only 42 percent were able to do so even by age 30.
- Carnevale and Rose (2000) showed that about one-third of low-wage workers (comparable to what we here call “poverty-wage workers”) are persistently in badly-paid jobs.
- Osterman (2000) found that close to half of all men who were in the bottom earnings quintile in 1979 remained there in 1995.
- Bernhardt et al. (2001) found that median wage growth for white men by mid-career was 21 percent lower in recent than in previous decades, and that the proportion of workers in “low-wage careers” has become much more prevalent at all educational levels.
- Lastly, using data from the Panel Study on Income Dynamics, we found that among the household heads and their spouses that had a poverty-wage job in 1990 and were working five years later, 53.7 percent were still poverty-wage, while 41.5 percent of those working ten years later were still poverty-wage.

There can be little doubt that at the bottom of the labor market mobility is not in good shape, and that a very significant proportion of poverty- and low-wage workers have dead-end careers. An increasing number of people are being condemned not just to poverty- and low-wage jobs for a limited time, but to poverty- and low-wage careers and to long-term poverty traps.

# 4

## A Proposed Solution Building Industry-Based Career Ladders

The previous section identified two central problems of today's services-dominated economy. The first problem is the poor quality of the U.S. employment structure. There are 60 million workers holding poverty- or low-wage jobs, and a large proportion of these workers are responsible for their families' welfare. Making the first problem even more pressing, the second problem is that many people are trapped in poverty- and low-wage jobs for long periods of time. Indeed, for most people without college degrees, poverty- and low-wage jobs are not short stopovers on their way to good jobs, but the staple of their careers.

Faced with these problems, many public policy scholars, policymakers, and community-based organizations (CBOs) have turned their attention to the strategy of (re)building career ladders. In this section we first explain what a career ladder is and what organizational challenges it has to face. We then propose a rationale for the career ladder strategy. We also discuss why employers would want to collaborate in the development of career ladders. We end up by summarizing the policy appeal of the career ladder strategy.

### What is a career ladder?

A career ladder is a succession of jobs with increasing levels of related skill requirements and increasing compensation, which a worker can occupy over the course of his or her career. These jobs get linked in a career ladder through two mechanisms.

First, there may be institutional arrangements in place that involve some level of commitment from employers to fill openings with people holding jobs lower down the ladder. An example involving very high levels of employer commitment would be a formal provision incorporated into a union contract. An example involving a lower level of employment commitment would be a non-contractual agreement in the context of a partnership of firms with other actors, for instance unions, CBOs, and technical colleges.

Second, the arrangement of jobs in a career ladder may be the result of more or less widely shared normative expectations about the previous positions that the candidates for certain classes of jobs should have had. An important example would be that of a set of firms, which as part of their human resources policies decide, and make it publicly known, that the openings in a particular job classification will be filled by workers from a specified set of other lower-wage job classifications.

In principle, career ladders can be constructed at three different levels: at the cross-industry level, at the industry level, and at the firm level. Most existing career-ladder initiatives are at the industry or firm level, where all of the job advancement occurs within a particular industry or firm. A given firm may have multiple career ladders, which may intersect, reflecting its underlying organizational and occupational structure.

## Organizing a career ladder

Organizing industry-based career ladders is not an easy task. Building career ladders usually involves creating intermediary organizations that bring together the government, CBOs, private funders, community and technical colleges and other training providers, groups of firms in a particular industry and, if present, unions. One of the actors involved—for instance, a CBO, a community college, or a government agency—may take a leadership role in forming and steering a career ladder organization. But without the participation of most of the above actors, the program is less likely to succeed. Unions can play an especially important role both in pushing for the programs, in providing institutional support for their continued existence, and in securing various contractual commitments from employers.

This is a relatively new field of study and the literature on career ladders is rather sparse, but it offers some interesting observations regarding the difficulties associated with the actual implementations of the policy (e.g., Fitzgerald, 2006; Dresser 2000; Fitzgerald and Carlson, 2000; Prince, 2003, see also the website of the Workforce Strategy Center, [www.workforcestrategy.org](http://www.workforcestrategy.org)). There are many obstacles that can be encountered in constructing such ladders, from making resources available for training, to obtaining employer support, to getting workers to commit to the sacrifices needed to move up the ladder.

Although investing in worker training may lead to productivity-driven increases in profits, employers are usually reluctant to make the investments in training that workers require to advance. This is in part because such investments are costly—the availability of public money can make a big difference here—and in part because of a fear that workers will take their new skills and go elsewhere before the firms providing the training take advantage of their increased abilities. In addition, when the ladders are defined at the industry level, individual firms have to cooperate—for instance, they have to harmonize their human resources systems to make the ladders work. Such cooperation may be difficult to achieve and sustain.

## Examples of career ladder initiatives

A large number of career ladder programs are being pursued around the country. The following are some examples:

- The Health Care Career Ladder in Chicago, which attempts to link the following four job levels: health care aide, certified nursing assistant, licensed practical nurse, and registered nurse or an allied health profession (such as respiratory therapist).
- The Greater Cleveland Growth Association, in partnership with the Center for Health Affairs, has launched career ladder initiatives in hospitals and clinics in the area, and also in long-term care facilities. The latter links certified nursing assistant, clinical technician I and clinical technician II jobs, and there are plans to extend it to clinical technician III and licensed practical nurse jobs.
- In Massachusetts, also in the health care sector, a program at Cape Cod Hospital looks first within the hospital to fill vacancies, subsidizes training, makes public information on all job openings and on their requirements in terms of training, education, and certification, and offers assistance and guidance to workers in order to qualify.
- In Washington, DC, Consumer Value Stores has organized, in collaboration with a One-Stop Career Center, a career ladder linking pharmacy assistant, pharmacy technician, and lead pharmacy technician jobs.
- In the region of metropolitan Madison, Wisconsin, the career-ladder component of the Jobs With a Future project improves labor market information and opportunities for workers to advance in manufacturing—the printing, plastic, metal and food-processing industries—and health care. In the latter, it helps certified nurse assistants to move up to mid-level technical jobs in the health-care industry.
- The Boston Workforce Development Coalition launched the Career Ladders Initiative to build ladders in health care, long-term care, and financial services—and efforts are underway in other sectors, such as information technology, biotechnology, and childcare.
- In California the state's Employment Training Panel and the state's Employment Development Department have both adopted a policy of helping employers build career ladders for their employees, and to this end have set aside funds for the training of entry-level incumbent workers.
- Also in California, the hotel industry and the union representing hotel workers (Hotel Employees and Restaurant Employees, HERE) collaborated with employers in setting up career ladders in San Francisco, San Jose, Los Angeles, and San Diego.
- A non-profit consulting firm, Workforce Strategy Center, is working on projects to develop careers in information technology for disadvantaged workers in New York, San Jose, Los Angeles, the East Bay (Oakland/Berkeley) area and San Francisco, and consortiums composed of city agencies, CBOs, employers, community colleges, and funders have been organized in each of them.
- In Seattle, Shoreline Community College has created a job ladder partnership involving employers in manufacturing, customer relations, health services, and information technology, which uses both state and federal Pell grant money to finance training. This program attempts to find viable careers for former welfare recipients.

## How can a career ladder strategy contribute to solving our central problems?

Let's return to our central problems, the low quality of the employment structure and the bad-job trap. Can career ladders contribute to solving either of these? To answer these questions we are going to consider three different scenarios: targeting access, targeting skill scarcities, and targeting job quality.

### Scenario # 1: Targeting Access

This is the most important scenario for the argument of this report. Here career-ladder programs do not affect the proportion of workers at each wage level. Hence, the employment structure remains unchanged, which means that career-ladder programs do not affect its quality. Can they still have an impact on mobility rates? To answer this question we have to examine in detail the determinants of upward mobility rates.

#### Determinants of mobility rates

Let's focus on the determinants of intra-industry mobility rates, from bad to good jobs, of different educational groups. There are four such determinants:

- The number of accessible net openings.
- The number of internal competitors
- The number of external competitors
- The process through which accessible net openings are filled by competitors.

*The number of accessible net openings.* Openings are positions that need to be filled. Those good-wage openings not taken by good-wage workers already in the industry can be called, quite naturally, "good-wage net openings." However, not all of them are relevant. For instance, high-school dropouts cannot fill any good-wage opening, but only those for which employers would consider hiring a dropout. We can call these openings "accessible good-wage net openings," or "accessible net openings" for short. Different educational groups have different numbers of accessible net openings.

*The number of internal competitors.* "Internal competitors" are all the workers that hold bad-wage positions in the industry in question and have the same educational level—high school dropouts, in the above example.

*The number of external competitors.* All other people interested in filling the accessible openings and that employers would consider hiring are "external competitors." For instance, in our high-school-dropout example both workers with more education holding bad jobs within the industry, and all sorts of people outside the industry, may be external competitors.

*The process through which accessible net openings are filled by competitors.* Competitors can be matched to opportunities in very different ways, resulting in quite divergent sets of mobility rates for different socio-demographic groups. The matching process is, thus, a crucial determinant of mobility rates.

## Career Ladders' Modes of Intervention

Career ladder programs may affect the determinants of upward mobility in three different ways:

- They can make the good jobs in the industry less open to people coming from outside the industry.
- They can relax employment barriers based on educational credentials and reduce various forms of queuing.
- They can make the labor market more transparent.

*Reducing the openness of the industry.* Intra-industry upward mobility rates from bad to good jobs are in part determined by the proportion of openings in better-paying jobs that are taken by some of the external competitors—those coming “from outside” the industry. All other things being equal, the higher this proportion, the lower the advancement rates of workers in worse-paying positions within the industry will be. By linking jobs with increasing levels of pay within an industry, career ladders increase the rate at which people in lower-paying jobs in the same industry are hired for good-wage positions, and thus reduce the share of openings that are filled by external competitors. This will tend to improve the advancement prospects of all workers in bad jobs within the industry; that is, it will tend to raise intra-industry upward mobility rates for workers at all educational levels.

Reducing the openness of an industry does not necessarily result in fewer people getting stuck in bad jobs across the economy. However, it does reduce their number if at least one of the two following conditions occur: either the average mobility rate from bad to good jobs of the whole economy goes up—because fewer people move directly from unemployment or out of the labor force to good jobs—while the distribution of opportunities across workers in bad jobs remains the same; or the average mobility rate for the whole economy remains the same but the distribution of mobility opportunities across workers changes in favor of those with a higher chance of getting stuck in bad jobs.

*Relaxing educational barriers and reducing queuing.* Employers sometimes require that people have very specific educational credentials in order to consider them for the positions they need to fill. Sometimes there are legal and technical reasons for doing so. Having a medical degree is a prerequisite for the legal exercise of medicine, but also it is very unlikely that a person not trained in a medical school would be able to get the skills and knowledge that a medical position demands. Hence, hospitals have a compelling reason to require that people working as physicians be medical school graduates. In other cases there is no legal constraint, but still very good technical reasons to require that people filling certain positions have specific educational credentials. Thus, it is rather unlikely that somebody would be able to obtain the knowledge and skills necessary to design a jet engine without obtaining a degree in mechanical engineering or a similar credential.

However, decisions regarding who is and is not hired are only partially based on people's objective capacities and the objective requirements of the openings they want to fill. First, employers often use educational credentials as proxies for skills and knowledge that many people without the credentials have, and for personality traits, work habits, etc. that are only correlated, and quite imperfectly, with those credentials. As a result, many openings become completely inaccessible to people that have all the capacities required but lack the appropriate credentials.

Career ladder programs can increase the number of net openings accessible to workers with less education by relaxing the artificial educational barriers they confront in jobs they would be able to perform well. They can do this by providing employers with alternative proxies, such as job experience in related positions or customized formal training, for those individual features they care about; or by conducting more extensive screening than what firms are disposed to pay for given that they can resort to educational credentials as an inexpensive device to sort out people.

Further, employers and managers often prefer some categories of people to others even if they deem both of them eligible. For instance, employers may prefer people with college education to high school graduates, even for jobs they know do not require any skill or knowledge that the latter do not possess. They may also prefer whites to nonwhites, men to women, married to single people, etc. This can be described by saying that workers are placed in a queue, with the most-preferred categories of workers at the top of the queue and the least-preferred at the bottom. Workers higher in the queue get the best jobs, while those workers at the bottom can only take those jobs that are left -- those that pay less, have worse or no benefits, have fewer prospects for advancement, and are harder, riskier, more unpleasant, and so on.

Career ladders can help disadvantaged workers (people with less education, but also women and minorities) to "jump ahead on the queue." As a result, upward mobility rates among workers with less education will tend to increase, while rates among those with more education will tend to decrease. If as a consequence, the average upward mobility rate in the whole economy goes up, or if mobility opportunities get redistributed towards those who had been more likely to get stuck across the whole economy (that is, not only within the industry in question), this will also reduce the degree to which people get stuck in bad-wage jobs. An even if this is not the case, by reducing the differences among the mobility rates of different education, sex, nationality, race or ethnic groups, the effects of career ladders may still be deemed desirable even if the total number of people stuck in bad jobs remains the same.

*Increasing transparency.* Some categories of people may have better information about jobs than others, and this may contribute to the latter's lack of mobility out of bad jobs. Career ladders may reduce these "information asymmetries," and thus reduce the number of people trapped in bad jobs. Indeed, well-defined ladders may lead to increased transparency for workers confronted with a labor market that they often do not understand well (Dresser and Rogers, 1997). By making opportunities and pathways clear to everyone involved, career ladders may help disadvantaged workers make the best of the level of education and training they have. If this has the effect, across the whole economy, of increasing the average upward mobility rate or of redistributing mobility opportunities in favor of those most likely to get stuck, it will reduce poverty- and low-wage stickiness as well.

## Scenario # 2: Targeting Skill Scarcities

In this scenario career ladders aim at moving people to better-paying positions that remain unfilled due to skill scarcities. The best actual examples are career ladder programs in the healthcare sector (see box page 10), in particular those that attempt to connect entry-level jobs to a succession of nursing positions requiring increasingly higher skill and offering increasingly better pay—certified nursing assistant, licensed practical nurse and registered nurse. Here the existence of unmet labor demands means that successful career ladder programs will be able to change, albeit marginally, the proportion of workers in poverty-, low- and good-wage jobs, thereby improving the employment structure. And, therefore, they will also be able to increase upward mobility among targeted workers without affecting the mobility chances of other workers.

The greatest challenge career ladder initiatives have to confront under this scenario is that, often, skill scarcities are the result of time, resource and other constraints that workers face, which career ladder programs usually can only mitigate slightly. For example, a career ladder program linking entry-level jobs to nursing positions may be able to provide entry-level job holders the training needed to get a certified nursing assistant job. However, since usually such a program does not sufficiently loosen workers' constraints, it will have much greater difficulties helping working CNAs to get the associate's degree required for a licensed practical nursing position, and enormous difficulties helping working LPNs to get the training required to get registered nurse positions. Hence, career ladder initiatives like this may be more able to move workers from poverty-wage entry-level jobs to low-wage jobs, than to move workers from low- to good-wage jobs.

## Scenario # 3: Targeting Job Quality

In this scenario career ladder initiatives are just one component within broader industrial modernization initiatives or sectoral partnerships. The goal of such sectoral partnerships is to help groups of firms in the same industry and region to upgrade their technology, reorganize their labor process, and improve old capacities and develop a variety of new capacities, with the aim of becoming more competitive. These broader programs may, among other things, disseminate information on best practices, benchmark firms' performance against international standards, help firms manage the reorganization of labor processes, help firms handle the free-rider problem they face when investing in training and in other collective goods, and support the development of a social infrastructure composed of institutions that provide specialized training, education, information, research, technical assistance and, more generally, coordinate, regulate, or in some way interconnect the firms in question.

However, technological upgrading, reorganizing the labor process, and improving capacities often means that a firm would need to have workers with skills not only different from those its current workforce possesses, but also which are unavailable or in short supply in its regional labor market. As a consequence, it may decide not to modernize. The situation is similar but not the same as in the previous scenario. Here there may be only a potential unmet labor demand. Indeed, there may be no actual unmet labor demand because firms may anticipate that they would not have the supply of skills they need, and then refrain from moving in the direction that would generate that unmet demand.

The career ladder component of a sectoral partnership may thus contribute significantly to firms' modernization by helping produce the skills required by such modernization. If the firms' gains in competitiveness lead to a higher number of better-paying jobs than what would have been the case in the absence of the sectoral partnership, then career ladders would be able to move workers in worse-paying positions to related but better-paying positions that would not have existed without the partnership—and hence they would be able to increase upward mobility among targeted workers without affecting the mobility chances of other workers. For the above condition to hold it is not necessary that as a result of the sectoral partnership there are more better-paying opportunities than before, but only that there are more than what would have been the case otherwise—it is possible that such partnerships would be able to “save” many good jobs that otherwise would have been lost to, let's say, international competition, and still the final result would be fewer good jobs because some jobs would be lost to such competition anyway.

### Taking stock: career ladders' appeal and limits

When a career ladder program is able to move people to better-paying positions previously unfilled due to skill scarcities, or to positions that would not have existed without the program, it transforms—albeit marginally—the employment structure. This is a win-win situation: employers and all workers benefit.

However, when the workers who benefit from a career ladder program take positions that, in its absence, would have been taken by other workers, the program does not affect the proportion of workers in poverty- or low-wage jobs at all—it does not change the employment structure even at the margin. Hence, this is not a win-win situation: successful career ladder programs may benefit employers in several ways, but they will simply redistribute among workers the costs imposed by a low-quality employment structure.

Given this report's focus on the service industries, this is the key scenario to consider. Indeed, evidence of significant job quality improvement is hard to find, especially in the service industries. Likewise, although there are sometimes unmet labor demands due to skill scarcities in service industries, career ladders could not develop widely in these industries if they only worked when this is the case.

This means that, in the service industries, career ladders are most likely to target access. Under this scenario, their potential appeal comes from their possible effects on upward mobility rates. First, career ladders may be able to raise the average upward mobility rate of the economy and thus lower poverty- and low-wage stickiness—under the plausible assumption that those with the highest expected time in bad jobs would benefit from this general increase in advancement opportunities. In this case the unemployed and those entering the labor force for the first time or after a period out would “pay” for the improvement in the mobility chances of those in bad jobs, and for the reduction in low- and poverty wage stickiness, by reducing their own chances of moving directly into good jobs, and thus by increasing their average time in bad jobs, in unemployment, or out of the labor force.

### • Why would firms want to collaborate?

- What is in it for firms?
- Why would they participate in career ladder initiatives? Firms may benefit from an improvement in the matching of workers to jobs. First, by hiring people lower down the ladder, they have at their disposal “a work-centered mechanism to vet the qualifications of applicants” (Prince, 2003:26). Second, ancillary organizations—such as technical colleges, community colleges, community job centers, and personnel agencies—become better equipped to deal with the labor market if it is made more transparent. The result is a workforce whose skills more accurately match firms' needs, and a set of labor market intermediaries that can operate more efficiently.
- But firms may benefit in other ways as well, all of them central to their bottom line. On the one hand, by lengthening the temporal horizon of workers' decision-making, career ladders may both reduce turnover and increase work effort, especially at the bottom of the labor market. On the other hand, by arranging jobs with similar skill requirements in a career, career ladders may generate economies of scope in the acquisition of human capital by workers, and thus reduce firms' training costs.

Second, career ladders may redistribute upward mobility opportunities in favor of those more likely to get stuck in bad jobs (minorities, people with low education, etc.), and thus reduce the number of people that are stuck even if the average mobility rate of the whole economy remains the same. In this case the reduction in the number of people stuck in bad jobs would be obtained by making the expected time in bad jobs of different groups less unequal, and thus would come at the expense of an increase in the average time in bad jobs of those (originally) expected to spend less time in them.

Lastly, from some normative perspectives the potentially equalizing effects of career ladders over the upward mobility chances of different education-, sex-, race-, nationality- or ethnicity-based groups would make them an appealing policy, even if the total number of people in bad jobs, and of those stuck in bad jobs, are not altered.

These normative justifications for career ladders give rise to very serious problems, both for the promoters of the policy and for those simply interested in assessing their actual or potential results. Indeed, we need to keep in mind that in the three cases considered (and the obvious combinations thereof) career ladders are redistributing among workers the time they spend in bad jobs. Hence, career ladders would have effects deemed desirable if and only if the set of workers in question in any career-ladder-driven upward movement—the worker who benefits and the worker or workers who suffer as a consequence—satisfy a certain property or properties. For instance, that the former be a worker holding a bad job and the latter a person entering the labor force for the first time; that the former's expected time in bad jobs is higher than the latter's; that the former be less educated than the latter; that the former be a member of a minority group and the latter not, and so on.

Unfortunately, career ladder programs cannot control which worker or workers suffer as a consequence of a career-ladder-driven upward movement. Movements between jobs are linked by complex vacancy chains, which will often cross industry borders. Even if a career ladder program were able to control the type of worker that is immediately affected—for instance, by making an organization change its hiring policy from hiring recent college graduates entering the labor force to hiring high school graduates from lower rungs in a multi-firm career ladder—it cannot control what the end effect of that change is. It may well be the case that, continuing with the example, the immediately affected college graduate takes a good job in a different firm. And that in doing so she ends up (when the potentially long chain of displacements triggered by the career-ladder-driven upward movement reaches its conclusion) preventing a different high school graduate, who in the absence of the career ladder program would have taken that job, from moving up. This, of course, would mean that the net effect of the policy is nil.

Now, even if career ladder programs cannot control who they end up displacing, it could be the case that, as an empirical fact, those ultimately paying the cost are such that the effects of the policy are normatively desirable. Although this is possible, to assess this claim requires a rather sophisticated model of mobility through vacancy chains, and of the potential effects of career ladders over existing mobility patterns. Nothing like this is yet available. Therefore, given what we know today, the sobering conclusion has to be that although in the targeting-access scenario the career-ladder policy may have normatively desirable effects, it is also possible that it has little or even no desirable effects at all.

# 5

## Structural Constraints for Career Ladders in the Service Industries

Career ladder strategies are intended to build a pathway out of low-wage careers. In this section, we look more closely at a number of service industries. In so doing we seek to explore whether building career ladders is a feasible strategy in specific industries, given their employment structure.

First, we look at the employment structure of ten selected service industries. Then we examine the all-important relationship between the quality of an industry's employment structure and the opportunities it offers for advancement among different educational groups. Finally, we discuss the prospects for building within-industry career ladders in these ten service industries.

Table 5

### Employment Structure of Selected Industries, 2000

Industry	Number of Jobs in 2000					Share of Jobs in 2000			
	Bad Jobs			Good Jobs		Bad Jobs			Good Jobs
	Poverty Wage	Low Wage	Total	Total	Total	Poverty Wage	Low Wage	Total	Total
Construction	1,088,572	2,146,389	3,234,961	3,835,584	7,070,546	15.4	30.4	45.8	54.2
Durable Manufacturing	1,707,482	3,380,146	5,087,628	6,573,497	11,661,125	14.6	29.0	43.6	56.4
Banking	370,230	720,733	1,090,963	1,079,354	2,170,316	17.1	33.2	50.3	49.7
Hospitals	723,865	1,283,256	2,007,121	2,965,930	4,973,052	14.6	25.8	40.4	59.6
Schools	1,326,937	1,792,731	3,119,668	4,389,613	7,509,280	17.7	23.9	41.5	58.5
Business Services	741,780	820,875	1,562,655	996,645	2,559,300	29.0	32.1	61.1	38.9
Non-food Retail	4,289,749	3,025,633	7,315,382	2,910,302	10,225,684	42.0	29.6	71.5	28.5
Nursing & Personal Care Facilities	676,191	546,092	1,222,283	476,641	1,698,924	39.8	32.1	71.9	28.1
Hotels and Lodging Places	637,058	462,445	1,099,503	386,166	1,485,670	42.9	31.1	74.0	26.0
Food Stores	1,520,857	766,433	2,287,290	635,895	2,923,185	52.0	26.2	78.2	21.8
Childcare	569,727	259,200	828,927	150,554	979,481	58.2	26.5	84.6	15.4
Eating and Drinking Places	3,281,592	1,365,218	4,646,810	903,940	5,550,750	59.1	24.6	83.7	16.3
Entire Economy	29,175,620	31,902,986	61,078,606	56,701,388	117,779,992	24.8	27.1	51.9	48.1

Source: Authors' calculations using data from CPS-ORG 2000.

Note: Poverty-wage jobs are those paying less than \$8.40 in 2000; jobs paying between \$8.40 and \$12.60 in 2000 are low-wage. Bad jobs are poverty- and low-wage jobs taken together. Good jobs are those paying more than \$12.60 in 2000.

## Our service sector industries

Our analysis includes ten service-sector industries: hospitals; eating and drinking places; food stores; nursing and personal care facilities; child day care services; elementary and secondary schools; business services; banking and savings institutions; hotels, motels and lodging places; and non-food retail. We have also included two industries outside the service sector, construction and durable manufacturing. Both have been traditionally known for having many good jobs in their employment structures, and for offering good advancement opportunities for workers at all educational levels, so they constitute natural “yardsticks” for comparison.

As Table 5 shows, each of the ten service industries we have selected either has a high number of poverty- and low-wage jobs, a high proportion of such jobs within its employment structure, or both. Indeed, in 2000 almost half of all poverty-wage jobs, and better than one third of all low-wage jobs, were in one of the service industries we examine here. The hospitality industries alone (hotels, motels, and lodging places and eating and drinking places) provided almost one seventh of all poverty-wage jobs, and a full four-fifths of the workers employed in these industries were poverty- or low-wage in 2000. In addition, some of the industries we examine here have been the targets of career ladder programs.

## • Employment structure

• Table 5 and Figure 2 give a general picture of the employment structure of each of our industries in 2000. It is clear that our service industries differ markedly in the extent to which poverty- and low-wage jobs dominate their employment structures. Some industries have a high proportion of good-wage jobs and a relatively low proportion of poverty-wage jobs —banking, hospitals, and schools all have less than 18 percent of poverty-wage jobs, well below the average for the whole economy (25 percent) and comparable to construction and durable manufacturing (about 15 percent). In addition, the proportion of bad jobs (poverty- and low-wage jobs together) in both hospitals and schools is below 42 percent, slightly lower than in the yardstick industries, while the corresponding proportion in banking, at 50 percent, is slightly higher than in the latter. Thus, the job-distribution across wage levels in these three “good service industries” is quite similar to those of construction and durable manufacturing.

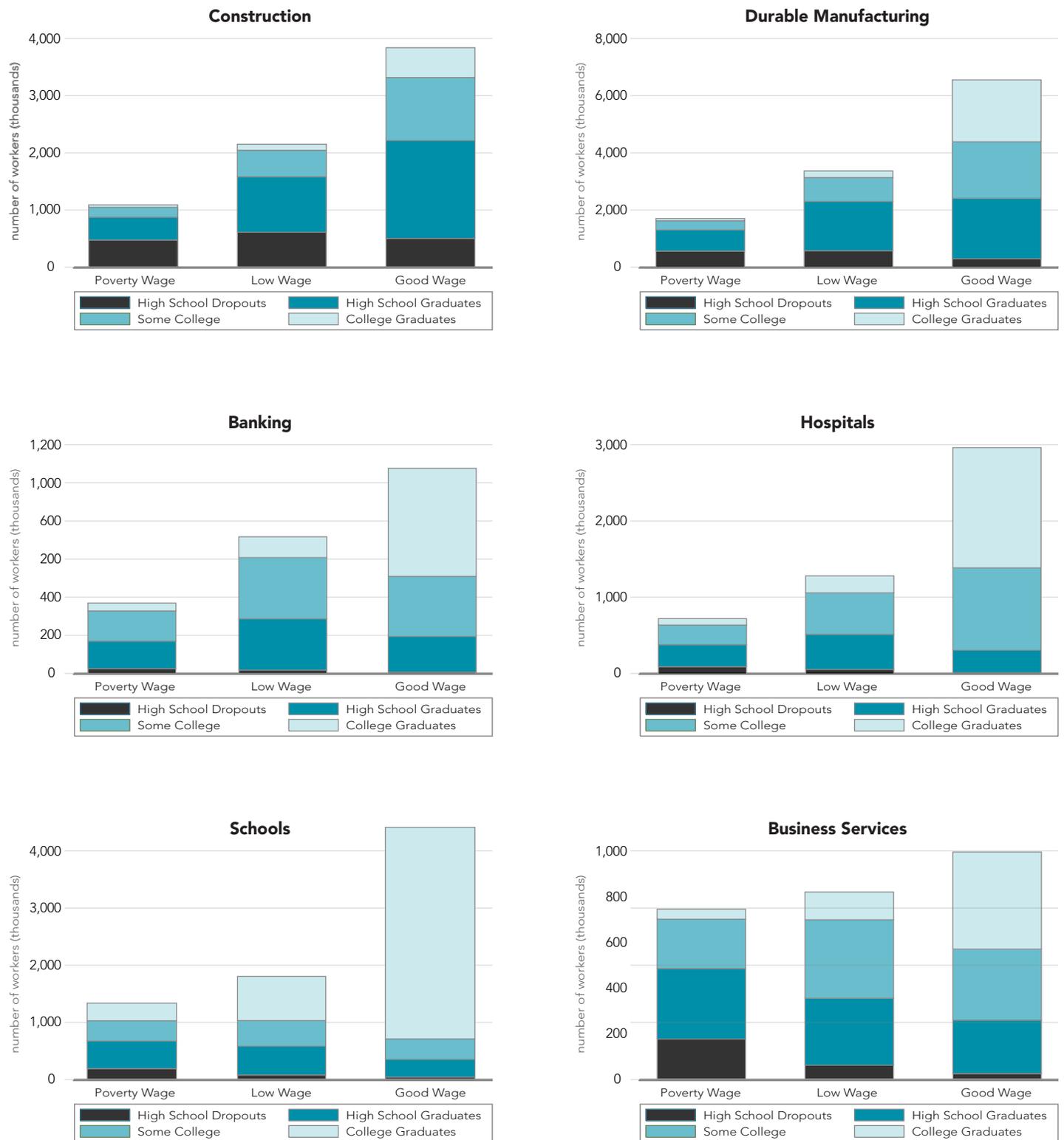
• All other service industries have shares of poverty-wage and bad jobs well above the national averages. The worst-quality employment structures in this second group of industries are those of eating and drinking places, and childcare, which have close to 60 percent poverty-wage jobs and about 84 percent bad jobs each, with food stores almost as bad at 52 and 78 percent. The situation is a little better in nursing, hotels, and non-food retail, which have about 40 percent poverty-wage jobs and 72 percent bad jobs each. Business services, at 29 and 61 percent, has the least unfavorable employment structure among the industries with above-average proportions of poverty-wage and bad jobs.

• Now, are the good service industries fully comparable to the yardstick industries in terms of their role as providers of good jobs for the economy? Unfortunately not. The first five charts of Figure 2 suggest why. In banking, hospitals and schools a much greater proportion of good jobs are occupied by workers with at least some college education—between 82 and 92 percent, compared to 42 percent in construction and 63 percent in durable manufacturing. Perhaps more critically, more than half of all good jobs in these three industries (and fully five sixths in schools) are held by four-year college graduates, as opposed to less than 14 percent in construction and 33 percent in durable manufacturing.

• Thus, even when the job distribution across wage levels in these good service industries is similar to those of the yardstick industries, it is apparent that those without at least some college—still 46 percent of the population between 18 and 64, and 43 percent of those between 30 and 50—are much more unlikely to get good-wage employment in the former than in the latter. It may be that jobs in these service industries are simply not accessible to people without college education because of the skills and credentials they require for legal or technical reasons. Or it may be that people without college education are being out-competed by those with college education even in their quest for jobs that they could perform well and for which employers would be willing to hire them if they had reliable information about their capacities and personality traits. The difference is crucial for the prospects of career ladders in these industries, because they would be feasible only in the latter case. Figure 2 cannot help us distinguish between these two possibilities, but below we readdress this issue with the help of additional data.

Figure 2

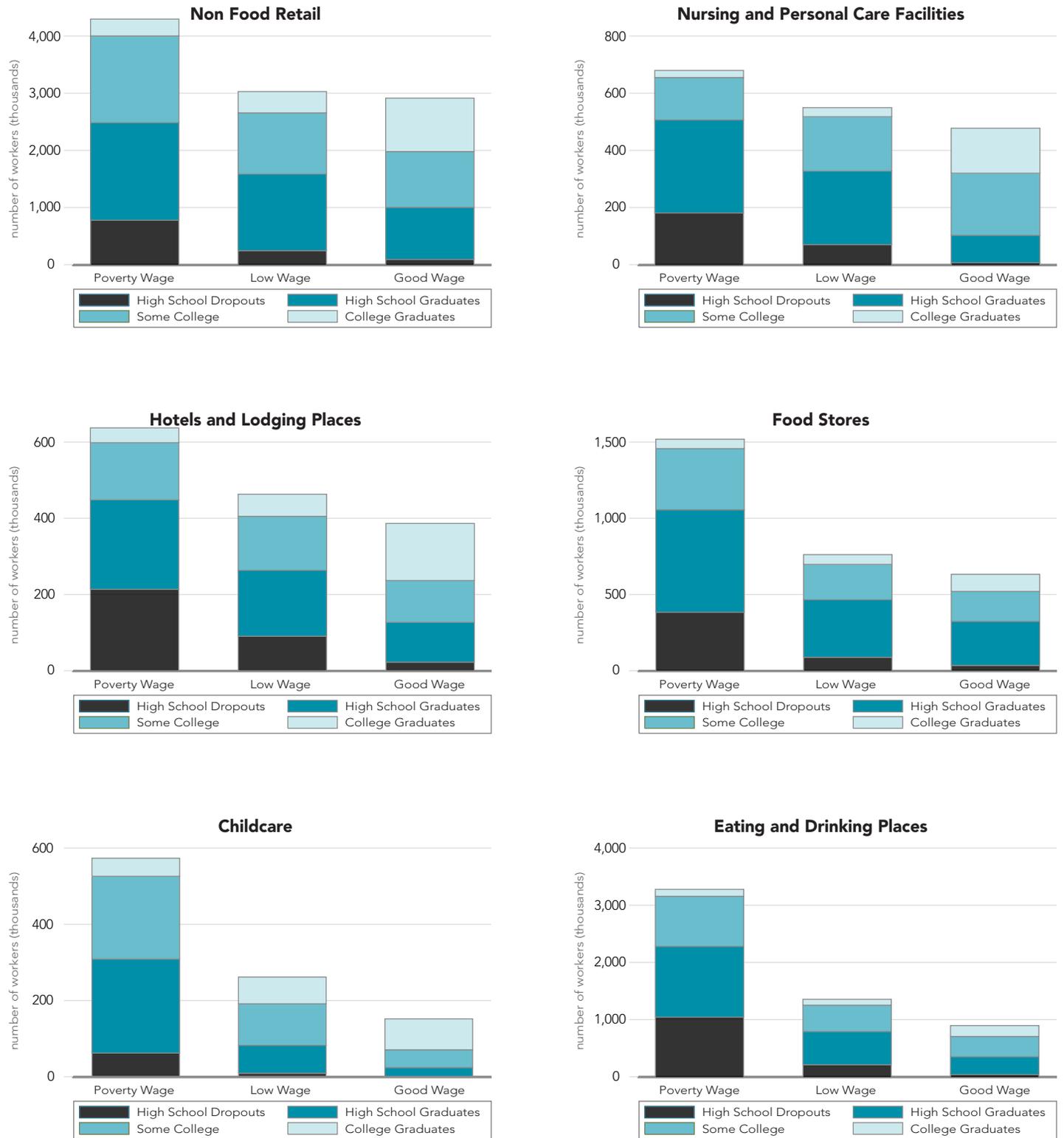
## Employment Structure of Selected Industries by Workers' Education, 2000



Source: Authors' Analysis of data from CPS-ORG 2000.

Figure 2 Cont.

### Employment Structure of Selected Industries by Workers' Education, 2000



Source: Authors' Analysis of data from CPS-ORG 2000.

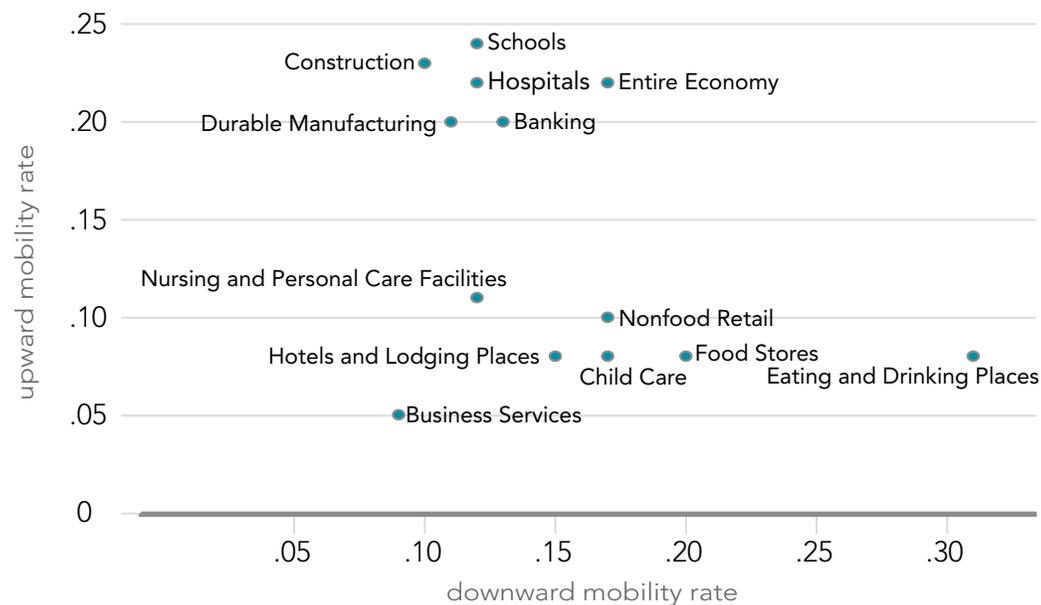
## Opportunities for advancement

The one-year intra-industry mobility rate from bad to good jobs is the number of people that were in a bad job in a given year and are in a good job in the same industry in the next year, divided by the total number of people in bad jobs in that industry in the first year. Here we will call it “intra-industry upward mobility rate.” This rate can be used as a rough indicator of how much industries differ in the opportunities for advancement they offer. As prospects for advancement vary across educational levels, we will carry out our analysis not only for all workers but also for subpopulations with different levels of education.

Upward mobility rates by industry, for all workers, are reported in the second column of Table 6. In terms of these rates, our three good service industries stand out sharply, as Figure 3 makes apparent. Indeed, schools, hospitals, and banking have mobility rates from bad to good jobs comparable to, or higher than, those of construction and durable manufacturing. All other service industries have much lower upward mobility rates—most rates are between one quarter and one half of those in the yardstick industries.

Figure 3

### Intra-Industry Mobility Rates in Selected Industries, All Workers, 2000–2001



Source: Authors' Analysis of data from CPS-ORG 2000–2001.

• The one-year upward mobility rate as an indicator of opportunities for advancement

• We use the one-year intra-industry upward mobility rate as a rough indicator of opportunities for advancement, but not as a policy-relevant measure of how much mobility out of bad jobs really exists. First, because wages are imperfectly measured, much of what appears as mobility out of bad jobs from one year to the next is due to measurement error. Second, wage mobility should be measured for longer periods of time, and in a way that eliminates the effects of short-term fluctuations, something that a one-year mobility rate cannot do. Lastly, an intra-industry mobility rate only measures wage-level changes that occur within the industry in question—if a worker moves from a bad job in one industry to a good job in a different industry, this is not captured by our upward mobility rate.

• However, one-year intra-industry mobility rates can still be used to compare industries in terms of the opportunities for advancement they offer. In other words, we do not assume that these rates measure adequately how much mobility out of bad jobs there is in any policy-relevant sense, even within industries, but only that the differences among them across industries can serve as a rough indicator of how different industries are in terms of the opportunities for advancement that they offer.

Table 6

### Upward and Downward Mobility Rates in Selected Industries, 2000–2001

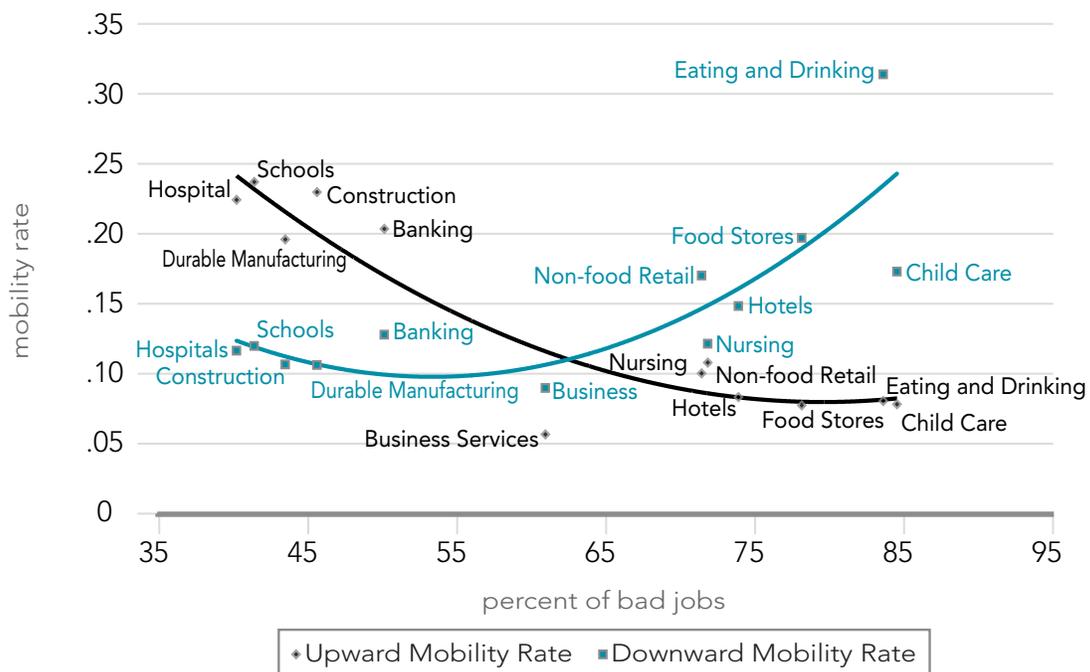
	Upward Mobility Rate					Downward Mobility Rate				
	All Workers	Dropouts	HS Grads	Some College	College Grads	All Workers	Dropouts	HS Grads	Some College	College Grads
Construction	0.23	0.18	0.23	0.28	*	0.10	0.19	0.12	0.06	0.05
Durable Manufacturing	0.20	0.12	0.19	0.23	0.42	0.11	0.25	0.15	0.11	0.04
Hospitals	0.22	0.08	0.16	0.24	0.43	0.12	*	0.29	0.13	0.06
Eating and Drinking Places	0.08	0.04	0.07	0.11	0.17	0.31	*	0.33	0.39	0.14
Banking	0.20	*	0.16	0.20	0.28	0.13	0.00	0.28	0.15	0.05
Hotels and Lodging Places	0.08	0.03	0.07	0.08	*	0.15	*	0.17	0.18	0.09
Nursing and Personal Care Facilities	0.11	0.06	0.10	0.13	0.17	0.12	0.04	0.12	0.16	0.06
Childcare	0.08	0.00	0.05	0.09	0.17	0.17	NA	*	*	0.13
Schools	0.24	0.08	0.12	0.18	0.46	0.12	*	0.35	0.27	0.08
Business Services	0.05	0.02	0.06	0.06	0.10	0.09	0.00	0.19	0.05	0.06
Food Stores	0.08	0.01	0.08	0.10	0.15	0.20	*	0.23	0.19	0.07
Non-food Retail	0.10	0.05	0.09	0.10	0.18	0.17	*	0.21	0.15	0.14
Entire Economy	0.22	0.10	0.20	0.24	0.45	0.17	0.33	0.25	0.20	0.09

Source: Authors' calculations using data from CPS-ORG 2000–2001.

Notes: \* Indicates that the sample size was too small to allow reliable estimation. The upward mobility rate is the one-year intra-industry mobility rate from bad to good jobs, that is, the number of people that were in a bad job in one year and are in a good job in the same industry in the next year, divided by the total number of people in bad jobs in that industry in the first year. The downward mobility rate is defined in an analogous manner.

Figure 4

### Employment Structure Quality in 2000 and Mobility Rates between Good- and Bad-Wage Jobs 2000–2001 in Selected Industries, All Workers



Source: Authors' analysis of data from CPS-ORG 2000–2001.

As it has probably become clear already, there is a close relationship between the employment structure of an industry and the opportunities for advancement it offers. Figure 4 presents the evidence in compact form. There we have plotted average intra-industry mobility rates against the percent of bad jobs in each industry—which we take as a summary indicator of the quality of the employment structure. The relationship between the quality of the employment structure and upward mobility is apparent in the negative slope of the darker trend line, which shows that the higher the proportion of bad jobs, the lower upward mobility is. Indeed, the quality of the employment structure is a very good predictor of upward mobility in all industries, with the partial exception of business services.

Our analyses so far, although useful to compare advancement prospects across industries in general, may not speak directly enough to the main concern of those interested in developing career ladders. Indeed, those advocating career ladders are concerned, above all, with the advancement opportunities of disadvantaged workers, while the mobility rates we have examined up to now are averages of the mobility rates of all types of workers.

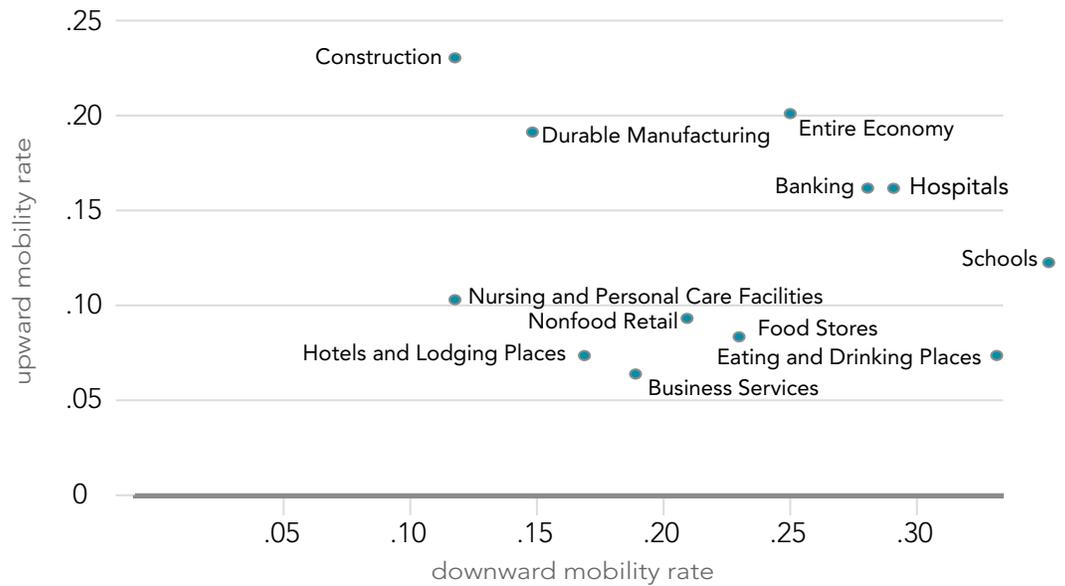
Table 6 shows upward mobility rates by industry, for workers with different levels of education—taken here as the main indicator of relative disadvantage. Let's focus on dropouts and high school graduates, the most likely targets of career ladder programs. In all service industries, dropouts' intra-industry advancement prospects are worse than what they are in the yardstick industries. Even in the service industries most favorable to them, hospitals and schools, dropout-specific upward mobility rates are about two-thirds of their rate in durable manufacturing, and less than half of their rate in construction. In the other service industries the situation is much worse—in four of them a dropout's chance of going up within the industry is 0.03 or lower, while in the other three for which we have reliable data this chance is in the 0.04–0.06 range, compared with 0.11 in durable manufacturing and 0.18 in construction.

Table 6 and Figure 5 indicate that advancement prospects for high school graduates in the three good service industries are better than those of dropouts, but worse than those of workers with similar education in the yardstick industries. In hospitals and banking advancement rates for high school graduates are between two-thirds and nine-tenths of those in durable manufacturing and construction, while schools' rate is half that in construction and seven-tenths of that in durable manufacturing.

Table 6 and Figure 5 also show that all other service industries offer workers with high school degrees poor or very poor prospects for advancement to good-paying jobs in comparison to the yardstick industries.

Figure 5

**Intra-Industry Mobility Rates in Selected Industries, High School Graduates, 2000–2001**



**Source:** Authors' analysis of data from CPS-ORG 2000–2001.

**Note:** Childcare not included, because the sample size was too small to allow reliable estimation. The upward mobility rate is the one-year intra-industry mobility rate from bad to good jobs, that is, the number of people that were in a bad job in one year and are in a good job in the same industry in the next year, divided by the total number of people in bad jobs in that industry in the first year. The downward mobility rate is defined in an analogous manner.

## Prospects for building within-industry career ladders

Putting aside the very serious problem, discussed in the previous section, that the net effects of building career ladders under the targeting-access scenario are undetermined, it is also important to consider whether it is feasible to build upward-mobility-boosting career ladders in the service sector industries at any significant scale, given the constraints that the employment structures of these industries entail. This is what we do next.

Our analysis in this section has identified two types of service industries, differentiated by the quality of their employment structures. Indeed, among our ten service industries, schools, hospitals, and banking have relatively good-quality employment structures because, as in construction and durable manufacturing, their proportion of good jobs is equal to or greater than their proportion of bad jobs. In addition, these three industries have “upstairs” employment structures, that is, employment structures in which there are significantly more jobs at each wage level compared to the preceding one.

Unlike our yardstick industries, however, schools offer very few good employment opportunities to workers without college education. In effect, examining the occupational distribution of jobs in this industry indicates that the overwhelming majority of its good jobs require college credentials on technical and/or legal grounds, four-year degrees in most cases. Given this occupational distribution, and that a job generates a net opening only when it is first created, or when its incumbent leaves it and does not take another good job in the same industry, it is reasonable to conclude that in schools, there are far too many non-college workers in bad jobs per accessible net opening at the good-wage level.

The situation is a little better in hospitals. Although in this industry it is also the case that most good jobs require college education, unlike in schools a significant proportion of them are accessible for people with two-year associate degrees, and some for people with one-year certificates. Hence, if career ladder programs are able to provide the support workers require to get these degrees and certificates, they may be able to move them to good jobs. This would entail, however, that the level of support that career ladder programs typically provide to workers be considerably ratcheted up, and thus that the amount of resources for operating them be increased accordingly.

To sum-up, building upward-mobility-boosting career ladders at a significant scale in either schools or hospitals faces serious educational barriers. However, while those barriers seem overwhelming in schools, they seem less so in hospitals. Hence, while in schools the prospects are grim for building career ladders able to increase significantly non-college workers’ chances of moving to good jobs, and not just to low-wage jobs, in hospitals ratcheted-up career ladder programs may have some chance of success.

The situation might be different in banking. Our analysis of the occupational distribution of good jobs in this industry suggests that it may offer better prospects for building within-industry career ladders under the targeting-access scenario than both schools and hospitals. Indeed, in this industry a good share of good jobs seem to be in occupations that do not require college degrees, at least on technical and/or legal grounds. However, a more extensive and precise analysis of banking’s occupational structure would be needed to confirm this very preliminary assessment.

## The occupational distribution of good jobs in schools, hospitals and banking

For schools and hospitals, our analysis focused on those occupations whose share in the total number of good jobs in the industry was, in 2000, at least two tenths of one percentage point. In schools there were 24 such occupations, and they accounted, altogether, for 94 percent of all good jobs in the industry in that year. Nine out of every ten good jobs within these “non-negligible” occupations belonged to one of the following occupations: pre-kindergarden, kindergarden, elementary, secondary, special education and not-elsewhere-classified teachers; educational and vocational counselors; librarians; education, related fields and not-elsewhere-classified administrators; registered nurses; speech therapists; psychologists; social workers; and computer systems analysts and scientists. As it is easy to see, most of these occupations require four-year college degrees for technical or legal reasons.

In hospitals there were 54 non-negligible occupations in 2000. Altogether, they accounted for 93.6 percent of all good jobs. Within these occupations, better than 17 out of every 20 jobs were in the following high-education occupations: physicians; registered and licenced practical nurses; physicians’ assistants; medical scientists; pharmacists; psychologists; social workers; dietitians; respiratory, occupational, physical, speech, and not-elsewhere-classified therapists; clinical laboratory, radiologic, and not-elsewhere-classified technologists and technicians; accountants and auditors; computer systems analysts and scientists, and computer programmers; medicine, health and financial managers, not-elsewhere-classified managers and administrators, and not elsewhere classified management-related occupations; not-elsewhere-classified purchasing agents and buyers; personnel, training, and labor relations specialists; not-elsewhere-classified teachers; and clergy. However, unlike in schools, several of these occupations only require two-year associate degrees or one-year certificates.

As occupational titles in banking are less informative than in schools and hospitals, with respect to the credentials and training required by the jobs they cover, we attempted to assess whether the good jobs in this industry are accessible for people without college education in a different way. Here, for all occupations for which the sample size made the analysis minimally meaningful, we first calculated the proportion of non-college workers holding good jobs over the total number of good jobs in that occupation in 2000. We were able to calculate this proportion for 13 occupations, covering more than four-fifths of all good jobs in banking.

Then we considered an occupation at the good wage level in banking as accessible to people without college education if that proportion was higher than 15 percent. Using this threshold, 6 of the 13 occupations were accessible to people without any college education: investigators and adjusters (except insurance); bank tellers; general office supervisors; securities and financial services sales occupations; not-elsewhere-classified administrative support occupations; and bookkeepers, accounting, and auditing clerks. This means that, according to our criterion, 24 percent of all jobs in the 13 occupations considered are in occupations accessible to people without college education. Moreover, banking’s two largest occupations at the good wage level, financial managers, and other financial officers, are very close to the 15 percent threshold. Thus, although our analysis of banking occupations has only been exploratory, it nevertheless suggests that a significant share of the good jobs in the industry might correspond to occupations that do not require college degrees on technical and/or legal grounds.

Business services, eating and drinking places, childcare, food stores, nursing, hotels, and non-food retail have poor-quality employment structures—in all of them the proportion of bad jobs is much higher than the proportion of good jobs. In addition, all of them but business services have “downstairs” employment structures, that is, employment structures in which there are significantly fewer jobs at each wage-level compared to the level one step below. And even in business services, which has an upstairs employment structure, we saw that this structure is much flatter than those of the good industries—in fact, it is closer to being flat than to the average steepness of the industries with good-quality employment structures.

In summary, with the possible exception of banking, our service industries have employment structures either dominated by poverty- and low-wage jobs or, when this is not the case, employment structures in which the overwhelming majority of good jobs require at least some college education and often four-year college degrees. As a result, seven of our ten service industries offer very few opportunities for advancement for those without college education, while all but two of them (hospitals and banking) have employment structures that, at least in the targeting-access scenario, seem highly inimical to the development of career ladders.

# 6

## Conclusion

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**W**orkers in today's services-dominated economy confront two related problems, the problem of the poor quality of the U.S. employment structure—there are too many poverty- and low-wage jobs—and the problem that many people are trapped in poverty- and low-wage jobs for long periods of time—for the majority of those holding bad jobs, it has become increasingly difficult to move up. To an important degree these two problems can be traced back to the following fact. Many service industries have poor-quality employment structures, while those that do not tend to have employment structures in which most good jobs require at least some college education—if not a four-year college degree or better.

A currently popular policy is to build industry career ladders, and there are many career ladder initiatives underway throughout the country. Unfortunately, there has been insufficient reflection on what they are supposed to do, on what their normative justification is, on what conditions have to be met for them to have desirable effects, and on the structural constraints that they confront.

We have distinguished three scenarios for career ladders. Under two of these scenarios, a career ladder is a win-win strategy. Thus, if a career ladder is able to move people to better-paying positions that previously remained unfilled due to skill scarcities, it will also change the employment structure of the industry in question, benefiting targeted workers without affecting the chances of other workers. Likewise, if a career ladder is part of a sectoral partnership whose net effect is that the industry ends up with more good jobs than what would have been the case otherwise, the career ladder will also be able to help some workers to move up without affecting the chances of others.

Sectoral partnerships are, however, very hard to develop in most service industries. And, although there are sometimes skill scarcities in these industries, career ladders could not develop widely in them if they only worked under such conditions. Moreover, often skill scarcities are the result of constraints that a career ladder program can only mitigate slightly, and thus such a program will often be unsuccessful in helping workers to close the substantial skills/credentials gap that separates them from the good-wage positions.

Under the scenario most relevant for the service industries, the targeting-access scenario, building career ladders is not a win-win strategy—here career ladders do not broaden opportunities, but just reshuffle them. Under this scenario, career ladders' potential appeal comes from the fact that they may be able to redistribute among workers the costs imposed by a low-quality employment structure in ways deemed desirable.

Indeed, we have argued that by reducing the openness of the industry, relaxing educational constraints, reducing queuing and increasing transparency, career ladders may be able to produce three effects that may be normatively appealing: increasing upward mobility in the economy by displacing people coming from outside the employment structure; reducing the number of people stuck in bad jobs by making the distribution of the time spent in bad jobs across the workforce less unequal; and equalizing the upward mobility chances of different education-, sex-, race-, nationality- or ethnicity-based groups (regardless of whether this also tends to equalize the distribution of the time spent in bad jobs across the workforce or not).

The first possibility, i.e., that career ladders increase upward mobility in the whole economy at the expense of those outside the labor force, is quite problematic from a normative point of view. Indeed, as some of those coming from outside the employment structure that career ladders would prevent from taking good jobs would be people that, before being unemployed, out of the labor market, etc., had been in bad jobs for long periods of time, at least part of the increase in upward mobility thus produced should not be considered a desirable outcome.

Even more importantly, the three potential effects of career ladders that would make them normatively appealing are effects whose production career ladders programs cannot control, even in theory, because they lack means to effectively determine who the workers that will end up losing as a result of their intervention will be.

Of course, even if career ladder initiatives cannot control who is going to be at the losing end of the redistribution of opportunities that they cause, it could be the case that those ultimately paying the costs are such that the effects of the policy are normatively desirable anyway. This is possible. But then again, given what we know today it is also possible that they have no desirable effects—a simple judgment of possibility, even if well founded, is a rather weak foundation for a social policy. At the very least, our analysis has shown that it would be misleading to evaluate a career ladder program by examining its actual or potential immediate effects (for instance, the number of people that they help move up within an industry), and that models able to estimate their actual or potential net effects are badly needed.

Putting aside the question of the normative foundations of the career ladder policy, in our study we explored in some detail the issue of whether this policy could be implemented at any significant scale in the service industries, given the constraints that the employment structures of these industries entail. On this respect, it is clear that not all service industries are equal. In effect, we found that in nursing, hotels, food stores, non-food retail, business services, childcare, and eating and drinking, current advancement rates are dismayingly low. We argued also that these industries' employment structures are such that career ladder programs cannot reasonably be expected to raise them substantially, much less to take them anywhere close to those of the yardstick industries.

Therefore, to the extent that workers are in any of these industries, the best way to help them move up will most likely be to help them move out—to other industries. This is particularly true in the case of welfare leavers; “work first” alone will not take them up if they get stuck in any of these industries.

We also found that a non-college educated worker in a bad job in a school, in a hospital, or in a bank has today a much better chance of moving to better paying work in his or her current industry than an equally educated worker in any of the other seven service industries we have examined here (although still significantly lower than a worker in either of our yardstick industries). However, this does not mean that building career ladders in these three industries is equally advisable.

To be potentially worthwhile, career ladders should boost significantly the advancement chances of disadvantaged workers over their current chances. Unfortunately, our analysis of the occupational distributions of good jobs in schools and hospitals indicate that, in spite of these industries’ relatively high advancement rates for non-college workers, there are serious educational barriers to increasing them. These barriers are, however, much more overwhelming in schools than in hospitals—ratcheted-up career ladder programs may be able to help people to get the one-year post-secondary certificates and two-year associate degrees needed to access some of the good jobs in the latter industry. Finally, our provisional analysis of the occupational distribution of good jobs in banking suggested that this industry might be a propitious place for building career ladders able to boost the within-industry upward mobility of people without college education. Further studies of banking’s occupational structure would be needed, however, to settle this issue.

Overall, there are two main lessons that we draw from our analysis of our ten service sector industries, and their comparison with construction and durable manufacturing. First, the service sector comprises a set of industries very heterogeneous in their employment structures, the legal and technical requirements of their good jobs, and the consequent advancement opportunities they offer to different subpopulations, in particular to those with no college education. This has important consequences for those interested in helping workers to move out of bad jobs. Those who design and implement career ladder programs should focus on those industries in which the prospects for boosting upward within-industry mobility through career ladders are best, and avoid tilting at windmills in those whose employment structures are strongly inimical to them.

Second, the industries we have examined here comprise a very substantial share of all service-sector jobs (and an even greater proportion of all bad service-sector jobs), and reflect well the diversity of industrial-organization logics found in that sector. Hence, the general picture resulting from our analysis may be plausibly considered as representative of the whole sector. If this is correct, then our analysis points to the conclusion that structural constraints make most of the service industries unsuitable for industry career-ladder programs capable of significantly boosting the within-industry mobility chances of workers without college education.

The fact that the effects of career ladders are undetermined plus the fact that the employment structures of the service sector industries seem largely inimical to building career ladders, make us rather skeptical about the potential of the career ladder policy, and thus about its overall relevance to the problems generated by the proliferation of bad jobs in today's service-dominated economy.

This brings up a second set of conclusions. Welfare, poverty, and training policy all too often focus principally on the attributes that workers themselves bring to the labor market. Career ladder policies go a little beyond this supply-side, individualistic approach by trying to generate a social infrastructure that supports the upward mobility of the disadvantaged. However, their promoters need to take more seriously the existing constraints to building and making work, with the expected results, such a social infrastructure. They also have to keep in mind that most often career ladders will simply redistribute opportunities across workers. Our analysis points squarely to the ways in which employment structure affects welfare and constrains advancement, and thus urges policy-makers and political actors to recognize that in this context none of the currently fashionable supply-side and career ladder policies will be able to make a substantial difference.

To make a substantial difference, job quality has to be improved. Increased unionization, extension of living wage regulations to new jurisdictions, higher minimum wages, and the expansion of mandatory benefits are all examples of institutional mechanisms that would improve job quality immediately, without relying on an often-phantom possibility of advancement. The quality of the employment structure can also be transformed by supporting high-road firms—high-productivity, high-wage, low-waste firms—and by promoting the development of those industries with a high share of good jobs.

Career ladders are unlikely to change the employment structure of the service industries in any substantial way. Even their more modest goal of attempting to redistribute the time spent in bad jobs across workers confronts formidable structural constraints. For these reasons, building career ladders in the service industries is unlikely to take us very far.

# Appendix Data Sources and Methodology

## Data Sources

**M**ost of the data for this paper come from the Current Population Survey (CPS). We used the Economic Policy Institute versions of the CPS Outgoing Rotation Group (ORG) files. We employed the CPS ORG files for 2000 and 2001 for the analysis of the entire economy's poverty-wage jobs and workforce, for the description of the employment structure of each industry, and for the analysis of the prospects for advancement and stability across industries.

In the CPS ORG half of the households interviewed one year are interviewed again in the subsequent year. We have made use of this longitudinal component of the survey. By matching corresponding cases from 2000-2001, we were able to calculate one-year mobility rates among wage levels and between wage-earning employment and other states (unemployment, retirement, self-employment, etc.) for the whole economy and for 12 industries.

We also employed the March supplement of the Current Population Survey for 2001 (income year 2000) to analyze the relationship between holding a poverty-wage job and living in a poor family. Lastly, we used data from the Panel Study on Income Dynamics for the years 1991, 1996 and 2001 to examine whether poverty-wage household heads and their spouses are able to move up quickly or, rather, get stuck in poverty-wage jobs for extended periods of time.

We have excluded workers younger than 18 from most of our analyses. We did this in order to be certain that our results were not affected by the significant presence in some industries of workers that, most likely, are not the target of policy interventions. However, we did include workers younger than 18 when doing so was required by the character of the arguments we were considering.

## When is a family considered poor?

In our analysis a family is considered poor if its total income is below twice the federal poverty line for a family of its size and composition. Total family income is here a very comprehensive notion. It includes earnings, rents, dividends and interest; workers and unemployment compensation; public assistance and welfare, and supplemental security from government; social security, veteran, survivors and disability benefits; child support and alimony; credit from the Earned Income Tax Credit program; market value of food stamps; market value of school lunches; and other sources of income.

We use twice the federal poverty line as the poverty threshold because it is widely accepted that the poverty line grossly underestimates the amount of money required to avoid poverty. Indeed, most researchers contend that family incomes above at least two times the poverty line are needed to avoid poverty. The results of a recent study estimating “basic family budgets” support this contention, and help one to understand how low the thresholds established by the federal poverty line are (Boushey et al. 2001). A basic family budget is defined as the minimum income a family requires to afford a safe and decent standard of living, based on the composition of the family and where it lives. According to the study a family of four with two children, living in Milwaukee (which is not an expensive city), required in 1999 a BFB of \$36,720, more than twice the corresponding federal poverty line of \$16,895 for that year.

## Our “industries”

The twelve “industries” we have examined in this report were defined at different levels of aggregation, in terms of the Standard Industrial Classification (SIC) system in use in the CPS in 2000 and 2001. Indeed, our analysis included, first, three major industry groups: hospitals, construction and durable manufacturing. Second, it included six three-digit industries: eating and drinking places, food stores, nursing and personal care facilities, child day care services, elementary and secondary schools, and business services. Lastly, it included three aggregations of three-digit industries: banking and savings institutions, hotels, motels and lodging, and non-food retail.

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