

It's not your father's Cadillac!

The Transformation of the US from a High School to a College Economy

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GEORGETOWN UNIVERSITY

Center on Education and the Workforce

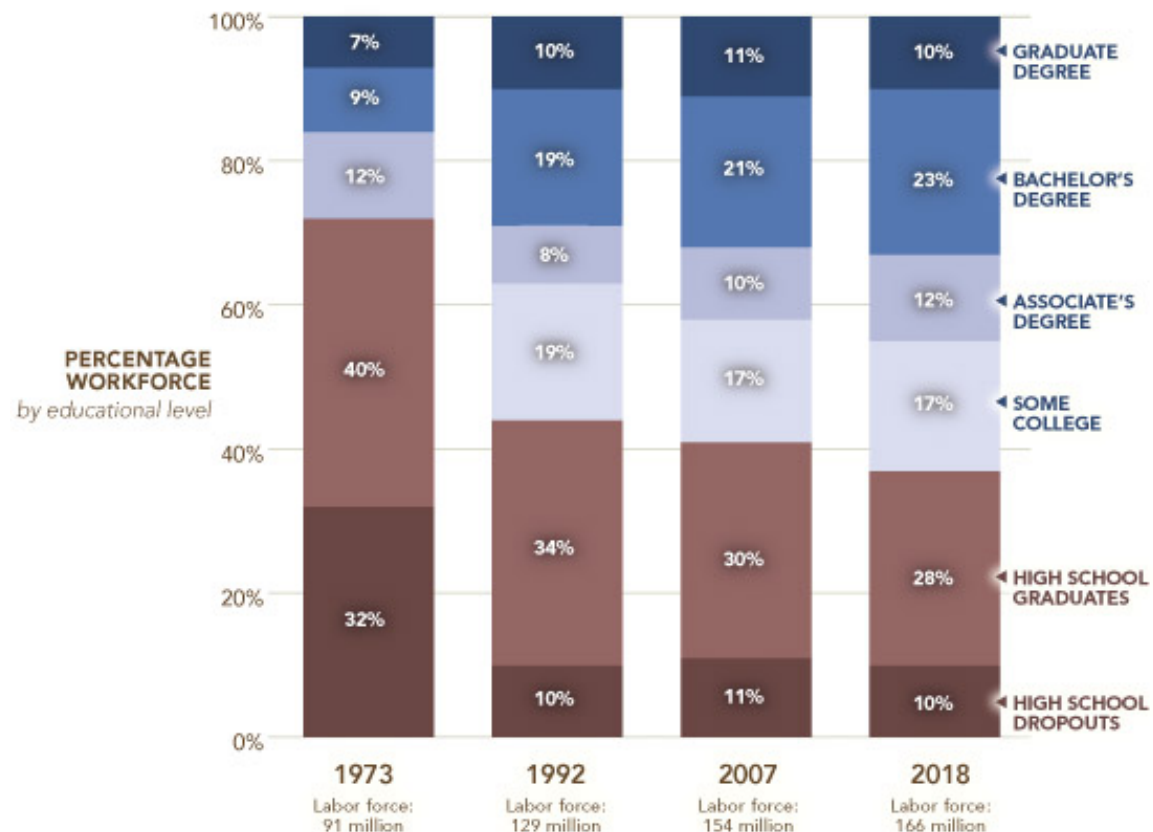
What I hope to cover

- **Demand for education**
- **Measurement problems**
- **Hard Times**
- **Learning-labor exchange**



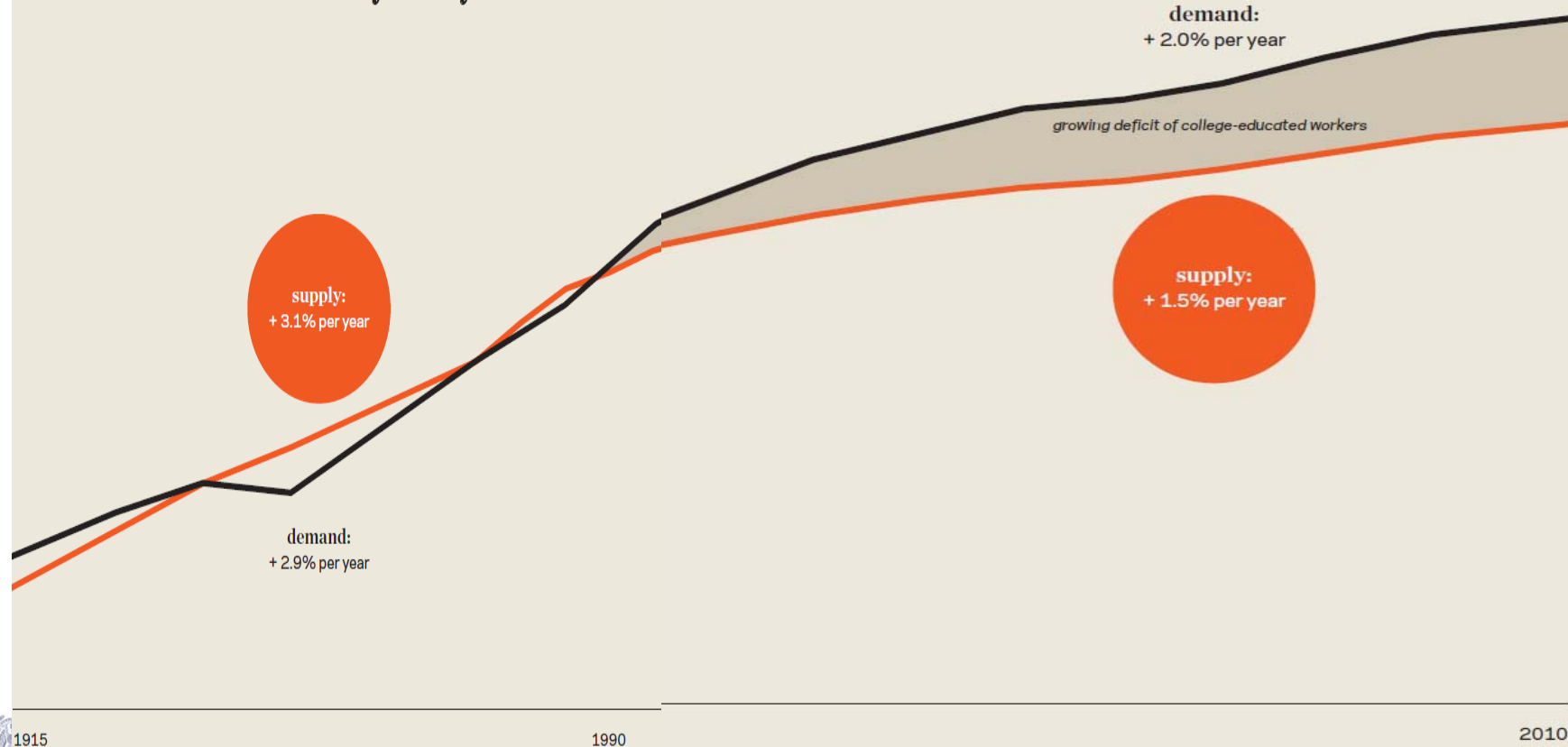
Postsecondary education demand has been increasing, but graduate and BA attainment has been relatively slow.

BY 2018, 30 MILLION NEW AND REPLACEMENT JOBS WILL REQUIRE SOME COLLEGE OR ABOVE

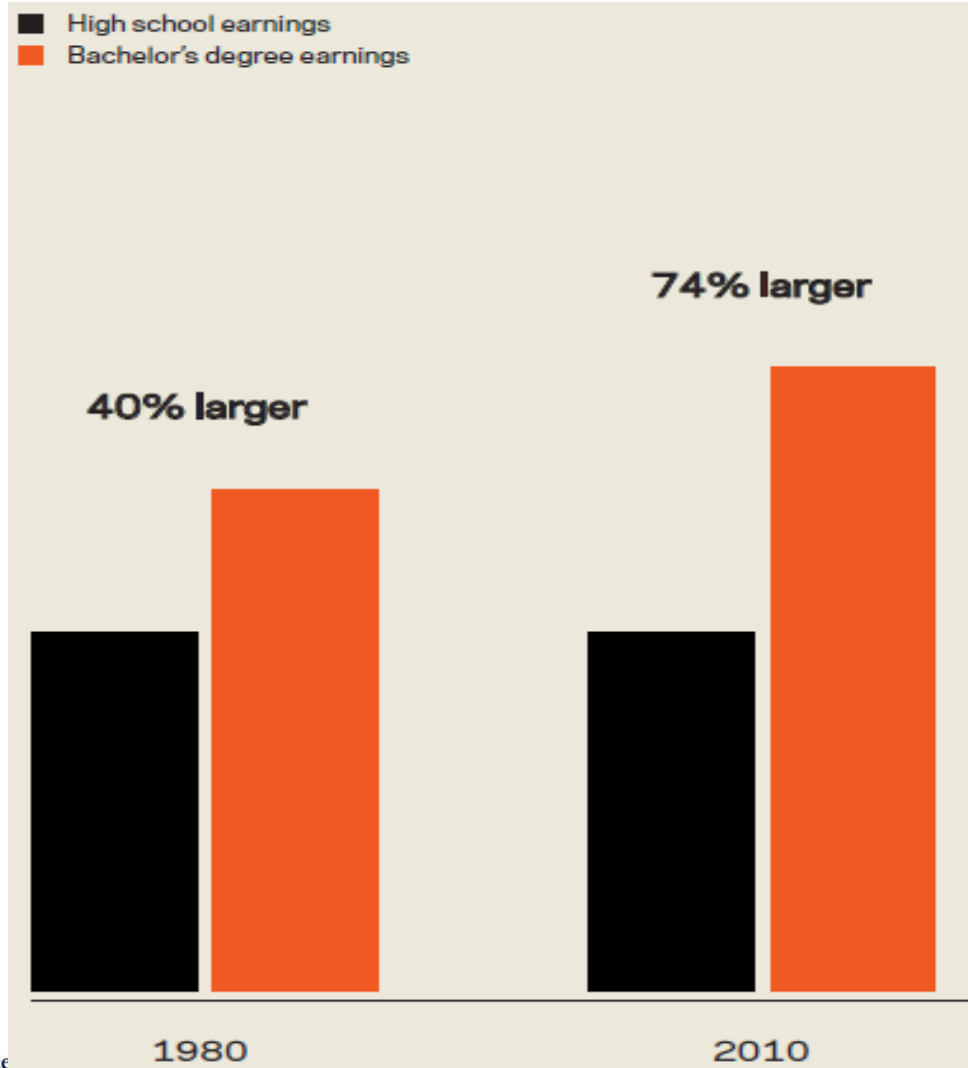


Wage growth indicates a supply side problem

From 1915 to 1980, supply grew in tandem with demand. But, starting in 1990, the share of college-educated young people in the workforce rose very slowly.



Our analyses traditionally compare BA earnings to High school which demonstrates the old high school economy has been transformed into a college economy

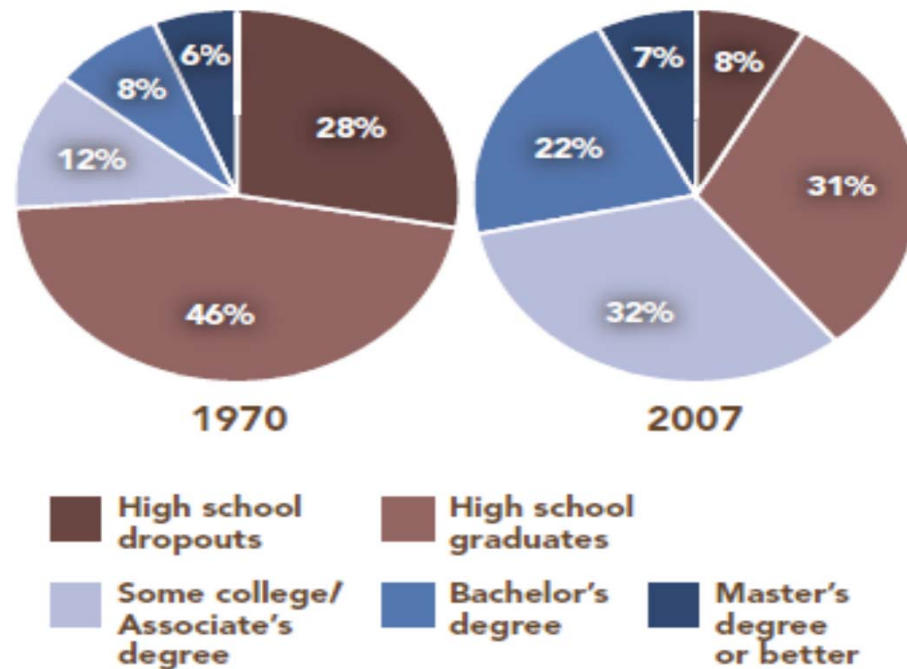


The Big Squeeze: Access to the middle class was once afforded high school graduates who are now being left behind in the college economy.

FIGURE 4

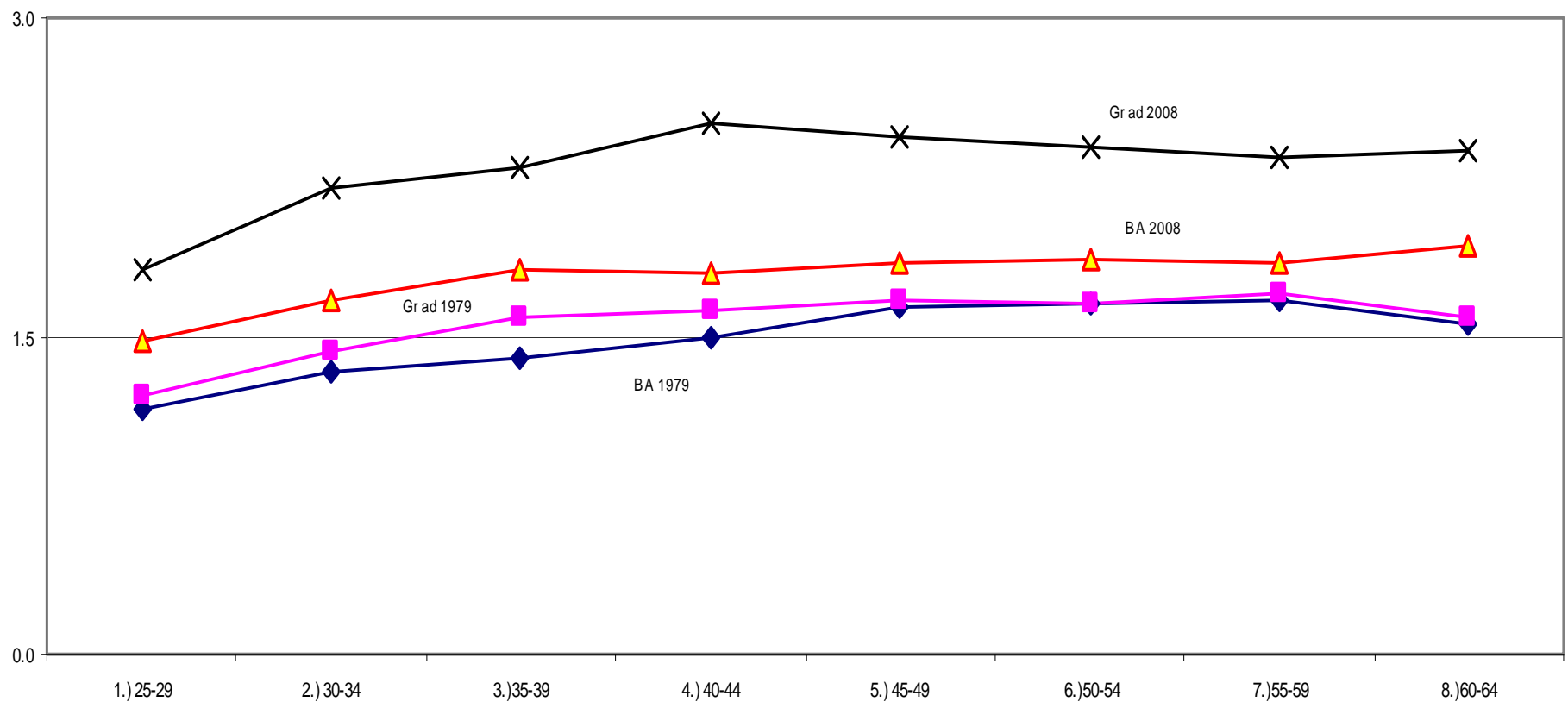
Increasingly, the middle class is composed of workers with postsecondary education and training. In 1970 only 26% of the middle class had postsecondary education. Today, 61% need postsecondary education.

Source: Authors' analysis of March CPS data, various years; Center on Education and the Workforce forecast of educational demand to 2018



The Economy keeps shifting demand upwards

In 1979, BA and Grad earnings premia over High school were close and converged overtime. By 2008, Graduate earnings premium was well above that afforded Bas. This suggests that relative demand is further shifting the economy towards a graduate one.



Measurement issues hinder analysis of education demand



The education and training requirements are not an accurate picture of education demand: 22 million workers with post-secondary degrees are missing.

TABLE 1 Comparison of BLS education and training requirements and education among employed workers in 1996 and 2008.

Sources: Silvestri, G. (1997), "Occupational employment projections to 2006," Monthly Labor Review, Table 6, p. 82, Nov. 1997. BLS; CPS March Supplement, various years; Lacey, A. and B. Wright (2009), "Occupational employment projections to 2018," Monthly Labor Review, Table 3, p. 88, Nov. 2009

	BLS 1996		Labor Market 1996		BLS 2008		Labor Market 2008	
	%	#	%	#	%	#	%	#
Postsecondary degrees	25%	33,008	34.3%	45,397	25.1%	37,884	40.1%	60,524
1st professional degree	1.3%	1,707	1.6%	2,118	1.3%	2,001	1.7%	2,566
Doctoral degree	0.8%	1,016	1.1%	1,456	1.4%	2,085	1.4%	2,113
Master's degree	1%	1,371	5.9%	7,809	1.7%	2,531	7.3%	11,018
Bachelor's degree or better, with work experience	6.8%	8,971	NA	NA	4.3%	6,516	NA	NA
Bachelor's degree	12%	15,821	17.6%	23,294	12.3%	18,584	20.4%	30,790
Associate's degree	3.1%	4,122	8.1%	10,721	4.1%	6,129	9.3%	14,037
Post 2nd vocational training	6.1%	8,091	NA		5.8%	8,787		
Work experience in a related occupation	7.5%	9,966			9.6%	14,517		
Long-term on-the-job-training	9.3%	12,373			7.2%	10,815		
Moderate-term on-the-job-training	12.7%	16,792			16.3%	24,569		
Short-term on-the-job-training	39.4%	52,125			36%	54,396		



Educational attainment is widely distributed within the BLS categories, and in the case of AAs the BA requirement is larger.

TABLE 3 Average education distribution within each of BLS's education and training categories.

Source: Georgetown University Center on Education and the Workforce calculations using (http://www.bls.gov/emp/ep_table_111.htm) Table 1.11, Education and training measurements by detailed occupation

	Less than high school diploma	High school diploma or equivalent	Some college, no degree	Associate's degree	Bachelor's degree	Master's degree	Doctoral or professional degree
1st professional degree	0.1%	0.7%	0.7%	0.5%	5.2%	6.4%	86.5%
Doctoral degree	0.2%	1.6%	4.7%	3.3%	28.4%	29.3%	32.6%
Master's degree	0.6%	3.2%	6.7%	4.3%	30.8%	39.6%	14.9%
Bachelor's degree or better, with work experience	1.6%	8.7%	13.7%	5.8%	35.3%	21.2%	13.6%
Bachelor's degree	1.2%	8.1%	13.8%	7.8%	42.9%	20.9%	5.3%
Associate's degree	2.4%	16.3%	23.7%	24.0%	25.2%	5.9%	2.4%
Post 2nd vocational training	7.3%	29.6%	29.1%	14.3%	15.9%	2.9%	0.9%
Work experience in a related occupation	9.1%	27.5%	26.1%	9.9%	21.2%	5.3%	1.0%
Long-term on-the-job-training	13.8%	35.0%	23.9%	9.3%	14.1%	3.2%	0.7%
Moderate-term on-the-job-training	18.1%	41.9%	22.2%	7.0%	8.8%	1.6%	0.4%
Short-term on-the-job-training	17.8%	37.8%	23.5%	8.0%	10.4%	1.9%	0.5%



Over qualification in the Labor Market?

22 million too many post-secondary degrees in the labor market? Is the President's Goal wrong????

- **Our analysis earnings data demonstrates that variation in education requirements within occupations is a real phenomenon.**
- **Over qualification is not an answer**
- **Unpublished research by Newmark and Johnson (2010) supports this position**
- **Certainly mis-match exists but this doesn't explain away 22 million post-secondary degrees**



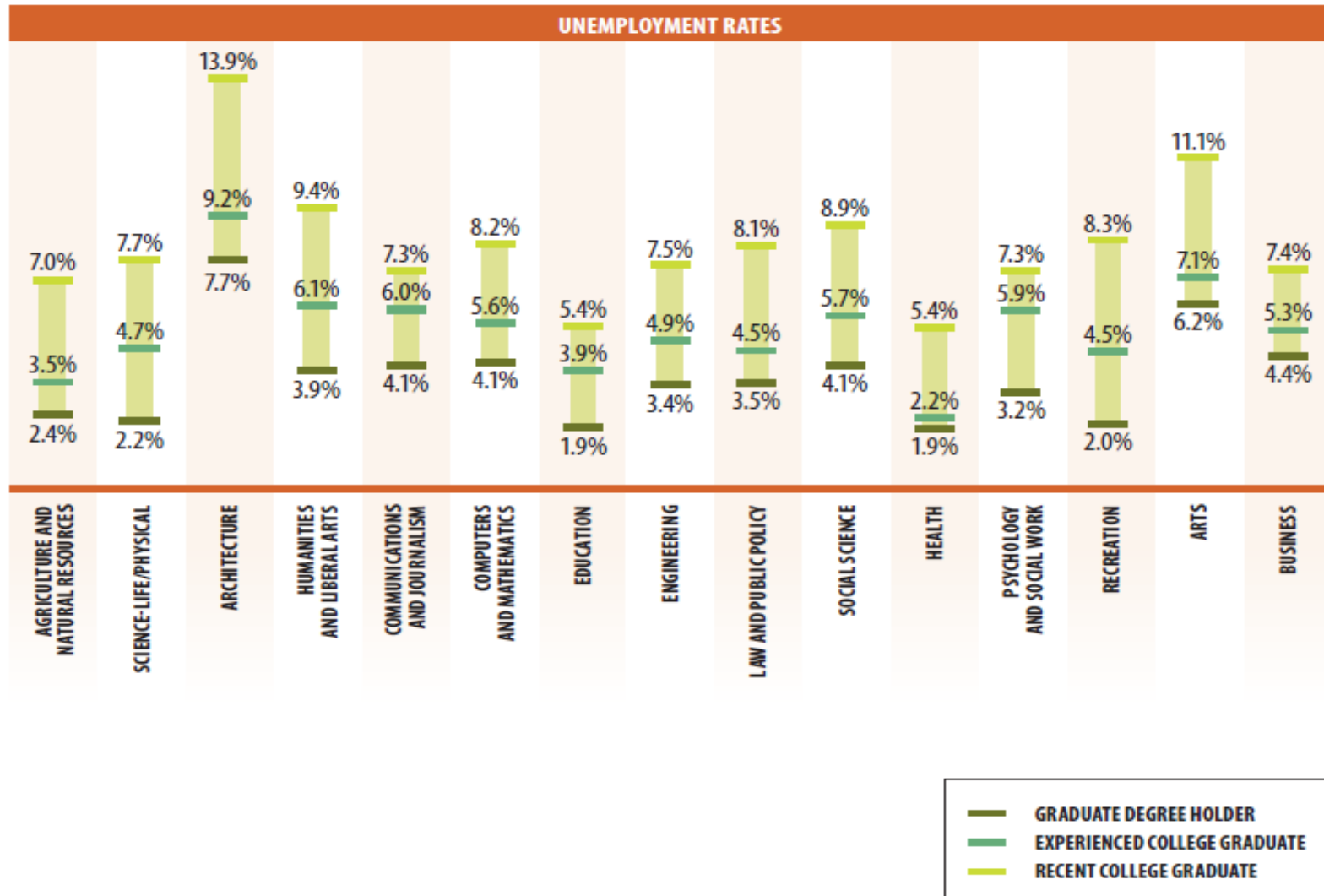
Hard Times



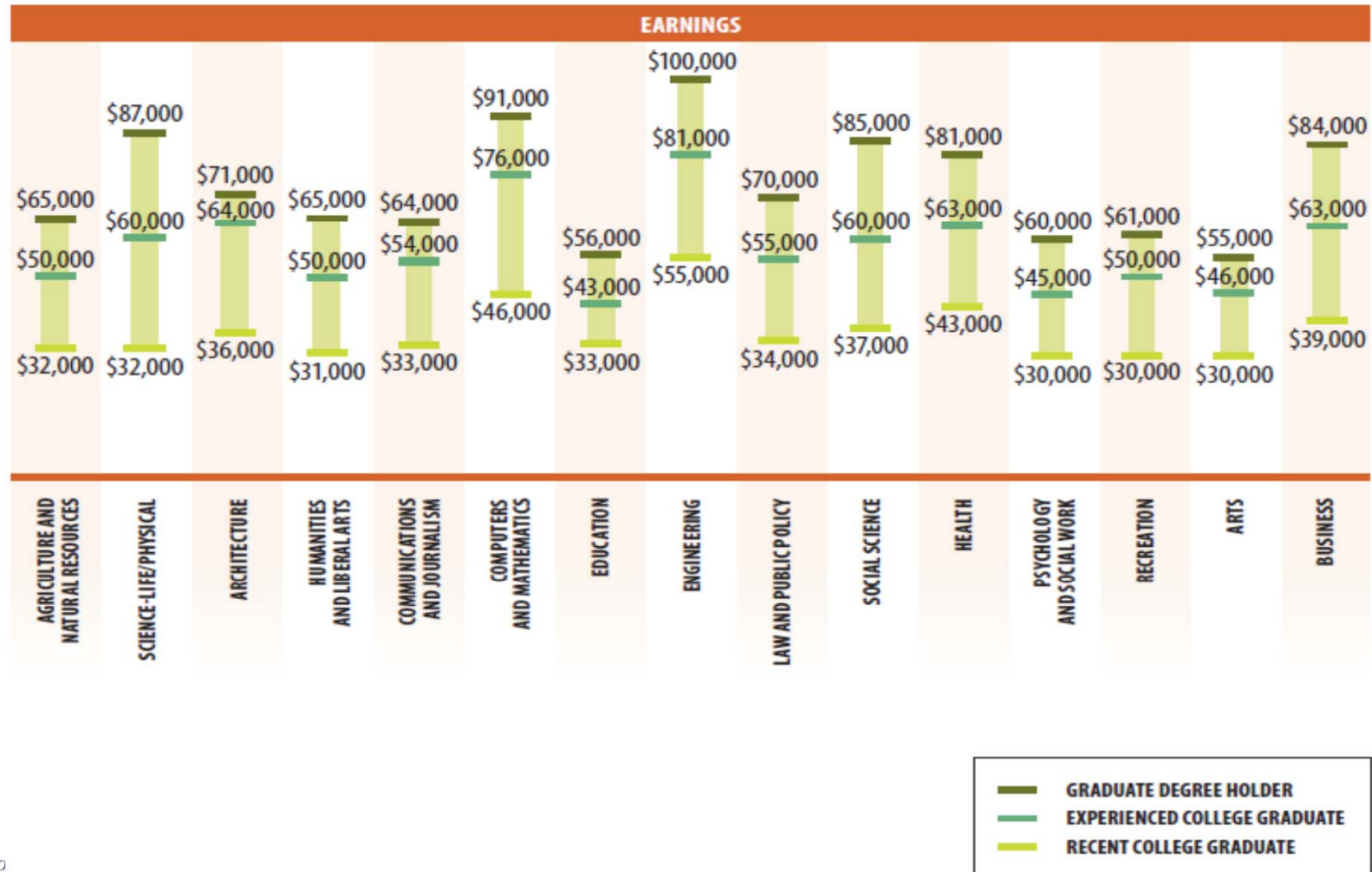
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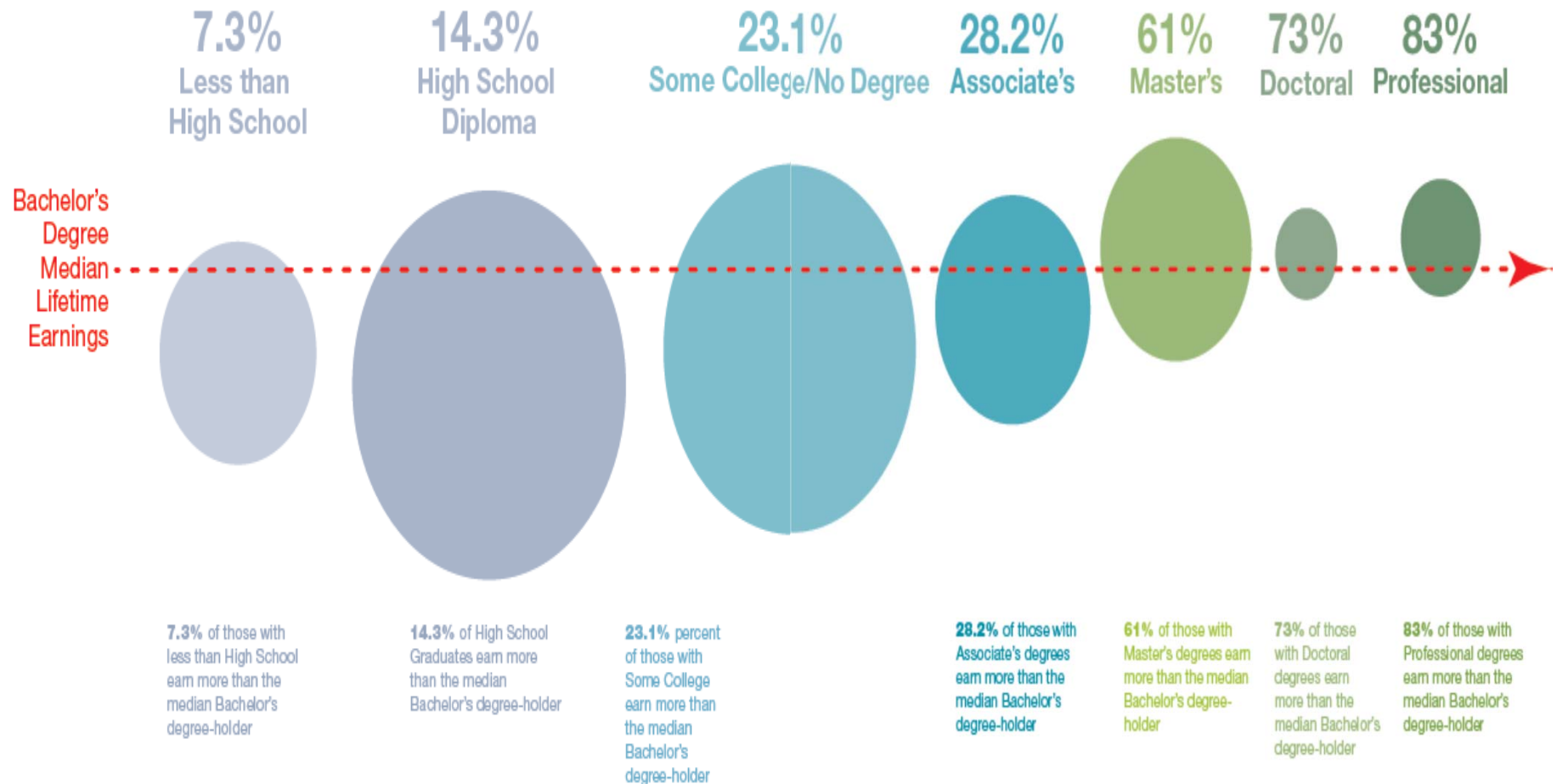
Having a graduate degree is a good umbrella in economic storms



Earnings boosts vary but are always substantial



There is high degree of earnings overlap that is somewhat rooted in occupational choice



Learning Labor Exchange

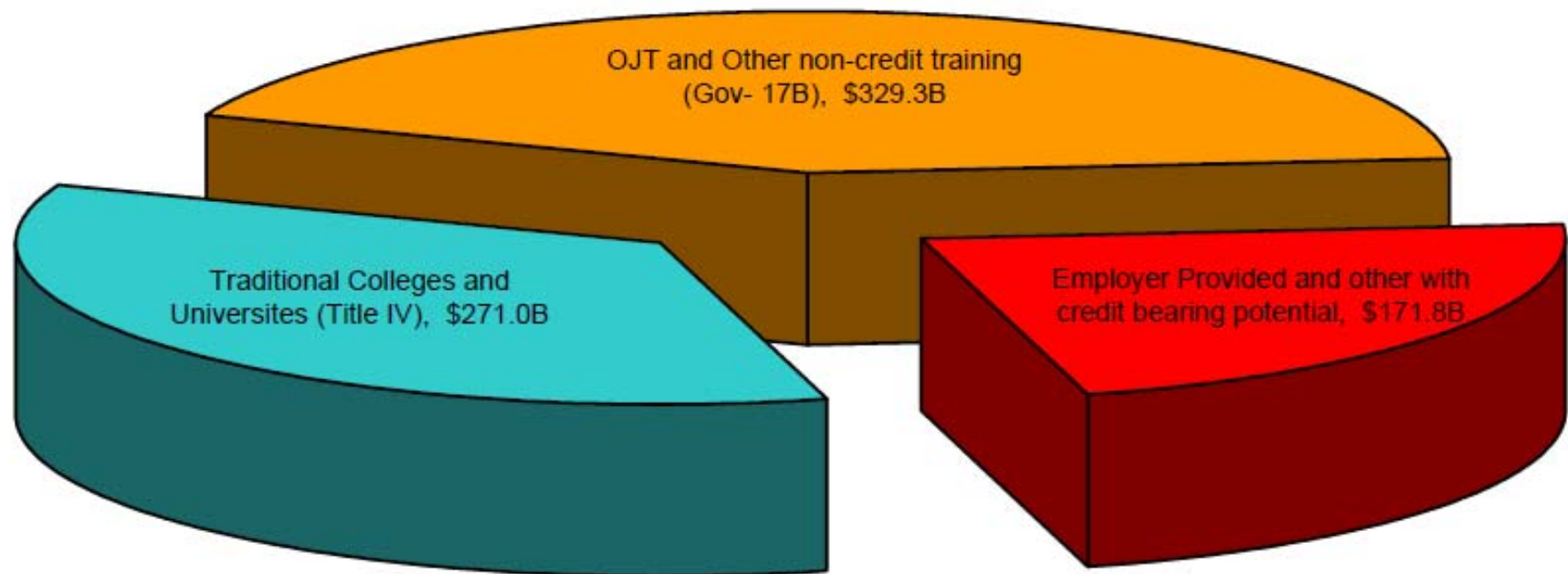


Information improves the efficient operation of labor markets. It is absolutely critical for development

- **Labor market inefficiencies arise with longer time horizons which is exacerbated in private markets when individual business planning is proprietary information (imperfect information)**
 - **The US addresses this problem by generating and providing information to avoid market inefficiencies**
 - **Longer period degrees are more prone to time-sequencing problems where enrollment decisions, based on current labor market conditions lead to cyclical surplus/shortage issues.**



The American Way – Education and training are separate spheres where formal preparation is only 1/3rd of human capital development (in \$).



So then, what is the Problem?

- We need good information for better labor market efficiency, especially that informing students but
 - Federal and state **statistics are lagged**.
 - Labor market data from the workforce/UI system **doesn't have occupation**, with very few exceptions; **Occupation is critical** to understanding granular labor demand.
 - The Bureau of Labor Statistics (BLS) does a good job projecting occupation and industry growth but **does not offer any projections of education and skill demand**. Attempts to use the BLS education and training requirements data leads to gross underestimation of education demand.
 - 22 million short at baseline, and
 - 0.3% point increase in BA demand over 10 years.
 - Business information is proprietary** (see revealed employer preference later)
 - The stigma of 'tracking' has **diminished efforts to link labor market information with education**, specifically curriculum development.
 - The higher education establishment and the American public perceives education as having the lofty mission of creating well educated and good citizens which is **only one among many** missions that leaves workforce development on the bench.

Gainful employment might begin changing this.



So then, what is the answer?

- **The US needs to include skill and education demand** as part of projections. Our center has done this –accounting for both upskilling and changing occupational composition.
- **Our aversion to tracking needs to be rethought**, at least in the training and retraining spheres. Commonly this is thought of as a vocational or CTE problem, but the underlying issue would effect highly specialized graduate education
- **We need to be careful to maintain our production of general education** if it truly imbues the ability to ‘learn’ and is, thus, critical to the economic flexibility of individual workers and the overall economy.
 - **One insight** comes from work on occupational transferability – is it tracking if single programs of study link to broad job clusters, or if multiple fields of study provide access to the same occupation?
 - **A second insight** comes from work being done on stackable certificates. The more we conceptualize that the American solution has foundational competencies developed in the formal system while more firm or task specific human capital occurs in the labor market the more we can focus on linking information on job requirements in programs, or field of study, closest in time to the labor market



The Future of data systems is now

- **Momentum has been building** to link postsecondary transcript data to wage records. This give us ex post evaluation of the relationship between program/field of study and a host of labor market outcomes.
- This **doesn't provide a feedback mechanism** because we don't know what people are doing on the job. Our loopy-goopy education-labor market connection makes it difficult to infer occupation from industry of employment and wages.
- **Cutting edge work is in using internet job postings** to defeat the problems of timely data, proprietary employer information, skills/job tasks and technologies ,and other occupation-related requirements. (Job postings as revealed employer demand)
- These data **enable short-term** occupation, skills, etc. **projections models** that can break job requirements into information about upcoming labor market needs in ways beneficial to training/retraining programs.



What would a modernized learning-labor exchange do?

- Improve information flow between the workplace and the education and training system by utilizing internet job postings, wage record-transcript data, and O*NET data detailing underlying KSAs
- Combine the competency model, stackable certificate concept, and occupational transferability with more study on just how education programs/field of study are utilized in the labor market which would:
 - Minimize the tracking issue by linking education clusters to broad occupational clusters.
 - Increase efficiency of retraining by identifying minimum skills gap to move displaced worker quickly to new occupations
 - Enable education and training efforts to focus on teaching up-to-date occupationally specific skills as close to labor market entry as possible to minimize mismatch (and more stories of workers trained to jobs that don't exist.) (See Freeman on counter-cyclical problems as education period lengthens)

