Education and the "New Economy"

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1 Introduction

The "New Economy" has a number of obvious implications with respect to education which I will not focus on. Some of these implications are

- (A) new professional profiles ("the internet salesman"),
- (B) demand shifts in the education sector (although these shifts are widely overestimated),
 - (C) human capital becomes the central factor of production,
- (D) education policy is the most important means for redistribution policy,
 - (E) conflicts and differences between generations aggravate. Instead, I will briefly focus on three aspects:
- (1) The relationship between taxation, human capital accumulation, public provision of education, and globalization (The taxation-migration nexus).
- (2) The change in the supply structure of higher education ("Economics of the Superstars").
 - (3) The change in focus in higher education ("Education as a Filter").

2 The Taxation-Migration Nexus

In nation states without global labor markets the dominant share of expenditure for higher education are public expenditure: higher education is typically publicly provided. One of the central reasons for this is time consistent taxation of human capital returns:

The story is as follows: There is good reason to tax human capital returns heavily, because the "tax base" is fixed: a 40 year old person has a given stock of capital. So this is an inelastic tax base and the excess burden of taxing it is small. Empirically, this is reflected by high marginal tax rates in the top tax

brackets. Anticipation of these tax rules will keep people from investing in human capital. How can you solve this: by providing (or subsidizing) human capital investment. This is what happened in the past, and is one of the quintessential reasons for public provision of higher education.

Things change: High international mobility of the highly skilled. This

has a number of implications

(A) Erosion of the tax base. Tax competition drives down the equilibrium tax rates on human capital returns.

(B) Redistributional implications. The low-skilled immobile workers will bear the burden of financing public expenditure.

- (C) The end of "excessive taxation" of the returns of human capital is near. As public provision of higher education was a countermeasure to this excessive taxation. Therefore, one of the efficiency guided reasons for public provision of higher education disappears.
- (D) International competition for talent / subsidization of highly skilled immigrants. (Rents from human capital investment cannot be fully appropriated by the person who owns the human capital. There are spillovers. It is beneficial to have clever co-students, or colleagues, and also, in the job market, there will be less than full compensation for the services of human capital.)
 - (E) Strong forces towards privatization of higher education.

3 "Economics of the Superstars"

The "New Economy" will change (or speed up some existing) trends in higher education. The development is parallel to what happened in sports, and performing arts in the last 50 to 100 years.

What happened there? Music records and broadcasting media (television in particular) made it possible to watch a tennis match or to listen to a philharmonic orchestra or to a rock star simultaneously, from all over the world, or to store the entertainment product on storage facilities and use it whenever needed. The consequence: a dramatic change in demand: Demand becomes extremely skewed. In the "old" equilibrium (more than 100 years ago) a huge number of musicians and orchestras were needed, generating demand for many reasonably good musicians. Now a few "superstars" cater for the whole market.

A similar technology revolution is possible in the education sector.

1) Travel becomes easier. Already today, the U.S. is the center of higher education. (Straubhaar 1999, p.8: The "export" of education services (by an "import" of foreign students) has become a money machine for the U.S. Every

year foreign students contribute over USD 7 billion to the US economy.")

2) New technology: similar to the "economics of the superstars" in the entertainment industry, some universities with excellent reputation could supply courses and programs in economics, in which only the world's leading experts teach courses. Expert systems could make such courses as interactive as ordinary (teacher physically present) teaching: questions can be anticipated and, while going through the virtual lecture/course, if the student has a question, the question starts a subprogram to the main program.

We might end up with

- (A) a "dual" system of higher education, with inexpensive "virtual" programs, and expensive first class programs with "real" teachers that may agglomerate in very few places (the "Cambridge agglomeration effect").
 - (B) a high degree of monopolization
 - (C) contests for talent among the few top education centers.

4 University as a Filter

Tracing back to Kenneth Arrow, there is a major debate whether higher education is more like training, or more like a filtering device. A lawyer, or a medicine student may acquire useful skills, comparable to on-the-job-training. However, higher education often has a different character. For instance, it is often claimed that for French top schools the contest for entering the school is the main hurdle, with an actual course program that is not really a challenge. Admittance is also a major issue for the British "public schools", or for the top U.S. universities.

The process of generating knowledge accelerates, and the depreciation rate for knowledge increases, but also the required types of skills have changed. Professors teach material that was correct 5 years ago, but now has become useless or wrong. Silicon Valley spends less on education than the U.S. national average.

Overall the training aspect becomes less important and the filtering role for higher education becomes more important.

One indicator for the relevance of this development is the wide-spread recent idea that universities should teach "soft skills" - because, different from ordinary knowledge, these skills depreciate much slower. To teach soft skills is not the task of universities, because soft skills are developed in the kindergarten.

But universities will do the screening/filtering.