



Developments in economics of education research



Stephen Machin*

Department of Economics, University College London, Gower Street, London WC1E 6BT, United Kingdom
Centre for Economic Performance, London School of Economics, London WC2A 2AE, United Kingdom

ARTICLE INFO

Article history:

Received 10 February 2014
Received in revised form 1 April 2014
Accepted 3 April 2014
Available online 5 July 2014

JEL classification:
I20

Keywords:

Economics of education
Education policy

ABSTRACT

The significant upsurge in economics of education research that has occurred over the last 10 to 15 years is discussed, together with reasons as to why. Education impacting more on economic outcomes, methodological innovations, access to rich new data sources and an increased demand for evidence based education policy are highlighted. The paper concludes that because these are the factors that have driven the increased volume of research, the increased interest is not a research fad, nor a transitory blip, but an area producing work often of high relevance to education policy and seems likely to be sustained for some time to come.

© 2014 Published by Elsevier B.V.

1. Introduction

Research undertaken by economists on questions to do with education and education policy has been a big growth area in recent years. A quick glance at the conference programmes of the world's two leading associations for labour economists – the European Association of Labour Economists and the US Society of Labor Economists – makes it clear that they feature a high preponderance of research papers studying education, so does looking at the articles published in the profession's leading academic journals.

The upsurge of new (predominantly empirical) research by economists on education and education policy has occurred a lot in Europe, but applies in many countries across the globe. This research trend is an interesting development that has occurred for a number of reasons, each of which have complemented one another to enable what has become a very fertile and prolific research ground. It is also interesting to compare what has been going on in Europe with the United States where the economics of education has been (and remained) a very important research field since at least as far back as the 1960s, when some of the key developments in the economics of education area were initiated.

In this paper, I discuss these developments. I begin, in Section 2, by setting the economics of education field into its historical context and by quantifying the recent upsurge in economics of education research. I also highlight the broad range of areas covered by this research. In Section 3, I consider the reasons why the increased volume

of economics of education research has come about. I argue that it has been for multiple reasons, which have combined to generate a large body of research. Finally, Section 4 concludes with a forward look on what these developments might mean for future research by economists on education.

2. The upsurge in education research by economists

2.1. Historical context

The 1960s were boom years for the economics of education as the area began to make its way to the forefront of modern economics when a number of highly influential economists (like Gary Becker, Jacob Mincer and Theodore Schultz) conducted major, new innovative research applying economics to education questions.¹ Commentators on these origins of the economics of education as an independent field of research (like Teixeira, 2001) refer to Schultz's presidential address to the 1960 American Economic Association meetings (Schultz, 1961) and to the Special Issue of the 1962 *Journal of Political Economy* edited by Schultz entitled 'Investment in Human Beings' as early instances of the start of the rise of the subject.

¹ Of course, education had featured prominently in economic research before then: for example, as far back as Adam Smith's *Wealth of Nations* one can find reference to the potential importance of education for raising the productive capacity of society. But it does not seem unreasonable to say that many of the precursors that set the stage for recent research can be traced directly back to the work done in the 1960s in the US and subsequently by the likes of Tinbergen (1974) in Europe.

* Corresponding author. Tel.: +44 2079557443; fax: +44 2079557595.
E-mail address: s.machin@ucl.ac.uk

A key development was the human capital approach of Becker (1964) in his classic book *Human Capital*. He formalized in an economic cost–benefit model as to why individuals invest in education and training in a manner analogous to investments in physical capital.² The resulting human capital theory still forms the basis of, or the starting point, for much research in the economics of education field to this day.

The human capital approach has become the dominant one amongst economists studying education questions. The (essentially simple) theory is particularly powerful because it provides a tool to analyse a diverse range of phenomena.

Significant developments were also made on the empirical side of things at that time. Mincer's (1958, 1974) highly influential work developed the earnings function (the Mincer earnings equation) that relates log(earnings) to schooling and experience that is one of the most widely used tools amongst empirical economists. This lies at the cornerstone of a vast array of empirical research done in many areas of economics. This includes many micro based empirical applications that focus on the core elements of the Mincer equation, like Card's (1999) discussion of a large body of work on the causal impact of education on earnings, or the work on wage returns to experience or job tenure (see, inter alia, Jacobson et al., 1993, Topel, 1991, Angrist, 1990 or Dustmann and Meghir, 2005). Other work relies upon extended or augmented Mincerian equations to look at the determinants of individual earning power. There are numerous examples of this, like work on gender wage discrimination (see Altonji and Blank, 1999) or the huge literature on estimating union non-union wage differentials (see Lewis, 1986).

2.2. The recent upsurge

The developments of the 1960s laid the foundations for the modern economics of education. They led to a huge research literature by economists on education issues, in the US and elsewhere. Significant developments occurred in both theoretical and empirical work in the years that followed. Many new ideas were developed in the field, including theoretical work that challenged the human capital approach (the signaling and screening work of Spence, 1973, 1974, and Stiglitz, 1975), critical appraisals of the rise of human capital theory (Blaug, 1972, 1976) and detailed empirical work on issues like over-education (Freeman, 1976), the race between demand and supply of skilled workers (Tinbergen, 1974) or on private and social rates of return to education (Layard and Psacharopoulos, 1974; Psacharopoulos, 1973).

However, after the heyday of the 1960s and 1970s, there was something of a decline in research on education by economists, especially outside of the United States. In the United States the field continued on from the start generated by the 1960s and 1970s' research, with something of a lull in the 1980s, but on the whole remaining a thriving area. In other places, like in Europe, initial momentum was not maintained and the field dwindled.

This pattern is shown in Table 1, which updates and further develops a similar table in Machin (2008). The table shows the scale of the revival of interest that has more recently occurred from the number of publications by decade with the word/phrase education, schooling, school or human capital in the title of papers published in leading mainstream economics journals across six decades beginning in the 1950s.³

The numbers in the table demonstrate a clear pattern. In the 1950s hardly any education papers (three) were published. In the 1960s 37 papers appeared and this more than doubled to 78 in the 1970s. After

² In this regard, see also the important contributions of Schultz (1961, 1963) and the dynamic model of Ben-Porath (1967).

³ The journals are the following: *American Economic Review*; *Economic Journal*; *Econometrica*; *Economica*; *Journal of Political Economy*; *Quarterly Journal of Economics*; *RAND Journal of Economics*; *Review of Economic Studies*.

Table 1
Education publications in mainstream economics journals.

	Decade					
	1950s	1960s	1970s	1980s	1990s	2000s
Number of papers	3	37	78	38	82	134
Number non-north American based	0	4	13	8	23	56
Percent non-north American based	0	11	17	21	28	42

Notes: Publications with the word Education, Schooling, School or Human Capital in the title in the following list of journals: *American Economic Review*; *Economic Journal*; *Econometrica*; *Economica*; *Journal of Political Economy*; *Quarterly Journal of Economics*; *RAND Journal of Economics*; *Review of Economic Studies*. Source: JSTOR, Ingenta Connect, Business Source Premier, Blackwell Synergy. Only full articles and excludes the following: Papers and Proceedings papers (from *American Economic Review*); comments; replies; erratum; corrigendum; round tables; notes; articles where the word school means school of thought. For jointly authored papers to be classified as non-north American based requires at least half of the authors' affiliations to be outside of North America.

this, however, there was a fall in the 1980s (down to 38 papers), a subsequent pick up in the 1990s to 82 (although with a lot of these in the latter half of the decade) and then a very sharp increase to 134 papers published in the 2000s, easily the highest level in all the decades considered.⁴

There is another notable feature of this recent upsurge. The second row of the table shows the number of papers with authors based outside of North America, and the third row shows the percentage of the total papers. For this group the rising trend over time is striking. Far fewer education papers were published by this group in the journals I choose to look at, until relatively recently although by the 2000s 56 papers were published. This corresponds to a continually rising percentage share over time – going from zero in the 1950s to 42% by the 2000s. The increasing share is shown on an annual basis in Fig. 1 where the grey bars denote the papers published by non-US based authors. Given that many of the journals in the list are American, this is very striking, and reveals that the economics of education is currently a thriving field. This is especially the case in Europe where many of the authors of these papers contributing these more recent papers are from.

A second way of documenting the rise of economics of education research is to look at conference programmes. The first row of Table 2 shows the number of education papers (classified by myself) on the 1980 European Association of Labour Economists (EALE) conference held in Lund, Sweden, which was the second ever EALE conference.⁵ The second row shows the number in the current, 2013, conference. As the 2013 conference is much bigger than the 1980 one, the number of education papers is also expressed as a percentage of all papers presented at the respective conferences.

The numbers in the table shows that in 1980, 17 out of 108 papers, or 16%, were on the economics of education. By 2013, the number had risen to a massive 77 which, out of the 352 in total, comprised 22% of all papers being presented at the conference.

These publication and conference presentation trends make it evident how the economics of education research field has grown. They also show how this growth has very much made it an independent research field and one that is one of the most rapidly growing within the economics discipline.

⁴ The exercise is necessarily selective along many dimensions and only meant to be taken as indicative and suggestive, rather than definitive. A number of issues make this the case. For example, the number of papers per journal may well have also risen through time (especially in those journals that now have more issues per year than in the past), but not by enough to explain the scale of the recent upsurge. Similarly specialist journals that were set up in this time period and that have published a lot of economics of education papers (e.g. the *Journal of Human Resources*, the *Economics of Education Review* and the *Journal of Labor Economics*) were not considered in this suggestive analysis and so the scale of increase could well be understated.

⁵ I could not obtain a list of the actual papers presented at the Inaugural EALE conference in Turin in 1979.

Download English Version:

<https://daneshyari.com/en/article/972343>

Download Persian Version:

<https://daneshyari.com/article/972343>

[Daneshyari.com](https://daneshyari.com)