Educational policymaking: economic and historical perspectives

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Introduction

It will be argued in this chapter that increased emphasis on economic perspectives can offer historians of education new theoretical and methodological tools and also broaden understandings of policymaking. The potential for economics to colonise other social sciences presents a danger, however (Fine and Green 2000), so what is proposed here is a combination, rather than a merger, of perspectives designed to analyse the relationship between public expenditure on education and economic cycles. The complexity of this has been acknowledged in Richard Aldrich's *Education for the Nation*, which notes that 'education may serve either as a means of investment, or of consumption' (1996: 130). Other examples of Aldrich's writing (e.g. Aldrich, Crook and Watson 2000) have highlighted a complex and inconsistent relationship between education and the economy; one that has been influenced strongly by historical change over time and the objectives of the State.

The economy, history and education

While not altogether ignoring the issue, historians of education have sometimes integrated economic contexts into their writings with reluctance. The economy tends be presented as an environment, but its impact on both the conception and implementation of education policy is rarely explored in depth, even though the financial resourcing of policy initiatives, schools and

classrooms has been – and continues to be – a significant influence upon teaching and learning. Pragmatic encounters between economic and educational historians have produced some important outcomes. In 1997, for example, a British History of Education Society conference generated a special journal issue on the theme of education and economic performance (Lowe and McCulloch 1998). More recently, Michael Sanderson has called for bridge building between the two fields (2005).

In the 1940s, as Gary McCulloch has observed, Fred Clarke called for an 'interpretation, conscious and deliberate, of education in terms of a social economic history' (quoted in McCulloch 2004: 8), and the work of one British historian of education, above all others, confirms a commitment to this objective. The writings of Brian Simon (1915-2002) examine educational and social change through a Marxist lens, focusing on social class within broader economic structures. This implies recognition of, though not an allegiance to, the economic perspective. On the one hand, Simon argues that 'the fundamental educational issues have remained the same through the years – who should be educated, how, to what level or different levels of the service of what social or industrial needs? – so the conditioning social and economic factors continue to operate' (Simon 1966: 70). On the other hand, Simon criticised 'reproduction theories' associated with Bourdieu and Bowles and Gintis because they failed to recognise education's 'degree of relative autonomy' from 'the economic structure' (Brehony 2004: 546).

The application of economic theory to educational examples has been tentative. Classical economists associated education with political and social stability, creating favourable conditions for economic development. Adam Smith (1776) envisaged a direct relationship between education and economic performance by comparing a skilled worker to an expensive machine,

but it was more than a century before Alfred Marshall developed an economic model that embraced education. Marshall (1890) viewed education as an investment of individuals in themselves in order to transform the type of labour supplied. This may be seen as an attempt to bring economic rationality to the concept of education.

This challenge was next taken up in the 1960s, when human capital theory treated education as a constituent element of rational economic choice. Just like physical capital, the quantity and level of education to be provided rested upon microeconomic decision making: the costs of individuals' education were balanced by the benefits of their increased productivity, rewarded by higher wages (Becker 1962). A transposition of this model to the macroeconomic level established a direct and positive link between national educational investment and national income. Abandoning the previous assumption of homogeneous labour shifted the focus towards the qualitative factors of economic growth: knowledge came to be seen as the main driving force of the economy (Romer 1990).

Economic theory has been shown to be both reactive and proactive vis-à-vis educational policymaking. Human capital theory emphasised the contribution of education to economic growth, as revealed by empirical studies (e.g. Denison 1962), but it also endorsed the post-Second World War programme of public investment in education. The education system could be represented not only as a cost for the economic system, but also as an investment and major determinant of growth. This balanced view was to change after the 1973 oil crisis hastened the end of the post-War consensus. The tax burden associated with education was now widely thought to outweigh the benefits. In part, this was because the financial costs and levels of visible

taxation, used as indicators by policymakers, seemed straightforward in comparison with the harder-to-measure outputs showing economic benefits.

In the process of investigating the factors behind economic growth, economists have gradually given more space to education, but have tended to understand it in a narrow way. According to John Vaizey, this was one reason why Marshall did not pursue his exploration of human capital and education (Vaizey 1972: 22). It can be argued, therefore, that the disciplinary shift from *political economy*, a social science uniting politics and economics, towards *economic science*, with its emphasis upon the alternative uses of scarce resources by individuals and societies, has refined the theoretical relationship between education and economic growth, while sidelining the indirect economic benefits attached to education, as identified by classical economists. Something has been lost here: the history of educational policymaking may better be understood if we locate policy dilemmas, past and present, in a context that recognises prevailing economic conditions.

In the United Kingdom, debates have centred around the historical links between education and economic growth. Did education contribute to the first industrial revolution and the economic hegemony that followed? Is the lack of education before the second industrial revolution of the late-nineteenth century responsible for the economic decline of the twentieth? (Aldcroft 1974; Sanderson 1999) If so, was this inevitable? (McCloskey 1970). Such debates have been coloured by historians' own perspectives on public versus private education, another strong research interest of Richard Aldrich (2003). Some have presented public intervention as a wrong move, or mistake, which permanently destabilised the progress towards educational development begun by efficient private institutions (e.g. West 1975). By contrast, others see public education as a

necessary response to socio-economic problems ignored by private organisations (e.g. Simon 1960: 115; Anderson 1983). The hazards of drawing comparisons across time, of straying into counterfactual 'what if' territory, and of attempting to disaggregate the contribution of education from other cultural, social and political factors that may have affected economic development are legion. But historians of education have been culpable of underestimating the influence of economic forces upon the settings they are studying, tending to follow debates rather than leading them. For example, William Richardson (1999: 131) regrets that there has been no significant engagement by historians of education with the highly contentious thesis about the failure of British education to serve the needs of industry, set out in Martin Wiener's (1981) volume *English Culture and the Decline of the Industrial Spirit*.

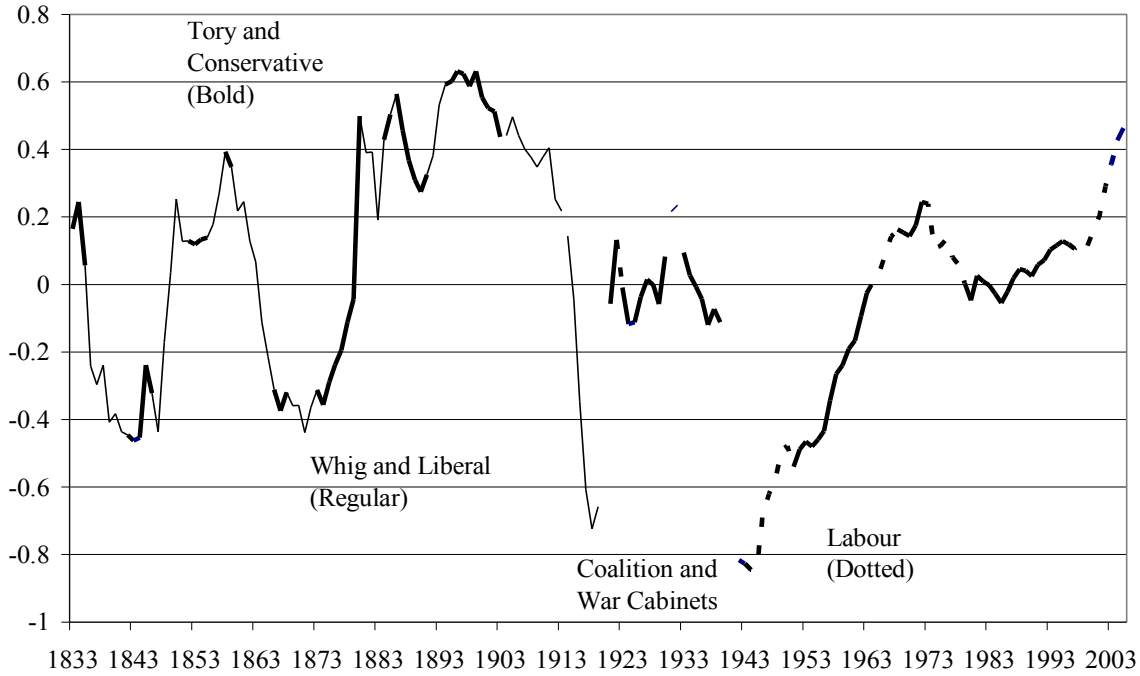
Alternative explanations of the relationship between education and the State also reflect competing methodologies. Questions arise about the reliability and availability of quantitative data for such issues as enrolment, literacy rates and expenditure (West 1970; Hurt 1971), while qualitative studies of, for example, curriculum, pedagogy and values present difficulties for comparing past and present. Today's policymakers continue to face timeless questions. What education is for? How should it be evaluated? This chapter provides no answers to those questions, but it does argue that the combination of methodologies is crucial to define, evaluate and interpret the quantitative and qualitative development of educational systems. This, in turn, is an aid to better understanding the similarities and differences across time and space.

Three main developments are considered below: first, the relationship between economic fluctuations, educational funding and policy; second, comparisons between education and other areas of State activity; finally, international comparisons.

Long economic cycles and education policies

It is argued here that paying close attention to long economic cycles, or 'Kondratiev waves', can illuminate the historical relationship between British education, the State and the economy. Nikolai Kondratiev (1892-1938), the Russian economist argued that Western capitalist states experience regular cycles of boom followed by depression (Loucã and Reijnders: 1999). A study of fluctuations in educational funding since 1833 (see Figure 1) shows that, since the first public grant to education was made in that year, the 'highs' and the 'lows' of educational activity are in reverse to the Kondratiev waves prior to 1945, but are synchronised thereafter (Carpentier 2003). One interpretation, therefore, is that the Second World War fundamentally changed the relationship between education and economic growth.

Figure 1: UK public expenditure on education (1990 prices), 1833-2005 (second order deviation from the regression curve)



Source: Carpentier 2001.

Before 1945, periods of economic boom resulted from cost savings, including reductions in education spending. Evidence points to such policies contributing to economic upturns in the short term, but in the longer term they tend to generate lower levels of productivity and to increase social unrest. This leads to a crisis of capital, which, though it may be abundant, is not invested efficiently. Increasing public spending on education is an orthodox strategy used to overcome such crises: unused capital is deployed to restore labour productivity and a long-term dynamic of profit. Contrary to the thesis of E.G. West, this explanation suggests that nineteenth-century State involvement in education was the result, not the cause, of economic setbacks (West: 1975; Carpentier: 2003).

After 1945, the preconditions of growth changed. They were no longer based on lowering the cost of the factors of production, but derived instead from qualitative improvements. From this point, public expenditure on education became a conscious instrument of the post-War economic growth (Michel 1999). But this situation was to change again with the onset of the early 1970s world oil crisis, which precipitated cuts in public spending and hastened the end of the post-War consensus (Chitty 2004: 16).

Such an interpretation should be treated with caution, not least because certain economists are sceptical about the existence and significance of cycles (e.g. Solomou 1987). Some historians, meanwhile, feel uneasy about associating cyclical analysis with historical determinism, repetition and prediction. Yet analyses of this kind can be valuable as long as we recognise that cycles are of different amplitudes and periodicities, and that they illustrate the *recurrence of mechanisms*, rather than the *reproduction of identical situations*. What does seem clear is that long-term economic fluctuations are likely to be affected by - and may themselves influence - public spending on education. Cyclical analysis cannot explain the whole process of educational development, but it does go some way towards responding to Eric Hobsbawm's call for historians to collaborate with economists to better understand socio-economic transformation (1997: 163).

In respect of the UK, Table 1 (below) offers a brief interpretation of the upward and downward phases of long economic cycles and the development and funding of education.

Long Cycles	Upward phases	Downward phases
1790-1850	**c.1790-c.1820** Economic advances of the	**c.1820-c.1850** Economic instability and

	'first industrial revolution' occurred in spite of, not because of educational provision. No state funding of education in this period.	social unrest, yet the state began to fund elementary schooling (from 1833), develop a bureaucracy and establish a schools inspectorate.
1850-1897	**c.1850-c.1873** A 'golden age' for the Victorian economy, but the Newcastle Report (1861) slowed educational spending and introduced 'payment by results' for schools'.	**c.1873-c.1897** Marked by the 'First Great Depression', but a substantial rise in educational funding followed the 1870 Education Act. Elementary education subsequently became compulsory (1880) and free (1891).
1897-1945	**c.1897-c.1914** A modest economic recovery, but the 1902 Education Act was not accompanied by increased public investment.	**c.1914-c.1945** The Wall Street Crash (1929) and Great Depression impacted less severely on education spending than on other public spending.
1945-present	**c.1945-c.1973** Post-war economic growth was partly driven by universal secondary education and the expansion of higher education.	**c.1973-present** Economic turmoil led to the 'capture of education', with budget reductions and the State's partial retreat in favour of increased private resourcing.

While there are correlations here, these do not automatically signify causality. As McCulloch has argued, educational history 'can provide a testing ground, the test of time for the relationship between education and economic performance (1998: 204). Even so, such test results may do little more than confirm a need for further inquiry and open mindedness. In 1997, Richard

Aldrich's contemporary, Roy Lowe, a contributor to this volume, voiced doubts about the impact of education upon the economy, while simultaneously citing the Kondratiev wave theory as a possible explanation of the 1970s budget cuts (1997: 25).

The relationship between education and the economy is an evolving construct, potentially subject to continuity as well as change. Indeed, Richard Aldrich has questioned whether the 'discontinuity, disruption and chaos in the 1970s, 1980s and 1990s are any greater than during previous periods of history' (2006: 31). Acknowledging the cyclical recurrence of economic crises offers the reassurance of a pattern. The reversal of the relationship between education and the economy after the Second World War, however, presents a challenge for policymakers. Received wisdom, since the 1970s, has been that public spending, including that devoted to education, must be restrained during periods of economic slowdown. Prior to 1945, however, evidence suggests not only that public expenditure on education *increased* during periods of economic crisis, but also that it provided a way out of the crisis.

The study of economic cycles is not a substitutive tool, but rather an additional lens available to historians of education policy. It presents a critique, supported by critical researchers (e.g. Ozga 2000: 118), of older, 'Whiggish' explanations, which view the development of State education as natural growth or as a pathway to progress, marked by legislative milestones. Cyclical analysis also challenges over-simplified associations between politics and education. Figure 1 shows, for example, that the party political transitions of governments do not necessarily lead to new patterns of economic spending. New governments initially find themselves locked into economic cycles, and while neither politics nor economics is the slave of the other, like the proverbial oil tanker, there can be a significant time lag before a decision to change the course of policy

becomes manifest by a new direction in the expenditure statistics. Moreover, raw figures showing expenditure on education may be a blunt instrument for policy analysis. Prime Ministers James Callaghan (Labour, 1976-79) and Margaret Thatcher (Conservative, 1979-90) were both associated with parsimony and the achievement of efficiencies in education, yet the 'wasted years' policy legacy of the former contrasts markedly with the 'revolution' associated with Thatcher's education reforms. 'Value for money', upon which governments have purported to focus since the early 1970s, has proved to be a misleading slogan. Most frequently, education initiatives are presented in a way that makes it easy to count the monetary cost, while an estimation of the policy's value is much less clear. The challenges of identifying and evaluating educational outputs are at the core of the Atkinson Report (2005) on public service productivity. But the lessons of history suggest that presenting education, and other public services, as an aggregation of costs will generate spreadsheet figures that fail to reflect the true value and public benefit. Cyclical analysis helps us to understand when, and possibly why, more funding is applied to education, but this quantitative approach is blind to qualitative data. In this respect, history of education adds a vital dimension: working together, economists and historians are better placed to understand the relationship between educational funding and policy development than either discipline can independently claim.

Cyclical analysis illustrates both education's dependence upon, and autonomy from, the economy. Two observations are important here. The first is that the expansion and development of education over time has been regularly justified as a precondition of economic growth. In spite of the poor health of the economy, there was a strong pattern of public investment in education, evidenced by the graphical peaks in the opening, mid-century and final years of Queen Victoria's monarchy and during the world economic depression of the 1930s. The second observation is that

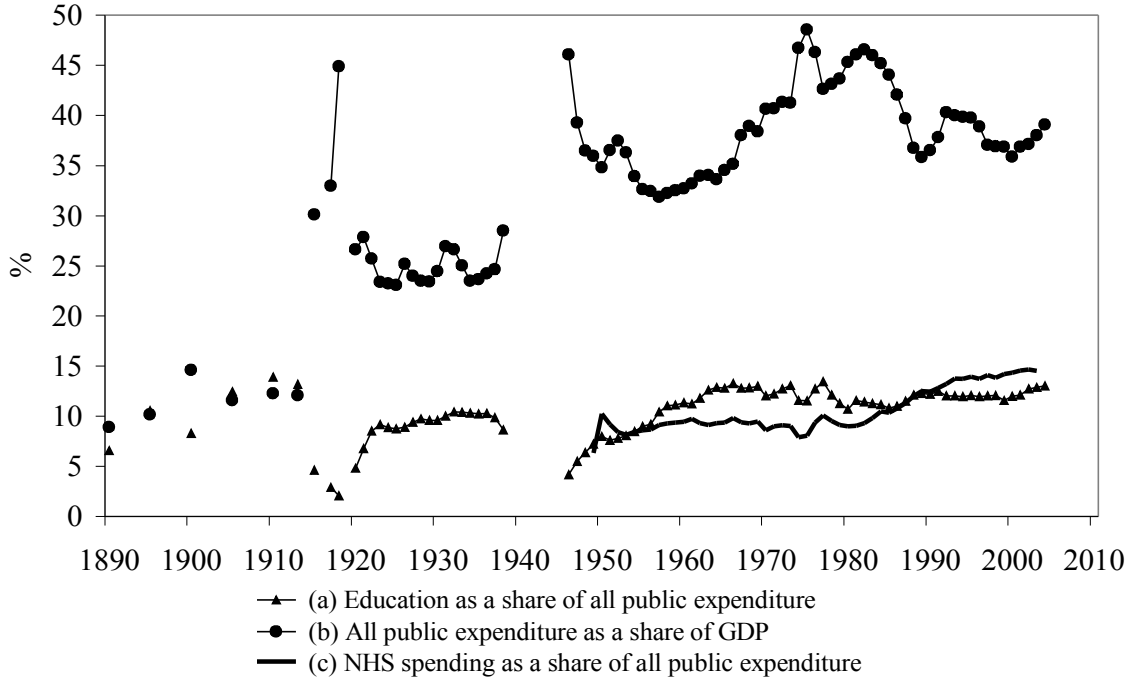
the 1973 oil crisis heralded the 'capture' of education by economics. From this point it became more difficult for the stakeholders of education, including the Department of Education and Science and its successors, to secure resources for initiatives that were not clearly related to economic performance.

Education, the public sector and the economy

Another benefit of engaging with the economic perspective is to facilitate comparisons between education and other State-funded activities. To what extent is the funding of education independent from, or subject to, the variables of other claims on the public purse?

Fontvieille (1976) observed a correlation between global public expenditure and economic cycles in France. Applying his methodology the UK situation over an extended period, Figure 2 demonstrates a similar outcome. In the UK, too, a significant increase in all public resources after World War Two slowed in the early 1970s. At that point, stagflation - the combination of inflation and stagnation - undermined the Keynesian consensus and ushered in neoliberal policies designed to fight inflation, such as wage control and public expenditure restraint. Public funding, not only in education, synchronised with Kondratiev fluctuations in the 1970s, but there are, nevertheless, characteristics of education that are distinct from other public activities.

Figure 2 UK education and other public expenditure and Gross Domestic Product (GDP), 1890-2004



Sources: Carpentier 2001; Peacock and Wiseman 1994; Webster 1998 (updated)

Fontvieille made a distinction between the State's *regalian* spending (on, for example national security and the maintenance of law) and those areas of expenditure linked to human development (including education, housing, health and social services). He identified a clearer historical pattern in the latter type of expenditure, with dynamic growth occurring during downward economic phases. Cyclical movements of global public funding, he concluded, were more predominantly driven by fluctuations of social expenditure than by regalian spending. Other French studies have confirmed this pattern and have pointed to similarities between the cyclical fluctuation of funding for health and education (Fontvieille 1990; Domin 2000). In the UK, evidence for the pre-1945 period certainly points to relatively high spending on health, education

and housing at times of overall economic weakness. A study of health policy since 1939 (Berridge 1999), reflecting the shift from private and voluntarist initiatives to a National Health Service (NHS), suggests possibilities for further research to compare and contrast the expenditure fluctuations of education with other public spending on social welfare activities.

It is common for levels of government expenditure on education to be cited as a reflection of State ambitions and priorities for the area. But the full picture is likely to be more complex than this. Education is in competition for finite resources with other central government departments, with each of them likely to be thwarted by overall public spending round caps and subject to the constraints of State taxation approaches that accompany neo-liberal agendas. Figure 2 offers mixed messages in respect of the relationship between education and total public spending. On the one hand, this shows how all public expenditure, including that on education, is affected by economic fluctuations. The trajectory of the line showing education as a share of all public expenditure after 1945 tells a different story: at the beginning of this period education claimed only a five per cent share, but in 1977 it reached the heights of 12 per cent, before stagnating in the recession of the late 1970s. Figure 2 further shows that education funding improved relative to expenditure on the NHS between the mid 1950s and the early 1970s, but then experienced a narrowing advantage before health claimed a higher percentage share from the 1990s.

At the heart of all public sector spending discussions lie questions of whether the amount spent is too little or too much, and whether the sums granted are being spent efficiently. Yet the potential *value* of pursuing education policies may differ from the *costs*, judged in monetary terms. In the early 1860s, for example, as Richard Aldrich has shown, Sir John Pakington was hopeful that the work of the Newcastle Commission would herald an ambitious national education policy for the

working classes. Such hopes evaporated with the Revised Code of 1862, introducing budget cuts and 'payment by results' (Aldrich 2006: 60). It was the absence of any recognition of education's qualitative measures in the Revised Code that underpinned the criticisms of Joseph Payne, the subject of another of biographical study by Aldrich (ibid: 103). A possible parallel may be drawn between this nineteenth-century era and the experience of the post-1980s education quasi-market. The budget slowdowns in this period are demonstrated by statistics, but as with the Revised Code, qualitative improvements in educational provision were less evident (Campbell et al 2003).

What becomes clear from this analysis is that, against a background of economic cycles, expenditure on education is autonomous, but it is influenced by variables that affect the public funding of other social activities too. Interdisciplinary approaches to educational research can deliver powerful lessons for policymakers, and where research-informed practices can demonstrate positive synergies between social activities there may be a compelling case to break with the tradition of requiring one government department to compete for funding against another. For example, studies of health and education point to a 'virtuous circle': individuals with higher levels of education take better care of their health, and those in good health produce the best outcomes in the education system (Bynner and Feinstein 2005). On their own, economic statistics tell a partial story, but so, too, do narrow historical accounts. The potential for economists and historians to learn from each other in explaining educational change is considerable.

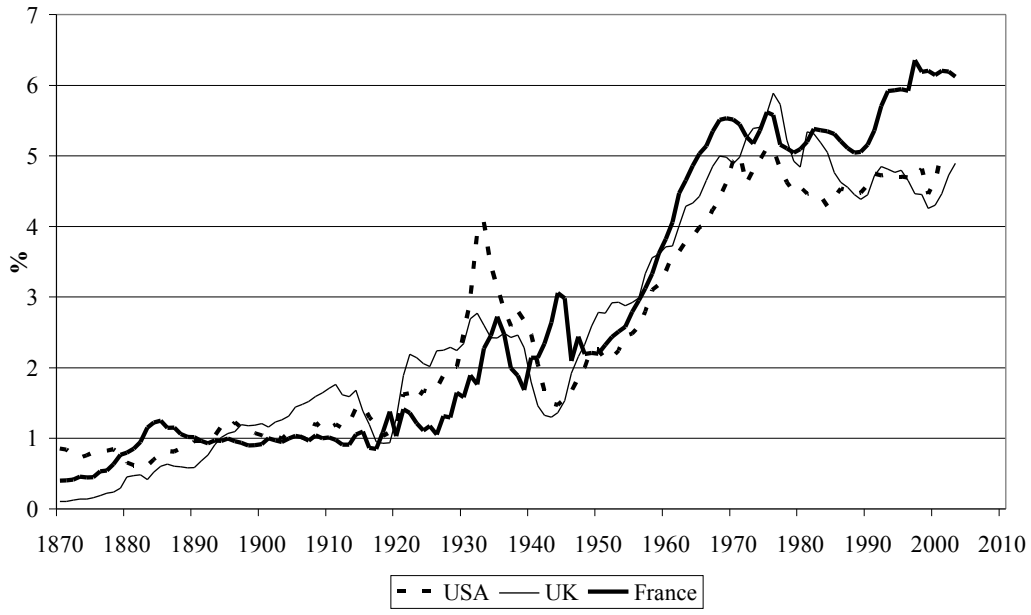
Educational resources and international perspectives

This chapter has focused mostly on the UK, but current debates about globalisation encourage us to consider whether transformations of particular kinds - economic, cultural, political and social –

are always likely to impact upon education in the same way, or whether there are country-specific variables.

Figure 3 below, for example, suggests that, for most of the past 130 years, France, the UK and the USA have devoted similar percentages of Gross Domestic Product (GDP) to educational spending, but also that there were significant differences in these countries' relative efforts at particular points in time.

Figure 3: Public expenditure on education as a share of GDP, 1870-2003



Sources : Carry 1999; Carpentier 2003; Carpentier 2006a

The relationship between British public expenditure on education and economic cycles is consistent with the conclusions of previous studies in France (Fontvieille 1990) and the USA (Carpentier 2006a). In the UK, the period immediately following the 1870 Forster Act was

characterised by efforts to 'catch up' with economic competitors by 'filling up the gaps' in elementary education. The second industrial revolution of this period was more dependent than the first on knowledge and skills (Freeman and Louçã 2001). The higher levels of public funding for education in France and the USA might be attributed to conscious policies for the development of human capital, but other cultural, social and political forces may have been at work, too (see Green 1990; Bowles and Gintis 2002). Another turning point comes in the early 1970s, when the end of the international post-War consensus interrupted the rising trend of public funding for education. In the UK and USA, this led to increased marketisation and a rise in the levels of private resources (Carpentier 2006b). By contrast, such reforms have impacted much less on France, where a new dynamic of public expenditure on education gained momentum in the early 1990s.

Once more, there is a research agenda here for economists and historians to pursue collaboratively. The three countries represented in Figure 2 committed similar percentages of national income to education during the first 100 years represented on the graph. Even where the lines become volatile and divergent, during the interwar period, the trend in each of these countries was to commit relatively *more*, rather than less, money to education. Does this constitute a framework or model – a Western one, at least - for understanding educational expansion? Similarly, there may be scope for economists and historians to examine whether the kind of post-1973 national patterns shown in Figure 2 are consistent with, or challenge, theories of globalisation and understandings of how global forces may impact upon education. The various – and sometimes contradictory - messages from such international agencies as the International Monetary Fund, the World Bank and the Organisation for Economic Cooperation and Development concerning international education resource levels and targets are ripe for

discussion and critique from educational historians, as well as economists of education. Similarly, the apparent trend, at an international level, for voluntary and private stakeholders to be involved with - and to finance - public education demands the engagement of historians if we are to learn lessons from past enterprises of this kind.

Conclusion

This chapter has sought to illustrate how the expansion of education has been both dependent upon, but also autonomous from, economics. Three main conclusions are offered here.

The first is that quantitative and cyclical analysis reveals a relationship between the rhythmic pulsation of the economy and public expenditure on education. A next step should be for economists and historians to use quantitative and qualitative approaches to examine more closely the *impact* of such funding, in respect of national economic and educational development, and paying attention to such factors as student achievement, teachers' professional standing and pedagogical practices. The second conclusion is that, although public education has developed in a distinct manner, it operates alongside other publicly funded spheres. These areas are frequently advantaged or disadvantaged collectively, according to the State's overall public spending budget. But such areas as health and housing may also be in direct competition for limited public resources. Finally, national policies for educational expenditure may be influenced by globalisation, but there is scope for much more comparative and collaborative research in this area.

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