



INTRODUCTION

Educational Finance in France and Sweden: A Historiographical Overview

Clémence Cardon-Quint & Johannes Westberg

A long way to the history of education finance

The funding of education (primary, secondary, technical or higher education) has been a divisive issue in European welfare states in recent decades, against a background of reduced economic growth, tightening budgetary constraints, the surge of neo-liberalism and a new rise in social inequalities, all trends whose precise characterisation is, in itself, a matter of debate.¹ Education expenditure is described both as a form of “social investment”, and as a component of redistributive policies, a rationale used to justify increases in spending.² At the same time, attempts to “rationalise” public spending in education, linked with the expansion of New Public Management tools and policies, have bloomed; this trend is often decried as a threatening thrust

-
- 1 This article has benefited from numerous discussions: we would specially like to thank Pierre Caspard and the participants of the School Finance Reforms webinar (France, Sweden). We are solely responsible for the content of the article. This special issue was made possible thanks to the financial support of the University Bordeaux-Montaigne, the Centre d'études des mondes moderne et contemporain (CEMMC EA 2958), and the Swedish Research Council (dnr 2019-04425). Peter H. Lindert, *Growing Public: Social Spending and Economic Growth Since the Eighteenth Century*, vol. 2 (Cambridge: Cambridge University Press, 2004); Thomas Piketty, *Capital et idéologie* (Paris: Éditions du Seuil, 2019).
 - 2 Ben W. Ansell, *From the Ballot to the Blackboard: The Redistributive Political Economy of Education*, Cambridge Studies in Comparative Politics (Cambridge: Cambridge University Press, 2010); Marius R. Busemeyer, *Skills and Inequality: Partisan Politics and the Political Economy of Education Reforms in Western Welfare States* (Cambridge: Cambridge University Press, 2014).

Clémence Cardon-Quint is Associate Professor of History, at Bordeaux University, member of the Centre d'études des mondes moderne et contemporain, and junior member of the Institut Universitaire de France.
Email: clemence.cardon-quint@u-bordeaux.fr

Johannes Westberg is Full Professor of the Theory and History of Education, University of Groningen, the Netherlands. Email: b.a.j.westberg@rug.nl

of neo-liberalism and criticised for its everyday consequences.³ On these topics, the intertwining of technical and political dimensions is a breeding ground for controversies, that have local, national and also international dimensions. Efficiency and equity in the allocation of educational resources are questioned by international organisations, such as the OECD, and foreign examples are frequently invoked to promote changes.⁴

Sweden and France are no exception to this rule, and in those countries too, debates on school finance have been raging.⁵ Two examples will suffice. In Sweden, the introduction of school vouchers in the early 1990s raised numerous discussions. With this internationally unique system of government funded school vouchers—where government funded school vouchers follow children either to public or private schools, where schools are not allowed to charge fees, and where private companies are allowed to make a healthy profit from the school vouchers—the role of private schools and private school companies in the school sector has remained high on the political agenda. In France, the funding of higher education has been a very sensitive issue for several years. The budgetary autonomy of the universities, decided in 2007, stirred up the debate. In 2022, an ambiguous statement by the President of the Republic about the low cost of education for students immediately sparked controversy in an academic community traditionally hostile to any tuition fee increase. Education finance thus encompasses a variety of questions that are of interest to diverse academic fields: public policy, economy, law, sociology, political science, and history.

Early promoters of historical approaches towards education finance were economic historians, following the rise of education economics on American campuses at the end of the 1950s.⁶ Researchers in this field have addressed a wide variety of topics, from the relationship between human capital and economic growth, to the

3 Christian Laval, *L'École n'est pas une entreprise: le néo-libéralisme à l'assaut de l'enseignement public* (Paris: la Découverte, 2003); Ken Jones, Chomin Cunchillos, and Richard Hatcher, *Schooling in Western Europe: the New order and its Adversaries* (Basingstoke: Palgrave Macmillan, 2008); Helen M. Gunter, ed., *New Public Management and the Reform of Education: European Lessons for Policy and Practice* (London: Routledge, 2016); Hélène Buisson-Fenet, *Piloter les lycées: le 'tournant modernisateur' des années 1990 dans l'Éducation nationale* (Grenoble: Presses universitaires de Grenoble, 2019).

4 Christian Ydesen, *The OECD's Historical Rise in Education: The Formation of a Global Governing Complex*, Global Histories of Education (Cham, Switzerland: Palgrave Macmillan, 2019); Peter Lindert, "Revealing Failures in the History of School Finance" (Cambridge, MA: National Bureau of Economic Research), November 2009; Edward N. Wolff, William J. Baumol, and Anne Noyes Saini, "A Comparative Analysis of Education Costs and Outcomes: The United States vs. Other OECD Countries," *Economics of Education Review* 39 (2014), 1–21.

5 For an overview of the French debates, Jacques Hallak, *À qui profite l'école ?* (Paris: Presses universitaires de France, 1974); Roger-François Gauthier and André Désiré Robert, *L'École et l'argent: quels financements pour quelles finalités?* (Paris: Retz, 2005); Commission du débat national sur l'avenir de l'école, *Les Français et leur école: le miroir du débat* (Paris: Dunod, 2004), chap. 4.3; Jean-Richard Cytermann, "Le Financement du système éducatif français et l'enjeu de la performance," *Revue internationale d'éducation de Sèvres*, no. 65 (2014), 121–31.

6 The economics of education is characterised in particular by the attention paid to the measurement of the effects of education, an issue that is also present in other fields of research (history, sociology, political science, psychology), but in a more diffuse manner. Christian Baudelot et al., *Les Effets de l'éducation: rapport à l'intention du PIREF* (La documentation française, 2005), <https://halshs.archives-ouvertes.fr/halshs-00174936> (accessed February 23, 2022).

effects of education on social mobility, productivity, and the labour market.⁷ To that intent, they mobilised a wide range of quantitative series (number of schools, enrolment rates, average years of schooling etc.), that sometimes included data related to educational expenditure, usually used as a proxy for investment in human capital.⁸ Today, the interest among economic historians in education and human capital remains strong.⁹

In history of education, questions of educational finance have, however, only received intermittent attention.¹⁰ In the 1970s and 1980s, several works addressing the social history of schooling have made extensive use of financial elements. These include the pioneering publications of, for example, Norman Morris on public educational spending in England during the 1860s, Mary Jo Maynes comparative local histories on schooling in France and Germany, and Ben Eklof's studies on schooling in Russia.¹¹ Studies examining the generation of revenues, the allocation and utilisation of resources in education from a historical perspective have, however, remained scarce.¹² The reasons for this are varying, and may be explored further. These nevertheless include the normative ideal that education should not be determined by economic issues and the distance that sometimes is created between education and its social and economic context.¹³ This may also be linked, at least in some academic contexts, to certain strands of research in history and education that, following the linguistic turn, have paid less attention to realities, practices and contexts of schooling and to a larger degree have focused on the meaning of educational phenomena.¹⁴ Finally, in France at least, this lack of interest in economic and financial issues is not specific to history of education but is also reflected, more broadly, in the themes dealt with by historians of the nineteenth and twentieth centuries, who, after the dawn of a

7 Michael Sanderson, "Educational and Economic History: The Good Neighbours," *History of Education* 36, no. 4/5 (2007), 429–45.

8 David Mitch, "The Economic History of Education," in *Routledge Handbook of Modern Economic History*, ed. Robert Whaples and Randall E. Parker (Routledge, 2013), 247–65; Claudia Goldin, "Human Capital," in *Handbook of Cliometrics*, ed. Claude Diebolt and Michael Hauptert (Cham: Springer International Publishing, 2019), 147–77.

9 Martina Cioni et al., "The Long-Term Evolution of Economic History: Evidence from the top Five Field Journals (1927–2017)," *Cliometrica* 14, no. 1 (2020), tab. 3.

10 We might mention as an exception: Fletcher Harper Swift, *A History of Public Permanent Common School Funds in the United States, 1795–1905* (H. Holt and Company, 1911).

11 Ben Eklof, *Russian Peasant Schools: Officialdom, Village Culture, and Popular Pedagogy, 1861–1914* (Berkeley: University of California Press, 1986); Mary Jo Maynes, *Schooling for the People: Comparative Local Studies of Schooling History in France and Germany, 1750–1850* (New York: Holmes & Meier, 1985); Norman Morris, "Public Expenditure on Education in the 1860s," *Oxford Review of Education* 3, no. 1 (1977).

12 For this broad and preliminary definition of school finance, see Jennifer King Rice et al., "School finance: an overview," in *The Economics of Education (Second Edition)*, ed. Steve Bradley and Colin Green (Academic Press, 2020), 333.

13 Marcelo Caruso, "Why Do Finance? A Comment About Entanglements and Research in the History of Education," *Nordic Journal of Educational History* 2, no. 1 (2015), 144.

14 For such research after the linguistic turn, see, e.g., Lynn Fendler, "New Cultural Histories," in *Handbook of Historical Studies in Education*, ed. Tanya Fitzgerald (Singapore: Springer, 2019).

certain type of a social and economic history, have rather focused on political, social and cultural issues.¹⁵

There are, nevertheless, good reasons for historians of education to study the history of educational finance. Since most decisions are, by extension, financial decisions, studies into funding, spending and distribution enable us to examine educational policies and practices in greater depth, including the goals that are sought after, the aims policies have been less concerned with, but also those matters that could not be funded. Educational expenditure can thus provide vital measurements on the development of the educational system, but also deepen our understanding of the visions and intentions of those who funded it.¹⁶

This is the rationale behind monographs or edited volumes, published during the last 10–15 years, that draw extensively on school finance. These include Nancy Beadie's monograph *Education and the Creation of Capital in the Early American Republic* (2010), R.D. Gidney's and W.P.J. Millar's chapter on school finance in *How Schools Worked* (2012), Ingrid Brühwiler's dissertation *Finanzierung des Bildungswesens in der Helvetischen Republik* (2014), and the special issue of *Paedagogica Historica*, edited by Michael Geiss and Carla Aubry Kradolfer, on the "entangled histories of funding and educational administration" (2016).¹⁷

Neither in Sweden nor in France are we the first to point out these crucial stakes among historians of education. In Sweden, early historical studies of school finance found a basis in the 1970s in social history addressing local cases. These include Bodil Wallin's study of political debate and the organisation and funding of the Swedish school system, which was part of a broader project on ideology and social policy.¹⁸ Almost twenty years later, Mats Sjöberg's thesis on local conflicts over schooling in the south-west of Sweden, featured sections on school spending as well as revenues. Both studies may be compared, in the themes and theoretical approach,

15 Nicolas Patin, "Les thèse soutenues en histoire contemporaine (2014–2018). Un bilan," Billet, *Historiens contemporanéistes* (blog), <https://ahcesr.hypotheses.org/2096> (accessed February 23, 2022).

16 Donald Warren, "Beginnings Again: Looking for Education in American Histories," *History of Education Quarterly* 43, no. 3 (2003), 405; R. D. Gidney and W. P. J. Millar, *How Schools Worked: Public Education in English Canada, 1900–1940* (Montreal: McGill-Queen's University Press, 2012), 151.

17 Nancy Beadie, *Education and the Creation of Capital in the Early American Republic* (Cambridge, 2010); R. D. Gidney and W. P. J. Millar, *How Schools Worked: Public Education in English Canada, 1900–1940* (Montreal: McGill-Queen's University Press, 2012); Ingrid Brühwiler, *Finanzierung des Bildungswesens in der Helvetischen Republik. Darstellung verschiedener Akteure sowie deren Einfluss und Wirkung in unterschiedlichen Regionen der Schweiz um 1800*, Studien zur Stapfer-Schulenquête von 1799 (Bad Heilbrunn: Klinkhardt, 2014); Carla Aubry Kradolfer and Michael Geiss, "The Backbone of Schooling: Entangled Histories of Funding and Educational Administration – Introduction," *Paedagogica Historica* 52, no. 4 (2016), 315–24. See also Carla Aubry Kradolfer's dissertation *Schule zwischen Politik und Ökonomie: Finanzhaushalt und Mitspracherecht in Winterthur, 1789–1869* (Zürich: Chronos, 2015).

18 Bodil Wallin, "Att forma en skolform: Svensk folkskolepolitik vid mitten av 1800-talet," in *Ideologi och socialpolitik i 1800-talets Sverige: Fyra studier*, ed. Ingrid Hammarström, Väinö Helgesson, Barbro Hedvall, Christer Knuthammar and Bodil Wallin (Stockholm: Almqvist & Wiksell International, 1978); Mats Sjöberg, *Att säkra framtidens skördar: Barndom, skola och arbete i agrar miljö. Bolstad pastorat 1860–1930* (Linköping: Linköping University, 1996).

with research addressing issues on school finance published elsewhere in this vein of social history research.¹⁹ However, the main efforts to examine the history of school finance was done starting in the 2010s. In 2015, the third issue of the *Nordic Journal of Educational History* was dedicated to the History of Educational Finance.²⁰ Far from being an isolated initiative, it preceded the publications of several books, addressing various aspects of school finance.²¹ This special issue is part of this emerging field of research. In France, financial data—teacher salaries, cities’ budgets, school fees—was commonly used in the first thorough studies in educational history, published in the 1960s and 1970s.²² The aim was the development of a social history of education, that did not exist as a constituted field of research at that time.²³ School finance was just one aspect of a vast territory that had yet to be methodically explored by historians, and as such, attracted only limited attention. However, the subsequent development of history of education, and the relative specialisation of the research topics created a context more favourable to specialised studies.

As far back as 1993, Philippe Savoie—by then a researcher at the Service d’histoire de l’éducation (Institut National de Recherche pédagogique, Paris)—published a directory entitled *Un nouveau champ pour l’histoire: économie et finances de l’éducation*. His purpose was “to identify researchers, and through them the work of this type currently (or recently) conducted in France, in order to reveal the landscape of this composite and multidisciplinary research sector.”²⁴ The aim of the publication was also to foster contacts and interdisciplinary exchanges between historians and economists—who counted for more than half of the researchers referenced. At that time, in relation with public debates about education governance, several local case

19 See, e.g., Maynes (1985); Eklof (1986).

20 Johannes Westberg (ed.), “Special issue: The History of Educational Finance,” *Nordic Journal of Educational History* 2, no. 1 (2015).

21 See, e.g., Andreas Åkerlund, *Public Diplomacy and Academic Mobility in Sweden: The Swedish Institute and Scholarship Programs for Foreign Academics, 1938–2010* (Lund: Nordic Academic Press, 2016); Johannes Westberg, *Funding the Rise of Mass Schooling* (Palgrave Macmillan, 2017); Anne Berg and Samuel Edquist, *The Capitalist State and the Construction of Civil Society: Public Funding and the Regulation of Popular Education in Sweden, 1870–1991* (Basingstoke: Palgrave Macmillan, 2018); Madeleine Michaëlsson, *Privata bidrag till folkskolan: Järnbruken och det svenska folkskoleväsendet 1850–1930* (Uppsala: Uppsala University Library, 2016); Esbjörn Larsson, “Cheap, efficient, and easy to implement? Economic Aspects of Monitorial Education in Swedish Elementary Schools during the 1820s,” *History of Education* 45, no. 1 (2015).

22 Maurice Gontard, *L’Enseignement primaire en France: de la Révolution à la loi Guizot (1789–1833): des petites écoles de la monarchie d’ancien régime aux écoles primaires de la monarchie bourgeoise* (Paris: les Belles Lettres, 1959); Raymond Oberlé, *L’Enseignement à Mulhouse de 1798 à 1870* (Paris: Les Belles Lettres, 1961); Antoine Prost, *Histoire de l’enseignement en France, 1800–1967* (Paris: Armand Colin, 1968); Françoise Mayeur, “L’Enseignement secondaire des jeunes filles: 1867–1924” (doctorat d’État, histoire, Paris 4, 1975).

23 Raymond Oberlé, “L’Histoire de l’éducation, contribution à l’histoire sociale: l’exemple de Mulhouse,” *Annales* 15, no. 5 (1960), 963–73.

24 Philippe Savoie, ed., *Un nouveau champ pour l’histoire: économie et finances de l’éducation* (Paris: INRP, 1993).

studies in history or sociology shed light on the financial involvement of the cities in the development of various forms of schooling.²⁵

Despite this early initiative, individual books in history of education that draw heavily on financial data have remained rare in France, compared with other countries.²⁶ In 2010 and 2011, the historian Jean-François Condette organised two conferences on the financial and economic aspects of education. The first one addressed “the cost of education and its academic, social and political implications.”²⁷ The second one raised the question of education as a “good business”, a set of profit-making activities.²⁸ The contributions eventually published cover a large variety of situations (from the sixteenth to the twentieth century), but for the majority of the authors, this plunge into education economics was an excursus from their main area of research. Other contributors drew on previously published work. Confirmed by an informal survey of colleagues specialised in different fields of educational history, a general pattern emerges: elements of funding or economic issues are found scattered throughout the research literature, but systematic studies are lacking. However, ongoing research—the 2019 conference about philanthropic activity in research and education, the works of Clémence Cardon-Quint, about the making of the French education state budget, or of Stéphane Lembré, about the funding of the apprenticeship—as well as this joint issue signal a new commitment to exploring this field.²⁹

25 “L’Offre locale d’enseignement: les formations techniques et intermédiaires (XIXe–XXe Siècles),” *Histoire de l’éducation*, no. 66, numéro thématique (1995); Gérard Bodé and Philippe Savoie, “L’Approche locale de l’histoire des enseignements techniques et intermédiaires: nécessité et limites,” *Histoire de l’éducation* 66, no. 1 (1995), 5–13; Marc Suteau, “Une ville et ses écoles. Nantes 1830–1940” (doctorat de sociologie, Paris 8, 1995); Marianne Thivend, “L’École et la ville: Lyon, 1870–1914” (doctorat d’histoire, Université Lumière (Lyon), 1997); Marianne Thivend, *L’École républicaine en ville: Lyon, 1870–1914* (Paris: Belin, 2006).

26 See this analysis of the PhDs defended in history of education, Solenn Huitric, “Les thèses françaises en histoire de l’éducation depuis 1990: un miroir de la discipline?,” *Histoire de l’éducation* 154, no. 2 (2020), 93–117.

27 Jean-François Condette, ed., *Le Coût des études: modalités, acteurs et implications sociales, XVIe–XXe siècle* (Rennes: Presses universitaires de Rennes, 2012).

28 Jean-François Condette, ed., *L’École une bonne affaire? Institutions éducatives, marché scolaire et entreprises, XVIe siècle–XXe siècle*, *Histoire* 29 (Villeneuve d’Ascq: Revue du Nord, 2013).

29 Conference “Dons et legs en faveur de l’enseignement, de la recherche et des institutions de conservation”, 12–13 décembre 2019, <https://pupitre.hypotheses.org/4887> (accessed February 23, 2022); Clémence Cardon-Quint, “State Education Budgets in the 20th Century: Literature Review and Research Perspectives on the French Case,” *Rivista Di Storia Economica*, no. 2 (2020); Clémence Cardon-Quint, “Finances publiques et éducation, des années 1870 au début du XXIe siècle,” in Fabien Cardoni, Michel Margairaz (ed.), *Dynamiques des dépenses publiques en France au XXIe siècle*, (Vincennes, IGPDE, 2022); Stéphane Lembré, “Le Retour de l’apprentissage une institution du travail et son financement au XXIe siècle: jalons pour l’histoire d’une voie française à l’aune des expériences européennes et mondiales” (mémoire d’HDR, histoire, Paris 1-Panthéon Sorbonne, 2022).

It echoes a growing interest, among historians, economic historians and political scientists, in the history of the management of public finance and its implications for sectoral policies.³⁰

Crossing national and disciplinary borders

This special issue—published in cooperation between *Nordic Journal of Educational History* and *Histoire de l'éducation*—is intended to fill out the gap in our respective historiographies, but also to further research into the history of educational finance, by promoting methodological debates, beyond disciplines and national boundaries. In this sensitive area, it does not pretend to close scientific and political controversies, but rather to contribute to a more detailed understanding of the phenomena at stake, thanks to the plurality of perspectives.

Educational finance is questioned in history of education as well as in economic history, both fields of research having their own dynamics, structuring debates, key references and national developments. With a large variety of topics in common, history of education and economic history certainly have the potential to be “good neighbours”, as Michael Sanderson suggests.³¹ However, that is not always the case. Interdisciplinary dialogue comes up against methodological differences: the use of qualitative evidence, the crafting and analysis of descriptive statistics, or the econometric treatment of already available statistical series are not necessarily incompatible, but they rely on different know-how. While these differences in methods can also be observed within each disciplinary field, when they cut across disciplinary boundaries they can lead to a total misunderstanding.

In the Swedish setting, the situation is certainly quite neighbourly. Although historians of education do not publish in economic history journals, it is not unusual that economic historians publish in educational history reviews and attend conferences in history as well as economic history.³² This relationship might partly be explained by the strong tradition of historical methods within economic history in Sweden.³³ In the French context, however, the relationship between a certain type

30 Philippe Bezes and Alexandre Siné, eds., *Gouverner (par) les finances publiques* (Paris: Sciences Po, les Presses, 2011); Philippe Bezes, Florence Descamps, and Sébastien Kott, eds., *L'invention de la gestion des Finances publiques. Le Moment RCB ou le rêve d'un gouvernement rationnel 1963–1978* (Vincennes: Comité pour l'histoire économique et financière de la France, 2021); Fabien Cardoni, “Le Choix des futurs. La programmation des dépenses militaires en France 1945–1973” (mémoire inédit d'HDR, Paris, Paris 1, 2019). See the seminar of the *Groupe de recherche sur les affaires budgétaires*, Research Group on Budgetary Affairs led by Clémence Cardon-Quint and Thomas Hélié (<https://grab.hypotheses.org/>, accessed February 23, 2022).

31 Sanderson (2007).

32 See, e.g., Anders Nilsson, *Yrkesutbildningen i Sverige 1850–1910* (Uppsala: Föreningen för svensk undervisningshistoria, 2008); Sandra Hellstrand, “Attempting Institutional Change: Swedish Apprenticeship, 1890–1917,” *Nordic Journal of Educational History* 3, no. 2 (2016); Tobias Karlsson et al., “Vocational Education and Industrial Relations: Sweden 1910–1975,” *Nordic Journal of Educational History* 5, no. 1 (2018).

33 Still in the early twenty-first century, Swedish PhD programs in economic history stressed qualitative historical methods, rather than advanced quantitative analyses. Daniel Waldenström, “Is Swedish Research in Economic History Internationally Integrated?,” *The Scandinavian Economic History Review* 53, no. 2 (2005), 64–66.

of quantitative economic history (written by economists) and the history written by historians has long been marked by misunderstanding or mutual ignorance.³⁴ Moreover, the debate on the proper use of quantitative history has been particularly intense in the history of education. The conception and reception of Grew and Harrigan's analyses on primary schooling in nineteenth-century France provides a good illustration of the difficulties raised by these questions back in the 1980s.³⁵ The reliability of the data used for regression analyses was at the heart of the controversy. This episode may thus be related to the collective effort made by French historians at that time to construct reliable statistical retrospective series on school attendance.³⁶ However, in the long term, the study of the production of statistics or of their use by the government and the authorities usually prevailed over the direct exploitation of statistical series by historians of education.³⁷ The combination of the two approaches, as implemented by Jean-Michel Chapoulie in various studies, remains the exception.³⁸ Finally, while a new generation of historians has been turning to the use of econometric methods applied to different subjects, this trend is still rather exceptional in history of education.³⁹ In this context, the inclusion of a cliometric article written by economists in this special issue is not self-evident.

We nonetheless consider this exchange between cliometric economic history and the history of education to be of vital importance. At a time when the internationalisation of research pushes toward the hyperspecialisation of methods, fields of investigation and the bibliographical references mobilised, this effort seems highly justified. Cliometrics—defined as “the quantitative projection of social sciences in the past”—is surely of interest to historians of education. It provides estimates of volumes, variations and trends that provide important historical context both to

34 Jean-Charles Asselain, “Le Projet français d'histoire économique quantitative: ambitions et résultats,” *Économies et Sociétés. Serie AF. Histoire Économique Quantitative*, no. 36 (2007), 567–609.

35 In 1984, Raymond Grew, Patrick J. Harrigan and James B. Whitney published in the *Annales* (a leading review in the French historical field) an article which offered a first version of analyses developed in the book published in 1991, see Raymond Grew et al., “La Scolarisation en France, 1829–1906,” *Annales* 39, no. 1 (1984), 116–57. The necessary methodological debate that ensued in the journal quickly became tense (Jean-Noël Luc, “L'illusion statistique,” *Annales* 41, no. 4 (1986), 887–911; Raymond Grew and Patrick J. Harrigan, “L'Offuscation pédantesque. Observations sur les préoccupations de J.-N. Luc,” *Annales* 41, no. 4 (1986), 913–22. For the English language book, see Raymond Grew and Patrick J. Harrigan, *School, State and Society: The Growth of Elementary Schooling in Nineteenth-Century France— a Quantitative Analysis* (Ann Arbor: University of Michigan Press, 1991).

36 Jean-Noël Luc, *La Statistique de l'enseignement primaire, 19e–20e siècles politique et mode d'emploi, L'école à travers ses statistiques* (Paris: Economica INRP, 1985); Jean-Pierre Briand et al., *L'enseignement primaire et ses extensions: annuaire statistique, 19e–20e siècles* (Paris: INRP, Service d'histoire de l'éducation: Economica, 1987).

37 Luc (1985); Briand et al., *L'enseignement primaire et ses extensions*; Évelyne Barbin and Anne-Sophie Bruno, “Éducation : compter et décider,” *Histoire & Mesure* XXIX, no. 1 (2014).

38 Jean-Michel Chapoulie, “Les Nouveaux spécialistes des sciences sociales comme « experts » de la politique scolaire en France 1945–1962,” *Genèses* 64, no. 3 (2006), 124–45; Jean-Michel Chapoulie, *L'École d'État conquiert la France: deux siècles de politique scolaire* (Rennes: Presses universitaires de Rennes, 2010).

39 Karine Karila-Cohen et al., “Nouvelles cuisines de l'histoire quantitative,” *Annales. Histoire, Sciences sociales* 73, no. 4 (2018), 771–83; Jérôme Krop, *La Méritocratie républicaine: élitisme et scolarisation de masse sous la IIIe République* (Rennes: Presses universitaires de Rennes, 2014); Jean-Paul Caille and Jérôme Krop, “Une source négligée de l'histoire des élèves: les panels d'élèves des années 1960 aux années 2000,” *Histoire de l'éducation* 151, no. 1 (2019), 175–202.

studies of educational policy and local case studies.⁴⁰ In addition, such research helps formulate, question and test general assumptions that often underly qualitative analyses. In this respect, the significant interest in education among economic historians of education is certainly great news for qualitatively oriented historians of education.⁴¹

Economic historians also have a lot to gain from increasing exchanges with historians of education. Culture and institutions matter to economic historians, and studies into the history of education provides a wealth of insights into the policies, organisation and local realities of education. By exploring such features, historians of education offer economic historians plenty of hypotheses to be tested and insights into dimensions of educational systems that are difficult to quantify, including the role of in-kind benefits and social networks in the funding of primary schooling. So, while interdisciplinary work requires efforts when communicating research design and results, such cooperation certainly has a range of benefits.

In terms of the internationalisation of research, this special issue promotes a specific international cooperation by highlighting two cases—France and Sweden. While quantitative approaches allow for large cross-national comparisons—thanks to the progressive standardisation of statistical categories⁴²—qualitative case studies require an effort in order to grasp the specificity of each national context. By restricting the issue to two countries, we had the opportunity—through a series of online workshops in preparing this special issue—to question and compare the national specificities.

The challenge of approaching the cases of France and Sweden is partly an issue of the publishing languages. In Nordic countries, the use of English as a standard language of scientific communication is a recent practice. In France, this move towards English exists too, but it is still heavily discussed and far from being generalised: in the humanities, the native language is commonly considered as an irreplaceable resource for nuance and precisions. That is one of the reasons why most French historians of education still favour writing in their native language.

The consequence of this language policy is that international research tends to be based on Anglo-Saxon publications, and that our knowledge of the history of education of a foreign country is often filtered through such books and reviews. The international success of Grew and Harrigan's analyses on the French case give a good illustration of this phenomenon, as does the impact of John Boli's monograph on the historiography of Swedish primary schooling.⁴³ These distortions may in turn lead to an impoverishment of the analyses, damageable to the dynamism and diversity of knowledge. There is no reason to believe that the most interesting studies on France or Sweden are necessarily those that are already available in English. This bilateral initiative is a result of these observations.

40 The quote is from Claude Diebolt, "Cliometrica After 10 years: Definition and Principles of Cliometric Research," *Cliometrica* 10, no. 1 (2015), 1.

41 Martina Cioni et al., "The Long-Term Evolution of Economic History: Evidence from the Top Five Field Journals (1927–2017)," *Cliometrica* 14, no. 1 (2020).

42 Alain Carry, "La Mesure de la dépense d'éducation. Entre comptes et mécomptes," *Cahiers de la recherche sur l'éducation et les savoirs*, Hors-série no. 1 (2005), 139–60.

43 John Boli, *New Citizens for a New Society: The Institutional Origins of Mass Schooling in Sweden* (Oxford: Pergamon, 1989).

As part of the affluent and influential global North, France and Sweden also offer two examples of European welfare states that faced very similar challenges at the crossroads of education and political economy dynamics. In that perspective, it is certainly interesting to note the overall convergence of the transformations experienced by these two educational systems in relation to their economic, political and social surroundings: the development of a dual educational system (for the people and the elite) in the nineteenth century, the rise of technical education in relation to industrialisation, and the profound organisational changes made to the school structure in the second half of the twentieth century in order to achieve school democratisation.⁴⁴ This of course does not minimise the differences that exist. This concerns not the least the radical introduction of a comprehensive school system in Sweden in the 1960s, when detracking in middle schools was implemented in France following the reform of 1975 (*collège unique*).

These complex similarities and differences are certainly part of the point with special issues such as this one. We agree with Thomas Piketty that “we must take seriously the ideological and institutional diversity of human society,” and that “we must carefully study in detail the institutional arrangements and legal, fiscal and educational systems of other countries, for it is these details that determine whether cooperation succeeds or fail.”⁴⁵ In that perspective, hamlet schools in Savoie or progressive schools in Göteborg are not just anecdotic declinations of an imaginary international standard case, but provide new and important contributions to our understanding of the history of education in its complex relationship with economic, political and social dynamics.

Our call for proposals focused on changes in educational finance. Times of changes usually coincide with an intense production of studies, data, analyses that offer a rich material to understand the complex rationale that justifies the changes, the variety of stakeholders and also the immediate or more durable consequences of the new financial arrangements. It is therefore an entry that leads the researchers to examine the avowed objectives, the technical dispositions, and the effective results of the changes. However, to fully understand the significance of these studies, it is necessary to get a broader view of the context, and of the structural characteristics of each system. This is the purpose of the historiographical overview that follows.

This literature review cannot be exhaustive. The history of educational finance is not a structured field of research: financial issues are addressed or mentioned in a wide range of books and articles. As they often provide strikingly different perspectives, and sometimes express a very miniscule interest in financial issues themselves, they would be artificial to group together. The discrepancy in size of both academic communities is another source of difficulty when it comes to bibliographic synthesis. We have therefore chosen to focus here on the research findings that are necessary to make sense of the case studies discussed in this volume, as well as on the studies that draw heavily—and not occasionally—on financial data. Our purpose here is there-

44 Fritz K. Ringer, *Education and Society in Modern Europe* (Bloomington, 1979); Detlef K Müller, Fritz K Ringer, and Brian Simon, *The Rise of the Modern Educational System: Structural Change and Social Reproduction, 1870–1920* (Cambridge: Cambridge University Press, 1989).

45 Thomas Piketty, *Capital and Ideology* (Cambridge, MA: Belknap Press, 2020), 12. Original quote: Piketty (2019), 26.

fore methodological: to give an idea of the various uses made of financial sources, and of the way they have affected the interpretation of the past.

Education expenditure and educational statistics

For economic historians, as well as for researchers in comparative public policy and some historians of education, statistical aggregates on education expenditure constitute a fundamental material for scientific investigations. A good understanding of these sources, their origin and limits, is therefore a prerequisite to any interdisciplinary dialogue on educational finance.

The development of coherent systems of statistical data on various aspects of western societies dates back to the nineteenth century, in what Ian Hacking termed the “avalanche of printed numbers.”⁴⁶ Along with national promoters of statistics, international congresses of statisticians contributed to the formulation of methodological guidelines intended to strengthen the comparability of the data retrieved. Statistics on school attendance, imbued with high political stakes, flourished pretty early on: series on primary school students started in the 1830s in France.⁴⁷ Financial data were occasionally published in the statistical compendiums of the French Ministry of Public Instruction/ National Éducation (*Statistique de l'enseignement primaire ; Statistique de l'enseignement secondaire*). In Sweden, local educational data were collected regularly from the 1840s, but were not published regularly before the 1880s.⁴⁸ Statistics on education enrolment and educational finance were compiled by different actors. During the nineteenth century, the ministry of education and ecclesiastical affairs (*Ecklesiastikdepartementet*) regularly collected such data. In the period 1920–1960, educational statistics were produced by the Swedish National Board of Education (*Skolöverstyrelsen*), and thereafter by Statistics Sweden (*Statistiska centralbyrån*, SCB).⁴⁹

However, the efforts to build standardised statistical series on financial aspects of the education system faced major methodological challenges. The plurality of public and private funders was definitely an issue, but even the financial contributions of public authorities were not easy to quantify in consistent series. Among the difficulties to be addressed: the classification of various and changing types of education expenditure, or the elimination of double counting occurring for example in France when the *départements* subsidised education in various municipalities. The use of financial data occasionally published in the nineteenth century therefore requires significant methodological precautions.⁵⁰ These challenges were also discussed on an

46 Alain Desrosières, *La Politique des grands nombres: histoire de la raison statistique* (Paris: Éditions la Découverte, 1993), chaps 5–6.

47 Ian Hacking, “Biopower and the Avalanche of Printed Numbers,” in *Biopower: Foucault and Beyond*, ed. Vernon Cisney and Nicolae Morar (Chicago: University of Chicago Press, 2016). See also Luc (1985); Henrik Höjer, *Svenska siffror: nationell integration och identifikation genom statistik 1800–1870* (Hedemora: Gidlund, 2001).

48 SCB, *Elever i obligatoriska skolor 1847–1962* (Stockholm: Statistiska Centralbyrån, 1974), 11–14.

49 SCB (1974), 14–17.

50 Jacques Edmond-Grangé, *Le Budget fonctionnel en France* (Paris: Librairie générale de droit et de jurisprudence, 1963); Jean-Charles Asselain, *Le Budget de l'Éducation nationale: (1952–1967)* (Paris: PUF, 1969), 34–75; Alain Carry, “Le Compte satellite rétrospectif de l'éducation en France: 1820–1996,” *Économies et sociétés* 33, no. 2–3 (1999), 79–107; Michaelsson (2016), 71–72; Westberg (2017), 118–21.

international level. In 1929, the International Statistical Institute addressed the topic of state financial statistics, and identified methodological prerequisites and general guidelines that needed to be applied to document the financial circuits linked to the social actions of states, in particular education.⁵¹ But the implementation took a few more decades.

In France, the interest in statistical data on education expenditure took shape in the 1960s at the crossroads of three different strands. First, the rapid increase in education public expenditure—linked both to the baby-boom and to school massification—drew the attention of several French economists. At that time, the planning process offered a public forum to discuss the distribution of public investments, and the development of education economics in the US aroused the hope that economists might contribute to the making of sound choices as regards education expenditure. At the end of the 1960s, Pierre Daumard, Jean-Claude Eicher and Jean-Charles Asselain each tried to quantify education expenditure, adopting varying approaches.⁵² The latter focused on the state budget, scrutinised from 1952 to 1967; Eicher and Daumard included other funders. At the same time, statisticians in the INSEE (*Institut national de la statistique et des études économiques*) considered the possibility of expanding the statistical system of national accounts to new sectors that were not correctly described by series primarily focused on market economy sectors. The initiative seriously took hold in 1974, with the first education satellite account published in 1976.⁵³ Similar initiatives have taken place, since then, in other countries (Australia, Netherlands, Italy) but until now, no conceptual framework has been officially developed and internationally agreed upon for satellite accounts on education and human capital.⁵⁴ To this day, the Swedish national accounts, just like in many other countries, do not include an education satellite account.

51 See Jan Piekalkiewicz, “Les Travaux préliminaires sur les statistiques des finances publiques,” La Haye, *Bulletin de l’Institut International de Statistiques* 35, no. 3, (1931), 617–719, quoted by Carry (2005), 143.

52 Pierre Daumard, “Coût et financement de l’éducation” (thèse de sciences économiques, Université de Paris, 1968); Jean-Claude Eicher, *Analyse comparative des dépenses d’éducation en France de 1952 à 1967* (Paris: OCDE, 1969); Asselain, *Le Budget de l’Éducation nationale*. As a student of Theodore Schultz, Jean-Claude Eicher introduced education economics in France with an article published in 1960: Jean-Claude Eicher, “La Rentabilité de l’investissement humain,” *Revue économique* 11, no. 4 (1960), 577–608. In 1971, he officially created the *Institut de recherche sur l’économie de l’éducation* at the University of Bourgogne.

53 Odile Carrère and Roland Daumont, “Le Compte de l’éducation et des formations: méthode et premiers résultats,” *Economie et statistique* 75, no. 1 (1976), 39–53. Generally speaking, satellite accounts are intended to cover accounts specific to given fields. They are based on the concepts of the system of national accounts, but they differ from the standard system as they encompass a larger variety of elements for the sectors of interest. Each satellite account is therefore consistent with the central system, but different satellite accounts may not always be consistent with each other. European Commission, International Monetary Fund, Organisation for Economic Co-operation and Development, United Nations, World Bank, *System of National Accounts 2008* (New York, 2009), 523.

54 Romina Boarini, Marco Mira d’Ercole, and Gang Liu, “Approaches to Measuring the Stock of Human Capital: A Review of Country Practices” (Paris: OCDE, 23 November 2012), 25–28; Fabiola Riccardini, “Towards Satellite Accounts on Education and Human Capital in OECD Countries,” in *A New Research Agenda for Improvements in Quality of Life*, ed. Filomena Maggino, Social Indicators Research Series (Cham: Springer International Publishing, 2015), 205–30. See also the current version (dated 2008) of the system of national accounts, <https://unstats.un.org/unsd/nationalaccount/sna2008.asp> (accessed February 23, 2022).

A third contribution to the study of educational expenditure came from economic historians and from the new interest in quantitative history. Inspired by the works of the American economist Simon Kuznets, in 1961 Jean Marczewski and Jean-Claude Toutain launched a vast program of quantitative history, led by the *Institut de science économique appliquée*.⁵⁵ The products of agriculture and industry, artisanal and industrial income were at the focus of their historical inquiries. A shift occurred in the 1970s with Louis Fontvieille's series addressing the contribution of central and local administrations to the formation of national income, thus providing a first series of retrospective data on education expenditure.⁵⁶ At the same time, Christine André and Robert Delorme studied the expansion of public expenditure in France in the nineteenth and twentieth centuries and also offered a sectoral breakdown.⁵⁷ These statistical compilations were intended to shed light on the relationships between the state and the economy.

The interest of Louis Fontvieille for statistical series on education expenditure—both at national and departmental level—gained momentum in the 1980s and 1990s.⁵⁸ As a professor at the University of Montpellier, he directed several PhDs which included the elaboration of historical series on education expenditure, both in France and in other countries such as Germany, the United Kingdom, and Algeria.⁵⁹ For the French case, Alain Carry—who, at that time, was working as a research engineer in Montpellier—transposed the methods and categories of the education satellite account to build a whole set of retrospective series on French education expenditure from 1820 to 1996. This was published in the *Cahiers de l'ISMEA* in 1999.⁶⁰ To date, these represent the most detailed series on national aggregates related to education expenditure for the French case.

These financial data were used—in the team built around Louis Fontvieille—to document the relationship between economic growth and education expenditure. Fontvieille's framework of analysis combined the regulation theory of the

55 Jean Marczewski, *Histoire quantitative de l'économie française* (Paris, Institut de science économique appliquée, 1961).

56 Louis Fontvieille, *Évolution et croissance de l'Etat français: 1815–1969* (Paris: ISMEA, 1976); Louis Fontvieille, "Évolution et croissance de l'administration départementale française, 1815–1974," *Cahiers de l'ISMEA* 16, no. 1–2 (1982), 10–191.

57 Robert Delorme and Christine André, *L'État et l'économie: un essai d'explication de l'évolution des dépenses publiques en France, 1870–1980*, Économie et société (Paris: Éditions du Seuil, 1983).

58 Louis Fontvieille, "La Croissance de la dépense publique d'éducation en France: 1815–1987," *Formation Emploi* 31, no. 1 (1990), 61–71; Louis Fontvieille, "Croissance et transformation du système éducatif et de formation en France aux XIXe et XXe Siècles," in *Administrer, gérer, évaluer les systèmes éducatifs. Une Encyclopédie pour aujourd'hui*, ed. Jean-Jacques Paul (Paris: ESF éditeur, 1999), 43–66.

59 Claude Diebolt, *Éducation et croissance économique: le cas de l'Allemagne aux XIXe et Xxe siècles*, Bibliothèque de l'éducation (Paris: Éd. L'Harmattan, 1995); Sandrine Michel, "Transformation de la relation de la formation à l'économie: Un processus d'autonomisation: une approche en termes de régulation" (Thèse de doctorat, Montpellier 1, 1996); Vincent Carpentier, *Système éducatif et performances économiques au Royaume-Uni, 19e et 20e siècles* (Paris: L'Harmattan, 2001); Azzedine Bouslimani, "Éléments pour une caractérisation économique du contenu qualitatif du développement. Une analyse à partir de la relation éducation-croissance en Algérie (1875–2000)" (PhD Thesis, 2003).

60 Carry (1999); Alain Carry, "La Dépense de l'État pour l'éducation secondaire professionnelle (France, 1820–1938)," ed. Gérard Bodé and Philippe Marchand, *Formation professionnelle et apprentissage. XVIIIe–XXe Siècles* Hors série, no. 17 (2003), 115–28.

Marxist economist Paul Boccara with the theory of economic cycles developed by Kondratieff.⁶¹ Louis Fontvieille opposed two different stages: before the Second World War, public education expenditure followed a contra-cyclical pattern, rising more rapidly during economic slowdowns; this pattern changes after the war into a pro-cyclical one, first in a context of rapid economic expansion and then during the economic slowdown that followed the oil crisis in the 1970s.⁶² This articulation between the study of education expenditure and a broader reflection on the interdependence of public spending and economic growth constitutes a specificity in this area compared to the dominant approaches in education economics.

Claude Diebolt, a promoter of cliometrics in the French academic field, also made extensive use of education expenditure, along with other statistical data, to study both the impact of human capital on economic growth and the various factors, including fertility and politics, that may affect the development of human capital.⁶³ Along with Bruno Théret he also contributed to the statistical reappraisal of the consequences of the Ferry laws (1881–1882) on school public expenditure⁶⁴ and primary school expansion.⁶⁵ In this issue, the article written by Claude Diebolt, Magali Jaoul-Grammare and Faustine Perrin offers an illustration of the innovative methods that may be used to examine the relationship between education expenditure, economic growth and school enrolment: they confirm the central impulse given by political decisions to school expansion at the end of the nineteenth century. Recently, in a PhD defended in 2019, Adrien Montalbo made a decisive contribution to the field by studying the relationship between schooling and economic development in nineteenth century at municipal level, making intensive use of data related to local school fees and school subsidies.⁶⁶ He shows the contrasting effects of industrialisation; while it is true that industrialisation generates resources that can be used by the municipalities to develop education, the development of certain industrial sectors—especially textile and mining activities—is negatively correlated to lower school enrolment at the beginning of the nineteenth century.

Historical series on education expenditure have sometimes been used by economists in other perspectives, for example to document the concentration of education public expenditure on specific populations. In a master's thesis, Stéphane Zuber

61 For a brief presentation, see Fontvieille (1990).

62 For an actualised version of this approach, see Vincent Carpentier, “State Education, Crisis and Austerity: an Historical Analysis through the Lens of the Kondratiev Cycles,” in *Education and the State: International Perspectives on a Changing Relationship*, by Carla Aubry et al. (Routledge, 2015), 78–102.

63 Claude Diebolt, *Dépenses d'éducation et cycles économiques en Espagne, XIXe et XXe siècles*, Logiques économiques (Paris Montréal (Québec): l'Harmattan, 2000); Claude Diebolt and Antoine Parent, *Essais cliométriques: capital humain, monnaie et finance, croissance et cycles* (Bern, Suisse, Allemagne, Belgique, 2011); Claude Diebolt, Audrey-Rose Menard, and Faustine Perrin, “Behind the fertility–education nexus: What triggered the French development process?,” *European Review of Economic History* 21, no. 4 (2017), 357–92.

64 Bruno Théret, “Les dépenses d'enseignement et d'assistance en France au XIXe siècle: une réévaluation de la rupture républicaine,” *Annales. Histoire, Sciences Sociales* 46, no. 6 (1991), 1335–74.

65 Claude Diebolt, Magali Jaoul, and Gilles San Martino, “Le mythe de Ferry: une analyse cliométrique,” *Revue d'économie politique* 115, no. 4 (2005), 471–97.

66 Adrien Montalbo, “Primary Education, Industrial Activities and Economic Growth in Nineteenth-Century France” (These de doctorat, Paris, EHESS, 2019).

underlined both the progressive equalisation of education expenditure per capita in France over the twentieth century, as well as the extent of remaining inequalities.⁶⁷ However, among French education economists, the use of historical series on educational expenditure remains rare.

In Sweden, the research setting is quite different. Statistical data drew the attention of economic historians quite early on. The first attempts to create historical national accounts date back to the 1930s. New work on these accounts was carried out in the 1950s, the 1970s and the 1980s–90s, with the most recent historical national account 1560–2010 published in 2015.⁶⁸ Interest in historical national accounts is thus an old and persistent feature of economic history. This data included both central and local government spending, and the estimates published in 1987 included statistics on primary school teachers' wages, building maintenance and the purchase of goods and services.⁶⁹ However, these historical accounts do not include exhaustive series on the financing of education, that would include both public and private funding.

Instead, the main contributions of economic historians to the study of education and economic growth in Sweden were not primarily based on historical series of education expenditure.⁷⁰ The relationship between economic growth and education was addressed on a different basis, as illustrated by the so-called Sandberg debate. While economic historians such as Lars Sandberg, Carlo Cipolla and David Mitch reasoned that literacy was of little use in early nineteenth-century agriculture, Anders Nilsson et al. argued the opposite. During this period, marked among other things by the partitioning and redistribution of land, literacy was an asset for literate farmers.⁷¹ Another important contribution concerned the first estimate of long-term human capital development in Sweden. Based on analyses of enrolments, Ljungberg and Nilsson used this dataset to argue that human capital was a causal factor in Swedish economic growth since industrialisation.⁷² Through these efforts, a firm foundation for further explorations into the economic history of education was thereby laid down. At Lund University, these have more recently included new

67 Stéphane Zuber, "L'inégalité de la dépense publique d'éducation en France, 1900–2000" (mémoire de DEA, Paris, EHESS, 2003); Stéphane Zuber, "Evolution de la concentration de la dépense publique d'éducation en France: 1900–2000," *Éducation & Formations*, no. 70 (2004), 97.

68 Håkan Lobell, Lennart Schön, and Olle Krantz, "Swedish Historical National Accounts, 1800–2000: Principles and Implications of a New Generation," *Scandinavian Economic History Review* 56, no. 2 (2008), 142–59; Lennart Schön and Olle Krantz, "New Swedish Historical National Accounts since the 16th Century in Constant and Current Prices," *Lund Papers in Economic History* no. 140 (2015).

69 Olle Krantz, *Historiska nationalräkenskaper för Sverige: Offentlig verksamhet 1800–1980* (Lund: Studentlitteratur, 1987), 88–106. The current estimates of the Swedish historical national accounts, which include local government education consumption, are available at <https://lusem.lu.se/economic-history/databases/economic-history-data/swedish-historical-national-accounts> (accessed January 28, 2022).

70 See, e.g., Anders Nilsson et al., "Agrarian Transition and Literacy: The Case of Nineteenth-Century Sweden," *European Review of Economic History* 3, no. 1 (1999); Lars Pettersson, "Reading and Writing Skills and the Agrarian Revolution: Scanian Peasants during the Age of Enclosure," *Scandinavian Economic History Review* XLIV, no. 3 (1996); Jonas Ljungberg and Anders Nilsson, "Human capital and Economic growth: Sweden 1870–2000," *Cliometrica* 3, no. 1 (2009); Anders Nilsson, "Vocational Education and Training – an Engine for Economic Growth and a Vehicle for Social Inclusion?," *International Journal of Training and Development* 14, no. 4 (2010).

71 Anders Nilsson et al., (1999), 79–82.

72 Ljungberg and Nilsson (2009).

detailed measurements of human capital using student grades, and explorations into the role of technical secondary schools for regional industrial development.⁷³

While the literature on human capital did not draw primarily on financial data, the interest in the economic history of education was at times translated into studies addressing the history of education finance and educational expenditure. In the context of comparative education, Florian Waldow made a rare interdisciplinary contribution by discussing the challenges researchers face when using public statistics on educational expenditure in Sweden.⁷⁴ This critical examination later formed the background for his work on the relationship between economic growth and the politics of education.⁷⁵ Within the discipline of economic history, Anders Nilsson examined the relationship between social recruitment and the systems of student funding in higher education.⁷⁶ In Patrick Svensson's research, farmers' investments in schooling—including teacher wages and school building—were explored in terms of entrepreneurship.⁷⁷ Gunilla Klose's two-year thesis (1992, published in 2011)—mapping the funding of primary schools from 1768 to 1839 based on government reports—was an important result of this research context.⁷⁸ More lately Jens Andersson and Thor Berger have examined the role of elites in educational expansion using data on school districts' educational expenditure, and Erik Bengtsson and Svante Prado used data on teacher wages in Stockholm to study the rise of the middle classes.⁷⁹ Of particular interest in this respect is the extremely rich dataset on Swedish local governments 1860–1950 that Per Pettersson-Lidbom and his associates have compiled. Starting from this data, Pettersson-Lidbom and his co-authors have, for example, been able to examine the impact of direct democracy on public welfare

73 Nicholas Ford et al., “Leaving their mark: using Danish student grade lists to construct a more detailed measure of historical human capital,” *Working Papers European Historical Economics Society (EHES)*, no. 207 (2021); Fay Lundh Nilsson and Per-Olof Grönberg, “A technical workforce for regional industrial development? Origin and dispersion of graduates from the technical secondary schools in Malmö and Borås 1855–1930,” *The Scandinavian Economic History Review* (ahead-of-print, 2021).

74 Florian Waldow, “The Suggestive Power of Numbers: Some Remarks on the Problem of the Accuracy of Quantitative Indicators in Comparative Historical Research,” *Historical Social Research* 26, no. 4 (2001); Florian Waldow, “Measuring Human Capital Formation in Sweden in the Nineteenth and Early Twentieth Centuries,” *Historical Social Research* 27, no. 4 (2002).

75 Florian Waldow, *Utbildningspolitik, ekonomi och internationella utbildningstrender i Sverige 1930–2000* (Stockholm: Stockholms universitets förlag, 2008).

76 Anders Nilsson, *Studiefinansiering och social rekrytering till högre utbildning 1920–1976* (Lund: Ekonomisk-historiska föreningen, 1984); Olle Krantz, *Historiska nationalräkenskaper för Sverige: Offentlig verksamhet 1800–1980* (Lund: Studentlitteratur, 1987).

77 Patrick Svensson, “Peasants and entrepreneurship in the nineteenth-century agricultural transformation of Sweden,” *Social Science History* 30, no. 3 (2006).

78 See Gunilla Klose, “Svensk ’folkskoleekonomi’ före 1770,” in *Utbildningshistoria 1992*, ed. Egil Johansson and Stig G. Nordström (Uppsala: Föreningen för svensk undervisningshistoria, 1992); Gunilla Klose, *Folkundervisningens finansiering före 1842* (Uppsala: Uppsala University, 2011).

79 Jens Andersson and Thor Berger, “Elites and the expansion of education in nineteenth-century Sweden,” *The Economic History Review* 72, no. 3 (2019); Erik Bengtsson and Svante Prado, “The rise of the middle class: the income gap between salaried employees and workers in Sweden, ca. 1830–1940,” *Scandinavian Economic History Review* 68, no. 2 (2020).

spending, and the causal effect of a weighted voting system on spending on primary education.⁸⁰

In the field of economic history, financial data on education have thus been mobilised, in France as in Sweden, both by means of consolidated statistical series and by means of series, often of more restricted scope, reconstructed from the sources for the needs of a particular piece of research. The existence of a retrospective satellite account of education is specific to France but has had little impact on French work on the history of education.

Primary schooling and popular education: economy and politics

Historians of education have paid specific attention to local regional and governmental funding of primary schooling and popular education, trying to identify the main factors at work in school expansion. This line of research, which has solid foundations in social history research, has been sparse in Sweden. Apart from being addressed by the investigations of Sjöberg and Wallin, mentioned above, it was only during the last 10–15 years that some research has been done on this topic. Starting from the work done by the historians of education mentioned above—including Nancy Beadie, Carla Aubry and Ingrid Brühwiler—Johannes Westberg published investigations that addressed how nineteenth-century primary schools were funded as well as how this was motivated and understood by local and national government. The results indicate the wide range of reasons why populations were taxed and agreed to be taxed for schooling, and how the mobilisation and distribution of resources were understood in terms of the pursuit of a fair and reasonable school funding structure. Particular emphasis was placed on the role of in-kind funding. By using a wide set of source materials, Westberg can show that nineteenth-century schooling was not only built on monetary taxes, but on a wide range of in-kind items including grains, cow fodder and firewood.⁸¹

Other contributions to this line of research also include Madeleine Michaëlsson's dissertation on the private funding of primary schooling. With a focus on the contributions made by iron mills in rural areas, Michaëlsson provides a national statistical perspective on this issue as well as case studies which shed light both on the schools

80 Björn Tyrefors Hinnerich and Per Pettersson-Lidbom, "Democracy, redistribution, and political participation: Evidence from Sweden 1919–1938," *Econometrica* 82, no. 3 (2014); Erik Lindgren et al., "The causal effect of political power on the provision of public education: Evidence from a weighted voting system," *arXiv preprint arXiv:2106.00350* (2021).

81 See, e.g., Johannes Westberg, "'Freedom for all! Injustice for none!' The peasant estate and the funding of elementary schools in rural Sweden, 1840–41," in *Erziehung und Bildung in ländlichen Regionen – Rural Education*, ed. Claudia Gerdenitsch and Johanna Hopfner (Frankfurt am Main: Peter Lang, 2011), 2919–29; Johannes Westberg, "When teachers were farmers: teachers' allotted farms and the funding of mass schooling, 1838–1900," *Nordic Journal of Educational History* 2, no. 1 (2015); Johannes Westberg, *Funding the Rise of Mass Schooling: The Social, Economic and Cultural History of School Finance in Sweden, 1840–1900* (Cham: Palgrave Macmillan, 2017); Johannes Westberg, "A conflicted political will to levy local taxes: inequality and local school politics in Sweden, 1840–1900," *Nordic Journal of Studies in Educational Policy* 4, no. 1 (2018).

run by iron mills, but also the support iron mills gave to other primary schools, including provision in the form of gifts and donations.⁸² In this respect, Michaëlsson's research is linked to the vast French historiography addressing the "industrial paternalism" that has underlined the efforts made by some employers to provide workers' children with schools. However, the quantification and economic appreciation of this effort is not central to an analysis driven mostly by social and political considerations.⁸³

In France, in contrast, there is an abundant literature addressing primary schools in the eighteenth and nineteenth century, before the Republican laws of the 1880s transferred most of the primary school costs to the state budget. Researchers have scrutinised teachers' contracts and communal archives and have revealed great disparities in the material situation of schools and schoolteachers throughout the country.⁸⁴ For example, the recent study by Côme Simien gives us a clear picture of the *maître d'école* within rural communities in the second half of the eighteenth century. When there were fewer than 2,000 inhabitants, the local communities did not have the means to pay specialised staff. So, the *maître d'école* was generally the only employee of the *commune*, apart from the messenger guard (or shepherd). He was therefore made to cumulate several functions, both sacred as well as secular, and sometimes also receiving in-kind payment. This was analyzed by Côme Simien as an element of the "*empreinte domestique*" which weighed on the function of the village schoolmaster.⁸⁵ The multi-tasking of school teachers in rural areas persisted in the nineteenth century, long after the central state became directly involved in the organisation of primary schools for boys—with the Guizot law of 1833—and the introduction of legal minima for teachers' salaries. But this multi-faceted activity—progressively restricted to providing a town hall secretariat and land surveying—has received less attention for its economic dimensions than for what it reveals about the low status of schoolteachers before the Republican legislation of the 1880s.⁸⁶ In the French historiography, the economic perspectives of the families—examined for

82 Michaëlsson (2016). See also Madeleine Michaëlsson, "From tree felling to silver lining: Diverse ways of funding elementary schools among Swedish ironworking communities, 1830–1930," in *History of Schooling: Politics and Local Practice*, ed. Carla Aubry and Johannes Westberg (Frankfurt am Main: Peter Lang, 2012).

83 For a recent analysis of this rich historiography, Stéphane Gacon and François Jarrige, "Les Trois âges du paternalisme. Cantines et alimentation ouvrière au Creusot (1860–1960)," *Le Mouvement Social*, no. 247 (2014), 27–45. Studies specifically focusing on schools have remained rare: Donald Reid, "Schools and the paternalist project at Le Creusot, 1850–1914," *Journal of Social History* 27, no. 1 (1993), 129–43; Jacqueline Fontaine, *La Scolarisation et la formation professionnelle des filles au pays de Schneider (1844–1942)* (Paris, France: L'Harmattan, 2010).

84 For an overview of these financial elements, see Angélique Blanc-Serra, "Les Instituteurs à Briançon du XIVe au XIXe siècle : un statut précurseur ?" *Carrefours de l'éducation* 45, no. 1 (2 July 2018), 129–48.

85 Côme Simien, *Le Maître d'école du village, au temps des Lumières et de la Révolution* (Paris: CTHS, A paraître). I am grateful to Côme Simien who gave me a preliminary version of his text. For insights into the secondary occupations of teachers in Sweden, analyzed in terms of livelihood diversification, see Johannes Westberg, "How did teachers make a living? The teacher occupation, livelihood diversification and the rise of mass schooling in nineteenth-century Sweden," *History of Education* 48, no. 1 (2019).

86 Gilbert Nicolas, *Le Grand débat de l'école au XIXe siècle: les instituteurs du Second Empire* (Paris, France: Belin, 2004).

example by Pierre Caspard for the Swiss canton of Neuchatel—have rarely been at the heart of the discussion.⁸⁷

In this issue, Jean-Yves Julliard studies the financial regime of the hamlet schools of Savoie, before and after the annexation of this territory by France, in 1860. The attention given to the population's habits and expectations, as opposed to the new requirements of the French government, offers an original vision of the families' appreciation of what was worth financing or not in this mountain area, and also demonstrates how the government was made to comply with these local financial habits. It thus contributes to the knowledge of an under-researched question in the French historical field.

What has thus far attracted the attention of French researchers has rather been the political dimension of the decisions regarding primary school funding at the beginning of the Third Republic.⁸⁸ In 1889, eight years after the generalisation of free education in public elementary schools (1881), school teachers' salaries were included in the central state budget. This centralisation certainly allowed for an overall increase in expenditure, and, as a result, an expansion of the schooling provided, as well as an improvement in attendance and in the quality of teaching. But this also made sense in the context of a struggle against denominational primary schools, deprived of any public subsidy since the Goblet law of 1886. This financial reorganisation was part of a school policy that aimed to establish the fledgling Republic through the school, and to counter the influence of the Catholic Church.⁸⁹ In her Ph.D. dedicated to the study of Lyon's education policy regarding its elementary schools (1870–1914), Marianne Thivend has renewed an analysis traditionally focused on the policy led by the central government.⁹⁰ Studying the municipal expenditure and the debates raised by the budget, she convincingly shows how the secularisation policy began at the local level with financial decisions taken by municipalities in large cities like Lyon and Paris, even before governmental decisions. However, the increasing interventions of the central state—which set constraints, imposed expenses, and controlled the fiscal policy—reduced the room for maneuver of large cities and forced them to adapt to government decisions, whereas the financial support from the state budget was much more limited than for rural villages, or even small and medium-sized cities.

Let us note that seventy years later, in 1959, the Debré law authorising and regulating the public financing of private schools under contract to the state also owed little to economists' considerations of the supposed efficiency of market mechanisms. It was above all a political decision, a compromise with the defenders of educational freedom, facilitated by the change of political regime that occurred in 1958 and by the growth crisis that the French education system was experiencing at that time.⁹¹

In Sweden, this political stake of educational finance has also been pointed out, but mainly for the sector of popular education. Anne Berg and Samuel Edquist

87 Pierre Caspard, *La Famille, l'école, l'État. Un modèle helvétique, XVIIe–XIXe Siècles* (Bern: Peter Lang, 2021).

88 Théret (1991).

89 Mona Ozouf, *L'École, l'Église et la République: 1871–1914* (Paris: Armand Colin, 1963).

90 Thivend (2006).

91 Bruno Poucet, *La Liberté sous contrat: une histoire de l'enseignement privé* (Paris: Fabert, 2009).

have investigated how the Swedish government used government funding schemes, 1870–1991, to shape a sector of popular education (*folkbildning*)—including open lectures, folk high schools, study circles and libraries organised by associations and based on voluntary efforts. By analyzing educational funding, they are thereby able to go beyond traditional ways of understanding popular education as an independent sector based on self-improvement and empowerment, to show how popular education in fact was also a phenomenon constructed by the Swedish government.⁹² In comparison, financial support for popular education by the state in France remained relatively limited until the financial measures decided upon by the anti-republican Vichy regime, then reorganised and extended after the Second World War.⁹³

The complex intricacy of finance and teaching methods

Among all the sensitive issues surrounding educational finance, the relation between funding and the content and form of teaching is perhaps the most delicate. In France, the cost of educational renewal has been a tricky subject since the end of the 1960s, and the evolution of spending per pupil is often questioned. In the 1990s, the American economist Eric Hanushek was keen to demonstrate that the solution to the school's problems would not come from increased spending.⁹⁴ The unequal efficiency of school expenditure across countries is one of the targets of international comparisons.⁹⁵ Saying that more money does not necessarily translate into quality learning does not mean that finance does not matter to pedagogics, but rather that both the amount of money spent and the provisions that determine how the money is spent should be included in the analysis.

Studies that explore the financial conditions of pedagogic transformations are still rare, both in France and Sweden. One exception is the original work on the French secondary education in the nineteenth century by Philippe Savoie who studied the interdependence of finance and pedagogy in the *lycées* (relying on national grants) and the *collèges* (relying on local subsidies).⁹⁶ Using a precise knowledge of the salaries and careers of teachers, as well as a thorough analysis of the *lycées* and *collèges'* budgets and of the state's expenditure, he argues that the construction, then the transformation of the economic model of secondary education played a major role in its pedagogical and administrative changes.⁹⁷ At the beginning of that cen-

92 Anne Berg and Samuel Edquist, *The Capitalist State and the Construction of Civil Society: Public Funding and the Regulation of Popular Education in Sweden, 1870–1991* (Cham: Springer Palgrave Macmillan, 2017).

93 Laurent Besse, Emmanuel Porte, “Repères sur les enjeux socioéconomiques dans l'éducation populaire en France,” in *Les Modèles socio-économiques des associations: spécificités et approches plurielles* by Mathilde Renault-Tinacci (Paris: La Documentation française, 2021), 51–66. Carole Christen, *À l'école du soir. Une histoire sociale et politique des cours d'adultes (1815–1870)* (Seysssel: Champvalon, to be published).

94 Eric A Hanushek, “Making America's Schools Work: This Time Money Is Not the Answer,” *The Brookings Review* 12, no. 4 (1994), 10.

95 Lindert (2009).

96 Philippe Savoie, *La Construction de l'enseignement secondaire (1802–1914). Aux origines d'un service public* (Lyon: ENS, 2013).

97 Philippe Savoie, *Les Enseignants du secondaire, XIXe–XXe siècles: le corps, le métier, les carrières: textes officiels. Tome 1, 1802–1914* (Paris: INRP/Economica, 2000).

ture, the tradition inherited from the humanist colleges of the pre-Revolution era, characterised by the predominance of Latin and Greek, the alternation of *classe* and *étude*, and the role of boarding schools, seemed strong, even if it had been heavily discussed by the Enlightenment philosophers. It was indeed attractive for the paying students that were necessary to the financial viability of the *lycées*, along with the state-funded scholarship recipients. This economic model could progressively accommodate additions made to the cursus and the specialisation of teachers, albeit with great diversity in local situations especially in the locally funded *collèges*. After 1880, the massive financial investment by the republican state and the homogenisation of pedagogical norms contributed to the abandonment of this economic model, as did the discrediting of boarding schools and the competition of private and upper elementary schools. This is the background of the major reform—both pedagogic and administrative—that took place in 1902, and which marks the definitive abandonment of an age-old pedagogical tradition.

For primary schools, researchers studying the monitorial education system in the nineteenth century also attempted to make a precise link between pedagogical choices and financial conditions. By studying school finance records, Esbjörn Larsson is able to show that the stated purpose of monitorial education to reduce the costs of popular education—mirrored in research literature arguing that monitorial education was a cheap and efficient method of education—was not necessarily correct. In rural areas, the introduction of monitorial education could imply increased school spending instead, because of the new expectations placed on school premises and school supplies.⁹⁸ This echoes the findings of Michel Chalopin, who noticed the same financial obstacles to the introduction of monitorial education in rural Britain.⁹⁹ Of course, this interpretation has to be compared with other analyses of the factors driving the transformation in the organisation of schooling in the nineteenth century.¹⁰⁰

In France, studies addressing the economics of school materials have primarily focused on school books. Jean-Yves Mollier and Bruno Dubot have written monographs on two major French publishers, Hachette and Larousse, both established in the nineteenth century and still active today.¹⁰¹ Emmanuelle Chapron studied the functioning of schoolbook markets in various contexts in the eighteenth century.¹⁰²

98 Larsson (2015).

99 Michel Chalopin, *L'enseignement mutuel en Bretagne: quand les écoliers bretons faisaient la classe* (Rennes: Presses universitaires de Rennes, 2011).

100 Marcelo Caruso, "The Slow Dichotomization of Elementary Classroom Roles. 'Grammar of Schooling' and the Estrangement of Classrooms in Western Europe (1830–1900)," *Paedagogica Historica* (ahead of print, 2021), 1–19.

101 Jean-Yves Mollier, *Louis Hachette (1800–1864): le fondateur d'un empire* (Paris: Fayard, 1999); Jean-Yves Mollier and Bruno Dubot, *Histoire de la librairie Larousse, 1852–2010* (Paris: Fayard, 2012).

102 Emmanuelle Chapron, "Des livres pour les écoles du peuple? Économie et pratiques du texte scolaire en Champagne au XVIIIe siècle," *Histoire de l'éducation* 127 (2010), 7–34; Emmanuelle Chapron, "Écoles charitables et économie du livre au XVIIIe siècle: les livres à l'usage des élèves des Ursulines," *Revue d'histoire moderne et contemporaine* 59, no. 4 (2012), 33–49; Emmanuelle Chapron, "Collèges et librairie scolaire à Paris au XVIIIe Siècle: périmètre économique, activités induites et vie de quartier," in *L'Université dans la ville. Les espaces universitaires et leurs usages en Europe du XIIIe au XIXe siècle*, ed. Nathalie Gorochov, Boris Noguès (Rennes: Presses universitaires de Rennes, 2018), 161–74.

Similar comprehensive studies are still lacking for the following centuries, despite the development of this research field in France, following the pioneering work of Alain Choppin.¹⁰³ The growing interest for the materiality of school culture has drawn attention to other teaching devices, but so far economic and financial approaches are marginal.¹⁰⁴ As an exception, Johann-Günter Egginger studied the financial implications of agricultural, horticultural and science teaching in the North of France, for the schools but also for the companies involved.¹⁰⁵

Studies that would question the financial aspects of the pedagogic transformations promoted by progressive education (*Éducation nouvelle; reformpädagogik*) are still scarce. For the Ecole des Roches—one of the first new French schools for future elites—Nathalie Duval has shown the extent of the financial difficulties the school faced recurrently from the 1960s to the 1980s, which finally led it to accept, in 1992, the system of a contract with the state, guaranteeing it public subsidies in exchange for an alignment with the national education programmes.¹⁰⁶ In this issue, the article of Samuelsson and Michaëlsson offers an original contribution to this controversial topic by studying the funding of two progressive schools, sustained both by private contributions, and by government grants. It also shows the involvement of local urban actors in the development of new types of schooling, a topic of interest for historians of education in both countries.

Little is known, however, about the budgetary implications of state-orchestrated pedagogical changes at the level of an entire education system. The financial implications of the great Swedish school reform of the 1960s have not been thoroughly examined. For the French case, Clémence Cardon-Quint showed that the argument of the financial cost was a reasoning explicitly mobilised at the end of the sixties by those—in the government—who opposed the spirit and purpose of the *renovation pédagogique*.¹⁰⁷ After 20 years of constant expansion, due to the baby-boom and school massification, they argued that the state education budget would not stand another increase justified by qualitative reasons. The slowdown in economic growth made subsequent pedagogic reforms even harder to fund.¹⁰⁸

103 Alain Choppin, “L’Histoire des manuels scolaires. une approche globale,” *Histoire de l’éducation* no. 9 (1980), 1–25; Alain Choppin, “Le Manuel scolaire, une fausse évidence historique,” *Histoire de l’éducation* no. 117 (2008), 7–56.

104 Marguerite Figeac-Monthus (ed.), *Éducation et culture matérielle en France et en Europe du XVIe siècle à nos jours* (Paris: Honoré Champion éditeur, 2018).

105 Johann-Günter Egginger, “L’Introduction de l’enseignement des sciences à l’école primaire et ses implications financières dans les écoles normales rénovées de la France septentrionale (1881–1940),” in *Le Coût des études: modalités, acteurs et implications sociales, XVIe–XXe siècle*, ed. Jean-François Condette (Rennes: Presses universitaires de Rennes, 2012), 99–113; Johann-Günter Egginger, “L’Enseignement agricole et horticole dans les écoles normales de la France septentrionale: un marché lucratif pour un grand nombre d’entrepreneurs (1851–1923),” in *L’École une bonne affaire? Institutions éducatives, marché scolaire et entreprises, XVIe siècle–XXe siècle*, ed. Jean-François Condette, *Histoire* 29 (Villeneuve d’Ascq: Revue du Nord, 2013), 147–67.

106 Nathalie Duval, *L’École des Roches* (Paris: Belin, 2009).

107 Clémence Cardon-Quint, “Quel financement pour l’école nouvelle? Le budget de l’Éducation nationale en débat en 1967–1968,” in *Réformer le système éducatif. Pour une école nouvelle, Mars 1968*, ed. Julien Cahon and Bruno Poucet (Rennes: Presses universitaires de Rennes, 2021), 83–93.

108 For a short overview of these dynamics see Clémence Cardon-Quint, “Finances publiques et éducation, des années 1870 au début du XXIe siècle,” in *Dynamique des dépenses publiques en France au XXIe siècle*, ed. Fabien Cardoni and Michel Margairaz (Paris: IGPDE, 2022).

Extended schooling: local resources and national policies

The development of schooling followed different patterns throughout national territories. The varied needs of local economic actors, as well as the abundance of available fiscal resources, played a specific role in the growth of extended schooling.

Several French researchers have explored the investment of local actors in the development of various forms of schooling in urban areas. This strand of research was particularly blooming in the 1990s, in the aftermath of a complex movement of devolution to administrative and local authorities in various sectors including education. While the work of Marianne Thivend on Lyon primary schools, mentioned above, is part of this line of research, this local approach first contributed to the study of intermediate forms of schooling with a modern, “realistic” or practical emphasis, including the *enseignement primaire supérieur*, vocational and technical education.¹⁰⁹ By combining an analysis of the national policy with several in-depth local case studies, the history of upper primary schools (*écoles primaires supérieures*) published by Jean-Pierre Briand and Jean-Michel Chapoulie in 1992 has played a pioneering role in this field.¹¹⁰ In 1999, a sociologist, Marc Suteau published a thorough study of the school policy of Nantes from 1830 to 1940, in which he scrutinises the material conditions for the creation and financing of educational institutions by the municipality. Thus, he shows how, during the nineteenth century, the local elite tried to develop and sustain technical or higher education schools, not with a systematic view of what a school system should be, but to meet specific needs, linked with the local economy.¹¹¹ In her Ph.D, defended in 2017, Solenn Huitric studied the process of transforming municipal secondary schools (*collèges*) into national secondary schools (*lycées*), which involved 45 *collèges* between 1830 and 1880. She examines the various issues, particularly financial, of a process seen as a “co-production of public action.”¹¹²

On a different scale, Stéphane Lembré has studied the development of technical education in the industrial region of the North, from the beginning of the nineteenth century to the 1940s. He showed the role and diversity of local initiatives, and then the gradual involvement of the state in a sector where the needs of the regional economy remained decisive in structuring the offer.¹¹³ However, he concluded that economic needs were not enough to explain why companies, the state and local authorities decided to commit themselves (including financially) to one school creation or another.

In the Swedish context, the history of intermediate and technical education has

109 See the special issue “L’Offre locale d’enseignement: les formations techniques et intermédiaires (XIXe–XXe siècles),” *Histoire de l’éducation*, no. 66, numéro thématique (May 1995).

110 Jean-Pierre Briand and Jean-Michel Chapoulie, *Les Collèges du peuple: l’enseignement primaire supérieur et le développement de la scolarisation prolongée sous la Troisième République* (Paris: Institut national de recherche pédagogique, 1992).

111 Marc Suteau, *Une ville et ses écoles: Nantes, 1830–1940* (Rennes: Presses universitaires de Rennes, 1999).

112 Solenn Huitric, “Transformer les collèges communaux en lycées. La coproduction d’une action publique (1830–1880)” (Doctorat d’histoire, sous la direction de Philippe Savoie, Université de Lyon, 2016).

113 Stéphane Lembré, *L’École des producteurs: aux origines de l’enseignement technique en France, 1800–1940* (Rennes: Presses universitaires de Rennes, 2013).

received increasing attention.¹¹⁴ For example, Lars Edgren has examined the political argumentation of artisans on vocational education during the second half of the century; Jonas Olofsson and Sandra Hellstrand have explored apprenticeship training, and Åsa Broberg the educational debate on vocational training, 1918–1971.¹¹⁵ In this issue, the article by Fay Lundh Nilsson and Per-Olof Blomberg explores the interaction between municipal and central government in the setting up and funding of an intermediate level of technical schools between 1850–1920, during the Swedish industrial expansion. They show that these schools were not only supported by educationalists, but they were also promoted both on the local level by politicians, industrialists and individual stakeholders, as well as on a national level by members of parliament. In terms of educational funding, they indicate the importance of private funding during the initial phase of the establishment of these schools, and that government grants thereafter became the main source of funding. Since these grants remained low, they also affected the debate surrounding these schools, and the reforms that targeted them. In the latter, the teachers' wages at these institutions became an important question.

In this special issue, Stéphane Lembré explores the multiple reasons that led the French Parliament in 1925 to set up a new tax, the *taxe d'apprentissage*, in order to sustain the development of lower technical education. This new tax is interesting for two reasons. First, it clearly assigns the funding of technical education to the future employers, whereas ordinary fiscal revenues for the state and local authorities—as well as students' fees—provide for other types of education. Second, the mechanism adopted at that time included tax exemptions for training expenses directly incurred by employers. Far from being the exception, the amounts disbursed through this channel still represent a significant proportion of expenditure. This original financial construction allows for a supple and deconcentrated coordination between administrative authorities and local economic stakeholders.

Free education, scholarships and loans

Educational finance is not only about the costs and benefits to society, but also includes how education affects the individual. In this respect, research has explored how in the public domain school fees became increasingly unusual during the nineteenth century in Europe, but also how the costs of secondary and tertiary education were addressed during the nineteenth and twentieth centuries.¹¹⁶ In European welfare states, free provision of schools and scholarship systems are commonly associated with the political aim of achieving equality or equal opportunity among

¹¹⁴ For a recent overview, see Sandra Hellstrand, *Läringsfrågan: institutionell förändring, ekonomiska föreställningar och historiska begrepp i den svenska debatten om lärlingsutbildningen, 1890–1917* (Stockholm: Stockholms universitet, 2020), 15–22.

¹¹⁵ Hellstrand (2020); Lars Edgren, *Lärling – gesäll – mästare: Hantverk och hantverkare i Malmö 1750–1847* (Lund: Dialogos, 1987); Jonas Olofsson, *Svensk yrkesutbildning: vägval i internationell belysning* (Stockholm: SNS förlag, 2005).

¹¹⁶ Regarding the costs of private education and secondary education in Sweden, see, e.g., Peter Bernhardsson, *I privat och offentligt: Undervisningen i moderna språk i Stockholm 1800–1880* (Uppsala: Acta Universitatis Upsalensis, 2016), 78–81; Esbjörn Larsson, “Hyddans son i ett framväxande parallellskolesystem: Skolavgifter och försörjningskrav vid de svenska allmänna skolorna under 1800-talets första hälft,” *Norsk pedagogisk tidskrift* 102, no. 2 (2018), 133–144.

various social groups in the schooling system. However, free education as well as scholarships already existed in various forms, and for various reasons, well before the clear formulation of this political aim.

On this issue, historians like Harvey Chisick first attempted, back in the 1970s, to document if and to what extent the scholarships were a lever of social mobility in the early modern period, in an academic context heavily influenced, in France, by the sociology of education.¹¹⁷ Later works tried to delineate the logics and functioning of the various systems of scholarships, whose purposes were not primarily related to social considerations. The collective work edited by Jean-François Condette in 2012 made a useful contribution to this topic with seven chapters addressing various scholarship systems, from the sixteenth to the twentieth century, for different types of students (girls, boys, in private denominational schools as well as in publicly funded settings, in secondary or technical schools, as well as in higher education etc.).¹¹⁸ Together with other books chapters and articles,¹¹⁹ this literature now covers a wide variety of cases, both in the pre-modern and the modern era. Studies addressing the twentieth century—like that of Stéphane Lembré on technical education scholarship holders—are particularly interesting as they show that the wide heterogeneity of end purposes persisted well into the twentieth century, at a time when, officially, meritocratic considerations and social justice were invoked.¹²⁰

In welfare states, the development of the state's fiscal capacity was followed by targeted supports being replaced with free provision for all, at least for primary and secondary public schools (respectively in 1881 and 1933 in France). Free secondary education and its potential effects on student enrolment was a heavily politicised topic in the 1920s and 1930s. These effects have been scrutinised by Philippe Hugot, and more recently by Antoine Prost, thus correcting the too uniform vision of the role played by the secondary education as a mere tool of social reproduction before the organisational reforms of the 1960s and 1970s.¹²¹

117 Harvey Chisick, "Bourses d'études et mobilité sociale en France à la veille de la Révolution. Bourses et boursiers du collège Louis-le-Grand (1762–1789)," *Annales* 30, no. 6 (1975), 1562–84. Emblematic of the influence of sociology on the history of education in the 1970s: Wilhelmus Theodorus Maria Frijhoff and Dominique Julia, *École et société dans la France d'Ancien Régime: quatre exemples, Auch, Avallon, Condom et Gisors* (Paris: A. Colin, 1975).

118 See the contributions of Véronique Castagnet, Dominique Picco, Jean-François Goubet, Arnaud Costechareire, Stéphane Lembré, Jean-François Condette and Philippe Rocher, in Condette (2012), 245–407.

119 Marie-Madeleine Compère, "Les Boursiers nationaux," in *Lycées, Lycéens, Lycéennes, Deux Siècles d'histoire*, ed. Pierre Caspard, Jean-Noël Luc, and Philippe Savoie (Paris: INRP, 2005), 73–86; Jean Le Bihan, "Le Recrutement des boursiers des collèges royaux sous la monarchie de Juillet: nouveau regard à partir des ordonnances de nomination," *Histoire de l'éducation*, no. 144 (2015), 55–78; Jean Le Bihan, "Les Boursiers communaux de l'enseignement secondaire au XIXe siècle: un angle mort de l'historiographie des élèves," *Histoire de l'éducation*, no. 151 (2019), 147–74.

120 Stéphane Lembré, "Bourses et boursiers de l'enseignement technique dans le Nord et le Pas-de-Calais (1900–1940)," in *Le Coût des études: modalités, acteurs et implications sociales, XVIIe–XXe siècle*, ed. Jean-François Condette (Rennes: Presses universitaires de Rennes, 2012), 315–31.

121 On the politics of free provision, see also: John E. Talbott, *The Politics of Educational Reform in France, 1918–1940* (Princeton, N.J.: Princeton University Press, 1969); Philippe Hugot, "La Gratuité de l'enseignement secondaire: l'application des premières mesures démocratiques dans l'enseignement secondaire, 1918–1939" (Paris, l'Harmattan, 2005); Antoine Prost, "Morphologie et sociologie des lycées et collèges (1930–1938)," *Histoire de l'éducation*, no. 146 (2016), 53–110.

Higher education is quite a different issue, as the funding models of higher education still diverge significantly among countries with similar levels of development, as highlighted by Julian Garritzmann.¹²² Moreover, the redistributive dimensions of higher education funding is a thorny question. In comparative political economy, Ben Ansell as well as Marius Busemeyer have underlined the complexity of a problem that encompasses the questions of access to higher education, but also the capacity to value one's training for the job market, which depends on the level of technological development and on the openness of the economy.¹²³ Within some higher education systems—like the UK's, studied by Vincent Carpentier—a strong resource differentiation combined with mission and social differentiations tends to stratify social inequalities, in spite of a general expansion.¹²⁴ While the subject also attracts several economists, Vincent Carpentier's work is distinctive in that it attempts to weave together the history of education, economics and political economy.

Today, the French system combines low tuition fees (at least in universities) with relatively modest support mechanisms (scholarships, accommodation, catering etc.).¹²⁵ This increasingly controversial balance has not been fundamentally altered in response to the massification of higher education. In Sweden, higher education is free of charge, and students are supported by student aid, consisting of a grant and a repayable student loan. As Martin Gustavsson notes in this special issue, this system is often perceived in a positive light, as a generous Social Democratic reform that was unique at its introduction in the 1960s, and that remains one of the most successful post-war educational reforms. By examining the rise and fall of the student finance system that preceded it, he is, however, able to nuance such accounts. While the new student finance system was in line with other Social Democratic reforms, it was also compatible with the influential idea of the Chicago School that education was an investment in human capital. And although this system implies that the government certainly supports higher education, one of its main functions is that it transfers costs not only from students to the government, but from parents to their children.

In conclusion

The range of issues that can be analysed through the investigation of the economic aspects of education is obviously very broad. As is evident from above, these include not only the financial aspects of education or economic growth, but also the social, political and pedagogic aspects of education. Educational finance is therefore not only of interest to the economic historian, but also to social historians, cultural historians and, not least, historians of education.

¹²² Julian L. Garritzmann, *The Political Economy of Higher Education Finance: The Politics of Tuition Fees and Subsidies in OECD Countries, 1945–2015* (Cham: Springer, 2016). See also Léonard Moulin, "Frais d'inscription dans l'enseignement supérieur et régimes d'État-providence: une analyse comparative," *Éducation et sociétés* 36, no. 2 (2015).

¹²³ Busemeyer (2014); Ansell (2010).

¹²⁴ Vincent Carpentier, "Three Stories of Institutional Differentiation: Resource, Mission and Social Inequalities in Higher Education," *Policy Reviews in Higher Education* 5, no. 2 (2021), 197–241.

¹²⁵ French higher education is dual. Schematically, one contrasts the *grandes écoles* – selective on an academic and/or financial level – with the universities, accessible to all holders of the baccalauréat.

Nonetheless, statistics produced by governments, archives containing financial data or statistical series “reconstructed” by researchers still remain underused in most historical research addressing education. As shown above, and in the various articles in this issue, the analysis of these financial data requires both good knowledge of their context of production, and also the ability to make sense of the figures themselves, in particular by relating them to other financial and economic data. As it is, the growing body of work on these financial aspects of education will hopefully provide the terms of comparison that are often still lacking for the interpretation of the quantitative data.

In this area, more regular collaborations between economists, economic historians and historians would certainly open up new perspectives. The interest of a new generation of historians and historians of education for quantitative methods and reconstructed statistics is certainly a favourable development in this context. Another is the increasing interest in education among economic historians, along with the cliometricians’ wide-ranging ambition to apply econometrics to historical settings. Finally, it is also likely that the “credibility revolution” that has reinforced the methodological precautions taken in econometrics in the analysis of causal imputation will facilitate dialogue with other fields of research.¹²⁶ These various shifts in methods and research interests certainly create a terrain favourable to a more intensive exploration of educational finance.

¹²⁶ For the latter, see, e.g., Émilien Ruiz, “Retour sur « l’anachronisme des séries longues »,” *Billet, Penser/Compter* (blog), 5 October 2014, <http://compter.hypotheses.org/768> (accessed February 28, 2022); Joshua D. Angrist and Jörn-Steffen Pischke, “The Credibility Revolution in Empirical Economics: How Better Research Design Is Taking the Con out of Econometrics,” *Journal of Economic Perspectives* 24, no. 2 (2010), 3–30.

References

- Andersson, Jens and Thor Berger. “Elites and the Expansion of Education in Nineteenth-Century Sweden.” *The Economic History Review* 72, no. 3 (2019), 897–924.
- Angrist, Joshua D., and Jörn-Steffen Pischke. “The Credibility Revolution in Empirical Economics: How Better Research Design Is Taking the Con out of Econometrics.” *Journal of Economic Perspectives* 24, no. 2 (2010), 3–30.
- Ansell, Ben W. *From the Ballot to the Blackboard: The Redistributive Political Economy of Education*. *Cambridge Studies in Comparative Politics*. Cambridge: Cambridge University Press, 2010.
- Asselain, Jean-Charles. “Le Projet français d’histoire économique quantitative: ambitions et résultats.” *Économies et Sociétés*, no. 36 (2007), 567–609.
- Asselain, Jean-Charles. *Le Budget de l’Éducation nationale: (1952–1967)*. Paris: PUF, 1969.
- Aubry, Carla. *Schule Zwischen Politik Und Ökonomie: Finanzhaushalt Und Mitspracherecht in Winterthur, 1789–1869*. Zürich: Chronos, 2015.
- Barbin, Évelyne, and Anne-Sophie Bruno. “Éducation : compter et décider.” *Histoire & mesure* XXIX, no. 1 (2014).
- Baudelot, Christian, François Leclercq, Boris Gobille, Armand Chatard, and Elena Satchkova. *Les Effets de l’éducation : rapport à l’intention du PIREF*. Paris: La Documentation française, 2005.
- Beadie, Nancy. *Education and the Creation of Capital in the Early American Republic*. Cambridge, 2010.
- Bengtsson, Erik and Svante Prado. “The Rise of the Middle Class: The Income Gap between Salaried Employees and Workers in Sweden, ca. 1830–1940.” *Scandinavian Economic History Review* 68, no. 2 (2020), 91–111.
- Berg, Anne and Samuel Edquist. *The Capitalist State and the Construction of Civil Society: Public Funding and the Regulation of Popular Education in Sweden, 1870–1991*. Cham: Springer Palgrave Macmillan, 2017.
- Bernhardsson, Peter. *I privat och offentligt: undervisningen i moderna språk i Stockholm 1800–1880*. Uppsala: Acta Universitatis Upsaliensis, 2016.
- Besse, Laurent, Emmanuel Porte. “Repères sur les enjeux socio-économiques dans l’éducation populaire en France.” In *Les modèles socio-économiques des associations: spécificités et approches plurielles* edited by Mathilde Renault-Tinacci, 51–66. Paris: La Documentation française, 2021.
- Bezes, Philippe, and Alexandre Siné, eds. *Gouverner (par) les finances publiques*. Paris: Sciences po, 2011.
- Bezes, Philippe, Florence Descamps, and Sébastien Kott, eds. *L’Invention de la gestion des finances publiques. Le moment RCB ou le rêve d’un gouvernement rationnel 1963–1978*. Vincennes: Comité pour l’histoire économique et financière de la France, 2021.
- Blanc-Serra, Angélique. “Les Instituteurs à Briançon du XVe au XIXe siècle : un statut précurseur ?” *Carrefours de l’éducation* 45, no. 1 (2018), 129–48.
- Boarini, Romina, Marco Mira d’Ercole, and Gang Liu. “Approaches to Measuring the Stock of Human Capital: A Review of Country Practices.” Paris: OCDE, 23 November 2012.

- Bodé, Gérard, Savoie, Philippe, eds. "L'Offre locale d'enseignement : les formations techniques et intermédiaires (XIXe–XXe siècles)." *Histoire de l'éducation*, no. 66 (1995).
- Bodé, Gérard, and Philippe Savoie. "L'Approche locale de l'histoire des enseignements techniques et intermédiaires : nécessité et limites." *Histoire de l'éducation*, no. 66 (1995), 5–13.
- Boli, John. *New Citizens for a New Society: The Institutional Origins of Mass Schooling in Sweden*. Oxford: Pergamon, 1989.
- Bousslimani, Azzedine. "Éléments pour une caractérisation économique du contenu qualitatif du développement. Une analyse à partir de la relation éducation-croissance en Algérie (1875–2000)," thèse de doctorat, 2003.
- Briand, Jean-Pierre, and Jean-Michel Chapoulie. *Les Collèges du peuple : l'enseignement primaire supérieur et le développement de la scolarisation prolongée sous la Troisième République*. Paris: INRP, 1992.
- Briand, Jean-Pierre, Jean-Michel Chapoulie, Françoise Huguet, Jean-Noël Luc, and Antoine Prost. *L'Enseignement primaire et ses extensions: annuaire statistique, 19^e–20^e siècles*. Paris: INRP, Economica, 1987.
- Brühwiler, Ingrid. *Finanzierung des Bildungswesens in der Helvetischen Republik. Darstellung verschiedener Akteure sowie deren Einfluss und Wirkung in unterschiedlichen Regionen der Schweiz um 1800. Studien zur Stapfer-Schulenquête von 1799*. Bad Heilbrunn: Klinkhardt, 2014.
- Buisson-Fenet, Hélène. *Piloter les lycées: le 'tournant modernisateur' des années 1990 dans l'Éducation nationale*. Grenoble: Presses universitaires de Grenoble, 2019.
- Busemeyer, Marius R. *Skills and Inequality: Partisan Politics and the Political Economy of Education Reforms in Western Welfare States*. Cambridge: Cambridge University Press, 2014.
- Caille, Jean-Paul, and Jérôme Krop. "Une source négligée de l'histoire des élèves : les panels d'élèves des années 1960 aux années 2000." *Histoire de l'éducation* 151, no. 1 (2019), 175–202.
- Cardoni, Fabien. "Le Choix des futurs. La programmation des dépenses militaires en France 1945–1973." Mémoire inédit d'HDR, Paris 1, 2019.
- Cardon-Quint, Clémence. "L'Allocation Barangé (1951–1990). Enquête historique sur la "légitimité" d'une dépense publique." In *La légitimité en finances publiques. Contribution à une étude de l'objet finances publiques*, édité par Céline Husson-Rochongar. Mare & Martin, 2022.
- Cardon-Quint, Clémence. "Finances publiques et éducation, des années 1870 au début du xx^e siècle." In *Dynamique des dépenses publiques en France au XX^e Siècle*, edited by Fabien Cardoni and Michel Margairaz. Paris: IGPDE, 2022.
- Cardon-Quint, Clémence. "Quel financement pour l'école nouvelle? Le budget de l'Éducation nationale en débat en 1967–1968." In *Réformer le système éducatif. Pour une école nouvelle*, Mars 1968, edited by Julien Cahon and Bruno Poucet, 83–93. Rennes: Presses universitaires de Rennes, 2021.
- Cardon-Quint, Clémence. "State Education Budgets in the 20th Century: Literature Review and Research Perspectives on the French Case." *Rivista Di Storia Economica*, no.2 (2020), 175–221.

- Carpentier, Vincent. "Three Stories of Institutional Differentiation: Resource, Mission and Social Inequalities in Higher Education." *Policy Reviews in Higher Education* 5, no. 2 (2021), 197–241.
- Carpentier, Vincent. *Système éducatif et performances économiques au Royaume-Uni, 19e et 20e siècles*. Paris: L'Harmattan, 2001.
- Carpentier, Vincent. "State Education, Crisis and Austerity: An Historical Analysis through the Lens of the Kondratiev Cycles." In *Education and the State: International Perspectives on a Changing Relationship*, edited by Carla Aubry, Michael Geiss, Veronika Magyar-Haas, and Jürgen Oelkers, 78–102. Routledge, 2015.
- Carrère, Odile, and Roland Daumont. "Le compte de l'éducation et des formations : méthode et premiers résultats." *Économie et statistique* 75, no. 1 (1976), 39–53.
- Carry, Alain. "La Dépense de l'État pour l'éducation secondaire professionnelle (France, 1820–1938)." Edited by Gérard Bodé and Philippe Marchand. *Formation professionnelle et apprentissage. XVIIIe–XXe siècles*, hors-série no. 17 (2003), 115–28.
- Carry, Alain. "La Mesure de la dépense d'éducation. Entre comptes et mécomptes." *Cahiers de la recherche sur l'éducation et les savoirs*, hors-série no. 1 (2005), 139–60.
- Carry, Alain. "Le Compte satellite rétrospectif de l'éducation en France: 1820–1996." *Économies et sociétés* 33, no. 2–3 (1999), 7–281.
- Caruso, Marcelo. "Why Do Finance? A Comment About Entanglements and Research in the History of Education." *Nordic Journal of Educational History* 2, no. 1 (2015), 141–49.
- Caruso, Marcelo. "The Slow Dichotomization of Elementary Classroom Roles. "Grammar of Schooling" and the Estrangement of Classrooms in Western Europe (1830–1900)." *Paedagogica Historica* ahead of print (2021), 1–19.
- Caspar, Pierre. *La Famille, l'école, l'État. Un modèle helvétique, XVIIe–XIXe siècles*. Bern: Peter Lang, 2021.
- Chalopin, Michel. *L'Enseignement mutuel en Bretagne: quand les écoliers bretons faisaient la classe*. Rennes: Presses universitaires de Rennes, 2011.
- Chapoulie, Jean-Michel. "Les Nouveaux spécialistes des sciences sociales comme « experts » de la politique scolaire en France 1945–1962." *Genèses* 64, no. 3 (2006), 124–45.
- Chapoulie, Jean-Michel. *L'École d'État conquiert la France : deux siècles de politique scolaire*. Rennes: Presses universitaires de Rennes, 2010.
- Chapron, Emmanuelle. "Des livres pour les écoles du peuple ? Économie et pratiques du texte scolaire en Champagne au XVIIIe siècle." *Histoire de l'éducation* 127 (2010), 7–34.
- Chapron, Emmanuelle. "Collèges et librairie scolaire à Paris au XVIIIe siècle : périmètre économique, activités induites et vie de quartier." In *L'Université dans la ville. Les espaces universitaires et leurs usages en Europe du XIIIe au XIXe Siècle*, edited by Nathalie Gorochov Boris Noguès, 161–74. Rennes: Presses universitaires de Rennes, 2018.
- Chapron, Emmanuelle. "Écoles charitables et économie du livre au XVIIIe siècle : les livres à l'usage des élèves des Ursulines." *Revue d'histoire moderne et contemporaine* 59, no. 4 (2012), 33–49.

- Chisick, Harvey. "Bourses d'études et mobilité sociale en France à la veille de la Révolution. Bourses et boursiers du collège Louis-le-Grand (1762–1789)." *Annales. Économies, Sociétés, Civilisations* 30, no. 6 (1975), 1562–84.
- Choppin, Alain. "L'Histoire des manuels scolaires. Une approche globale." *Histoire de l'éducation*, no. 9 (1980), 1–25.
- Choppin, Alain. "Le Manuel scolaire, une fausse évidence historique." *Histoire de l'éducation* n° 117, no. 1 (1 January 2008), 7–56.
- Christen, Carol. *À l'école du soir. Une histoire sociale et politique des cours d'adultes (1815–1870)*. Seyssel: Champvallon, to be published.
- Cioni, Martina, Giovanni Federico, and Michelangelo Vasta. "The Long-Term Evolution of Economic History: Evidence from the Top Five Field Journals (1927–2017)." *Cliometrica* 14, no. 1 (2020), 1–39.
- Commission du débat national sur l'avenir de l'école. *Les Français et leur école: le miroir du débat*. Paris: Dunod, 2004.
- Compère, Marie-Madeleine. "Les Boursiers nationaux." In *Lycées, Lycéens, Lycéennes, Deux Siècles d'histoire*, edited by Pierre Caspard, Jean-Noël Luc, and Philippe Savoie, 73–86. Paris: INRP, 2005.
- Condette, Jean-François, ed. *L'École une bonne affaire? Institutions éducatives, marché scolaire et entreprises, XVIe siècle–XXe siècle*. Histoire 29. Villeneuve d'Ascq: Revue du Nord, 2013.
- Condette, Jean-François, ed. *Le coût des études: modalités, acteurs et implications sociales, XVIe–XXe siècle*. Rennes: Presses universitaires de Rennes, 2012.
- Cytermann, Jean-Richard. "Le financement du système éducatif français et l'enjeu de la performance." *Revue internationale d'éducation de Sèvres*, no. 65 (2014), 121–31.
- Daumard, Pierre. "Coût et financement de l'éducation." Thèse de sciences économiques, Université de Paris, 1968.
- Delorme, Robert, and Christine André. *L'État et l'économie: un essai d'explication de l'évolution des dépenses publiques en France, 1870–1980*. Paris: Éditions du Seuil, 1983.
- Desrosières, Alain. *La politique des grands nombres: histoire de la raison statistique*. Paris: Éditions la Découverte, 1993.
- Diebolt, Claude, and Antoine Parent. *Essais cliométriques: capital humain, monnaie et finance, croissance et cycles*. Bern: Peter Lang, 2011.
- Diebolt, Claude, Audrey-Rose Menard, and Faustine Perrin. "Behind the Fertility–Education Nexus: What Triggered the French Development Process?" *European Review of Economic History* 21, no. 4 (2017), 357–92.
- Diebolt, Claude, Magali Jaoul, and Gilles San Martino. "Le mythe de Ferry une analyse cliométrique." *Revue d'économie politique* 115, no. 4 (2005), 471–97.
- Diebolt, Claude. *Éducation et croissance économique: le cas de l'Allemagne aux XIXe et XXe siècles*. Bibliothèque de l'éducation. Paris: Éd. l'Harmattan, 1995.
- Diebolt, Claude. "Cliometrica after 10 years: Definition and Principles of Cliometric Research." *Cliometrica* 10, no. 1 (2015), 1–4.
- Diebolt, Claude. *Dépenses d'éducation et cycles économiques en Espagne, XIXe et XXe siècles*. Logiques économiques. Paris Montréal (Québec): l'Harmattan, 2000.
- Duval, Nathalie. *L'École des Roches*. Paris: Belin, 2009.

- Edgren, Lars, *Lärling – gesäll – mästare: hantverk och hantverkare i Malmö 1750–1847*. Lund: Dialogos, 1987).
- Edmond-Grangé, Jacques. *Le Budget fonctionnel en France*. Paris: Librairie générale de droit et de jurisprudence, 1963.
- Egginger, Johann-Günter. “L’Introduction de l’enseignement des sciences à l’école primaire et ses implications financières dans les écoles normales rénovées de la France septentrionale (1881–1940).” In *Le coût des études: modalités, acteurs et implications sociales, XVIe–XXe siècle*, edited by Jean-François Condette, 99–113. Rennes: Presses universitaires de Rennes, 2012.
- Egginger, Johann-Günter. “L’Enseignement agricole et horticole dans les écoles normales de la France septentrionale: un marché lucratif pour un grand nombre d’entrepreneurs (1851–1923).” In *L’École une bonne affaire? Institutions éducatives, marché scolaire et entreprises, XVIe siècle–XXe siècle*, edited by Jean-François Condette, 147–67. Histoire 29. Villeneuve d’Ascq: Revue du Nord, 2013.
- Eicher, Jean-Claude. “La rentabilité de l’investissement humain.” *Revue économique* 11, no. 4 (1960), 577–608.
- Eicher, Jean-Claude. *Analyse comparative des dépenses d’éducation en France de 1952 à 1967*. Paris: OCDE, 1969.
- Eklöf, Ben. *Russian Peasant Schools: Officialdom, Village Culture, and Popular Pedagogy, 1861–1914*. Berkeley: University of California Press, 1986.
- Fendler, Lynn. “New Cultural Histories.” In *Handbook of Historical Studies in Education*, edited by Tanya Fitzgerald, 1–17. Singapore: Springer, 2019.
- Figeac-Monthus, Marguerite (ed). *Éducation et culture matérielle en France et en Europe du XVIe siècle à nos jours*. Paris, France: Honoré Champion éditeur, 2018.
- Fontaine, Jacqueline. *La scolarisation et la formation professionnelle des filles au pays de Schneider (1844–1942)*. Paris: L’Harmattan, 2010.
- Fontvieille, Louis. “Croissance et transformation du système éducatif et de formation en France aux XIXe et XXe siècles.” In *Administrer, gérer, évaluer les systèmes éducatifs. Une encyclopédie pour aujourd’hui*, edited by Jean-Jacques Paul, 43–66. Paris: ESF éditeur, 1999.
- Fontvieille, Louis. “Évolution et croissance de l’administration départementale française, 1815–1974.” *Cahiers de l’ISMEA* 16, no. 1–2 (1982), 10–191.
- Fontvieille, Louis. “La croissance de la dépense publique d’éducation en France : 1815–1987.” *Formation Emploi* 31, no. 1 (1990), 61–71.
- Fontvieille, Louis. *Évolution et croissance de l’État français: 1815–1969*. Paris: ISMEA, 1976.
- Ford, Nicholas, Kristin Ranestad, and Paul Sharp. “Leaving Their Mark: Using Danish Student Grade Lists to Construct a More Detailed Measure of Historical Human Capital.” *Working papers* European Historical Economics Society (EHES), no. 207 (2021).
- Frijhoff, Wilhelmus Theodorus Maria, and Dominique Julia. *École et société dans la France d’Ancien Régime: quatre exemples, Auch, Avallon, Condom et Gisors*. Cahiers des Annales 35. Paris: A. Colin, 1975.
- Gacon, Stéphane, and François Jarrige. “Les trois âges du paternalisme. Cantines et alimentation ouvrière au Creusot (1860–1960).” *Le Mouvement Social* 247, no. 2 (2014), 27–45.

- Garritzmann, Julian L. *The Political Economy of Higher Education Finance: The Politics of Tuition Fees and Subsidies in OECD Countries, 1945–2015*. Cham: Springer, 2016.
- Gauthier, Roger-François, and André Désiré Robert. *L'École et l'argent: quels financements pour quelles finalités?* Paris: Retz, 2005.
- Gidney, R. D. and W. P. J. Millar. *How Schools Worked: Public Education in English Canada, 1900–1940*. Montreal: McGill-Queen's University Press, 2012.
- Goldin, Claudia. "Human Capital." In *Handbook of Cliometrics*, edited by Claude Diebolt and Michael Hupert, 147–77. Cham: Springer International Publishing, 2019.
- Gontard, Maurice. *L'Enseignement primaire en France: de la Révolution à la loi Guizot (1789–1833): des petites écoles de la monarchie d'ancien régime aux écoles primaires de la monarchie bourgeoise*. Paris: les Belles Lettres, 1959.
- Grew, Raymond, et Patrick J. Harrigan. *School, state, and society: the growth of elementary schooling in nineteenth-century France*. Ann Arbor: University of Michigan press, 1991.
- Grew, Raymond, Patrick Harrigan, James Whitney, M.-B. Albaret, and J. Valensi. «La scolarisation en France, 1829–1906.» *Annales. Économies, sociétés, civilisations* 39, no. 1 (1984), 116–57.
- Grew, Raymond, and Patrick J. Harrigan. "L'offuscation pédantesque. Observations sur les préoccupations de J.-N. Luc." *Annales. Économies, sociétés, civilisations* 41, no. 4 (1986), 913–22.
- Grew, Raymond and Patrick J. Harrigan. *School, State and Society: The Growth of Elementary Schooling in Nineteenth-Century France- a Quantitative Analysis*. Ann Arbor: University of Michigan Press, 1991.
- Gunter, Helen M., ed. *New public management and the reform of education: European lessons for policy and practice*. London, Royaume-Uni de Grande-Bretagne et d'Irlande du Nord: Routledge, 2016.
- Hacking, Ian. "Biopower and the Avalanche of Printed Numbers." In *Biopower: Foucault and Beyond*, edited by Vernon Cisney and Nicolae Morar, 65–81. Chicago: University of Chicago Press, 2016.
- Hallak, Jacques. *À qui profite l'école ?* Paris: Presses universitaires de France, 1974.
- Hanushek, Eric A. "Making America's Schools Work: This Time Money Is Not the Answer." *The Brookings Review* 12, no. 4 (1994), 10.
- Hellstrand, Sandra. "Attempting Institutional Change: Swedish Apprenticeship, 1890–1917." *Nordic Journal of Educational History* 3, no. 2 (2016), 31–53.
- Hellstrand, Sandra. *Lärlingsfrågan: Institutionell förändring, ekonomiska föreställningar och historiska begrepp i den svenska debatten om lärlingsutbildningen, 1890–1917*. Stockholm: Stockholms universitet, 2020.
- Hinnerich, Björn Tyrefors and Per Pettersson-Lidbom. "Democracy, Redistribution, and Political Participation: Evidence from Sweden 1919–1938." *Econometrica* 82, no. 3 (2014), 961–93.
- Höjer, Henrik. *Svenska Siffror: Nationell integration och identifikation genom statistik 1800–1870*. Hedemora: Gidlund, 2001.
- Hugot, Philippe. *La Gratuité de l'enseignement secondaire : l'application des premières mesures démocratiques dans l'enseignement secondaire, 1918–1939*. Paris: l'Harmattan, 2005.

- Huitric, Solenn. “Les Thèses françaises en histoire de l’éducation depuis 1990 : un miroir de la discipline ?” *Histoire de l’éducation* 154, no. 2 (2020), 93–117.
- Huitric, Solenn. “Transformer les collèges communaux en lycées. La coproduction d’une action publique (1830–1880).” Doctorat d’histoire, sous la direction de Philippe Savoie, Université de Lyon, 2016.
- Jones, Ken, Chomin Cunchillos, and Richard Hatcher. *Schooling in Western Europe: the new order and its adversaries*. Basingstoke / New York: Palgrave Macmillan, 2008.
- Karila-Cohen, Karine, Claire Lemerrier, Isabelle Rosé, and Claire Zalc. “Nouvelles cuisines de l’histoire quantitative.” *Annales. Histoire, Sciences Sociales* 73, no. 4 (2018), 771–83.
- Karlsson, Tobias, Fay Lundh Nilsson, and Anders Nilsson. “Vocational Education and Industrial Relations: Sweden 1910–1975.” *Nordic Journal of Educational History* 5, no. 1 (2018), 27–50.
- Klose, Gunilla. “Svensk ‘Folkskoleekonomi’ Före 1770.” In *Utbildningshistoria 1992*, edited by Egil Johansson and Stig G. Nordström, 193–214. Uppsala: Föreningen för svensk undervisningshistoria, 1992.
- Klose, Gunilla. *Folkundervisningens finansiering före 1842*. Uppsala: Uppsala University, 2011.
- Kradolfer, Carla Aubry, and Michael Geiss. “The Backbone of Schooling: Entangled Histories of Funding and Educational Administration – Introduction.” *Paedagogica Historica* 52, no. 4 (2016), 315–24.
- Krantz, Olle. *Historiska nationalräkenskaper för Sverige: Offentlig verksamhet 1800–1980*. Lund: Studentlitteratur, 1987.
- Krop, Jérôme. *La Méritocratie républicaine: élitisme et scolarisation de masse sous la IIIe République*. Rennes: Presses universitaires de Rennes, 2014.
- Larsson, Esbjörn. “‘Cheap, Efficient, and Easy to Implement’? Economic Aspects of Monitorial Education in Swedish Elementary Schools During the 1820s.” *History of Education* 45, no. 1 (2015), 18–37.
- Larsson, Esbjörn. “Hyddans son i ett framväxande parallellskolesystem: skolavgifter och försörjningskrav vid de svenska allmänna skolorna under 1800-talets första hälft.” *Norsk pedagogisk tidskrift* 102, no. 2 (2018), 133–44.
- Laval, Christian. *L’École n’est pas une entreprise: le néo-libéralisme à l’assaut de l’enseignement public*. Paris: Éditions la Découverte, 2003.
- Le Bihan, Jean. “Le Recrutement des boursiers des collèges royaux sous la monarchie de Juillet : nouveau regard à partir des ordonnances de nomination.” *Histoire de l’éducation*, no. 144 (31 December 2015), 55–78.
- Le Bihan, Jean. “Les Boursiers communaux de l’enseignement secondaire au XIXe siècle : un angle mort de l’historiographie des élèves.” *Histoire de l’éducation*, no. 151 (2019), 147–74.
- Lembré, Stéphane. “Bourses et boursiers de l’enseignement technique dans le Nord et le Pas-de-Calais (1900–1940).” In *Le Coût des études: modalités, acteurs et implications sociales, XVIe–XXe siècle*, edited by Jean-François Condette, 315–31. Rennes: Presses universitaires de Rennes, 2012.
- Lembré, Stéphane. “Le Retour de l’apprentissage une institution du travail et son financement au xxe siècle : jalons pour l’histoire d’une voie française à l’aune des expériences européennes et mondiales.” Mémoire d’HDR, histoire, Paris 1-Panthéon Sorbonne, 2022.

- Lembré, Stéphane. *L'école des producteurs: aux origines de l'enseignement technique en France, 1800–1940*. Collection Carnot. Rennes: Presses universitaires de Rennes, 2013.
- Lindert, Peter. *Growing public: social spending and economic growth since the eighteenth century*. 2 Vol. Cambridge: Cambridge University Press, 2004.
- Lindert, Peter. "Revealing Failures in the History of School Finance." Cambridge, MA: National Bureau of Economic Research, November 2009.
- Lindgren, Erik, Per Pettersson-Lidbom, and Björn Tyrefors. "The Causal Effect of Political Power on the Provision of Public Education: Evidence from a Weighted Voting System." *arXiv preprint arXiv:2106.00350* (2021).
- Ljungberg, Jonas and Anders Nilsson. "Human Capital and Economic Growth: Sweden 1870–2000." *Cliometrica* 3, no. 1 (2009), 71–95.
- Luc, Jean-Noël. "L'Illusion statistique." *Annales. Économies, sociétés, civilisations* 41, no. 4 (1986), 887–911.
- Luc, Jean-Noël. *La Statistique de l'enseignement Primaire, 19e–20e Siècles Politique et Mode d'emploi. L'école à Travers Ses Statistiques*. Paris: Economica INRP, 1985.
- Lundh Nilsson, Fay and Per-Olof Grönberg. "A Technical Workforce for Regional Industrial Development? Origin and Dispersion of Graduates from the Technical Secondary Schools in Malmö and Borås 1855–1930." *The Scandinavian Economic History Review* ahead-of-print (2021), 1–27.
- Marczewski, Jean. "Histoire quantitative. Buts et méthodes." *Cahiers de l'ISEA. Série AF. Histoire économique quantitative*, no. 1 (1961).
- Mayeur, Françoise. "L'Enseignement secondaire des jeunes filles: 1867–1924." Doctorat d'État, histoire, Paris 4, 1975.
- Maynes, Mary Jo. *Schooling for the People: Comparative Local Studies of Schooling History in France and Germany, 1750–1850*. New York: Holmes & Meier, 1985.
- Michaëlsson, Madeleine. "From Tree Felling to Silver Lining: Diverse Ways of Funding Elementary Schools among Swedish Ironworking Communities, 1830–1930." In *History of Schooling: Politics and Local Practice*, edited by Carla Aubry and Johannes Westberg, 38–67. Frankfurt am Main: Peter Lang, 2012.
- Michaëlsson, Madeleine. *Privata bidrag till folkskolan: järnbruken och det svenska folkskoleväsendet 1850–1930*. Uppsala: Uppsala University Library, 2016.
- Michel, Sandrine. "Transformation de la relation de la formation à l'économie: un processus d'autonomisation: une approche en termes de régulation." Thèse de doctorat, Montpellier 1, 1996.
- Mitch, David. "The Economic History of Education." In *Routledge Handbook of Modern Economic History*, edited by Robert Whaples and Randall E. Parker, 247–65. Routledge, 2013.
- Mollier, Jean-Yves, and Bruno Dubot. *Histoire de la librairie Larousse, 1852–2010*. Paris: Fayard, 2012.
- Mollier, Jean-Yves. *Louis Hachette (1800–1864): le fondateur d'un empire*. Paris: Fayard, 1999.
- Montalbo, Adrien. "Primary Education, Industrial Activities and Economic Growth in Nineteenth-Century France." Thèse de doctorat, Paris, EHESS, 2019.
- Morris, Norman. "Public Expenditure on Education in the 1860s." *Oxford Review of Education* 3, no. 1 (1977), 3–19.

- Moulin, Léonard. "Frais d'inscription dans l'enseignement supérieur et régimes d'État-providence : une analyse comparative." *Éducation et sociétés* 36, no. 2 (2015), 119–41.
- Müller, Detlef K, Fritz K Ringer, and Brian Simon. *The Rise of The Modern Educational System: Structural Change And Social Reproduction, 1870–1920*. Cambridge: Cambridge University Press, Éd. de la Maison des sciences de l'homme, 1989.
- Nicolas, Gilbert. *Le Grand débat de l'école au XIXe siècle: les instituteurs du Second Empire*. Paris: Belin, 2004.
- Nilsson, Anders, Lars Pettersson, and Patrick Svensson. "Agrarian Transition and Literacy: The Case of Nineteenth Century Sweden." *European Review of Economic History* 3, no. 1 (1999), 76–96.
- Nilsson, Anders. "Vocational Education and Training – an Engine for Economic Growth and a Vehicle for Social Inclusion?" *International Journal of Training and Development* 14, no. 4 (2010), 251–72.
- Nilsson, Anders. *Studiefinansiering och social rekrytering till högre utbildning 1920–1976*. Lund: Ekonomisk-historiska föreningen, 1984.
- Nilsson, Anders. *Yrkesutbildningen i Sverige 1850–1910*. Uppsala: Föreningen för svensk undervisningshistoria, 2008.
- Oberlé, Raymond. "L'Histoire de l'éducation, contribution à l'histoire sociale : l'exemple de Mulhouse." *Annales. Économies, sociétés, civilisations* 15, no. 5 (1960), 963–73.
- Oberlé, Raymond. *L'Enseignement à Mulhouse de 1798 à 1870*. Paris: Les Belles Lettres, 1961.
- Olofsson, Jonas. *Svensk yrkesutbildning: vägval i internationell belysning*. Stockholm: SNS förlag, 2005.
- Ozouf, Mona. *L'École, l'Église et la République: 1871–1914*. Paris: A. Colin, 1963.
- Patin, Nicolas. "Les thèse soutenues en histoire contemporaine (2014–2018). Un bilan." Billet. Historiens contemporanéistes (blog). Accessed 14 February 2022. <https://ah-cesr.hypotheses.org/2096>.
- Pettersson, Lars. "Reading and Writing Skills and the Agrarian Revolution: Scanian Peasants During the Age of Enclosure." *Scandinavian Economic History Review* XLIV, no. 3 (1996).
- Piekalkiewicz Jan, "Les travaux préliminaires sur les statistiques des finances publiques", *Bulletin de l'Institut International de Statistiques* 35, no. 3 (1931), 617–719.
- Piketty, Thomas. *Capital and Ideology*. Cambridge, MA: Belknap Press, 2020.
- Poucet, Bruno. *La liberté sous contrat: une histoire de l'enseignement privé*. Paris: Fabert, 2009.
- Prost, Antoine. "Morphologie et sociologie des lycées et collèges (1930–1938)." *Histoire de l'éducation*, no. 146 (2016), 53–110.
- Prost, Antoine. *Histoire de l'enseignement en France, 1800–1967*. Paris: Armand Colin, 1968.
- Reid, Donald. "Schools and the Paternalist Project at Le Creusot, 1850–1914." *Journal of Social History* 27, no. 1 (1993), 129–43.
- Riccardini, Fabiola. "Towards Satellite Accounts on Education and Human Capital in OECD Countries." In *A New Research Agenda for Improvements in Quality of Life*, edited by Filomena Maggino, 205–30. Social Indicators Research Series. Cham: Springer International Publishing, 2015.

- Rice, Jennifer King, David Monk, and Jijun Zhang. "School Finance: An Overview." In *The Economics of Education (Second Edition)*, edited by Steve Bradley and Colin Green, 333–44. Academic Press, 2020.
- Ringer, Fritz K. *Education and Society in Modern Europe*. Bloomington, Ind.: Indiana University Press, 1979.
- Ruiz, Émilien. "Retour sur 'l'anachronisme des séries longues.'" Billet. Penser/Compter (blog), 5 October 2014. <http://compter.hypotheses.org/768>.
- Sandberg, Lars G. "The Case of the Impoverished Sophisticate: Human Capital and Swedish Economic Growth before World War I." *The Journal of Economic History* 39, no. 1 (1979), 225–41.
- Sanderson, Michael. "Educational and Economic History: The Good Neighbours." *History of Education* 36, no. 4–5 (2007), 429–45.
- Savoie, Philippe, ed. *Un nouveau champ pour l'histoire: économie et finances de l'éducation*. Paris: INRP, 1993.
- Savoie, Philippe. *La Construction de l'enseignement secondaire (1802–1914). Aux origines d'un service public*. Lyon: ENS, 2013.
- Savoie, Philippe. *Les Enseignants du secondaire, XIXe–XXe siècles: le corps, le métier, les carrières: textes officiels*. Tome 1, 1802–1914. Paris: INRP/Economica, 2000.
- SCB. *Elever i obligatoriska skolor 1847–1962*. Stockholm: Statistiska Centralbyrån, 1974.
- Schön, Lennart and Olle Krantz. "New Swedish Historical National Accounts since the 16th Century in Constant and Current Prices." *Lund Papers in Economic History*. General Issues no. 140 (2015), 1–31.
- Simien, Côme. *Le Maître d'école du village, au temps des Lumières et de la Révolution*. Paris: CTHS, to be published.
- Sjöberg, Mats. *Att säkra framtidens skördar: barndom, skola och arbete i agrar miljö. Bolstad pastorat 1860–1930*. Linköping: Linköping University, 1996.
- Suteau, Marc. "Une ville et ses écoles. Nantes 1830–1940." Doctorat de sociologie, Paris 8, 1995.
- Suteau, Marc. *Une ville et ses écoles: Nantes, 1830–1940*. Rennes: Presses universitaires de Rennes, 1999.
- Svensson, Patrick. "Peasants and Entrepreneurship in the Nineteenth-Century Agricultural Transformation of Sweden." *Social Science History* 30, no. 3 (2006), 387–429.
- Swift, Fletcher Harper. *A History of Public Permanent Common School Funds in the United States, 1795–1905*. H. Holt and Company, 1911.
- Talbott, John E. *The Politics of Educational Reform in France, 1918–1940*. Princeton, N.J., Etats-Unis d'Amérique: Princeton University Press, 1969.
- Théret, Bruno. "Les Dépenses d'enseignement et d'assistance en France au XIXe siècle: une réévaluation de la rupture républicaine." *Annales. Histoire, Sciences Sociales* 46, no. 6 (1991), 1335–74.
- Thivend, Marianne. "L'École et la ville: Lyon, 1870–1914." Doctorat d'histoire, Université Lumière (Lyon), 1997.
- Thivend, Marianne. *L'École républicaine en ville: Lyon, 1870–1914*. Paris: Belin, 2006.
- Waldenström, Daniel. "Is Swedish Research in Economic History Internationally Integrated?" *The Scandinavian Economic History Review* 53, no. 2 (2005), 50–77.

- Waldow, Florian. "Measuring Human Capital Formation in Sweden in the Nineteenth and Early Twentieth Centuries." *Historical Social Research* 27, no. 4 (2002), 140–56.
- Waldow, Florian. "The Suggestive Power of Numbers: Some Remarks on the Problem of the Accuracy of Quantitative Indicators in Comparative Historical Research." *Historical Social Research* 26, no. 4 (2001), 125–40.
- Waldow, Florian. *Utbildningspolitik, ekonomi och internationella utbildningstrender i Sverige 1930–2000*. Stockholm: Stockholms universitets förlag, 2008.
- Wallin, Bodil. "Att forma en skolform: svensk folkskolepolitik vid mitten av 1800-talet." in *ideologi och socialpolitik i 1800-talets Sverige: Fyra studier*, edited by Ingrid Hammarström, Väinö Helgesson, Barbro Hedvall, Christer Knuthammar and Bodil Wallin, 375–408. Stockholm: Almqvist & Wiksell International, 1978.
- Warren, Donald. "Beginnings Again: Looking for Education in American Histories." *History of Education Quarterly* 43, no. 3 (2003), 393–409.
- Westberg, Johannes. "A Conflicted Political Will to Levy Local Taxes: Inequality and Local School Politics in Sweden, 1840–1900." *Nordic Journal of Studies in Educational Policy* 4, no. 1 (2018), 3–12.
- Westberg, Johannes. "'Freedom for All! Injustice for None!' The Peasant Estate and the Funding of Elementary Schools in Rural Sweden, 1840–41." In *Erziehung Und Bildung in Ländlichen Regionen – Rural Education*, edited by Claudia Gerdenitsch and Johanna Hopfner, 219–29. Frankfurt am Main: Peter Lang, 2011.
- Westberg, Johannes. "Special Issue: The History of Educational Finance." *Nordic Journal of Educational History* 2, no. 1 (2015),
- Westberg, Johannes. "The Distribution of Government Grants in Sweden, 1865–1900." In *History of Schooling: Politics and Local Practice*, edited by Carla Aubry and Johannes Westberg, 15–37. Frankfurt am Main: Peter Lang, 2012.
- Westberg, Johannes. "When Teachers Were Farmers: Teachers' Allotted Farms and the Funding of Mass Schooling, 1838–1900." *Nordic Journal of Educational History* 2, no. 1 (2015), 23–48.
- Westberg, Johannes. *Funding the Rise of Mass Schooling: The Social, Economic and Cultural History of School Finance in Sweden, 1840–1900*. Cham: Palgrave Macmillan, 2017.
- Westberg, Johannes. "How Did Teachers Make a Living? The Teacher Occupation, Livelihood Diversification and the Rise of Mass Schooling in Nineteenth-Century Sweden." *History of Education* 48, no. 1 (2019), 19–40.
- Wolff, Edward N., William J. Baumol, and Anne Noyes Saini. "A Comparative Analysis of Education Costs and Outcomes: The United States vs. Other OECD Countries" *Economics of Education Review* 39 (2014), 1–21.
- Ydesen, Christian. *The OECD's Historical Rise in Education: The Formation of a Global Governing Complex. Global Histories of Education*. Cham, Switzerland: Palgrave Macmillan, 2019.
- Zuber, Stéphane. "Évolution de la concentration de la dépense publique d'éducation en France: 1900–2000." *Éducation & Formations* no. 70 (2004), 97.
- Zuber, Stéphane. "L'Inégalité de la dépense publique d'éducation en France. 1900–2000." *Mémoire de DEA, EHESS*, 2003.
- Åkerlund, Andreas. *Public Diplomacy and Academic Mobility in Sweden: The Swedish Institute and Scholarship Programs for Foreign Academics, 1938–2010*. Lund: Nordic Academic Press, 2016.