

Transnational Private Authority in the Sphere of Education*

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ABSTRACT

It seems that an ever-shorter temporal rhythm is gaining ground with the end of the “short twentieth century,”¹ challenging the modern temporal horizon. The emerging economy relies on a continuous stream of scientific and technical knowledge closely related to information technology and networks. The increasing compression of both time and space has major consequences for the governance of the economy and the setting of authoritative standards in this sphere. This paper explores the consequences for education and training and its governance, where continuing education has become crucial. It studies the setting of authoritative standards in the field of information and communication technology (ICT) training, which has become vital for the knowledge-based economy. I will show how the standardization of these trainings by way of third-party certifiers establishes a mode of private coordination between companies, sectors and across national borders. A closer examination of competing claims to authority in this field provides interesting insights into the enabling conditions of this mode of coordination and also brings a geopolitical dimension to the fore.

I. INTRODUCTION

This paper studies the global market in further education, and the enabling conditions for standard settings in this field. Further education has become crucial in a “perpetual innovation economy.”² With knowledge, information and communication technology (ICT) at its center, the perpetual innovation economy has paved the way for “reflexive business knowledge”³ and a “new spirit of capitalism.”⁴ This new

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¹ See generally ERIC HOBBSBAWM, AGE OF EXTREMES: THE SHORT TWENTIETH CENTURY 1914-1991 (Abacus 1995) (1994) (labeling the period from 1914 to 1991 as “the Short Twentieth Century”).

² DAN SCHILLER, DIGITAL CAPITALISM 157 (1999) (citing Tessa Morris-Suzuki).

³ See generally NIGEL THRIFT, KNOWING CAPITALISM 75–91 (Mike Featherstone ed., 2005) (detailing the rise of reflexive business knowledge’s globalization in capitalism).

⁴ See generally LUC BOLTANSKI & ÈVE CHIAPELLO, DER NEUE GEIST DES KAPITALISMUS [THE NEW SPIRIT OF CAPITALISM] (2003) (arguing that capitalism took on a new spirit after the 1970s when it

development is supported by what Chris Muellerleile and Susan Robertson call the digital bureau, alluding to Weber's notion of rule-based rationality that has now become digital rationality.⁵ However, this digital infrastructure would be of little relevance in the absence of skills that allow the best use to be made of it. Against this broader backdrop, we can better understand the increasing importance of ICT training and certification, giving rise to what Clifford Adelman calls a "parallel universe of postsecondary credentials."⁶ This private universe provides its standard-setting services, not only to individuals and companies, but also to public higher education (HE) institutions. Like continuing education and training (CET) in general, the parallel universe blurs the lines between formal, non-formal, and informal education. Many certifications build on each other, emulating the distinction between primary, secondary, and tertiary education. A number of programs require prior work experience in the relevant field and recognize it subsequently by a certification issued upon completion of the course. The training programs often go beyond technical skills in a narrow sense. They also test soft skills such as organizational skills, attentiveness, and self-reliance, and evaluate personal attributes such as motivation, ethics, and diplomacy.

ICT training providers and certifiers are merely the tip of the iceberg looming in the private "parallel universe of post-secondary credentials" (Adelman). The body of this iceberg is a plethora of institutes, professional associations, and for-profit firms that have entered the continuing education and training market. A case in point is Mercer, one of the largest human resources consulting firms with about 22,000

abandoned the hierarchical Fordist work structure and developed a new network-based form of organization at the cost of material and psychological security).

⁵ Chris Muellerleile & Susan L. Robertson, *Digital Weberianism: Bureaucracy, Information, and the Techno-Rationality of Neoliberal Capitalism*, 25 Ind. J. Global Legal Stud. 1, XX (2018).

⁶ Clifford Adelman, *A Parallel Universe: Certification in the Information Technology Guild*, 32 CHANGE 20, 20 (2000).

employees operating in more than 140 countries.⁷ Mercer provides human resource management (HRM) training to a broad range of companies. Manpower Group provides similar services by combining executive research with recruitment services and human resource (HR) training on a global scale.⁸ It has enhanced the skills of over eleven million individuals by way of its training and development center.⁹

In this contribution, I will first outline the broader context of this parallel universe and the challenges it poses to the literature that seeks to identify varieties of capitalism. I will show that the certifiers make a coordination possible that is neither typical for coordinated market economies nor for liberal market economies. It is rather part of an emerging, genuinely international political economy. I will turn to the literature of international private authority with a view to getting a better understanding of this mode of coordination and the setting of international private standards. Going beyond a simple mapping of the different modes, I am particularly interested in the enabling conditions of the authority of these private standards. The analytical framework developed in the first part will provide the backdrop against which I will explore the different ways in which the international training providers seek to underpin their authority. The study focuses on ICT training since this type of further training has become the most internationalized form. I will conclude by highlighting the role of the EU in underpinning one type of private authority and its geopolitical implications.

II. THE WILLIAMSONIAN TURN

It would be too simple to equate the emerging “parallel universe of

⁷ *About Mercer*, MERCER, <https://www.mercer.com/about-mercero.html> (last visited Oct. 5, 2017).

⁸ See KORN FERRY, <http://www.kornferry.com> (last visited Oct. 5, 2017); *Manpower*, MANPOWERGROUP, <http://www.manpowergroup.com/workforce-solutions/manpower> (last visited Oct. 5, 2017).

⁹ *ManpowerGroup Corporate Fact Sheet 2016*, MANPOWERGROUP, <http://www.manpowergroup.com/wps/wcm/connect/0f410928-6700-4a10-a6cb-e697b7df7e94/ManpowerGroup-Fact-Sheet-13.pdf?MOD=AJPERES> (last visited Oct. 5, 2017).

postsecondary credential”¹⁰ with the privatization of public education. Such a conclusion overlooks the long tradition of vocational and corporate education companies have provided. The way the training had been organized has, however, changed over time, reflecting a major struggle over the ownership of knowledge between the crafts, the employers, and the employees with their representatives.¹¹ The parallel universe is part of a new, important change. Drawing on a distinction introduced by the German sociologist Wolfgang Streeck, we can understand it as a move from a “Durkheimian” to a “Williamsonian” type of institutional organization of the private sector transforming the “coordinated market economy” (CME).¹² The Williamsonian turn underpins decentralization, fragmentation, and diversification in the coordination of the economy, where competition has become intensified. This change, Streeck argues, weakens the networks among firms, as well as the role of trade unions, especially in countries where trade unions once had a say in the design of vocational and corporate education.

Kathleen Thelen and Marius R. Busemeyer have studied the consequences of the Williamsonian turn for vocational and corporate education, and identified a move to segmentalism.¹³ Segmentalism differs from the collectivism of CMEs and its cross-sectoral coordination. However, segmentalism also differs from the neo-liberal laissez-faire of liberal market economies (LMEs) where short-term and adversarial relations between the different economic actors prevail, with major consequences for firm-based

¹⁰ See Adelman, *supra* note 6, at 20.

¹¹ For an excellent overview, see KATHLEEN THELEN & MARIUS R. BUSEMEYER, *Institutional Change in German Vocational Training: From Collectivism toward Segmentalism*, in *THE POLITICAL ECONOMY OF COLLECTIVE SKILL FORMATION* 68, 68–100 (Marius R. Busemeyer & Christine Trampusch eds., 2012).

¹² See WOLFGANG STREECK, *RE-FORMING CAPITALISM: INSTITUTIONAL CHANGE IN THE GERMAN POLITICAL ECONOMY* 157 (2009); see also *VARIETIES OF CAPITALISM: THE INSTITUTIONAL FOUNDATIONS OF COMPARATIVE ADVANTAGE* (Peter A. Hall & David Soskice eds., 2001) (discussing CMEs in greater detail).

¹³ See generally THELEN & BUSEMEYER, *supra* note 11, at 87. See also Martin Baethge, *Glanz und Elend des Deutschen Korporatismus in der Berufsbildung*, 52 *WSI MITTEILUNGEN* 489 (1999).

education and training. The hire-and-fire approach of managerial unilateralism in LMEs creates few incentives to invest in the training of employees.

In her study of the emerging segmentalism, Thelen refers to the Japanese keiretsu system as the historical predecessor that emerged after World War II.¹⁴ Different suppliers across a broad range of industries are grouped in this system around a major manufacturer, a trading company and/or a bank. Informal business groups, established through interlocking business relationships and shareholdings along the lines of major conglomerates, are key coordinators. The form corporate education has taken in this system mirrors this broader structure. The conglomerates with their large internal labor market provide skills that are in close alignment with their needs. In more general terms, segmentalism thus describes a constellation where large companies keep investing in the qualifications of their employees. However, they use the power of their size to ask for very firm-specific skills to the detriment of the more holistic principle of (regulated) occupation (*Berufsprinzip*) that used to inform collectivist arrangements.¹⁵

Thelen and Busemeyer have made a very important intervention into the Varieties of Capitalism (VoC) discussion; their analysis makes it possible to refute the convergence thesis, according to which CMEs are about to be transformed into liberal market economies (LMEs). The Williamsonian turn and segmentalism point to an important transformation of coordination that is neither a CME type nor a LME type. Maybe because Thelen and Busemeyer have the Japanese model in mind, their analysis focuses on large companies and the way they use their internal labor market to promote the modularization of firm-based training. They pay surprisingly little attention to the increasingly internationally active providers of further education and training, which

¹⁴ See KATHLEEN THELEN, HOW INSTITUTIONS EVOLVE 172–73 (2004).

¹⁵ See Mari Sako, *Skill Testing and Certification in Japan* 3 (Econ. Dev. Inst. of the World Bank, Working Paper No. 95-02, 1995).

are at the center of this contribution. In the next two sections, I will explore in more detail what we can learn from the literature on transnational private authority in order to better understand these providers, their standard-setting authority and their role in a global economy.

III. TRANSNATIONAL PRIVATE AUTHORITY

A significant body of literature on private transnational authority has emerged in recent years, examining how private actors have become important as “makers of global public policy.”¹⁶ Susan George refers to multinational companies as “shadow sovereigns.”¹⁷ Given their market power and size, they do indeed resemble the keiretsu system with its large conglomerates. The “giant firms,”¹⁸ as Colin Crouch calls them, use their “extrastatecraft”¹⁹ to establish a global economic infrastructure. We could consider the East India Company, or the company-state as Philip Stern calls it in his study, a historical forerunner.²⁰ But the extrastatecrafting has become much more sophisticated and diverse, mirroring the increased complexity of the global economy. Some companies have specialized in providing international coordination services. Timothy Sinclair’s study, for instance, points out how rating agencies have established a new global infrastructure in reaction to the weakening of the banks’ role as

¹⁶ See Timothy J. Sinclair, *The Infrastructure of Global Governance: Quasi-Regulatory Mechanisms and the New Global Finance*, 7 *GLOB. GOVERNANCE* 441, 441–51 (2001). For an excellent introduction on how transnational corporations gain prominence see Evelyne Léonard et al., *Multinational Corporations as Political Players*, 20 *TRANSFER: EUR. REV. LAB. & RES.* 171, 173–75 (2014).

¹⁷ See generally SUSAN GEORGE, *SHADOW SOVEREIGNS: HOW GLOBAL CORPORATIONS ARE SEIZING POWER* (2015) (analyzing the rise of shadow sovereigns and their increasing reach into the global economic order by way of lobbying governments and international organizations).

¹⁸ Colin Crouch, *The Global Firm: The Problem of the Giant Firm in Democratic Capitalism*, in *THE OXFORD HANDBOOK OF BUSINESS AND GOVERNMENT* 148, 148–72 (David Coen, Wyn Grant, & Graham Wilson eds., 2010).

¹⁹ See generally KELLER EASTERLING, *EXTRASTATECRAFT* 15 (2014) (defining extrastatecraft as “a portmanteau describing the often undisclosed activities outside of, in addition to, and sometimes even in partnership with statecraft”).

²⁰ See PHILIP J. STERN, *THE COMPANY-STATE: CORPORATE SOVEREIGNTY AND THE EARLY MODERN FOUNDATIONS OF THE BRITISH EMPIRE IN INDIA* (2011).

intermediaries between lenders and borrowers.²¹ Claire Cutler describes this type of service providers accordingly as “international coordination firms.”²²

One way of studying the internationalization of private coordination is by way of exploring the conditions underpinning their authority. Max Weber pointed out that not every power has authority.²³ An entity—be it a person, an organization, or an office—can be *in* authority, that is, have the right to command. It is, however, only *an* authority when it has the credibility and legitimacy to command. What provides credibility and legitimacy has changed over time, moving from traditional and charismatic authority to the legal-rational authority of modern capitalist societies. But rules and law are necessary but not yet sufficient conditions to turn an entity *in* authority into *an* authority in modern societies, Weber argues. The authority needs to draw on substantive rationality, which delineates the goals of actions in terms of ethical imperatives and expediential and precautionary rules.²⁴ This has major implications for the enabling conditions of a Weberian notion of legitimacy. Without the substantive rationality, formal rationality lacks legitimacy. It risks becoming an iron cage deprived of the capacity to make the wall of the cage porous again, so that the broader societal context can be considered. Weber studied national societies, but a number of scholars have used his account of power fruitfully in analyzing the authority of international organizations in setting standards and disseminating them as part of the expertise they

²¹ See Sinclair, *supra* note 16, at 444; see also Chris Muellerleile, *Calming Speculative Traffic: An Infrastructural Theory of Financial Markets*, *Economic Geography* (forthcoming) (arguing that the concept of infrastructure offers geographers a useful framework to understand the resilient influence of financial markets on the socioeconomy).

²² See A. Claire Cutler, *Private International Regimes and Interfirm Cooperation*, in *THE EMERGENCE OF PRIVATE: AUTHORITY IN GLOBAL GOVERNANCE* 23, 28 (Rodney Bruce Halland & Thomas J. Biersteker eds., 2002); see also Andreas Nölke, *Private International Norms in Global Economic Governance: Coordination Service Firms and Corporate Governance* (Amsterdam: Vrije Universiteit, Working Paper No. 06/2003, 2003) (explaining transnational private self-regulation’s impact on the current national models of corporate governance).

²³ MAX WEBER, *ECONOMY AND SOCIETY* 212–216 (Guenther Roth & Claus Wittich eds., 1978).

²⁴ See *id.* at 85.

provide.²⁵ But how do private actors gain authority in setting international standards? The literature on transnational private authority provides interesting insights.

IV. ENABLING CONDITIONS

The capacity to provide exclusive expertise across national borders is vital for transnational private authority. The expertise can take different forms. In his study of the authority of rating agencies, Sinclair points out the importance of the capacity to produce knowledge of “particular circumstances of time and place”²⁶ while also being able to simplify it. For rating agencies, simplification takes place by way of a combination of As, Bs, and Cs. Hence, the authority of this type of expertise is based on the capacity to simultaneously account for and reduce the complexity of reality. Similarly, contextualization and abstraction characterize the global rankings of universities. However, this reduction of complexity does not have a coordination effect if it has to compete with too many other suggestions for reducing complexity. The evaluation of rating agencies, for instance, will no longer influence economic decisions if there are too many rating agencies of equal reputation providing very different results.²⁷ In other words, the authority of private evaluations and standards also depends on their capacity to keep competing interpretations at bay. One way of gaining such authority is borrowing the exclusivity of public authority by integrating public entities into an international standard-setting process. The exact composition of private and public entities constituting such “global hybrids”²⁸ can differ. Some international

²⁵ For a first important attempt see Michael N. Barnett & Martha Finnemore, *The Politics, Power and Pathologies of International Organizations*, 53 INT’L ORG. 699 (1999).

²⁶ Sinclair, *supra* note 16, at 443.

²⁷ It is no coincidence therefore that there are only three big rating agencies: Standard & Poor's, Moody's, and Fitch Group.

²⁸ See Jean-Christophe Graz, *Standardizing Services: Transnational Authority and Market Power*, in HANDBOOK OF THE INTERNATIONAL POLITICAL ECONOMY OF PRODUCTION 132, 140 (Kees Van der Pijl ed., 2015).

norms include very few public bodies, while others give them a stronger say so that the standards gain a quasi-public status. A case in point is the International Organization for Standardization (ISO).²⁹ Many of the standard-setting bodies that are involved in developing ISO standards include representatives of public authorities. The integration of public entities increases the legitimacy of the exclusivity of ISO standards, turning them into an important international reference. Such legitimacy is particularly relevant when private standards are used in international dispute settlements regulated by international public law, where states are still the main legal subject. Providing purely private standards with such a quasi-public law status is still hotly contested.³⁰

The inclusion of a broad range of different private actors is another way to ensure the legitimacy of standards. A well-studied case is the Forest Stewardship Council (FSC). Maria Tysiachniouk calls the FSC a “governance generating network (GGN)”³¹ and points out the key role of deliberation underpinning the global authority of its standards.³² Every third year the members of FSC meet to discuss the guidelines for forest management, which inform the certifications of forest management and forest products the FSC carries out. The governance generating networks illustrate the importance of mediation between the particular context and the general principles informing the guidelines. The standards this mediation produces are more likely to be

²⁹ This not-for-profit international organization with 162 national members has published over 21,000 international standards and related documents, which cover almost every industry, from technology to food safety, agriculture, healthcare, and more recently education. *See generally* CRAIG MURPHY & JOANNE YATES, *THE INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO)* 25–45 (2009) (discussing ISO’s structure and functions); KRISTINA TAMM HALLSTRÖM, *ORGANIZING INTERNATIONAL STANDARDIZATION* 27–29 (2004) (discussing the history and function of ISO).

³⁰ *See generally* Jill E. Hobbs, *Public and Private Standards for Food Safety and Quality: International Trade Implications*, 11 *ESTEY CTR. J. INT’L L. & TRADE POL’Y* 136 (2010) (discussing problems with private standards in intergovernmental agreements).

³¹ MARIA S. TYSIACHNIOUK, *TRANSNATIONAL GOVERNANCE THROUGH PRIVATE AUTHORITY* 71 (2012).

³² *See* KRISTINA TAMM HALLSTRÖM & MAGNUS BOSTRÖM, *TRANSNATIONAL MULTI-STAKEHOLDER STANDARDIZATION* (2010); *see also* Jaye Ellis, *Constitutionalization of Nongovernmental Certification Programs*, 20 *IND. J. GLOBAL LEGAL STUD.*, 1035 (2013) (discussing the authority and the validity of the rules, standards, and decision-making processes that certification programs have put in place).

perceived as representing the general interest and general rules imposed from the top. Deliberation and mediation are thus vital for establishing what Weber calls substantive rationality, making the iron cage of rules more porous, so that the broader societal context can be considered. They make private standards more responsive to their environment and, as a consequence, increase the legitimacy of international rules and standards.

In other words, private standards gain authority if they are perceived, firstly, to be capable of simultaneously accounting for and reducing the complexity of reality, and secondly, to represent the general interest. In both cases they need to be able to keep competing interpretations at bay in order to ensure the coordination effect of their standards. The remainder of this article will study the extent to which these enabling conditions are also vital for establishing the private authority of ICT training and certifications.

V. THE PRIVATE AUTHORITY OF ICT TRAINING³³

The certification of ICT skills has become a global trend. A recent survey focusing on European Union (EU) countries estimated that up to 50 percent of the 6.67 million members of the ICT workforce in the EU have at least one ICT certification.³⁴ Many of these certifications are valid only for a certain period of time and thus need an upgrade, which turns ICT training and certification into a fast-growing business. TrainingIndustry.com, an online publication platform for IT trainers, estimates the

³³ See generally Eva Hartmann, *Education Outside the Public Limelight: The "Parallel Universe" of ICT Certifiers*, in *WORLD YEARBOOK OF EDUCATION 2016* 228 (Antoni Verger, Christopher Lubienski & Gita Steiner-Khamsi eds., 2016) (exploring the privatization of post-secondary education by studying ICT training and certification).

³⁴ WERNER B. KORTE ET AL., *TOWARDS A EUROPEAN QUALITY LABEL FOR ICT INDUSTRY TRAINING AND CERTIFICATION* 49 (2013). See also KARSTEN GAREIS ET AL., *E-SKILLS FOR JOBS IN EUROPE: MEASURING PROGRESS AND MOVING AHEAD* (2014) (examining the development of ICT practitioner skills in Europe).

global volume of this training and certification market was \$2.62 billion in 2014.³⁵ However, the exact size of the market is difficult to determine due to a lack of reliable data.

There is a plethora of different certifications, creating a rather fragmented and confusing landscape containing both key and niche players. In his study of the parallel universe, mainly focusing on the USA, Adelman lists over 100 ICT certifiers who offer more than 1,300 individual certification products.³⁶ In this study I will distinguish between three (ideal) types of certifiers: *formal post-secondary education providers*, *vendor-specific certifiers*, and *vendor-independent certifiers*.³⁷ They all differ in terms of the enabling conditions of their authority.

Formal post-secondary education has the least authority. This may come as a surprise given that higher education was for thirty years the main sphere for qualifying ICT professionals.³⁸ However, such programs came under a great deal of pressure in the 1980s, when the demand for developers and programmers substantially increased. This change opened the door for individuals with qualifications outside the electrical engineering discipline. While post-secondary education institutions still have formal authority, they are often seen as too slow in their reaction to be able to adjust quickly enough to new skill needs.³⁹ Thus, they have lost the status of *an* authority while still being *in* authority to award degrees.⁴⁰

³⁵ *IT Training*, TRAINING INDUSTRY, <https://www.trainingindustry.com/wiki/entries/it-training.aspx> (last visited Oct. 5, 2017).

³⁶ Adelman, *supra* note 6.

³⁷ See Roman Povalej & Peter Weiß, *Survey of ICT Certification Systems for ICT Professionals in Europe*, UPGRADE, June 2007, at 36, 39.

³⁸ Thomas Hoyle, *Credentials for Success: An Evolution in the It Industry*, T+D, July 2010, at 48, 48. See generally J. GLENN BROOKSHEAR, *COMPUTER SCIENCE* (12th ed. 2014) (providing an overview of computer science).

³⁹ See JOSHUA HAIMSON & MICHELLE VANNOY, *DEVELOPING THE IT WORKFORCE: CERTIFICATION PROGRAMS, PARTICIPANTS AND OUTCOMES IN HIGH SCHOOLS AND TWO-YEAR COLLEGES* xi (2004).

⁴⁰ However, a closer look at the wage structure in the ICT labor market indicates that formal qualifications continue to be decisive at the upper end of the qualification scale. The parallel universe has predominately gained momentum at bachelor's and master's degree levels, where ICT certificates –

In reaction, many HE institutions have started to “borrow” authority by way of outsourcing part of their IT training and testing to private ICT certifiers. Some HE institutions have even agreed to waive some of their general entrance requirements for holders of ICT certifications.⁴¹ This loss of public authority illustrates well how the acceleration of economic processes, translating into important changes of the time horizon, has undermined the standard-setting and coordination role of public institutions. The weakening of this type of coordination is an important reason why private standard setters have gained in importance in a Williamsonian era. However, the conditions underpinning the authority of vendor-specific certifiers and vendor-independent certifiers differ fundamentally, as I will show in the next sections.

VI. VENDOR-SPECIFIC CERTIFIERS

Vendor-specific certifiers have become the most important standard setters.⁴² Selling training and certification that is closely related to the certifiers’ own software is part of their diversification strategy. Microsoft, for instance, awards the title of Microsoft Technology Associate, which can be upgraded to Microsoft Certified Solutions Associate or, with further training, to Microsoft Certified Solutions Expert. A study by the European Centre for the Development of Vocational Training (CEDEFOP) lists over eighty vendor-specific certifiers.⁴³ Important players include Microsoft, Adobe, Cisco, Oracle, Novell, Hewlett Packard, and Sun Microsystems.

In many cases, the software companies do not provide the training themselves but authorize training centers to train. For instance, to become a Microsoft learning

not degrees – are more likely to determine wage levels, according to a number of studies: See Kenneth R. Bartlett et al., *The Perceived Influence of Industry-Sponsored Credentials on the Recruitment Process in the Information Technology Industry: Employer and Employee Perspective*, 21 J. CAREER & TECH. EDU. 51 (2005); Jones Tegan et al., *Certmag’s 2006 Salary Survey*, CERTIFICATION MAG., Dec. 2006, at 16. This is less likely to be the case for ICT professionals with a PhD.

⁴¹ See SCHILLER, *supra* note 2, at 143–202.

⁴² See CEDEFOP, ICT SKILLS CERTIFICATION IN EUROPE 8 (2006); Adelman, *supra* note 6, at 20–29.

⁴³ CEDEFOP, *supra* note 42, at 102–11.

partner, the center's staff has to undergo thorough training in different Microsoft products and they must pass an exam.⁴⁴

The authority of the vendor-certifiers is a stand-alone authority, which means that they are not accredited by a legislative and professional authority, as is the case with many other certifiers.⁴⁵ The source of their authority is their software and the oligopolistic structure of the software market, backed up by the exclusivity guaranteed by intellectual property rights. Their authority benefits from a winner-takes-all logic. The larger the market share, the more likely employers know the certification, which increases the certification's value across national borders.⁴⁶ In light of global migration, widely known certifications benefit from the attractiveness of the labor market of the certifier's home country. IT professionals from low-income countries may take an exam offered by an internationally known certifier to improve their access to high-income labor markets. Some immigration authorities have started to use this type of certification alongside formal qualifications in assigning work permits.⁴⁷ Certifiers also benefit from the international activities of other service providers. Multinational companies are likely to prefer employees with certifications they know when they employ abroad. Internationally known certifications also play an important organizational role in the field of subcontracting. They can become indicators of the subcontracting companies' quality, especially when these companies are situated in countries with a formal education system that is substantially different from that of the outsourcing companies' country of origin. These different examples illustrate the important role that vendor-specific certifiers have started to play, not only as providers

⁴⁴ See *Microsoft Learning Partner: Requirements, Benefits, How to Become One*, WINDOWS CLUB, <http://www.thewindowsclub.com/microsoft-learning-partner> (last visited Oct. 5, 2017).

⁴⁵ See PHILIPPE TISSOT, *TERMINOLOGY OF VOCATIONAL TRAINING POLICY* 18 (2004).

⁴⁶ See Kathryn Tyler, *Carve Out Training?*, HR MAG., Feb. 2004, at 52, 54.

⁴⁷ See, e.g., Kellye Whitney, *The International Market for Certification*, CERTIFICATION MAG., May 9, 2007 at 20, 23.

of skills and standards for education in an international “credential society”⁴⁸. They also help improve coordination between firms, across sectors and national borders. Scholars who merely focus on country-specific modes of coordination risk overlooking this emerging international mode of coordination.

However, the strength of vendor-specific certifiers is also their weakness. Their oligopolistic market power raises major concerns. They have been criticized for being too biased toward their own solutions and technology, and are seen as only being interested in building a pool of trusted individuals who know how to implement and support their product.⁴⁹ It is feared that such a bias could easily lead to incorrect resource allocations and undermine the general interest. Against the backdrop of these limits we can better understand the enabling conditions of the authority of vendor-independent certifiers.

VII. VENDOR-INDEPENDENT CERTIFIERS

The training and certification vendor-independent providers offer differ in terms of content. They focus more on issues, techniques, skills, and knowledge that are independent of a specific ICT product, and are therefore often more generic in their orientation. But they are also more inclusive in their institutional set-up. Some providers are closely affiliated with associations of IT professionals. A case in point is the British Computer Society (BCS) and its Chartered Institute for IT.⁵⁰ BCS provides predominately IT training and certification in the British context, but has also started to expand its services overseas by way of its 100 accredited training organizations. One of the most important profession-based certifiers is the Council of European

⁴⁸ See generally RANDALL COLLINS, *THE CREDENTIAL SOCIETY* (1979) (explaining the rise of the credential system and education’s role in standardizing it).

⁴⁹ See Matthew French, *Why IT Certification Matters*, TECHCENTRAL (Apr. 6, 2010), <https://techcentral.co.za/why-it-certification-matters/13743/>.

⁵⁰ BRITISH COMPUT. SOC’Y, <http://certifications.bcs.org> (last visited Oct. 5, 2017).

Professional Informatics Societies (CEPIS), which was established in 1989 by nine European informatics societies and has over 450,000 ICT and informatics professionals as members in thirty-two European countries.⁵¹ CEPIS offers the European Certification of Informatics Professionals (EUCIP) for IT professionals, as well as the European/International Computer Driving Licence (ECDL/ICDL) certification program designed for a broader clientele. ECDL/ICDL certification has been awarded to more than 14 million people in over 100 countries via a network of nearly 24,000 ECDL Accredited Test Centres (ATCs).⁵²

Other vendor-independent standard setters are affiliated with trade associations. A case in point is the Computing Technology Industry Association (CompTIA), which is a coalition of 200 IT vendors and IT distributors. CompTIA is headquartered in Chicago with offices in different Commonwealth countries and has awarded its main certification, CompTIA A+, to 1 million certified IT professionals since its creation in 1993.⁵³

In many respects, vendor-independent certifiers resemble national corporatist arrangements, and many are indeed involved in setting national standards. They include different stakeholders in the standard setting, although hardly ever trade unions. The inclusiveness of professional and trade associations helps their standards to gain authority and to get recognized as being in the general interest. However, a number of aspects undermine their authority. First and foremost, these standard setters have no way to ensure the exclusivity of their standards. On the contrary, as service providers they have to constantly develop new standards that differentiate them from other certifiers on the certification market. Against the backdrop of this need for

⁵¹ See COUNCIL OF EUR. PROF'L INFORMATICS SOC'YS, <http://www.cepis.org> (last visited Oct. 5, 2017).

⁵² See *Programmes*, ECDL, <http://ecd1.org/about-ecd1/> (last visited Oct. 5, 2017).

⁵³ *CompTIA A+: Exam Codes 220-901 & 220-902*, COMPTIA, <https://certification.comptia.org/certifications/a> (last visited Oct. 5, 2017).

diversification, we can better understand why the 100 ICT providers that Adelman lists provide more than 1,300 individual certification products.⁵⁴ The result is an ever more fragmented and confusing landscape of certifications that lack transparency and comparability, which in turn undermines their coordination role. This shortcoming provides very interesting insights into the challenges that this type of corporatist standard setters is facing.

VIII. TOWARD A EUROPEAN CORPORATISM?

The fact that the Council of European Professional Informatics Societies (CEPIS) is an important exception in this context, with the 14 million people in over 100 countries to whom it has awarded European/International Computer Driving Licence so far, is remarkable. A closer study of the enabling conditions of its authority brings the role of the public back into the picture. However, this public is no longer a national one. In 2003, CEPIS got important financial support from the EU to develop, together with the European Committee for Standardization (CEN), standards for ICT professionals in all industry sectors. However, it was not only CEPIS with its different national member organizations that developed the standards. The whole process was supported by a broad alliance also including large companies like the German Deutsche Telekom and the European consortium Airbus, and universities, and last but not least Microsoft and Cisco. The process resulted in 40 ICT competences constituting the European e-Competence Framework (e-CF), which became the European standard EN 16234-1-3 in 2016. Once the standards were established they were further strengthened by being associated with a number of other EU policy instruments. They have become part of the EU strategy for e-Skills in the twenty-first century, the Digital Skills and Jobs Coalition the European Commission developed in the framework of the Digital

⁵⁴ Adelman, *supra* note 6.

Single Market strategy and the new Skills Agenda for Europe.⁵⁵ Last but not least, the standards have become integrated into the European Qualifications Framework that the EU Member States adopted in their effort to establish a European Higher Education Area.⁵⁶

In other words, the EU has played a vital role in underpinning the standard-setting by this professional association and providing its standards with exclusivity by way of its public policy instruments. It is due to this support that CEPIS has become an important standard-setting authority at European and international levels, providing an alternative to the vendor-specific certifications. The fact that many of the vendor-specific certifiers have their headquarters in the USA indicates an important geopolitical dimension that underpins the competition over normative authority and international coordination.

IX. CONCLUSION

This paper has argued that the parallel universe of post-secondary credentials needs to be seen as part of an emerging transnational private coordination. In the vein of Streeck's (2009) study of the reform of capitalism, I have related this change to what he describes as a move toward a Williamsonian type of coordination. Thelen and Busemeyer have outlined how large firms have started to design their own VET in this context, mainly reflecting their firm-specific needs. According to their argument, this segmentalism undermines the cooperative arrangements in coordinated market economies (CMEs), with their monitoring and oversight mechanisms, that ensure a degree of cross-sectoral standardization in the content and quality of skills. I have

⁵⁵ See *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions*, at 8, COM (2016) 381 final (Oct. 6, 2010).

⁵⁶ See Martin Sherry et al., *Actions Towards Maturing the ICT Profession within Europe*, 4 INT'L J. HUM. CAP. & INFO. TECH. PROF. 46 (2013).

argued that Thelen and Busemayer fail to pay attention to private international modes of coordination and standardization. Drawing on the literature on transnational private authority and on Weber's differentiation between *an* authority and being *in* authority, I have identified three important conditions that private standards need to fulfill to gain authority. They need to be perceived as being capable of simultaneously accounting for and reducing the complexity of modern economies, as well as representing the general interest. In order to have a coordination effect they require a high degree of exclusivity that allows them to become a general reference for very different actors.

Against this theoretical background, I have studied in more detail two different private modes of ensuring an international standardization in the field of ICT education and training: one provided by vendor-specific certifications and one by vendor-independent certifications. The study has outlined how vendor-specific certifiers have gained global authority. The propriety standards of their software provide them with an important exclusivity that underpins their coordination role. However, the strength they gain through proprietary standards has an important flipside. Their standards raise concerns about a strong bias in the coordination that might be in contradiction to the general interest. They may also have difficulties in accounting for the specificity of a context due to the rigid standardization they impose. This standardization and the secrecy of the algorithms reduce the capacity of its users to adapt the standards to their specific context. In contrast, the authority of vendor-independent certifications is likely to be perceived as more legitimate, not least due to the broader range of different stakeholders that were involved in the standard development and the higher context-sensitivity. However, the openness of these norm setters can turn into a weakness. As long as they disseminate their standards by way of the market, they are forced constantly to produce new standards to distinguish themselves from other certifiers.

The result is an ever more fragmented and confusing landscape of vendor-independent certifications that undermines the coordination capacity of this type of private authority. It is in this context that the close collaboration between the EU and the Council for European Professional Informatics Societies (CEPIS) made a major difference. The public policy instruments of the EU made it possible for CEPIS to become a European and international alternative, at least in some areas, to the vendor-specific certifiers, many of them headquartered in the USA. Hence, the question of international coordination has an important geopolitical dimension.

However, much more research is needed to bring this emerging private sphere of post-secondary education and its coordination effects further into the public limelight. I hope to have shown with this case study that such a research program is not only relevant for scholars interested in the internationalization of (corporate) education. It also provides interesting insights into emerging transnational modes of coordination that studies of the Varieties of Capitalism (VoC) have failed to account for so far. It seems that once again the focus on corporate education could be an excellent entrance point for a better understanding of an emerging mode of coordination, even though this kind of coordination differs considerably from those prevailing in LMEs and CMEs.