

The Knowledge Economy, Gender and Stratified Migrations

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ABSTRACT *The promotion of knowledge economies and societies, equated with the mobile subject as bearer of technological, managerial and cosmopolitan competences, on the one hand, and insecurities about social order and national identities, on the other, have in the past few years led to increasing polarization between skilled migrants and those deemed to lack useful skills. The former are considered to be bearers of human capital and have the capacity to assimilate seamlessly and are therefore worthy of citizenship; the latter are likely to pose problems of assimilation and dependency due to their economic and cultural “otherness” and offered a transient status and partial citizenship by receiving states. In the European context this trend has been reinforced by the redrawing of European geopolitical space creating new boundaries of exclusion and social justice. The emphasis on the knowledge economy also generates gender inequalities and stratifications based on skills and types of knowledge with implications for citizenship and social justice.*

One of the issues that has intrigued me in my research on skilled migration has been the way in which discourse on the knowledge-based economy (KBE) and knowledge-based society (KBS) has been increasingly transposed in immigration policies in many developed countries. Although the role of knowledge in transforming economies and societies began to be discussed in the late 1950s and aired more widely in the 1960s, it was not established as a key plank of public policy until the 1990s. Most of the immigration receiving states have discussed at great length the knowledge economy, how to expand it and use resources such as migrants to do so. Countries such as Australia and Canada have, since the 1990s, oriented their immigration policies towards skilled migrants. In Europe, the UK has pursued this strategy even further by privileging the globalized financial and information technology and communications (ITC) sectors.

In this article I argue that the dominant and unreflective notions of what constitutes a knowledge economy and society have become closely associated with hyper or optimistic discourses of globalization. These discourses emphasize the rapid circulation of knowledge, conceived largely as science and technology, and its propensity to transform employment and social structures. The assumption in much of the dominant thinking about the knowledge economy is that managerial, scientific and technological knowledge is the driving force of globalization, productivity and wealth creation, and must therefore be promoted. The corollary is that what does not fit into this model of technologically driven change cannot benefit the economy of the receiving state, and hence must be prevented from entering its territory. Or if allowed to enter, cannot enjoy the same rights as those who are useful to the growth of the knowledge economy. Hence immigration policy, especially in Europe, is increasingly based on stratified rights and pathways to citizenship.

The conceptualization of knowledge economies is also profoundly gendered, though gender issues are rarely discussed. KBE and KBS are presented in gender neutral terms. In recent years, a number of feminists have begun to address the implications of the knowledge economy for gender inequalities. Sylvia Walby et al. (2006) are examining how gender transforms the conventional understandings of KBE in different gender regimes and varieties of capitalism. The comparative European project *From welfare to knowfare* considers the impact of KBS on gendered power and subordination structures and asks to what extent KBS is leading to greater gender equality (primarily in the work place). “Knowfare” is defined as “providing policies promoting education and lifelong learning in order to stimulate employment participation throughout the lifecycle as opposed to welfare policies ensuring the standard of living via a benefit system” (Mosesdottir, 2006, p. 17). This research concludes that women’s jobs involve less complexity and autonomy and that there is extensive gender segregation in the high tech sector. Furthermore, the wage gap between skilled and less-skilled women is widening and the remuneration for education and skills is higher for men than women. The journal *Gender, Work and Organization* held its fifth international conference in June 2007 on the theme of *Gendering the Knowledge Economy*. A special issue on this theme will examine the different ways in which the knowledge economy is gendered and question the implications of knowledge seen as being embedded in machines and codes rather than embodied in human beings.

However, while addressing the gendered dimensions of the knowledge economy, these discussions assume, as with the more traditional ungendered analyses, a nationally bounded and constituted labour force. The role of migrant women, and men, and how they are positioned in the knowledge economy and society, are not considered. Yet migrants have been prominent in skilled and less-skilled sectors of the economy, contributing to high tech work as well as work which has relatively low levels of informatization, such as construction and domestic and care work.

The conception of the knowledge economy has significant implications for immigration policies. While the knowledge economy has been promoted by the EU in recent years, we see it most clearly enunciated in the immigration policies of the UK, the state which has embraced most vigorously neoliberal and globalist agendas. Its recent proposed changes to managed migration closely correspond to the exemplary knowledge economy candidate – an individual working in the financial sector or ITC expert, or combination of both, who can earn high salaries and is young and promising with many years of work to offer the British economy. Those in the regulated sectors, associated with welfare professionals and social reproduction, are more likely to earn lower salaries and will have their movements more restricted and subject to confirmation of good conduct by the sponsor. This distinction has the effect of differentiating bearers of different forms of human capital and skills and a hardening of the boundaries between those with and without useful skills.

In this article, I shall firstly outline earlier discussions of the knowledge economy in the 1960s, highlighting the more expansive and embodied social conceptions of knowledge. In contrast, as the notion of KBE and KBS came to form a public policy paradigm in the 1990s, and became closely linked with globalization and the information society, KBE and KBS increasingly focused on a narrower interpretation in which technology not only drives the economy but also shapes human beings and social

relations. Secondly, I seek to show how immigration policies transposed the priorities of the knowledge economy and society. In turn, the privileging of certain forms of expertise within the knowledge economy had, as I shall outline, implications for gendered migrations and rights. Lastly, I schematically map out a system of stratification based on gender, nationality, and skills and their associated rights and entitlements, in particular in the EU. The development of a managed migration schema reflecting the objectives of a narrow conceptualization of a knowledge-based economy is most clearly discerned in the UK. Though not adopting the emphasis on the financial and managerial elites of KBE to the same extent as in the UK, the European Commission is seeking to orient its immigration policies towards attracting the highly skilled (European Parliament, 2007; Frattini, 2007)¹

Knowledge Economy

The role of knowledge in economic growth and society was initially raised by economists and management experts in the late 1950s and early 1960s and subsequently developed by sociologists such as Daniel Bell (1973) and Alvin Tofler (1970). Though popularized by Peter Drucker (1969), the term “knowledge economy” was coined by Fritz Machlup (1962) in *The Production and Distribution of Knowledge in the United States*, in which he argued that knowledge formed a major part of production in the United States (Cortada, 1998). He defined knowledge as “any human (or human-induced activity) effectively designed to create, alter or confirm in a human mind – one’s own or anyone else’s – a meaningful apperception, awareness, cognizance or consciousness (p. 30).” Knowledge had come to play a dominant role in creation of national wealth (29% of US gross national product in 1958) through its application to a wide range of economic activities. It takes place both through the creation of new knowledge as well as its communication and transmission. Thus commodification can result from repackaging existing information for new markets and consumers as much as from the creation of new products and services.

Significantly there were multiple types of knowledge which extended well beyond scientific knowledge determined by technological transformations and which were not necessarily based on educational level. These included:

- practical knowledge e.g. professional, business, politics and in the household
- intellectual knowledge, that is, general culture and the satisfaction of intellectual curiosity
- pastime knowledge, that is, knowledge satisfying non-intellectual curiosity or the desire for light entertainment and emotional stimulation
- spiritual or religious knowledge
- unwanted knowledge, accidentally acquired and aimlessly retained (Machlup, 1962, pp. 21-22).

At the same time, Michael Polanyi (1958, 1966) in his critique of positivism, explored the personal and emotional dimension of knowledge creation and drew the distinction between “codified knowledge”, defined as rule based knowledge that can be

¹ The Commission announced on 23 October 2007 its proposal for a Blue Card for the highly skilled.

written down and stored, and “tacit knowledge” which is acquired on the job and resides with the individual as know-how and experience.²

Drucker (1969), on the other hand, a business and management consultant, focused on the application of knowledge to product innovation i.e. application of management. Daniel Bell (1973), another exponent of the knowledge society emphasized the role of universities in transmitting knowledge that would advance economic development and thus the growing importance of the symbolic analyst or the managers and controllers of information and knowledge systems. In occupational terms this included both high tech industries and non-profit services, such as education, health and government.

By the 1990s the notion of the knowledge economy was taken up as a core element of public policy, involving measurement and comparison between states. The Organisation for Economic Cooperation and Development (OECD) proposed a generic definition of the term in developing national strategies for individual countries:

[A knowledge economy] is one that encourages its organisations and people to acquire, create, disseminate and use codified and tacit knowledge more effectively for greater economic and social development.

The European Union saw globalization and a new knowledge-driven economy presenting it with a major challenge (Lisbon European Council, 2000). Digital technologies were transforming the old industrial society into an information society. The Lisbon Agenda (2000) announced that it intended to make the EU “the most competitive and dynamic knowledge-based economy in the world by 2010”. It spoke of the need for “social and institutional modernization” as inevitable and KBE was presented as technical management (neoliberal governance) and not a political choice. Each Member State had to be at the cutting edge of a knowledge-based and innovatory economy and society.

Though vigorously promoted, operationalizing the concept has not been straightforward or unproblematic. On the one hand, it privileges science and technology but finds it difficult to measure the effects of its application in different industrial sectors. Hence the process is reliant on a more comprehensive definition of knowledge workers including all professional, managerial and scientific occupations. Originally the OECD focused on:

- high and medium-tech manufacturing
- high value added “knowledge-intensive” market service industries such as finance, insurance and telecommunications

² This distinction has been extended considerably. Williams (2006) applies a complex typology to the transfer and creation of knowledge in the context of international migration. The five types are:
Embrained – dependent on conceptual skills and cognitive abilities
Embodied results from experience of physical presence, practical thinking and learning in doing
Encultured – meanings are shared understandings arising from socialization and acculturation
Embedded - embedded in contextual factors and not objectively pre-given. Shared language generated in different language systems, cultures and groups
Encoded - embedded in signs to symbols to be found in traditional forms such as books, manuals, codes of practice and website.

- business services

Subsequently the OECD (Eurostat definition) added education and health but these seem to be marginal to discussions of knowledge-based economies despite the fact that in occupational terms the educational, health and cultural sectors contribute the single largest source of employment compared to market services in the EU (15.3%). High tech-based manufacturing (which is actually primarily medium rather than high) employs 6.9% (Brinkley, 2006).

A recent basic definition captures, in a nutshell, the dominant role of the ITC Revolution hitched to the market i.e. “the knowledge economy is what you get when firms bring together powerful computers and well-educated minds to create wealth” (Brinkley, 2006, p. 3). Ideological connotations are clearly reflected in the desirable sectors of growth. In the UK, a state that has promoted a neo-liberal globalist agenda, KBE is seen to require economically valuable skills and increased employment in financial services, high technology and the ITC sector, media and the broader cultural economy (Walby, 2002).

These sectors generally have global reach and, hence, were seen as crucial components of the knowledge economy. The latter was thought of as global because the supply of knowledge products was not bounded by geographical location with a natural marketplace that is ‘immediately global’. Technology as the key factor of production had transformed physical production. It could be transported and transferred instantaneously around the world such that the tyranny of distance had been vanquished forever. Such was the hyper globalist discourse that was adopted in the notion of the knowledge economy and its societal corollary, the informational or network society (Castells, 1996).

Informationalism, as a new technological communication characterized by “information generation, processing, and transmission” have become “the fundamental source of productivity and power” (Castells, 2000, p. 21). In contemporary society dominant functions and processes are increasingly organized around networks that constitute the new social morphology of society and the “diffusion of networking logic substantially modifies the operation and outcomes in processes of production, experience, power, and culture” (Castells, 2000, p. 500).

Castells vision is highly spatialized in that he postulates several disconnected worlds, that of the managerial elites, masters and beneficiaries of the information economy and network society who exist in timeless time of spaces of flows. These new elites of the informational society are the drivers of the new global economy, who make it happen and manage it. Discourses of globalization extolled unfettered mobility, cultural consumption of others and the decline of the nation-state. It is a world in which these elites are able to partake of high degrees of mobility and untrammelled circulation. Such “citizens” of the world in the frequent traveller category (Calhoun, 2003) are able to consume the world at their pleasure, probably more than at their leisure since many of them are time poor and resource rich. These are the individuals whom migration policies are keen to attract to advance the knowledge economy.

Thus, on the one hand, the tendency is to privilege the kind of skills and expertise which can circulate easily and rapidly through global networks, relatively unfettered by national regulations and easily absorbed by those in other cultures. On the other hand, the tendency is to marginalize those types of knowledge which are more nationally bounded

and/or relational and context dependent. The former sectors are often relatively unregulated (e.g. credentials do not have to be verified by a professional body) with skills circulating through business and the market, that is practice-oriented rather than codified knowledge. Men are far more likely to be employed in the business sector with few women to be found in the higher levels of business or of ITC. Because it is interest in the globalization of production and flows of capital that has fuelled the literature on skilled migration, the entrepreneurial class (both those employed in private sectors and those who have used entrepreneurship as a route to migrate) became the focus of the skilled migration literature (Mahroum, 2001; Lavenex, 2002; OECD, 2002).

The feminized skilled sectors (education, health, social work) fared badly in the 1990s. As sectors of reproduction, they supposedly did not contribute to productivity and growth of the economy. In an earlier period from the 1950s and 1960s nurses had migrated in large numbers to developed countries which saw them as cutting health care costs and ironing out fluctuations in labour shortages (Stasilius and Bakan, 2003, p. 107). In the period 1960 to 1972, 5% of nurses were estimated by the World Health Organization (Mejia et al., 1979) to be working outside of their home countries. In contrast in the 1990s, under neoliberal attempts to reduce the cost of social reproduction, states such as Australia (Iredale, 2001), Canada (Stasiulis and Bakan, 2003) and the UK (Raghuram and Kofman, 2002) reduced their investment in the numbers being trained as doctors, nurses and teachers. At the same time they also ceased to recognize, to varying degrees, these occupations as shortage areas eligible for points towards temporary and permanent migration, leading to a drop in migrants in these sectors. Immigration schemes such as the Canadian, which stressed occupational shortages, largely favoured the heavily male IT and finance sectors. The upshot was that by the late 1990s severe labour shortages had emerged in education, health and social work, especially in inner city and remote rural areas, which were then addressed through global recourse to labour both from the Third and First World (Rosewarne, 2001).

In addition these reproductive sectors are highly regulated by corporate bodies and have developed nationally codified knowledge. They are not seen to be wealth creating but closely tied to the nationally bounded, non-profit or public sector. The marginalisation of this category in the knowledge economy literature, ideologically associated with the market (Hudson, 2006), corresponds to a similar marginalization of these groups in many analyses of globalisation. Feminists in different disciplines (Beneria and Sen, 1981; Laslett and Brenner, 1989; Mitchell et al., 2004; Petersen, 2003); have for a long time underscored the lack of attention paid to reproductive labour, which though traditionally consigned to the domestic sphere, supports so-called productive activities and is also an important dimension of welfare regimes. Despite the lack of attention paid to reproductive activities, labour shortages at all skill levels in these sectors have led to the growth of globalized migrant labour (Ehrenreich and Hochschild, 2003; Moya, 2007). Both skilled (doctors, nurses, teachers and social workers) and less-skilled (carers, domestic workers) are heavily feminized occupations.

Furthermore, as Nikolas Rose (2000) notes, the contemporary forms of reinventing politics include displacing the substantive knowledge of welfare professionals (i.e. those involved in social reproduction by the knowledge of examination, scrutiny and review undertaken by accountants and consultants). Professional fields have been reconstituted at the same as services have been privatized.

This has resulted in more highly paid professionals being replaced by lesser paid, in some cases, by those with reduced security and career prospects. For example, doctors have been replaced by nurses for certain tasks and nurses by carers.

Apart from the privileging of market-led development and the occupations connected with it, the analysis of knowledge-based economies allocates a declining role for less-skilled labour based on the (unfounded) belief that manual and non-knowledge-based labour has disappeared in developed societies (Castles, 2006). Less-skilled labour was equated with manufacturing which had increasingly been decentralised to Third World countries and was in decline. It was, therefore, argued that there would be no use for the kind of labour demands that had previously been necessary in developed societies because technology would replace sheer physical labour and routine administrative work.

Not all globalization theorists have shared this view of the disappearance of less-skilled labour. Saskia Sassen's conceptualization of global processes has always maintained the close relationship between the expansion of producer services and global elites, especially in global cities (2001) and the need for less-skilled and flexible labour to service them. Her analysis of counter geographies of globalization (2000) highlighted an alternative narrative of globalization in which those performing less-skilled work played a crucial role in receiving and sending societies. The growing demand for less-skilled labour has become more acute in sectors such as personal services, hospitality and care, which have expanded compared to routine administration which has declined.

The problem is that productivity in the care sector cannot match gains in manufacturing or higher level service work (Himmelweit, 2005; Folbre, 2006). The relative cost of care is rising as demand outstrips supply but technology and informatization cannot be applied to what remains a labour-intensive sector. Hence the search for and marked expansion of low-paid, and often insecure, informal globalized labour. Thus middle and higher income countries are benefiting from the migration of domestic and care workers, many of them only enjoying partial citizenship (Parrenas, 2001; Stasilius and Bakan, 2003) with few or reduced economic and social rights.

As feminists have also pointed out, skills are socially constructed and valued differently, depending on how and where they are acquired (Jenkins, 2004). Having been supposedly acquired in the household, female skills of caring and cleaning, are seen as innate and maternal dispositions. For example in social care work tacit knowledge or practice wisdom, derived from personal qualities and experiences, is often presumed to derive from the worker's experiences with her own family rather than rely on generalized scientific or codified knowledge (Cameron and Boddy, 2005). Yet in the knowledge economy paradigm, tacit knowledge is largely seen as complementary rather than in opposition to scientific or codified. It adds value to scientific knowledge. The tacit knowledge of the carer, however, is not of the kind celebrated in literature on knowledge transfer amongst globalized and mobile business elites for whom it adds to their value and earning power (Williams, 2006).

Moreover, there is evidence of deskilling and under utilization of qualification in many low skilled sectors. Women migrants in low skilled sectors are likely to have higher qualifications than men (Dumont et al., 2007). In the UK, for example, there is an increased use of degree level staff in the personnel services drawn from students (national and migrant), working holiday makers, deskilled migrant labour, including young people

from other European Union countries (Recchi, 2006) who use their period in the UK to accumulate cultural capital, for example, linguistic skills.

Percentage Change in Use of Degree Labour in the UK 1995-2005
Percentage Distribution in 9 major occupational groups

	1995	2005	% change
Managers and senior officials	32.69	42.90	10.21
Professional occupations	79.10	81.65	2.54
Associate prof and technical	49.85	52.70	2.85
Administrative and secretarial	13.79	20.06	6.26
Skilled trades	7.00	9.51	2.51
Personnel service	10.12	17.98	7.86
Sales and customers	6.10	10.16	4.07
Process plant	2.86	4.80	1.94
Elementary occupations	3.42	5.56	2.15

Source: Fauth and Brinkley (2006, p. 38)

The Knowledge Economy and Managed Migration

By the beginning of the present decade, the Lisbon Agenda, as we have seen, announced Europe’s intention to promote a dynamic knowledge economy based on the market and technology. While the US epitomised the dynamic economy Europe wished to emulate and compete with, it was the immigration systems of Australia and Canada which supplied the model of countries which had attracted large numbers of skilled migrants. The European Union published a Green Paper (European Commission, 2005) on a common approach to economic migration and is increasingly adopting policies of managed migration based on a common framework of rights for all third country nationals in legal employment including less and highly skilled. Facing strenuous opposition from France and Germany, these proposals were withdrawn and replaced by a more limited proposal for a blue card for the highly skilled announced in September and then confirmed on October 23, 2007 (European Parliament, 2007).

The development of a new governance regime of managed migration is based on economic calculus (cost/benefit) of stratified entry, rights and entitlements linked to utilitarian considerations. The disciplining and surveillance of migrants is also to be achieved through partnerships with other agents, such as sponsors and transport agents (Lahav and Guiraudon, 2000), and the off-shoring and displacement of borders to enlarge the protective borders of the state. Managed migration demonstrates the ability to regulate and orient in a context of uncertainty and risk produced by globalization. Being able to manage gives the idea of control to the benefit of the nation-state and of a capacity to measure benefits against costs. In recent years, and in particular since 2001, agendas of national identity, multiculturalism, and social cohesion have become more prominent.

The classification, differentiation, selection and stratification of migrants in order to filter, as far as possible, welcome from unwelcome strangers has been pursued most vigorously in the UK. Here, migration is seen to be driven by globalization which, though not new, has increased in scale (Home Office, 2005). Globalization is inevitable and structured around “scientific and technological progressivism in which the interests of the business entrepreneurs are privileged” (Finlayson, 2003). Immigration policies must promote British interests. Like other developed states, the UK competes for the skilled, especially those connected with the driving force of globalization, (i.e. the scientific, financial and managerial sectors, which has clear resonances with much thinking about the knowledge economy). The UK launched a Highly Skilled Migrants Programme in January 2002 and in 2005, over three-quarters were issued to four occupational categories – medical (largely trained doctors), financial, business and information technology (Salt, 2006).

Only a quarter of applicants were women in 2004 (Kofman et al., 2006) due in good measure, we have argued, to the earnings criteria which distinguishes the British scheme from the Australian and Canadian conditions of entry for skilled migrants. With the rolling out of the new managed migration scheme, the gender bias will become even more pronounced given the further emphasis on earnings and educational level. The high level of earnings being demanded exclude many of the middle ranks of the welfare professions (nursing, social workers, and teachers, those working in NGOs) in which women are concentrated. Youth demonstrating aptitude rather than experience are desired by employers and this has been accommodated through additional points, especially for those in their 20s just at an age when many women may be wanting to have children.

By 2006 the UK had come to depend on skilled labour from across the globe. Since then a number of developments have altered the openness to a broad range of skilled occupations and led to geographical and occupational restrictions. In particular it was the health sector which was affected by the financial crisis in the National Health Service leading to loss of jobs and non-replacement and the expansion of medical places at universities. Post-graduate medical training, which had for many years been the mainstay of junior positions in British hospitals, has consequently been severely restricted, especially in relation to rights to a long-term career. Most significantly, the enlargement of the European Union in May 2004 (eight Eastern European countries, Cyprus and Malta) and then in January 2007 (Bulgaria and Romania) has reshaped the geopolitics of European immigration.

The substantial inflows of Eastern Europeans (Home Office, 2007) have primarily filled less-skilled jobs, resulting in the reduction and subsequent withdrawal of the sector-based scheme for less-skilled labour. The new five tier points scheme, outlined in 2005 (Home Office, 2005), and to be progressively introduced from 2008, envisages the European Union providing all the required less-skilled labour. For those outside the EU, only the skilled tiers (1 for the highly skilled and 2 for other skilled) will be available. Both of these tiers have the right to apply for settlement and eventual citizenship. However, even the highly skilled need to demonstrate that they have found employment at a commensurate salary that is no lower than a prescribed level in order to renew their residence permit and achieve long-term settlement (Borders and Immigration Agency, November 2006).

Elsewhere in Northern Europe, the opening up to skilled labour has been far more timid and limited, largely restricted to ITC and research, as in Germany or France where corporatist professional bodies still retained considerable influence. In Germany, only 1000 highly skilled migrants entered in 2005 following the provisions of the 2004 Immigration Act (von Weizsacker, 2006). Given continuing shortages in electrical and mechanical engineering sector, the government has opened up this sector to the 12 new member states and students who have obtained their degree in Germany (<http://www.workpermit.com/news/2007-08-25/germany/germany-new-eu-engineers-allowed-to-work-graduates-three-years.htm>). France is currently trying to limit family migration considered to be largely unskilled so as to encourage more skilled labour migration (Durand and Lemaitre, 2007; Kofman and Meeto, 2007). In Southern Europe there is virtually no recruitment of skilled labour as such.

In Northern European states, including the UK, the politicization of immigration has ensured that the entry and rights of less-skilled migrants are severely limited. The less-skilled are deemed to compete with internal labour forces, especially amongst ethnic minority youth, pose pressures on welfare expenditure and likely to undermine national values and identities through their cultural practices and difficulties in assimilating. For example, in the UK tier 3, which replaces the sector-based schemes for agricultural and food processing, precludes the right to settlement and citizenship. Non-EU migrants are only offered a transient passage and cannot build up any rights which accumulate with period of residence. Transience also means they cannot effectively challenge exploitation and injustice. In Southern Europe, where the need for less-skilled labour has been recognised, quotas and repeated regularisations have been deployed in a context of an expanding informal economy (Reyneri, 2003). Indeed, between 1995 and 2005 Spain received the largest number of immigrants (3.3 million) and in 2005 regularized 600,000 undocumented workers (Docquier and Marfouk, 2007, p. 10).

Hence the key divide, which the EC effectively leaves up to states to decide, is between the skilled and the lesser skilled. Castles (2006) has recently noted the return of the guest worker regime and increasing use of temporary workers. As he comments “the EU and its Member States still seem to be trying *to import labour but not people* (his italics) – just as the Western European countries did 40 years ago” (p. 760). The hardening of attitudes to settlement and greater surveillance mean that less-skilled labour migrants will only be able to remain undocumented and in the informal labour market, at least in Northern European states. The enlargement of the EU eastward (including Bulgaria and Romania from January 2007) and the diminished restrictions against labour mobility in an increasing number of EU states, especially in Southern Europe, have meant that less-skilled labour can be largely obtained from within the EU, rendering the notion of “Fortress Europe” probably more accurate than it had been in the past.

Conclusion

As I have shown in this paper, over time the notion of the knowledge economy has become narrower. In the 1960s, the notion of knowledge, and thus what counted as the knowledge economy, extended well beyond the codified scientific dimension and examined the significance of tacit and personal knowledge. This was, of course, a period

prior to internet connectivity or national and international deregulation of economic activities.

As the concept was taken up in management and business, and in particular deployed as a key objective of public policy, knowledge came to be defined as scientific and managerial. The knowledge economy was thus equated with scientific research, information technology and management, including finance, which were seen as the productive sectors of the economy. Though research itself might be subsidized by the state, the bulk of these activities were market-based and increasingly deregulated and globalized. And, of course, these were, and remain, male dominated sectors.

Although, some definitions of KBE encompass a broader occupational distribution to include all those with higher educational qualifications, and, thus, professional employment in welfare sectors, the latter are reproductive rather than directly contributing to production, and hence subordinate. The welfare professions are heavily regulated by national corporate bodies as well as the state which determines the numbers to be trained, and, therefore, to some extent entering the profession. In many instances, especially where the points system of entry includes an occupational element, the state decides upon the numbers and conditions under which foreign professionals may enter, as in Australia, and prior to the present decade in Canada. Subsequent to entry, corporatist bodies also play a major role in limiting and filtering entrants.

Equating this narrow understanding of KBE with productivity and growth has meant that even states with highly restrictive labour migrations, as in the European Union, seek to attract the highly skilled (by which they generally mean information technology, science and engineering). In the UK, the distinction between highly skilled, (primarily finance and IT with some higher levels of welfare professionals), on the one hand, and the skilled, with large numbers of middle level welfare occupations, on the other, demonstrates the gendered outcomes of immigration criteria. The highly skilled do not have to have a job offer, the “ordinarily” skilled do. What it also highlights is the vicissitudes that the welfare professions face to a much higher degree than those in finance and IT. The state, as it did in many countries in the 1990s, and as is happening in the UK once again, is closing avenues to entry for certain welfare professionals, especially in the health sector (doctors and nurses). The differential treatment of skilled and less-skilled has been noted and critiqued but we should also bear in mind the differential classification within the skilled category, their opportunities for labour market incorporation and hence gendered stratification.

The relationship between the conceptualization of the knowledge economy and globalized migrations varies between states and over time. And while more attention is being paid to gender equality and the knowledge economy, I would suggest we should in addition address the issue of international migration in our understanding of gender and the knowledge economy and society. We should also examine the relationship between diverse codified and tacit knowledge and the way they play out in different sectors and occupations. It would enable us to move away from the simplistic and technologically driven models of knowledge formation and transferability.

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