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DIVERGING SOLIDARITY
Labor Strategies in the New Knowledge Economy

By CHRISTIAN LYHNE IBSEN and KATHLEEN THELEN*

Introduction

THE transition from Fordist manufacturing to the so-called knowledge economy, under way since at least the 1980s, confronts unions across the advanced market economies with a new and more difficult landscape. Organized labor movements historically have faced the challenge of reconciling the interests of their diverse constituencies, but a large literature suggests that the dilemmas unions must confront have grown particularly acute. The long-term decline of manufacturing; accelerated technological change; and the reconfiguration of political-economic institutions, mostly in a liberalizing direction, have heightened inequality everywhere.

The shift in employment out of industry and into services has fueled labor-market dualism, as a shrinking core of skilled blue-collar workers in relatively stable jobs gives way to a growing number of unskilled workers employed under more flexible and sometimes precarious conditions.[1] Rapid technological change enhances the employment opportunities and skills premium for highly educated individuals even as it marginalizes low-skill groups and eliminates many middle-skill jobs.[2] Salaried professionals often stand to benefit from new, more flexible work arrangements that blue-collar groups view as a threat.[3]

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[1] For example, Rueda 2007; Palier and Thelen 2010.

[2] For example, Autor and Dorn 2013; Brynjolfsson and McAfee 2014; Iversen and Soskice 2015.

[3] For example, Gingrich and Häusermann 2015.

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Throughout Europe, we see organized labor struggling to forge new political coalitions across these constituencies and to find new formulas to maintain social solidarity under these changed and more difficult conditions.[4]

This article explores union responses to these trends in Denmark and Sweden, two countries that still embody a relatively more egalitarian model of capitalism.[5] It focuses on union strategies with respect to wage setting, rights to education and training, and the balance between collective bargaining and state policy in labor's efforts to promote solidarity. In overall measures of equality, both Denmark and Sweden continue to do relatively well compared to most other countries. On closer examination, however, they exhibit two quite different models of social solidarity that have distinctive features, rest on different social coalitions, and exhibit different strengths and vulnerabilities.

Swedish unions hew to a strategy of distributional solidarity emphasizing equality of outcomes, especially in wage bargaining. Meanwhile, Danish unions have transitioned to what Wolfgang Streeck called "supply-side egalitarianism"[6] emphasizing equal opportunities for workers to secure good employment as an alternative to equal wages across occupations. Sweden's "demand-side" model preserves the traditional division of labor between the union movement's industrial and political wings, pursuing wage solidarity in collective bargaining and delegating responsibility for other forms of social protection to the state. In contrast, Danish unions are charting a course based more on self-help within the industrial relations arena, relying more heavily on the state to take care of those who fall outside the ambit of collective bargaining.

This article examines the origins of these different strategic paths, explores the distinctive distributional outcomes the strategies have produced, and draws out the broad lessons they hold for the choices currently confronting labor movements throughout the advanced industrial world. We trace the origins of Sweden and Denmark's alternative strategies to the breakdown of centralized bargaining in the 1980s and 1990s, which revealed longstanding differences in union organization that had been masked by surface similarities between the peak union confederations in the two countries.[7] In Denmark, where skilled workers historically organized into craft unions separate from unskilled workers, the decentralization of bargaining meant that the unskilled (general) unions were absorbed and dominated—that is, effectively broken up and subsumed into bargaining arrangements in which they became the minority. This development paved the way for a return to the kind of voluntarist strategy the country's craft unions have always embraced, emphasizing self-reliance and prioritizing wage liberalization with opportunities for individual skill development over wage leveling.

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[4] Iversen and Soskice 2015; Kenworthy and Pontusson 2005; Thelen 2014.

[5] Andersen, Dølvik, and Ibsen 2014; Martin and Thelen 2007; Pontusson 2011; Thelen 2014.

[6] Streeck 1999, 7; see also Baccaro and Locke 1998.

[7] See also Dobbins and Busemeyer 2015, who explore the consequences of these organizational features for the structure of initial vocational training, whether school-based (as in Sweden) or firm-based (as in Denmark). Our analysis focuses on a different outcome—union strategies for social

In Sweden, unions historically organized along lines of class and industry (combining skilled and unskilled workers in the same organizations), which meant that low-skill workers could not be dominated the way they were in Denmark. Even after the breakdown of centralized bargaining, low-skill constituencies have continued to exert pressure for wage solidarity, both within sectoral organizations and through their continued influence in the Swedish Trade Union Confederation for blue-collar workers (LO-SE). The result has been stronger wage solidarity within industrial relations, but also much more limited forays into the realm of collectively bargained training and social policy, for which the LO continues to look to the state.[8]

These different strategies reflect and reinforce very different coalitional alignments within the labor movement—alignments that have important implications for distributive politics in the contemporary period. As early as 1985, Gøsta Esping-Andersen suggested that with the rise of the service economy, the future of egalitarian capitalism rested on the capacity of organized labor's shrinking blue-collar groups to maintain ties to their traditional base while forging alliances with growing constituencies, in particular, salaried employees.[9] In Denmark, the reorientation of organized labor's goals and strategies under the banner of opportunity and skill-based remuneration has indeed brought union interests in line with those of salaried groups. But the result has been an increasingly middle-class-oriented Danish Confederation of Trade Unions (LO-DK) that has left low-skill workers marginalized.

In Sweden, class-based industrial unionism has sustained the links between low- and high-skill workers within sectors, but it has exacerbated the divide that separates these workers from the salaried constituencies that are charting a course that's increasingly independent of,

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solidarity—and we note that the training element in our case focuses on *continuing* education and training (as opposed to Dobbins and Busemeyer's analysis of *initial* vocational education and training).

[8] See also Nijhuis 2009, 302.

[9] Esping-Andersen 1985, chap. 9.

and in some ways at odds with, blue-collar groups. In sum, while the LO-DK has effectively absorbed salaried organizations, though largely at the expense of low-skill workers, the LO-SE has remained committed to strategies centered on bridging the gap between skilled and unskilled workers, but at the expense of unity with white-collar unions.

Differences in the strategic orientation and goals of the two union movements have produced distinctive distributional outcomes. Sweden's demand-side approach to solidarity has proved much better at keeping wage inequality in check, placing a stronger floor under the wages of low-skill workers in particular. Although this has helped to deliver lower levels of pretax and transfer inequality, the LO-SE's focus on wages seems also to have interfered with negotiating gains in other areas, such as training rights, for which Swedish workers continue to rely mostly on the state. Denmark's alternative strategy of self-reliance and supply-side solidarity, by contrast, has facilitated broad trade-offs within industrial relations and a series of gains that are thus overall less dependent on politicians. But even though this orientation has produced more generous benefits in a number of areas, it has also promoted more intense dualism, leaving those outside the ambit of collective bargaining to rely on the market or less-generous state policies.

We begin this article by documenting the diverging trajectories of solidarity in Denmark and Sweden, explaining how the breakdown of peak confederation-level bargaining in the 1980s (Denmark) and 1990s (Sweden) has driven differences in union bargaining strategies. We then explore the consequences of these different trajectories for union membership, coalitions, and the politics of redistribution broadly conceived. We close by exploring the distinctive strengths and weaknesses of the Danish supply-side and the Swedish demand-side models of social solidarity, and the general lessons these models hold for redistributive politics in the contemporary period.

Explaining Diverging Solidarities

We're accustomed to considering Denmark and Sweden in terms of their many similarities. Both fall squarely within Peter Hall and David Soskice's model of a coordinated market economy, and both are prime examples of Esping-Andersen's social democratic welfare regime.[10] Moreover, despite pressures for liberalization, both countries have managed to sustain relatively high levels of equality, largely owing to an encompassing trade union movement and a large, universalistic welfare state.[11] Both countries have traditionally featured strong coordination between labor's industrial and political wings, and in the 1960s and 1970s, both were pursuing solidaristic wage policies that significantly narrowed wage differentials in the context of strong (state-based) social protections. Still today, by most measures Denmark and Sweden typically fall on the low-inequality end of the spectrum compared to other rich democracies.[12]

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[10] Esping-Andersen 1990; Hall and Soskice 2001. For a dissenting view, see Campbell and Pedersen 2007 on Denmark.

Closer examination, however, reveals important differences in the trajectories of change in the two countries. The single most striking difference is an explicit turning away from any commitment to wage solidarity on the part of Danish—but not Swedish—unions. At its most recent congress, the LO-SE reiterated its commitment to the principle of wage solidarity, using terms strongly reminiscent of the language and logic of the Rehn-Meidner model of the 1960s:

> The wage policy of solidarity helps structural transformation of the economy by squeezing out low productivity, low-wage jobs and making room for firms with good prospects of development.[13]

By contrast, one searches in vain for a similar commitment on the part of Danish unions. In fact, wage solidarity doesn't figure once in the resolution from the most recent (2015) congress of the LO-DK.[14]

If not wage solidarity, to what end are Danish unions putting their formidable powers? The theme that looms largest in the LO-DK's strategy is education.

> We need to focus all our efforts on education for our colleagues. Unskilled workers should become skilled. Skilled workers should rise to the next step with even more education. And we need to ensure that high-quality education and continuous education exist at all levels.[15]

Thus, rather than press for wage equality, Danish unions have aggressively used collective bargaining as an arena for pursuing expansive rights to education and training.[16] In a series of collective agreements that have no counterpart in Sweden, Danish unions have concluded a number of contracts that guarantee workers' rights to paid education and training during employment. Such agreements are financed through collectively bargained funds that are based on contributions by workers and employers and administered jointly by the two.

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[11] For example, Bradley et al. 2003.

[12] For example, http://www.compareyourcountry.org/inequality?cr=oecd&lg=en.

[13] LO/Sweden 2016a, 6.

[14] LO/Denmark 2015.

[15] LO/Denmark 2015, 18. Indeed, wages are only mentioned in relation to closing the wage gap between men and women, and the strategy for closing the gender pay gap also focuses on education by combating gender-segregated educational choices.

[16] Due and Madsen 2003; Mailand 2008; Trampusch 2007.

What accounts for these diverging patterns? One of the most prominent perspectives in the literature, power resource theory, draws attention to cross-national differences in the strength of organized labor movements.[17] In the cases at hand, however, it seems that the diverging strategies of the two countries' unions are not a straightforward function of differences in the conventional measures of power resources. In 2015, Sweden's union density was 69.5 percent and Denmark's was 67.7 percent. [18]

Nor can bargaining structures explain the differences. In the past, wage solidarity was highly correlated to the degree of bargaining centralization, and we might assume that the more centralized system would continue to prioritize wage compression.[19] But in Denmark and Sweden, the reverse is true. After the breakdown of peak-level bargaining, Denmark reequilibrated at a higher level of coordination than Sweden.[20] Denmark's peak trade union confederation LO is the undisputed dominant force on the industrial relations landscape, having extended its reach beyond its traditional blue-collar core to organize white-collar jobs that are increasing in numbers. The LO-DK works closely with its salaried counterparts, the FTF and the AC (confederations of salaried employees and professionals), and is currently negotiating a merger with the FTF, the larger of the two.[21] The union landscape in Sweden is far more fragmented. The LO-SE is still confined to blue-collar jobs, and its dominance has waned as separate white-collar confederations—the TCO and the SACO—have grown in membership and influence. Yet it is in the more fractured Swedish context, rather than the more unified Danish context, that the goal of wage solidarity lives on.

Industrial structure might offer a third possible explanation. Historically, the two countries exhibited quite distinctive profiles: the Swedish economy was dominated by a small number of very large corporations, while Denmark featured small enterprises.[22] The impact of this difference on the outcomes of interest here, however, is ambiguous. On the

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[17] Bradley et al. 2003; Korpi 2006.

[18] Kjellberg and Ibsen 2016, 285, 292.

[19] Wallerstein 1999; Bradley et al. 2003.

[20] Ibsen 2016.

[21] LO/Denmark 2015. Moreover, state mediation powers are far stronger in Denmark than in Sweden, further shoring up coordination. Ibsen 2016.

[22] For example, Esping-Andersen 1985, chap. 3.

one hand, the greater industrial fragmentation in Denmark could render working-class solidarity more difficult. On the other hand, we know that large companies often complicate working-class unity by encouraging "segmentalist" tendencies.[23] But more important, it turns out that the differences between the Swedish and Danish cases on this dimension have narrowed considerably.

In fact, by 2013 Sweden employed more people in small companies (those with one to nine employees) than Denmark did—at 26 percent versus 22 percent, respectively.[24] When we focus specifically on the manufacturing sector, we find that large Swedish companies (more than 250 employees) account for a larger share of the total employment, but the difference between the two countries is much smaller than typically assumed—60 percent in Sweden versus 53 percent in Denmark for all employment in manufacturing—and it's been shrinking over time. Thus, the trajectory of change on this dimension is the opposite of that of the outcomes we seek to explain, that is, while Denmark and Sweden have been converging in terms of industrial structure, the two countries have been diverging in terms of union strategies for social solidarity.

A fourth and final explanation might point to partisan politics. One of the longstanding differences between these two countries is the relative strength of the social democratic party.[25] Until the 2000s, Swedish unions could count on the almost uninterrupted support of a friendly social democratic government. In contrast, the Danish social democratic party was in power less often, and when it was in power it typically governed in a coalition with other, less labor-friendly parties. Patrick Emmenegger's explanation of why Denmark and not Sweden turned to flexicurity holds that it was precisely the weakness of the Danish labor movement that pushed the Danes toward "second-best" strategies, which paradoxically proved highly successful.[26] In a similar fashion, one could argue that lacking the same solid support of a near-hegemonic social democratic party, Danish unions have been forced into more voluntarist strategies based on self-help through collective bargaining. This explanation may seem plausible, but it turns out that the Danish unions' strategic reorientation actually marks a *return* to a preferred strategy that had been temporarily suppressed in the period of centralized bargaining.[27]

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[23] For example, Thelen and Busemeyer 2011.

[24] OECD 2017.

[25] Manow 2009, among others.

[26] Emmenegger 2010.

[27] See Galenson 1955 for an early analysis that recognized this point.

The Origins of Divergence

Throughout the 1960s and 1970s, both LO-DK and LO-SE were committed to strategies that emphasized wage solidarity in collective bargaining and strong social protection through state policy. But the many surface similarities masked important differences in underlying structures and associated goals. Craft unions of the sort that traditionally characterized the Danish labor movement had pursued their interests primarily through collective action in the market. Members of these unions, skilled workers with considerable labor-market power, embraced voluntarist strategies that neither relied on nor sought out the support of the state.[28] In contrast, industrial unions (including those in Sweden) whose membership is made up of both skilled and unskilled workers with less market power, embraced political unionism. Specifically, they "relied on favorable state intervention secured through political allies" both to protect their ability to organize and for complementary social policies. In short, whereas "craft unions tended toward liberal politics … attached to free collective bargaining as the only mode of trade union activity," industrial unions depended more on the "assistance of progressive political movements."[29]

These differences are not historical oddities or artifacts that industrialization swept away. The LO-DK accounts for 47 percent of all organized Danish workers, compared to the LO-SE, whose constituent unions organize 43 percent.[30] More important, as Figure 1 shows, skilled occupational/craft unions continue to dominate the LO-DK, with unskilled workers organized separately into sprawling conglomerates. Furthermore, as we will show, the conglomerates of unskilled workers have been subsumed into bargaining arrangements that put them in the minority. In contrast, the LO-SE is overwhelmingly composed of unions organized along industrial lines, with skilled occupational/craft unions representing a minuscule slice.

These historically evolved differences have powerfully rebounded with the breakdown of centralized bargaining and the advent of a more service-based economy. Esping-Andersen argued that the capacity of industrial unions to bridge divisions based on education made Sweden better able than Denmark (with its craft unions) to promote a broad wage-earner coalition in the transition to services.[31] But as we will show, it turns out that skill-based unionism has much more in com-

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[28] Streeck 2005, 267–8; Nijhuis 2009, 302.

[29] Streeck 2005, 268.

[30] Kjellberg and Ibsen 2016, 285, 292.

[31] Esping-Andersen 1985, 28.

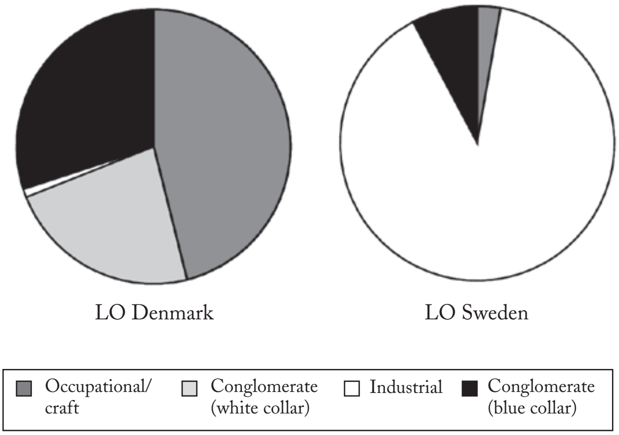

Figure 1
Union Types within LO Confederations, 2015

Sources: LO/Denmark 2016; LO/Sweden 2016b

mon with white-collar occupational unions. Both focus on education and training as roads to good jobs, and both accept and indeed embrace wage differentials that follow skills.[32] Thus, when centralized bargaining broke down in Denmark, resurgent craft unions rallied behind Dansk Metal, the skilled metalworkers union. Together with salaried employees, they pressed for a return to the core goals and strategies of the craft unions that had previously dominated the labor movement. Conversely, in Sweden the sharp split between blue-collar industrial unions and white-collar unions made a similar coalitional realignment impossible. The result has been quite different goals and strategies with respect to both wages and training.

Wages

One central difference between Denmark and Sweden concerns wage flexibility. In Denmark, the wage system for Dansk Metal was in fact always highly flexible, allowing individual wage setting for "able workers" since 1902. Even during the heyday of wage solidarity, wage negotiations for members of this union continued to differ from those of unskilled workers. Whereas the latter bargained under a system of centralized pay rates with increases set centrally (the so-called normal wage system, *normalløn*), skilled workers applied an alternative, minimum wage system (*mindstebetaling*) in which the centrally determined rate was topped up through locally negotiated increases and piece-rate agreements.

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[32] See Due et al. 1994; Nijhuis 2009, 302.

After the breakdown of peak-confederation-level bargaining in 1981, the normal wage system was gradually displaced by the minimum wage system long preferred—and practiced—by Denmark's skilled unions.[33] The first formal shift in wage structures came in 1991, when a large share of unskilled manufacturing workers that had previously been under the normalløn was transferred for the first time to mindstebetaling. The institutional foundation for this change had been laid earlier that year, when Dansk Metal mobilized other skilled unions to orchestrate the transformation of their own sectoral cartel, the Central Organization of Metalworking Employees in Denmark (CO-metal), into a more encompassing cartel, the Central Organization of Industrial Employees in Denmark (CO-industri). This move put Dansk Metal in charge of the new managing council and at the same time relegated unskilled unions to a permanent minority status.[34] Membership in the new bargaining cartel required handing over bargaining rights and control over agreements to CO-industri, which proceeded to cement the principle of decentralized wage systems. Over the next few years, the entire wage formation system changed along the lines preferred by the country's skilled unions.

Table 1 compares the wage systems currently in place in Denmark and Sweden (2014 is the latest available year for both countries, but those agreements remain in place). It shows that in Denmark today, fully 81 percent of private sector employees are covered by a system in which wages are negotiated at the company level, with 21 percent under so-called figureless agreements in which contracts don't specify any particular wage increase, and 60 percent under the minimum wage system described above.[35] The remaining 19 percent of private sector workers continue to be covered by the normal wage system, in which industry-level agreements set the actual paid wage.

Developments in Sweden followed a different path. As in Denmark, metalworking unions and employers led the charge against centralized

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[33] Due et al. 1993, 344; Iversen 1996; Scheuer 1998.

[34] Ibsen and Stamhus 1993, 57; Due, Madsen, and Jensen 1993, 427. Alongside Dansk Metal, Teknisk Landsforbund (technicians), Dansk El-forbund (electricians), and HK (white-collar workers) dominate the managing council; the unskilled workers union, 3F, holds just thirteen out of forty-six seats on the council. The unions representing low skill workers—SiD and KAD before they merged to become 3F—had attempted to create and lead a manufacturing cartel within LO, but this attempt failed at the LO Congress in 1991.

[35] The minimum wage system merely sets a floor on wages that, in practice, applies only to a small number of entry-level unskilled workers.

Table 1
Percentage of Employees Covered by Different Agreements in Sweden and Denmark: Private Sector, Selected Years 1989–2014[a]

	1989		*1993*			*2001*		*2004*		*2010*		*2014*	
			SW										
	SW	*DK*	*White-Collar*	*Blue-Collar*	*DK*	*SW*	*DK*	*SW*	*DK*	*SW*	*DK*	*SW*	*DK*
1. Figureless agreement	n/a	4	12		4	7	20	18	22	8	21	8	21
2. Local wage formation with nominal minimum wage; no wage pool or fallback of individual guarantees	n/a	62			80		65		62		63		60
3. Local wage formation with a fallback specifying the size of a company-level wage pool	n/a					5		4		25		13	
4. Local wage formation with a fallback specifying the size of a company-level wage pool, plus some form of individual guarantee	n/a					8		14		1		6	
5. Centrally negotiated wage pool for local bargaining without an individual guarantee	n/a		63	40		7		30		7		16	
6. Centrally negotiated wage pool with individual guarantee or fallback regulating the individual guarantee	n/a					45		17		43		21	
7. General wage increase with a wage pool for local bargaining	n/a		23	31		18		10		10		22	
8. General wage increase	n/a	34	2	29	16	10	15	7	16	6	16	13	19

Sources: Sweden: Svenskt Näringsliv 2006, 44 (for 1993); Medlingsinstitutet 2002; Medlingsinstitutet 2005; Medlingsinstitutet 2011; and Medlingsinstitutet 2015. Denmark: Dansk Arbejdsgiverforening 2000; Dansk Arbejdsgiverforening 2014.

[a] The eight agreement models differ in degree of centralization: model 1, figureless agreement, represents the most decentralized, and model 8, general wage increase, represents the most centralized. We adopt the seven agreement models used by Medlingsinstitutet 2015 in Sweden. However, we add model 2, local wage formation with nominal minimum wage and no wage pool or fallback of individual guarantees, which is a particularly Danish agreement model.

bargaining, but unlike in Denmark, Sweden's blue-collar unions, both within and outside industry, span a broad membership that includes all skill levels.[36] In Sweden, therefore, low-skill constituents have continued to shape bargaining strategies and outcomes within sectors and across them. As a result, the extent of decentralization and wage flexibility based on merit or skill is still much more restricted. In 1998, for example, a number of blue-collar agreements allowed for local bargaining, but only within the parameters of wage pools established in the central agreement. Moreover, and again by contrast to Denmark, this agreement also stipulated how much the wages of individual workers should increase in case of disagreement between company-level parties. Table 1 shows that in Sweden, most private sector employees (78 percent) are under agreements that set limits on the extent of wage flexibility either through wage pools or individual guarantees or both; another 13 percent are under fully centralized contracts.[37] Although nearly a quarter (21 percent) of all private sector employees in Denmark work under figureless agreements, such arrangements are rare in Sweden (8 percent) and limited to salaried professionals.

Beyond placing limits on wage flexibility *within* individual industrial agreements, the strength of unskilled unions within the LO-SE has allowed an attenuated form of wage leveling to continue *across* different sectors, along the lines of the previous solidaristic wage bargaining. Thus, the LO-SE still lobbies, with some success, for wage compensation for low-skill occupations. Specifically, by using a "second norm" (known colloquially as the *räknasnurra*), low-skill unions convert the wage norm agreed upon in manufacturing (a percentage increase) into a nominal increase, which constitutes a higher percentage increase for low-wage workers. Special efforts are made for female low-wage sectors, particularly by the Swedish Municipal Workers' Union (Kommunal), and also by the Union of Commercial Employees (Handelsanställdas förbund) and the Hotel and Restaurant Workers' Union (Hotell- och Restaurang Facket).

Although the export industries are meant to set the pattern for all other sectors, the pattern has been broken in several bargaining rounds by using the second norm.[38] In 2010, for example, retail workers got a

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[36] See Ahlén 1989 or Swenson and Pontusson 2000 for full accounts of the breakdown of centralized bargaining.

[37] Thus, 13 percent of workers have local wage formation with a fallback specifying the size of a company-level wage pool; 6 percent have local wage formation with a fallback specifying the size of a company-level wage pool, plus some form of individual guarantee; 16 percent have a centrally negotiated wage pool for local bargaining without an individual guarantee; 21 percent have a centrally negotiated wage pool with individual guarantee or fallback regulating the individual guarantee; and 22 percent have a general wage increase with a wage pool for local bargaining. See Medlingsinstitutet 2015, 127.

[38] Ibsen 2016, 304–305.

2.35 percent yearly wage increase, whereas the Swedish metalworkers union, IF Metall, won only a 1.75 percent gain.[39] More recently, in 2016, the Swedish Municipal Workers' Union negotiated a 4.3 percent increase for nursing assistants, significantly above the metalworkers' 2.2 percent increase.[40] The continued commitment to wage solidarity is thus no idle rhetoric. In fact, it has been an ongoing source of tension within the otherwise stable industry agreement (Industriavtal), causing the Metal Employers Association (Verstadsindustrier) to twice abandon the agreement to protest such coordination.[41] As noted above, these elements of wage solidarity have no counterpart in Denmark.

Education and Training

Even as wages have been progressively removed from the realm of peak-level coordination, Danish unions have increasingly used collective bargaining as an important arena for pursuing social policy goals.[42] Equal access to education and training throughout work life has attained top priority in collective bargaining since wage decentralization. In the past, when Denmark's unskilled unions pressed for *state-sponsored* continuing vocational education and training (CVET), they were opposed by skilled unions that feared this support threatened job demarcations. But after wage decentralization, skilled and white-collar unions took up the cause of CVET for their members *within collective bargaining*.[43] In 1985, Dansk Metal gained its first collectively bargained education fund for the metalworking industry.[44] By 1991, metalworkers had won the right to one week of paid education and training, and in 1993, this right was extended to two weeks. A subsequent 1995 agreement guaranteed workers their normal pay during education and training.[45]

Sectors dominated by unskilled workers were not included in the early agreements in this area. This changed in the early 2000s, when centralized bargaining underwent a deep crisis in Denmark. A rank-

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[39] According to the Swedish National Mediation Office, other labor cost–reducing provisions offset the higher wage increases in retail, aligning it with the manufacturing norm, but the wage increases nevertheless set a "second mark" for other low-skill workers. Medlingsinstitutet 2011, 141.

[40] Gustafsson 2016; Holm 2016.

[41] For example, Kullander and Eklund 2010.

[42] Due and Madsen 2003; Mailand 2008; Trampusch 2007.

[43] It is noteworthy that the demand for collectively bargained training funds originated with skilled unions in Denmark. One might assume that this would have been a goal prioritized by low-skill unions whose members are more at risk of unemployment, particularly in the context of Denmark's weak employment protections. In fact, white-collar unions in Denmark (as in Sweden) have been a driving force, even though their members enjoy somewhat stronger employment protections. See Jensen 2011.

[44] There was no guaranteed right to paid education and training connected to the fund, but trade unions saw it as a way to ensure that companies would invest in skill development.

[45] Navrbjerg, Nordestgaard, and Due 2001, 63.

and-file revolt against the LO-DK, spearheaded by unskilled unions feeling abandoned by the peak association, resulted in a major strike in 1998 that shut down the Danish economy for two weeks. The strike was a wake-up call for Dansk Metal, which needed to show that its leadership in coordinated bargaining would also benefit low-skill workers. The union's president thus sought to sweeten the deal for such workers by broadening the scope of bargaining at the industry level to include nonwage issues.[46]

Beginning in 1999, education and training therefore began to figure prominently in the LO-DK's new national strategy. Collectively bargained agreements on CVET, which now also covered unskilled workers, offered governments a way to fund training by supplementing existing public funding of such education.[47] In 2006–7, a sweeping tripartite agreement was reached: the government promised extra funding for CVET if the social partners could come to an encompassing solution. Negotiations settled on an extension of the skill-development fund that had been negotiated previously for the industry sector, and the agreement now gave each worker the right to two weeks of paid training and education, plus the right to personally choose the training to be received. Allowing workers to opt for non-firm-specific courses was seen as a great improvement, given the lax hiring-and-firing rules in the Danish flexicurity model.[48] Although the metalworking sector led the way in negotiating these provisions, the terms of the deal were extended to all occupational groups thanks to cross-sectoral coordination in Danish bargaining.[49]

Collective agreements in Sweden, by contrast, are notoriously weak on training. [50] Most of the agreements that do exist in this area build on a framework agreement that dates back to the 1980s and simply serves as a guide on how to implement the 1976 Co-Determination at Work Act (*Medbestämmandelagen*).[51] Under the terms of that agreement, firms are meant to inform workers about the training needed to keep up with technological and market changes and to encourage them to participate. But the agreements don't contain any substantive rights to paid education and training, so firms are under no obligation to provide or fund it. Laid-off workers in Sweden are covered by the restructuring agreement (*Omställningsavtal*) from 2004, which set up a fund for job-search coaching that supports workers who are made redundant.[52] However, unlike in Denmark, where laid-off workers have guaranteed training rights, in Sweden such workers are eligible for paid training courses only under exceptional conditions.

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[46] Ibsen 2016, 304.

[47] LO/Denmark 1999. Unskilled workers' unions were especially afraid that their members would lose out if public funding for labor market vocational training centers suffered from collectively bargained rights to CVET, cf. Mailand 2008, 47–51.

[48] Ibsen and Mailand 2011.

[49] Mailand 2008.

[50] See Appendix Table A1 for a detailed comparison of industry-level agreements on education and training in Sweden and Denmark.

[51] The terms are laid out in the so-called Development Agreement (Utvecklingsavtal 1982/1985) between LO-SE, PTK, and SAF (the peak-level employer confederation).

Although separate industry-level agreements on training have been reached in a few sectors in Sweden, these agreements are mainly procedural; they lack the substantive rights guaranteed in Danish collective agreements.[53] Moreover, even the weaker procedural provisions of Swedish contracts don't cover all sectors. Workers in construction, metalworking, transportation, and other industries have concluded such agreements, but sectors employing large numbers of low-skill workers (for example, personal care services) don't enjoy even these limited procedural rights.[54] In Sweden, national-level negotiations on paid education and training between the LO-SE and the Confederation of Swedish Enterprise (SN), the peak-level employers' organization, have repeatedly foundered on internal union controversy and employers' insistence on making the relaxation of employment protection part of the deal.[55]

Even though Sweden's blue-collar unions so far have not prioritized collectively bargained training, the same can't be said for Sweden's white-collar confederations, which have been actively pursuing collective bargaining deals on training. Faced with the blue-collar unions' unwillingness to give up wage solidarity and job protection, employers turned their attention to salaried employees. Some TCO and SACO unions have already agreed to more flexible wage systems that bypass skilled workers within the LO-SE industrial unions. By 1993–94, 75 percent of the salaried workers covered by contracts negotiated with SN affiliates had transferred to agreements without centrally agreed upon individual wage guarantees, though only 12 percent were on "figureless agreements."[56] The private sector cartel for salaried workers (PTK) also recently sidestepped the LO-SE to open negotiations with SN about "competence funds" in return for reforms of employment protection legislation.[57]

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[52] Bäckström 2005, 3–6, 30–31.

[53] LO/Sweden 2005; LO/Sweden 2012.

[54] See Appendix Table A1, which shows that Swedish agreements are procedural in nature and not uniform across industries. Danish agreements are both procedural and substantive, and they are also uniform across industries.

[55] The Swedish LO unions actually disagree on the matter, both across unions and within them. For example, IF Metall's leaders have expressed willingness to relax the employment protection law (LAS) if compensated by employer-financed education for its members, but the union's rank and file protested against any measure that would weaken LAS; see Jacobsson 2015.

[56] Conversely, no blue-collar agreement under the SN-auspice is figureless, cf. Svenskt Näringsliv 2006; Svenskt Näringsliv 2011.

In sum, by the mid-2000s, the Danish labor movement had completed a transition away from the centralized model of wage solidarity characteristic of the 1960s and back to a regime that countenances, and in fact actively encourages, skill-based wage differentials in exchange for expanded rights to education and training. Meanwhile, Sweden stuck with previous strategies based on continued wage solidarity between skilled and unskilled blue-collar groups, a strategy that appears to be exacerbating the divide between blue- and white-collar constituencies, especially on issues of education and training.

The Impact of Divergence

The different strategic priorities of the Swedish and Danish labor movements are reflected in bargaining outcomes related to both wages and training in the two countries. We begin with wages. Figures 2 through 6 document the development of wage differentials measured in several ways. Figure 2 tracks the wage ratio between skilled manufacturing and unskilled services between 1990 and 2007 (precrisis), revealing stronger dispersion in Denmark than in Sweden. Figures 3 and 4 record differentials between manufacturing and low-tech services in 2009–15 (postcrisis), for blue- and white-collar workers, respectively. Figure 5 compares the median wage ratio between workers with upper-secondary and postsecondary (nontertiary) education and unskilled workers in the two countries (2006, 2010, and 2014). Figure 6 shows the share of low-wage earners as a proportion of all employees in 2006, 2010, and 2014. It's clear from all measures that wage inequality for low-skill blue-collar workers and in low-skill sectors is more pronounced in Denmark than in Sweden.

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[57] Negotiations broke down over the preferences of the highest skilled unions (academics) for local negotiations on skill development rather than collective funding, i.e., the solidaristic element of paid training (see, for example, http://www.ingenjoren.se/2015/12/las-kan-offras-mot-lofte-om-utbildning/). And although government legislation may resolve the issue, the tradition in Swedish educational policy has been not to induce the social partners to engage in the funding of education. A committee appointed by the current social democratic government proposed a new "system for life-long learning" that could include a universal "competence insurance" fund based on collective agreements, as well as changes to the employment protection legislation (see, for example, http://www.regeringen.se/sveriges-regering/statsradsberedningen/uppdrag-framtid/arbetet-i-framtiden/). But no such agreement has emerged as of this writing. We thank Axel Cronert for bringing this to our attention.

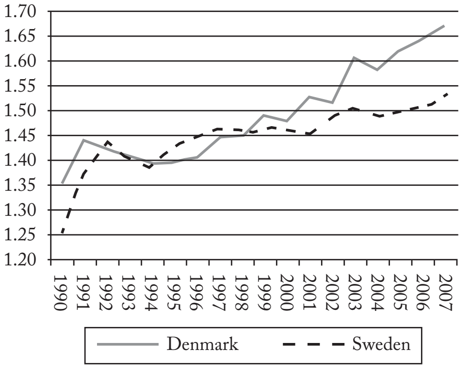

Figure 2
Average Wage Ratio between Workers in High-Tech Manufacturing and Low-Tech Service (Retail, Hotels, and Restaurants) 1990–2007

Sources: EU KLEMS 2009a; EU KLEMS 2009b.

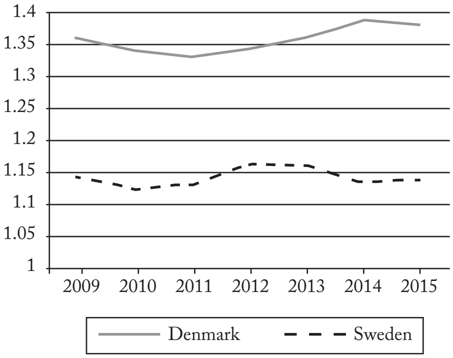

Figure 3
Average Wage Ratio between Manufacturing and Low-Tech Service (Commerce,[a] Hotels, and Restaurants) 2009–2015: Blue-Collar Workers

Sources: Statistics Sweden 2017a; Statistics Denmark 2017.

[a] Includes data on retail and wholesale trade; data on retail only not available for this period.

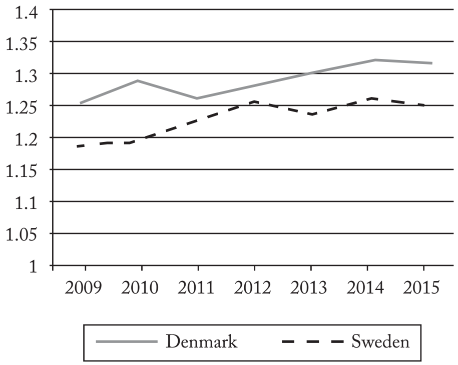

FIGURE 4
AVERAGE WAGE RATIO BETWEEN MANUFACTURING AND LOW-TECH SERVICE (COMMERCE,[a] HOTELS, AND RESTAURANTS) 2009–2015: WHITE-COLLAR WORKERS

Sources: Statistics Sweden 2017b; Statistics Denmark 2017.

[a] Includes data on both retail and wholesale trade; data on retail only not available for this period.

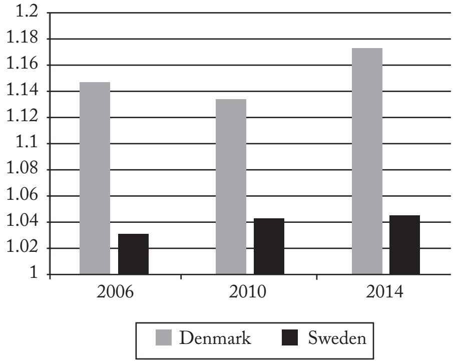

FIGURE 5
MEDIAN WAGE RATIO BETWEEN EMPLOYEES WITH UPPER-SECONDARY AND POSTSECONDARY, NONTERTIARY EDUCATION VERSUS EMPLOYEES WITH LESS-THAN-PRIMARY, PRIMARY, AND LOWER-SECONDARY EDUCATION, 2006, 2010, AND 2014

Source: Eurostat 2017a.

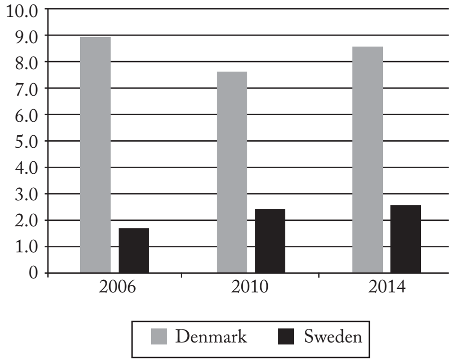

Figure 6
Low-Wage Earners as a Proportion of All Employees (Excluding Apprentices) 2006, 2010, and 2014[a]

Source: Eurostat 2017b.

[a] Low-wage earners are defined as those employees (excluding apprentices) earning two-thirds or less of the national median gross hourly earnings in that particular country.

A reverse pattern can be seen in the area of training, where Denmark has overtaken Sweden in generosity of benefits. Although public expenditure on CVET in the two countries is similar,[58] supplemental (collectively bargained) training rights have resulted in higher participation rates for Danish workers. Figure 7 shows participation in education and training for employees since 2000, the first year for which comparable data are available. Danish employees record higher levels of participation than their Swedish counterparts, with participation increasing in the early 2000s and steady since then, despite the center-right dominance in the Danish government and the relative weakness (compared to Sweden) of the social democratic party.[59] Swedish participation rates are lower, though they are trending upward and showing signs of convergence under the current social democratic government.

Figure 8, which shows participation in training across skill levels, tells a similar story. Panel (a) indicates participation rates for persons with less-than-primary and lower-secondary education; panel (b) shows the rates for persons with upper-secondary and postsecondary nontertiary educa-

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[58] According to Eurostat, in 2010, Denmark and Sweden spent 1.8 percent and 1.7 percent, respectively, of total labor costs on CVET (Eurostat 2017c).

[59] Center-right governments (Fogh government and Rasmussen government) were in power in Denmark for most of this period, except for part of 2001 (end of the Nyrup government) and 2011–15 (Thorning government).

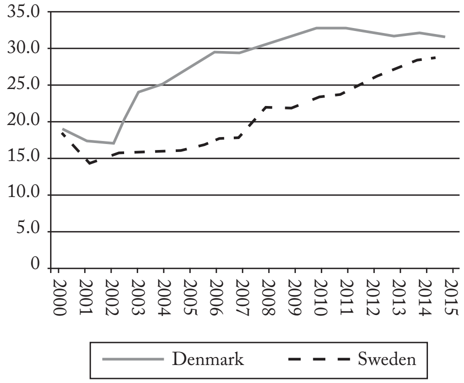
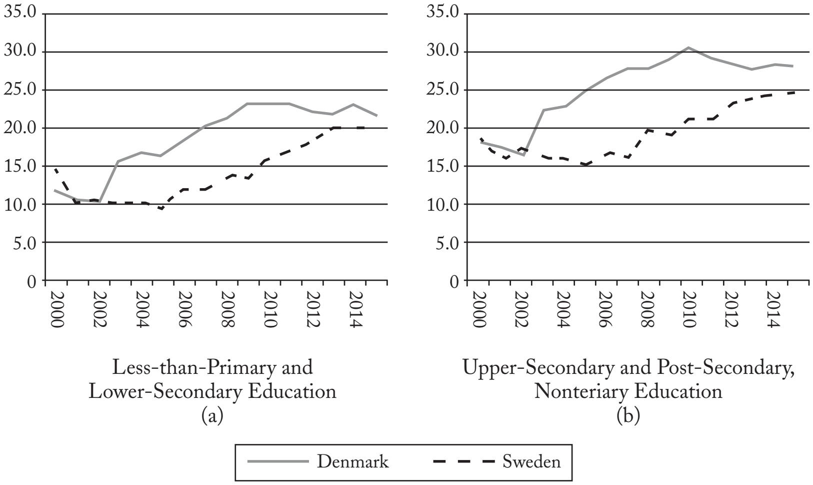


Figure 7
Participation Rate in Education and Training (Last Four Weeks) for Employed Persons 25–64 Years Old

Source: Eurostat 2016.



Less-than-Primary and
Lower-Secondary Education
(a)

Upper-Secondary and Post-Secondary,
Nonteriary Education
(b)

Figure 8
Participation Rates in Education and Training (Last Four Weeks) for Employed Persons 25–64 Years Old

Source: Eurostat 2016.

tion. In both cases, Danish workers have higher participation rates than their Swedish counterparts, albeit again with signs of convergence.

UNION STRATEGIES AND THE POLITICS OF DISTRIBUTION

Judging from overall impact and in comparative perspective, both the Danish and the Swedish approaches to social solidarity seem to have real and positive consequences for wages and worker employability in the two countries. However, the differences between the two varieties of solidarity are unmistakable. This section discusses the impact of these different trajectories of change for alliances within the labor movement. It also addresses the broader lessons the two models of solidarity hold concerning the role of unions in sustaining high levels of equality in a period of labor market liberalization and welfare state retrenchment across the world's rich democracies.

WAGE-EARNER COALITIONS AND THE POLITICS OF SOCIAL SOLIDARITY

Our comparison of Denmark and Sweden highlights some of the general trade-offs and dilemmas faced by organized labor in sustaining social solidarity today. A number of recent studies have pointed to the potential for new coalitions to bridge the interests of workers in the "new" and "old" economies.[60] Esping-Andersen was one of the first to propose a new wage-earner coalition between the old and new worker constituencies, but his original prediction, as noted, was that industrial—not craft—unions would be "better situated to invoke broad class solidarity."[61] Our study suggests that skilled unions may more easily find common cause with the growing salaried and professional workers' unions. Denmark's supply-side approach has helped forge an alliance that links skilled blue-collar workers with salaried workers. But this is happening at the expense of low-skill workers whose wages have demonstrably failed to keep pace. In Sweden, by contrast, the LO-SE's strategy has kept low-skill workers in the fold. But this alternative strategy may also have intensified the gap between blue-collar and salaried employees, with the latter pursuing an increasingly independent course that emphasizes an alternative path of skill-based pay and education.

The divergent approaches taken in these two countries reflect, but also reinforce, significant differences in underlying working-class preferences. Recent polls of LO-SE and LO-DK members suggest that the two different strategies don't just reflect the preferences of the current leadership, but also run deep among the rank and file. Naturally, union members in both countries assign a relatively high priority to wages and wage bargaining. In Sweden, 95 percent of members rank wages as the top priority, as do 85 percent in Denmark, and overall, wages rank fourth out of eighteen goals in Sweden and third out of twenty in Denmark. Opinions on the issue of education diverge sharply, however. In Denmark, education actually came in above wages as a priority among the rank and file (86 percent cited it as a top priority, making it second overall out of twenty themes). In Sweden, by contrast, education ranked near the bottom (seventeenth out of eighteen), with only 65 percent of LO-SE members agreeing that this should be a union priority.[62]

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[60] Beramendi et al. 2015; Iversen and Soskice 2015.

[61] Esping-Andersen 1985, 28.

These differences reflect trends in evolving union membership in the two countries. As we've seen, overall unionization rates are quite similar (69.5 percent for Sweden, 67.7 percent for Denmark).[63] But aggregate density figures obscure important trends in the composition of union membership. For starters, Danish union-density figures include members of so-called yellow unions, which have no counterpart in Sweden. Such unions offer lower union fees, but don't negotiate contracts themselves, instead free riding on collective agreements negotiated by other unions.[64] These organizations have been winning market shares from unions, such as 3F and HK, that represent low-skill workers.[65] But since they're entirely outside the LO, they're not able to influence the strategic direction of the movement. If we exclude yellow unions, the union-density figure in Denmark was 58.2 percent in 2015—more than ten percentage points below that of Sweden.[66]

Sweden, by contrast, continues to organize not just a larger share of workers overall, but also a larger share of unskilled workers in particular. In 2010–12, only 46 percent of low-skill workers in Denmark were organized in agreement-bearing unions, compared to 63 percent in Sweden in 2010 (see sources for Figure 9). Moreover, recent studies show that in the past decade, LO-DK unions have reached critically low density rates—around 30 percent of all workers—in industries like retail, hotels, and restaurants.[67] In Sweden, union density is 49 percent for blue-collar retail workers (61 percent for white-collar retail workers); 38 percent for blue-collar hotel workers (65 percent for white-collar hotel workers); and 29 percent for blue-collar restaurant workers (40 percent for white-collar restaurant workers).[68]

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[62] Caraker et al. 2014, 76; LO/Sweden 2011, 8.

[63] The Danish figure uses the labor force (employed plus unemployed) as the denominator, whereas the Swedish one only uses employed as the denominator. But unemployed persons in the two countries are generally union members, due to the Ghent system of union-administered unemployment insurance funds. The different denominator in the two unionization rates should therefore not change the overall unionization rates much; cf. Kjellberg and Ibsen 2016.

[64] Thanks to provisions in Danish labor law that apply agreements to all workers in a covered company, irrespective of membership in the agreement-signing union.

[65] Ibsen, Høgedahl, and Scheuer 2011, 137.

[66] Kjellberg and Ibsen 2016, 292.

Figure 9 provides some comparisons of unionization rates at different skill levels. It shows that Sweden and Denmark enjoy roughly equal (and by international standards, very high) unionization rates among employees with tertiary education. Sweden does somewhat better than Denmark among those with upper-secondary education. But the gap between the two countries is largest precisely among unskilled workers, where Swedish unions continue to organize a significantly larger share.

Beyond unionization rates, the different coalitional configurations in Sweden and Denmark are manifest in organizational developments. Sweden, but not Denmark, has seen increased tensions between blue-collar and salaried confederations. The LO-SE continues to attend to the interests of low-skill groups on wages, but the confederation also remains confined to a shrinking blue-collar constituency. Thus, it has steadily lost ground to white-collar groups that are organized into alternative, competing confederations with very different strategic courses. Indeed, the LO-SE often finds itself explicitly at odds with salaried workers' unions on wage solidarity and job protection, which has complicated the pursuit of joint gains, such as education.

By contrast, the LO-DK, led by skilled occupational unions, has maintained its central position by capturing and absorbing the rapidly growing white-collar constituencies with whom, as we've seen, they pursue an agenda of wage flexibility plus training. But this has left low-skill workers more marginalized than they are in Sweden and also more prone to alternative, yellow unions in producer-group politics, and welfare-chauvinist parties in electoral politics.[69] It's beyond the scope of this article to fully discuss how these two union movements have responded to the challenges associated with immigration, but it's worth noting that according to many studies, competition between immigrant groups and low-skill domestic workers fuels support for populist right-wing, anti-immigrant political parties.[70]

Such arguments would appear to complement the analysis offered

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[67] Toubøl et al. 2015, 30.

[68] LO/Sweden 2015, 11–12.

[69] Andersen and Bjørklund 1990.

[70] See, among others, Dancygier 2010 and Mews and Mau 2012.

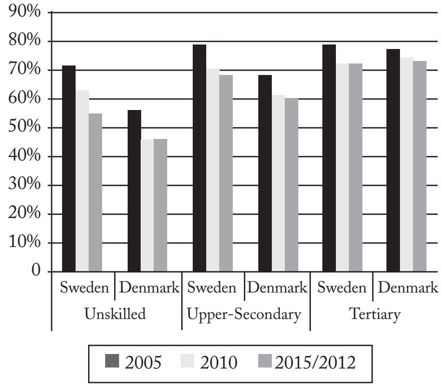

FIGURE 9
UNION DENSITIES (DISCOUNTING YELLOW UNIONS) ACROSS SKILL LEVELS
2005, 2010, 2015/2012[a]

Source: Danish administrative data and Swedish labor force surveys.

[a] Sweden: Figures are for the years 2005, 2010, and 2015. Denmark: Figures are for the years 2005, 2010, and 2012 (the most recent available).

here. While Sweden has traditionally had a more liberal labor migration policy and thus has a larger immigrant population,[71] in Denmark we observe earlier and higher levels of welfare chauvinism in electoral politics.[72] As we've shown, low-skill groups in Denmark are more likely to find themselves outside the protection of collective bargaining, and thus more dependent on state policy. This puts them in direct competition with other possible claimants on state resources including, of course, immigrants. And that competition is exacerbated by the lower labor-market attachment of nonwestern immigrants in Denmark (48 percent for women and 55 percent for men) compared to Sweden (52 percent for women and 59 percent for men).[73]

Also consistent with our analysis, trade unions in Sweden have generally been more accommodating to these new workers, particularly in low-skill sectors.[74] For example, the Swedish Hotel and Restaurant Workers' Union actively organizes immigrant workers and the number of union members who are first- and second-generation immigrants exceeds that of native Swedes.[75] Conversely, hotel and restaurant workers in Denmark are part of the large 3F conglomerate of unskilled workers that has no particular strategy for immigrant workers. Instead of organizing immigrants, the 3F strategy has focused more on defending collective agreements against low-wage competition, especially from foreign, posted workers.[76]

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[71] OECD 2011; 17 percent of the total population in Sweden consists of individuals born outside the country, compared to 11 percent in Denmark; see Danmarks Statistik 2016, 89.

[72] As measured in support for the right-wing populist parties, the Danish People's Party and the Sweden Democrats. The recent refugee crisis has given an electoral boost to the Sweden Democrats, possibly spelling the end of Swedish exceptionalism on this score. See also Jungar and Jupskås 2014.

[73] Danmarks Statistik 2016, 96–7.

[74] The labor market situation actually varies considerably across different immigrant groups, but in general, and as Ilsøe 2016, 45, documents, immigrants are often overrepresented in low-skill sectors such as hotels and restaurants.

Unions and the Politics of Redistribution

The two alternative strategies for solidarity also have important implications for the politics of distribution more broadly conceived. Recent scholarship suggests that union bargaining no longer serves as a guarantor of equality, and that the political system will have to compensate for rising market inequality through redistributive social policies.[77] An emerging literature thus emphasizes the dominance of electoral politics over producer-group politics, suggesting that union strategies in collective bargaining are of little consequence, and that unions pursuing equality—if they do so at all[78]—should instead focus on influencing policy-making.[79]

Our analysis suggests a less zero-sum view of the relationship between the two spheres. Rather than discarding collective bargaining in favor of an exclusive focus on electoral politics, we should look at how coalitions in both arenas interact, complement, or clash to produce distinct distributional outcomes. One core difference between the two cases we've examined is that they mark out two rather distinct divisions of labor for industrial relations and state policy. Sweden's demand-side model continues to prioritize wage equalization in collective bargaining, while leaving accompanying social policy (including responsibility for training) in the hands of politicians. Denmark's supply-side model, by contrast, relieves the state by integrating some aspects of social policy (including training) into the realm of industrial relations. But of course, the resulting benefits reach only those covered by the contracts.

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[75] Neergaard 2015, 215.

[76] Arnholtz and Andersen 2016.

[77] For example, following the framework of Meltzer and Richard 1981, who proposed that median voters would demand redistribution when average incomes diverge from the median voter income, Kenworthy and Pontusson 2005 find that rising market inequality is associated with more redistribution by welfare states. These authors argue that voter turnout is decisive for the politics of redistribution. Iversen and Soskice 2015 propose that parliamentary systems, more specifically proportional representation systems, facilitate inclusionary coalitions between parties that promote redistributive policies.

[78] Rueda 2007.

[79] Beramendi et al. 2015; Iversen and Soskice 2015.

These two models of social solidarity are thus characterized by distinctive strengths and vulnerabilities. In the area of training, Denmark's model is less vulnerable to shifting political winds, since social protections that are financed through collectively bargained funds don't rely as heavily on state support. Moreover, because employers and trade unions control them jointly, collectively bargained social funds keep Danish employers in the game. Employers' own contributions to these funds mean that they too have sunk costs that can only be recovered by giving workers use of these resources. The same can't be said of Sweden, where collective bargaining has focused more on the enduring battle over flexibility versus equality of wages.[80] In contrast to Denmark, where joint contributions to training funds stabilize collective bargaining, in Sweden employers are overall less invested and indeed, they're actively disgruntled by the lack of wage flexibility and continued strict job protections. This is why in Sweden—but not in Denmark—we hear periodic calls for abolishing industry-level bargaining altogether.[81]

Furthermore, the emphasis on wage solidarity in Sweden has made it harder for blue-collar unions to coordinate with white-collar unions and to negotiate broad trade-offs, for example, conceding greater wage or employment flexibility in exchange for more training. Thus, Swedish unions must rely more on the state to pay for training, which means funding for these purposes is more vulnerable to shifting partisan political winds. Figure 10 tracks public expenditure and participant stocks on training in labor-market policy for Denmark and Sweden since 1998. It shows that training participation in Denmark remained stable even through ten-plus years of center-right governance. Sweden, for its part, far outspent Denmark in the 1990s and early 2000s, when participant stocks were also much higher. The picture changed drastically in the early 2000s, however, as Danish expenditures remained stable while Sweden's dropped to levels on par with the Danes. Most important, however, the number of participants in Sweden dropped precipitously while Denmark's participant stock remained stable and even grew in the 2000s.

In some ways, the vulnerabilities of the Danish model present a mirror image. By linking benefits to employment, Denmark not only excludes those outside the ambit of collective bargaining, but also risks encountering some of the same problems suffered by Bismarckian welfare states. Collectively bargained rights to education and training,

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[80] Ibsen 2013.

[81] Ibsen et al. 2011, 331.

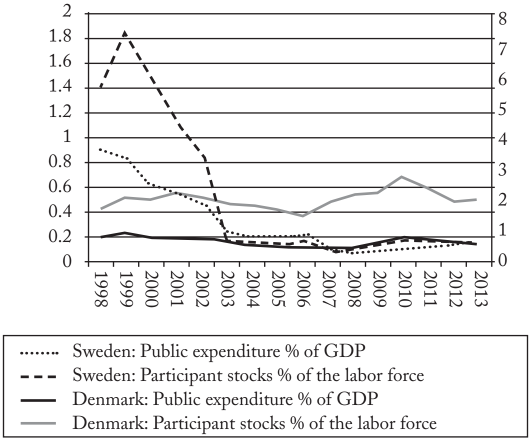

FIGURE 10
PUBLIC EXPENDITURE (PRIMARY AXIS) AND PARTICIPANT STOCKS ON TRAINING (SECONDARY AXIS) IN LABOR MARKET POLICY 1998–2013

Source: OECD 2016.

parental leave, and pensions accrue through stable employment and contributions.[82] In such a context, politicians can neglect universal welfare schemes, relying more and more on industrial relations to provide social policy.[83] In the case of pensions, for example, low bargaining coverage for certain private sector industries has created a residual group without sufficient pension entitlements.[84]

If we pull back to view the politics of redistribution more broadly conceived, it also seems clear that the interplay of producer group and electoral politics runs even more deeply than such simple trade-offs. Institutions such as collective bargaining, which affect the level and structure of pretax and transfer inequality, have enormous implications for the level and structure of inequality that politicians may be called upon to redress. To appreciate these deeper connections, compare the inequality levels of the two countries we've examined against the benchmark of the United Kingdom, a classic liberal market economy. Figure 11 shows that when it comes to market inequality (captured in the pretransfer Gini coefficient), Denmark has been converging to the

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[82] Palier and Martin 2008. Moreover, in the case of occupational pensions, contributions are a percentage of gross salaries, thus creating pension inequalities based on wage inequality.

[83] Trampusch 2009.

[84] Due and Madsen 2015; Kangas, Lundberg, and Ploug 2010.

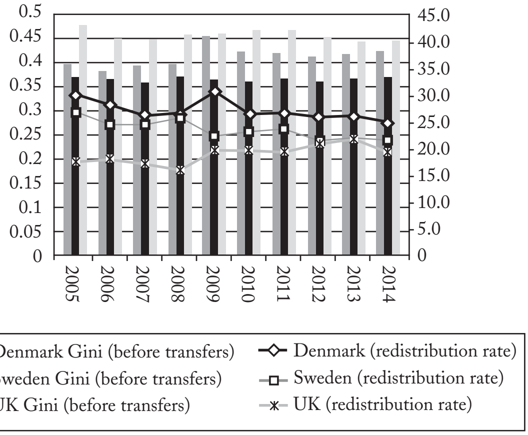

Figure 11
Redistribution Rates (Primary Axis) and Gini Coefficients (Secondary Axis) in Denmark, Sweden, and the UK, 2005–2014[a]

Source: Eurostat 2017d; authors' calculation of redistribution rate.

[a] Income includes pension in pretransfer Gini.

UK level while Sweden has consistently generated significantly lower levels of market inequality over the same period.[85]

Thus, to arrive at similar levels of posttax and transfer equality, the Danish welfare state confronts the larger burden. And while Figure 11 shows that the Danish state has indeed responded by redistributing more than the Swedish state, it also shows that such efforts have drifted down over the past several years.[86] In short, even though Sweden's demand-side solidarity relies more on the state for social policy, there's already more redistribution occurring through collective bargaining. That means the state has less mopping up to do. Hypothetically, if Sweden in 2014 wanted to maintain its own posttransfer level of inequality given a UK-level of market inequality, the welfare state would have to increase its redistribution rate from 0.24 to 0.37, requiring a substantial increase in taxes and transfers.[87] As such, Swedish politicians should be thankful that collective bargaining is still solidaristic.

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[85] The difference could be explained in part by rising income from capital due to the property boom in Denmark until 2009, but after the crisis, market inequality in Denmark continues to be higher than that in Sweden.

[86] Redistribution is measured as a percentage reduction in the Gini before taxes and transfers to after taxes and transfers:

$$\frac{Gini_{Pre} - Gini_{Post}}{Gini_{Pre}}$$

Iversen and Soskice 2015, 6.

[87] In 2014, the UK Gini_{Pre} was 40.2 versus the Swedish Gini_{Pre} at 33.4. Using the Iversen and Soskice redistribution definition (see fn. 86), the hypothetical example would yield the following redistribution

Conclusion: Union Politics and the Dilemmas of Solidarity in the New Knowledge Economy

Taken together, the two different models of social solidarity we observe in Sweden and Denmark provide an especially clear view of the trade-offs and dilemmas faced by all unions in maintaining solidarity in the new knowledge economy. Denmark's industrial-exchange model appears to provide a formula for reconciling the interests of skilled blue-collar and salaried employees—a formula that in some ways relies less on active state support. However, benefits and protections that run through the industrial relations system are less encompassing, and hence especially sensitive to a decline in bargaining coverage. That leaves those outside the ambit of collective bargaining to the market or to less-generous state policies. The situation is especially acute for immigrants affected by recent social policy reforms that single them out for less-generous benefits. These reforms have lowered reservation wages of immigrants well below those of native workers, an especially troublesome development in a context of flexible wage systems and in the absence of a statutory minimum wage.[88]

The strength of Sweden's demand-side approach to solidarity is that bargaining coverage, including among low-skill workers, remains more robust. As we've seen, it places a stronger floor under wage flexibility while continuing to organize a larger share of the country's most vulnerable workers. But this alternative model relies more heavily on direct government support and financing, such as for training, leaving it in some ways more vulnerable to shifts in the composition of government. Indeed, the trends we document may have weakened Swedish corporatism (compared to Danish corporatism) as Swedish governments have decoupled the social partners from policy making, particularly, though not exclusively, under center-right governments.[89] Perhaps most important, Sweden's demand-side solidarity has yet to make a strong connection to salaried constituencies, and as the most rapidly growing segment of the labor market, these groups may well hold the key to the viability of egalitarian capitalism going forward.

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rate: 40.2 – 25.4 / 40.2 = 0.37, which is significantly higher than the actual redistribution rate: 33.4 – 25.4 / 33.4 = 0.24.

[88] Arnholtz and Andersen 2016; Bengtsson 2013.

[89] Anthonsen, Lindvall, and Schmidt-Hansen 2011.

APPENDIX

TABLE A1
INDUSTRY-LEVEL AGREEMENT PROVISIONS ON EDUCATION AND TRAINING (PRESENT)

	Sweden	*Denmark*
Construction	Training agreement on procedures/ skill content for apprentices/new entrants (*Yrkesutbildningsavtal*).	Right to two weeks paid training/education chosen by worker (can accumulate six weeks over three years), paid by multiemployer skill-development funds. Right to two weeks paid training during notice period. Procedural agreement on skill development at company level, including individual skill-development plan.
Metalworking and other manufacturing	Procedural agreement on skill development at company level (*Avtal om kompetensutveckling i företagen*). Statement of intentions.	same as above
Paper and pulp	Procedural agreement on skill development at company level, including individual skill-development plan (*Avtal om samverkan inom massa- och pappersindustrin*).	same as above
Food processing	Procedural agreement on skill development at company level (*Utbildning och kompetens*). Statement of intentions.	same as above
Printing	Procedural agreement on skill development at company level, including individual skill-development plan.	same as above
IT/communication	Procedural agreement on skill development at company level, including individual skill-development plan.	same as above

	Sweden	*Denmark*
Transport	Procedural agreement on skill development at company level (*Avtal om kompetensutveckling for unionen*). Statement of intentions.	same as above
Personal-care services (municipal/public sector workers)	none	same as above
Maintenance and cleaning	Procedural agreement on skill development at company level, including individual skill-development plan (*Fastighet, Överenskommelse Om introduktions-, och grund- och vidareutbildning in serviceentreprenad-avtal*).	same as above
Commerce	Retail: Procedural agreement on skill development at company level, including individual skill-development plan (*Detaljhandelsavtal—bilag 2: Avtal kompetensutveckling*).	same as above

Source: Author compilation of current collective agreements for major industries in Sweden and Denmark.

References

Ahlén, Kristina. 1989. "Swedish Collective Bargaining under Pressure: Inter-union Rivalry and Incomes Policies." *British Journal of Industrial Relations* 27, no. 3: 330–46. doi: 10.1111/j.1467-8543.1989.tb00343.x.

Andersen, Jørgen Goul, and Tor Bjørklund. 1990. "Structural Change and New Cleavages: The Progress Parties in Denmark and Norway." *Acta Sociologica* 33, no. 3: 195–217. doi: 10.1177/000169939003300303.

Andersen, Søren Kaj, Jon Erik Dølvik, and Christian Lyhne Ibsen. 2014. *Nordic Labour Market Models in Open Markets*. Brussels, Belgium: ETUI.

Anthonsen, Mette, Johannes Lindvall, and Ulrich Schmidt-Hansen. 2011. "Social Democrats, Unions and Corporatism: Denmark and Sweden Compared." *Party Politics* 17, no. 1: 118–34. doi: 10.1177/1354068810365504.

Arnholtz, Jens, and Søren Kaj Andersen. 2016. *Udenlandske virksomheder og udstationerede arbejdstagere i bygge- og anlægsbranchen* [Foreign companies and posted workers in construction]. Copenhagen, Denmark: FAOS, University of Copenhagen.

Autor, David H., and David Dorn. 2013. "The Growth of Low-Skill Service Jobs and the Polarization of the US Labor Market." *American Economic Review* 103, no. 5: 1553–97.

Baccaro, Lucio, and Richard M. Locke. 1998. "The End of Solidarity? The Decline of Egalitarian Wage Policies in Italy and Sweden." *European Journal of Industrial Relations* 4, no. 3: 283–308. doi: 10.1177/095968019843002.

Bäckström, Henrik. 2005. *Omställningsbranschen och omställningsavtalet mellan Svenskt Näringsliv och LO* [Industries under restructuring and the agreement on restructuring between SN and LO]. Stockholm, Sweden: Arbetslivsinstitutet.

Bengtsson, Erik. 2013. "Swedish Trade Unions and European Union Migrant Workers." *Journal of Industrial Relations* 55, no. 2: 174–89. doi: 10.1177/0022185612473211.

Beramendi, Pablo, Silja Häusermann, Herbert P. Kitschelt, and Hanspeter Kriesi, eds. 2015. *The Politics of Advanced Capitalism*. Cambridge, UK: Cambridge University Press.

Bradley, David, Evelyne Huber, Stephanie Moller, François Nielsen, and John D. Stephens. 2003. "Distribution and Redistribution in Postindustrial Democracies." *World Politics* 55, no. 2 (January): 193–228. doi: 10.1353/wp.2003.0009.

Brynjolfsson, Erik and Andrew McAfee. 2014. *The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies*. New York, N.Y.: W. W. Norton & Co.

Campbell, John L., and Ove K. Pedersen. 2007. "The Varieties of Capitalism and Hybrid Success: Denmark in the Global Economy." *Comparative Political Studies* 40, no. 3: 307–32. doi: 10.1177/0010414006286542.

Caraker, Emmet, Laust Høgedahl, Henning Jørgensen, and Rasmus Juul Møberg. 2014. *Fællesskab før forskelle—Lønmodtagerværdier og interesser i forandring* [Community before differences—wage earner values and interests under change]. Aalborg, Denmark: CARMA. At https://www.lo.dk/Nyheder/Nyhedsarkiv/2014/12/~/media/LO/Aktuelt/Nyheder_2014/APL_III_2014.ashx.

Dansk Arbejdsgiverforening. 2000. *Arbejdsmarkedsrapport 2000* [Labor market report]. Copenhagen, Denmark: Dansk Arbejdsgiverforening. At http://www.da.dk/bilag/ArbejdsMarkedsRapport%202000.pdf.

———. 2014. *Arbejdsmarkedsrapport 2014* [Labor market report]. Copenhagen, Denmark: Dansk Arbejdsgiverforening. At http://www.da.dk/bilag/AMR14%20Arbejdsmarkedsrapport_2014_net.pdf.

Dancygier, Rafaela M. 2010. *Immigration and Conflict in Europe*. New York, N.Y.: Cambridge University Press.

Danmarks Statistik. 2016. *Indvandrere i Danmark 2016* [Migrants in Denmark 2016]. Copenhagen, Demark: Danmarks Statistik. At http://www.dst.dk/Site/Dst/Udgivelser/GetPubFile.aspx?id=20704&sid=indv2016.

Dobbins, Michael, and Marius R. Busemeyer. 2015. "Socio-Economic Institutions, Organized Interests and Partisan Politics: The Development of Vocational Education in Denmark and Sweden." *Socio-Economic Review* 13, no. 2: 259–84. doi: 10.1093/ser/mwu002.

Due, Jesper, and Jørgen Steen Madsen. 2003. *Fra magtkamp til konsensus: arbejdsmarkedspensionerne og den danske model* [From power struggle to consensus: occupational pensions and the Danish model]. Copenhagen, Denmark: Jurist- og Økonomforbundets Forlag.

———. 2015. *AMP og fremtidens pensionssystem—Det solide grundlag, der truer med at skride i det kommende tiår* [AMP and the future pension system—the solid foundation that could erode in the next decade]. Copenhagen, Denmark: FAOs, University of Copenhagen.

Due, Jesper, Jørgen Steen Madsen, and Carsten Strøby Jensen. 1993. *Den Danske*

Model: en historisk sociologisk analyse af det kollektive aftalesystem [The Danish model: a historical-sociological analysis of the collective bargaining system]. Copenhagen, Denmark: Jurist- og Økonomforbundets Forlag.

Due, Jesper, Jørgen Steen Madsen, Carsten Strøby Jensen, and Lars Kjerulf Petersen. 1994. *The Survival of the Danish Model: A Historical Sociological Analysis of the Danish System of Collective Bargaining*. Copenhagen, Denmark: DJOF Publishing.

Emmenegger, Patrick. 2010. "The Long Road to Flexicurity: The Development of Job Security Regulations in Denmark and Sweden." *Scandinavian Political Studies* 33, no. 3: 271–94. doi: 10.1111/j.1467-9477.2010.00251.x.

Esping-Andersen, Gøsta. 1985. *Politics against Markets: The Social Democratic Road to Power*. Princeton, N.J.: Princeton University Press.

———. 1990. *The Three Worlds of Welfare Capitalism*. Princeton, N.J.: Princeton University Press.

EU KLEMS. 2009a. "Denmark—EU KLEMS Growth and Productivity Accounts: November 2009 Release." Groningen, Netherlands: Groningen Growth and Development Centre. Data available at http://www.euklems.net/index.html. Data extracted on May 30, 2016.

———. 2009b. "Sweden—EU KLEMS Growth and Productivity Accounts: November 2009 Release." Groningen, Netherlands: Groningen Growth and Development Centre. Data available at http://www.euklems.net/index.html. Data extracted on May 30, 2016.

Eurostat. 2016. "Labor Force Survey—Participation rate in education and training (last four weeks) by sex and educational attainment level [trng_lfse_03]." Brussels, Belgium: Eurostat. Data available at http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=trng_lfse_03&lang=en. Data extracted on September 7, 2017.

———. 2017a. "Structure of Earnings Survey—Median hourly earnings, all employees (excluding apprentices) by educational attainment level [earn_ses_pub2i]." Brussels, Belgium: Eurostat. Data available at http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=earn_ses_pub2i&lang=en. Data extracted on February 2, 2017.

———. 2017b. "Structure of Earnings Survey—Low-wage earners as a proportion of all employees (excluding apprentices) by sex [earn_ses_pub1s]." Brussels, Belgium: Eurostat. Data available at http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=earn_ses_pub1s&lang=en. Data extracted on February 2, 2017.

———. 2017c. "Cost of cvt courses as % of total labor cost (all enterprises), by type of cost and size class [trng_cvts54]." Brussels, Belgium: Eurostat. Data available at http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=trng_cvts54&lang=en. Data extracted on March 9, 2017.

———. 2017d. "Gini coefficient of equivalized disposable income before social transfers (pensions included in social transfers) [ilc_di12b]." Brussels, Belgium: Eurostat. Data available at http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc_di12b&lang=en. Data extracted on February 4, 2017.

Galenson, Walter. 1955. *Arbejder og Arbejdsgiver i Danmark* [Worker and employer in Denmark]. Copenhagen, Denmark: Det Danske Forlag.

Gingrich, Jane, and Silja Häusermann. 2015. "The Decline of the Working Class

Vote, the Reconfiguration of the Welfare Support Coalition and Consequences for the Welfare State." *Journal of European Social Policy*, 25, no. 1: 50–75. doi: 10.1177/0958928714556970.

Gustafsson, Anna-Karin. 2016. "Sweden: No Wage Coordination—New Trend or Just an Exception?" Eurofound EIROnline. At https://www.eurofound.europa.eu/print/observatories/eurwork/articles/industrial-relations-business/sweden-no-wage-coordination-new-trend-or-just-an-exception, accessed April 10, 2017.

Hall, Peter A., and David Soskice, eds. 2001. *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage*. Oxford, UK: Oxford University Press.

Holm, Joel. 2016. "Nya avtalet för Kommunal klart" [New agreement ready for Kommunal]. *Dina Pengar*. April 29. At http://www.expressen.se/dinapengar/nya-avtalet-for-kommunal-klart/, accessed April 10, 2017.

Ibsen, Christian Lyhne. 2013. "Consensus or Coercion—Collective Bargaining Coordination and Third Party Intervention." Ph.D. diss., Department of Sociology, University of Copenhagen. At http://nyheder.ku.dk/korte-nyheder/2013/samf/forligsinstitutionen_hjaelper_til_overenskomstforhandlingernes_overlevelse/F_rdig_udgave_Christian_Lyhne_Ibsen_B5_thesis_2013.pdf.

———. 2016. "The Role of Mediation Institutions in Sweden and Denmark after Centralized Bargaining." *British Journal of Industrial Relations* 54, no. 2: 285–310. doi: 10.1111/bjir.12142.

Ibsen, Christian Lyhne, Søren Kaj Andersen, Jesper Due, and Jørgen Steen Madsen. 2011. "Bargaining in the Crisis—A Comparison of the 2010 Collective Bargaining Round in the Danish and Swedish Manufacturing Sectors." *Transfer: European Review of Labour and Research* 17, no. 3: 323–39. doi: 10.1177/1024258911410788.

Ibsen, Christian Lyhne, and Mikkel Mailand. 2011. "Striking a Balance? Flexibility and Security in Collective Bargaining." *Economic and Industrial Democracy* 32, no. 2: 161–80. doi: 10.1177/0143831X10371695.

Ibsen, Flemming, Laust Høgedahl, and Steen Scheuer. 2011. *Kollektiv Handling—Faglig organisering og skift af fagforening* [Collective action—labor organization and change of trade unions]. Frederiksberg, Denmark: Nyt fra Samfundsvidenskaberne.

Ibsen, Flemming, and Jørgen Stamhus. 1993. *Fra central til decentral lønfastsættelse—muligheder og konsekvenser* [From centralized to decentralized wage formation—possibilities and consequences]. Copenhagen, Denmark: Jurist- og Økonomforbundets forlaget.

Ilsøe, Anna. 2016. "From Living Wage to Living Hours—The Nordic Version of the Working Poor." *Labour & Industry: A Journal of the Social and Economic Relations of Work* 26, no. 1: 40–57. doi: 10.1080/10301763.2016.1152534.

Iversen, Torben. 1996. "Power, Flexibility, and the Breakdown of Centralized Wage Bargaining: Denmark and Sweden in Comparative Perspective." *Comparative Politics* 28, no. 4: 399–436. doi: 10.2307/422051.

Iversen, Torben, and David Soskice. 2015. "Democratic Limits to Redistribution: Inclusionary versus Exclusionary Coalitions in the Knowledge Economy." *World Politics* 67, no. 2 (April): 185–225. doi: 10.1017/S0043887115000039.

Jacobsson, Göran. 2015. "Industriparter öppnar för större reform av las" [Manufacturing parties open for reforms of job protection legislation]. *Arbetet*. September 11. At http://arbetet.se/2015/09/11/oppnar-for-storre-reform-av-las/, accessed April 10, 2017.

Jensen, Carsten Strøby. 2011. "The Flexibility of Flexicurity: The Danish Model Reconsidered." *Economic and Industrial Democracy* 32, no. 4: 721–37. doi: 10.1177/0143831X11401928.

Jungar, Ann-Cathrine, and Anders Ravik Jupskås. 2014. "Populist Radical Right Parties in the Nordic Region: A New and Distinct Party Family?" *Scandinavian Political Studies* 37, no. 3: 215–38. doi: 10.1111/1467-9477.12024.

Kangas, Olli, Urban Lundberg, and Niels Ploug. 2010. "Three Routes to Pension Reform: Politics and Institutions in Reforming Pensions in Denmark, Finland and Sweden." *Social Policy & Administration* 44, no. 3: 265–84. doi: 10.1111/j.1467-9515.2010.00713.x.

Kenworthy, Lane, and Jonas Pontusson. 2005. "Rising Inequality and the Politics of Redistribution in Affluent Countries." *Perspectives on Politics* 3, no. 3: 449–71. doi: 10.1017/S1537592705050292.

Kjellberg, Anders, and Christian Lyhne Ibsen. 2016. "Attacks on Union Organising: Reversible and Irreversible Changes to the Ghent Systems in Sweden and Denmark." In Trine Pernille Larsen and Anna Ilsøe, eds., *Den Danske Model Set Udefra*. Copenhagen, Denmark: Jurist- og Økonomforbundets Forlag.

Korpi, Walter. 2006. "Power Resources and Employer-Centered Approaches in Explanations of Welfare States and Varieties of Capitalism: Protagonists, Consenters, and Antagonists." *World Politics* 58, no. 2 (January): 167–206. doi: 10.1353/wp.2006.0026.

Kullander, Mats, and Oskar Eklund. 2010. "Largest Employer Organisation in Industry Leaves Industrial Agreement." Eurofound EIROnline. At https://www.eurofound.europa.eu/observatories/eurwork/articles/industrial-relations/largest-employer-organisation-in-industry-leaves-industrial-agreement, accessed April 10, 2017.

LO/Denmark. 1999. *Velfærdssamfundet i fremtiden—Velfærd forpligter* [The welfare state in the future—welfare is a commitment]. Copenhagen, Denmark: LO/Denmark. At http://www.lo.dk/upload/LO/Documents/V/velfaerdsop_42.pdf.

———. 2015. *Beretning fra LO-kongres* [Record from LO-congress]. Copenhagen, Denmark: LO/Denmark. At http://www.lo.dk/Tema/TemaArkiv/2015/Kongres2015/~/media/LO/Fokus/LOkongres2015/Kongresmaterialer/Beretning_web2.ashx.

———. 2016. *Samlet medlemstal og arbejdsmarkedstilknyttede, 2014-2015* [Total membership figure and economic active members, 2014–2015]. Copenhagen, Denmark: LO/Denmark. Data available at http://www.lo.dk/omLO/faktaogtal/~/media/LO/Rundt_om_LO/medlemstal/Medlemstal_2015.ashx. Data extracted on August 22, 2016.

LO/Sweden. 2005. *Kollektivavtalen på arbetsmarknaden* [Collective agreements in the labor market]. Stockholm, Sweden: LO/Sweden. At http://www.lo.se/home/lo/res.nsf/vres/lo_fakta_1366027492914_kollektivavtal_arbmarkn_webb_pdf/$file/kollektivavtal_arbmarkn_webb.pdf.

———. 2011. *Röster om facket och jobbet—Fackets uppgifter, fackets inflytande och facklig-politisk samverkan* [Opinions on trade unions and the job—union tasks, union influence and union political cooperation]. Stockholm, Sweden: LO/Sweden. At https://www.lo.se/home/lo/res.nsf/vRes/lo_1369640289175_rof_4_2011_pdf/$File/RoF-4_2011.pdf.

———. 2012. *Kollektivavtal år 2010–2012* [Collective agreements in 2010–2012]. Stockholm, Sweden: LO/Sweden. At https://www.lo.se/home/lo/res.nsf/vres/lo_fakta_1366027492914_kollektivavtal_2010_2012_pdf/$file/Kollektivavtal_2010-2012.pdf.

———. 2015. *Facklig anslutning år 2015—Facklig anslutning bland anställda efter klass och kön år 1990–2015* [Union density in 2015—union density among employees across class and gender in 1990–2015]. Stockholm, Sweden: LO/Sweden. At https://www.lo.se/home/lo/res.nsf/vRes/lo_1366026587231_facklig_anslutning_2015_pdf/$File/Facklig_anslutning_2015.pdf.

———. 2016a. *Full Employment and a Wage Policy of Solidarity, Report to the 2016 LO Congress: Summary*. Stockholm, Sweden: LO Sweden. At https://www.lo.se/home/lo/res.nsf/vRes/lo_in_english_1366027842542_3092_7_fssl_summary_webb_pdf/$File/3092-7_FSSL%20summary_webb.pdf.

———. 2016b. *LO-förbundens medlemsantal 2011–2016* [LO-unions' membership figures 2011–2016]. Stockholm, Sweden: LO/Sweden. Data available at http://www.lo.se/start/lo_fakta/lo_forbundens_medlemsantal_2011_2016. Data extracted on August 22, 2016.

Mailand, Mikkel. 2008. *Regulering af Arbejde og Velfærd—mod nye arbejdsdelinger mellem staten og arbejdsmarkedets parter* [Regulation of work and welfare—toward a new division of labor between state and social partners]. Copenhagen, Denmark: Jurist- og økonomforbundets Forlag.

Manow, Philip. 2009. "Electoral Rules, Class Coalitions and Welfare State Regimes, or How to Explain Esping-Andersen with Stein Rokkan." *Socio-Economic Review* 7, no. 1: 101–21. doi: 10.1093/ser/mwn022.

Martin, Cathie Jo, and Kathleen Thelen. 2007. "The State and Coordinated Capitalism: Contributions of the Public Sector to Social Solidarity in Postindustrial Societies." *World Politics* 60, no. 1 (October): 1–36. doi: 10.1353/wp.0.0000.

Medlingsinstitutet. 2002. *Avtalsrörelsen och lönebildningen 2001* [Collective bargaining round and wage formation]. Stockholm, Sweden: Medlingsinstitutet. At http://www.mi.se/files/PDF-er/att_bestalla/arsrapporter/AR01.pdf.

———. 2005. *Avtalsrörelsen och lönebildningen 2004* [Collective bargaining round and wage formation]. Stockholm, Sweden: Medlingsinstitutet. At http://www.mi.se/files/PDF-er/att_bestalla/arsrapporter/AR04.pdf.

———. 2011. *Avtalsrörelsen och lönebildningen 2010* [Collective bargaining round and wage formation]. Stockholm, Sweden: Medlingsinstitutet. At http://www.mi.se/files/PDF-er/att_bestalla/arsrapporter/AR10.pdf .

———. 2012. *Avtalsrörelsen och lönebildningen 2011* [Collective bargaining round and wage formation]. Stockholm, Sweden: Medlingsinstitutet. At http://www.mi.se/files/PDF-er/att_bestalla/arsrapporter/AR11.pdf.

———. 2015. *Avtalsrörelsen och lönebildningen 2014* [Collective bargaining round and wage formation]. Stockholm, Sweden: Medlingsinstitutet. At http://www.mi.se/files/PDF-er/att_bestalla/arsrapporter/AR14_20150219.pdf.

Meltzer, Allan H., and Scott F. Richard. 1981. "A Rational Theory of the Size of Government." *Journal of Political Economy* 89, no. 5: 914–27. At http://www.jstor.org/stable/1830813.

Mews, Jan, and Steffen Mau. 2012. "Unraveling Working-Class Welfare Chauvinism." In Stefan Svallfors, ed., *Contested Welfare States: Welfare Attitudes in Europe and Beyond.* Palo Alto, Calif.: Stanford University Press.

Navrbjerg, Steen E., Malene Nordestgaard, and Jesper Due. 2001. *Fremtidens overenskomster i decentraliseringens tegn: En historisk analyse af udviklingen i Industriens overenskomster i perioden 1902–2004 med særligt fokus på tillidsrepræsentantens rolle* [The future of collective agreements in the age of decentralization: a historical analysis of the development of manufacturing agreements 1902–2004 with special focus on shop stewards]. Copenhagen, Denmark: CO-industri.

Neergaard, Anders. 2015. "Det fackliga löftet: Solidaritet, fackföreningsrörelse och Arbetskraftsinvandring" [Labor on the rise: solidarity, union movement and labor migration]. In Catharina Calleman and Petra Herzfeld Olsson, eds., *Arbetskraft från hela världen: Hur blev det med 2008 års reform?* [Labor from all over the world: what happened after the 2008 reform?]. Stockholm, Sweden: Delmi.

Nijhuis, Dennie Oude. 2009. "Revisiting the Role of Labor: Worker Solidarity, Employer Opposition, and the Development of Old-Age Pensions in the Netherlands and the United Kingdom." *World Politics* 61, no. 2 (April): 296–329. doi: 10.1017/S0043887109000112.

OECD. 2011. *Recruiting Immigrant Workers: Sweden 2011*. Paris, France: OECD Publishing. doi: 10.1787/9789264167216-en.

———. 2016. "Public Expenditure and Participant Stocks on LMP—Training." Paris, France: OECD.stat. Data available at https://stats.oecd.org/Index.aspx?DataSetCode=LMPEXP#. Data extracted on July 14, 2016.

———. 2017. "SDBS Structural Business Statistics (ISIC Rev. 4)." Paris, France: OECD.stat. Data available at https://stats.oecd.org/Index.aspx?DataSetCode=SSIS_BSC_ISIC4. Data extracted on January 26, 2017.

Palier, Bruno, and Claude Martin, eds. 2008. *Reforming the Bismarckian Welfare Systems*. Oxford, UK: Wiley-Blackwell.

Palier, Bruno, and Kathleen Thelen. 2010. "Institutionalizing Dualism: Complementarities and Change in France and Germany." *Politics & Society* 38, no. 1: 119–48. doi: 10.1177/0032329209357888.

Pontusson, Jonas. 2011. "Once Again a Model: Nordic Social Democracy in a Globalized World." In James E. Cronin, George W. Ross, and James Shoch, eds., *What's Left of the Left: Democrats and Social Democrats in Challenging Times*. Durham, N.C.: Duke University Press.

Rueda, David. 2007. *Social Democracy Inside Out: Partisanship and Labor Market Policy in Advanced Industrialized Democracies*. Oxford, UK: Oxford University Press.

Scheuer, Steen. 1998. "Denmark: A Less Regulated Model." In Anthony Ferner and Richard Hyman, eds., *Changing Industrial Relations in Europe,* 2nd ed. Oxford, UK: Wiley-Blackwell.

Statistics Denmark. 2017. "Løn efter branche (db07), sektor, aflønningsform, lønmodtagergruppe, lønkomponenter og køn 2009–15 [SLON40]" [Wage according to industry (db07), sector, wage form, wage earner group, wage element and gender 2009–15]. Copenhagen, Denmark: Denmarks Statistik. Data available at http://www.statistikbanken.dk/slon40. Data extracted on February 2, 2017.

Statistics Sweden. 2017a. “Genomsnittlig timlön, arbetare privat sektor (SLP), uppdelad på löneelement efter näringsgren SNI 2007, arbetstidsart och kön. År 2009–15” [Average monthly wage, blue-collar workers private sector (SLP), split on wage element according to industry SNI 2007, working time form and gender. Year 2009–15]. Stockholm, Sweden: Statistiska centralbyrån. Data available at http://www.statistikdatabasen.scb.se/pxweb/sv/ssd/START__AM__AM0103__AM0103A/SLP9a07/?rxid=4e692554-a950-42b5-99cb-c1262ac101fe. Data extracted on February 2, 2017.

———. 2017b. “Genomsnittlig månadslön (tid och prestationslön) , tjänstemän privat sektor (SLP), uppdelad på löneelement efter näringsgren SNI 2007, arbetstidsart och kön. År 2009–15” [Average monthly wage (time and performance), white-collar workers private sector (SLP), split on wage element according to industry SNI 2007, working time form and gender. Year 2009–15]. Stockholm, Sweden: Statistiska centralbyrån. Data for 2009–2013 available at http://www.statistikdatabasen.scb.se/pxweb/sv/ssd/START__AM__AM0103__AM0103J/SLP9t07/?rxid=66e47015-94c3-41b4-b63c-20c718e67a64. Data for 2014–2015 available at http://www.statistikdatabasen.scb.se/pxweb/sv/ssd/START__AM__AM0103__AM0103F/SLP9t0712/?rxid=6630bdd6-8a91-4083-b4ca-ccf64c64059e. Data extracted on February 2, 2017.

Streeck, Wolfgang. 1999. “Competitive Solidarity: Rethinking the ‘European Social Model.’” MPIfG Working Paper 99/8. Cologne, Germany: Max Planke Institute for the Study of Societies.

———. 2005. “The Sociology of Labor Markets and Trade Unions.” In Neil J. Smelser and Richard Swedberg, eds., *The Handbook of Economic Sociology*. Princeton, N.J.: Princeton University Press with Russell Sage Foundation.

———. 2009. *Re-Forming Capitalism: Institutional Change in the German Political Economy*. Oxford, UK: Oxford University Press.

Svenskt Näringsliv. 2006. *Fakta om löner och arbetstider 2006* [Facts about wages and working time 2006]. Stockholm, Sweden: Svenskt Näringsliv. At https://www.svensktnaringsliv.se/migration_catalog/Rapporter_och_opinionsmaterial/Rapporters/fakta-om-loner-och-arbetstider_527409.html/BINARY/Fakta%20om%20l%C3%B6ner%20och%20arbetstider.

———. 2011. *Fakta om Löner och Arbetstider 2011* [Facts about wages and working time]. Stockholm, Sweden: Svenskt Näringsliv. At https://www.svensktnaringsliv.se/migration_catalog/Rapporter_och_opinionsmaterial/Rapporters/fakta-om-loner-och-arbetstider-2011_531870.html/BINARY/Fakta%20om%20L%C3%B6ner%20och%20Arbetstider%202011.

Swenson, Peter A., and Jonas Pontusson. 2000. “The Swedish Employer Offensive against Centralized Wage Bargaining.” In Torben Iversen, Jonas Pontusson, and David Soskice, eds., *Unions, Employers and Central Banks: Macroeconomic Coordination and Institutional Change in Social Market Economies*. Cambridge, UK: Cambridge University Press.

Thelen, Kathleen. 2014. *Varieties of Liberalization and the New Politics of Social Solidarity*. Cambridge, UK: Cambridge University Press.

Thelen, Kathleen, and Marius R. Busemeyer. 2011. “Institutional Change in German Vocational Training: From Collectivism toward Segmentalism.” In Marius R. Busemeyer and Christine Trampusch, eds., *The Political Economy of Collective Skill Formation*. Oxford, UK: Oxford University Press.

Toubøl, Jonas, Christian Lyhne Ibsen, Daniel Sparwath Jensen, and Anton Grau Larsen. 2015. *Det Mobile Danske Arbejdsmarked Og Organisering Af Lønmodtagere* [The mobile Danish labor market and unionization of workers]. LO-dokumentation. Copenhagen, Denmark: LO/Denmark.

Trampusch, Christine. 2007. “Industrial Relations as a Source of Social Policy: A Typology of the Institutional Conditions for Industrial Agreements on Social Benefits.” *Social Policy & Administration* 41, no. 3: 251–70. doi: 10.1111/j.1467-9515.2007.00551.x.

———. 2009. “Collective Agreements on Pensions as a Source of Solidarity.” *Journal of Comparative Social Welfare* 25, no. 2: 99–107. doi: 10.1080 /17486830902789715.

Wallerstein, Michael. 1999. “Wage-Setting Institutions and Pay Inequality in Advanced Industrial Societies.” *American Journal of Political Science* 43, no. 3: 649–80. doi: 10.2307/2991830.