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TRENDS IN SECTOR SWITCHING: Evidence from Employer-Employee Data

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Abstract:

Sector switching is new to the public administration literature and our knowledge about the prevalence and trends is limited. Yet, sector switching is an important phenomenon which casts light on public-private differences. We study sector switching in a modern economy using unique Danish register-based employer-employee data covering more than 25 years. We find that sector switching constitutes 18.5 percent of all job-to-job mobility and the trend is increasing both in general, for administrative professionals, for top managers and, in particular, for middle managers. These findings are robust to controlling for general trends in labour market mobility, unemployment and economic growth.

Keywords: Sector switching, public private differences, New Public Management

INTRODUCTION

Sector switching defined as people mobility between the private and public sectors (Bozeman and Ponomariov 2009) is a phenomenon which has received scant attention in the public administration literature (Su and Bozeman 2009a; Hansen forthcoming). Nevertheless, sector switching has recently been argued to be a very important phenomenon and a key source to the decoding of public-private sector differences (Bozeman and Ponomariov 2009). Sector switching is therefore relevant in regard to understanding if there has been convergence between the public and private sectors during the last decades (Poole, Mansfield, and Gould-Williams 2006; Morales, Wittek, and Heyse forthcoming). Sector switching is also informative about how the private and public sectors, respectively, can retain and attract employees (Tschirhart et al. 2008). At present the empirical knowledge about sector switching is limited and little is known about its prevalence and trends. In this paper, we will fill this gap in the literature and determine the importance of sector switching in the Danish economy using unique register-based employer-employee data for a period spanning more than 25 years and all employees in the workforce. A call for this type of longitudinal study has recently been made by Bozeman and Ponomariov (2009).

Sector switching has previously been analyzed with a focus on the explanations and motives for the sector switch and not for its prevalence or trends. It has been found that managers tend to switch from the private to the public sector more often than non-managers (Su and Bozeman 2009a). It is also established that sector switching into the public sector increases career opportunities because the movers are more likely to be promoted and end up supervising a larger number of subordinates (Bozeman and Ponomariov 2009). Sector switching has also been studied in relation to highly educated employees who due to their high level of competences constitute an attractive group to retain for both sectors (Hansen forthcoming). While former studies focus on the explanations and motivations for sector switching, our contribution is to analyze the importance and trends in sector

switching. This will be done at the general level, i.e., for all employees, but also in relation to particular employee subgroups central to managerialism, i.e., managers and administrative professionals (Pollitt 1990; Diefenbach 2009).

Empirical work on sector switching has been based on surveys and occupied with unidirectional mobility, i.e., studies of mobility from the public to the private sector (Hansen *forthcoming*) or from the private to the public sector (Bozeman and Ponomariov 2009, Su and Bozeman 2009a, 2009b).

In regard to former studies, this paper makes a dual contribution. First, we make use of a single data set to shed light on sector switching in both directions. Second, we will not rely on cross-sectional survey information but instead use register based panel data. The implication is that our analysis is comprehensive when compared to earlier studies as it covers a whole economy. Further, its reliability is judged to be much higher because the data is virtually free of measurement error and response biases.

Our data source is the IDA database which is a register-based employer-employee dataset constructed by Statistics Denmark. This dataset starts off in 1980 and contains information on all public and private sector employees in the Danish population. In the data it is possible to match employees to public and private sector workplaces and to follow individuals over time. The data also contains extensive information on individual's demographics, education and organizational placement. Hence, by applying econometric techniques we can use the data to identify trends in sector switching over a period of almost thirty years. It is also possible to control for a large set of confounding factors at different levels of analysis. This type of data is likely to be what Bozeman and Ponomariov (2009) had in mind when they made their call for longitudinal studies where sector switching could be studied in conjunction with additional information about the labour market and the state of the economy.

Our empirical analysis shows that sector switching is important for the Danish economy and on average 3.44 percent of the workforce makes such a move each year; and the trend is increasing. Because the level of job-to-job transitions in the Danish economy is 18.6 percent this means that $(3.44/18.6 =)$ 18.5 percent of all job-to-job mobility is a sector switch. A more comprehensive analysis shows that the probability of moving from the private to the public sector has increased significantly (70 percent) from 1980 to 2006. An even stronger positive trend (90 percent) is found for mobility from the public to the private sector. The significance of the positive trend is robust to controlling for general trends in labour market mobility, unemployment and economic growth. We also find that middle managers have a disproportional increase in sector switching from the public to the private sector. In contrast, the trends for top managers and administrative professionals mirror that for the labour market in general. In the discussion section we relate these findings to the sector switching literature and the literature on New Public Management (NPM). We will also discuss how our results are informative about public-private sector differences.

The structure of the paper is as follows. In the theory section we review the literature on sector switching and set up a number of hypotheses. In the institutional setting and data section we provide information on the Danish context, the IDA data, and our empirical methodology. In the following section we test the hypotheses. The discussion section relates our findings to the existing literature and provides directions to further research. Finally, we conclude.

THEORY

Sector switching is a phenomenon which only recently has received attention in the public administration literature (Bozeman and Ponomariov 2009; Su and Bozeman 2009a; Hansen *forthcoming*). This is despite the fact that it has been argued to be an important source to understand public-private difference (Bozeman and Ponomariov 2009). One reason for the lack of interest can

be that it is often argued that sector preferences are rather fixed (Tschirhart *et al.* 2008) which could imply that sector switching is a rare event and thus of limited interest. Yet, we do not know empirically if this assertion is correct as the prevalence of sector switching has not been the key focus in former studies of sector switching which instead have focused on the characteristics and motives of the sector switchers and consequences (Hansen *forthcoming*, Bozeman and Ponomariov 2009, Bozeman and Su 2009a, 2009c). Furthermore, previous investigations have been based on surveys, which by nature are “small-scale” cross-sections where it may be difficult to detect sector switching at a level that makes it useful for analysis. This point has been noted previously in the literature by Bozeman and Ponomariov (2009) who argue that there is a need for better studies including longitudinal studies.

Our starting point for hypothesizing about sector switching is the literature on private-public sector differences (Baarspul and Wilderom 2011, Boyne 2002, Rainey 2009). In this literature it has been argued that sector differences are diminishing (Boyne 2002; Poole, Mansfield, and Gould-Williams 2006) partly due to New Public Management (NPM) which traditionally is argued to introduce economic and management thinking from the private sector into the public sector (Hood 1991). One example is Poole, Mansfield, and Gould-Williams (2006) who study organizational behaviour differences between the public and private sectors and find convergence to some extent during a twenty year period. A similar picture is found in a more recent study by Morales, Wittek, and Heyse (*forthcoming*) on Dutch organizations where they find that public and private organizations are becoming more similar in relation to organizational aspects.

It is likely that sector convergence facilitates sector switching. The mechanisms behind such convergence could be multiple. One motivation is that public organizations due to internal or external pressure are restructured such that they become more like private organizations. A second

motivation is that institutional logic of the employees in the sectors has changed. A third motivation is that structural changes such as outsourcing and privatization have shifted jobs between sectors. These different motivations for convergence resides from different public administration literatures. Especially, the literature on New Public Management (Hood 1991, Pollitt and Bouckaert 2011) motivates this convergence between the public and private sectors as the public sector's introduction of economic and management thinking from the private sector. These New Public Management changes are also related to change in institutional logics where public employees are becoming more like private employee due to gradual change of insttutional logics (Meyer and Hammerschmidt 2006). As a consequence of these motivations for convergence and that previous research points in the direction of sector convergence, we hypothesize that some sector convergence has taken place and that this has increased sector switching. Hence, our first hypothesis:

H1: Over time there will be more sector switching

In addition to the hypothesized increase in sector switching at the general level, we hypothesize that specific groups experience a disproportional increase in sector switching as sector convergence is more rapid in their domain. There are two groups for whom we expect to find such an increase: managers and employees with degrees in the social sciences, i.e., individuals with degrees in economics, management, law, psychology, and political science (Diefenbach 2009). The reason is that the public and private labour markets for these two employee subgroups are argued to become more similar as a consequence of managerialism (Pollitt 1990; Kirkpatrick, Ackroyd, and Walker 2004) where managerialism is understood as the belief of separation between operational and supervision/leadership activities and that the latter should be performed by a special group of people trained and thinking in these terms (Hood 2005). Managers are likely to be strongly affected (Diefenbach 2009) because they are expected to know more about management and economic

thinking to secure effectiveness and efficiency in modern public organizations. Further support for these ideas comes from (Bhatti, Olsen, and Pedersen 2009, 2011) who focus on New Public Management theory and argue that managers and employees with social science degrees are instrumental in the convergence between sectors because they influence innovation and contracting in the public sector. Thus, in addition to our main hypothesis that the level of sector switching has been increasing, we will hypothesize that this increase is disproportionately higher for employees who are central to managerialism:

H2a: Over time there will be more sector switching for individuals in management positions

H2b: Over time there will be more sector switches for individuals with higher educations in social science.

INSTITUTIONAL SETTING, METHOD AND DATA

In this section we provide some background on the Danish labour market and economic context which is followed by a detailed introduction to the IDA data. We will also present some general results on labour mobility in Denmark that will be used in the subsequent analysis of trends in sector switching.

Institutional setting

The stated hypotheses will be tested in the Danish context. Denmark is a strong welfare state with a highly progressive tax system and low income inequality. Denmark is characterized by having a large public sector. According to our data more than 900.000 people were employed in the public sector in 2006 which is 37 percent of all people employed. The number has decreased from 40 percent in 1980. This implies that the public sector accounts for a large part of Danish employment

and economic activity. The public spending share may even exceed the employment share as there is considerable contracting out in Denmark.

The Danish labour market has often been characterized as a system of “flexicurity” (Ministry of Employment, 2013), i.e., the labour market is “flexible” as employers can lay off employees with relatively short notice and at relatively low costs, but the system is also “secure” as unemployed individuals receive generous benefits (replacement rates, i.e. the ratio of unemployment benefits to former salary, of up to 90 percent for low income earners) for a considerable time (up to 7 years in the sample period). One implication of this system is that employee turnover is at a very high level in Denmark and comparable to the level in the United States and the United Kingdom. This fact will be discussed further below.

The Danish labour market has a high (but declining) degree of unionization. This implies that wages traditionally have been set by collective agreements between unions and employer organizations with little room for individual wage bargaining. Over time, however, there has been more room for individual bargaining, in particular, in the private sector. A recent “Wage Commission” (Lønkommissionen 2010) has documented that public sector employees in Denmark are compensated at a lower level than private sector employees. But, they also find that public sector employees have lower work hours and in general benefit from higher job security. These sector differences in salary and job security are classical ingredients in the literature on public and private differences (Rainey 2009).

It has also been argued that the public sector in Denmark has been under the influence of New Public Management during the last decades (Greve 2006). Reforms have been implemented over a longer period of time under both Social-Democratic and Conservative-Liberal government. The main themes in the reforms are: performance management, market mechanisms, consumer choice,

e-government, deregulation, quality, management training, human resources, and top executive management (Greve 2006). Despite the fact that there has been a significant amount of contracting out, the overall picture is that the reforms are better characterized as modernization rather than marketization (Greve 2006).

The IDA data, method and preliminary results

We use the register-based employer-employee database known as the IDA database to test the hypotheses. The data is perfectly suited for the purpose as they contain detailed information on all public and private sector employees in the Danish economy since 1980. Further, due to unique individual and firm identifiers all employees can be tracked over time (and across sectors). An important additional feature of the data is that they contain detailed information on individual's demographics, education and organizational placement. Hence, we can use the data to study trends in sector switching over a period of more than 25 years at a general level (all employees) as well as for employee subgroups with particular characteristics. Our methodology is to estimate trend lines (controlling for a comprehensive set of covariates) and to test their significance. When addressing sector switching patterns of particular employee types we also conduct test for equality of the trend line slopes.

Naturally, the trends we identify empirically and use to test the hypotheses have to be genuine. For this reason, we will control for confounding factors such as general trends in labour mobility, unemployment and economic growth. To be precise: If for instance sector switching is proportional to general labour mobility and we have a situation where labour mobility is increasing, then sector switching will also increase. This, however, is not what we mean by an increase in sector switching. Our hypothesis is that sector switching is increasing conditional on general trends in labour mobility. For this reason, we have to control for general trends in labour mobility. We do so by

including the level of job separations (the event that an employee working in a workplace in year t leaves (separates) the workplace before arriving at year $t+1$) and the level of job-to-job transitions (the event that a person working for a workplace in year t obtains a new job in a different workplace in year $t+1$). We will also account for general economic conditions by controlling for lagged, contemporaneous and leaded changes in GDP as well as the unemployment rate.

When studying labour mobility in a Danish context, it is important to recognize that it is at a very high level. Frederiksen and Westergaard-Nielsen (2007) and Frederiksen (2008) document that the level of job separations in the private sector in Denmark is close to 30 percent per year. Hence, almost 30 percent of the employees working in a particular workplace in a given year are not employed in that workplace the following year. Extending their analysis to include the public sector, we confirm this finding and establish that the high level of labour mobility extends to the economy at large, see Figure 1. That is, over the period 1980 to 2006 the level of job separations is between 28 and 35 percent. Interestingly, the level of job separations stays fairly constant over time, and estimation of a time trend reveals a positive but insignificant slope. This is despite the large structural reform in 2006 which changed the structure in the public sector between local, regional and state levels (The Danish Ministry of the Interior and Health 2004) and caused the level of job separation to jump to its all-time high of 35 percent.

Insert Figure 1 about her

While the overall level of job separations has not been altered significantly over the period 1980 to 2006, we document in Figure 2 that the level of job-to-job transitions has increased significantly. Early in the period only around 16 percent of employees moved between workplaces in a given

year, whereas job-to-job mobility in later years is closer to 20 percent. Estimation results show a significant increase in the level of job-to-job transitions of 0.15 percentage points per year.

Insert Figure 2 about her

A more detailed analysis reveals that the increase in job-to-job transitions is driven by mobility in the private sector (Figure 3, Part A) as opposed to the public sector (Figure 3, Part B). As expected, the level of mobility between jobs in the private sector is fluctuating substantially, and they have a clear counter-cyclical pattern (which was also documented by Frederiksen and Westergaard-Nielsen, 2007). In contrast, job-to-job transitions in the public sector are at a much lower level, and except for the reform year of 2006, volatility is modest. Regression analysis shows that while the trend in job-to-job mobility in the private sector is positive and significant with the level of mobility increasing by almost 0.1 percentage points per year the trend is clearly insignificant in the public sector. This is despite the high level of job-to-job transitions in the public sector during the reform year 2006 which also constitutes the end point of our data series.

Insert Figure 3 about her

Our analysis has focus on sector switching, and we will turn to this in the next section. However, the descriptive statistics presented above show some significant trends in labour mobility over the sample period and their dependence on the business cycle which emphasizes our point that a proper test of our hypotheses on sector switching requires that we take the business cycle and general trends in labour mobility into account.

TEST OF HYPOTHESES

The first hypothesis states that there will be more sector switching over time. Our test of this hypothesis is to check for increasing trends in the levels of sector switching from the private to the public sector and from the public to the private sector. Our results are presented in Figure 4. Part A shows transitions from the private to the public sector and confirms the stated hypotheses that there has been more sector switching over time. The increase in mobility from the private to the public sector has been a significant 0.025 percentage points per year. With a base of around 1.5 percent in 1980 this implies an increase to 2.15 percent ($1.5 + 26 \cdot 0.025$) in 2006 or an increase of 70 percent. When looking at the flows from the public to the private sector, the hypothesis is also confirmed. These transitions increase by a significant 0.038 percentage points per year from around 1.1 percent in 1980 to 2.1 in 2006, which corresponds to an increase of almost 90 percent.

Insert Figure 4 about her

While the increase in sector switching is a substantial 70 to 90 percent, the level of sector switching may at first appear small. It should be noted, however, that job-to-job mobility in Denmark is at a level of 18.6 percent per year. Mobility from the private to the public sector makes up 9.6 percent of all job-to-job mobility and mobility from the public to the private sector constitutes 8.9 percent of all job-to-job mobility. Thus, the combined sector switching constitutes 18.5 percent of all job-to-job mobility.

We have made the case that a proper test of the first hypothesis requires that we control for confounding factors such as general trends in labour mobility and economic conditions. For this reason, we re-estimate the “trend” regressions from Figure 4 controlling for economic growth (the

variable is denoted dGDP), level of job separations, level of job-to-job transitions, and the unemployment rate in various ways, see Table 1.

Part A of Table 1 contains regression results for the mobility from the private to the public sector. The first model controls for the time trend (Year/100) and dGDP. Note that Year is divided by 100 such that the coefficient 0.028 corresponds to a (significant) 0.028 percentage point increase in the flow each year. Interestingly, the results show that mobility from the private sector to the public sector is negatively affected by growth in GDP, but, note also that the effect is insignificant. In model 2 we control for lagged, contemporaneous and lead changes in GDP. The results show that changes in GDP - independent of their timing - do not drive the employee flows from the private to the public sector and that the trend is almost unaltered.

In model 3 and 4 we control for general trends in labour mobility by including the overall level of job separations and the level of job-to-job separations, respectively. The two added control variables are insignificant, and the trends continue to be positive and significant. A different way to control for the economic conditions is to include the unemployment rate. We do so in model 5. The unemployment rate is significantly negative at the 10 percent level, and the trend is positive and significant at the 10 percent level.

In model 6 we include the full set of explanatory variables. In this model only the level of job-to-job transitions is significant. When assessing the performance of this model, however, it appears that this model performs worse than a model estimated on the same time period that only includes the trend and the level of job-to-job transitions as explanatory variables (model 7). The reason is that the inclusion of the large set of insignificant variables, i.e., dGDP in various forms, the unemployment rate, and the level of job separations, use up degrees of freedom without contributing significant explanatory power. This reduces the adjusted R-square of model 6 to a level

below that for model 7. In model 7 both the trend variable and level of job-to-job transitions are positive and significant. Note that model 7 is similar to model 4 except that it is estimated on the same data as model 6. This is required in order to be able to compare the performances of the two models. Only 24 data points are included as a consequence of the inclusion of leaded and lagged dGDP. Thus, in the preferred specification (model 7) the trend line is (in accordance with the hypothesis) established to be positive and significant.

In Part B of Table 1 we show estimations similar to those of Part A for transitions from the public to the private sector. The results mirror those from Part A, and we conclude that a model which includes a time trend and the level of job-to-job transitions has the highest performance. Most importantly, the time trend is positive and significant in such a model. Note that the argument for not choosing model 6 is that it contains no significant variables at the conventional 5 percent level.

In conclusion, the results show that even when we control for the state of the economy and general trends in labour mobility, we maintain the result that cross sector mobility has increased significantly over time, and thus we confirm our first hypothesis.

Insert Table 1 about her

The second set of hypotheses (H2a and H2b) state that sector switching has become more prevalent among managers and employees with longer educations within the social sciences. We will test these hypotheses by comparing trends in mobility for these employee subgroups. When identifying administrative professionals we make use of the detailed information on education in the database. That is, we use the variable for “highest completed education” and pick the individuals who have a Master’s degree in political science, economics, law and social science. Managers are identified

using Statistic Denmark’s definition of “main labour market status” for a given individual in a given year. The variable distinguishes top managers and managers from other employees.

Figure 5 Part A shows the trend lines for transitions between the private and the public sector for all individuals, middle managers and top managers, respectively. The results show that managers have a much lower transition probability than the rest of the labour market, but it is also noteworthy that the slope on the trend line for middle managers is more positive than that for the labour market in general. For top managers the slope appears to be similar to that of the general trend. However, a formal test of equality of the slope parameters cannot be rejected in either case. That is, allow β to be the slope parameters. Then we test $H_0: \beta_{Middle\ manager} = \widehat{\beta}_{All}$ against the two-sided alternative and fail to reject the null. In a similar test for top managers we also fail to reject the null hypothesis.

When focusing on the reverse mobility, i.e., mobility from the public to the private sector, the picture is somewhat different. Most notable is the crossing of the trend lines for “all” and middle managers. This naturally implies that the growth in cross sector mobility for middle managers has increased considerably more than for employees in general which is also confirmed by a formal hypothesis test. The trend line for top managers, in contrast, is in line with that of the general labour market.

Insert Figure 5 about her

The level for sector switching is lower for top managers than for the economy at large (12.7 percent vs. 18.5 percent of job-to-job mobility). Middle managers also have lower transition probability when moving from the private to the public sector than what is observed generally in the economy

whereas the reverse mobility is higher than the general flow in the period after 1997. For middle managers sector mobility makes up 16.1 percent of job-to-job transitions.

The results related to the test of H2b which focus on administrative professionals are present in Figure 6. A first thing to note is that the overall level of mobility for these individuals is much more in line with the labour market at large (as opposed to the much lower levels of transitions for managers). For instance, the level of mobility from the private to the public sector for administrative professionals is only 0.2 to 0.3 percentage points below that for all employees in general and the reverse flows are about 0.1 percentage points above the general flows. In addition to this we see that the trend lines for administrative professionals are almost parallel to those for the labour market in general. Formal tests confirm this picture as we cannot reject the null hypothesis of equality in slopes.

Insert Figure 6 about her

Based on this evidence we find support for H2a. There is more sector switching for individuals in management positions. The flows from the public to the private sector for middle managers have increased significantly more than for employees in general. In contrast, we find no support for H2b stating that there should be more sector switching over time for administrative professionals. For administrative professional sector mobility makes up 18.9 percent of job-to-job transitions which is a bit higher but close to the percentage for the sector switch trend for the economy in general.

DISCUSSION

The results presented in the previous section show that sector switching is at a significant level in Denmark and that it amounts to 18.5 percent of all job-to-job transitions in the economy. Even more important in the present context is it that the levels of sector switching both from the private to the public sector and especially from the public to the private sector have increased and that managers experience a disproportional increase.

One interpretation is that our results are consistent with a gradual introduction of New Public Management (NPM) by which an introduction of economic and management elements from the private sector into the public sector administration has reduced sector differences (Hood 1991; Pollitt and Bouckhaert 2011) and increased cross sector mobility. That is, we see both an increase in cross sector mobility at the general level and an increase for managers who make up a group of key players in the literature on managerialism (Pollitt 1990; Kirkpatrick, Ackroyd, and Walker 2004). As such, our findings are consistent with the findings in Greve (2006) who argues that the period we study has been subject to several NPM reforms in Denmark.

Our results may also be interpreted in the light of institutional theory. The main mechanism is then an institutional change in logics similar to that described in Meyer and Hammerschmid (2006) who study how managerial logics are introduced in the Austrian Rechtstat. In our context this change in institutional logic is related to public and private employees' understandings of the sectors which could be argued to make a sector switch more likely. This may indeed be the case as our results show that the positive trends in sector switch remain significant even when we control for general trends in labour mobility.

A main result is that middle management had a disproportional increase in sector switching. This could reflect that management practices in the public and private sectors are converging. But, we do not see the same strong growth in sector switching for top managers or administrative professionals

who have sector switching patterns similar to the patterns of the general labour market. This casts some doubt on the assertion. We also observe that top managers have sector switching at a level which is much lower than that experienced by other employees. Thus, sectors may be converging at middle manager tiers but not as much at the very top of organizations. Such top positions seem to require significant sector specific knowledge.

Implication for future research:

Our analysis reveals the interesting finding that the level of public to private sector switch is higher than the level of private to public sector switch. Our analysis cannot explain such level differences. Yet, one obvious reason is that there has been a rather significant amount of outsourcing and privatization going on in Denmark, though it is judged by Greve (2006) not to constitute the major part of the experienced NPM changes in Denmark. Furthermore, it could be speculated that the barriers for a public to private sector switch are smaller than for a private to public sector switch. A different explanation is given in the economics literature which argues that the unemployed search for jobs and accept the first job that exceeds their reservation wage. In some cases employees would then continue searching for better jobs (Mortensen and Pissarides 1999). We know from the work of the Wage Commission (Lønkommissionen 2010) that private sector employees are paid more on average than public sector employees which may explain that the flow from the public sector to the private sector exceed the flow in the opposite direction. But, we also learned from the Wage Commission's work that job protection is higher in the public sector (we find a lower job separation rate in the public sector which is likely to confirm this) and that work hours are shorter. Hence, preferences for these aspects of the work life may cause mobility away from the private sector. Because little is known about how the interaction of wages and preferences influence initial sector choice and subsequent sector mobility, this seems to be a fruitful path to pursue for future research.

In this paper we have identified trends in labour mobility from the public to the private sector and from the private to the public sector in a symmetric way. While this approach is appropriate for identifying trends in mobility, we recognize that the underlying motivations for shifting sector may be different depending on the direction. Hence, future work that intends to shed light on initial sector choice and subsequent sector mobility should accommodate sector asymmetry and employee heterogeneity.

We have argued that our results are consistent with, for instance, a gradual introduction of New Public Management (NPM). Further research is required, however, to test whether this is the mechanism behind the documented increase in sector switching. One way to do this could be to investigate how specific NPM reforms influence various subsectors or employee subgroups. By comparing how NPM initiatives influence different subsectors over time, it will be possible to construct a more direct test for NPM.

It is also important to stress that our empirical findings are established for the Danish economy – a country with a large public sector. Moreover, the differences between sectors in Denmark may be small compared to those of other countries due to Danish employment regulations, a social system accessible to all (irrespective of sector of employment) and a public health care system. Further, attitudes towards the public sector in Denmark are fairly positive compared, for example, to attitudes of people in the United States (Greve 2006). For these reasons, it remains to be seen whether our findings extend to countries with smaller public sectors and to countries less influenced by NPM.

Where this paper focuses on sector switching at an aggregated level by focusing on the trends and overall level of sector switching, this does not show us who these sector switchers are or whether specific types of people conduct a public to private and private to public sector switch, respectively.

E.g. how does age, gender, and children influence the two types of sector switching? Future studies may benefit from looking into the more specific motives for sector switching. Although this has been done to some extent, no studies have tried to compare public to private and private to public sector switching thoroughly and simultaneously. Hence, future studies may benefit from looking into the more specific motives for sector switching such as the Public Sector Motivation (PSM) as to some extent done by Christensen and Wright (2011), Wright and Christensen (2010) and Hansen (*forthcoming*). Studying both PSM and sector choice and switching simultaneously over time would be an important next step to unveil the dynamics and mechanisms to understand why people work in specific sectors but also to understand how PSM evolve.

If we come back to our main finding that sector switching is increasing which indicates some kind of sector convergence over time. As such, we have made a contribution to the on-going debate on sector differences which is so prominent within the public administration and public management research literature (Boyne 2002; Baarspul and Wilderom 2011). While our study of trends in sector switching may be silent about why the convergence has occurred, it is an intriguing finding in need of explanations, and we hope it will spark future research on the topic.

CONCLUSION

The main finding of this paper is that there has been an increase in sector switching from the private to the public sector and especially from the public to the private sector over the last decades. It is also established that sector switching has increased disproportionately for managers. Combining these findings with the fact that 18.5 percent of all job-to-job transitions, in fact, involve sector switching, the importance of this phenomenon in modern economies is strongly emphasised. Yet, the motives behind sector switching and sector choice are not well understood. We hope that our study has clarified that such research is warranted and that it will motivate a wave of new research

that uncovers the mechanisms behind the increasing sector switching. A way to shed further light on this issue could be to establish the importance of the Public Sector Motivation (PSM) for sector choice and sector switching. In the paper we also argue that it would be interesting to see future studies relating sector switching to the literatures on public-private differences and New Public Management (NPM).

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Figure 1: Job separations in Denmark from 1980 to 2006

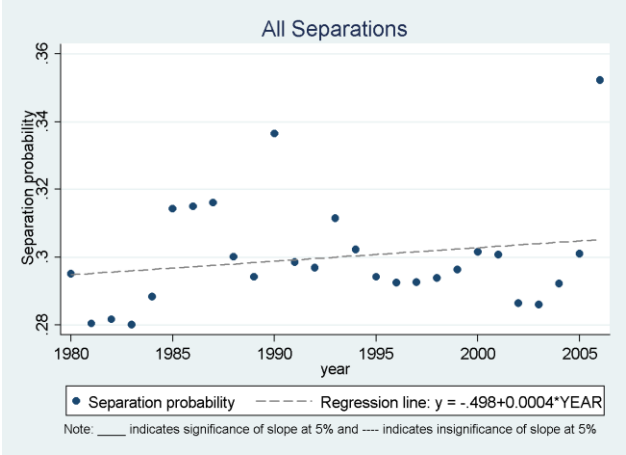


Figure 2: Job-to-job transitions in Denmark from 1980 to 2006

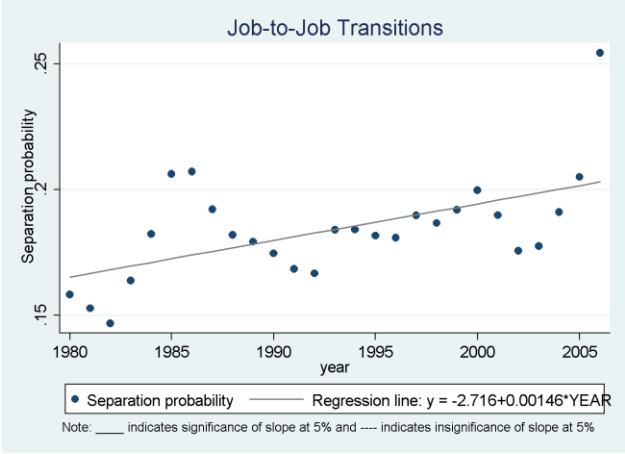


Figure 3: Job-to-Job transition in the private and public sectors

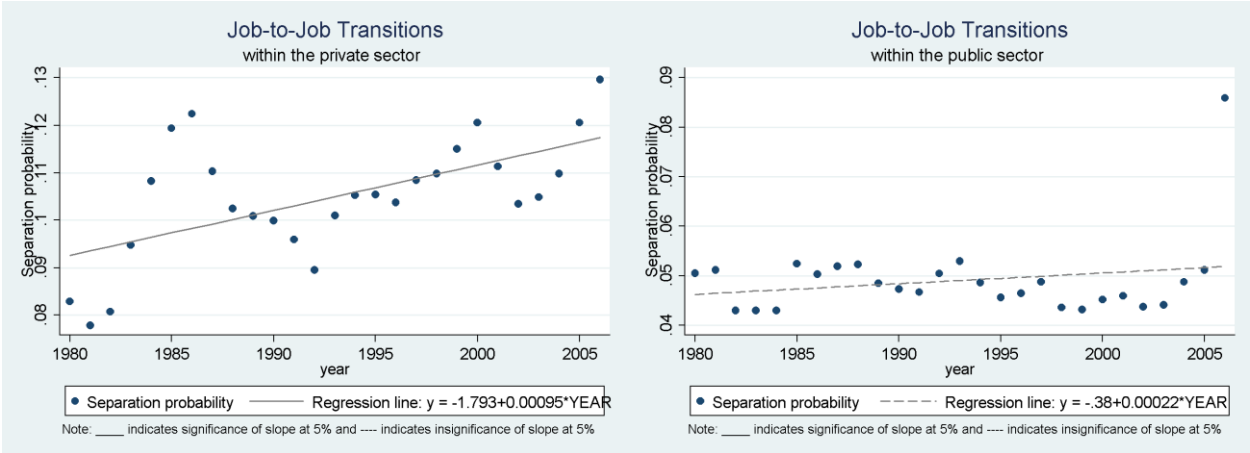


Figure 4: Sector switching: Private to Public and Public to Private

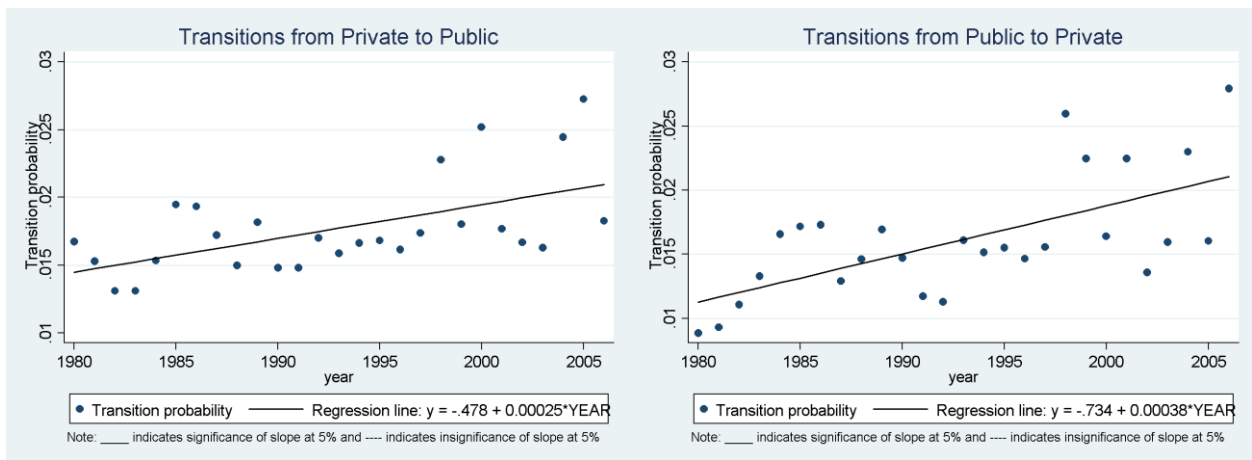


Table 1: Regression models for sector switching

Part A	Private to public						
	<i>Model 1</i>	<i>Model 2</i>	<i>Model 3</i>	<i>Model 4</i>	<i>Model 5</i>	<i>Model 6</i>	<i>Model 7</i>
Year/ 100	0.028** (0.008)	0.023** (0.008)	0.025** (0.008)	0.018* (0.009)	0.016+ (0.009)	0.007 (0.009)	0.015* (0.007)
dGDP	-0.008 (0.034)	-0.010 (0.037)				-0.006 (0.034)	
dGDP lagged		0.037 (0.047)				0.020 (0.031)	
dGDP lead		-0.026 (0.037)				0.044 (0.041)	
All separations			0.004 (0.037)			-0.002 (0.055)	
Job-to-job separations				0.050 (0.033)		0.132* (0.047)	0.114** (0.034)
Unemployment rate/100					-0.052+ (0.030)	-0.041 (0.033)	
Constant	-0.531** (0.156)	-0.448* (0.160)	-0.476** (0.148)	-0.343* (0.166)	-0.293 (0.176)	-0.138 (0.178)	-0.301* (0.137)
N	26	24	27	27	27	24	24
Adj. R-square	0.293	0.250	0.265	0.330	0.345	0.453	0.493

Note: Time period is 1980 to 2006. Significance levels (two-sided): ** p<.01, * p<.05, + p<.10.

Part B	Public to private						
	<i>Model 1</i>	<i>Model 2</i>	<i>Model 3</i>	<i>Model 4</i>	<i>Model 5</i>	<i>Model 6</i>	<i>Model 7</i>
Year/ 100	0.030** (0.009)	0.034** (0.010)	0.034** (0.009)	0.019* (0.009)	0.030* (0.011)	0.014 (0.012)	0.022* (0.009)
dGDP	0.048 (0.039)	0.061 (0.047)				0.073 (0.044)	
dGDP lagged		0.038 (0.040)				0.010 (0.040)	
dGDP lead		-0.0460 (0.046)				0.046 (0.053)	
All separations			0.084+ (0.043)			0.032 (0.071)	
Job-to-job separations				0.125** (0.034)		0.126+ (0.070)	0.130** (0.045)
Unemployment rate/100					-0.046 (0.039)	-0.064 (0.043)	
Constant	-0.590** (0.177)	-0.668** (0.203)	-0.692** (0.173)	-0.394* (0.175)	-0.571* (0.227)	-0.293 (0.231)	-0.452* (0.184)
N	26	24	27	27	27	24	24
Adj. R-square	0.324	0.292	0.447	0.587	0.394	0.461	0.458

Note: Time period is 1980 to 2006. Significance levels (two-sided): ** p<.01, * p<.05, + p<.10.

Figure 5: Managers' sector switching: Private to Public and Public to Private

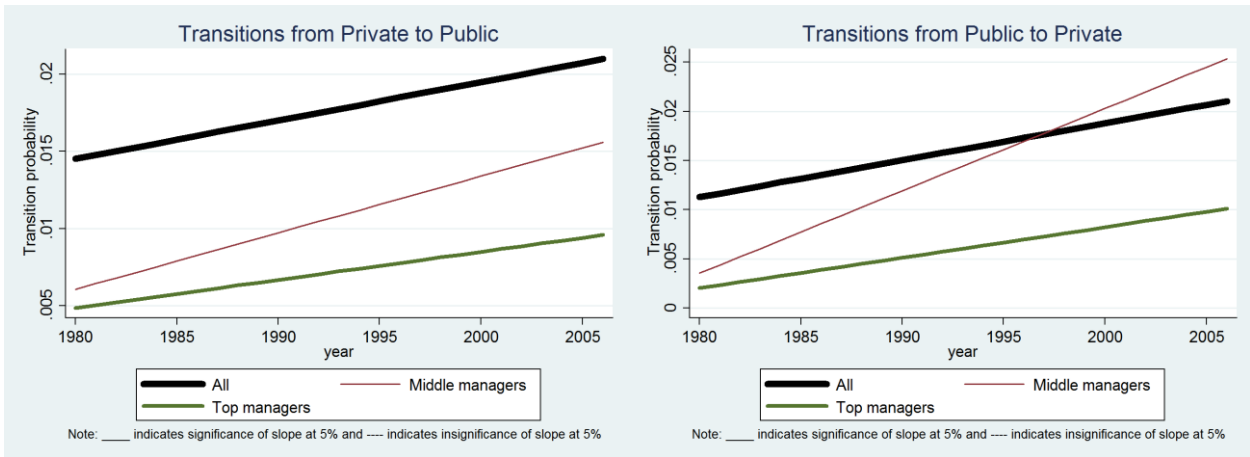
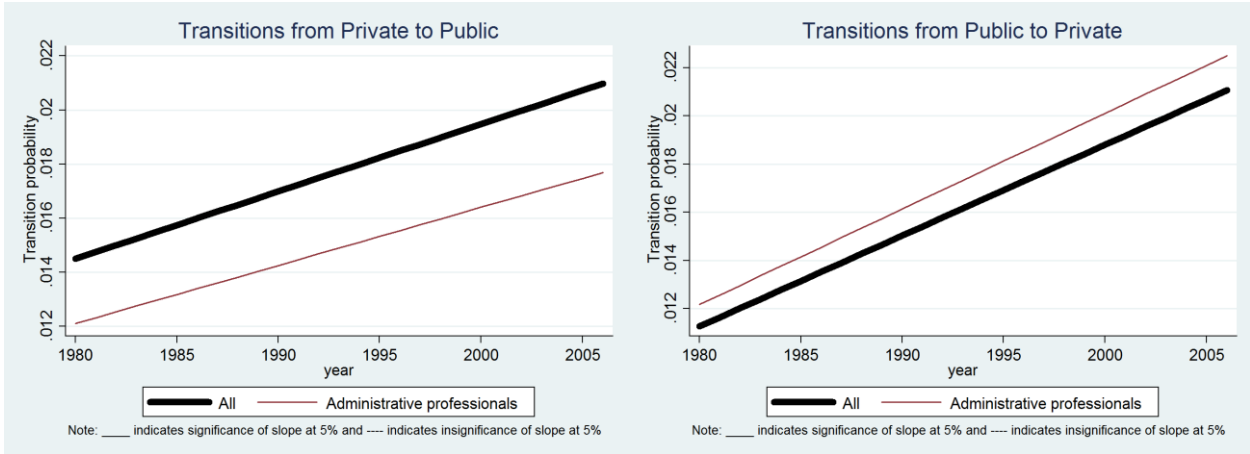


Figure 6: Administrative professionals' sector switching: Private to Public and Public to Private



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