

Mergers and Mobility: Organizational Growth and the Origins of Career Migration at Lloyds Bank¹

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Though organizationally driven geographic mobility is a distinguishing feature of modern careers, accounts of its origin are murky. Drawing on various theories of organization, the authors show how a merger wave exposed competing institutional logics and triggered the elaboration of the modern, mobile, bureaucratic career. Using organizational data and employment records, the authors model the association between organizational merger and the introduction of career-migration among employees at Lloyds Bank over a 45-year period. The pattern of mobility they find suggests that agency problems associated with the loyalties of newly acquired workers dominated early experiments with lateral transfers. As the merger wave matured, geographic mobility became a general feature of all bank workers' careers. The implications of this pattern of mobility for organizations, career structures, and stratification systems more generally are examined.

Organizational dynamics profoundly influence both the career trajectories of specific employees and the landscape of employment possibilities that groups of workers face. When firms grow, enter new markets, confront

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new competitors, innovate technologically, or merge with other firms, employees and employment practices are transformed in complex and often unexpected ways (Carroll and Harrison 2004). Different classes of organizational events, however, affect employment relations in different ways: when a firm enters a new product market, for example, it may create a new managerial structure to oversee strategic planning across diverse markets (Chandler 1962), while increased competition may cause a firm to streamline its managerial hierarchy (Kanter 1989). In the past decade or so, scholars have examined the empirical association between fundamental organizational characteristics (such as size, or sector) and employment outcomes (wages, tenure), yet despite regular observation that what happens within organizations matters for employees' prospects (e.g., Sørensen 2000; Kalleberg and Mastekaasa 1998; Barnett, Baron, and Stuart 2000; Philips 2001), few studies explicitly model the link between organizational *dynamics* and workers careers.²

A crucial obstacle to careful study of the relationship between organizational activities and career structures is that the two classes of phenomena typically follow quite different time horizons: organizational events like product diversification or merger occur at specific moments in time, while career structures take much longer to unfold. As a consequence—of particular relevance for researchers, though also well recognized by workers in firms—systems of careers are often opaque in the cross-section, since at any given moment workers in an organization are in different phases of their careers (Spilerman 1977; Stovel, Savage, and Bearman 1996). Detailed historical data is therefore particularly valuable, since with it one can untangle various “clocks” and identify the longer-term employment consequences of shorter-term organizational changes.

In this article, we use personnel data from Lloyds Bank, one of England and Wales's oldest and largest banks, to explore how changes in the structure of banks in the late 19th and early 20th centuries affected career lines. The joint rise of bureaucratic organizations and modern career ladders is something of a sociological truism, and in its broadest contours the history of Lloyds Bank is a familiar saga. In the mid-18th century Lloyds Bank was a tiny particularistic institution that by the 1920s had become one of the five major banking houses in England and Wales. Though Lloyds extended its own branch network through direct expansion, the engine of its phenomenal growth was a massive wave of acquisitions that began in the mid-19th century and culminated, in 1918,

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² There are exceptions, including Haveman and Cohen (1994), Roos (1978), Fujiwara-Greve and Greve (2000) and Baron, Hannan, and Burton (2001).

in the merger of Lloyds Bank with Capital and Counties Bank, an institution almost as large as Lloyds. During this period of rapid growth, a highly centralized and profitable bureaucracy emerged, complete with a modern, formal career system for male employees (Sayers 1957; Stovel et al. 1996; Winton 1986). Yet while many have noted broad transformation of career regimes during periods of bureaucratization, few empirical studies examine the mechanisms by which specific features of modern management emerge. In this article we focus on the implications of Lloyds's particular growth pattern for an understudied feature of employment, namely, organizationally driven geographic mobility.

Our focus on geographic mobility is by no means arbitrary: geographic movement has played a crucial—though largely underappreciated—role in the process of stratification throughout human history (Blau and Duncan 1967). And of course, the reality of geographic mobility is not new: men and women have always moved in search of better conditions (Friedlander and Roshier 1966). Over time, however, the relationship between migration and employment has become increasingly complex (e.g., Polanyi [1944] 2001). In early modern economies, employment was a largely particularistic relation, and regular employment typically bound a worker to a place; marginal persons and those who sought new opportunities outside locally available offerings were most likely to move (Moch 1992). Thus while migration was frequently a response to local economic or political conditions, the decision to move was typically made at the individual or household level. In England (as elsewhere) this basic motivation for migration continued during the period of rapid industrialization, when workers moved to urban areas in search of factory jobs (Whyte 2000).

As economic activities became increasingly rationalized, however, a new role structure emerged around many types of employment: the employment relation shifted from a relationship between persons to a relationship between an employing organization and a worker. This transformation of the employment relation implied new claims over workers' lives; increasingly, workers served an organization's interest and tied their prospects to the organization's fortunes (Whyte 1956). To the extent that workers' private interests were subordinated to organizational efficiency, workers could be moved from location to location to serve organizational goals, a phenomenon Tilly (1978) refers to as *career migration*.

The goal of this article is to link the origins of career migration among white-collar laborers to particular changes in the structure of an employing institution. What do organizations do when expansion occurs, at least in part, because of merger with other firms with varying types of governance structures? To answer this we follow Chandler (1962, 1977), whose contribution was to outline how conditions specific to particular industries shape and constrain the practices available to produce increases in effi-

ciency. Chandler's empirical work detailed how rearrangements of inputs made possible economies of scale and efficiency gains in productive manufacturing industries; he made much of the analytic distinction between labor-intensive production, which benefited from organizational innovation, and capital-intensive production, which benefited from technological innovation. While eventually banks were revolutionized by technology (after the industry had already matured), during the first decades of the 20th century, banking was clearly a labor intensive industry: banks had virtually no investments in capital intensive resources, and expenses were limited to staff costs and some investment in real estate. Chandler suggests that the possibilities for efficiency gains under these conditions were slim and were concentrated in the organization and functioning of staff. This is exactly what we observe prior to the merger wave. Recognizing that the advantages of larger size (expanding markets, diversified risk) could only be realized with uniform procedures, banks like Lloyds began to adopt formal and hierarchical employment and operating practices. Yet what made banking different from other labor-intensive industries was a slavish belief that central control would undermine the institution's trustworthiness (Rae 1902; Hunt 1935). Overcoming this belief was one of the great legacies of the merger wave.

We begin with a brief orienting discussion of several theoretical approaches that may shed light on the link between organizational change and career structure. We then outline the traditional employment arrangement operative at Lloyds and other early English banks, focusing on why local status was an important prerequisite for Victorian bankers, even as banks became structurally more complex and formalized. After sketching the basic contours of the original employment systems, we turn to the dynamic side of the story, documenting the path by which Lloyds Bank grew from a small, privately held regional institution to a major national bank.³

The historical narrative highlights two key institutional logics—the traditional importance of local position and modern pressures toward centralization and uniformity—whose incompatibility was acutely revealed when the increasingly bureaucratic Lloyds absorbed smaller local banks. We argue that the merger wave shifted the balance between these competing logics and triggered a marked change in the prevalence, and meaning, of geographic mobility. We test our argument empirically by

³ After a great deal of stability in the middle half of the 20th century, Lloyds once again began to acquire smaller banks toward the close of the century. In 1995 Lloyds acquired TSB, and, after changing its name to Lloyds TSB, became the largest bank in England.

analyzing 45 years of detailed organizational and occupational data, drawn directly from the archives of Lloyds Bank.

Our results show that, contrary to conventional wisdom, the rise of career migration was not simply a component of the general development of bureaucratic working practices; rather, it emerged first and most abruptly in response to specific organizational challenges posed, in this instance, by a merger wave. While Lloyds had already begun to bureaucratize its banking practices and employment system long before geographic mobility was introduced or became widespread among bank workers, it was workers brought into Lloyds via the absorption of small and particularistic local banks who were the first to be geographically transferred away from their home branches in large numbers. They were joined by relatively smaller numbers of trusted Lloyds workers who were installed in newly absorbed branches to teach Lloyds practices and monitor local workers. Once it became clear that these early experiments with geographic transfer were successful, the rationale for local control disintegrated, and career migration rather quickly became a norm in the career of bank workers. In our discussion, we consider how this firm's response to the classic problem of weaving discrete operating units into a single large firm had distinctive and durable structural implications for broader labor markets and systems of careers.

ORGANIZATIONAL THEORY AND CAREERS

The dominant account of the rise of bureaucracy identifies growth as the key factor that sets the stage for adoption of a variety of operating practices that rationalize the activities of an organization (Weber 1968; Chandler 1962). The general logic of this account, which is often referred to as the *technical* explanation for the rise of bureaucratic forms, is that as organizations grow, control and coordination become increasingly significant problems, in part because it is no longer possible to effectively coordinate activities through diffuse and particularistic relations (Blau 1970). In order to resolve these problems, a variety of new centralized procedures are introduced to rationalize both operations and employment. A primary purpose of these new organizational practices is to replace patrimonial forms of loyalty and dependence with relations that reliably align individual interests with organizational goals. On the employment side, formalized job descriptions and hierarchical job ladders are one commonly adopted means of rationalizing an organization (Chandler 1977; Baron, Hannan, and Burton 1999); a second way to address control and coordination problems in large organizations is to regularly transfer employees between offices.

Weber's own work explicitly recognized the efficiency advantages that may accrue from rotating agents through geographically dispersed offices. In fact, rotation of workers is often assumed to go hand-in-hand with the formalization of operating procedures; since uniform practices essentially make workers interchangeable, any trained worker can—in theory—be effective in any particular office. This interchangeability allows for efficient use of labor power, and in fact may reinforce the uniformity of practice within the organization. But, as modern variants of agency theory make clear, there is an additional advantage to rotating workers through offices that is particularly important for the *formation* of modern organizations: because they may break down local allegiances, lateral transfers increase employees' dependence on the organization, thereby aligning the interests of workers with the organization (e.g., Kiser 1991; Kiser and Schneider 1994). In both lines of reasoning (centralization/homogenization and agency theory), rotating workers through positions is an important feature of modern bureaucratic organizations, for it signals the dominance of the universal over the particular. A crucial caveat, however, is that for rotation to work, employees' personal relationships with clients and in-depth knowledge of local affairs cannot be the foundation of the business.

While technical accounts of the rise of modern forms of administration emphasize practices that improve efficiency, these accounts downplay the extent to which existing conditions constrain organizational change. Such conditions play a central role in scholarship that emphasizes norms, beliefs, and the importance of legitimacy among organizational actors (DiMaggio and Powell 1983; Fligstein 1985). This *neoinstitutionalist* approach has primarily been used to account for convergence in organizational structures across diverse contexts (e.g., Meyer and Scott 1992; Dobbin, Sutton, Meyer, and Scott 1993), though it may also help explain the persistence of inefficient practices. With respect to employment systems, neoinstitutionalists emphasize the adoption of cultural blueprints that become dominant among organizations seeking to succeed in new organizational environments (Baron et al. 2001; Baron, Dobbin, and Deveraux 1986). From this perspective, the life course of employment norms is understood to be less a function of the technical superiority of those norms than of attempts to gain or preserve legitimacy in a field of actors—a process that, by definition, emphasizes actors' beliefs about what is institutionally possible. Following this logic, a merger between particularistic firms may pit cultures, practices, and loyalties against one another as firms seek dominance and institutional legitimacy. While the origins of new practices may be murky, their rise to dominance may result from their compatibility with other intersecting institutions, through the active efforts of elite ambassadors, or via sideways glances among competing actors.

Thus technical theories somewhat unproblematically explain the rise of bureaucratic forms as a function of organizational size and the resulting problems of control and coordination, while neoinstitutionalists' concerns with legitimacy suggest that both the external environment and conflicts over cultural practices will affect the changes in organizational practices. Unfortunately, it is often difficult to distinguish the effects of control and culture empirically, let alone see how they are mutually reinforcing. The particular advantage of the organization we study is that a period of growth and centralization were well underway by the time the merger wave took hold. Thus we can examine the interplay of broad control issues (represented through general organizational growth) and acute integration and agency problems (represented by the merger wave) in a context where a powerful cultural logic appeared to constrain the range of possible solutions to the problems associated with rapid growth. First, we set the empirical stage with a brief history of Lloyds Bank.

THE TRADITION OF LOCAL BANKING

Though the early banks in London had their roots in goldsmiths' shops, the proliferation of county banking in Britain developed in response to the needs of both merchants and industrialists for monetary services. Often linked to specific industrial concerns, rural banks typically exchanged local wage tokens, issued bank notes, paid interest on deposits, and advanced money to local entrepreneurs (Nevin and Davis 1970). Until they were swallowed up by large national banks in the early 20th century, county banks in England were governed patrimonially, often by founding owners. These banks gained their standing and prestige and ultimately, therefore, their business, by being trusted, respectable members of what were generally recognized as distinct local communities. The classic problems faced by all bankers—maintaining clients' trust and identifying creditworthiness (Akerlof 1970)—were resolved in the traditional way: by relying on deep understanding of both the local status arrangements and the financial standing of members of the local community. Just as contemporary Russian credit card issuers must rely on personal endorsements in the absence of formal credit scoring (Guseva and Rona-Tas 2001), county bankers in the 18th and 19th centuries relied on longstanding personal relationships as both the source of crucial information and the basis for clients' confidence.

In these respects and many others, the origins of Lloyds Bank are typical of early English county banks. In 1765, two Quaker merchants, John Taylor and Sampson Lloyd (Taylor in textiles and Lloyd in iron), entered into a partnership to form a bank in Dale End, Birmingham. For fully

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a century, Taylor and Lloyds remained a privately owned bank that operated with a single location, although through two younger family members Taylor and Lloyds quickly developed links to a London bank, which gave them crucial access to the central currency markets. Like other British banks, from its earliest origins Taylor and Lloyds remained deeply committed to local banking (Sayers 1957).

The Local Nature of Early Banking Careers

The delicate nature of financial transactions had a direct effect on the structure of English banking careers in the 18th and 19th century. Reliance on personal relationships and the need to guarantee the security of clients' accounts gave small banks good reasons to hire only trusted, local workers whose moral probity and community commitment were recognized by all. As late as the turn of the century, banking careers were largely organized around locally recognized ascriptive characteristics (Rae 1902; Stovel et al. 1996).⁴ The significance of in-depth knowledge and respectability lay behind banks' implicit exchange of lifetime employment in return for local status.⁵

As a consequence, the dominant employment pattern in English banks was a classic firm-internal labor market, characterized by lifetime employment within a single firm and essentially no midcareer entry into bank-specific career ladders. Employees joined the bank as probationary clerks, generally between the ages of 16 and 19, and most banks kept the costs of clerical labor low by requiring that young workers reside with parents. This effectively precluded any geographic mobility until clerks married, at the absolute earliest. Beyond the selection and vetting of employees, however, the importance of position and familiarity within the local community meant that bank staff could not be shifted readily into areas in which they were not known.

Therefore, both the economics and the culture of banking in the Victorian era were essentially local, resting on particularity rather than universal characteristics or practices. Individual bank staff members were valuable to their employers in large part because of their local position,

⁴ Bank archives are filled with evidence on this point, with many references to both the moral character and the local connections of well-regarded bank staff. For example, one branch manager noted that "Mr. Jones is an Oxford boy and has a wonderful knowledge of local people and their affairs—he is most useful." (file 3515, Lloyds Bank Archives)

⁵ A similar duality between local status and business reputation is noted by Weber (1958), who observed that membership in particular Protestant sects constituted a locally valid "certificate of moral reliability" that was essential to a successful business career.

while employment at the bank was valuable to individual employees because it confirmed status in their local community. When viewed through this lens, the rapid rise of bankers' geographic mobility after the turn of the century appears as a puzzle to be explained (see fig. 1). The answer, we argue, lies in the organizational side of the story: the growth of English banks through a remarkable wave of mergers.

THE EMERGENCE OF A NATIONAL BANK

In the mid-19th century, changes in the British financial sector triggered a widespread consolidation in the banking industry. The joint occurrence of rapidly developing capital markets (largely to finance the emerging industrial economy) and the gradual relaxation in the legal restrictions on joint-stock banks made possible the emergence of larger, and potentially more profitable, commercial banks. The joint-stock form formally separated stockholders from local interests, and thus the solvency of particular local clients was subordinated to corporate profitability. In 1865, Taylor and Lloyds (which at the time operated as a single branch in Birmingham) took advantage of the new legislation and formally became a joint-stock company.

Soon after becoming a joint-stock bank, Taylor and Lloyds began to grow. A major motivation for growth among joint-stock banks was entry into new markets, since a broader customer base would reduce a bank's exposure to bad loans: the logic was that many small depositors created a safer position from which to lend than did reliance on a few large accounts whose owners might also be major creditors (Hunt 1935; Sayer 1957). Hence expansion of a bank's branch network allowed shareholders to benefit from variations in local economies.⁶ Lloyds quickly opened new branches beyond its West Midlands origins and acquired a number of small regional banks. Between 1865 and 1884 Lloyds grew from its original business to 33 locations.

With the change in ownership structure came changes in operating procedures. In the two decades following its conversion to a joint-stock bank, Lloyds instituted many of the classic features of a technical bureaucracy. The Lloyds family ceded executive control to senior salaried

⁶ During the merger wave, some absorbed banks brought depositors, while others disproportionately brought borrowers (see Sayer 1957, pp. 19–20). For example, one of the first banks Lloyds absorbed was the Warwick and Leamington Banking Company (in 1866), which had many bad accounts from the building industry. As Sayer notes, "The lending policy had probably been too venturesome because deposits came easily in the residential area of Leamington, and absorption in a larger bank which had plenty of outlets of the money undoubtedly made for sounder banking" (Sayer 1957 pp. 19–20).

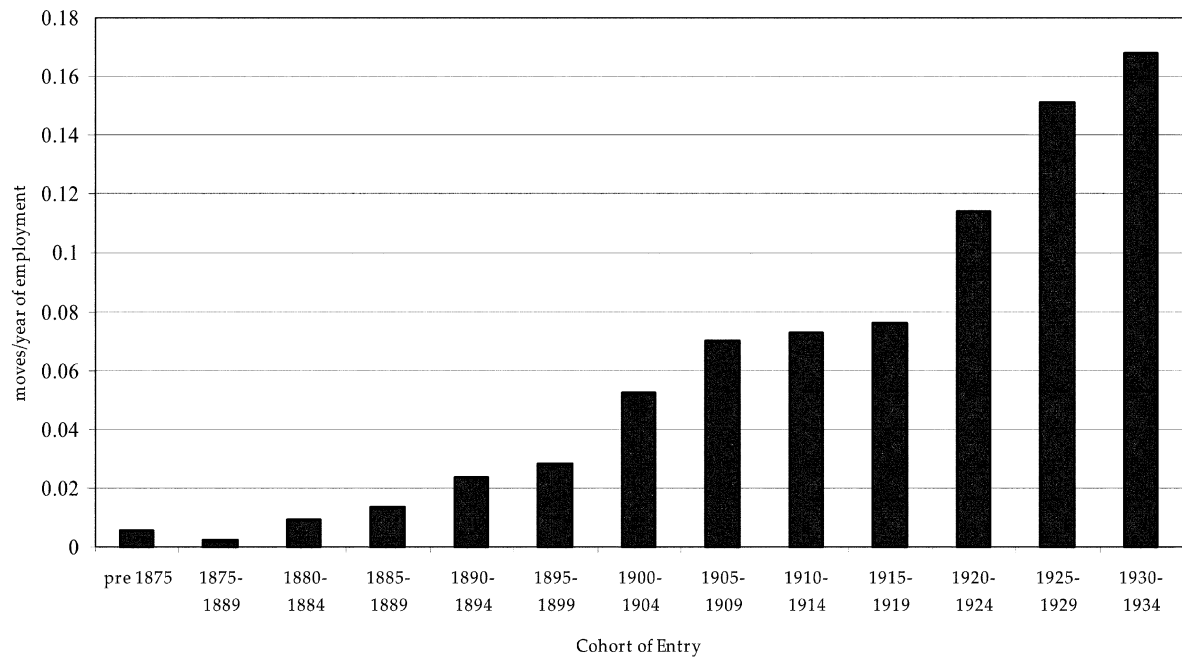


FIG. 1.—Mean number of geographic moves per year of employment by entry cohort

Career Migration

managers, adopted accounting procedures that standardized limits for loans, and ensured that branches were subordinated to head office. On the employment side, by 1884 staff grades had been formalized and salary rates were centrally established. As Sayers (1957, p. 236) records, “The system as it had emerged by the 1870s was . . . one of considerable centralization of lending power and dispersion of general office control subject to increasingly tight inspection.” Despite this formalization, the importance of local knowledge about clients meant that branch staff continued to spend their careers in their home branch, though the bank developed an extensive monitoring program to ensure local compliance with bank policies. All branches were formally inspected twice a year, and the head office launched intensive inquiries when fraud was suspected.⁷

Immediately after becoming a joint-stock bank, Taylor and Lloyds began slowly to absorb other banks. Figure 2 documents the temporal history of Lloyds’s merger activity during the 19th and early 20th centuries. The earliest mergers were with other small banks, all of which were located in the vicinity of Birmingham. Many of these early mergers involved Taylor and Lloyds’s absorption of other family-run banks that had fallen on hard times following the death of an original founder. Taylor and Lloyds’s major breakthrough came in 1884, when it absorbed its first London bank and became known as Lloyds, Barnetts and Bosanquets Bank Limited. This allowed it a seat in the London Banker’s Clearing House, which was a key site for banking activity, and gave the bank entry to the lucrative London and international markets. Lloyds’s merger activity accelerated in the 1890s, after it was an established London bank and well after it had implemented centralized operating procedures. Eventually, Lloyds merged with two other large joint-stock banks, first with Wilts and Dorset (1914) and ultimately with Capital and Counties (1918); both of these banks were already major players in the industry when they amalgamated with Lloyds. All told, Lloyds formally absorbed 53 distinct banks, 23 of which had already absorbed other banks and had multi-branch structures.

Though figure 2 reveals the outline of the merger wave, the potential organizational impact of these changes is only hinted at in the time line. One of the crucial effects of the merger wave was to transform Lloyds

⁷ Lloyds’s attempts to root out suspected fraud were legendary in the bank and were a clear example of the bank’s attempt to exercise more control over regional affairs. Inspectors both initiated their own investigations and responded to complaints from members of the local community. In several cases it was clear that the fraud was not motivated by strict self-interest; rather the bank worker felt part of the local community on whose behalf he had been acting. Records for this kind of investigation are found in the head office inspectorate files.

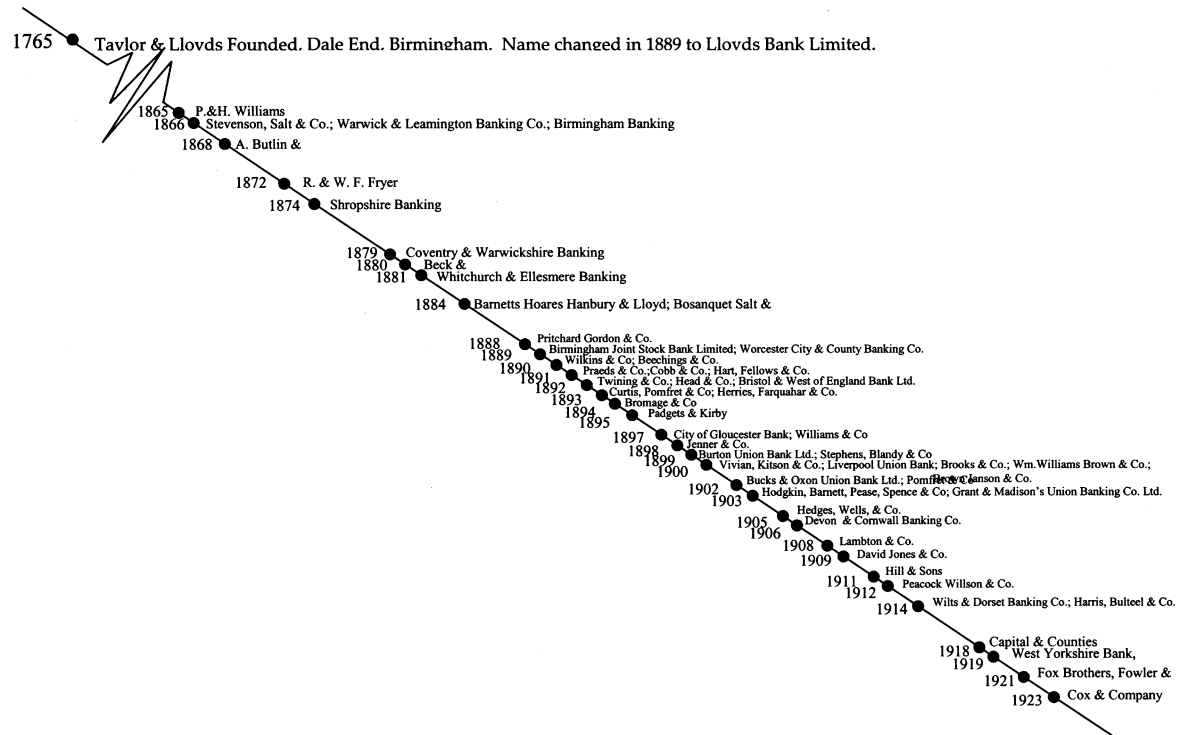


FIG. 2.—Lloyds Bank's acquisitions (adapted from R. S. Sayers [1957])

Career Migration

from a small regional bank based in West Midlands to a London-based banking powerhouse with a fully developed national branch structure. The series of maps shown in figure 3 documents the path of Lloyds's geographic penetration, through both merger and direct expansion, into the English countryside. Each panel in figure 3 plots Lloyds's branch network, over time.⁸ Taken together, these figures reveal the extent to which Lloyds grew during the late 19th and early 20th centuries.

The first panel of figure 3 shows the geographic structure of Lloyds Bank in 1903. During this period, Lloyds was still centered in its heartland in the West Midlands, though subsidiary clusters of strength existed in London and parts of the southeast, in Newcastle and the northeast, in South Wales, and in Liverpool. Lloyds's presence in Liverpool was largely the result of its absorption, in 1900, of the Liverpool Union Bank, an event that occurred to the dismay of local bankers, who claimed "Lancashire businessmen should be able to undertake the most delicate negotiations with Lancashire bankers" (Sayers 1957, p. 262). Despite this expansion, it was still premature to consider Lloyds a national bank at the turn of the century. The main change by 1910 (panel 2) was Lloyds's entrance into the southwest following the relatively large merger with the Devon and Cornwall Bank in 1908.

The next map (fig. 3, panel 3) reveals that by 1920 Lloyds was clearly a national bank. While Lloyds continued to expand its own branch network, the major growth during this period resulted from mergers with two large and highly centralized competitors: the absorption of Wilts and Dorset in 1914 brought 100 branches into Lloyds's network, while the merger with Capital and Counties in 1918 added 400 branches. Together these two mergers almost doubled the size of Lloyds's branch network. Geographically, Capital and Counties had been strong in the Home Counties, East Anglia, the southwest, and Wales, and its acquisition strengthened Lloyds's hold in these areas. Finally, panel 4 shows that between 1920 and 1930, Lloyds's branch structure had largely stabilized (although there was a bit of in-filling and an overall consolidation of the network). What growth occurred in that period was driven less by expansion into new territories and more by increasing the size of existing branches.⁹

In sum, by 1920 Lloyds had established the structural shell of a large national organization, complete with a well developed branch structure

⁸ Unfortunately, data describing the branch-specific asset sheets are not available. Hence all measures of bank size are in terms of number of employees rather than assets.

⁹ Though we do not offer an illustrative figure here for the sake of space, the same general trends continue through 1939, with the exception of a bit more growth in the suburban belt around London.

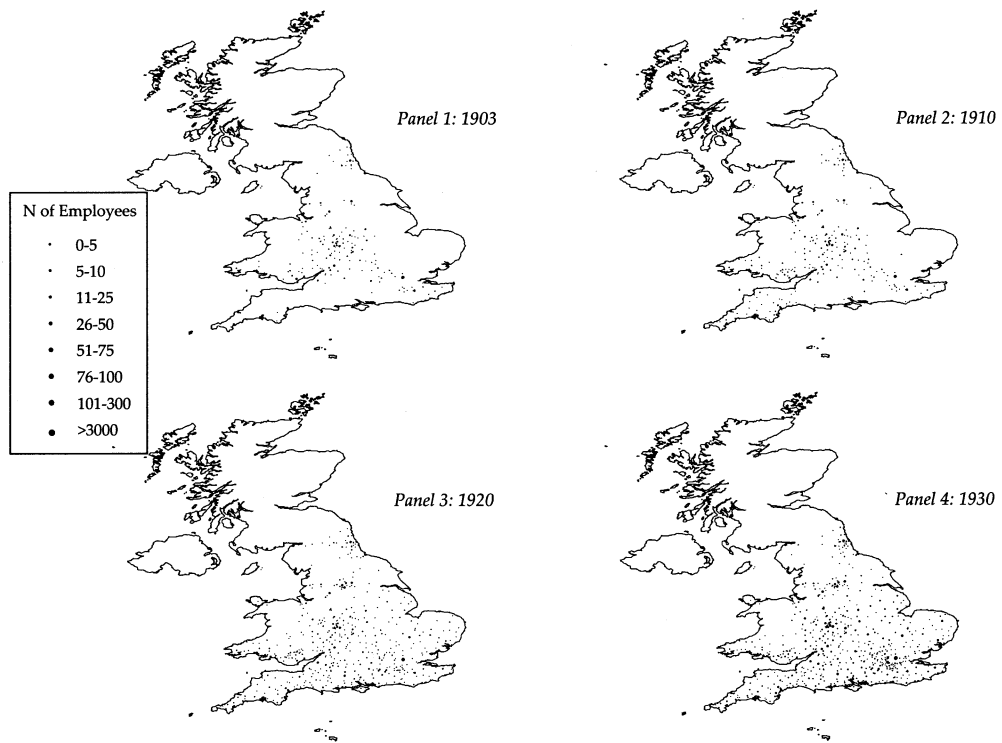


FIG. 3.—Geographic expansion of Lloyds Bank, 1903–30

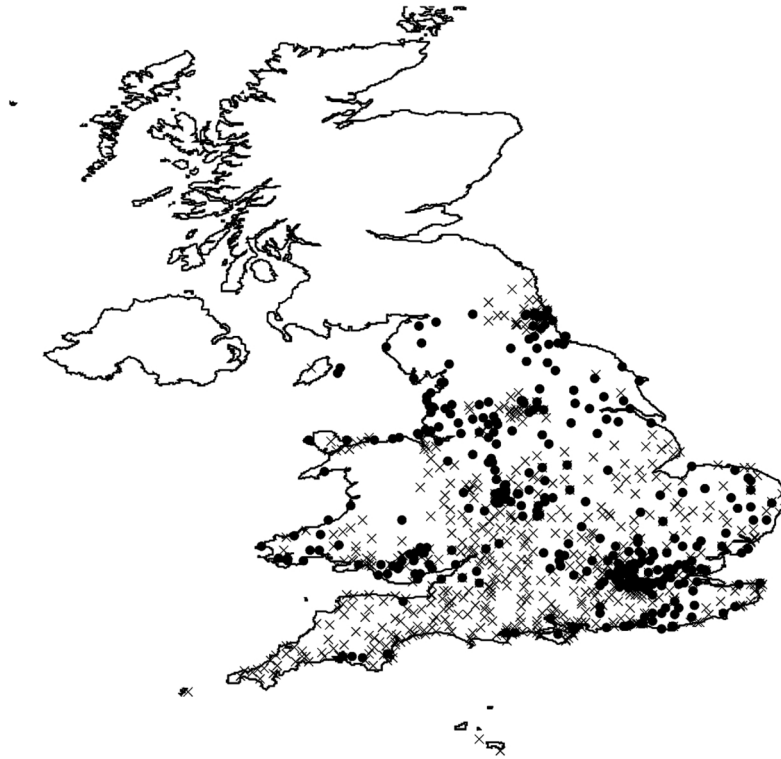


FIG. 4.—Growth through merger and expansion: mature branch structure at Lloyds Bank; a solid dot indicates an original Lloyds branch; a cross, a merged branch.

and a large army of employees (Sayers 1957; Winton, 1986). Figure 4 highlights another aspect of Lloyds's growth pattern: the extent to which changes in the branch structure were a result of both merger *and* direct expansion. While Lloyds opened many new branches during this period, the bank's active absorption of existing banks played a central role in its emergence as one of England's dominant banks. In fact, by the 1930s well over half of the branches in the Lloyds network had been absorbed through merger.

CONFLICTING INSTITUTIONAL LOGICS

For any bank to remain solvent, it must be perceived to be trustworthy and reliable, yet trust is notoriously hard to institutionalize. Banks have always struggled to maintain a balance between two competing logics that could signal their trustworthiness: local control over individualized

decisions and central control over uniform operating procedures. Through the end of the 19th century, banks primarily resolved this trade-off in favor of local interests. When status is important and information is scarce or difficult for outsiders to acquire, employing only those who are embedded in the local community is a cheap and effective way to maintain the confidence of local clients—even if the procedures these locals use are increasingly formalized. For decades after the emergence of joint-stock banks in the mid-19th century, bankers continued to remain sensitive to the demands of local business communities that expected branches to accommodate their interests (Savage, Stovel, and Bearman 2001). The belief that close alignment with local elites made good business sense was deeply ingrained in the operating practices and staffing arrangements of 19th-century British banking houses, particularly in banks' reliance on hiring locally reputable staff.

Yet allowing local control over decisions is a risky strategy, for two reasons. First, as agency theorists recognize, staff members may collude with local interests at the firm's expense. Second, as highlighted by the new institutionalists, the sheer fact of variability may undermine the legitimacy of a firm's operations. This latter point is a particular concern for banks: financial institutions that are unpredictable may be seen as untrustworthy by clients or potential clients, and untrustworthy banks quickly collapse.

Both of the liabilities associated with local control are exacerbated as banks grow. Prior to the period of expansion, the potential negative consequences of collusion between branch staff and local clients—often viewed by bank owners as the poor exercise of discretion by local managers—could be easily contained.¹⁰ As banks grew and financial interdependencies became more complex, however, monitoring the judgments of the bank staff became more crucial since even local improprieties could escalate into major financial crises that would affect shareholders' profits (Granovetter 1985). At the same time, a large bank that is *known* to encompass a patchwork of practices and policies may have particular difficulty maintaining the public's confidence. This suggests that uniform standards and central control are essential for larger banks to remain successful (Akerlof 1970; Shapiro 1987).

However, as the British banking industry grew, efforts toward centralization were constrained by the residual belief that banks were reputable only to the extent that their staffs were reputable and responsive to individual concerns (Rae 1902). The depth of this belief was articulated in the 1838 *Circular to Bankers*, which warned, "Joint Stock Banking

¹⁰ In the end, however, such behavior clearly led to the downfall of some of the family-owned banks.

Companies aim at making all cases conform to their established rules, while the very essence of the principle of a private banker is that he makes a rule for every case: hence the necessity for private consultation and unreserved confidence which can never obtain from public companies” (cited in Hunt 1935, p. 338). Under these conditions, fully eliminating local control in favor of a highly centralized bureaucracy was considered a dangerous business proposition (Hunt 1935).¹¹

As an organizational problem, the issue bank owners faced in the late 19th century was analogous to the trade-offs faced by rulers seeking to develop systems of tax administration (Kiser and Kane 2001). In the tax administration case, the state must balance the likelihood of collusion between tax collectors and local subjects against the ability of tax collectors to benefit from their knowledge of local affairs. One solution in the taxation case is the rotation of collectors through offices; this solution was used when the costs associated with monitoring local tax farmers were particularly high. In the case of banks, where monitoring costs were not prohibitive and local clients were quite committed to particularistic relations with private bankers, agency theory does not predict the emergence of rotation of staff. And in fact, instead of rotation, Lloyds instituted an extensive monitoring program designed to deter and to root out fraud. Thus we must ask what triggered a shift in the bank’s strategy toward rotation of staff from branch to branch, even though this meant losing access to rich stores of information of local value.

The answer to this puzzle can be found by recognizing a transformation in the nature of the bank’s control problem, from the general variant associated with growth to a more narrow variant that emerged in the wake of the massive consolidation of British banking in the late 19th and early 20th centuries. During this period, as we have seen, growth among successful banks was in large part the result of merging with other banks. This particular pattern of growth exacerbated both the liabilities of local variability in practice *and* the scope of the agency problem.

While direct expansion and the transition to the joint-stock form provided a strong incentive for banks to centralize control and homogenize their operating procedures, the particular conditions associated with the merger wave made the rotation of staff an increasingly attractive strategy for firm integration. Merged banks brought with them diverse policies, relationships, and ways of doing business. For a large bureaucratizing firm that was increasingly committed to uniformity, this new patchwork

¹¹ During the period we examine here, banks as an institution had still not been fully accepted by the public at large. Many individuals did not keep a bank account until well into the 20th century, and bankers relied on merchants and industry for both deposits and a market for credit (Sayers 1957, pp. 89–103).

of practices and competing loyalties threatened to undermine its reputation as a modern bank. In a context of new variability in branch operating procedures, rotation could accelerate the homogenization of banking practices (as bankers learned from one another) and facilitate central control over the activities of newly absorbed branches. In addition, by placing bankers in the variable conditions of different branches, a bank would be better able to assess each staff member's potential for advancement. On this logic, mergers renewed the drive for uniformity, and rotation was an avenue for firm integration.

The merger wave offered a second rationale for rotation as well: the fact that newly absorbed men joined Lloyds with complex and competing allegiances made existing agency problems more acute. From the perspective of an absorbing bank, the risks of local collusion were most difficult to control among newly absorbed staff, who had no track record of loyalty to the parent firm. In addition to long-standing commitments to local clients, these newly absorbed bankers might retain commitments to old employers and old colleagues (Buono and Bowditch 1989); in short, it was entirely possible that these men would be so embedded in the affairs of their local community that their lending decisions would be more oriented toward these concerns than toward the overall profitability of the bank. While increased monitoring might help, lateral transfers of newly absorbed staff members would quickly sever residual ties to old employers and clients, thereby minimizing the risk that newly acquired employees would subvert the bank's profitability in favor of their own local autonomy.

In short, where the logic of localism had precluded the introduction of geographic mobility during Lloyds's early period of growth, the context changed fundamentally once Lloyds began absorbing other banks. Unifying the bank became even more important, as did aligning bankers' interests more closely with the interests of the firm. Suddenly, incorporating geographic mobility—which had previously made no business sense at all—into the already formalized banking career addressed two related aspects of the difficulties Lloyds faced during its merger phase. Examining precisely when and where mobility occurred can help us untangle these mechanisms.

ORGANIZATIONAL GROWTH AND CAREER MIGRATION

To identify the precise impact of organizational changes on career dynamics, we model patterns of geographic mobility among employees at Lloyds Bank over four and a half decades, drawing on data recording changes in the bank's structure and on a sample that describes the com-

plete work histories of over 2,500 Lloyds employees. The longitudinal nature of our data—at both the organizational and individual levels—allows us to untangle the relationship between organizational events and changes in the career system at Lloyds Bank.

Data and Methods

All data used in these analyses were extracted from archival records maintained at Lloyds Bank headquarters in London. The bank data were collected from annual yearbooks and the work histories were extracted from a source known by Lloyds archive staff as *The Bible*. Developed as part of the bank’s effort to provide pensions for employees, *The Bible* contains the name of every employee of the bank, regardless of grade, sex, or location, who began working for Lloyds between about 1880 and 1940.¹² Although the volume itself contains minimal information about each employee, it is possible to use the data contained within *The Bible* to trace the full career history of any employee by consulting various branch directories and yearbooks issued by the bank.

During the entire period we study, the overwhelming norm among English banks was to hire young men into entry-level positions; the vast majority of bank employees worked in banking until they died or retired (though among the later cohorts increasing numbers left mid-career for other employment). These features of the employment relationship minimize problems of both left and right censoring in these data, since for all employees our data begin at hiring and continue through men’s entire careers.¹³

We use these data to model how changes in the bank’s structure influenced the timing and proximate causes of geographic mobility among bank staff. We first estimate a discrete-time proportional hazard model

¹² *The Bible* contains records on over 20,000 workers. Because *The Bible* is organized alphabetically, our sample was also initially drawn alphabetically and contains employees whose last names began with the letters A-E. The 2,542 employees whose career data we analyze are all men, taken from a total sample of approximately 4,000 employees. We examined only men’s careers here since women were hired on female-only grades and had no prospect of promotion. As a result the two workforces are entirely separate and thus incomparable during this period. For workers who joined Lloyds as a consequence of a bank merger, Lloyds staff reconstructed past employment histories for pension purposes. For other studies using this data, see Stovel et al. (1996) and Savage et al. (2001).

¹³ However, before about 1900, our sample is unrepresentative of Lloyds Bank as a whole, since long-term employees who had been hired by their original employer (Lloyds or otherwise) before 1880 tend not to be recorded in the Lloyds archives, and thus their careers are not included in our sample. After about 1900, we can be confident that we have a cross-sectionally representative sample of the bank itself—in addition to representative samples of cohorts of starters.

to evaluate how the dynamics of growth and merger are associated with geographic mobility. We then consider the structure of the association between originating branch type and destination branch type for those workers who moved. These analyses reveal how personnel flows linked old and new branches and therefore shed light on how transfers may have solved short-term agency problems and unification issues brought on by mergers.

WHO MOVED?

We begin by estimating a discrete-time proportional hazard model of the rate of employees' first geographic moves. We limit our models to *first* geographic moves because it is only the first move that severs an employee's ties to his place of origin, his original clients, and his initial employer, while subsequent geographic mobility reflects the general homogenization of the bank's staffing practices.¹⁴ Since we are working with interval-censored data (recorded yearly though moves can occur at any time during the year), we use the complementary log-log specification of the discrete time proportional hazard model rather than the more familiar logistic version. The complementary log-log specification is appropriate when the underlying risk is continuous but the data are measured in intervals (Allison 1982).

The specific form of the model is

$$P_{it} = 1 - \exp[-\exp(\alpha_t + \beta'X_{it-1})].$$

Thus for each yearly employment spell of exposure, we calculate the probability that an employee i will experience a geographic move at time t conditional on (1) a baseline hazard of geographic mobility at time t ; and (2) a vector X of explanatory variables for employee i at time $t-1$.¹⁵ In the models we estimate, X includes covariates measuring individual, organizational, and historical factors that may affect the rate of geographic mobility within the bank.

It is a rare employment system that completely ignores individual char-

¹⁴ Throughout the period under study, the mean distance of a bank employee's geographic move was approximately 30 miles. This suggests that even if workers were transferred in order to sever ties to old employers, the bank maintained some interest in keeping workers in local regions where customs, if not specific personalities, might be known.

¹⁵ We experimented with several "clocks" to model the baseline hazard. Since we are primarily interested in the effects of particular factors on the risk of moving, rather than the shape of the hazards, we do not discuss results for models including different time variables. The best fitting and most parsimonious models include a linear and quadratic term for employment tenure and period effects for chronological year.

Career Migration

acteristics; therefore, we include several measures of individual-level status as control variables, including whether or not the employee has a *banker's credential*, his *job grade* (clerk, senior clerk, manager, or specialist manager), and his *tenure in banking*. Of theoretical interest at the organizational level but measured at the individual level, we include a measure of the *type of branch* the employee worked in (original Lloyds, newly acquired, or absorbed in the past) and, for merged branches, whether or not the absorbed branch was a *small private bank*. At the organizational level and measured yearly, we examine the effects of the *size of the bank* (measured as the log of the number of employees/1,000), the *level of recent merger activity*, and the effects of *four temporal periods* capturing different eras in the bank's expansion history. To account for major historical effects, we also include an indicator for the years in which Britain was involved in a major war. The value of each covariate is updated for each yearly spell. Table 1 provides descriptive data about the sample and measures; we discuss our expectations for each of these measures below.

Individual factors.—In the early 20th century, Lloyds and other banks experimented with requiring their employees to pass bankers certifications in order to receive pay increases. While this credential might be expected to be associated with the rate of promotion rather than with geographic mobility, we include a dummy variable (coded “1” if the employee has some form of banking credential) in order to evaluate the idea that the bank looked for signals of an individual's promise and structured subsequent job experiences on the basis of these signals.¹⁶ Theoretically, we would expect this perceived promise to be rewarded with *increased* geographic mobility (though it is also plausible that some less promising employees were “sacrificed” in the sense that they were moved around a great deal in order to satisfy short-term staffing needs.)

In addition to individual credential status, we include a series of dummy variables measuring job grade during each spell (senior clerk, manager, and specialist manager; the omitted category is clerk). Because job grades signify both stage of career and position within the firm, their net effect on the risk of geographic mobility is difficult to predict. Because clerks' skills were the most universal (and because they may have had less bargaining power than the bank), we might expect that they would have the highest rates of geographic mobility. However managers, who had more branch-level authority, had more opportunities to act in ways contrary to

¹⁶ In other contexts, the rise of formal credentials is itself an indication of increasing commitment to formal and uniform business practices. In British banking, however, despite many attempts to require particular educational training, formal credentials have never played a substantial role in advancing bankers' careers.

TABLE 1
DESCRIPTIVE STATISTICS FOR SAMPLE OF MALE LLOYDS BANK
EMPLOYEES, 1890–1934

	Sample Mean*	SD*
First geographic move .....	.0499	.2177
Individual factors:		
Banker's credential .....	.2476	.4316
Clerk** .....	.9377	.2417
Senior clerk .....	.0164	.1270
Manager .....	.0400	.1959
Specialist manager .....	.0059	.0769
Bank tenure	13.8609	11.3090
Organizational factors:		
Log of size of bank/1,000 (staff)	6.9982	.5106
Number of bank mergers, past three years	2.0739	2.0485
Simple merged bank .....	.2713	.4447
Employed:		
Original Lloyds office** .....	.6691	.4705
New merged branch (\leq 7 years since merger) .....	.0809	.2728
Old merged branch ($>$ 7 years previ- ously) .....	.2500	.4330
Historical factor:		
War (1914–19) .....	.1920	.3939
Period effects:		
P1 1890–1902: early merger wave, mostly small mergers** .....	.1554	.3623
P2 1903–13: acceleration of mergers, moderate size .....	.2357	.4244
P3 1914–23: end of merger wave, few extremely large mergers .....	.3369	.4727
P4 1924–34: post merger wave .....	.2720	.4450

NOTE.— $N = 2,524$ individuals; $N = 32,133$ yearly employment spells.

* Sample statistics calculated on employment spell data.

** Omitted category in models.

the bank's interests, so the bank had a great deal of incentive to insure that manager's fortunes were closely linked with the bank rather than with their particular clients. This logic suggests managers might have higher rates of geographic mobility. There is an additional reason to think that managers might have higher rates of mobility: since there were fewer managers than clerks, the structure of vacancies in the bank might mean that managers would be moved away from their home branch in order to fill newly open positions. Finally, during the merger wave, managers might be considered especially valuable from the head office's perspective

and might be moved into positions of responsibility at newly absorbed branches in order to institute Lloyds's business practices.

Another factor that may influence the risk of geographic mobility, independent of organizational characteristics, is an employee's career stage. Since all employees were hired as young men, tenure at the bank is a reasonable measure of career stage. We include both linear and quadratic tenure terms in order to capture possible nonlinearity in the effect of tenure on mobility. There are several organizational and life course justifications for expecting this functional form. First, the parental subvention policy common in English banks essentially prevented geographic transfer during the earliest years of employment across all cohorts. Second, some geographic mobility coincided with promotions,¹⁷ and to the extent that promotions into the managerial ranks were highly concentrated at about 20 years of bank service, we would expect increased geographic mobility during this phase of career. As individuals age or near retirement they may resist moving for career purposes. In addition, older individuals may have already "proven" themselves to the bank, and so transferring them would neither instill loyalty to the bank nor provide the bank with an opportunity to observe the employee's potential in multiple settings. Therefore, we expect the effect of bank tenure on the rate of geographic mobility to be an inverted U and relatively constant across cohorts.

Organizational factors.—General technical theories about bureaucratization claim that as organizations become larger, employees will be more likely to be moved from place to place. The rationales are multiple: transfers increase employee dependence on the firm, thereby increasing managers' control over workers; transfers provide workers with more knowledge and thus may enhance coordination throughout the firm; and transfers of trained and interchangeable employees allow for more efficient use of human capital in a firm with complex vacancy chains. All of these factors cause us to expect that as Lloyds became bigger (regardless of whether this was through expansion or merger) the rate of geographic mobility would increase. We assess this directly by including a measure

¹⁷ Of the $n = 1,603$ first geographic moves recorded in our sample, 111 coincide with a promotion ($\approx 7\%$). Thus, while some geographic moves coincide with promotion, the vast majority do not. Among those with simultaneous geographic transfer and promotion, $n = 15$ (or 13.5%) involve men employed in a newly merged branch. This compares with 16% of *all* moves that involve men in newly merged branches. Therefore, men working in newly merged branches are fairly proportionately represented among vertical movers. The bulk of the newly merged men who experienced simultaneous promotion and geographic transfer joined Lloyds via the merger with Capital and Counties in 1918 and were moved in the early 1920s. As a comparison, 42% of the men who experienced simultaneous promotion and transfer were employed in original Lloyds branches. This proportion is quite close to the 38% of all movers who were employed in such branches.

bank of size in each year (coded as the log of the current number of employees/1,000).

Beyond sheer size, we have suggested that the particular form of growth may create additional pressures on organizations that could be resolved by transferring employees. If mergers bring diverse cultures and practices into an existing organization, the firm may become newly committed to integration and homogenization and begin to experiment with using employees as ambassadors of change. If this is true, recent merger activity—here measured as the number of mergers during the past three years—will increase the overall rate of geographic mobility in the bank.

Growth through merger could have more localized effects as well. Leaving newly absorbed employees in place after the union with Lloyds exposed an agency problem: these men might remain committed to their old bank's lending practices and clients rather than to those of Lloyds. By moving new employees to different branches, Lloyds could effectively crush the absorbed old banks' autonomy. To explore this, we include indicator variables measuring the type of branch the employee worked in during each year. We distinguish between original Lloyds branches (the omitted category), branches absorbed by Lloyds in the past seven years, and branches absorbed seven or more years in the past.¹⁸

For those workers employed in merged branches, we also include an indicator variable recording whether their originally employing bank was a small bank with a simple branch structure or a multibranch bank. For small traditional banks with patrimonial governance structures, personal ties between bankers and locals were an essential part of doing business; after a merger, these bank workers could be expected to be particularly unwilling to adopt formal rules regarding asset levels or lending limits, and might be openly hostile to increased monitoring. In contrast, banks with more complex branch structures—some of which were joint-stock banks themselves—were more likely to have already adopted bureaucratic operating practices before merging with Lloyds. Even by the 1890s, most larger banks had begun to rationalize their lending practices somewhat and had instituted formalized job descriptions. To the extent that Lloyds was concerned about particularism and the risk of fraud, the directors would have been more concerned about workers absorbed from small banks with patrimonial governance structures than workers coming to Lloyds from larger and more bureaucratized banks. If this were true,

¹⁸ We distinguish between recently absorbed branches and branches absorbed more than seven years in the past because our reading of the archival evidence suggests that during the years immediately following a merger, absorbed branches were viewed as a distinct class by Lloyds senior management. We consider seven years an appropriate cutoff because almost all absorbed banks had lost all vestiges of their autonomous decision-making structures within seven years of merging with Lloyds.

workers who came to Lloyds from simple merged banks would have higher rates of geographic mobility.

Because the structure of the employment system may not be invariant over organizational or chronological time, we also estimate models that include dummy variables measuring four distinct periods in Lloyds's history (Isaac and Griffin 1989). These variables allow the baseline hazard α_i to vary between periods as well as over employee tenure. Period 1 covers the years 1890–1902, years during which Lloyds had become a technical, multibranch bureaucracy but was still relatively small in scale. During the second period, which we define as the years 1903–13, Lloyds's pattern of acquisitions changed somewhat. Lloyds continued to acquire banks, though at a slower rate; those that were absorbed tended to be larger than the small banking houses acquired earlier. The third period, 1914–23, reflects the end of the merger wave. Lloyds acquired only five banks during this period, though two of them were major mergers. By merging with Wilts and Dorset (1914) and Capital and Counties (1918), Lloyds solidified its position as one of the great survivors of the consolidation wave in British banking. During the fourth period, 1924–1934, Lloyds continued to grow through direct expansion, and matured into a large national bureaucratic institution. Even net of changes in bank size, we expect that the rate of geographic mobility will differ from period to period, with a general rise from the earlier periods to the later periods.¹⁹ This is in part due to changes within Lloyds itself; we expect that early experiments transferring employees between branches will reveal unexpected benefits to Lloyds in terms of the opportunity to identify talented staff and to more efficiently allocate staff across vacant positions.

Beyond the direct effects of period, however, we expect the effect of the type of branch an employee worked in on the rate of geographic mobility to be most pronounced during the early phase of the merger wave, when Lloyds was still struggling to institute a centralized authority and might have been threatened by strong localist tendencies among newly acquired banks. As issues of integration were resolved, the bank became more uniform in its operating practices, and as mobility became more common overall, merged branches should be less distinctive in terms of the geographic mobility profiles of workers. To test this idea, we include terms capturing the interaction of branch type and period.

Historical factors.—Earlier work has documented the highly turbulent

¹⁹ Though we have coded our measures of temporal period to coincide with coherent “eras” in the organizational history of the bank, these variables may also capture broader secular trends outside the bank, including improvements in infrastructure that facilitate geographic mobility and changes in the nature of white-collar labor in Great Britain. In either case, we expect later periods to be associated with higher rates of geographic mobility among bank workers.

and disorganized careers of men hired at Lloyds during the First World War (Stovel et al. 1996), so here we control for the impact of the war years (1914–19) on the yearly risk of geographic mobility as well. While the Great War created a labor shortage on the home front (which might have resulted in moving remaining employees to the most critical locations), we expect that in general the rate of geographic mobility will be *lower* during the war years. This is because wars are likely to “freeze” civilian institutions (particularly nonmanufacturing concerns) in place, displacing organization-specific goals in favor of collective pursuit of the war effort. Further, on the more human side, there is some archival evidence that the bank was less willing to introduce further disruptions into the lives of their employees during wartime.

Empirical Patterns

The results of estimating models of geographic mobility on the Lloyds sample data are shown in table 2. Models 1–5 successively add sets of covariates. The models are nested, so the likelihood ratio test can be used to identify the best fitting model; here model 5, which simultaneously includes all our covariates, is the best fitting model. The pattern in this model is very much as we expected: individual, organizational, and historical factors all contribute to explaining variation in the rate of geographic mobility among bank staff at Lloyds bank. Further, the terms measuring the interaction between branch type and period are all significant, suggesting that the association between working in a newly merged branch and geographic mobility changed over time.

Among the individual-level control variables, we find that the relative risk of a geographic move is substantially higher for those holding a banker’s credential than for those without.²⁰ Managers are more likely to move than are clerks, while being a senior clerk or a specialist manager has no effect on the probability of a geographic move (relative to clerks). Each additional year of bank tenure decreases the risk of geographic mobility and though the quadratic term is significant in the better fitting models, there is not strong evidence for an inverted U-shaped tenure effect. This may be because some of the tenure effects are captured by our measures of job status.

Turning to the relationship between organizational characteristics and geographic mobility, the results show that as the bank became larger, the rate of geographic transfer for individual employees increased. However,

²⁰ Exponentiating the β coefficients gives the relative risk of the outcome. Since the complementary log-log model is used when the probability of an event is very small or very large, relative risks approximate odds ratios.

TABLE 2
THE EFFECT OF INDIVIDUAL, ORGANIZATIONAL, AND HISTORICAL FACTORS ON THE RATE OF FIRST GEOGRAPHIC JOB TRANSFER

	Model 1 Estimate	Model 2 Estimate	Model 3 Estimate	Model 4 Estimate	Model 5 Estimate
Individual factors:					
Banker's credential .....	.8418*** (.05)	.4321*** (.05)	.4128*** (.05)	.3639*** (.05)	.3532*** (.05)
Senior clerk	-.1238 (.25)	-.1479 (.26)	-.2566 (.26)	-.3282 (.27)	-.3122 (.27)
Manager	-.3527* (.17)	.5468* (.17)	.4727* (.17)	.4094* (.17)	.3211 (.17)
Specialist manager .....	.1980 (.45)	.1778 (.46)	.3028 (.46)	.1434 (.46)	.1130 (.46)
Bank tenure	-.0418*** (.01)	-.0227** (.01)	-.0231** (.01)	-.0259** (.01)	-.0262** (.01)
Bank tenure ² .....	.0000 (.00)	-.0008*** (.00)	-.0007** (.00)	-.0006* (.00)	-.0006* (.00)
Organizational factors:					
Log(staff/1,000)		2.6001*** (.11)	2.8092*** (.18)	1.7979** (.54)	1.9736** (.55)
Recent merger activity .....			.1364** (.04)	.1668*** (.04)	.2044*** (.04)
Simple merged bank .....			.3333*** (.08)	.4016*** (.09)	.3383*** (.09)
New merged branch			1.0032*** (.11)	.9406*** (.11)	3.7964*** (.82)

Career Migration

Old merged branch .....			.7741*** (.09)	.7108*** (.09)	.6208*** (.09)
Historical factors:					
Great War				-1.6125*** (.16)	-1.5596*** (.16)
P2: 1903–13				1.9721*** (.40)	2.1519*** (.44)
P3: 1914–23				2.1372** (.61)	2.3205** (.63)
P4: 1924–34				2.3836** (.66)	2.6737*** (.68)
Joint effects:					
P2 × new merged branch					-2.1588* (.84)
P3 × new merged branch					-2.7580** (.83)
P4 × new merged branch					-3.3297*** (.83)
Intercept	-2.8141*** (.06)	-21.4642*** (.79)	-23.4220*** (1.33)	-18.0133*** (3.56)	-19.5650*** (3.63)
-2 log likelihood	12,124.6480	11,100.5630	10,949.4590	10,670.2480	10,635.0710
<i>df</i>	6	7	11	15	18

NOTE.—Numbers in parentheses are SEs for the coefficient estimate.

* $P < .05$.

** $P < .01$.

*** $P < .001$.

even controlling for bank size, recent merger activity has an independent effect on the rate of geographic mobility, suggesting that growth and merger posed distinctive challenges to the bank. Further, each successive temporal period had a higher base rate of mobility than the previous period, though the Great War depressed the rate of geographic mobility.

Of particular substantive interest, we find strong effects for whether or not the worker was employed in a branch that was absorbed into Lloyds via merger. Specifically, working in a recently absorbed branch increased the relative risk of being moved in year t , while working in a branch that had been absorbed in the more distant past also increased employees' risk of geographic transfer. Further, men whose original employing bank was a small and simple branch (rather than a multibranch country bank or a joint stock company) were also more likely to be transferred (relative risk = 1.4; model 5). Perhaps of greatest interest, the coefficients for the interactions between merged branch and period are significant for each of the three periods, revealing a change over time in the relationship between working in a merged branch and the risk of geographic mobility. Specifically, in the earlier periods, men employed in merged branches were substantially more likely to experience a geographic move in any given year than were bank staff employed in original Lloyds branches. Over time, however, the *differential* in risk declines and then disappears, even as the overall risk of mobility among bank staff increases.

In order to better illustrate changes in the joint impact of individual branch type and period on geographic mobility among workers at Lloyds, we use the coefficient estimates from Model 5 to calculate the annual predicted probability of a geographic move for clerks working in either a Lloyds branch, a newly merged branch, or an older merged branch within each period. All other covariates are set at the mean or mode for the period.²¹ These estimated probabilities are presented in figure 5.

Figure 5 reveals two important aspects of the structure of geographic mobility among Lloyds Bank staff. First, as we would expect, there is an overall increase in the level of geographic mobility over time. Most interesting, however, is the extent to which this increase was led by employees working in merged branches. Figure 5 clearly demonstrates that during the early years of the merger wave, clerks working in merged branches were substantially more likely to be moved from one branch to another than any other group of workers, while men who worked in either older merged branches or in original Lloyds branches were at almost no risk of moving. In the later periods, the magnitude of the difference be-

²¹ Calculating predicted risks using overall sample means reproduces the pattern of difference between branch types over time, though the secular rise in mobility over time is suppressed (available from the authors).

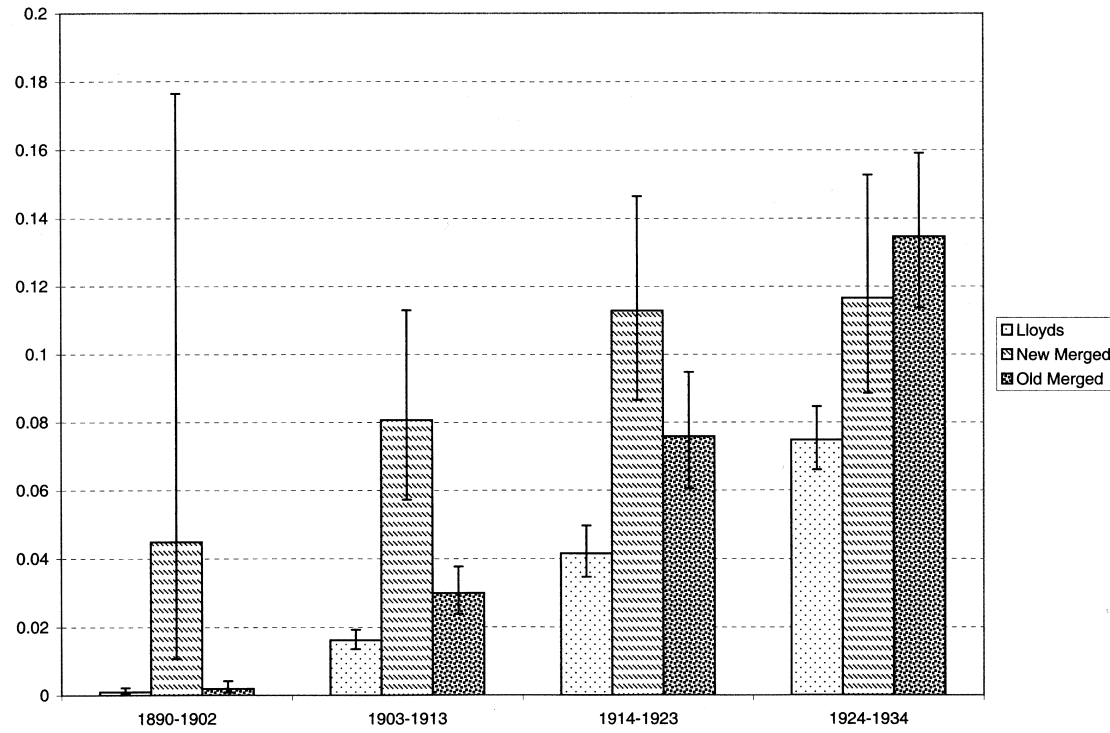


FIG. 5.—Estimated probability of a first geographic move in year t of career. (Estimates are calculated using coefficients from table 2, model 5; all other variables are set to the period-specific mean or mode. Error bars indicate 95% confidence intervals around estimated probability.)

tween branch type is reduced, though men working in newly absorbed branches continued to be more likely to move than other workers until the final period. Ninety-five percent confidence intervals associated with each of these estimated probabilities confirm that in the final period, the probability associated with merged branches is not significantly different from that associated with Lloyds or older merged branches. In all three earlier periods, workers in new merged branches are significantly different from Lloyds workers.

To summarize, these analyses show that the rise of career migration within Lloyds cannot be attributed simply to either growth or a change in ownership structure. While growth mattered, the merger wave accelerated the rate of geographic mobility among bank workers, with merged workers being the first to experience lateral transfer in significant numbers. Further, we find that the changes in career structure ushered in by the merger wave were durable: by the end of our period of study, geographic mobility had become a generalized feature of the careers of most men who worked at Lloyds Bank.

INTRAORGANIZATIONAL LINKAGES

Our hazard models show that men who worked in merged branches were more likely to be moved than were men employed in other types of branches, and offer little support for the idea that Lloyds disproportionately moved its own loyal and trusted employees during the height of the merger wave. However, these models do not include information about the *destination* of these mobile bank workers, and therefore tell us nothing about the permeability of the boundary between newly absorbed branches and other branches in the firm, let alone whether the structure of mobility is more consistent with a post-merger integration strategy or a response to localized agency concerns. We address this issue by examining how mobility-flows link branch-types. Several possibilities exist, two of which are consistent with the general centralization/homogenization thesis, with a third primarily reflecting narrow agency problems that are central to technical accounts of the rise of bureaucracy. If Lloyds sought to spread its own increasingly formalized operating culture by filling absorbed branches with loyal men who were familiar with Lloyds's practices, we should observe a mobility structure dominated by transfers of original Lloyds workers to newly merged branches. The inverse could also be true: if Lloyds sought to teach newly absorbed men Lloyds's way of doing business, we might observe disproportionately more newly merged men moving to original Lloyds branches. Both of these patterns would be consistent with the idea that Lloyds was primarily concerned with the

diffusion of uniform operating practices and was using its control over employment to facilitate this organizational goal. This general hypothesis links technical and neoinstitutional accounts of organizational change: the rationale for the drive toward uniformity and centralization comes straight from Weber, though the cultural diffusion argument is reminiscent of many institutional accounts. It differs, however, in that the mechanism of diffusion (employee transfer) is clearly specified. On the other hand, it is also possible that newly acute agency concerns drove patterns of geographic mobility. If Bank Directors were eager to reduce Lloyds's vulnerability to new employees' activities, they may have tried to erode the culture, practices, and relationships associated with acquired banks. If so, we should observe variability in the destinations of mobile men originating in newly absorbed branches. Interestingly, this hypothesis, which frames mobility as a solution to a control problem, also emphasizes the significance of existing cultural logics as a constraint on organizational strategies.

To evaluate these alternatives, we cross-classify origination branch-type and destination-branch type of mobile workers during the final 3 periods.²² We begin by considering the extent to which the structure of mobility within the bank is symmetric. That is, in the aggregate, are moves *from* one type of branch balanced by moves *to* that same type of branch, or are there shifts in the marginal proportions of jobs? Table 3 allows us to examine the marginal symmetry of mobility. For each period, the first two columns report the share of all moves during each period that originate within each branch type and that end in each branch type.²³ We present proportions of moves in order to control for the secular increase in mobility across periods. For comparison purposes, we also include the share of all employee-years spent in each branch type during the period (third columns). First off, we note that in periods 2 and 3, men working in newly merged branches are substantially overrepresented among the mobile men, compared with their representation in the bank as a whole, a finding consistent with the analyses reported in table 2. Second, and more generally, though within this sample of bank workers moves *to* Lloyds branches are largely balanced by moves *from* Lloyds branches in periods 2 (1903–13) and 4 (1924–34), overall there is little evidence of symmetry

²² The total number of moves during the first period is too small for tabular analysis.

²³ These values are simply the row and column marginal proportions of the branch of origin by branch of destination cross-classification tables.

TABLE 3
 ORIGINS AND DESTINATIONS: SHARE OF TRANSFERS FROM—AND TO—SPECIFIC BRANCH TYPES, BY PERIOD

	P2: 1903–13			P3: 1914–23			P4: 1924–34		
	Origin	Destination	All Employee- Years	Origin	Destination	All Employee- Years	Origin	Destination	All Employee- Years
Lloyds .....	.46	.46	.78	.39	.25	.68	.36	.33	.38
New merged ...	.19	.34	.06	.32	.27	.13	.08	.52	.08
Old merged ....	.35	.20	.16	.29	.48	.20	.55	.14	.54
<i>n</i> moves		180			425			989	

NOTE.—Column totals may not equal 1.0 due to rounding. All employee-years is a measure of the proportion of all employee-years during the period that were spent in each branch type.

in the structure of mobility.²⁴ Together with the fact that the proportion of both origins and destinations varies substantially from the period-specific employment structure, these data suggest that the opportunity structure at Lloyds was rather elastic during this era of rapid organizational change: branch staffs expanded and contracted, and mobility was not completely driven by the existence of vacancies.

Against this background of elasticity in the structure of destinations for mobile men, we consider the association between origin and destination for individual men who moved. Three questions are of interest: (1) Were Lloyds employees who moved more likely to go to newly absorbed branches than to other destinations? (2) Were newly absorbed employees more likely to go to original Lloyds branches than to other destinations? And (3) Are newly absorbed men randomly distributed across destinations?

Often such questions are addressed in a log-linear framework, fitting models reflecting particular patterns of association to observed cell frequency data. However, since there is substantial evidence that bank workers were not simply moved to fill existing vacancies, but rather to effect other organizational goals, the distribution of destinations deviates substantially from the overall pattern of employment within Lloyds Bank as a whole (compare cols. 2 and 3 in table 3). For example, during periods 2 and 3 far more employees worked in Lloyds branches than in other types of branches (78% in period 2, 68% in period 3), yet much smaller fractions of all mobile men were moved into Lloyds branches (46% and 39%, respectively). In contrast, while only a small fraction of all employee-years were spent in newly absorbed branches (6%, 13%, and 8% across the three periods), substantially larger fractions of all mobile men were moved into newly absorbed branches (34%, 27%, and 52% across the three periods).

Simply using the observed column marginals to determine the expected number of moves would ignore the fact that the gross structure of the bank made it more likely that vacancies would open up in Lloyds branches than in other branches, and that slots were scarce in newly merged branches. To more adequately capture the underlying opportunity (destination) structure, we calculate an expected distribution of destinations by using the proportion of employee-years spent in each branch type during each period, and adjust the marginals accordingly. Specifically, we

²⁴ Since our estimates of the marginal proportions come from a sample, it is possible that unobserved moves balance our observed moves. However, we have no reason to believe that our sample is biased toward some destinations over others; further, decennial branch data collected from the archives shows substantial variation in the number of employees at specific branches over time.

calculate the expected number of men moving from branch type i to branch type j in a given period k as the product of (1) the number of mobile men originating in branch type i in period k ; and (2) the period-specific proportion of all employees who worked in branch type j .²⁵ Table 4 reports the standardized residuals of these estimates;²⁶ each cell entry can be interpreted as the number of standard deviations above or below the expected value that the observed value falls. Negative cell entries indicate that fewer workers from origin i ended up in branch type j than expected given the period-specific opportunity structure; positive cell entries indicate more moves linking i to j .²⁷ The χ^2 values reflect the sum of the squared deviations from the expected value for each origin; in all nine cases (three origin states by three periods), the observed distributions are substantially different from the expected distributions.

Table 4 shows how geographic mobility linked particular types of branches at Lloyds Bank. With respect to our two hypotheses derived from the centralization/homogenization thesis, the findings are mixed. In each period, Lloyds workers were much *more* likely to be moved into newly absorbed branches than expected by chance (standardized residual = 4.97 [P2], 3.79 [P3], 11.22 [P4]), a pattern consistent with a strategy of using trusted workers as ambassadors charged with incorporating new branches into Lloyds. However, the flip side of the diffusion model does

²⁵ Note that this model does not assume any additional dependence between origins and destinations such as might exist in a strict a vacancy chain system.

²⁶ Standardized residuals [$s\ res(o_{ij})$] are computed as follows:

$$s\ res(o_{ij}) = \frac{o_{ij} - \exp_{ij}}{\sigma_{ij}},$$

where

$$\exp_{ij} = n_i * p_j,$$

and

$$\sigma_{ij} = se(o_{ij}) = o_{ij} * \left(1 - \frac{o_{ij}}{\sum_i o_{ij}}\right).$$

²⁷ To assess the probability of observing a cell frequency o_{ij} , we use a binomial distribution defined by the number of mobile workers originating in each branch type (n_i , the observed row marginal) and the proportion of *all* bank employees working in that branch type during that period (p_j , the period-specific branch proportions, given in table 3). Let X be a Bernoulli random variable such that $X = 1$ with probability equal to p_j (the proportion of all employee-years spent in branch-type j), and probability $X = 0$ equal to $1 - p_j$. With n independent trials of X , the probability of observing o_{ij} successes ($X = 1$) follows a binomial distribution. With a two-tailed test, critical values exist at $P = .05$ (the observed value is significantly smaller than expected) and $P = .95$ (the observed value is significantly larger than expected).

TABLE 4
STANDARDIZED RESIDUALS REFLECTING ASSOCIATION BETWEEN BRANCH TYPES

ORIGINS	DESTINATIONS			χ^2
	Lloyds	New Merged	Old Merged	
P2:				
Lloyds	-3.93*	4.97*	-1.11	94.39*
New merged ...	-8.28*	1.43*	5.94*	69.07*
Old merged	-5.09*	6.61*	-3.14	193.8*
P3:				
Lloyds	-9.13*	3.79*	5.20*	81.33*
New merged ...	-20.53*	.98	13.66*	251.99*
Old merged	-9.89*	6.28*	2.66*	109.96*
P4:				
Lloyds .....	.82	11.22*	-13.64*	426.08*
New merged ...	-1.48*	4.52*	-2.87*	59.07*
Old merged	-4.16*	27.89*	-52.25*	2,456.97*

NOTE.—This table reflects the structure of mobility flows; residuals are adjusted for period-specific opportunity structures.

* $P < .05$.

not appear to be true in the Lloyds case: in all periods, men whose careers originated in newly absorbed branches were much less likely to be moved *into* Lloyds branches than would be expected by chance. The picture is even more complex with respect to the destinations of men working in newly absorbed branches. In all periods they were kept out of Lloyds branches, but otherwise there is no consistent pattern to where they were moved. In periods 2 and 3 they were more likely to be transferred to older merged branches, though by the final period this overrepresentation was reversed. In periods 2 and 4 mobile newly absorbed men are more likely to be transferred to other newly absorbed branches, though in period 3 this pattern does not hold.

These results are particularly interesting when combined with the overall rates of transfer among employees: Lloyds men were less likely overall to be transferred, but when they were moved, they were much more likely to be moved into a newly merged bank. This suggests a top-down strategy of placing known workers in recently acquired units in order to represent corporate interests and to oversee the implementation of central business practices. In contrast, newly absorbed men were much more likely than any other group of men to be transferred out of their original branch, but aside from being kept out of Lloyds branches, there is little pattern in where they landed. Clearly, Lloyds was not moving these men primarily to teach them Lloyds's ways. Rather, the variability in destination suggests

that these transfers may have served a variety of organizational needs, including severing competing relationships and filling existing vacancies.²⁸

Integrated with the results of the hazard model and our reading of the archival evidence, we see an accumulation of evidence that Lloyds was as least as concerned with breaking down old loyalties and business cultures as in disseminating its own operating practices.²⁹ Moving newly acquired employees from their traditional place of work with little regard for their destination—particularly during the early years of the merger wave when geographic mobility was an oddity—suggests that to the bank directors these men may have been viewed as potential source of trouble. *In situ*, these new men's old loyalties could create problems for the emerging powerhouse bank; once transferred, some may have usefully filled vacancies, though there is evidence that as a group the Bank may have been willing to sacrifice their careers. However, the fact that even these 'sacrificial lambs' could work effectively in unfamiliar settings revealed generalized advantages associated with lateral transfers. By the late twenties (and even more so in later years), all bank clerks were transferred regularly, both in order to expose them to all aspects of the business and to help bank managers identify talented clerks.

DISCUSSION

One of the fundamental insights of organizational studies is that bureaucratic practices are often instituted as organizations grow in size. However, the precise manifestations of a crisis in size, the specific manner in which it is resolved, and the non-economic consequences of the new patterns of organizational behavior have received less attention in the empirical sociological literature.³⁰ An important domain in which solutions to the crisis of size were played out is the nature of the employment relationship: bureaucratization directly affects the lives of individuals to the extent that it transforms their relationship to employers and other institutions. The contribution of this article is to specify the dynamic between *particular forms* of the crisis of size and an employment innovation that we now recognize as characteristic of modern employment relations.

²⁸ A reviewer suggests an additional interpretation of the flow of newly merged men to older merged branches: while Lloyds branches represent the firm's desired end state, working in an older merged branch could offer these new men a model of how to make the transition to Lloyds.

²⁹ The fact that men absorbed from small banks were more likely to be moved than men absorbed from larger and more bureaucratized banks supports this interpretation.

³⁰ Fligstein's (1985) analysis of the conditions that led to rise of the multi-dimensional form stands out as an exception.

In the case of Lloyds Bank, none of the existing accounts of organizational change adequately anticipates how the fundamental trade-off between local and central control would be resolved during the course of organizational modernization. The technical explanation simply links the adoption of a variety of centralized bureaucratic operating practices to coordination problems associated with growth, yet does not explain the decoupling of formalization from rotation of workers. However, our analysis of detailed organizational and personnel records reveals that many aspects of both operating practices and the employment system were formalized well before the earliest experiments with geographic mobility. While the joint-stock form of governance clearly replaced the traditional patrimonial bank, the logic of localism persisted; it was roughly 50 years after the joint-stock form began to dominate that geographic mobility emerged as an employment norm in British banking. Further, geographic mobility was not introduced evenly throughout the bank: we find that the first workers to be transferred away from their home branches were those employed in branches newly absorbed by Lloyds. Thus it seems clear that career migration, a key feature of the modern career, was introduced not simply because of growth, but also in response to organizational tensions associated with building a national bank out of many small and regionally oriented institutions. The core issues identified by the technical story of bureaucratization—formalization and control—turn out to be central to the development of Lloyds, though the story is a subtle one: prior to the merger wave, formalization and centralization occurred only to the extent that they did not undermine the tradition of local banking with local men. The merger wave meant an influx of new employees and reframed existing concerns about loyalty and conflicting interests (the central theoretical concerns of agency theory). Our analyses suggest that only after the merger wave were bank directors finally willing to violate the principle of local banking—on a small scale—by introducing lateral transfers among these newly absorbed men.

Thus fully explaining the emergence of career migration requires moving beyond the strict technical accounts of the rise of bureaucratic organizations and their associated career structures, and considering factors identified by neoinstitutionalists as salient, in this case, the constraints associated with locally institutionalized practices. In banking, the process of organizational centralization was in conflict with the competing logic of local control over individual decisions: the merger wave served as the shock that shifted the balance away from local interests. Several explanations could account for higher rates of mobility among newly absorbed men and the particular origin-destination patterns observed among the early cohorts of mobile bank workers. While there is strong evidence that Lloyds used trusted workers familiar with Lloyds's procedures to spread

its mode of operating, the inverse is not true: Lloyds did not disproportionately expose newly absorbed men to Lloyds branches, employees, and operating practices. In fact, though these men were moved at high rates, there is little apparent pattern to their destinations. We interpret this finding as support for the idea that agency problems were not fully resolved by formalization.³¹ Once it became clear to the bank directors that clients were willing to trade with nonlocal bankers (even if they came from merged branches), it became possible to conceive of a generalized practice of lateral transfer. Ultimately, regular transfer of employees from branch to branch had several benefits at the organizational level: the practice provided an additional means of unifying the institution, and it allowed the bank to realize the economic advantages associated with a more rational allocation of labor resources. Thus in spite of the turbulence of the merger years themselves, what emerged within Lloyds was a new type of banking career, one in which men's local identities played a subservient role to their identities as employees of a firm.

The particular interplay of organizational change and staffing practices we observe is visible only when we consider the time horizons of organizations and workers careers simultaneously, and in fact, the significance of the patterns is most clearly revealed from a much later vantage point—when geographic mobility was a common feature of the banking career. In this regard, the case of Lloyds Bank is illustrative, for it demonstrates how short-term organizational issues played a key role in the development of a new class of white-collar workers whose careers were characterized by high levels of geographic mobility. Such dynamics may also play a role in the integration of multinational firms in an increasingly global economy, where similar tensions between local knowledge and pressures toward uniformity exist.

Yet in a broader sense, the Lloyds case is more than simply an illustration. Thorough restructuring of the relationship between employment and geographic mobility cannot occur in a vacuum; it is dual to changes in the willingness of the public to engage in nonparticularistic relations with strangers. As long as locals regard nonlocals with suspicion, nonlocals will be poor agents in industries that rest on trust.³² In this sense, for career migration to serve the interests of a central organization, locals must recognize nonlocals as legitimate representatives of a respectable institution; they must accept the universality of position, even if the in-

³¹ While there is ample reason to believe that Lloyds had an interest in severing old loyalties (to both clients and employers), it is also possible that the bank simply had a weaker commitment to these men's futures.

³² In industries where employees have little contact with the public—such as mining and manufacturing—these issues are minimized, though not eliminated.

cumbent is not familiar to them. By incorporating geographic mobility into the normal careers of its staff, Lloyds—and other growing organizations in England—became an engine of class mobility. By firmly decoupling position from place, Lloyds's new patterns of employment weakened traditional, locally based claims to status, and sent thousands of white-collar workers throughout the Great Britain, where their status claims rested on their own performance and their association with a major firm (Musgrove 1963).

More generally, this study suggests that geographic mobility should be conceptualized as an important analytic feature of stratification systems. As long as position is based primarily on ascribed status, geographic mobility plays a minimal role in allocating position to person. Yet career migration is an integral part of occupational mobility systems that rest on structural changes in occupational distributions or on individual achievement. In the former, even the *possibility* that workers will move to where jobs are located is essential for systemic response to structural change. Geographic mobility may play an even more critical role in stratification systems based on individual achievement, however, since—as Lloyds ultimately learned—the ability to succeed in multiple contexts is often interpreted by employers (or potential employers) as *evidence* of an individual's talent or achievement. From this perspective, geographic mobility is not simply a significant event in the lives of those individuals who move; rather, its frequency and pattern can be read as an indicator of deeper social structural arrangements.

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