
Strategy, Organization and Incentives: Global Corporate Banking at Citibank

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This paper studies organizational structure and incentives within a company, Citibank, that has an explicit and evolving global business strategy. The paper focuses on Citibank's corporate banking business, which in the mid-1990s underwent major changes in its strategy that, in turn, were accompanied by two major reorganizations and implementation of a new incentive compensation system. Citibank's corporate banking business in OECD markets moved from a geography-based organization to one that was multi-dimensional, with the customer dimension given first priority, the product dimension given second priority, and the geography dimension significantly de-emphasized. Citibank thus represents an excellent setting for examining the interplay among strategy and organizational structure in a complex, global company.

1. Introduction

Companies such as Unilever and Philips have operated globally for many decades, and their early organization often oriented around a country or a region. Reductions in domestic restrictions and trade barriers beginning in the 1960s provided opportunities for companies to globalize. With the subsequent international expansion and the continuing globalization of markets, international competition intensified as more companies attempt to extend their competitive advantages to new markets. These companies recognize that the organization of their global operations is an important determinant of the effectiveness of their strategy. Organization not only must fit with strategy, but it also must evolve in response to changes in strategy. Consequently, if strategy is based on a set of drivers, such as economies of scale and scope, organization also must be a function of the same drivers.

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company—Citibank—that has an explicit and evolving global business strategy. The paper focuses on Citibank's corporate banking business, which in the mid-1990s underwent major changes in its strategy that, in turn, were accompanied by two major reorganizations and the implementation of a new incentive compensation system. Citibank's corporate banking business in OECD markets moved from a geography-based organization to one that was multi-dimensional, with the customer dimension given first priority, the product dimension given second priority and the geography dimension significantly de-emphasized. Citibank thus represents an excellent setting for examining the interplay among strategy and organizational structure in a complex, global company.

Ever since Chandler's (1962) path-breaking history of organizational change at DuPont, Sears, General Motors and Standard Oil, the link between strategy and structure has been an important theme in the strategy, economics and organization theory literatures. However, in the tradition of Chandler, most empirical studies of organizational structure in economics have focused primarily on the choice between the functional (U-form) and multi-divisional (M-form) structures (e.g. Rumelt, 1974; Armour and Teece, 1978). Little attention has been given to the choice between multi-dimensional, or matrix, and single-dimension (i.e. M-form) structures, nor has much attention been given to how authority in a multi-dimensional organization is allocated.

Because Citibank's commercial banking business evolved from a geography-based structure to a multi-dimensional structure organized simultaneously around customers, products and geographies, its organizational structure will be assessed through the lens of a theory of multi-dimensional organization developed by Baron and Besanko (1998). That theory emphasizes that multi-business firms build and mobilize capabilities through the accumulation and sharing of know-how. In this view, a firm develops a capability in a value-chain activity when the know-how accumulated in executing that activity within one unit of the firm (e.g. through learning-by-doing or a conscious investment in building execution skills in that activity) is shared with, or 'spills over' to, other units in the firm. Baron and Besanko's model shows that the choice of organizational structure and incentives can shape the intensity with which know-how is shared and thus can affect the extent to which latent capabilities become mobilized to benefit the firm as a whole.

The purpose of this paper is not to use Citibank as a 'data point' to test this framework or the Baron and Besanko theory. Rather, the framework and the theory are used to structure an enquiry into why Citibank reorganized

its OECD corporate banking business the way it did and to evaluate whether Citibank's organizational changes were appropriate given the circumstances it faced. In particular, this paper addresses the following questions:

- Why did Citibank change from the geography-based structure that it had used for decades to a more complex multi-dimensional structure?
- In light of likely patterns of know-how spillovers within Citibank, is Citibank's new structure (both its form and the allocation of authority within it) an appropriate adaptation to changes in its strategy and the global banking environment?
- How did Citibank's organization evolve in response to identified problems? Were these adaptations appropriate?
- How is the structure of Citibank's corporate banking business likely to evolve in the future?

Answering these questions can contribute to organizational economics in two ways. First, as noted earlier, the multi-dimensional organizational form has not been extensively studied by economists, yet they have been adopted at one time or another by major global firms, such as ABB, Unilever and Philips. A structured evaluation of the choice of a multi-dimensional organization by a particular firm—Citibank—can advance the development of theories to shed light on the general circumstances under which multi-dimensional organizations may be appropriate. Second, by evaluating Citibank's organizational structure in terms of a particular theory, one is forced to examine the circumstances in which Citibank acted in ways that either diverge from that theory or fall outside its scope. For example, as considered in Section 6, Citibank's formation of the Global Markets unit in 1997 appears to be hard to rationalize solely in terms of the theory of organizational choice that will be described in Section 2. By highlighting such limitations, this paper could spur refinements or extensions that may ultimately lead to a general and robust theory of organizational choice in complex global firms.

The study of Citibank was based on six days of interviews with fifteen senior Citibank managers. For confidentiality reasons, it is not possible to offer direct quotations (even unattributed) from these individuals. The interviews were supplemented with the review of confidential reports, research from publicly available sources (such as annual reports), publications aimed at Citibank shareholders (such as *CCInvestor*), speeches by Citibank executives and reports on Citibank in the business press.

The remainder of the paper is organized as follows. The next section

presents the conceptual framework used to evaluate the choice of organization and incentives. Section 3 describes global corporate banking at Citibank, and characterizes its strategy and the subsequent choices of organization and incentives. Section 4 assesses the organizational choices made by Citibank in light of the theory developed in Section 2, and Section 5 explores the role of teamwork and communication in sharing know-how within Citibank. Section 6 analyzes the reasons behind Citibank's second reorganization of its corporate banking business in 1997, and Section 7 considers possible future organizational change at Citibank.

2. Spillovers, Capabilities and Organizational Design: Uni-dimensional Organization or Multi-dimensional Organization?

In this section, we present a conceptual framework for exploring the optimal organizational structure for a global firm. In particular, we seek to identify circumstances under which a global firm would choose to organize itself along one dimension (e.g. by product line or geography) or as a matrix or multi-dimensional organization. The framework will be developed through informal arguments rather than through formal modeling. A formal model of the ideas developed here is presented in Baron and Besanko (1998).

The basic premise underlying this framework is that in large, multi-product global firms, delegation of operating decisions, incentive design and performance evaluation are an unavoidable fact of life. Figure 1 portrays our conceptualization of a global firm. We view the firm as a hierarchy consisting of local units, divisions and a corporate center, each of which possesses a certain set of decision rights. At the base of the hierarchy are the firm's local units. A local unit might be an individual manager or a team of managers. Each local unit is associated with a particular product in a particular geography and is responsible for making decisions about operating activities, such as cost-reduction, product-enhancement, and marketing and sales on behalf of that product in that geography. Local units have specialized expertise about local market conditions that cannot be easily communicated up the hierarchy or replicated at a higher level in the organization. As we discuss in detail shortly, the activities of a local unit can generate valuable know-how that can benefit other local units.

The next level in the hierarchy consists of the firm's operating divisions. An operating division is a collection of local units that is accountable for the performance of these local units. A division's management is rewarded

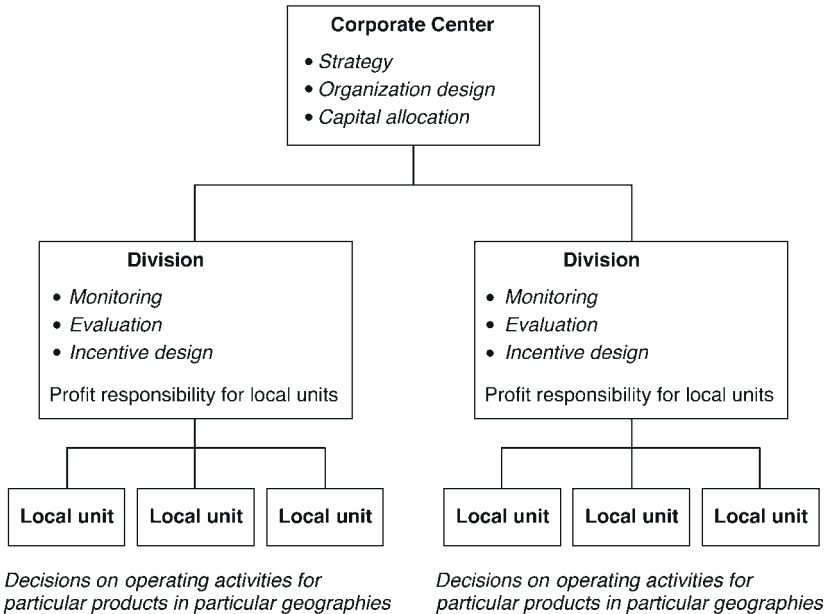


FIGURE 1. Firm hierarchy.

according to the overall profit that its local units generate.¹ A division's management, in turn, monitors the performance of its local units, evaluates this performance and rewards its local units accordingly. A division might use formal incentive contracts to guide its divisions or a combination of formal contracts and less formal systems based on monitoring and performance appraisal. Whatever the combination of instruments, we assume that divisional management can, at least to some extent, influence its local units to make decisions consistent with the division's overall profit objective.

¹ Profit-based incentive structures are, of course, restrictive. For one thing, a division's incentives ought to be based on its revenues and costs separately. For another, when there are spillovers across activities of local units (as we discuss below), there might be desirable incentive benefits that result from tying a division's rewards to the performance of other divisions. However, restricting attention to profit-based incentives can be justified on several grounds. First, as Holmstrom and Tirole (1991) point out, incentives that depend on divisional revenues and costs separately 'would be impossible if cost . . . or revenue . . . cannot be separately identified or ineffective if these accounts were fungible in a way that allows units to transfer entries between accounts without the general office taking notice' (p. 210). Second, if profits are risky, then incentive structures that reward a division based on the performance of other divisions will create a cost by introducing additional risk into the incentive contracts of divisional managers. Even if spillovers across local units in different divisions are large, this risk-bearing cost will generally keep the corporate center from putting as much weight on other divisions' profits as on 'own' profits in designing profit-based incentives for a division [see Besanko et al. (1998) for an illustration of this point]. The basic arguments that we present in this paper will continue to apply as long as a division's rewards *predominantly* depend on its own profits.

In this view of the firm, operating decisions (i.e. activity choices) are delegated to the firm's local units by the corporate center, while incentive-design, monitoring and performance evaluation decisions are delegated to the firm's divisions. The corporate center's role is to design the organization, as well as make decisions (such as capital allocation) that determine the long-term strategic direction of the firm. Although it is obviously a simplification, this conceptualization of a firm captures in broad outlines the structure of complex global companies such as Citibank.

The key organizational choice faced by the firm depicted in Figure 1 is how to organize local units into divisions. One possible choice is a *product organization*. Under this arrangement, all local units with responsibility for the same product are grouped together to form product divisions. For example, each of the firm's individual product lines could constitute a separate operating division, each of which is rewarded according to that product's profit performance. Because incentive-design and performance evaluation is done by an organizational unit whose objective is product-line profit maximization, the local units in a particular product division would face incentives that give primacy to that product's profitability.²

Another possible choice is a *geographical organization*. Under this arrangement, all units with a common geography are grouped together to form geographical divisions. That is, each of the firm's geographies (e.g. individual countries/regions) would constitute a separate operating division, each rewarded according to that geography's profit performance. Because incentive-design and performance evaluation is done by an organizational unit whose objective is the maximization of profit within its geography, we would expect that the local units that fall within a particular geographical division would face incentives that give primacy to that geography's profitability.

A third possible choice is a *multi-dimensional organization* in which a local unit simultaneously belongs to a product division and a geographical division.³ This is an arrangement used by a number of high-profile global companies, including ABB, Unilever and (as we shall see below) Citibank.

² The insights of our analysis would continue to apply if the management of each product division were rewarded according to the profits of other product divisions in addition to 'own' profits. As long as the weight given to 'own' profits is sufficiently large in comparison to the profits of other divisions in the incentive compensation system—a structure that would make sense if profits are risky—local units within a particular product division would face incentives that would give primacy to the profits of that product.

³ A multi-dimensional organization is a generalization of a matrix organization. In the ensuing discussion, we consider a two-dimensional organization form, but as will become clear in our subsequent analysis of Citibank, a multi-dimensional organization can be structured along more than two dimensions. The advantages and disadvantages of two-dimensional organizations explored in this section readily extend to the case of organizations structured along more than two dimensions.

Under this arrangement, there are both product divisions and geography divisions, and they share authority for monitoring and evaluating the performance of local units and determining a portion of the reward that accrues to the managers of a local unit.⁴ The allocation of authority to the operating divisions by the corporate center determines the extent to which the product and geography divisions are allowed to influence the rewards that flow to local units. This, in turn, determines the attention that local units give to geography profits and product profits in choosing the levels of their activities. For example, in a multi-dimensional organization in which local units are members of both geography divisions and product divisions, the geography divisions could have a greater say in the rewards received by the managers of local units. The greater say of the geography division might be codified in a formal incentive system that gives greater weight to geography profits in determining the rewards accruing to managers of the local unit. Or this greater say might occur informally. For example, formal responsibility for local unit evaluation could rest with the geography organization, but the product organization could be given the opportunity to contribute to this evaluation process. However the differential authority is institutionalized, the greater authority allocated to geography would lead local units to give greater weight to geography interests than to product interests when making their decisions on activity choices.

Why would organizational design ‘matter’ in this firm? Notice that organizational design would not matter in a firm in which the activity choices of the local units were entirely self-contained, i.e. if the activities on behalf of a product in a particular geography had no impact on the other products sold in that geography or on the other geographies in which that product is sold. In this case, each local unit is an ‘island unto itself’, and the firm is nothing more than a federation of these unconnected local units. An instruction to maximize the unit’s profit would result in the maximization of overall firm profit. Eliciting the effort to maximizes each local unit’s profit could be accomplished equally well under any of the organizational forms discussed above.⁵

Organizational design in the firm would matter only to the extent that the activities performed by local units generate positive *spillovers*, i.e. know-how and skills in the performance of an activity that, when shared with other units in the firm, enable those units to perform that activity better than they would

⁴ This authority can be interpreted more broadly as including a formal role in the evaluation of the local manager’s performance.

⁵ This assumes that each organizational form does an equally good job of monitoring the performance of local units.

otherwise. For example, a local unit that undertakes product promotion activity might generate intra-geography spillovers, i.e. geography-specific know-how that reduces the costs of promoting other products within the same geography. A local unit might also generate intra-product spillovers: product-specific know-how that could reduce the costs of promoting the same product in different geographies. A local unit's product promotion activity could also generate both intra-geography and intra-product spillovers, in which case the product promotion know-how that the unit accumulates benefits other products as well as other geographies.

Our notion of spillovers is closely related to the concepts of capabilities and competencies that play a central role in the strategy literature (Itami, 1987; Hamel 1994). Although definitions of capabilities differ, most are unified around the idea that a capability is a skill in executing a particular activity that enables the firm, through that activity, to create economic value in several product lines or markets simultaneously.⁶ In our framework of organizational choice, any activity that involves positive spillovers would be a *latent* capability of the firm. The firm *mobilizes* that capability when its local units 'internalize' the spillovers from that activity and, as a result, exert more or higher quality effort in that activity than otherwise.

In the presence of spillovers, alternative organizational forms would mobilize the firm's capabilities to different degrees. This is because different organizational forms, through their effect on the design of incentives for local units, determine the extent to which the local units pay attention to the spillovers that their activities create. For instance, in a geography organization, local units in a particular geography division would face incentives that reflect the imperative of maximizing the profits in that geography. Facing such incentives, the units would take into account the intra-geography spillovers (geography-specific know-how) that their efforts create and, as a result, would put more effort into these activities than they would if they did not internalize the spillovers. The local units, however, would not take into account the

⁶ Prahalad and Hamel (1990) use the term 'core competence' to refer to a related concept. They state (p. 82), 'Core competencies are the collective learning in the organization, especially how to coordinate diverse production skills and integrate multiple streams of technology'. And 'Core competence is communication, involvement, and a deep commitment to working across organizational boundaries'. Hamel (1994) writes: 'Building core competencies requires the accumulation and integration of knowledge, residing both within the firm and without . . . The capacity to integrate the individual strands into a core competency requires a rich pattern of cross-discipline communication and learning . . . In building core competencies a capacity to integrate may be just as important as a capacity to invent.' Our concept of a capability is narrower but more fundamental in the sense that it is on the one hand a determinant of optimal organization and on the other hand generated by the actions of managers as motivated by incentives chosen in conjunction with organization.

intra-product spillovers their activities create because the incentives they receive are not product-line oriented.

By contrast, in a multi-dimensional organization, local units would receive incentives from both product divisions and geography divisions, and, in response to these more balanced incentives, would take into account both intra-geography and intra-product spillovers in their decision making. The extent to which these spillovers are internalized would depend on the relative authority to evaluate and reward local units granted to the product and geography divisions.

Of course, formal organization structure is just one of several means by which a firm's management can create and mobilize capabilities within a complex decentralized firm. Know-how sharing inside the firm can also be facilitated by personnel policies (e.g. job rotation), by the formation of sub-organizations (e.g. project teams) and by the development of informal organizations within the company.⁷ Capabilities can also be built through the firm's market relationships, as when it enters into joint ventures, alliances or other close-knit partnerships in an attempt to build or acquire new capabilities or energize latent ones. The framework presented here is thus not a general theory of capabilities development. Rather, it pertains to those latent capabilities that can be influenced by organizational structure.

A key consideration determining how alternative organizational forms affect the mobilization of capabilities is whether the pattern of spillovers is correlated or complex, and whether the activities themselves are complements or substitutes. When the pattern of spillovers is *correlated*, either

- all activities primarily generate intra-product spillovers; or
- all activities primarily generate intra-geography spillovers.

By contrast, when the pattern of spillovers is *complex*,

- some activities generate intra-geography spillovers and other activities generate intra-product spillovers; and/or
- some activities generate both intra-geography and intra-product spillovers.

Two activities are *complements* when more of one activity increases the marginal profit of the other and are *substitutes* when more of one activity reduces the

⁷ Below, we discuss an informal organization at Citibank, the World Corporate Group, that preceded the formation of a formal organizational unit, the Global Relationship Bank.

marginal profit of the other.

To illustrate these definitions, consider local units that perform two activities—product customization (which enhances demand) and efficiency enhancement (which reduces costs). The extent to which a local unit is successful in customizing its product would be expected to make production more varied, which in turn would raise the marginal cost of the unit’s efforts to enhance production efficiency. In this case, product customization and efficiency enhancement would be substitute activities.

Suppose, now, that by performing both activities, a local unit generates spillovers that benefit other units. For example, the effort that the firm expends to customize a particular product within a particular geography could generate valuable know-how that could then be applied to product-customization efforts on behalf of other products in that geography (geography-specific know-how). Alternatively, this customization effort could generate insights about the product itself that could be transferred to other geographies where this product is also sold (product-specific know-how). If the spillovers in both product-customization effort and efficiency-enhancement effort were primarily along one dimension (e.g. intra-geography), the pattern of spillovers in the firm would be correlated. If, by contrast, product-customization effort largely generates geography-specific know-how while efficiency-enhancement effort generates product-specific know-how, the pattern of spillovers would be complex.

As summarized in Figure 2, the pattern of spillovers and the nature of activity complementarities have an impact on the efficacy of alternative organizational forms. To illustrate why, consider what would happen if activity spillovers occurred primarily within geographies (i.e. activities

		<i>Activities are ...</i>	
		Complements	Substitutes
<i>Capabilities are ...</i>	Correlated	Unidimensional organization is always optimal	Multi-dimensional organization is usually optimal
	Complex	Multi-dimensional organization is usually optimal	Multi-dimensional organization is nearly always optimal

FIGURE 2. Optimal organizational design.

primarily generate intra-geography know-how) and activities were complementary. If the firm were organized along product lines, the incentives given to local units would reflect the objectives of the organization designing the incentives, and thus local units would be responsive to the imperative of product-line profit maximization. But because the flow of know-how in the firm generally occurs *across* product lines, each local unit would ignore the benefits that its activities generate for other product lines in the same geography. This would lead to an undersupply of those activities by local units, thus undermobilizing the firm's capabilities. The fact that activities are complements would reinforce this effect because with complementarities a lower level of one activity corresponds to a higher marginal cost of providing another activity. That is, when the greatest potential for valuable know-how transfer is *across* product lines but the firm is organized into product divisions, the global firm's ability to benefit from know-how transfers is compromised.

If, however, the firm were organized geographically, local units would be faced with incentives that give primacy to the maximization of geography profits. In this case, each local unit would have a reason to take into account the benefits its activity choices have for the other local units that operate in the same geography. By internalizing these spillovers, the firm would more effectively mobilize its capabilities and spread valuable know-how throughout the organization.

Consider, by contrast, what would happen when the pattern of spillovers is complex and activities are substitutes. In particular, suppose that in global corporate banking, product customization and efficiency enhancement are substitute activities. Suppose, too, that the spillovers within the former activity are primarily intra-geography, whereas spillovers within the latter are primarily intra-product. With a geography organization, local managers would pay attention to the geography-specific spillovers generated through product-customization efforts but would ignore the product-specific spillovers generated through efficiency-enhancement efforts. In this case, the firm fails to mobilize optimally its capabilities in efficiency enhancement and might overinvest in the development of product-customization capabilities. Since the activities are substitutes, low levels of efficiency-enhancement effort reduce the marginal cost of product customization. By contrast, a product organization would lead to an oversupply of efficiency-enhancement activity and an undersupply of product-customization activity. In both cases, the dual authority under a multi-dimensional organization could better balance the incentives facing local units, leading to a more balanced supply of both activities, thereby moving the firm closer to the corporate optimum.

3. Corporate Banking Strategy and Organization at Citibank: Background

Having described a theory that explains why multi-dimensional organizations might emerge, we now apply that theory to Citibank's choice of an organizational form in its corporate banking operations in OECD markets. To lay the groundwork for that application, we provide an overview of Citibank's corporate banking business and describe the changes in strategy and organization in the mid-1990s that culminated in the creation of a multi-dimensional organization known as the Global Relationship Bank (GRB).

3.1 Corporate Banking at Citibank: an Overview

Citibank began foreign debt operations in 1897, and established offices in London, Shanghai, Manila, Yokohama and Singapore in 1902. It opened its first Latin American office in Buenos Aires in 1914, followed by Rio de Janeiro, Montevideo and Santiago. By 1917 Citibank had branches in 35 countries, and by 1998 had branches and offices in 100 countries.

Citibank traditionally provided a full range of financial services for corporate customers, with the exception of investment banking services in the USA. Citibank's corporate banking products are broadly grouped into three categories: transaction services, such as cash management and custody services; corporate finance services, such as trade finance and asset-based financing; and capital markets services, such as hedging and foreign exchange.

During the 1990s Citibank's corporate banking activities evolved from a highly decentralized set of operations within individual geographies to a more tightly focused business supported by a clearly articulated strategy, a distinct organization and well-defined incentives. Table 1 summarizes this change, which we will describe in more detail later in this section and evaluate in subsequent sections. This change occurred in the aftermath of a very difficult period for Citibank. At the beginning of the 1990s Citibank was reeling from its near-disastrous real-estate lending, and speculation about the failure of the bank was heard. In 1991 its stock was trading at \$9 a share.⁸ But within three years, Citibank had its risk under control and had significantly strengthened its balance sheet.

By 1997 Citibank was one of the most profitable US banks, and by most measures the most global. In 1997 Citibank had profits of \$3.59 billion after

⁸ By contrast, in 1998, prior to its merger with Travelers, Citibank's stock traded close to \$120 per share.

TABLE 1. Corporate Banking at Citiban

	Pre-1994	Post-1994
Strategy	<p>OECD countries</p> <ul style="list-style-type: none"> Customers: geography-based subsidiaries of large corporations operating within OECD countries Products: Broad range of financial services to serve the needs of geography based subsidiaries Value-proposition: Citibank's country organization will serve a full range of the client's financial needs within that country <p>Emerging markets countries</p> <ul style="list-style-type: none"> Customers: Subsidiaries of global corporations operating in emerging markets Products: Broad range of financial services Value-proposition: Citibank country organization will serve the client's financial needs within the emerging market 	<p>OECD countries</p> <ul style="list-style-type: none"> Customers: 1400 large global corporations; institutional investors Products: Broad range of financial services to serve the needs of global customers; special emphasis on products in which Citibank has distinctive capabilities (e.g. FX, securitization) Value-proposition: Citibank's global organization will serve a full range of a global customer's financial needs around the world. Citibank will provide investment opportunities for institutional investors to beat benchmarks <p>Emerging markets countries</p> <ul style="list-style-type: none"> Customers: Subsidiaries of global corporations operating in emerging markets; domestic companies that may become global; institutional investors (1997) Products: Broad range of financial services Value-proposition: Citibank country organization will serve the client's financial needs within the emerging market and around the world (embedded bank strategy)
Organization	<p>OECD countries</p> <ul style="list-style-type: none"> Geography-based, with WCG 'overlay' <p>Emerging markets countries</p> <ul style="list-style-type: none"> Geography organization 	<p>OECD countries</p> <ul style="list-style-type: none"> Multi-dimensional Formation of GRB make the customer dimension the highest priority Geography dimnsmion moves from first priority to third <p>Emerging markets countries</p> <ul style="list-style-type: none"> Geography organization Global Markets organization consolidates the product dimension across the GRB and EM units (1997)
Incentives	<ul style="list-style-type: none"> High-power incentives Revenue recognition primarily on a geography basis 	<ul style="list-style-type: none"> High-power incentives on multiple dimensions Multiple revenue recognition, including by product and customer (GAPS)

TABLE 2 Citibank Revenues and Profitability by Line of Business: 1997

	Revenue (\$millions)	% of total	Net income (\$millions) ^a	% of total	Return on assets (%)
Consumer banking					
Citibanking (retail)	6030	29.2	753	16.9	0.89
Credit cards	5190	25.2	822	18.4	2.65
Private banking	1130	5.5	329	7.4	1.94
Total consumer	12 350	59.9	1904	42.7	1.44
Corporate banking					
GRB	4384	21.3	967	21.7	1.15
Emerging markets	3888	18.9	1591	35.7	2.21
Total corporate	8272	40.1	2558	57.3	1.64
Total Citicorp ^b	20 622	100	3591		

^aExcludes restructuring charges.

^bIncludes corporate items and restructuring charges. Income percentages are based on net income of \$4462 million that excludes corporate items and restructuring charges.

a \$556 million after-tax restructuring charge, with global corporate banking accounting for \$2.56 billion. Table 2 summarizes the 1997 financial performance of Citibank's two principal lines of business: consumer banking and corporate banking.⁹ Following the reorganization that we discuss below, Citibank's corporate banking business was organized into two business units: the GRB and the Emerging Markets unit. The GRB operated in the OECD countries and accounted for profits of \$967 million in 1997. The Emerging Markets unit operated in developing countries and earned profits of \$1.6 billion. Figure 3 shows Citibank's corporate organizational structure and key officers in 1996, after the creation of the GRB.

3.2 Corporate Banking at Citibank: Strategy and Competitive Advantage in OECD Markets

Citibank's historical strategy in OECD markets involved providing a broad range of financial services to local companies and geography-based subsidiaries of large corporations operating in individual OECD markets. For

⁹ Consumer banking, which included retail banking ('Citibanking'), credit cards and the Private Bank (banking and investment services for wealthy individuals), accounted for \$1.9 billion in profits in 1997, excluding the restructuring charge.

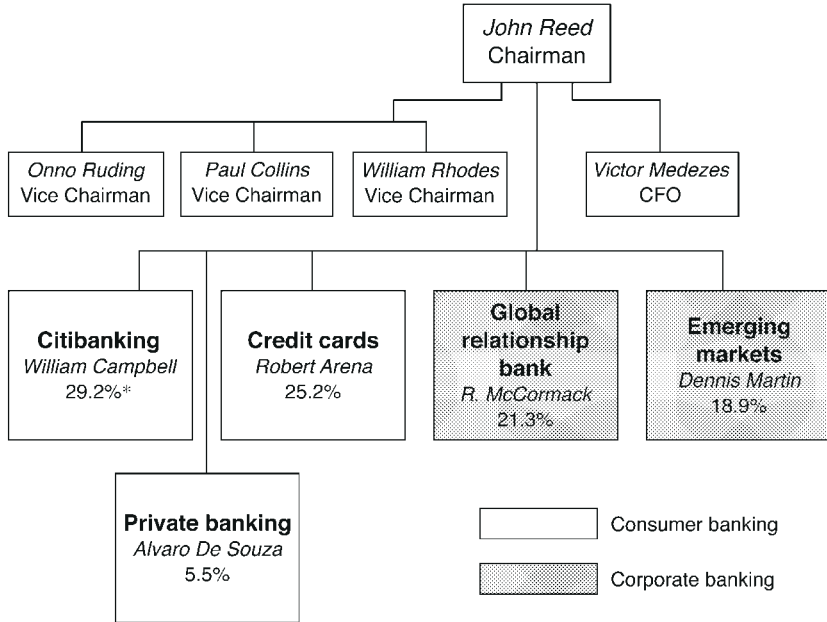


FIGURE 3. Citibank corporate organization, 1996.

example, a Citibank country organization in a country such as France would compete for the business of French companies, as well as the French subsidiaries of any company with operations in France. Generally speaking, Citibank activities within one country were conducted independently from activities within other countries, even though different country organizations might be serving subsidiaries of the same corporation.¹⁰

In the mid-1990s that strategy changed. Citibank decided to take a much tighter customer focus, concentrating its attention on a set of 1400 large global corporations and large institutional investors such as insurance companies and hedge funds. Citibank continued to provide a broad range of services to serve the needs of these customers, but it also emphasized the use of its global network to provide these services anywhere in the world that the customer operated. It also began to emphasize the provision of products that (i) would be valued by global firms in many countries; (ii) Citibank had traditionally excelled in providing; and (iii) could be standardized across geographic markets. Notable examples of such products were foreign exchange and cash management services. As summarized by Citibank vice chairman, Onno Ruding,

¹⁰ An exception to this was a small set of large companies served by an informal organizational overlay known as the World Corporate Group. We discuss this in greater detail below.

Citibank's strategy is to focus on customers who value our global network in the broadest sense. With these customers, our global capabilities give us a competitive advantage. We must deliver high-quality, innovative products that address our customers' ever-changing needs. To a significant extent, our developed economies business, especially in the USA, serves as a basis from which successful products can be developed and transferred to other geographic markets.

This change in Citibank's strategy was driven by desires both to exploit market opportunities and to insulate itself from competitive forces in corporate banking markets in the OECD countries. The market opportunities arose as large corporations in Europe, Japan and the USA attempted to cope with slow economic growth and increased competition in their home markets. Alan MacDonald (1997), an Executive Vice-President at Citibank, characterized this as the 'Math Problem'.

The Math Problem is very simple and it can be stated like this: How do you achieve bottom line earnings-per-share growth of 12 percent to 15 percent per year—which is what individual investors are demanding—when your top-line growth is nearly flat?

OECD-based companies attempted to deal with the Math Problem in a variety of ways: horizontal mergers; outsourcing back-office activities; investing in emerging markets, especially those with growing middle classes; and stock repurchases. Each of these strategic initiatives translated, at least potentially, into an increased demand for a wide variety of financial services. And this, in turn, created an opportunity for Citibank to capture a greater share of what Citibank executives referred to as a customer's 'wallet', i.e. the customer's spending on financial services. For example, the outsourcing of back-office activities increased the demand for cash management and treasury services, whereas global expansion increased demand for a full range of banking and capital market services in the emerging markets.

At the same time competition within OECD banking markets had become increasingly intense, and Citibank's management concluded that it would be difficult to sustain returns in excess of the cost of capital if the firm continued with its current strategy. Although never quite put this way, one can infer that Citibank's executives believed that, under its pre-1994 strategy, Citibank had been underexploiting a key strategic asset that clearly differentiated it from most other large banks: its enormous global reach. To achieve increased profitability, Citibank executives believed that the firm needed to exploit this

asset more intensively and that doing so would require concentrating its attention on serving the demands for those customers that placed an especially strong value on global reach. Robert McCormack, Executive Vice-President and head of the GRB, characterized this assessment as follows (*CCInvestor*, June 1996):

The central focus of our business is to serve global customers globally. This fundamental change in our orientation in the developed markets comes out of our conviction that we have a sustainable competitive advantage with global customers, in an otherwise relatively bleak environment for wholesale banking in the developed world.

Citibank's global banking network would be most valuable to global corporations that have demands for financial services in a large number of countries around the world. For this reason, Citibank decided to concentrate its corporate banking business on 1400 large corporations with significant global operations. (Citibank managers sometimes referred to these companies as the 1400 'names'.) Ninety percent of these companies already did some business with Citibank, and Citibank sought to obtain a larger share of their wallets, particularly for those high-profit wholesale banking services such as cash management and foreign exchange that multinational firms required in many countries.

3.3 The Organization of Global Corporate Banking: The GRB

Prior to the mid-1990s Citibank's corporate banking business in the developed countries was largely organized along geographic lines, with strong and autonomous country units in which 'country managers were kings' with respect to decision making, resource allocation and performance evaluation. Citibank executives referred to the country organizations as 'silos'. A country unit, for example, had its own product specialists and its own customer relationship managers who had primary responsibility for the direct relationship with customers headquartered in that country.

There was one notable exception to Citibank's traditional geography orientation: the World Corporate Group (WCG). The WCG was organized in 1973 to serve a group of approximately 200 multinational corporate customers. The WCG was a customer-oriented 'overlay' to the geography-based organization of Citibank's corporate banking business and was administered separately from the geography units. As an overlay, the WCG was more of an informal than a formal organization. It did not command

resources, but instead WCG managers had to lobby the heads of Citibank's country units to provide the resources to serve their corporate customers. For example, since product specialists were based in geography units, they had to be supplied to the WCG by the heads of the geographies in which the products were to be provided.

The basic form for serving customers in the WCG was the parent account manager (PAM)–subsidiary account manager (SAM) system. Under this system, a banker (the PAM) was assigned to the customer parent corporation, and in the countries in which it had subsidiary operations another banker (the SAM) served the subsidiary. For example, the geography manager for France would serve as the PAM for a French company, and bankers in other countries served as SAMs for the subsidiaries of that company. In the case of a US customer, a banker in France would serve as a SAM for the US company's French subsidiary. Communication and coordination between the PAM and the SAMs were close. The WCG was administered separately from the country (geography) units, and, unlike those units, it did not have its own profit and loss statement.

When Citibank changed its corporate banking strategy in 1994, it also chose to reorganize. It established the GRB to serve its OECD corporate customers and the Emerging Markets unit to serve customers in the non-OECD countries. The Emerging Markets unit continued to be organized on a geography basis (our study did not include this unit). In forming the GRB, Citibank formalized the WCG concept and extended it to the 1400 global corporations it had decided to target. The formalization consisted of creating a customer dimension and giving greater emphasis to the product groups. The country organizations from the existing geography structure were retained. The result, as depicted in Figure 4, was a multi-dimensional structure organized along product, geography and customer dimensions.

To give the GRB a strong focus on the customer relationship, Citibank gave the customer dimension the highest priority and, in the opinion of the Citibank executives interviewed for this study, gave the geography dimension the lowest priority. A Citibank publication reflected the sentiments of Citibank executives interviewed for this study (*CCIInvestor*, June 1996):

Our priority is to get the global network right for the customers. Toward this end, we have moved from a geographically oriented management structure to one organized around the customer. Customer management professionals—organized primarily by industries—interrelate, on a team basis, with the three major product groups: trading and capital markets, corporate finance, and transaction services.

One indication of the primacy of the customer dimension and the de-emphasis on the geography dimension was that, as one Citibank manager explained to us, Citibank's top management no longer asked how much earnings were in France but instead asked how much was earned from French customers, who might operate not only in France but also in many other countries.

The customer dimension of the GRB consisted of fourteen industry groups, each responsible for a particular global industry, such as automobiles, retailing, chemicals, aviation and electronics. An industry group could have a broad scope. For example, the communications group had eighty-one customers, including telecommunications companies in the USA, Postal, Telephone, and Telegraph Companies (PTTs) in Europe and Japan, telecommunications equipment suppliers, and media, entertainment, broadcast, cable, advertising, publishing and newspaper companies.

At the center of GRB's multi-dimensional organization were teams of bankers, each of which typically included a PAM, SAMs in the geographies in which a customer had subsidiaries, and product managers and specialists who worked with the parent corporation and its subsidiaries (see Figure 4). The pattern of interactions between this team and the customer often reflected the organization of the customer. If the customer had a centralized treasurer's office, the corporate treasurer was likely to contact the PAM directly, even if the transaction involved a subsidiary rather than the parent. If the treasurer's

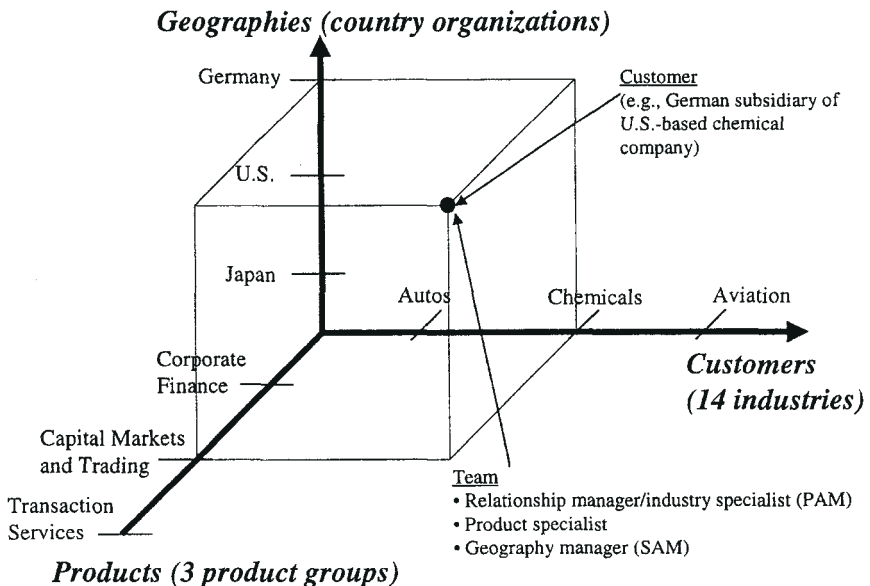


FIGURE 4. Multi-dimensional organization in the GRB.

office was decentralized, the contact might be made with the SAM in the subsidiary's country. The PAM was generally an industry specialist, but if the customer was not in one of the fourteen industries, a geography or market manager played that role. If the transaction involved an Emerging Markets country, the team might include relationship managers and, prior to the formation of the Global Markets unit, product specialists from that organization. The GRB's incentive system provided shared incentives to encourage team as well as individual performance. As a result of the formation of the GRB, many relationship managers who had been doing product work for their customers were transferred to product groups. For example, the loan products group went from fifteen to forty bankers as a result of the reorganization. Product design was then done by the product groups, resulting in better-designed products and more standardized products for a customer.

A key principle guiding Citibank's corporate banking strategy was that to seize opportunities created by expanding demands for financial services by globalizing firms—i.e. to gain a greater share of a customer's wallet—Citibank would need to gain a greater share of the customer's mind. Expanding 'mind share' entailed developing deep information and knowledge about customer demands, across both geographies and products. It also involved developing the confidence of the customer that Citibank could serve its financial needs when they arose. Deeper customer relationships were believed to put Citibank in a preferred position in the competition to provide financial services. Although the large companies that Citibank was targeting would generally seek bids from several providers, having a close relationship with a customer could help identify opportunities and help win a customer.

At approximately the same time as it formed the GRB, top management decided to emphasize not only financial performance, but also performance, measured on several dimensions, such as strengthening the customer relationship. Citibank revamped its variable compensation system at the corporate level to base bonuses strongly on performance, i.e. on an individual's contribution to corporate and business unit performance. This pay-for-performance program was subsequently extended to an additional set of GRB officers. Both the reorganization and the emphasis on performance incentives strengthened the focus on the customer and on the objective of winning a larger share of its wallet.

Interviews with Citibank executives indicated that the formation of the GRB and the introduction of the new incentive compensation system did indeed reorient corporate banking away from geographies and toward customers. Relationship managers focused more on deepening the customer

relationship and identifying opportunities for providing additional services to customers. Product managers focused more on the design of products to meet customer demands and on bringing new products to the attention of relationship managers.

Citibank's experience in corporate lending illustrates how the formation of the GRB and the focus on customer relationships affected decision making. Prior to the formation of the GRB, Citibank had not made a loan in Europe for six years. The relationship managers were oriented toward maximizing profits in the geography dimension, so they had little incentive to make loans in Europe, where margins were very low. Lending activities, however, are often an effective means of building a relationship with a corporation. Because of its new emphasis on the customer relationship, Citibank returned to lending in Europe. In 1995 it participated in twenty-five syndicated loans in Europe, and in 1996 it participated in fifty. During the first-half of 1997, it participated in eighty.

4. Evaluation of Organizational Choice at Citibank

Changes in the structure of Citibank's OECD corporate banking business closely followed the changes in its strategy. Citibank's strategic focus on serving the global needs of large global customers required coordination and know-how sharing to exploit effectively Citibank's global network. The existing geography structure in which 'country managers were king' was ill suited to achieving the desired coordination, sharing of information and transferring know-how across Citibank's geographic units around the world.

But why did Citibank adopt a multi-dimensional organization rather than move to a uni-dimensional structure organized solely around customer groups? One explanation is adjustment costs: given Citibank's past experience with the WCG, the formal addition of a customer dimension to an existing geography organization was probably a less drastic organizational change than a move to a purely customer-based organization. But it is also useful to ask whether a multi-dimensional organization was an optimal adaptation to the opportunities that Citibank faced in global banking markets and the capabilities it possessed. This section explores this issue by interpreting and evaluating Citibank's organizational choice through the lens of the framework presented in Section 2. To apply this framework, we first describe the key activities involved in corporate banking within Citibank and assess whether these activities are complements or substitutes. We then characterize the nature of the know-how spillovers that these activities generate.

4.1 Corporate Banking Activities in the GRB

Activities and spillovers play a central role in the framework developed in Section 2, and so to assess Citibank's organizational choice through the lens of this framework, we must begin by identifying the important activities performed by the teams of relationship managers, SAMs and product specialists that are at the center of the GRB's multi-dimensional organization. A key issue in activity identification is the level of aggregation. The set of activities must be small enough to make the analysis tractable but sufficiently disaggregated to reflect in a meaningful way the different actions that Citibank managers actually take. Based on interviews with Citibank corporate bankers, we identified seven principal activities to which teams of bankers devoted time and attention when providing corporate banking services to customers:

- *Spot deal making* refers to effort aimed primarily at making profitable deals with a customer. One might think of this as focusing solely on the customer's demand for a particular financial service at a particular point in time. At Citibank, this activity was referred to as 'grazing'—going where the grass is presently greenest.
- *Relationship management* refers to developing and maintaining rapport with a customer, providing financial and strategic advice, and managing the portfolio of services Citibank provided to that customer. In corporate banking, relationship management was fundamentally about creating 'trust' so as to obtain greater mind-share of a customer.
- *Product development* refers to effort aimed at developing new banking services that global customers could use around the world.
- *Building a national presence* refers to efforts to increase Citibank's visibility and presence in a particular geography.
- *Efficiency enhancement* refers to efforts to reduce Citibank's costs of providing banking services to its customers. It included such things as increasing the efficiency of back-office processing activities and improving risk and asset management.
- *Industry analysis* refers to effort expended in researching the nature and pattern of demand for financial services at the industry level.
- *Customer opportunity identification* refers to efforts to identify an individual customer's demand for financial services in various geographies.

Table 3 presents our assessment of whether pairs of these activities are complements or substitutes. To make this assessment, we asked the following diagnostic question for each pair of activities:

TABLE 3. Complementarities Among Activities

	Spot deal making	Relationship management	Product development and standardization	Building a national presence	Efficiency enhancement	Industry analysis	Customer opportunity identification
Spot deal making		substitute	substitute	complement	?	complement	substitute
Relationship management			complement	substitute	substitute	complement	complement
Product development and standardization				substitute	complement	complement	complement
Building a national presence					substitute	complement	substitute
Efficiency enhancement						complement	independent
Industry analysis							complement
Customer opportunity identification							

Would an increase in the intensity of effort devoted to the one activity increase the marginal cost or reduce the marginal productivity of the other activity? Or, would an increase in the intensity of effort decrease the marginal cost or increase the marginal productivity of the other activity? If the answer to the first question is ‘yes’, the activities are substitutes. If the answer to the second question is ‘yes’, the activities are complements.

Table 3 reveals a mixed pattern: some pairs of activities are complements whereas other pairs are substitutes. For example, spot deal making and relationship management are likely to be substitutes because the tone of customer interactions in these activities is quite different. Citibank managers believe that an emphasis on spot deal making made it more difficult to build long-term trust with customers. In this sense, greater emphasis on spot deal making raised the marginal cost of building long-lasting relationships with global customers. Similarly, we concluded from our interviews that efforts directed at increasing Citibank’s market presence in particular geographies weakened the focus on building long-term, global customer relationships. Thus, building a national presence and relationship management are

substitute activities. By contrast, relationship management and customer opportunity identification are complementary activities. The better able Citibank was to identify customer opportunities the lower would be the marginal cost of relationship management. Conversely, greater emphasis on relationship management and the development of trust made it easier to identify opportunities for the provision of financial services.

4.2 Know-how Spillovers in the GRB

Executives within the GRB were aware of the possibility of know-how spillovers. Nancy Newcomb, a senior manager in the GRB, characterized know-how transfers at Citibank as follows (*CCInvestor*, November 1995):

Another advantage of our global presence is our ability to take the best of what is developed in one market and transport it to other markets. We call this 'success transfer,' and we have accomplished it with a variety of products ranging from cash management to vendor finance to securitization. One key advantage of 'success transfer' is that innovative products have a much longer life in the emerging markets, and thus maintain their margins longer.

Interviews with Citibank executives suggest that there were three categories of spillovers, or success transfers, within Citibank's corporate banking business:

- Some activities generated intra-customer spillovers through the creation of customer-specific know-how that could be applied across the geographies in which the customer operated and/or the various products that the customer might demand. For example, effort devoted to identifying customer demand in a particular geography often led to identification of valuable opportunities across all of the geographies in which the customer operated.
- Some activities generated intra-product spillovers through the creation of product-specific know-how that could be applied across different customers who used the product or across different geographies in which the product was marketed. For example, the head of an industry group adopted a 'common carrier' approach in which a product developed for one customer was then marketed to other customers, including the initial customer's rivals. In this particular case, the initial customer asked Citibank to develop an off-balance-sheet financing product for a project.

The industry head assembled a team to design the instrument and subsequently marketed it across the industry, giving a slight price discount to the company that first identified the demand. In this case, know-how primarily flowed across customers in this intra-product spillover. An example of an intra-product spillover in which know-how flowed across geographies occurred when several of Citibank's multi-national customers operating in South America established regional treasuries and needed a multi-currency cash management system. Citibank was able to import a cash management system from Europe and adapt it to the needs of these customers. This strengthened Citibank's presence in South America.

- Some activities generated intra-geography spillovers through the creation of geography-specific know-how that could be applied across the different customers operating in that geography and/or the different product lines sold in that geography. Prior to the formation of the GRB, when Citibank's country organizations dealt primarily with domestically domiciled firms, most spillovers were of this type.

Table 4 indicates the nature of spillovers for each of the activities described above by identifying whether the activity generated intra-customer, intra-product or intra-geography spillovers. To characterize the nature of spillovers in an activity, the following diagnostic questions were asked:

- *Intra-customer spillovers*: Does the activity create customer-specific know-how? Does the creation of this know-how allow Citibank to increase the profitability of transacting with this customer across multiple geographies or multiple product lines? If the answer to both questions was 'yes', we concluded that there were intra-customer spillovers in the activity.
- *Intra-product spillovers*: Does the activity create product-specific know-how? Does the creation of this know-how allow Citibank to increase the profitability of selling this particular product in multiple geographies or to different customers? If the answer to both questions was 'yes', we concluded that there were intra-product spillovers in the activity.
- *Intra-geography spillovers*: Does the activity create geography-specific know-how? Does this know-how allow Citibank to increase the profitability of selling multiple products in this geography or transacting with multiple customers in this geography? If the answer to both

questions was ‘yes’, we concluded that there were intra-geography spillovers in the activity.

Table 4 provides a yes or no answer to these questions, recognizing that the complete answers form a continuum. Table 4 also indicates for each activity, whether spillovers reside predominantly along customer, product or geography dimensions, and hence where a capability would originate.

To illustrate the conclusions summarized in Table 4, consider Figure 5, which summarizes know-how and spillovers for the activity ‘relationship management’. Developing trust in the relationship with a customer builds

TABLE 4. Nature of Spillovers Within Activities

Activities	Intra-customer spillovers?	Intra-product spillovers?	Intra-geography spillovers?	Spillovers reside <i>predominantly</i> in which dimension?
1. Spot deal making	no	no	no	none
2. Relationship management	yes	no	no	customer
3. Product development and standardization	yes	yes	no	customer or product
4. Building a national presence	no	no	yes	geography
5. Efficiency enhancement	yes	yes	no	customer or product
6. Industry analysis	yes	yes	no	customer or product
7. Customer opportunity identification	yes	no	no	customer or product

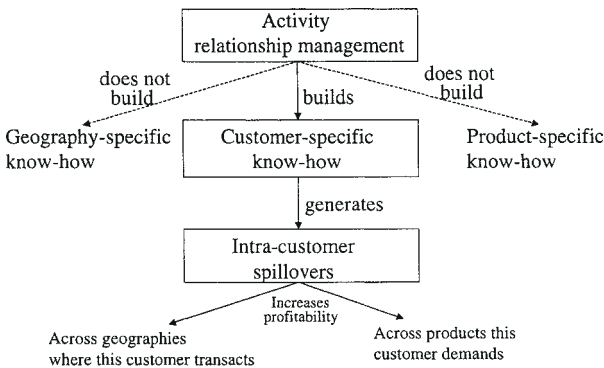


FIGURE 5. Activities, know-how and spillovers.

customer-specific know-how, which in turn generates intra-customer spillovers. These spillovers can potentially benefit each of the geographies in which Citibank transacts with this customer and each of the products this customer might demand. By contrast, relationship management generates few intra-product and intra-geography spillovers. That is, by developing trust in its relationship with a specific customer, or with customers in a particular industry, Citibank develops little product-specific knowledge that could be applied across customers in other industries or across different geographies; and it does not develop substantial geography-specific know-how that could be applied across many customers or many product lines. Thus, a capability in relationship management resides primarily in intra-customer spillovers.

As another example, consider the activity of building a national presence, which involves developing knowledge about a particular geography, including expertise in dealing with the idiosyncrasies of the regulatory processes. This activity generates geography-specific know-how that, in turn, could increase profitability across all the products sold in that geography and all customers with demands in that geography. It would not, however, generate substantial customer-specific know-how that could be applied to many products or many geographies, nor product-specific know-how that could be applied to many geographies or many customers. Thus, a capability residing in a national presence would originate primarily in intra-geography spillovers.

As another example, efficiency-enhancement activity involves reducing Citibank's costs of delivering financial services and hence has both intra-customer and intra-product spillovers but probably not intra-geography spillovers. The intra-customer spillovers result because Citibank's customers are global companies and often purchase the same service (e.g. custodial services) in more than one geography. Thus, lowering the cost of a particular product sold to a global customer increases the profit Citibank earns in all the geographies in which it sells this particular product to that customer. The intra-product spillovers are based on Citibank's ability to sell similar products to multiple customers simultaneously. This derives, in part, from the fact that Citibank often has relationships with many customers in the same industry and they have similar demands (e.g. two movie studios). It also derives from the fact that product expertise often extends beyond industry boundaries. For example, know-how in hedging accumulated by dealing with global chemical companies can be applied to developing hedging products for customers in other industries (e.g. pulp and paper) that buy key inputs in global commodity markets. When Citibank can lower the cost of providing a particular product with common features for a variety of industries, the activity increases Citibank's profitability across several customer groups

simultaneously. Since efficiency-enhancement activity generates both intra-customer and intra-product spillovers, it is not immediately clear which dimension is primarily responsible for a capability in this activity. One would not expect efficiency-enhancement activity to generate significant intra-geography spillovers, however. Within a geography, Citibank markets many different products with quite different ‘financial technologies’. Thus, an initiative aimed at decreasing the costs of a particular product would not be likely to create geography-specific know-how that would then flow across different products or different customers in a given geography.

As a final example, consider industry analysis, which develops expertise about the market dynamics of an industry and about the financial services needs that arise from those dynamics. This activity has intra-customer spillovers, since understanding the industry dynamics increases the likelihood of identifying opportunities for transacting with that customer in many geographies and/or for many products. This activity also has intra-product spillovers. That is, industry analysis allows Citibank to identify and develop products that are tailored to the dynamics of an industry and which can then be marketed to its various customers in that industry. Because most of the GRB’s 1400 customers operate in global, rather than geographically confined, industries, this activity does not generate significant intra-geography spillovers.

4.3 Optimal Organization

Table 4 indicates that the pattern of spillovers in OECD corporate banking at Citibank is likely to be complex rather than correlated. There is no single dimension that is responsible for all or even most know-how spillovers. Furthermore, as indicated in Table 3, some activities are complements and others are substitutes. This suggests that balance is needed among the organizational dimensions, and hence a multi-dimensional organization is likely to be superior to an organization that allocates all authority to the product, geography or customer dimensions.

A geography organization would likely result in the under-supply of complementary activities that entail intra-customer or intra-product spillovers. In a geography organization managers would focus on maximizing profits in their individual geographies and pay insufficient attention to the spillovers across geographies and the opportunities for transferring know-how across geographies within either the customer or product dimensions. In particular, organizing corporate banking along geography lines would lead to insufficient emphasis on building the customer relationship, product

development and efficiency enhancement. It could also lead to an over-emphasis on activities, such as building a national presence and spot deal making, that have intra-geography spillovers or that are substitutes for the activities with intra-customer or intra-product spillovers. The footprints of this pattern of activity choice could show up in a variety of ways. For example, under a geography organization Citibank would undersupply low-margin services, such as corporate lending, that are important to relationship building.

Organizing corporate banking solely along the customer dimension would also have been inferior to a multi-dimensional organization. Just as product specialists in the emerging markets organization were attached to particular geography organizations, a GRB organized along customer lines would probably have placed product specialists within industry groups. This would have compromised activities such as efficiency enhancement and new product development that generate important intra-product spillovers that flow across industries and geographies.¹¹ Citibank executives believed that an important source of Citibank's competitive advantage in dealing with large global firms was its deep expertise in product lines such as cash management and foreign exchange, and derivatives that were especially valuable to global firms. The potential loss of product focus and the attendant undermobilization of Citibank's product-oriented capabilities that might result from organizing only along customer lines would have made it more difficult for Citibank to execute its corporate banking strategy described in the previous section.¹²

Which dimension should have been emphasized, or placed 'first,' in Citibank's multi-dimensional organization? Because Tables 3 and 4 indicate that there are several important complementary activities that entail intra-customer spillovers, the conceptual framework discussed in Section 2 suggests that the customer dimension should be emphasized. Reorienting the organization to emphasize the customer dimension would stimulate additional relationship building activity and thus raise the quality of the relationship management function at Citibank. It would also stimulate the supply of other activities that were complementary to relationship management, such as product development and standardization, industry analysis, and customer opportunity identification. Additional emphasis on these

¹¹ Placing product specialists within a uni-dimensional customer organization would also have complicated recruitment and compensation. Specialists in trading and capital markets have significant outside opportunities, and their compensation is related more closely to these outside options than is the case for a relationship manager.

¹² As will be discussed below in connection with the formation of the Global Markets unit, some loss in product focus probably occurred despite the inclusion of a product dimension in the GRB's structure. The formation of the Global Markets unit was intended to correct this deficiency.

activities is consistent with the GRB core strategy of developing deeper relationships with a focused set of global customers. Additional emphasis on these activities would also enable Citibank to mobilize the potential capabilities in relationship management and product development more effectively than it had in the past.

In summary, a multi-dimensional structure with the customer dimension given first priority was probably an optimal organization given the strategy Citibank adopted in its OECD corporate banking business and the capabilities it needed to mobilize to execute that strategy successfully. A multi-dimensional organization also has a flexibility advantage: as Citibank's corporate banking strategy evolved, the GRB's organization could be altered by changing the emphasis given to various dimensions rather than through a full-fledged reorganization. Finally, the GRB's multi-dimensional structure was probably easier to adopt initially, creating as it did a customer dimension similar to the informal WCG overlay that had existed in the 1970s.

5. Mobilizing Capabilities Through Communication, Teamwork, and Informal Organization

The framework applied in the previous section emphasizes the extent to which organizational structure, by shaping the goals of divisions and influencing the incentives that these divisions provide to their local units, facilitates the creation and spreading of know-how throughout the organization. Application of that framework suggests that a multi-dimensional organization giving priority to the customer dimension was an appropriate adaptation in light of Citibank's strategy, its resources, and the pattern of activities and spillovers in its OECD banking business.

But at Citibank the mobilization of capabilities through success transfers was also influenced by organizational structure in other, less formal, ways. First, by grouping its customers into fourteen broad industry categories, Citibank facilitated communication, collaboration and know-how sharing among managers with particular industry expertise. At the same time, by de-emphasizing geography units, Citibank encouraged managers to share information about the global demands of their customers. For example, under the GRB structure, the market manager in, say, France was not only responsible for seeing that French-domiciled companies were served by Citibank-France, but was also responsible for seeing that French subsidiaries of companies with headquarters elsewhere in the world were served effectively. This required close communication between the French market manager and market managers and industry heads around the world.

Citibank also encouraged know-how sharing in the GRB through its emphasis on teamwork in its interactions with customers. As noted earlier, GRB teams would be composed of the relationship manager (PAM) for the customer, SAMs as needed for any subsidiaries involved, and product specialists from the GRB and the Emerging Markets organization if a subsidiary in a developing country was involved. This team orientation was inherited from the WCG, but it was strengthened by the GRB organization and the incentive system. Teams were customer focused and flexible in the sense that they were formed on an as-needed basis to deal with the needs and demands of particular customers, and individual team members such as product specialists would serve on more than one team. This flexibility facilitated the migration of know-how within product lines and geographies.

6. *Global Markets*

In 1997, within two years of forming the GRB, Citibank launched another major reorganization of its commercial banking business when it formed the Global Markets unit. The Global Markets organization brought together Citibank's corporate finance, capital markets and cross-border financing units by gathering 3000 product specialists and managers from its GRB and Emerging Markets businesses.¹³ As shown in Figure 6, the head of the Global Markets unit reported to the heads of both the GRB and the Emerging Markets organizations.

If, as the preceding analysis suggests, the GRB was an optimal organizational response to strategic change within Citibank, why was this second major reorganization necessary? The answer lies in the fact that the formation of the GRB in 1995 reflected an 'issuer strategy'. That is, it focused on 1400 global corporations that were issuers of securities or generators of transactions. This focus led the GRB to emphasize the products demanded by its corporate customers. But, in the view of Citibank executives, the strong focus on issuers had a significant downside: Citibank was missing opportunities to provide investment vehicles to institutional investors—insurance companies, pension funds, mutual funds and hedge funds.¹⁴ Not only were these investors the potential purchasers of the securities issued by Citibank's corporate customers in the GRB and Emerging Markets, but these funds were also growing at a double-digit rate. In addition, the investment demands of

¹³ The product specialists located in the Emerging Markets countries remained there, but their reporting relationship and incentive structure changed.

¹⁴ Citibank was not ignorant of this problem when it formed the GRB but chose to deal with the issuer-side first.

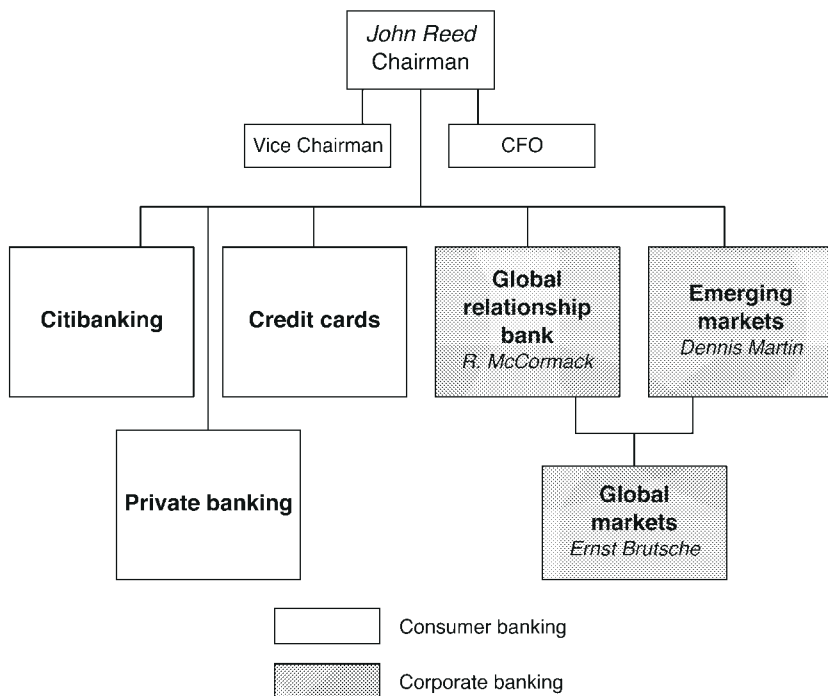


FIGURE 6. Citibank corporate organization, late 1997.

these funds fit well with the Citibank's competitive strengths. For example, Citibank consistently received superlative customer ratings in foreign exchange and derivatives, which were investments that fund managers increasingly used to maximize fund performance.¹⁵ The GRB's focus on issuers and neglect of investors meant that Citibank was both undermobilizing its product know-how and passing over profit opportunities at a time when competition for the business of its global customers was intensifying.

The formation of the Global Markets organization was thus driven by a revision in the corporate banking strategy that Citibank had developed in 1995. To better exploit its product know-how and more effectively serve its investor-customers, Citibank decided to emphasize both sides of a financial transaction: the issuer of securities—its GRB customers—and the institutional investors that bought those securities. As Alan MacDonald

¹⁵ For example, in 1996 Citibank had 8.30% of the foreign exchange market, with the second place firm at 5.62%. A *Euramoney* poll rated Citibank best in foreign exchange for the nineteenth consecutive year, and an *Asiamoney* poll again earned Citibank the award as the Best Foreign Exchange Bank in Asia.

(1997), head of corporate finance in Global Markets, stated, 'We want to give investors the same disciplined attention that our corporate issuers have long enjoyed from us'. With the establishment of the Global Markets unit, Citibank had three units covering the three principal customer bases in its corporate banking business: global corporate customers in OECD countries, covered by the GRB; corporate customers in developing countries, covered by the Emerging Markets organization; and institutional investors, covered by the Global Markets unit.

But the formation of the Global Markets unit was not exclusively driven by strategic change; it was also intended to improve the interface between the GRB and the Emerging Markets organizations. The boundary between the GRB and Emerging Markets organizations complicated the ability of the GRB to service the needs of its OECD corporate customers, many of which had subsidiaries in developing markets. Issuers of securities in developing countries would often work with product groups from both the GRB and Emerging Markets organizations. Moreover, with product specialists located in both units, the transfer of know-how across the GRB and Emerging Markets units was impeded. The geography organization of the Emerging Markets business exacerbated this problem.

Figures 7 and 8 illustrate the strategic and organizational changes associated with the formation of Global Markets. Figure 7 presents the organization of the GRB and Emerging Markets, with the columns corresponding to the primary organizational dimension prior to the formation of Global Markets. For example, in the GRB the columns correspond to industry groups within the customer dimension. In serving a customer, the GRB and Emerging Markets units formed a team to serve an issuer. This involved relationship managers (RM) and product specialists from both units, as illustrated in the figure.

Figure 8 presents the organization with Global Markets with the product specialists brought together in a single unit. A team was composed of relationship managers from both the GRB and Emerging Markets organizations and product specialists from Global Markets. Global Markets thus consolidated the product dimension and simplified the team structure. It also had the important responsibility of developing relationships with investors with the objective of paving the path from the issuer to the investor, as Figure 7 illustrates.

The product groups approached the investor side in the same manner as the customer groups approached the issuer side. The Global Markets group identified 450 institutional investors, assessed their wallets and identified their principal needs as investments in emerging markets securities,

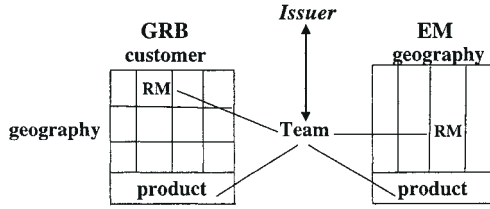


FIGURE 7. Organization of corporate banking pre-global markets.

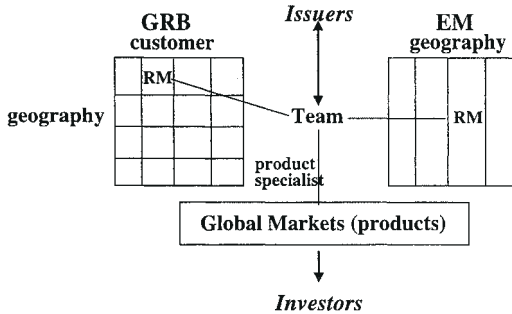


FIGURE 8. Organization of corporate banking global markets.

structured securities and yield-enhancement securities, for all of which Citibank has strong capabilities. Citibank then formed teams to market securities to the investors. Some of the investors, such as insurance companies, were also customers who issued securities and generated transactions, so Citibank already had established corporate banking relationships with a substantial number of the investors. For example, the GRB had an insurance industry customer group.

How does one evaluate the formation of the Global Markets organization from the perspective of the theory of organizational choice presented in Section 2? At first blush, that theory might not seem especially illuminating. The formation of the Global Markets unit had less to do with attempts to harness spillovers among activities involving GRB's existing customer base, as emphasized by the theory in Section 2, and more to do with an attempt to exploit opportunities to provide investment instruments to a different set of customers, institutional investors. Still, the theory in Section 2 can illuminate the potential impact of the formation of the Global Markets organization on spillovers and the mobilization of capabilities. Given its consolidation of product design, the formation of the Global Markets organization should facilitate the transfer of know-how within the product dimension. This, in

turn, would be expected to lead to an enhanced mobilization of Citibank's capabilities in product development and standardization that are based (in part) on intra-product spillovers. The theory in Section 2 then suggests that this effect would have also have resulted from an increased allocation of authority to the product dimension in GRB's multi-dimensional organization. However, the formation of the Global Markets unit had the additional advantage of creating a unique focus on institutional investors, without detracting from the GRB's focus on OECD issuer-customers.

7. A Global Corporate Bank?

The Global Markets organization reported to the heads of both the GRB and Emerging Markets units, a reasonable arrangement given that it spanned both organizations. But an interesting question is whether this arrangement would be stable. For example, would the Global Markets unit remain subordinate to the GRB and the Emerging Markets organization? One possible answer is that Global Markets would eventually be a separate but equal organization, perhaps with its own profit-and-loss responsibility, as was the case with the GRB and Emerging Markets units. Another possibility is that all three units would be consolidated into a global corporate bank that would not stop at the OECD boundary.

Such a consolidation would pose a number of important organizational challenges for Citibank. A single global corporate bank would need to reflect Citibank's tight customer focus in OECD markets, with respect to both issuers and investors. The need to balance the interests of issuers and investors suggests the possibility of adding an investor dimension to Citibank's multi-dimensional structure. The formation of the Global Markets units could be viewed as a first step in this direction.

A single global corporate bank would also need to reflect Citibank's 'embedded banking' strategy in emerging markets. Under this strategy, Citibank attempted to remain as large as the largest domestic bank, reversing the usual trend that, as countries develop, international banks tend to become marginalized and relegated to market niches. The embedded banking strategy increased the importance of building a national presence in emerging markets, an activity which, as discussed above, generated intra-geography spillovers and was also a substitute to activities such as relationship management, product development and opportunity identification. This suggests that a single global bank, like the GRB, would need to be organized multi-dimensionally to achieve an appropriate balancing of activities. However, the geography dimension would need to be given greater

prominence than it was in the GRB because of the embedded banking strategy. Alternatively, the multi-dimensional organization could give greater authority to the geography dimension for emerging markets countries than for developed countries. Consequently, a global corporate bank would likely have a more differentiated multi-dimensional organization than either the current GRB or Emerging Markets businesses. Indeed, the current organization could be quite close to this design, particularly if incentives for cooperation between Emerging Markets and GRB bankers could be established.

Whether the organization existing after the creation of Global Markets was stable may never be known, since Citicorp and Travelers merged on October 8, 1998, necessitating a consolidation and reorganization of the two companies' activities in corporate and investment banking.

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References

- Armour, H. O. and D. J. Teece (1978), 'Organizational Structure and Economic Performance: A Test of the Multi-Divisional Hypothesis,' *Bell Journal of Economics*, 9, 106–122.
- Baron, D. P. and D. Besanko (1998), 'Shared Incentive Authority and the Organization of the Firm,' working paper.
- Besanko, D., P. Regibeau and K. Rockett (1998), 'A Multi-Task Principal-Agent Approach to Organizational Form,' working paper.
- Chandler, A. D., Jr (1962), *Strategy and Structure: Chapters in the History of the American Industrial Enterprise*. MIT Press: Cambridge, MA.
- Hamel, G. (1994), 'The Concept of Core Competence,' in G. Hamel and A. Heene (eds), *Competence-based Competition*. Wiley: New York.
- Holmstrom, B. and J. Tirole (1991), 'Transfer Pricing and Organizational Form,' *Journal of Law, Economics & Organization*, 7, 201–228.
- Itami, H. (1987), *Mobilizing Invisible Assets*. Harvard University Press: Cambridge, MA.
- MacDonald, A. S. (1997), 'Global Corporate Banking: A Citibank View,' Arthur Andersen Lecture, Cambridge University.
- Prahalad, C. K. and G. Hamel (1990), 'The Core Competence of the Corporation,' *Harvard Business Review*, 80, 79–91.
- Rumelt, R. P. (1974), *Strategy, Structure, and Economic Performance*. Harvard University Press: Boston, MA.