September 19, 2023

Forthcoming, ***Journal of Applied Corporate Finance***

PURPOSE, CULTURE, AND STRATEGY IN BANKING

By

Anjan Thakor*

ABSTRACT

In this paper I discuss the concept of culture in banks, how it is shaped by the bank's purpose and how it influences the bank's strategy, risk management, and capital structure.

* John E. Simon Professor of Finance, Olin Business School, Washington University in St. Louis, FTG Fellow, ECGI, and MIT LFE Research Associate.

INTRODUCTION

In the wake of the 2007-09 financial crisis, a number of prominent policymakers, like New York Federal Reserve Bank President William Dudley, recognized that, in addition to the usual financial indicators of bank risk-taking propensity, culture had also been a huge driver of bank risk taking and performance.[1] The epiphany was that culture had both a *direct* and *indirect* impact on bank performance and both effects worked in concert to amplify each other. The direct effect is that culture influences employees' mindsets, attitudes and work approaches, thereby driving organizational performance. The indirect effect is that all of the financial variables of the bank that have been extensively studied in academic research as determinants of bank behavior—such as bank capital and asset portfolio composition[2]--are themselves influenced by the bank's culture. Thus, when regulators focus solely on these determinants to change bank behavior, they are addressing the symptoms, rather than the root causes, of undesirable bank behavior.

In this paper, I have three main goals. The first is to define culture and discuss broadly the way in which it affects employee behavior and bank performance. The second goal is to introduce a framework to diagnose corporate culture in a way that lends itself to a tangible view of the current and preferred cultures of the organization. The third goal is to discuss how corporate higher purpose has gained increasing traction in recent years[3]. No discussion of culture would be complete without some thoughts on how it can be shaped by an authentic corporate purpose.

---

[1] See Song and Thakor (2019) for a theory of bank culture that predicts this.
[2] See, for example, Merton and Thakor (2019), and Thakor (2014, 2019).
[3] See Henderson and Van den Steen (2015), Gartenberg, Prat, and Serafeim (2019), Quinn and Thakor (2018, 2019), and Song, Thakor, and Quinn (2023)

Culture is important not only for bank regulators but also for bank executives. It is not something you can see, but it is continuously affecting employee decisions and organizational performance, so it is undoubtedly something whose effects you *feel*. An important task of culture is to support the execution of strategy, so if culture is aligned with strategy, the execution of the strategy fulfills its promise. But lack of alignment between strategy and culture can frustrate even the most brilliantly designed strategy. Thus, statements like “culture eats strategy for breakfast” are vacuous in the absence of context. That is, it is not a question of which is more important, but rather that you need both— strategy cannot be effective unless culture supports it, and what kind of culture should be optimally chosen depends on the strategy.

Examples of the dysfunction created by a lack of alignment between strategy and culture are abundant. Think of a highly efficient firm that prides itself on its cost productivity and decides to shift its strategy from a focus on improving the bottom line to growing the top line organically. Despite the shift in strategy, it fails to successfully innovate its products because its employees—long conditioned to think and act in a disciplined manner within the boundaries drawn by its structure and processes—simply cannot generate enough breakthrough new ideas. That is, strategy has changed, but culture has not.

I had a similar experience with a bank that had an excellent track record for consistent earnings and low levels of loan defaults. With the arrival of a new CEO, it announced a shift in its strategy to product innovation. Yet, year after year, its pipeline of new financial products remained bare. The reason is that although the strategy changed, the key drivers of culture change did not.

Whether it is a failure to innovate or a failure to control excessive risk taking, the standard approach has been to rely on executive compensation to moderate employee behavior.

For example, in banking many believe that an important contributing factor to the 2007-09 financial crisis was poorly designed bank compensation that encouraged excessive risk-taking (e.g. Curry (2014)). In the case of non-financial firms too, the popularity of measures like Economic Value Added (EVA) was based, at least in part, on the premise that tying compensation to the appropriate measure of shareholder value creation would align the incentives of managers with those of shareholders and enhance shareholder value[4].

There is little doubt that compensation affects behavior. However, compensation is, by necessity, based on observable variables that can be contracted upon. But employee behavior is also driven by a host of variables that are either unobservable or difficult to use for contracting purposes.

These include the norms and values of the organization, perceptions of the kind of behavior that is rewarded in terms of promotions and the granting of decision-making authority. These are all part of the culture of the organization [5] and they spawn a host of "implicit contracts" between the organization and its employees. In this way, culture indeed affects the effectiveness of formal contracts in organizations, which explains why the same compensation contract can produce different outcomes in two organizations with different cultures.

What is organization culture? The literature in economics has provided various definitions, but most papers end up viewing organization culture as a shared set of values, beliefs, norms and knowledge[6] Brickley, Smith, and Zimmerman (2023) divide corporate culture into two components: unobserved shared values and observable norms. Regardless of the definition, however, culture remains a somewhat nebulous concept. This aspect of culture makes

---

[4] See, for example, Chew (2023).

[5] See Kreps (1990).

[6] See Crémer (1993), Lo (2016), Gorton and Zentefis (2019), Guiso, Sapienza, and Zingales (2015), Van den Steen (2010)).

diagnosis of culture challenging. And proactive change is not possible without diagnosis. To this end, I discuss a framework for diagnosing and changing corporate culture called the Competing Values Framework (CVF). I rely significantly on my previous work in this regard[7]. The CVF provides a research-validated practical tool for making culture a visually tangible concept and for diagnosing and changing culture.

While an important goal of culture is to support the execution of the organization's strategy, there is now growing recognition that employee motivation is also powerfully influenced by the organization's transcendent or higher purpose, as documented by Grant, et al (2007), and Hedblom, Hickman, and List (2019). This is essentially a *contribution goal* that transcends the organization's business goals and yet acts as an arbiter of its business decisions[8] . I discuss the relevance of purpose in banking and how an authentic purpose can shape the bank's culture to elevate its business performance. This discussion relies on ideas I introduced in Thakor (2019).

The rest of the paper is organized as follows. Section 2 discusses how culture affects organization behavior and introduces the CVF. Section 3 discusses organization purpose and its impacts on culture and business outcomes. Section 4 concludes.

---

[7] See Cameron, DeGraff, Quinn and Thakor (2019), and especially Thakor (2016)).

[8] See, for example, Quinn and Thakor (2018, 2019).

2. DEFINING CULTURE AND DIAGNOSING IT USING THE CVF.

2.1. What is Culture?

As in my previous work[9] , I define culture as the collective assumptions, beliefs, expectations, and values that reflect the explicit and implicit rules determining how employees think and behave in the organization. When the organization has a "strong" culture employees have shared (homogeneous) beliefs[10] and the rules employees use for decision-making are similar[11] . This makes it easier to delegate decision-making authority to lower levels in the organization that are closer to the information needed to make the best decisions.[12]

Since culture needs to support the execution of the strategy, it is important for the organization to clearly articulate its strategy so it is easily comprehensible to all employees. With a strong culture, those who have the delegated authority can then make the necessary resource allocation decisions—involving financial as well as human capital resources—to effectively execute the strategy. This allocation of resources will then drive the business outcomes the organization achieves. One reason why culture affects organizational performance is that, at every level in the organization, culture influences how resources are allocated. That is, with exactly the same explicit wage contracts, information sets, and strategy, differences in culture will give rise to differences in resource allocation decisions. The second reason why culture affects performance is employee motivation—an effective culture, especially one shaped by an authentic higher purpose, energizes employees to take greater ownership and work harder[13]. It also builds greater trust that employees have in their leaders; Bunderson and Thakor (2022)

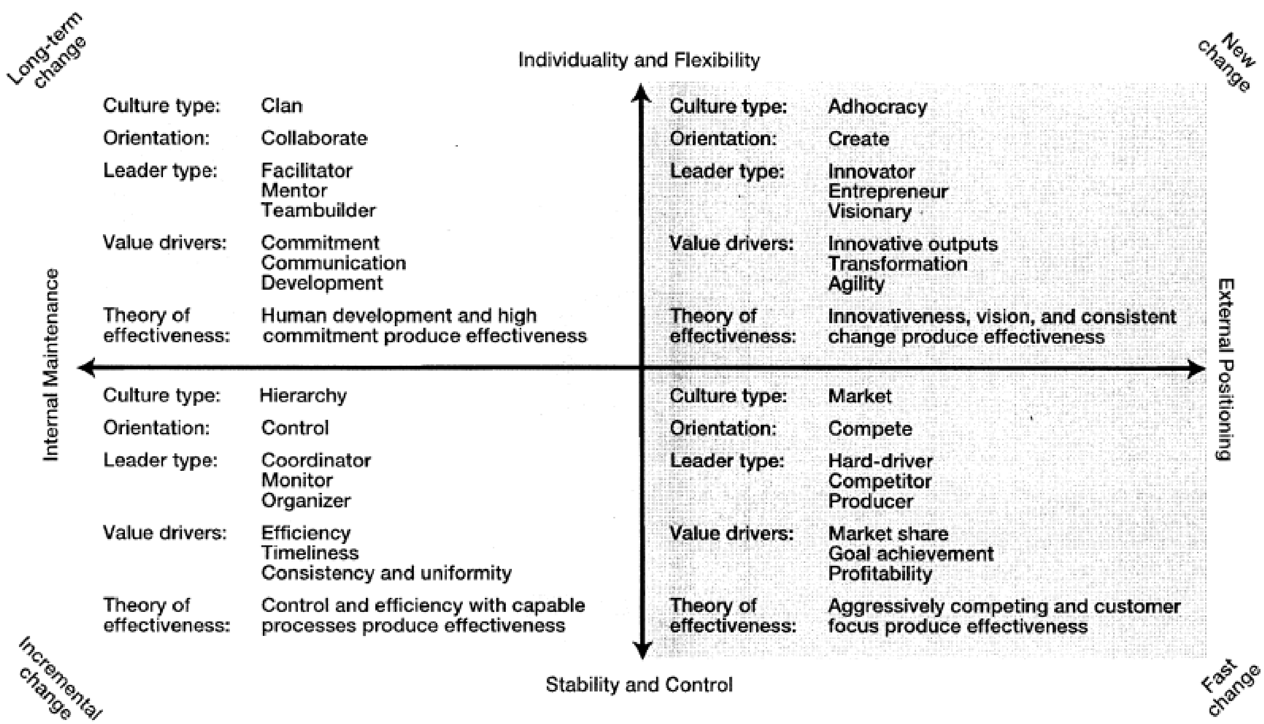
---

[9] For example, Thakor (2016, 2021).
[10] See van den Steen (2010).
[11] See Crémer (1993).
[12] Brickley, Smith, and Zimmerman (2023)) view this as an important feature of an effective organizational architecture.
[13] See Song, Thakor and Quinn (2023).

provide evidence of this, and Thakor and Merton (2019) provide a theory of how trust affects the operation of banks and their competitiveness *vis a vis* other lenders, such as non-depository fintech firms[14] .

2.2 The Competing Values Framework (CVF)

Figure 1:
The Competing Values Framework



The Competing Values Framework, shown in Figure 1, provides a simple yet tangible way to describe organization culture. Developed in the organizational behavior literature[15], this framework is extensively used by organizations.

The CVF observes that organizations engage in many activities to create value, but most can be put into one of the four categories or quadrants shown in *Figure 1*: *Collaborate (Clan),*

[14] See, for example, Thakor (2020).
[15] See, for example, Quinn and Cameron (1983), Quinn (1988), and Cameron and Quinn (2011).

Control (Hierarchy), Compete (Market), and *Create (Adhocracy)*. The action verbs are taken from Cameron, DeGraff, Quinn, and Thakor (2019). I have found them to be more useful when working with organizations than the words in the parentheses, which are the labels from the original research in organizational behavior. I now discuss each quadrant.

Collaborate: Activities in this quadrant include building human competencies, leadership development, and encouraging a collaborative environment. The approach to change in this quadrant relies on consensual and cooperative processes. Employee satisfaction and morale, cross-functional work groups, employee retention, harmony, and decentralized decisionmaking are all part of this quadrant. Organizational effectiveness reflected in human capital development and high employee engagement.

Control. Activities in this quadrant include improvements in efficiency through better processes. The goal is to make things better, at lower cost, and with less risk. Organizational effectiveness is reflected in effective processes, measurement and control that result in a high degree of statistical predictability in outcomes. Examples of activities in this quadrant include risk management, credit analysis, auditing, planning, statistical process control, Six Sigma and Lean Six Sigma, and so on.

Compete. Activities involve being fast, aggressive, and competitive. Activities in this quadrant involve gathering market intelligence and excelling in interactions with external stakeholders, customers, and competitors. The focus is on customer satisfaction and shareholder value. EVA is an excellent metric for this quadrant.

Create: Activities in this quadrant involve innovation in products and services. Organizations that excel in this quadrant effectively handle discontinuity, change, and risk.

Thoughtful “rule breaking” and out-of-the-box thinking are commonplace. Organizational effectiveness is associated with entrepreneurship, vision, and new ideas.

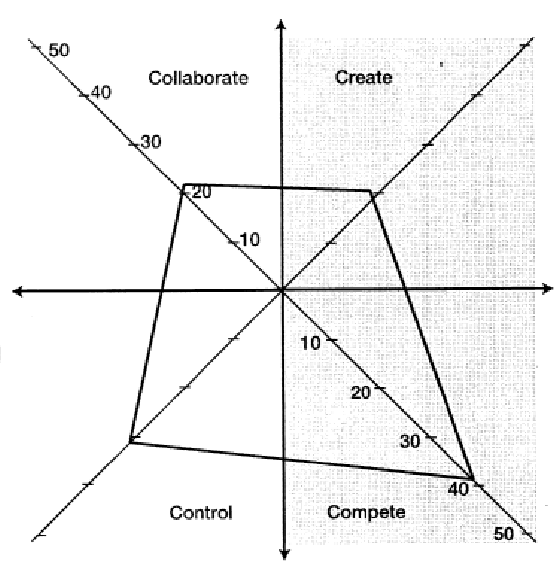
2.3 Tensions within the Framework

The quadrants within the CVF have similarities and differences that are illuminating. Consider first the *Collaborate* and *Control* quadrants. Both are internally focused. *Collaborate* focuses on the “human capital” of the organization—its employees and their development and well-being. *Control* focuses on the “process capital” of the organization—how internal processes are used to achieve efficiency and predictability of outcomes.

By contrast, the *Compete* and *Create* quadrants outward-focused. *Compete* is focused on the customers, competitors, markets, and opportunities of today, while *Create* is focused on the customers, markets, and opportunities of the future.

So one dimension of similarity and difference is whether there is an internal or external focus. On this dimension, *Collaborate* and *Control* are one side—an internal focus—and *Compete* and *Create* are on the other side—they have an external focus.

Figure 2
A Competing Values Culture Map



A second dimension of comparison is in the degree of their focus on stability and control as against individuality and flexibility. On this dimension, *Control* and *Compete* emphasize stability and control, focusing on tangible and measurable outputs, where the rules of success are well known. Leadership style tends to be prescriptive, and the time horizon for assessing results is short. By contrast, *Collaborate* and *Create* involve a more individuality and flexibility. The rules of success are more ambiguous. Leadership style is more participative than prescriptive, encouraging experimentation, and the time horizon for achieving results is typically longer.

A key insight of the CVF is that diagonally opposite quadrants have nothing in common. That is, *Collaborate* shares no similarity with *Compete* and *Control* shares none with *Create*. In fact, at the margin, these quadrants pull the organization in opposite directions. Any resources allocated to one quadrant pull the organization away from its diagonal opposite. The quadrants thus represent competing forms of value creation, and this creates inherent tensions within the organization, as stakeholders at opposite ends compete for resources. These competing views and beliefs about what creates value can be considered similar to the disagreement stemming from heterogeneity of (rational) beliefs described by Van den Steen (2010).

A choice of culture is effectively a decision about the relative degrees of emphasis on the four quadrants in *Figure 2*. This culture profile would typically be constructed on the basis of a survey of employees in the organization, using a diagnostic instrument (see Cameron and Quinn (2011)). The usefulness of such a depiction of culture is that:

- it can communicate the chosen culture to all key stakeholders;
- it clarifies how resources will be allocated to execute the growth strategy;
- it becomes a guide for hiring, development, and retention processes, and
- it helps to coordinate beliefs and guide day-to-day decision making.

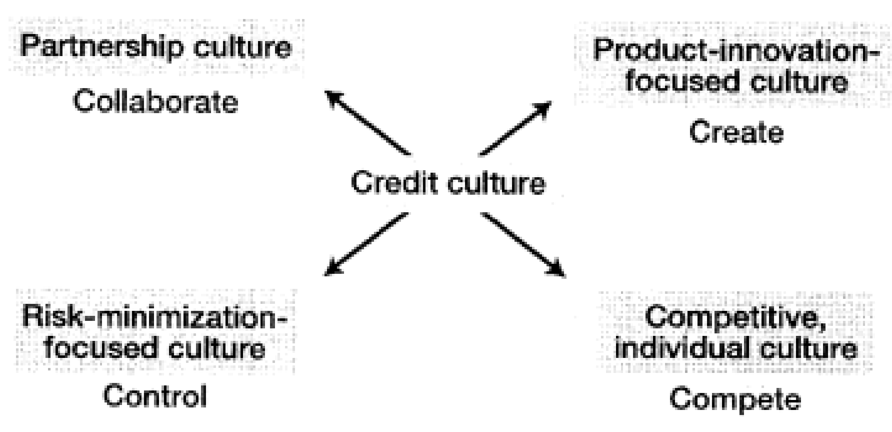
2.4 Adapting the CVF to Analyze Credit Culture in a Bank

The CVF can also be used to analyze specific aspects of the overall culture, such as those relating to the credit risk-management of the bank[16]. *Figure 3* shows what the four quadrants of the CVF look like in the context of credit culture (which reflects the values, norms, and formal and informal practices the organization's credit decisions and management of credit risk).

A credit culture that emphasizes *Collaborate* is a "partnership culture," one in which employees work in collaborative, cross-functional teams. This was the dominant aspect of the culture in U.S. investment banks before they became publicly traded. It is the culture that currently exists among Farm Credit System associations.

A credit culture that emphasizes *Control* is a risk-minimization culture. It values rigorous credit analysis and post-lending monitoring of borrowers. It achieves low default risk. Prudence and safety take precedence over growth.

Figure 3
Credit Culture



[16] Clearly, the credit culture in a bank has to be consistent with the overall culture that supports its growth strategy. However, describing the credit culture separately enables a focus on details relating to the credit risk management of the bank.

A credit culture that emphasizes *Compete* is a competitive, individual-performance-oriented culture, in which employee bonuses depend on exceeding performance targets, the ratio of bonus to base pay is high, and market share gains and revenue growth are important goals. Such banks tend to hire decisive, fast-moving, and aggressive employees.

A credit culture that emphasizes *Create* focuses on product innovation and organic growth. Experimentation with new products is encouraged. Banks with this culture would extend securitization to new asset classes, design new contracts to expand access to the credit market, and so on. The investment banking industry in the United States has been a leader in financial innovation due to this culture.[17]

The CVF asserts that while most banks will have an organizational culture that spans all four quadrants, each bank will typically be strongest in one quadrant, and this strength will influence how the bank functions, where it thrives, and what it finds most challenging. For example, a bank with a *Create* culture will consistently come out with new financial products and achieve a high level of organic growth, but will have the most difficulty maintaining consistent risk-control standards and eliminating regulatory compliance errors.

2.5 Diagnosing and Changing Culture Using the CVF

The CVF enables any organization to diagnose its current culture and juxtapose it with its preferred culture. Using a diagnostic instrument that has been validated by extensive research in organizational behavior, one can survey any set of the organization's employees about organizational practices and individual behaviors.[18] The responses can then be aggregated and

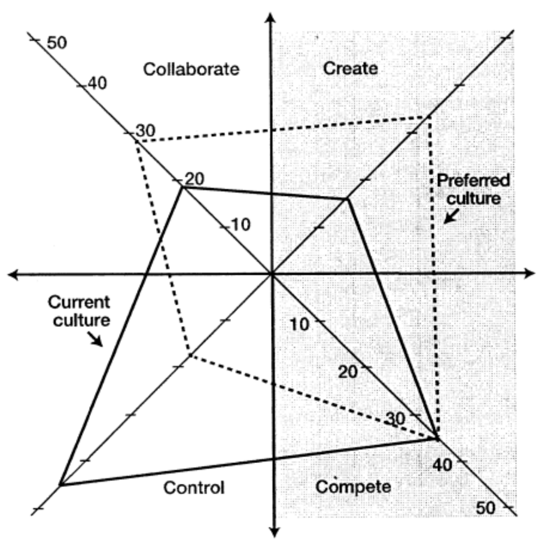
[17] Boot and Thakor (1997) develop a theory that explains why U.S. investment banks have been more successful in financial innovation than investment banks in Europe.
[18] See Cameron and Quinn (2011) for a complex discussion of the Organizational Cultural Assessment Instrument.

averaged to generate pictorial depictions of the current and preferred cultures, as shown in *Figure 4*.

The unbroken lines in the exhibit depict the current culture of the organization, and the broken lines depict the preferred culture. This hypothetical organization wishes to shift from control and stability (the *Control* quadrant) to more flexibility, collaboration (the *Collaborate* quadrant), and innovation (the *Create* quadrant). Knowing this goal, one can examine how this change can be achieved, a topic addressed next.

The CVF is currently a leading method used in assessing organization culture. Several consulting firms have used this framework to organize their climate and culture instruments[19] .

Figure 4
Changing Organizational Culture



[19] See, for example, Cameron, DeGraff, Thakor and Quinn (2019).

2.6 Levers for Changing Culture

There are mainly three levers that must be pulled in order to change culture: (1) performance metrics for judging individuals, projects, and business units; (2) processes for decision-making and resource allocation; and (3) behaviors to encourage, tolerate, and punish.

Performance metrics are of paramount importance in changing organization culture. These include both the explicit measures by which employees are judged and rewarded with higher compensation and the measures of performance that do not show up in explicit contracts but are used nonetheless to judge people and based on which decision-making authority is allocated. Performance metrics also include the measures used to judge business units and decide which projects to invest in.

To see how this aspect of culture affects bank decision making, consider the popularity of return on equity (ROE) as a measure of bank performance.[20] Holding all else constant, a bank can increase its ROE by increasing its leverage, so use of this as a performance metric encourages banks to lower their equity capital ratios. This, in turn, increases the risk appetite of the bank and affects its growth objectives and asset portfolio decisions. Pull this culture-change lever and you create forces that change the bank's capital structure and a host of other decisions.

The resource allocation process represents another culture-change lever. I once worked with a company that wanted to change its strategy to be more innovation-focused. However, its capital-allocation process emphasized payback and IRR as project performance metrics, and none of the proposed innovation projects could ever meet the threshold criteria based on these metrics. Thus, no resources were ever allocated to innovation projects. Only when the company

[20] Bennett, Gopalan, and Thakor (2021) document that banks rely more on ROE as a metric for executive bonuses than firms in other industries.

changed its resource allocation process to include real-options thinking in evaluating projects was it able to approve innovation projects.

Finally, the messages that come from the leadership of the organization—the activities that are encouraged, tolerated, and discouraged—matter too in affecting employee decisions.

There is empirical evidence that culture affects banking outcomes, as I discuss in Thakor (2021). Fiordelisi, Raponi, and Rau (2015) provide evidence that banks with low capital ratios exhibit risky behavior and attract regulatory enforcement actions. Sanctioned banks and those that have a high probability of attracting regulatory sanctions reorient their culture to be more safety-oriented. Barth and Mansouri (2020) document that banks that emphasize growth and have cultures focused more on the Compete and Create quadrants of the CVF enjoy higher stock returns. Accetturo, Barboni, Cascarano and Gracia-Appendini (2023) exploit an interesting dataset to provide evidence of cultural affinity in bank-borrower relationships—that firms are more likely to apply for loans to banks with similar cultures.

2.7. The Effect of Regulation and Bailouts

One issue that is prominent in banking but I have not discussed thus far is how regulation and other interventions may influence bank culture. Bank capital requirements will affect the pricing and supply of bank credit as well as the bank's asset portfolio composition and investment decisions[21]. In a larger general equilibrium context, bank regulation can also affect the competitive structure of the financial services industry, including competition from non-banks[22], and this can impact bank culture. Bailouts will distort the ex ante capital structure decisions of banks as well inferences investors draw from bank failures [23]. These are interesting

[21] For example, see Acharya, Mehran and Thakor (2016), Bonaccorsi di Patti, Moscatelli, and Pietrosanti (2023), and Thakor (1996).
[22] See, for example, Donaldson, Piacentino, and Thakor (2021).
[23] See Acharya and Thakor (2016).

issues and suggest that regulators ought to be thoughtful about how the design of prudential regulation as well as ex post measures to prevent contagion by bailing out some institutions may influence bank culture.

3. ORGANIZATIONAL HIGHER PURPOSE AND BANKS

Various researchers have recently written about the *economic* ramifications of organization adopting an authentic purpose that transcends its business goals and yet acts as the arbiter of its business decisions[24] . But applications to banking are just emerging[25].

Nonetheless, banks themselves have begun to embrace the notion of a transcendent organization purpose. In Thakor (2021), I provided examples of purpose statements of major banks from their 2018 Annual Reports:

Bank of America:

"We did this by living our purpose, which is to help make our clients' lives better through the power of every connection we can make."

J.P. Morgan Chase:

"We lift up our communities . . . [We started our] *Advancing Cities* initiative to support wage and job growth in communities most in need of capital."

The authenticity of these purpose statements of arbiters of the banks' business decisions is for future research to determine. However, smaller banks provide interesting examples of purpose in action. For example, in southern Pennsylvania, Bank of Bird-in-Hand states its

[24] See, for example, Hedblom, Hickman, and List (2019), Henderson and Van den Steen (2015), Quinn and Thakor (2018, 2019).

[25] See Bunderson and Thakor (2022), Song, Thakor, and Quinn (2023) and Thakor (2016, 2019, 2021).

purpose as providing banking services to the unbanked Amish community. It boosts local economic development by supporting community projects[26].

From a purely business standpoint, adopting a higher purpose can align nicely with the bank's relationship banking strategy[27] . Empirical research highlights the significant economic benefits of relationship banking [28]. But since these benefits accrue to borrowers only when the relationship is sufficiently long[29] , a bank with a customer-centric higher purpose will wish to ensure a high probability of continuation. This can be achieved, for instance, with a relatively high capital ratio. This will increase the attractiveness of the bank to both its depositors *and* borrowers [30] and increase the trust its financiers have in the bank[31].

The high capital ratio will also influence the bank to develop a more safety-oriented culture and invest more in risk management, with consequences for dividend policy, duration mismatching and the composition of its asset and liability portfolios; see Song and Thakor (2019) for a formal analysis of this and related issues. Thus, higher purpose can shape the bank's culture.

Adopting an authentic higher purpose may also help reshape strategy and open up new business opportunities for banks. Bartlett and Ghoshal (1994) explain how purpose goes beyond strategy and thus can help shape strategy. As a specific example of this, Lo and Thakor (2023) discuss how banks can play an important role in reducing the funding gap that exists in the financing of biomedical research. If a bank's stated purpose was contributing to the cure of some diseases by financing early-stage biomedical research devoted to finding a cure, then it may lead

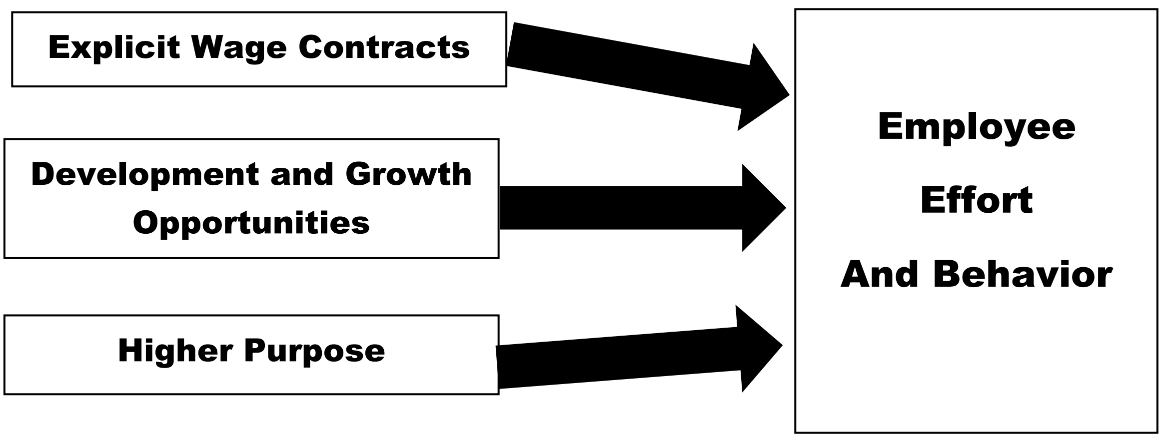
---

[26] See Volz (2019).
[27] See Sharpe (1990), Rajan (1992), Boot and Thakor (1994, 1997, 2000).
[28] See Ferri, Minetti, and Murro (2019)..
[29] See Lopez-Espinosa, Mayordomo, and Moreno (2017).
[30] Merton and Thakor (2019).
[31] As shown by Thakor and Merton (2023).

the bank to design innovative financial contracts to facilitate that, and this innovation may open the door for new business.

There are also other ways in which a higher purpose can influence bank culture. Employees' incentives to expend effort and make decisions are affected by three forces, as shown in *Figure 5* below.

Figure 5
Forces Affecting Employee Effort and Behavior



Firms in which employees act like owners and work hard are those that address all three factors. But even tradeoffs are possible—organizations with an authentic higher purpose can even pay employees less and incentivize them to work hard[32]. However, an authentic purpose can boost the effectiveness of high-powered incentive compensation schemes based on measures like EVA and stock prices.

[32] For example, Grant et al (2007), and Song, Thakor, and Quinn (2023).

4. CONCLUSION

In this paper, I have relied on the emergent research literature in Economics, Finance, Strategy, and Organizational Behavior on the topics of organization culture and higher purpose to provide a discussion of relevant issues in the context of banking.

Culture and purpose are “soft” concepts—they do not rely on complex mathematical formulas—but for organization leaders, these so-called soft issues represent the really hard challenges. What the research is showing, however, is that in many instances, acting to serve the greater good actually helps the bottom line as well, and the channel for this effect is employee motivation. Lenders of all organizations—including banks—would do well to remember that:

$$\boxed{\text{Higher Purpose}} \quad \text{X} \quad \boxed{\text{Culture}} \quad \text{X} \quad \boxed{\text{Strategy}} \quad \Longrightarrow \quad \boxed{\text{Enhanced Value Created}}$$

Part of the reason for this relationship is that adoption of an authentic higher purpose engenders employee trust in the organization’s leaders [33] and this facilitates the design of more complex, customized and profitable products and services [34]. Moreover, it goes beyond strategy[35], and creates powerful incentives that complement those provided by formal contracts[36].

[33] As documented by Bunderson and Thakor (2022).
[34] As shown theoretically by Thakor and Merton (2023).
[35] As emphasized by Bartlett and Ghoshal (1994).
[36] See, for example, Grant et al () 2007) and Henderson and Van den Steen (2015).

REFERENCES

Accetturo, A., G. Barboni, M. Cascarano, and E. Garcia-Appendini, "The Role of Culture in Firm-Bank Matching," *Journal of Financial Intermediation* 54, April 2023.

Acharya, V. and A. V. Thakor, "The Dark Side of Liquidity Creation: Leverage-Induced Systemic Risk and Implications for the Lender of Last Resort," *Journal of Financial Intermediation* 28, October 2016, 4-21.

Acharya, V., H. Mehran, and A.V. Thakor, "Caught Between Scylla and Charybdis: Regulating Leverage When There is Rent-Seeking and Risk Taking," *Review of Corporate Finance Studies* 5(1), March 2016, 36-75.

Barth, A., and S. Mansouri, "Corporate Culture and Banking", Working Paper, Goethe University 2020.

Bartlett, C.A. and S. Ghoshal, "Beyond Strategy to Purpose," *Harvard Business Review*, November-December 1994.

Bennett, B., R. Gopalan, and A.V. Thakor, "How are Bankers Paid?" *Review of Corporate Finance Studies* 10-4, December 2021, 788-812.

Bonnacorsi di Patti, E., M. Moscatelli, and S. Pietrosanti, "The Impact of Bank Regulation on the Cost of Credit: Evidence from a Discontinuity in Capital Requirements," *Journal of Financial Intermediation* 55, July 2023.

Boot, A.W.A. and A.V. Thakor, "Moral Hazard and Secured Lending in an Infinitely-Repeated Credit Market Game," *International Economic Review* 35(3), 1994, 899-920.

Boot, A.W.A., and A.V. Thakor, "Financial System Architecture," *Review of Financial Studies* 10-3, Fall 1997, 693-733.

Boot, A.W.A., and A.V. Thakor, "Can Relationship Banking Survive Competition?" *Journal of Finance* 55(2), 2000, 679-714.

Brickley, J., C. Smith, and D. Zimmerman, "Corporate Culture and Organizational Architecture," Working Paper, University of Rochester, 2023.

Bunderson, S., and A.V. Thakor, "Higher Purpose, Banking and Stability," *Journal of Banking and Finance* 140, July 2022.

Cameron, K., J. DeGraff, R. E. Quinn, and A. V. Thakor, *Competing Values Leadership: Creating Value in Organizations*, Publisher: Edward Elgar Publishing Ltd., First Publication Date: 2006, Third Edition: 2019.

Cameron, K. and R.E. Quinn, *Diagnosing and Changing Organizational Culture: Based on the Competing Values Framework*, Wiley, 1999.

Chew, Don, "The Rise and Fall of Stern Stewart & Co.'s EVA Financial Management System", Ch. 7 in *The Making of Modern Corporate Finance*, forthcoming, 2023

Crémer, J., "Corporate Culture and Shared Knowledge," *Industrial and Corporate Change* 2(1), 1993, 351-386.

Curry, T.J., "Keynote Remarks," Remarks Delivered to the Annual Conference of the Clearing House Association, New York City, November 21, 2014.

Donaldson, J., G. Piacentino, and A.V. Thakor, "Intermediation Variety", *Journal of Finance* 76-6, December 2021.

Ferri, G., R. Minetti, and P. Murro, "Credit Relationships in the Great Trade Collapse: Micro Evidence from Europe." *Journal of Financial Intermediation* 40, October 2019.

Fiordelisi, F., J. Raponi, and P.R. Rau, "Corporate Culture and Enforcement Actions in Banking," Working Paper, 2015.

Gartenberg, C., A. Prat, and G. Serafeim, "Corporate Purpose and Financial Performance," *Organization Science* 30(1), 2019, 1-18.

Gorton, G. and A. Zentefis, "Social Progress and Corporate Culture," NBER Working Paper No. 25484, January 2019.

Grant, A.M., E.M. Campbell, G. Chen, K. Cottone, D. Lapedis, and K. Lee, "Impact and the Art of Motivation Maintenance: The Effect of Contact with Beneficiaries on Persistence Behavior," *Organization Behavior and Human Decision Processes* 103(1), 2007, 53-57.

Guiso, L., P. Sapienza, and L. Zingales, "The Value of Corporate Culture," *Journal of Financial Economics* 117(1), 2015, 60-76.

Hedblom, D., B. Hickman, and J.A. List, "Toward an Understanding of Corporate Social Responsibility: a Theory and Field Experimental Evidence," Working Paper, University of Chicago, March 26, 2019.

Henderson, R. and E. Van den Steen, "Why Do Firms Have Purpose? The Firm's Role as a Carrier of Identity and Reputation," *American Economic Review* 105(5), 2015, 326-330.

Kreps, D., "Corporate Culture and Economic Theory," in *Perspectives on Positive Political Economy*, eds. J.E. Alt and K.A. Shepsle, 1990, 90-143 (Chapter 4), *Cambridge University Press.*

Lo, A., “The Golden Gekko Effect: The Role of Bank Culture in the Financial Industry,” *Economic Policy Review*, Federal Reserve Bank of New York 22(1), 2016, 17-42.

Lo, A. and R.T. Thakor, “Financial Intermediation and the Funding of Biomedical Innovation: A Review,” *Journal of Financial Intermediation* 54, July 2023.

Lopez-Espinosa, G., S. Mayordomo, and A. Moreno, “When Does Relationship Banking Start to Pay?” *Journal of Financial Intermediation* 31, July 2017, 16-29.

Merton, R.C. and R.T. Thakor, “Customers and Investors: A Framework for Understanding the Evolution of Financial Institutions,” *Journal of Financial Intermediation* 39, July 2019, 4-18.

Quinn, R. E. 1988. *Beyond Rational Management: Mastering the Paradoxes and Competing Demands of High Performance*. San Francisco: Jossey-Bass, Inc.

Quinn, R. E., and K. Cameron. 1983. “Organizational Life Cycles and Shifting Criteria for Effectiveness.” *Management Science* 29, No. 1 (January): 33-51.

Quinn, R.E., and A.V. Thakor, Creating a Purpose-Driven Organization,” *Harvard Business Review* July/August 2018, 78-85.

Quinn, R.E., and A.V. Thakor, *The Economics of Higher Purpose*, 2019, Barrett-Koehler Publishers.

Rajan, R., “Insiders and Outsiders: The Choice Between Informed and Arm’s Length Debt,” *Journal of Finance* 47(4), 1992, 1367-1400.

Sharpe, S., “Asymmetric Information, Bank Lending and Implicit Contracts: A Stylized Model of Customer Relationships,” *Journal of Finance* 45(4), 1990, 1069187

Song, F., and A.V. Thakor, “Relationship Banking, Fragility, and the Asset-Liability Matching Problem,” *Review of Financial Studies* 20(6), 2007, 2129-2177.

Song, F., and A.V. Thakor, “Bank Culture,” *Journal of Financial Intermediation* 39, July 2019, 59-79.

Song, F., A.V. Thakor, and R.E. Quinn, “Purpose, Profit, and Social Pressure,” *Journal of Financial Intermediation*, July 2023.

Thakor, A.V., Capital Requirements, Monetary Policy and Aggregate Bank Lending: Theory and Empirical Evidence”, *Journal of Finance* 51-1, March 1996, 279–324

Thakor, A.V., “Bank Capital and Financial Stability: An Economic Tradeoff or a Faustian Bargain?” *Annual Review of Financial Economics* 6, December 2014.

Thakor, A.V., “Corporate Culture in Banking,” *Economic Policy Review*, Federal Reserve Bank of New York, 22(1), 2016, 1-12.

Thakor, A.V., *The Purpose of Banking: Transforming Banking for Stability and Economic Growth*, Oxford University Press, 2019.

Thakor, A.V., “Fintech and Banking: What Do We Know?” *Journal of Financial Intermediation*, January, 2020.

Thakor, R.T., and R. C. Merton, “Trust, Transparency, and Complexity,” *Review of Financial Studies*, August 2023.

Thakor, R.T., and R.C. Merton, “Trust in Lending,” NBER Working Paper No. 24778, 2023.

Van den Steen, E., “On the Origins of Shared Beliefs and Corporate Culture,” *RAND Journal of Economics* 4/(4, Winter), 2010, 617-648.

Volz, S., “Banking Amish Style,” *American Studies Blog*, June 26, 2019.