A Framework for Detecting Macroeconomic Changes and Their Effect on a Bank's Business Model

Current banking models are ill equipped to meet the demands of increased regulation, declining profitability and 24x7 accessibility.

Executive Summary
This paper aims to elaborate on the emerging trends in the banking industry and their impact on the future of banking. It explains how firms can become sustainable even amid financial crises. Lastly, it presents a framework with which changes in the macroeconomic environment can be detected and their effect on the internal logic of a firm can be interpreted. This framework is intended to set the ground for a new banking business model that can cope with the changing landscape.

Introduction
Notwithstanding the ideas and concepts proposed about the future of banking, the ongoing debate about how to deal with the credit and liquidity crisis and the various endeavors underway, no model has evolved yet to replace the current paradigm.

A sound analysis of the banking business model requires looking at investment banking, private banking, retail banking, asset management and other business areas. However, as this paper seeks to elaborate on a generic framework to understand the effects of macroeconomic changes on the internal logic of a bank's business model, we have only considered the generic banking business model.

The economic crisis of the past couple of years seems set to continue for the near future. Analysts, economists and political scientists hypothesize that the financial problems confronting the world will not improve, but rather worsen.

The crisis can be seen as resulting from six forces:
• The bottoming out of interest rates.
• Consumer deleveraging.
• Increasing regulation.
• Aging populations.
• The retreat of credit risk-free sovereign borrowers.
• Diverging growth rates between developed and emerging markets.

These trends are expected to result in the following major changes in the banking industry:
• Consolidation, especially in developed markets, to remove excess capacity.
• Innovation in offerings and service models to restore margins.
• Migration of relative profitability from mass-market to wealthy customers.
• Growth shifting from developed economies to emerging economies.
Impact of Crisis on the Banking Industry

Because of the current crisis, banks in developed economies have been finding it difficult to grow revenues. As a result of political intervention and special programs such as quantitative easing, banks in Europe and the U.S. have returned to moderate profitability. However, the accompanying changes have led to a more volatile and challenging environment – one that is transaction- and trading-based.

In order to achieve sustainability, banks need to incorporate superior earnings, lower risks and access to high-growth markets. Superior earnings can be achieved when a banking model is able to generate higher assets turnover or higher margin earnings. The key to generating sustainable profits is a bank’s ability to grow revenues over the long term.

Banks that outperform their competitors tend to exhibit the following characteristics:

• Employee productivity in generating sales, acquiring deposits and generating revenue.
• Strong customer relationships, high-quality B2C relationships and high-quality products and services.
• A cost-to-serve approach: capturing the total overall cost in the provision of products and services to customers.
• Risk management: capturing the rate of non-performing credit and the ability to recover outstanding loans.
• Innovation in the use of technology and the generation of new business models to create and extend customer relationships.

Demand for Increasing Customer Value

Growth through attracting new customers continues to be expensive and therefore limited in the banking industry. However, even opportunities for growing existing relationships are not completely exploited. For example, customers for whom banks provide transactional account services tend to have low levels of savings.

In order to increase customer value, banks can either increase the customer’s needs or increase their share of the customer’s portfolio and expand the customer’s utilization of their products and services. Assuring high service levels, product and service quality and providing accessibility to customers require banks to be innovative. Building significant customer relationships requires a high connectivity between the bank’s staff and the customer base. Identifying the appropriate technologies and incorporating them into the bank’s system as well as incorporating appropriate business processes supports a bank in building successful customer relationships.

Overall, increasing revenue strongly depends on the customer. However, customers’ growing demands and their decreasing loyalty is a challenge for the banking industry today.

New Demands on Banks

**Banks Are Expected to Be Accessible Anywhere and Everywhere**

Having a Web site is no longer enough for a bank. Customers want to be able to reach their bank from everywhere at any time through their mobile devices. However, banks’ flash-loaded Web sites do not allow customers the kind of mobile access and mobile-enabled services that customers seek.

Another factor is the continuing growth of mobile wallets or m-wallets. These are electronic accounts that are linked to a customer’s mobile phone. Money can be electronically deposited and used as cash through these accounts. Internationally, m-wallets are used at stores, to pay for public transportation, to make donations and to pay bills. Businesses such as Dwolla, Square (Pay with Square) and Google (Google Wallet) are early birds in this area and m-wallets are being developed for various other providers. Banks need to hop on to this bandwagon if they want to remain competitive. Other potential technological implications are mobile payment, or mobile banking coupled with push services, direct fund transfer without banks being intermediaries and direct credit and loans facilities.

**Tighter Regulations Are Under Way**

Globally, tighter regulations are being imposed on banks. These regulations are intended to prevent the current financial crisis from worsening and to protect businesses and customers. These have resulted in various challenges for banks such as forcing them to increase their reserves relative to their assets. On one hand, this allows loans to be backed up better, but on the other hand it forces banks to give out fewer loans, especially for large amounts. As another example, Basel III standards have had a major impact on the business and operational model of banks. Also, the introduction of oversight rules and bodies has significant implications for the banking industry.
Even while confronting strategic and regulatory challenges, banks have to ensure efficient and faultless operations. This calls for continued efficiency improvement of the operational model. Business and operational model adjustments in response to the macroeconomic environment (e.g., mobility, regulations and the “future of work”) as well as process optimizations, reorganizations and cost structure optimizations have to be done on a regular basis.

This calls for identifying opportunities to align IT systems across business units and geographies, focusing on core competencies and outsourcing noncore activities.

Challenges for Established Banking Business Models

A business model describes an organization’s core logic for generating value. Akin to patterns in architecture and software engineering, i.e. successful solutions through which firms create value, business models come before strategy. Hence, various combinations of business models can be used for designing strategy and generating new strategies for existing and new businesses.

Technology is not only important for new product and service development, but also for risk management, effective life cycle planning and meeting the risk control needs of firms. Hence, a new banking business model that accounts for macroeconomic changes should meld information with transaction capabilities for creating value.

Technology Is Key Driver of Changes in Architecture and Revisions of Business Models

Banking business models need to incorporate the ability to adjust to environmental changes. They should thus be able to respond to less loyal and more demanding and advanced consumers, as well as to increased competition from nonbanking firms. Technology is fundamental to both the bank’s ability to adapt its architecture and affiliated business model as well as to implement the underlying strategy. Advances in technology enable banks to respond to competitive market situations by making better credit decisions, by using modern risk management systems and by creating and using new instruments. Therefore, technology allows banks to change from traditional banking business models based on selling their own mainstream banking products to a broker-like approach with banks coordinating and integrating a range of products and services from outside suppliers and providing these at a low(er) cost.

Also, technology-based structural change results in lower costs for generating, processing, and coordinating information as well as greater availability of risk management tools.

The emerging financial landscape is becoming standardized in terms of distribution activities, while a high degree of flexibility, cost efficiency and superior quality are assumed. The main concern for banks now is how to deploy contemporary technologies for developing and selling cutting-edge, high-margin services and products to demanding customers in a highly competitive market. Bankers need to transform themselves into competitive lifecycle engineers and “masters of the information and knowledge universe.” Banking firms need to be able to follow technological developments and identify and absorb appropriate technologies into their systems landscape. They need to have sufficient and efficient access to information about borrowers from third-party databases.

These capabilities require a new business architecture, which in turn is influenced by a revised up-to-date business model that consolidates information and transaction capabilities so as to create exceptional value.

Framework Explicating Change and Its Effect on a Firm’s Internal Logic

Banks have to consider appropriate measures for handling global macroeconomic changes. A step towards this is a framework that guides banks toward structures and themes to be analyzed, and provides a collection of interrelated concepts for confronting the current upheaval within the banking industry. This framework explores how fit influences the link between macroeconomic changes and subsequent changes in the firm. The common focus would be on performance and choices of activities, policies, organizational structures, capabilities and resources. Internal fit among these choices can lead to sustainable competitive advantage because it makes imitation difficult. However, a tight fit and sustainable competitive advantage are ambivalent because macroeconomic changes negate the value of organizational capabilities and complementary assets. A firm with tight activities must basically modify all of its choices simultaneously to confront environmental change successfully. The marginal payoff to adjusting each choice in response to some external change is increased by a tighter fit.

Thus, each choice influences the payoff to adjust all of its choices. A tight fit makes the firm...
sensitive in multiple areas, and able to respond quickly to environmental changes. Hence, the classification between fit-conserving change and fit-destroying change is useful, because managers must react differently to these changes. Without the knowledge of this particular framework, managers would react arbitrarily.

**Choice, Uniqueness, Fit of Activities Are Crucial for Sustainability**

Strategic decisions involve consciously doing something differently, ultimately resulting in a sustainable advantage (or disadvantage). Hence, competitive strategy calls for a different approach based on a different choice and set of activities, being able to deliver a unique mix of value that is desired by the market. An important factor is the impossibility of imitation by competitors. Uniqueness is reached through complex interactions between various activities in a firm that are not reducible to the sum of the individual activities. It is the synergies between the activities that result in value, and not the activities themselves. Choice means determining which activities a firm will perform and how individual activities are configured. Fit locks out imitators by creating a chain that is as strong as its strongest link.

Recently, managers have turned to core competencies, critical resources and key success factors. In this respect, fit is a crucial component of competitive advantage — e.g., production lines with high degrees of model variety, combined with inventory and order processing for minimizing stock, a sales process explaining and promoting customization and order processing for minimizing stock, a sales process explaining and promoting customization coupled with advertisements that accentuate the benefits of product variations meeting customer needs. It is these complementarities that provide sustainability and comprehensiveness in strategy. Though fit of activities can be generic, applicable to most firms, the most valuable fit is strategy-specific, creating a firm’s unique position. In Porter’s view, three types of fit exist:

- **First-order fit**: The consistency between each activity (function) and the overall strategy, the firm aligning activities with low-cost strategy, distributing funds directly to avoid commissions to brokers.
- **Second-order fit**: This involves reinforcing activities, in which firm A uses on one hand industry specialists to augment its product quality and on the other hand uses firm B’s platform for introducing its products. Hence, in using a specialist and firm B’s platform, firm A’s marketing activities reinforce one another, lowering total marketing costs.
- **Third-order fit, or optimization effort**: For example, a retailer of casual clothes focuses on product availability by restocking basic clothing (a collection with few colors) more frequently (daily), and thus avoids large in-store inventories and lowers the cost of implementing the short model cycle.

Overall, the exchange of coordinated information across activities eliminates redundancy and lowers inefficient efforts. In every type of fit, the whole matters more than the individual activities. Consequently, the strategic fit of activities is fundamental for sustainable competitive advantage. Market positioning based on systems of activities is more sustainable compared to individual activities. It is harder for competitors to copy interlocked activities compared to imitating particular activities — e.g., marketing approach, process technology or replicating a set of product features. Porter provides an excellent mathematical example — the probability a competitor can match any activity is often less than one. Hence, probabilities compound quickly to a level in which matching the entire system becomes highly unlikely.

Therefore, established firms that would like to reposition themselves are forced to either reconfigure some, many or all activities.

**Performance Landscape Framework for Understanding and Interpreting Change**

When explicitly looking at a specific stage of change, particularly upstream, Siggelkow identifies signals coming from environmental change and affecting the fit of activities within the firm through the concept of a performance landscape. It is important to understand that “one must analyze the firm as a system of interconnected choices: choice with respect to activities, policies and organizational structures, capabilities, and resources.”

Furthermore, “the implication of a tight fit for the sustainability of a competitive advantage is ambiguous.” In order to realize a tight fit of activities, managers have to understand this concept and how it relates to the concept of performance landscape developed by Sewell Wright. The framework thus offers an alternative and complementary classification.” With this classification, the effect of environmental change on firms can be described as fit-destroying or fit-conserving.
In general, “for a firm that occupies a peak, environmental change can affect both external and internal fit.” Siggelkow distinguishes four cases:

- **No change:** If either external or internal fit is affected, (but) the environmental change has no impact on the firm in question.
- **Detrimental fit-destroying change:** If both external and internal fit are affected, the firm finds itself at a lower elevation (lower external fit) and located away from a peak (lower internal fit).
- **Beginning fit-destroying change:** In this case, the firm’s performance has not decreased, yet internal fit has been compromised by the environmental change.
- **Fit-conserving change:** Although internal fit has not been affected, external fit has decreased. Thus, the environmental change has affected the internal logic of the firm’s system while decreasing the appropriateness of the system—the activities—as a whole.

Overall, the framework explores how fit influences the link between environmental changes and subsequent changes in the firm. The classification between fit-conserving change and fit-destroying change is useful, because managers must react differently to these changes. At the point when a firm does not react to customer demands to cut prices and provide reordering, technological changes create a new performance landscape, and hence a strategic infliction point exists—what happens to a business when a major change takes place in its competitive environment. Though strategic infliction points are caused by technological change, they are more than just technological change. They can be caused by competitors, but are also more than just competition. They are full-scale changes in the way business is conducted. Hence merely adopting new technology or battling the competition, as firms are used to doing, may be insufficient.

Explaining a business model solely based on phenomena—i.e., crises with concomitant new demands imposed on banks—is vague. Rather, what is needed is to apply a framework that explains how fit influences the link between environmental changes and subsequent firm changes. A mechanism that focuses on generating a business model in response to the environmental demands is preferable.

**Fit Between Firm’s Choice and Business Model**

A rugged fitness landscape reflects the process of how a vague idea turns into an innovation and ultimately into a new product or service. The performance landscape, originally devised to explore how organisms and proteins evolve, is adapted for examining managerial search in the context of organizational studies regarding the adaptation of organizational attributes.

The functional aspects of business models are evaluated on the value proposition, market segments are identified, the structure of value chains are defined, cost structure and profit are estimated, a firm’s position within a value network is described and the competitive strategy is formulated. Business attributes such as product and service offerings, prices, advertising and sales strategy, target audience, location, customer service levels, financial structure, production/service delivery methods and distribution channels foster a climate for adaptation.

A study of the process of entrepreneurial adaptation of new ventures in terms of the exact relationship between uncertainty and ambiguity and the entrepreneurial search for a viable business model is based on Kaufmann’s and Levithal’s modeling. The results indicate the importance of differentiating between various types of adaptation. Clearly, “new ventures can adapt their business model following a local search strategy or search through long jumps.”

The first form “implies that [entrepreneurs] gradually refine and adapt their business model by changing only one (or, in real life, only a couple of) aspects of the business model at a time.” The second, trying out unrelated business models, motivates for a discerning “between these two types of adaptation since they yield different results under different circumstances.” The strategy of local search is superior regarding “performance and survival under situations of moderate ambiguity,” whereas “search through long jumps becomes more interesting as ambiguity increases.”

Hence, situations of moderate ambiguity require that “new ventures should adapt their initial business model through experimentation with closely related alternatives,” whereas highly ambiguous situations demand “opportunities that are far removed from the initial business
model.” Further, the identification of an alternative business model should also be based on the degree of ambiguity. Although rugged landscapes do influence the performance level of firms, they do not affect the “appropriateness of different search strategies.”

Ambiguity is the trigger for divergent behavior – search through long jumps. Hence, a reduction “of ambiguity can then trigger convergent behavior and the discovery of a possibly viable business model.” Even when facing “zero ambiguity, search through long jumps becomes superior to local search in the long run.”

Novelty-centered business models are another option for evaluating the implications of business model and market strategy on a firm’s performance design themes. These involve three product market strategy choices: cost leadership, differentiation and timing of entry into a market.24 Like business model design themes, product market strategy choices are not exclusive and exhaustive. For example, managers peruse simultaneously a strategy of product differentiation, cost leadership and early market entry.

Now the question arises, which business model fits the firm’s choice, the activities a firm will perform and how individual activities are configured. What makes a good fit between these constructs? Siggelkow’s performance landscape indicates25 “coherent configurations of design elements as good fit” relative to the environment, justifying a firm’s choice and the appropriate fit of activities. Consequently, design elements X and Y fit well, if complementarity between them exists – i.e., the marginal benefit of X increases with the level of Y, and if the levels of X and Y adjust optimally to the local performance optimum.26

Zott and Amit in their study investigate “which combinations of business model design themes and product market strategies fit well.” The findings indicate that a “firm’s product-market strategy and its business model” are “distinct constructs that affect the firm’s market value.” They reflect the “significant effects of its interaction with product market strategy on the perceived performance of firms, as measured by market capitalization.” Concretely, “empirical support for the theoretical predictions about the positive and significant interactions between novelty-centered business models and various product market strategies” exists. Further, the “boundary-spanning transactions” between a firm and its environment of partners, customers and suppliers provide for an “understanding [of] wealth creation and performance.” With a business model being the source of competitive advantage, “competitive advantage can emerge from superior product-market positioning, as well as from the firm’s business model” both enhancing the firm’s performance, either independently or collaboratively.

As a consequence, for a firm to remain competitive it needs to investigate competition among various business models within an industry and consider product market competition. This competition on business model questions a firm’s wealth-creation potential based on a given business model. Defining business models and the concomitant choice, product market strategy design can be done when defining and redefining business models. Entrepreneurs, at the same time, can identify customer needs and map them against the choice offered by competitors.28

Overall, when environmental changes impose a change on the landscape of a firm, the framework of performance landscape provides hope for situations of varying landscapes in terms of choice (activities a firm performs), search for an appropriate business model (organization’s core logic for generating value) and the set of activities with its internal and external fit.

Requirements, Key Drivers and Diverse Fit

Competitive strategy requires uniqueness – a firm adopts a differentiated choice and set of activities to deliver a unique mix of value. To achieve this, a crucial factor is the impossibility of imitation by competitors. Such uniqueness can be achieved through complex interactions between various activities within a firm that are not reducible to the sum of the individual activities. Therefore, choice determines the activities a firm performs, and determines how individual activities are configured. In this respect, operational effectiveness means achieving excellence in individual activities, whereas strategy means the combination of these activities. Hence, fit locks out imitators by creating a chain that is as strong as its strongest link. Managers are therefore focusing on core competencies, critical resources and key success factors. In this respect, fit is a crucial component of competitive advantage.

The key drivers shaping the contemporary banking business model are accessibility for customers, the increasing demand for m-wallet, (beginning fit-destroying change) with a lower internal fit, as shown in Figure 1, tighter regula-
tions (detrimental fit-destroying change) with a lower external and internal fit and assurance of increased operations efficiency because of decreased performance/profit with a lower internal and external fit. With banks required to be accessible anywhere and everywhere (beginning fit-destroying change) a lower internal fit exists, and to continuously adjust to regulations and to decreasing performance and profitability, a lower external fit and internal fit is indicated. Investment and asset management institutions need to adjust to changes in infrastructure, regulations and markets.

Ultimately, financial institutions need to understand their customer base and reassess their value proposition of products and services. Further, constant efficiency improvement of the operational model, hence, business and operational model adjustments in response to the macroeconomic environment and its demands (e.g., mobility, regulations and future of work) as well as process optimizations, reorganizations and cost structure optimizations are indications of lower internal fit. Banks in developed economies, challenged in growing revenues, are confronted by detrimental fit-destroying change. Both external and internal fit are affected, and the firms find themselves at a lower elevation (lower external fit) and located away from a peak (lower internal fit).

The triggers for these challenges are the period of declining interest rates (lower external fit) and the accompanying decline in banking profits (lower external and internal fit) with the end of the savings and loan crisis and the bottoming out of interest rates in 2003 — hence, for declining interest rates indicating a fit-conserving change and decreasing profits a detrimental fit-destroying change.

**Conclusion**

The key issue for the banking industry currently is how to activate contemporary technologies for developing and selling cutting-edge, high-margin services and products to demanding customers in a highly competitive market. We have presented a framework for visualizing the relationship between macroeconomic changes and fit, in the performance landscape. According to this concept, certain combinations of flexibility and product variety illustrate the effect of change. Thus, environmental changes can be seen as the driving force for changes in the landscape. For example, in 1900 with the available technological and production potential, a firm’s choice of low variety and low flexibility could be very efficient, whereas in 1980 choices with high variety and high flexibility introduced a high-volume production that could be realized through technology.

This paper provides an outline of the possible effects of the demands and key challenges that the current era imposes on the current banking model. It further elaborates their effects on external and internal fit.

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**Change Framework**

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Source: Siggelkow, 2001

Figure 1
Footnotes

22. Ibid.
About the Author

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