SPRING 2009 VOL. 50 NO. 3

MITSloan Management Review

Peter Navarro

Recession-Proofing Your Organization

Please note that gray areas reflect artwork that has been intentionally removed. The substantive content of the article appears as originally published.

REPRINT NUMBER 50311

Recession-Proofing Your Organization

Put aside the myth of the 'tamed' business cycle. In the wake of the current economic downturn, managers must learn how to use the business cycle for competitive advantage.

BY PETER NAVARRO

THE LEADING QUESTION
What can managers and organizations do to anticipate downturns and mitigate the worst effects of a recession?

FINDINGS

- ▶**Managers can forecast the business cycle using data culled from a daily reading of the financial press.**
- ▶**Executive teams must learn to implement a set of business-cycle management strategies in response to the forecasting data.**
- ▶**Organizations that "master the cycle" can outperform their rivals and become recession-proof.**

UNTIL THE 1980S, many economists, finance professionals and strategists believed the business cycle, like the stock market, was a "random walk" that couldn't be predicted — and couldn't be managed. In recent years, however, numerous studies have demonstrated the power of such forecasting variables as the Economic Cycle Research Institute's Weekly Leading Index, stock prices and the bond market's "yield curve."[1] If the business cycle can indeed be forecast in an accurate and timely enough manner, then shouldn't managers who cultivate economic and financial market literacy and learn how to apply forecasting models manage the business cycle better than their competitors?

My 2004 article "Principles of the Master Cyclist"[2] made the case for why companies need to learn how to integrate strategic business-cycle management into their tool kits. It presented a set of principles that savvy managers can use in making tactical decisions (involving, say, inventory management, marketing and pricing) and strategic decisions (involving such things as capital expansion and mergers and acquisitions), and it offered case studies supporting the argument.

2004 was not a particularly good time to be promoting business-cycle awareness to management. The global economy had recently recovered from the relatively mild 2001 recession. The expansion, in turn, had fueled a widespread perception that the business cycle had largely been "tamed" by the sophisticated application of discretionary fiscal and monetary policies. For many business executives, the future seemed bright. Thoughts of managing the business cycle for strategic advantage were on the back burner.

Today, the myth that business cycles don't matter has been completely shattered — not just by the current recession but also by the U.S. Federal Reserve System's role in formulating the economic policies that helped trigger the crash. In the wake of the meltdown, learning to manage the business cycle strategically — and recession-proofing one's organization — have become critical topics for both managers and academics. This article therefore extends the work of my original article. (See "About the Research.")

The importance of linking company performance to strategic business-cycle management cannot be understated. Research across diverse functional areas has been dedicated to identifying factors that will enhance company performance, and practitioners are constantly searching for new ways to boost profits.

ABOUT THE RESEARCH

I began the Master Cyclist Project in September 2000 as an analytical, integrated and experiential vehicle to teach MBA students how to strategically manage business-cycle risk.

Phase 1 began with an extensive set of case studies designed to identify specific business-cycle management strategies and tactics. From these cases and a companion literature review emerged the set of principles presented in "Principles of the Master Cyclist," published in the *MIT Sloan Management Review* in 2004.

Phase 2 involved more intensive case study analyses designed to reveal characteristics of an organization that predisposed it to effective business-cycle management. This yielded insights such as the need for a strong business-cycle orientation, the importance of economic literacy and the critical roles of organizational structure and culture.

Phase 3 involved a collaboration with strategist Philip Bromiley and doctoral student Pedro Sottile, both of University of California, Irvine, on a much more systematic test of the association of company performance with strategic business-cycle management behaviors. This study was the first to analyze business-cycle management behavior in a multidisciplinary, rather than a single functional area, context. It compared the stock price performance of 70 high- versus low-performing companies, sorted into 35 "matched pair" rivals, over a five-year period before and after the March 2001 recession. These matched pairs represented 35 subindustries in the S&P 500. The econometric results provided significant support for a strong association between company performance and strategic business-cycle management.

Managers need to focus on three major activities to advance business-cycle management:

- Developing and deploying forecasting capabilities to anticipate movements and key turning points in the business cycle
- Applying well-timed business-cycle management strategies and tactics across the functional areas of the organization in a synergistic and integrative fashion
- Over the longer term, building the recession-proof organization with an orientation toward business-cycle management, an executive team with a high degree of economic and financial market literacy, a facilitative organizational structure and a supportive organizational culture

Step 1: Developing and Deploying a Forecasting Capability

"Principles of the Master Cyclist" provided only a brief summary of the various forecasting tools available to managers. Because of the critical importance of accurate forecasts, I have developed a more systematic approach to help managers monitor the business cycle. The first tool involves the deployment of in-house computer forecasting models. As a second option, companies may use outside subscription forecasting services either to complement or replace in-house models. Any organization that is serious about strategic business-cycle management needs to use one or the other, or a combination of the two.

That said, one of the most important lessons I have learned working both with executive MBA students and executive teams is that the task of forecasting the business cycle cannot be delegated to a remote group of economists. Rather, business executives must learn to become business-cycle forecasters. This may seem like a huge and complicated undertaking for managers who already have multiple responsibilities, but it really isn't as daunting as it sounds. I have developed a relatively simple and powerful forecasting method that draws on a handful of forecasting tools and information that is published daily or weekly in newspapers such as *Barron's*, the *Financial Times*, and *The Wall Street Journal*. (See "How to Become Your Own Business-Cycle Forecaster.")

Because changes in the GDP growth rate chart movements in the business cycle, the most important tool is the "GDP forecasting equation." The GDP growth rate is driven by four components —

consumption, business investment, net exports and government spending. By using a select group of leading economic indicators such as consumer confidence, retail sales and the Institute for Supply Management index as indicators of the components of the GDP equation, business executives can develop a keen sense of where the business cycle may be heading.

In addition to tracking the GDP forecasting equation, executives should follow the stock market trend and monitor the shape of the bond market's "yield curve," which defines the yield spread between short- and long-term government bonds. Numerous research studies have validated the predictive power of these tools. In addition, the last two recessions were accurately signaled by bearish turning points in the stock market, while yield curve inversions have accurately predicted six of the last seven recessions, with only one false signal.[3]

By using these forecasting tools, business executives can not only anticipate shifts in the business cycle but also enhance their economic and financial market literacy.

Step 2: Applying Well-Timed Strategies and Tactics

My 2004 article explained how the "master cyclist" project at the University of California, Irvine had developed a set of business-cycle management principles that defined how a market-literate management team would approach short-run *tactical* decisions regarding inventory, production, marketing and pricing as well as more *strategic* choices regarding capital expansion, acquisitions and investors. I have since expanded and revised the original set of these strategies and tactics. (See "Timing Is Everything: When to Do What," p. 48.)

Human Resources Management In 2004, I pointed out the tactical advantage of trimming the workforce in "anticipation of a contraction — even as rivals continue to hire at premium wages."[4] However, I also noted that savvy managers begin to hire sooner than competitors in anticipation of an upturn. Companies may be able to cherry-pick from the relatively deeper pool of unemployed labor and thus greatly enhance the quality of their staff.

This raises questions about whether newly hired workers will choose to remain at a company once expansion resumes and wages begin to rise. Research shows that reasonably satisfied workers do not actively search for information on other employment, even if they might be able to earn more elsewhere.[5] In fact, changing jobs may involve substantial costs (including moving expenses, loss of accumulated benefits, loss of pension, etc.). Consequently, companies that hire employees during recessions are typically able to keep many of them.

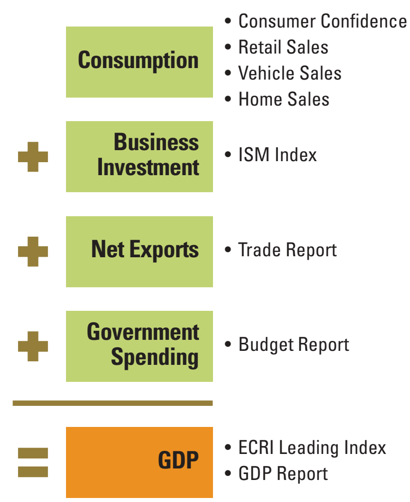
Marketing and Advertising Spending money on marketing and advertising during a recession may often seem like a low priority, but here, too, timing is important. As I wrote in 2004, "As a countercyclical measure, an executive team would want to temporarily boost marketing expenditures to trim inventories in anticipation of a downturn. Once inventories were thinned, marketing expenditures

HOW TO BECOME YOUR OWN BUSINESS-CYCLE FORECASTER

"Give an executive team a forecast, and guide it for a quarter. Teach an executive team how to forecast, and guide it for a lifetime." This aptly captures the value of learning how to become your own business-cycle forecaster. The primary tool used in a method I have taught to thousands of MBA students and managers is the "GDP forecasting equation."

A nation's GDP measures its economic growth, and changes in the GDP growth rate chart movements in the business cycle. By following the GDP's four components — consumption, business investment, net exports and government spending — any manager can develop a very keen sense of where the business cycle may be heading and quickly spot potential recessionary dangers ahead.

At right are the economic indicators and reports that I recommend managers regularly follow to anticipate movements and key turning points in the business cycle.



There are close to 100 reports a month in the United States alone on the macroeconomic calendar. However, this much smaller selection of indicators, used in conjunction with the stock market and yield curve indicators, is more than sufficient for individual forecasting purposes. When teaching this forecasting method, I strongly recommend the use of Moody's Economy.com Dismal Scientist Web site as a supplement to the coverage these indicators are given in the financial press. It provides a one-stop shop for any manager serious about developing economic literacy and becoming a master cyclist.

would be ratcheted down to weather the contractionary storm."[6]

Highlighting the tactical and synergistic use of advertising to trim inventories was correct, but suggesting that cutting marketing expenditures provided benefits was not. In fact, a wealth of research indicates that countercyclically increasing marketing expenditures in a recession is one of the most effective ways to build brand and market share.[7] Advertising activity declines sharply during recessions. As a result, the ad market is less congested, and compelling messages can stand out more clearly. Moreover, advertising rates are generally lower, so you can get more bang for the buck.

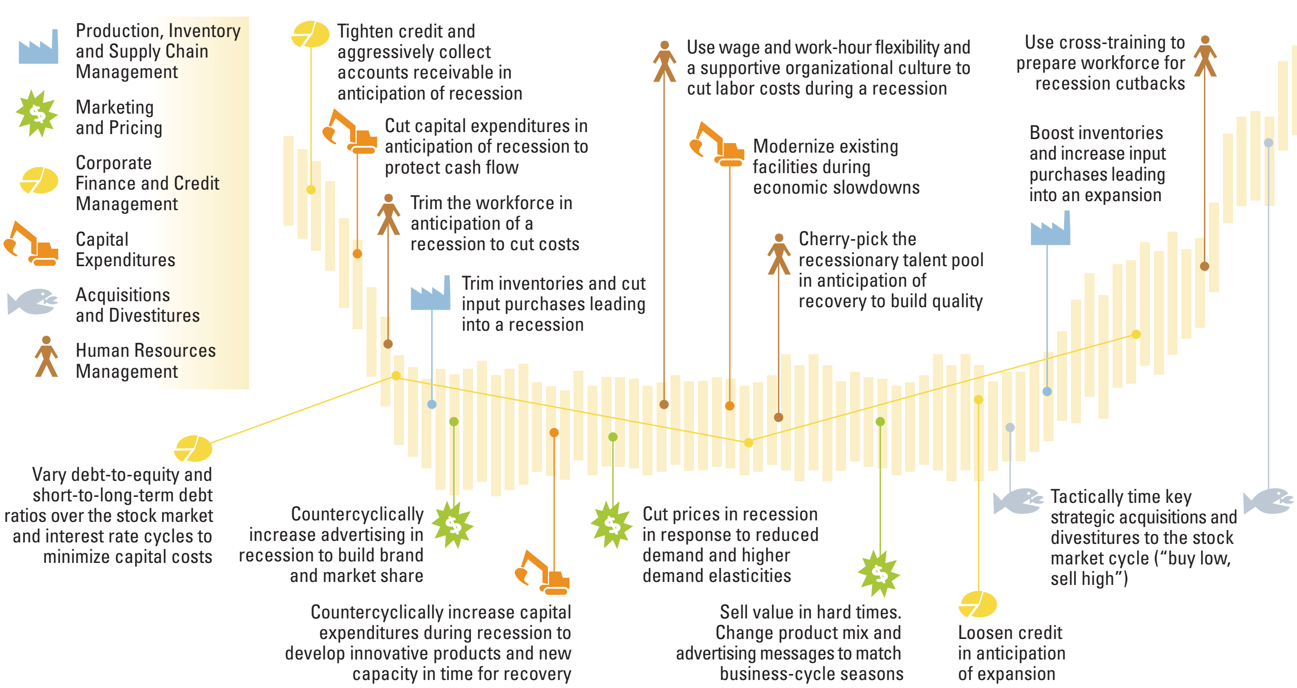
This doesn't mean you should simply pour more money into the same marketing program you had in place before the downturn. Instead, as many companies have found, both the advertising messages and the product mix need to change to meet the changing moods of the business-cycle seasons.

For example, during the 2001 recession, El Pollo Loco, a fast-food chain based in Costa Mesa, California, shifted its product mix away from white meat, to less expensive dark meat value meals. In a similar vein, the Dallas-based Centex Corp., a large homebuilder company, tactically shifted its product mix to the lower end of the pricing spectrum. The company's executive team has learned over multiple cycles that the lower end of the housing market is more insulated from cyclical variations than the high end.[8] As a general rule, the product mix should meet needs in bad times and wants in good times, and your marketing messages should sell value in recessions and style in booms.

Pricing the Cycle Many managers do raise prices during recessions in hopes of offsetting revenue declines as demand weakens. Unfortunately, this is a fool's game that goes against the grain of one of the most important concepts in economics — the price elasticity of demand. A critical point — and one that is rarely taught in either undergraduate economics or business school classes — is that price elasticities are *not* immutable. Instead, price elasticities generally become *more elastic* as a recession takes hold, thereby making products more price

TIMING IS EVERYTHING: WHEN TO DO WHAT

During the business cycle, market-literate managers need to make short-run tactical decisions (regarding inventory, production, marketing and pricing) as well as longer-term strategic choices (involving capital expansion, acquisitions and investors).



sensitive.[9] This means that if a company has set a product price properly during the expansion (using price elasticities to maximize total revenues), price cutting in a recession makes sense not just because overall demand for the product is lower (i.e., the demand curve shifts in) but also because the demand has become more elastic (i.e., the demand curve also becomes flatter).

Capital Expansion and Modernization In 2004, I emphasized the need for companies to *decrease* capital expenditures in anticipation of a recession so as to not be saddled with a significant debt load as cash flow diminishes. In the late stages of the economic expansion with a recession on the horizon, "Johnson & Johnson cut its capital expenditures by over $100 million — the first decrease in seven years. As the company significantly built up its cash reserves, it saw double-digit growth in both revenues and earnings."[10]

I have been strongly persuaded by subsequent case analyses that it is equally important to countercyclically *increase* capital expenditures once a recession hits. By doing so, a company will be first to market with products that reflect the latest innovations and styles. (A company that does this extraordinarily well is Intel Corp., which has historically used recessionary periods to build new capacity to turn out its next generation of microprocessors.)[11]

Increasing capital expenditures during a recession has another big advantage: The costs of capital, construction labor, equipment and raw materials all tend to be lower. Finally, a recession is an excellent time to replace or modernize existing facilities because the opportunity costs of lost capacity utilization are relatively low.

Acquisitions and Divestitures While broad *strategic* considerations inform the decisions to acquire or divest, business-cycle management considerations provide important guidance as to *when* to implement the decisions. Ideally, executive teams will pursue a "buy low, sell high" strategy, acquiring companies at bargain prices during downturns (and accompanying bear stock markets) and divesting unwanted companies at premium prices in the late stages of expansion (when stock prices are heading up).

Production, Inventory and Supply Chain Management Strategic inventory management balances inventory-holding costs against stock-out costs. Companies that master the cycle will trim inventories in anticipation of a recession and expand inventories as they gear up for an expansion.

Large stockpiles of production inputs such as raw materials and components can depress profits as the business cycle shifts from late expansion into early recession. Stockpiles are all the more costly because companies are likely to pay premium prices during the late expansionary stage of the business cycle, when there is robust demand. Accordingly, managers who take advantage of the cycle trim input purchases in anticipation of a recession as they scale back on production.

Corporate Finance and Credit Management This set of business-cycle management principles did not appear in the 2004 article. However, additional research has yielded this promising new set of strategies and tactics.

In the area of corporate finance, the spread between short- and long-term interest rates continually narrows and widens over the course of the business cycle and the related interest rate cycle. For example, as a recession ensues, the Federal Reserve will begin to rapidly cut short-term rates and thereby will typically widen the spread. In a similar vein, the relative costs of equity and debt capital vary over the course of the business cycle as stock and bond prices move, often in opposite directions. These observations suggest that a business cycle-sensitive corporate finance team can reduce capital costs by paying closer attention to managing the short-to-long-term debt and debt-to-equity ratios.

In the area of credit management, default risk rises during recessions and falls during expansions. This means that companies should quickly tighten credit and reduce receivables in anticipation of a recession. Later, as the economy picks up, they can loosen credit policies to encourage customers to buy.

Step 3: Building a Recession-Proof Master Cyclist Organization

Business historian Alfred Chandler suggested in his classic book *Strategy and Structure* that changes in strategy may require companies to change their structure.[12] Effective business-cycle management forces organizations to be sensitive to the business cycle. Such organizations need (1) a strong business-cycle orientation; (2) an executive team that is highly literate about macroeconomics and the financial markets; (3) an organizational structure that facilitates the flow of forecasting data and timely decision making; and (4) an organizational culture that supports business-cycle management activities.

A strong business-cycle orientation. Companies need to recognize that movements in the business cycle represent a potential source of competitive advantage and will determine both the flow and stability of future earnings. Organizations with a strong business-cycle orientation are outwardly focused on movements in the business cycle and broader macroeconomic events. They seek a continuous stream of information from various forecasting resources, suppliers and customers, all of which help in forecasting future demand for both resource planning and strategic purposes.

The high cost of not having a business-cycle orientation is underscored by one of the most important — and counterintuitive — findings of my collaborative research into how companies use business-cycle management: Even if a company excels at managing the business cycle in one area (say, marketing or staffing), it doesn't necessarily follow that the company will manage effectively in every function.[13]

One reason for this compartmentalized behavior is that companies that are skillful at business-cycle management in selected areas don't always see it as broadly applicable across the full spectrum of management functions. In addition, the skills may be concentrated among a particular set of individuals.[14]

Macroeconomic and financial market literacy. Executives who are not up to speed on the basic concepts and tools of economics and financial management are very limited in their ability to interpret forecasting data and to anticipate movements and key turning points in the business cycle.

By learning how to become astute economic forecasters, executives will significantly boost their literacy. In addition, an organization with a strong business-cycle orientation will likely adopt training programs to boost financial market literacy.

A facilitative organizational structure. A company's organizational structure must facilitate the timely acquisition, processing and dissemination of forecasting information and promote the timely implementation of appropriate strategies and tactics. The consequences of not having this kind of organizational structure are graphically illustrated by Conexant Systems Inc., a semiconductor company based in Newport Beach, California. Prior to the 2001 recession, Conexant's middle managers clearly saw a recession coming because of rapidly deteriorating order patterns. Lacking the appropriate organizational structure, however, they were unable to sound the alarm in a way that got the attention of senior managers. The company went forward with a production plan based on a forecast that was far too optimistic. The result: A once high-flying technology stock became a penny stock.[15]

A supportive organizational culture. This aspect of the organization goes hand in glove with a business-cycle orientation. In essence, the culture of a master cyclist organization must support all elements of strategic business-cycle management. The example of Nucor Corp., headquartered in Charlotte, North Carolina, helps illustrate the importance of a supportive organizational culture.

As part of its cultural fabric, Nucor employees have embraced an innovative "share the pain" program. This program provides for voluntary salary cuts and reduced work hours when times are tough as a means of avoiding painful layoffs. In this way, Nucor is able to manage its production costs during downturns with little labor strife and without losing valuable talent.[16]

Managing the Business Cycle in Practice

"Principles of the Master Cyclist" noted that the yield curve, the stock market and The Conference Board's Composite Index of Leading Indicators together provided an extremely strong signal of the impending March 2001 recession. I also included several case studies illustrating how some companies had impressively adopted master cyclist principles.

For example, E. I. du Pont de Nemours and Co. used the 2001 recession to accelerate the pace of its modernization programs and to close a number of aging facilities as part of a broader effort to change its product mix. Southwest Airlines Co. used an internal forecast of a significant global shortage of crude oil to hedge nearly 100% of its fuel costs and achieved earnings that were almost three times the industry average.[17]

At the time of this writing, the Master Cyclist Project is conducting a fresh round of case studies targeting the 2008-2009 crash with the help of a large army of MBA students. It is too soon to know which companies will be the most successful at navigating the dangerous shoals of 2008-2009 and which will emerge with a competitive advantage. What should be clear from even a cursory review of the forecasting data available is that no well-informed manager who had paid attention to that data would ever have been caught flat-footed by the 2008-2009 crash.

As with the 2001 recession, the yield curve inverted well in advance of the 2008 downturn. As an equally clear recessionary warning, the stock market hit a peak in October 2007 and established a clear downward trend by December. The highly accurate Economic Cycle Research Institute's Weekly Leading Index also turned down in June 2007 and, in December 2007, hit its worst reading since the 2001 recession. The broader point is that any organization with a strong business-cycle orientation that had deployed appropriate forecasting capabilities could have, and should have, seen trouble brewing. Organizations caught by surprise have learned a painful lesson: A recessionary economy can damage a company far more than any 10 competitors.

For managers, the most enduring lessons of the 2008 crash may well be that they must develop a much more comprehensive view of the business cycle and learn how to recession-proof their organizations. Senior management cannot delegate business-cycle management responsibilities to others in their organizations. All managers must become their own economic forecasters, learn how to apply appropriate strategies and tactics over the course of the business cycle and, over time, build their organizations with a strong business-cycle orientation and an appropriate structure and culture. Organizations that master the business cycle are made, not born.

***Peter Navarro** is a professor at the Paul Merage School of Business, University of California, Irvine, and author of* Always a Winner: Finding Your Competitive Advantage in an Up and Down Economy *(Wiley & Sons, forthcoming). Comment on this article or contact the author at smrfeedback@mit.edu.*

REFERENCES

1. Representative studies include A. Estrella and F.S. Mishkin, "Predicting U.S. Recessions: Financial Variables as Leading Indicators," Review of Economics and Statistics 80, no. 1 (February 1998): 45-61; C.R. Harvey, "Forecasts of Economic Growth from the Bond and Stock Markets," Financial Analysts Journal (September-October, 1989): 38-45; R.D. Laurent, "An Interest Rate-Based Indicator of Monetary Policy," Economic Perspectives 12 (January 1988): 3-14; and M. Chauvet and J. Piger, "Identifying Business Cycle Turning Points in Real Time," Review 85, no. 2 (March-April 2003): 47-61.

2. P. Navarro, "Principles of the Master Cyclist," MIT Sloan Management Review 45, no. 2 (winter 2004): 20-24.

3. For sample studies, see Note 1 above.

4. Navarro, "Principles," 22.

5. J.G. March and H.A. Simon, "Organizations" (New York: Wiley & Sons, 1958).

6. Navarro, "Principles," 22.

7. Representative studies include J. Kypriotakis, "Marketing in Tough Times," 2002, www.lysisintl.com; and R.G. Picard, "Effects of Recessions on Advertising Expenditures: An Exploratory Study of Economic Downturns in Nine Developed Nations," Journal of Media Economics 14, no. 1 (2001): 1-14.

8. Details may be found in P. Navarro, "The Well-Timed Strategy: Managing the Business Cycle for Competitive Advantage" (Upper Saddle River, New Jersey: Wharton School Publishing, 2006), 102-104.

9. R.F. Harrod, "Imperfect Competition and the Trade Cycle," Review of Economic Statistics 18, no. 2 (May 1936): 84-88.

10. Navarro, "Principles," 23.

11. See Navarro, "Well-Timed Strategy," 28-30.

12. A. Chandler, "Strategy and Structure: Chapters in the History of the Industrial Enterprise" (Cambridge: MIT Press, 1969).

13. See P. Bromiley, P. Navarro and P. Sottile, "Strategic Business Cycle Management and Organizational Performance: A Great Unexplored Research Stream," Strategic Organization 6, no. 2 (May 2008): 207-219.

14. Such compartmentalized behavior appears to fit the pattern of localized learning described in R.M. Cyert and J.G. March, "A Behavioral Theory of the Firm" (Englewood Cliffs, New Jersey: Prentice Hall, 1963). In "local neighborhood search," companies respond to problems identified in a particular area by searching for solutions in that area.

15. Navarro, "Well-Timed Strategy," 79-81.

16. Ibid, 69-71.

17. Ibid, 134-136.

Reprint 50311.