

# ESP TEXTS

Stable isotope analysis has emerged as one of the primary means to analyze the structure of food webs. Stable isotopes are especially useful because they provide time- and space-integrated insights into trophic relationships among organisms, and thus can be used to develop models of trophic structure. Many of the first applications of stable isotope data in a food-web context were critical advances, although largely qualitative, providing for broad inferences based on relative isotope values of consumers and resources (Haines & Montague, 1979; Peterson, Howarth & Garritt, 1985; Zieman, Macko & Mills, 1984). Over the past 10 years, a series of more quantitative approaches for analyzing stable isotope data has emerged. These approaches have dramatically improved our understanding of food webs, for example, providing new insight into food-chain length (Post, Pace & Hairston, 2000), niche variation (Martínez del Río *et al.*, 2009a; Moore & Semmens, 2008; Semmens *et al.*, 2009b; Votier *et al.*, 2010), and human-driven shifts in community structure (Layman *et al.*, 2007b; Schmidt *et al.*, 2007).

To understand the economics of the model, first consider bonds. Consistent with the empirical evidence reviewed shortly, a disaster leads on average to a positive jump in inflation in the model. This has a greater detrimental impact on long-term bonds, so they command a high risk premium relative to short-term bonds. This explains the upward slope of the nominal yield curve. Next, suppose that the size of the expected jump in inflation itself varies. Then, the slope of the yield curve will vary and predict excess bond returns. A high slope will mean-revert and, thus, predicts a drop in the long rate and high returns on long-term bonds. This mechanism accounts for many stylized facts on bonds.

Worldwide interest in the potential health promotion and disease prevention benefits of food is being propelled by an aging population, emerging science, information technology, advances in food technology, consumerism, and rising health care costs. As a result, scientists in academia, government, and industry are studying whole foods as well as nutritive and nonnutritive food components as possible health modifiers.<sup>1</sup>

Effective customer relationship management (CRM) is important for any business (Pan and Lee 2003, Varian 2001). It has been shown that customer data can play a critical role in designing effective CRM strategies (Padmanabhan and Tuzhilin 2003). This is particularly the case in the online world where Web servers automatically collect vast amounts of behavioral data on customers. The term *analytical eCRM* (Swift 2000) has been used to refer to the use of data-based analytical methods for customer analysis, customer interactions, and profitability management. A characteristic of most of the existing approaches to eCRM is that they build profiles and models based on data collected by a single Web site from users' interactions with the site. In this paper we refer to such data as *site-centric* data, which we define to be clickstream data collected at a site augmented with user demographics and cookies (Sen et al. 1998). In this sense, traditional approaches are *myopic*: they are based on firms building models from data collected at their site only. However, the myopic nature of most current eCRM methods is not due to the fact that site-centric data is adequate for understanding customer behavior; rather, it is due to the nature of data ownership: most sites only have access to their own log files.

THE PIVOTAL EVENT in Shakespeare's Roman history play—Coriolanus's refusal to show his wounds—is without basis in Roman history. Whereas Plutarch's Coriolanus simply follows custom, exhibiting his scarred body in the marketplace as a matter of course, Shakespeare's Coriolanus balks at doing so, pleads against it, relents, declines to do so, argues against it, agrees reluctantly, refuses outright, relents again, and finally fails when put to a last test in the scene of his banishment in 3.3.<sup>2</sup> What is a mere formality of rhetoric for Plutarch's Coriolanus becomes for Shakespeare's Coriolanus an explicitly theatrical exhibit of shame: "a part / That I shall blush in acting" (2.2.144–45). His injured body offered up only as an inert object, viewed through a thin gown, will not in and of itself convey battle heroism. In order to gain votes for his wartime exploits, Coriolanus must add sound track and gesture; embellish the objective facts of his appearance with emotion and narrative; alter his voice, expression, stance, and dress; modulate his movements self-consciously; communicate his subjective experience to others; and, in short, take on the role of an actor.

The immune system recognizes and kills pathogens and tumor cells to protect the host. The immune system is composed of two major subdivisions, the innate or non-specific immune system and the adaptive or specific immune system. Innate immunity that is constitutively present and is immediately mobilized upon infection acts as the first line of defense against invading organisms. It is non-specific and reacts equally well to a variety of organisms. While the adaptive immune system acts as a second line of defense, responding specifically and generating immunological memory. Both innate immunity and adaptive immunity have humoral response and cell-mediated responses. In the innate immune system, humoral responses involve cytokines, complement system, coagulation system, lysozymes and other secreted substances; cell-mediated responses involve a wide number of cell types, including phagocytes (neutrophils, monocytes/macrophages, and dendritic cells), natural killer cells (NK cells), basophils, mast cells and eosinophils. In the adaptive or specific immune system, humoral responses (also called antibody responses) and cell-mediated responses are carried out by B cells and T cells, respectively.

**Wednesday 08.50 BST.** Stocks, commodities and growth-sensitive currencies are firm after the [Bank of Japan](#) became the latest central bank to pledge a monetary boost to tackle weak economic activity.

The FTSE All-World equity index is up 0.3 per cent as the Asia-Pacific region bounces 0.6 per cent.

Europe's FTSE Eurofirst 300 is up 0.4 per cent and S&P 500 futures suggest Wall Street will add 0.4 per cent, taking the US benchmark to within a couple of points of a fresh four-year high.

The dollar index, which tends to fall when the market mood is a bit more chipper, is down 0.1 per cent. This in turn is giving extra lift to dollar-denominated products. Copper, the development bellwether, is gaining 1.2 per cent to \$3.84 a pound and Brent crude is up 0.6 per cent to \$112.69 a barrel.

Tokyo was earlier one of the standout performers, the Nikkei 225 bouncing 1.2 per cent to a four-month high, after the Bank of Japan delivered a bigger than expected monetary jolt into the world's third-biggest economy, which has been struggling in the face of softening demand for its exports.

Dear

Your counter proposal on the above referenced project has been reviewed and is acceptable in its entirety.

We are enclosing an executed copy of the agreement along with two copies for your files.

We are enthusiastically looking forward to this project and are pleased about having the opportunity to work together.

8.1 The user acknowledges that all the elements of the shop and of each one of the products, information and materials contained in them, brands, structure, selection, classification and presentation of its contents, and the computer programmes used in this regard are protected by intellectual and industrial property of INDUSTRIAS VALLS 1 S.A. or of third parties, and that the general conditions afford the user no industrial and intellectual property rights other than those specifically provided for in them.

8.2 Unless it is authorised by INDUSTRIAS VALLS 1 S.A. or, as the case may be, by the third parties holding the corresponding rights, or unless legally permitted, the user may not reproduce, transform, modify, disassemble, perform reverse engineering, distribute, rent, supply or provide access to the public via any mode of public communication, any of the elements referred to in the previous paragraph. The user must use the materials, elements and information they access through the use of the shop for their own needs only, undertaking not to use, directly or indirectly the materials, elements and information obtained through them for commercial purposes.