Marketing Fraud: An Approach for Differentiating Multilevel Marketing from Pyramid Schemes

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A specific form of direct selling, multilevel marketing (MLM), experienced significant international growth during the 1990s, facilitated in part by the development of the Internet. A corresponding increase in the investigation and prosecution of illegal pyramid schemes occurred during the same period. These parallel activities led to increased uncertainty among marketing managers who used or wished to use the MLM approach. The authors examine similarities between the multilevel approach to marketing and activities associated with illegal pyramid schemes. A mathematical model is used to differentiate between the two on the basis of previous pyramid scheme cases and current U.S. law. The results of the model suggest key factors that marketers interested in MLM will need to consider when developing this type of distribution channel.

Though estimated to account for less than 1% of retail marketing in the United States (Berman and Evans 1998; Leeson 1997), multilevel marketing (MLM), also called "network marketing," dramatically increased in size and international expansion during the 1990s. Amway, described as the world's largest MLM firm, tripled its sales from 1991 to 1997, growing to an estimated $7 billion in gross sales (Vlasic 1998). The company reported 14,000 employees, 3 million distributors operating in 45 countries, and more than 1 million distributors in Japan alone (Amway 1997). The direct selling industry in general and other MLM firms such as Excel, The Pampered Chef, Nu Skin, and Herbalife also experienced increasing sales in the 1990s (Bloch 1996; Caminiti 1996; Direct Selling Association 2001a; Nu Skin 1997; Roha 1997).

Firms using an MLM approach offer a range of products and services, many involving repeat product purchases (Ella 1973) that are designed to foster positive feelings among purchasers over time (Kustin and Jones 1995). Previous academic inquiry has found that psychological factors associated with preexisting social ties are important to the "embedded markets" in direct selling and MLM (Frenzen and Davis 1990). By relying on independent contractors, the MLM firm faces managerial challenges similar in some ways to those of franchising (Granfield and Nichols 1975). Compensation structures used by MLM firms necessarily affect the amount of time a distributor spends recruiting compared with time spent soliciting retail sales and therefore affect the pace at which the MLM structure grows (Coughlan and Grayson 1998; Ettorre 1995). Although managerial issues influence the MLM process and consumer psychology influences the degree to which the approach may be accepted under conventional business practices, other researchers have recognized the structural similarities between MLM and pyramid schemes (Barkacs 1997; Grant 1988). Other than the current work, however, no study has taken a quantitative approach to distinguish the two activities.

Pyramid schemes perpetrate a fraud on consumers not unlike false advertising, misleading price claims, and other deceptive marketing practices. They prompt action based on a suggested market opportunity that does not truly exist or that is not accurately portrayed in the firm's marketing communications. In doing so, pyramid schemes cause consumers to misallocate resources and divert interest away from competing products and services. Marketing academics have a long tradition of researching fraudulent practices that compromise the consumer's position in the market (Converse 1959; Hollander, Keep, and Dickinson 1999; Kinnear 1997). The U.S. Federal Trade Commission (FTC) also has a long-standing interest through its role in consumer protection.[1]

Firms found to operate pyramid schemes in the 1990s frequently featured characteristics similar to MLM firms but had activities that resulted in financial losses for the overwhelming majority of participants. In 1996, the Better Business Bureau in the United States warned that pyramid schemes were "all over the country" (Better Business Bureau 1996). In 1997, a large percentage of Albanian people lost their life's savings in two Ponzi schemes; the losses prompted citizens to riot, threatening the stability of the national government (*The Economist* 1997a, b). During March 1998, the U.S. Securities and Exchange Commission (SEC) filed suit against International Heritage Incorporated, allegedly the largest pyramid scheme in SEC history to date (*The Economist* 1998). In May 1998, the Chinese government halted the operations of all direct selling firms, in part because of the government's inability to stop the growth of

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[1]The cited FTC cases of the 1990s were brought through the agency's Bureau of Consumer Protection and were based on unfair or deceptive practices in violation of Section 5 of the FTC Act; anticompetitive practices were not alleged.

pyramid schemes (Roberts 1998). Since 1996, the FTC prosecuted more pyramid schemes than in the prior 17 years; see the FTC cases versus each of the following: Fortuna Alliance LLC (1996), Global Assistance Network for Charities (1996), Mentor Network Inc. (1996), Nia Cano (1997), JewelWay International Inc. (1997), World Class Network Inc. (1997), FutureNet Inc. (1998), Five Star Auto Club (1999), Equinox International Inc. (1999), 2Xtreme Performance International LLC (1999), and SkyBiz.com Inc. (2001).

The increase in the number of pyramid schemes and related activities called "Ponzi" schemes has motivated new litigation and regulatory activity, increasing the risk to MLM managers who are unable to draw important operational distinctions. We provide an analysis and a corresponding mathematical model that distinguishes legitimate MLM from pyramid scheme activity using court cases pursued by the FTC, the U.S. Justice Department, and the SEC. Because pyramid schemes come in variations, our model will not serve as a template for all situations. The model we present, however, contains characteristics found in virtually all the large and frequently cited federal and state cases in the United States.

We begin with MLM, a specific form of direct selling. We follow with an overview of pyramid analysis and move to a description of the avenues of fraud involved with pyramid schemes. Next, we describe the impact of current regulations and court decisions. We then introduce a mathematical model that differentiates legitimate MLM from the prototypical pyramid scheme of the 1990s. We conclude with policy implications.

MLM: A Specific Form of Direct Selling

Multilevel marketing is a way of distributing products or services in which the distributors earn income from their own retail sales and from retail sales made by their direct and indirect recruits. As a form of direct selling, MLM involves nonstore retailing based on "face-to-face" communications between a selling representative and a potential buyer (Direct Selling Association 2001b; May 1979; Peterson and Wotruba 1996). Direct selling typically includes in-home selling situations such as door-to-door solicitations, appointments, referrals, and product parties, as well as catalogs and the Internet to disseminate information. By design, direct selling firms rely more on the selling skills of their sales forces than on indirect communications such as advertising. Proponents of direct selling point to low fixed costs compared with operating retail stores, valued social relationships among customers and between sales representatives and customers, and the persuasiveness of personal selling (Frenzen and Davis 1990; Greco 1996).

Almost all salespeople representing direct selling organizations operate as independent contractors rather than employees (Direct Selling Association 2001b). The sales force is generally paid through a commission system, which provides maximum selling motivation. Successful direct selling, however, is difficult. As a result, direct selling firms face the task of continually training and motivating their sales forces. In addition, turnover among salespeople is high. A direct selling organization may lose 100% or more of its sales force in a single year (Peterson and Wotruba 1996; Wotruba and Tyagi 1991). A lack of motivation, poor training, and high turnover can have a detrimental effect on operating expenses, sales, and customer loyalty.

The MLM approach limits some negative aspects of traditional direct selling while enhancing the role of entrepreneurship. By rewarding current distributors in hierarchical fashion for sales made by their direct and indirect recruits, the MLM firm (the parent company) shifts the burden of recruiting and training new people onto the existing sales force (Sherman 1991). These tasks are accomplished with support from the parent firm. Distributors are rewarded for personal sales and are motivated by the entrepreneurial aspect of being an independent contractor who builds a "downline" of distributors. The MLM structure provides the additional benefit of shifting some operating expenses from fixed to variable costs.

Compensation programs in MLM vary. Some plans allow recruits to "break away" from their sponsors eventually. Others require sponsors to "pass" one or two recruits "upline" to their immediate supervisor (Nichols 1995; Poe 1995). The structure and terminology of compensation plans vary but all provide the distributor with rewards from retail sales and from the sales (or purchases) of those they recruit (Nichols 1995; Poe 1995; Scott 1992). The hierarchical reward system encourages recruitment, entrepreneurship, and retail sales. Thus, the efforts of distributors are divided between developing their own retail customer bases on the one hand and marketing the organization to potential recruits on the other. This compensation structure resembles certain pyramid schemes and may leave uninitiated managers vulnerable to judicial investigation and possible prosecution. This article assists managers and strategists in developing structures that are different from illegal pyramid schemes.

An Overview of Pyramid Analysis

As with other marketing terms established through legal precedent, the nature and determination of pyramid schemes have evolved over time. Early schemes did not involve the sale of products or services. Similar to chain letters, the "opportunity" offered by early pyramid schemes passed in chainlike fashion from one participant to another. The schemes were deemed illegal because the main (and often, sole) benefit to participants was the right to receive monetary compensation from recruiting others into the organization. Such schemes are certain to fail because there is a limit to the number of new participants and the probability of success decreases for each new recruit.

Firms operating more complex pyramid schemes offer products and services for sale to recruits and to general consumers outside the organization. These schemes developed more recently and used a variety of techniques. Some required large up-front purchases; others paid commissions based on recruitment, with little regard for the actual purchase of a product or service; still others sold products with dubious market value; also, all claimed income levels well above what could realistically be achieved. Once involved, distributors could find themselves with products they could neither sell nor return and/or were subject to a never-ending series of extraneous expenses, such as purchasing questionable business aids and attending multiple rallies and "training" conferences. The Direct Selling Education Foundation, Better Business Bureau, FTC, and district attorneys responded with general guides to help potential recruits discern real MLM opportunities from pyramid schemes.[2]

Nonetheless, the distinction between pyramid schemes and MLM continued to be obfuscated. During the 1990s, certain firms entered the MLM industry under the pretense of engaging in retail activity while avoiding the most obvious pyramid scheme techniques. This greater subtlety created a need for legal clarification. The criterion that evolved through a series of legal decisions was a certain refinement of the original Koscot test (*FTC v. Koscot* 1975). Under *Koscot*, a pyramid scheme is an arrangement in which participants pay money "in return for which they receive (1) the right to sell a product and (2) the right to receive in return for recruiting other participants into the program rewards that are unrelated to the sale of product to ultimate users." During the 1990s, several federal court rulings affirmed *Koscot*, and in *Webster v. Omnitrition International Inc.* (1996) the court viewed the Koscot test (i.e., recruitment rewards that are unrelated to sale of product to ultimate users) as the sine qua non for pyramid determination. The court also refined this test and held that for purposes of pyramid analysis, "the sale of product to ultimate users" means the sale of product to those outside the organization. We view such sales to be synonymous with retail sales.

Pyramid Schemes as a Specific Form of Marketing Fraud

Although academics have a long history of studying marketing fraud, and particularly the legal issues in the channel of distribution, the study of pyramid schemes presents a unique situation. Both MLMs and pyramid schemes involve distributors as consumers, recruiters, and retailers. Pyramid scheme distributors, however, are recruiters first and focus considerably less on personal consumption and retailing. Some schemes do not even require the completion of a consumer sale before paying a reward for recruitment—a reward that is further characterized as "business income." Although pyramid schemes have involvement with direct selling, they are often structured in a way that avoids triggering consumer protection laws that fit traditional direct sales (e.g., the three-day "cooling off" period on door-to-door sales).[3]

Pyramid schemes involve multiple avenues of fraud. To promote growth, the pyramid scheme organizers invariably misrepresent potential earnings. The lucrative earnings emphasized in promotional messages depend on reaching a high position in the pyramid, but new participants lack requisite information on the realistic odds of obtaining such a position. Legal business opportunities also involve uncertainty, but businesspeople alter their probability of success by the actions they take. The probability of success for new entrants in a pyramid scheme, however, decreases with the size of the pyramid regardless of actions taken (or not) by individual participants.

Along with earnings misrepresentations, there is a closely related set of deceptive marketing communications. As with deceptive advertising, much of the promotional language used by the organizers is designed to blur the true nature of the opportunity. Promotional brochures employ ill-defined terms not commonly found in business texts, though they are also used by some MLM firms. For example, "business volume" means neither sales revenue nor gross margin, "downline" means neither employee nor franchisee, and "retail sale" sometimes refers to an end-using consumer outside the distribution network and at other times means a purchase made by a distributor. Also, the difference between gross and net income can be blurred in promotional earning claims that have not subtracted normal business costs (e.g., product distributor costs, sales-aids materials, training conferences). The imprecision of the language adjoined with the general complexities of compensation obscure channel relationships, the importance of retail selling, and the amount of net income that can realistically be achieved.[4]

The core deception in all the avenues mentioned is that pyramid schemes are not designed to build—indeed, are designed not to build—viable retail organizations. Retail sales are not forthcoming, because the reward system is designed to reward recruitment much more readily than retail sales. The compensation plan creates a situation in which the vast majority of participants cannot obtain rewards. As the scheme develops, the number of new recruits grows rapidly, often at an exponential rate. But as enrollment inevitably falters, the recent recruits (who repre-

[2]See Direct Selling Education Foundation (1997; published in cooperation with the National District Attorneys Association's Economic Crime Project and the FTC) and Better Business Bureau (1996).

[3]Because more recent pyramid schemes emphasize a business income opportunity, as well as the retailing of products and services, the activities might be viewed as similar to franchising (Greco 1996; Nichols 1995). Like franchising, MLMs and pyramid schemes offer distributors the opportunity to retail a product and/or service. Unlike franchising, however, building the business primarily means recruiting new distributors. The financial commitment between distributor and parent firm in either a legitimate MLM or an illegal pyramid scheme is also considerably less than in franchising. Franchise startup fees can range from $50,000 to more than $1 million, whereas MLM or pyramid scheme startup kits generally sell for less than $500. Furthermore, franchise contracts specify in some detail the duties and responsibilities of each partner with the goal of building success for both; a failed franchise represents a loss to both parties and may damage the parent firm's reputation. An MLM or pyramid scheme contract is general in nature, reflecting the reality that many distributors will fail—a known characteristic of direct selling. In addition, franchise contracts exclude new franchises in a defined geographic region. In MLM or pyramid schemes, the parent firm provides no domestic geographic limitations on distributors. Because of these significant differences, MLMs and pyramid schemes do not fall under franchising regulations and do not offer the associated protections.

[4]A further element of fraud lies in an undisclosed securities violation. Many pyramid schemes are prosecuted as securities frauds because they represent an unregistered investment contract as defined by the Securities Act of 1933 and the Securities Exchange Act of 1934 (e.g., *Webster v. Omnitrition* 1996). A successful downline contains multiple layers of recruits indirectly sponsored by the upline distributor, and success hinges on the extensiveness of indirect recruitment—a matter over which an individual participant has, at best, a modicum of control. The organizers communicate the benefits of recruitment without presenting the distributor agreement as an investment contract. Such schemes are not registered with the SEC in order to avoid associated antifraud standards, but the failure to register is itself a securities violation.

sent the vast majority of participants) cannot qualify for any rewards because their own "downlines" are empty or have insufficient numbers. Because retail is a facade, the scheme is just a mechanism that transfers funds from new recruits to those higher in the organization. In summary, a pyramid scheme is a transfer scheme that uses certain marketing tools that illegally achieve financial success for some by imposing a direct loss on others and that are inconsistent with establishing a viable retail base.

Pyramid Schemes, Marketing, and Regulators

The importance of retail sales initially developed in *Koscot* (1975) was further developed in subsequent cases. One of the most noted was the 1979 Amway case (*FTC v. Amway* 1979). Under the Amway plan, a participant did not pay a large sum of money up front, and the initial purchase of a sales kit was largely refundable. Upline distributors were rewarded for the volume of product purchased by their direct and indirect recruits—a reward system that held the prospect of significant rewards that could be obtained through the recruitment of others. As a defense against accusations of pyramid scheme activities, the Amway plan required 70% of a distributor's purchases to be resold at wholesale or retail, which sought to prevent inventory loading. Each sponsoring distributor was further required to make retail sales to at least ten different customers each month. These two safeguards reassured the administrative law judge that Amway's emphasis was on moving products through a wholesale and (eventual) retail network. A further salient feature was the company's refund policy, which offered a 90% refund on initial purchases returned in salable condition. Ultimately, the settlement that was reached in the Amway matter prohibited the company from making false and misleading income claims, and specific company policies at that time successfully established Amway as an MLM firm and not a pyramid scheme.

Since 1979, many MLMs have used the safeguards outlined in the Amway plan as a defense against allegations of pyramid scheme activities. However, the Amway safeguards did not consistently distinguish between sales made to distributors and sales made to consumers outside the distribution network. All financial rewards were to be based, in one way or another, on "product sales." From testimony during litigation, it became evident that Amway's "10-customer rule" could only be satisfied by sales to customers who were not distributors; in contrast, the "70% rule" could be satisfied by any combination of sales to other distributors or to ultimate users, inclusive of a distributor's personal consumption. The parent company did not sell directly to the public; all the firm's products were processed through Amway distributors (i.e., participants who, as independent contractors, purchased a certain inventory and subsequently sold product to downline distributors and to the public). Therefore, the product volume involved in the 70% rule was readily much larger than the volume involved in the 10-customer rule. Equally significant, no specific dollar volume was required to satisfy the 10-customer rule, and the latter was the only rule that directly mandated retail activity. Depending on factual circumstances, proposed safeguards provided by an Amway-type plan to promote retail activity could range from adequate to inconsequential.

Regarding this nexus of issues, *Webster v. Omnitrition* (1996) is pivotal. Employing direct language from *Koscot*, the *Omnitrition* court declared that the compensation paid to upline distributors when they enrolled new participants was facially "unrelated to the sale of the product to ultimate users" because the compensation was based on the suggested retail price of product ordered and purchased by an Omnitrition distributor, rather than on sales to consumers. In applying the Koscot test, the court made a distinction between products purchased by distributors and those sold to consumers who are outside the distribution network. The court concluded that the rewards "induce participants to focus on the recruitment side of the business at the expense of their retail marketing efforts, making it unlikely that meaningful opportunities for retail sales will occur." The court also found that Omnitrition's policies and procedures did not meet, either in enforcement or effectiveness, the rules referenced in the Amway decision.[5]

We highlight that the *Omnitrition* court found that the firm's reward system and associated rules encouraged recruitment over retail selling, a finding that has its related basis in deeming that sales to distributors were not retail sales. Indeed, the Koscot test would have no teeth if distributor purchasers were automatically characterized as retail sales; under such a characterization the rewards paid in connection with recruitment would, by definition, be based on retail activity and thus make the pyramid issue moot.

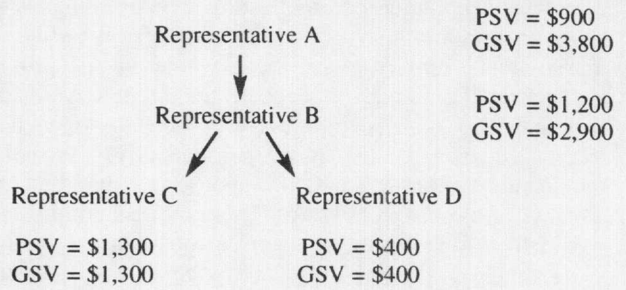
In *World Class Network* (1997), distributors earned income from two sources: travel bookings made after becoming an "independent travel agent" and "network earnings" for sponsoring a downline of travel agents. To qualify as an agent, a recruit purchased a tutorial program ($495). The firm held that the tutorials led to travel bookings, so that rewards paid upline for (downline) purchases of tutorials were based on retail sales. Regarding all earnings received by World Class Network agents, the records showed that 8% of earnings were paid for actual bookings, whereas 92% of earnings were paid as rewards for recruitment (the sale of tutorials).[6] The records also showed that 93% of agents either had earned nothing or had not earned enough to cover the tutorial fee. The reward system led participants to focus overwhelmingly on recruitment.

In *JewelWay* (1997), distributors could earn income by retailing jewelry to the public and by receiving rewards for sponsoring a downline of distributors. Promotional materi-

[5]In addition, the *Omnitrition* court held that the 10-customer rule and the 70% rule need not, of themselves, be effective in tying upline rewards to retail sales. Specifically, the court's ruling states (Part II, C) "[t]hat some amount of product was sold by each supervisor to only 10-customers each month does not insure that overrides [royalty overrides, the firm's upline rewards] are being paid as a result of actual retail sales." Moreover, in the same section and in direct reference to the 70% rule, the court states, "Importantly, the [70%] requirement can be satisfied by non-retail sales to a supervisor's downline IMAs [independent marketing associates]. This makes it less likely that the [70%] rule will effectively tie royalty overrides to sales to ultimate users, as Koscot requires."

[6]In *World Class Network*, the rewards paid for downline purchases of tutorials can be immediately identified as rewards for recruitment; the tutorial had no consumption (end-use) value by itself and was solely a required tool for becoming a World Class Network travel agent.

Figure 1. Equinox's Reward System for Sales Representatives



GSV	Rebates
$0–$1,000	0%
$1,001–$2,000	5%
$2,001–$3,000	10%
$3,001–$5,000	15%

Notes: PSV = personal sales volume, GSV = group sales volume.

als called this MLM the "Amway of Jewelry" (hence "JewelWay"). Indeed, following an Amway-type plan, compensation for sponsorship was based on the volume of product purchased by downline recruits. The firm's records indicated that less than 10% of all distributor earnings came from sales to consumers outside the JewelWay network, whereas more than 90% of earnings were rewards paid in connection with recruitment. The records further showed that some 175,000 distributors, or approximately 95% of all the distributors, had earned nothing at all (having made no sales at all). Evidently, recruitment led to little retail, and distributor earnings were based overwhelmingly on the ongoing recruitment of new distributors.

In *Equinox* (1999), the company claimed to be a legitimate MLM and presented—at least on paper—an Amway-type plan. Following Amway, the crux of the compensation plan was that upline distributors were rewarded for the volume of product purchased by their direct and indirect recruits, and the firm had certain "retail rules" that claimed to effectuate retail sales. Equinox presented a diagram and table (see Figure 1) to explain how certain financial rewards (called "rebates") were paid to "sales representatives," the latter being the entry position for an Equinox distributorship.

For each distributor, there was a defined personal sales volume (PSV) and a group sales volume (GSV). The PSV was composed of product that a distributor had personally purchased from Equinox. This product could be (re)sold to the general public, sold to someone else in the downline, or retained by the distributor who bought it. If a distributor recruited others, the PSVs of the recruits became part of that distributor's GSV, and each distributor's PSV was always a part of his or her GSV. Any distributor's GSV was simply the sum of all purchases made by the members in the distributor's downline. The related reward paid by Equinox for sales volume was a certain commission based on a distributor's GSV.

The compensation plan Equinox built into the category of sales representative was repeated at every higher distributor level. An array of executive levels was defined by the size of a distributor's GSV. In addition to a common rebate percentage (of 20%) for all executive levels, each level had a further "bonus percentage" that was to be applied to GSV. A distributor's GSV could become larger in one of two ways: (1) through greater personal purchases of product

Table 1. Equinox Executive Levels and Rewards (1998)

Executive Level	Qualifying Size of GSV	Bonus Percentage
1. Manager	$ 5,000	3%
2. Supervisor	$ 10,000	new 10% + prior 3% = 13%
3. Director	$ 20,000	new 6% + prior 13% = 19%
4. Executive director	$100,000	new 3% + prior 19% = 21%
5. International marketing director	$500,000	21%, plus Bonus Car Program and Million Dollar Club Bonus

(obtaining a larger PSV and automatically a larger GSV) or (2) through GSV growth that came from recruiting more people into the downline, each recruit making some purchase of product and thereby creating a PSV and a related GSV. In summary form (omitting several details), Table 1 presents the executive levels and rewards in 1998.

Retail sales had no impact on the size or definition of GSV. Even if all distributors in (say) a director's downline sold only a trivial amount of product to the public, that would not change the "bonus percentage" to be paid by Equinox to this director for achieving an initial $20,000 for GSV (i.e., $20,000 in purchases undertaken by a certain set of distributors). Two rules having some bearing on retail sales were presented as qualifiers for obtaining the rewards. The first was the "6–retail sales" rule, which stated that to receive any bonus percentage for a given month, a distributor needed to submit to Equinox at least six retail sales receipts (of any size) from six customers for the same month. Second, Equinox had a 70% rule requiring a distributor to certify that 70% of a prior order was sold or consumed before the distributor could order new product. This certification pertained to any combination of personal consumption, retail sales, or sales to downline distributors.

Given the nature of the Equinox compensation plan, a natural question is evoked: Did the rewards that were paid in connection with recruitment have any meaningful relationship with actual retail sales? During litigation (*Equinox* 1999), it was established that the answer was no. As far as the company's records could show from collected receipts, the volume of product ostensibly retailed to the public was approximately 17% of distributor purchases. Besides being a relatively small percentage, many of these receipts—which were collected in view of the 6–retail sales rule—were imputed sales. Equinox did not institute any effective method for verifying sales to the public, and there was considerable testimony from participants that upline distributors encouraged their downline members to "make up" receipts to comply with the 6–retail sales rule. Testimony from several high-level distributors (some of whom were international marketing directors) also stated that the company knew of these practices and did nothing in response. Through this and other means, it became evident that the rewards paid by Equinox to its distributors were based primarily on recruitment and furthermore had no meaningful connection with retail sales.[7]

In summary, as was true in *Omnitrition, World Class Network, JewelWay*, and now *Equinox*, the compensation plan and the firm's associated rules and practices led the participants to focus overwhelmingly on recruitment at the expense of retailing efforts.

The FTC settlement orders reached in *Equinox, JewelWay*, and *World Class Network* may be viewed as a certain refinement of *Webster v. Omnitrition* (1996). The FTC settlements reflect the following position: If an organization sells goods or services to the public and the participants in the organization obtain monetary benefits from (1) recruiting new members and (2) selling the organization's goods and services to consumers, the organization is deemed a pyramid scheme if the participants obtain their monetary benefits primarily from recruitment rather than the sale of goods and services to consumers (see order provisions and language in *FTC v. World Class Network Inc.* 1997; *FTC v. JewelWay International Inc.* 1997; *FTC v. Equinox International Inc.* 1999).

Deeper Analysis of the Koscot Test and a Related Retail Question

In applying the Koscot test and related rulings to MLM compensation plans, we seek to quantify a relationship between retail sales and recruitment rewards—a desired relationship thus far highlighted by legal decisions but in a largely nonquantitative way. We recognize that there are further issues related to pyramid schemes—among them, nonviable products, the requirement of large initial purchases, and heavy purchases of business aids. Nonetheless, the pyramid scheme cases of the 1990s have established the level of retail activity as a key issue. Our contribution lies in offering, for the first time, an objective means of measuring the relative importance of retail sales to an MLM.

From a business perspective, MLM distributors are salespeople who work to receive two types of commissions: direct retail commissions and indirect retail commissions. First, in retailing the product to the general public, the markup that is applied to distributor wholesale cost provides a direct retail commission. Second, the upline rewards paid in connection with recruitment are viewed—to whatever extent is reasonable (discussed subsequently)—as indirect retail commissions paid to the sponsoring distributors in advance of ultimate retail sales. These indirect commissions would thus function as an override to the direct commissions obtained upon retailing the product. This construction permits the most favorable view of the upline rewards, and for this same construction a certain economic question becomes meaningful (hereafter called the "retail question"):

> If the MLM parent company were required to use actual gross retail sales as the basis for paying all the direct and indirect retail commissions (as well as production costs and related expenses), to what extent could it do so?

Not infrequently (as the preceding cases show), MLM compensation plans pay recruitment rewards that have some partial and ambiguous relationship with retailing. Subsequently, by posing the retail question, we set forth a model of how the Koscot test can be applied to an MLM compensation plan.

It is important to recognize the hypothetical nature of the retail question in a typical MLM context. Usually, the parent company is not paying rewards out of retail sales in any literal sense. The MLM distributors take ownership of the product by buying it from the company, and all subsequent monies obtained from retail sales belong to the distributors (as independent contractors), not to the company. In paying upline rewards, the company immediately uses some portion of the wholesale revenues it has obtained from the distributors. The generic design of MLM compensation is that the rewards paid upline at the time of recruitment are literally paid out of, and are immediately based on, the monies obtained from the wholesale purchases made by new recruits; indeed, the upline rewards are usually proportional to these purchases (e.g., *Amway, JewelWay, Omnitrition, Equinox*, as well as several other cases). Thus, from the company's perspective, there is no issue about its ability to meet its financial obligations; the company can pay all its various costs and expenses, inclusive of upline rewards, out of the revenue obtained from distributor wholesale purchases of product. Equivalently expressed, independently of any retail activity, the operation is entirely solvent from the perspective of the parent company's financials.

Yet the organization may still be a pyramid scheme. It is expected that the recruited distributors, in pursuing their business opportunity, will eventually retail most of the product they have purchased. But whether they do so or not, the upline rewards paid to the sponsoring distributors have already occurred (because these upline rewards are immediately based on and paid out of the wholesale purchases undertaken by the recruited distributors). This procedure may permit the outcome that the upline rewards have no meaningful relationship with actual retail activity but only with inventory purchases undertaken on the expectation of retail. The Koscot test is directly pertinent: Given this

[7] It was also shown that the vast majority of Equinox distributors were harmed. From the company's own survey of distributor earnings (based on more than 100,000 participants), it was deducible that more than 90% of distributors had received no gross earnings at all from the compensation plan. In turn, for the relatively few who received positive gross earnings (less than 10% of distributors), the majority of these still did not earn enough to cover their own business expenses. Without yet considering the cost of inventory purchases and considering only what was involved in the prospective enrollment of new participants, typical expenses were incurred for desk rental fees, telephone and advertising expenses, training conferences, and special seminars that, in total, amounted to approximately $1,700 per month for distributors who actively pursued the Equinox business opportunity.

generic design of MLM compensation, is the totality of the company's rules and policies effective in tying upline rewards to actual retail sales (as in *Amway* and a plethora of cases since then, most notably *Omnitrition*, *JewelWay*, and *Equinox*)? As we address this question, the defined retail question serves as an analytical tool.

Preamble to the Model: Defined Variables and Examples

The issue of whether the monetary rewards for an MLM's distributors are based primarily on recruitment is a focal point that has strong intuitive appeal, but it is not a notion that is analytically transparent or is easy to use for an economic test. A potentially confounding issue is how to categorize the rewards paid to upline sponsors when recruits buy product. Are these rewards automatically the same as rewards for recruitment? There is no simple answer here. If recruitment leads to retail, it is plausible that the upline rewards—or at least some portion of them—have a retail basis. If so, upline rewards are not only rewards for recruitment but also in part an indirect reward for retailing. Furthermore, if upline rewards were identified as just being rewards for recruitment, most presently existing MLMs would automatically be deemed pyramid schemes, because the upline rewards typically dominate the reward structure. Here, an analytical model is useful for two purposes: to present a specific way to measure a retail basis for upline rewards and to explain what role this measure plays in assessing whether a stated MLM is a pyramid scheme.

The type of compensation plan addressed by the model is generic to the MLM industry.[8] We assume that distributors purchase product from the company primarily for the purpose of resale, though personal consumption is allowed. The distributors can earn business income in two ways: (1) by retailing products at some markup from wholesale cost, thereby generating a direct retail commission, and (2) by receiving rewards for the volume of product purchased by subsequent recruits, direct or indirect—briefly called "upline rewards." Ex ante, we hold in abeyance the extent to which the upline rewards may be rewards for recruitment versus rewards for retailing.

We think of product as being bought by the distributors in units called "packages." For example, each package may contain an array of nutritional supplements and personal care products. Some part of the package is retailed to the public (on average, below 100%); any part not retailed either is held as inventory by the distributor or is used for personal consumption. These assumptions have a related set of defined variables:

1. The actual retail price, P, the public pays for a package;
2. The wholesale price (or cost), W, distributors pay for a package;
3. The retail margin, m, expressed as a direct retail commission per $1 of retail revenue, namely, $m = (P - W)/P$;
4. The percentage, r, of a package that, on average, is retailed to the public (for various measurement purposes, the full package may be measured at either retail or wholesale value);
5. Full production costs of a package (manufacturing costs and directly related company expenses) expressed as a percentage, f, of distributor wholesale price; and
6. Upline rewards expressed as an aggregate percentage, u, of distributor wholesale price.

An MLM may have multiple upline levels with corresponding commissions. The number of levels can vary, as can the commissions paid out per level (e.g., *Equinox*). The existence of many upline levels often indicates (as a rule of thumb) that the totality of upline rewards absorbs an ever-greater percentage of the distributor wholesale price. This MLM structure may be characteristic of a growth strategy. A large number of levels and related commissions may also increase concern about pyramid scheme activity, because commissions may hinge all the more on recruitment. Regardless of the number of levels and the commissions paid per level, the most important features are (1) the total percentage of gross margin dollars dedicated to commissions and (2) the source for those same dollars, that is, a retail source or a recruitment source. For simplicity, the upline rewards are expressed as a single (aggregate) percentage of distributor wholesale price. The MLM structures that vary by number of levels and related commissions become special cases of, though not exceptions to, the model presented here.[9]

In addition to the preceding definitions, the main concept introduced expressly for purposes of pyramid analysis is *advance retail commissions* (ARC). These funds refer to the portion of actual retail volume (in monetary terms) that is available for the payment of upline rewards. The ARC is a residual, namely, a portion of gross retail sales that is left over after certain commitments and costs have been covered; we define ARC by the following relation:

$$\text{ARC} = \text{gross retail sales} - (\text{direct retail commissions} + \text{full production costs}). \quad (1)$$

Gross retail sales refer to the actual gross monies obtained from selling product to the public. The direct retail commissions refer to whatever funds the distributors receive above their own wholesale costs upon selling product to the public. Full production costs refer to the parent firm's own wholesale cost and immediately related expenses for providing product to its distributors; in general, full production costs will be lower than the distributor's wholesale price,

[8]The model we develop reflects the presentation of an MLM as a business opportunity. We do not deal with a "buyers' club," a matter having sufficient issues to warrant separate treatment. Also, the model does not address a plethora of variations that may occur or the role played by ancillary products and services (see, e.g., Poe 1995).

[9]In *Equinox*, there were several upline levels (executive positions) and related rewards. Whenever a downline distributor purchased product, certain upline distributors received rewards in terms of specified "bonus percentages" of the purchase value; see the schedule of rewards reviewed in Figure 1. In audited financial statements, Equinox expressed the upline rewards as an aggregate percentage of the distributor's wholesale price. This empirical percentage came to approximately 49%. That is, when a distributor purchased $1,000 in product (distributor wholesale value), the relevant set of upline sponsors received rewards totaling $490; this sum was further partitioned among the sponsoring distributors. Regarding the upline reward system, the model is not focused on "who gets what" but on the dedication of a certain aggregate percentage of wholesale value to the payment of upline rewards and on the related question whether such rewards can reasonably be construed as having a retail basis.

assuming that the parent firm receives a markup in selling product to its distributors.

The sense of the definition for ARC is the following: In keeping with the retail question, the company seeks to fund out of actual retail sales its own immediate costs for acquiring and handling the product, as well as a direct retail commission for distributors who sell the product to the public; whatever funds remain are deemed available for paying the upline rewards. Note that the defined ARC funds are not allocated to the retailing distributors but are allocated to the upline distributors for having directly or indirectly sponsored new distributors (more specifically, the reward is for the volume of product purchased by the new distributors). The company views these sponsorship rewards as part of its selling expenses for moving the product downline and ultimately to the public. In turn, ARC measures the extent to which these upline rewards, which are paid in connection with recruitment, can be funded out of actual retail sales. Briefly, ARC is a quantifiable bridge that connects recruitment to retail. On a per-package basis, ARC may be measured as

(2) $$ARC = (r - f)W.$$ [10]

An immediately related funding concept is *effective recruitment rewards* (ERR). As the logical complement to ARC, these funds will identify upline rewards that have no basis in retailing. Also, ERR is a certain residual. When a distributor obtains a package by paying W to the parent firm, the funds needed to pay the upline rewards (namely, uW) come first from whatever ARC funds exist. If ARC is not large enough to cover the upline rewards, ERR is defined as the upline rewards that remain unfunded by ARC; thus,

(3) $$\text{if } ARC \leq uW,\ ERR = uW - ARC = (u + f - r)W.$$ [11]

By construction, ERR is the portion of upline rewards that can be explained neither as sales commissions in advance of retail sales nor as direct retail commissions (the direct commissions have already been accounted for by the markup on distributor wholesale cost). The model thus identifies ERR to be the reward for recruitment.

As progressively smaller retail percentages are considered, there is an increasing difference between upline rewards that have a basis in retail sales and upline rewards that do not. Consider first the scenario in which 70% of distributor purchases are retailed to the public (see Table 2). Here, as a result of the stated parameters, the portion of gross retail sales that is available for upline rewards on a per-package basis is $24 = ($70) – ($14 + $32), where $70 = gross retail sales, $14 = direct retail commissions, and $32 = production costs and related expenses except upline rewards. The upline rewards also come to exactly $24 (i.e., 30% of an $80 wholesale package). We find that at r = 70%, it is possible in this scenario to fund all upline rewards and all other costs and expenses out of gross retail sales. Thus, all the rewards paid in connection with recruitment can function as sales commissions paid in advance of the retail sale (retail sales are sufficient to fund these rewards). Here, the rewards paid for recruitment—that is, ERR—are counted as zero.

For the stated cost structure and compensation plan, we further observe that if less than 70% of product is retailed, retail sales would not be able to cover the commitments for compensation and costs. Considering progressively lower percentages of retailed product, at some point the inability to pay for the various commitments out of gross retail sales must dictate the conclusion that the given operation cannot be a legitimate MLM. For example, in Table 2, if only 40% of a package were retailed, all compensation and costs

[10] If r percent of a package is retailed, the direct commission for the retailing distributor is the mathematical product of the retail margin (m) and the gross retail sales revenue (rP), yielding a direct retail commission of size mrP. The full production cost for a package is fW. By applying the definition for ARC, we have ARC = gross retail sales – (direct retail commissions + full production costs) = rP – (mrP + fW). If m = (P – W)/P is further substituted, the formula for ARC simplifies to ARC = (r – f)W. This formula has a ready interpretation through the consideration of the two components rW and fW. When a distributor obtains a package by paying W to the parent company, the portion rW represents funds received by the firm that are directly attributable to retail activity, whereas the firm incurs an immediate cost fW for providing the package. The difference, rW – fW = (r – f)W, thus represents funds beyond the parent's immediate costs that have a retail basis (are attributable to retail activity) and are available for a commission to be paid (upline) in advance of a retail sale, that is, ARC.

[11] Here, ERR incorporates the per-package formulation for ARC given in footnote 10.

Table 2. Percentage of Product Retailed Versus ARC

r (% of $100 Package Retailed)	rP (Gross Retail Sales Volume: r × $100)	mrP (Direct Retail Commission for Distributors: 20% of rP)	fW (Production Costs and Expenses, Except Upline Rewards: 40% of $80)	uW (Aggregate Upline Rewards: 30% of $80)	ARC (Retail Funds Available for Upline Rewards: [r – .4]$80)
r = 80%	$80	$16	$32	$24	$32
r = 70%	$70	$14	$32	$24	$24
r = 60%	$60	$12	$32	$24	$16
r = 50%	$50	$10	$32	$24	$ 8
r = 40%	$40	$ 8	$32	$24	$ 0

Notes: P = $100 per package, W = $80 per package, m = 20%, u = 30%, and f = 40%. Numeric values are used for ease of explanation and are not implied to be representative.

would add up to \$64 and would be significantly greater than what gross retail sales of \$40 could sustain—a shortfall of \$24 per package. Here, after production costs and expenses (\$32) and direct retail commissions (\$8) have been paid, nothing from the retail sales volume of \$40 would remain to fund upline rewards. In other words, in the systemwide operation of this MLM at r = 40%, no part of the (aggregate) upline rewards can function as sales commissions paid in advance of retail sales. Accordingly, if r ≤ 40%, the upline rewards paid in connection with recruitment must now be counted entirely as direct rewards for recruitment.

A Formal MLM/Pyramid Model

The model highlights and explains two main contexts: one in which the system of rewards is funded primarily by recruitment and another in which the rewards are funded primarily by direct and indirect retail commissions. Given the complex nature of MLM compensation plans, neither of these contexts is obvious on its face. Also, although these two contexts are mutually exclusive, they do not exhaust all possibilities; the model recognizes a "gray area" that is neither of these two.

Definition 1: An MLM pays *sponsored-volume rewards* if the rewards paid upline in connection with the sponsorship of new distributors are based on or are proportional to the volume of product purchased by the new distributors.

Throughout, we assume that the parent firm pays sponsored-volume rewards (as in *Amway*, *Omnitrition*, *JewelWay*, *Equinox*, and other cases). This feature enables the analysis to encompass, through one general model, a spectrum of outcomes that covers legitimate MLMs and pyramids that have an MLM-type structure. We incorporate the definitions for ARC and ERR developed previously. The basic properties of ARC and ERR are collected by the next proposition:

P_1: Assume that an MLM has a cost structure and upline rewards that are summarized, respectively, by the values f and u. Let L be the upline rewards paid by the firm when a distributor buys product (namely L = uW) and let r be the percentage of product retailed. For any r in the closed interval, f ≤ r ≤ f + u, we have (a) ARC/L = (r – f)/u and (b) ERR/L = (u + f – r)/u.

As implied by P_1 and illustrated by Table 2, there is a sufficiently high percentage of retail at which ARC covers all upline rewards. Specifically, by making the substitution r = f + u into Equation (a) in P_1, we have ARC/L = [(f + u) – f]/u = 1.00 = 100%. Here, it is clear that the organization must be a legitimate MLM, because 100% of the rewards paid in connection with recruitment are capable of being funded out of retail sales. The model also identifies a sufficiently low percentage of retail, namely r = f, at which it is clear that the organization fails to be a legitimate MLM. Substituting r = f into Equation (b) in P_1, we have ARC/L = [f – f]/u = 0, so that ERR must now fund all upline rewards. This means that the rewards paid in connection with recruitment have no (i.e., zero) basis in gross retail sales. This circumstance warrants a pyramid conclusion under the Koscot test. We rely on *Omnitrition*'s finding that for purposes of pyramid analysis, the sale of product to ultimate users means the sale of product to those who are outside the organization. For r = f, the rewards paid in connection with recruitment (the upline rewards) have zero basis in the sale of product to those who are outside the organization.

Given a specification of the cost and reward structure describing the MLM, the model thus locates two basic "cut points" determined by the values for f and u. The role of these cut points—call them c_1, c_2—is to identify at least two positions (and there may be more) for which the distinction between a pyramid scheme and a legitimate MLM is clear. In summary, the lower cut point is c_2 = f, where ARC/L = 0; the upper cut point is c_1 = u + f, where ARC/L = 100%.

Rewards That Are Based Primarily on Recruitment

The stated cut points leave a certain range for the percentage of product retailed, namely, the range $c_2 < r < c_1$, where the upline rewards have a varying basis in retail sales—a basis that may move from large to small. For some of these cases, a pyramid finding may be warranted. To explain, we compare ERR to upline rewards (L) and to gross distributor earnings (G), where G is defined as the sum of upline rewards and direct retail commissions. In Table 3, we use the MLM of Table 2 for illustration.

For the MLM of Tables 2 and 3, the lower cut point of the model is c_2 = 40%, and the upper cut point is c_1 = 70%. At

Table 3. Selected Percentages of Product Retailed Versus Rewards or Earnings Funded by ERR

r (Starting with a \$100 Package)	ERR	G	ERR/L	ERR/G
70%	\$ 0.00	\$38.00 (\$14.00 + \$24.00)	0%	0%
60%	\$ 8.00	\$36.00 (\$12.00 + \$24.00)	33%	22%
55%	\$12.00	\$35.00 (\$11.00 + \$24.00)	50%	34%
50%	\$16.00	\$34.00 (\$10.00 + \$24.00)	67%	47%
49%	\$16.80	\$33.80 (\$9.80 + \$24.00)	70%	50%
45%	\$20.00	\$33.00 (\$9.00 + \$24.00)	83%	61%
40%	\$24.00	\$32.00 (\$8.00 + \$24.00)	100%	75%

Notes: As in Table 2, P = \$100, W = \$80, m = 20%, u = 30%, and f = 40%. In Table 3, to arrive at net earnings, distributors must subtract expenses from gross earnings (G); these may vary considerably from person to person. Because net earnings are smaller than gross earnings, ERR/net earnings > ERR/G. Therefore, the ratio ERR/G presents a conservative measure of the proportion of earnings that are funded by ERR.

$r = 45\%$ (a specific point $r > c_2$), we note that ERR/L = 83%; that is, 83% of upline rewards are not capable of being funded by retail sales. At this same r, ERR constitutes 61% of gross distributor earnings (see Table 3). For this scenario, it is evident that distributor earnings are funded primarily by rewards for recruitment (ERR).

It is plausible that a pyramid conclusion may be reached for some retail percentages that are above the lower cut point of the model. Recent FTC settlements reflect the position that rewards paid in connection with recruitment are not deemed to have a meaningful relationship with retail activity if distributor earnings are based primarily on recruitment. A formal model is useful in explicating conditions under which the reward system is based primarily on recruitment:[12]

Definition 2: Suppose that direct retail commissions (D) and upline rewards (L) constitute the financial rewards offered by an MLM and that the sum of these two rewards constitutes gross distributor earnings (G). The system of rewards is said to be *based primarily on recruitment* if ERR/L > 50% and ERR/G > 50%. Also, a monetary reward is *retail based* if the reward can be funded by a combination of direct retail commissions and ARC.

Definition 2 evokes a pertinent question. If the major portion of the upline rewards is not retail based, would not the major portion of gross distributor earnings (G) also fail to be retail based? Equivalently, if ERR/L > 50%, does it follow that ERR/G > 50%? There is no necessary implication here. Depending on the relative sizes of $\{r, f, u\}$, the majority of gross distributor earnings may be retail based, whereas the major portion of upline rewards is not.[13] The MLM/pyramid model identifies levels of retail—a range for the variable r—for which this dichotomy does not occur (see P_2). Over this range, a potentially confounding element is thus removed in the decision whether the reward system is based primarily on recruitment:

P_2: Let $f, u, m \geq 0$ summarize the MLM's cost and reward structure. Then there is a critical value c^*, where $0 < c^* < 1$, for which the following hold: (a) If the percentage of product retailed to the public falls below c^*, more than 50% of gross distributor earnings and more than 50% of upline rewards are not retail based (i.e., are direct rewards for recruitment), and (b) the critical value is given by $c^* = (2f + u)[(1 - m)/(2 - m)]$.

P_2 may be summarized as follows: If $r < c^*$, the MLM's reward system is based primarily on recruitment. The proposition presents a formula for c^* determined by information that is empirically ascertainable from either company records or survey of the distributors. P_2 thus presents an operational formula for computing c^*. The model supports a pyramid conclusion whenever the percentage of product retailed to the public falls below c^* (see the "Discussion" section).

Retail-Based Rewards

In MLM, distributors can obtain "retail-based" rewards in two main ways: (1) direct retail commissions derived from the markup above wholesale cost and (2) indirect retail commissions paid to sponsoring distributors for the volume of product sold to the public by their downline of recruits. This second avenue underscores the dual role of the upline rewards as jointly composed of certain rewards for retailing and certain rewards for recruitment. As noted previously, we do not assume that the upline rewards paid to sponsoring distributors for purchases made by their recruits are automatically characterized as rewards for recruitment. The analysis first distinguishes the upline rewards into components of ARC and ERR, counting only ERR as the reward for recruitment. Also, ARC is counted as a retail-based reward, because it measures the extent to which the upline rewards can be funded out of retail sales.

To aid the understanding of P_3, which specifies a context in which an MLM is retail based, we note that there are various but equivalent ways to view the totality of distributor earnings. There are two sources for gross distributor earnings (G): direct retail commissions and upline rewards, so that $G = D + L$. In turn, L is the sum of ARC and ERR. Therefore,

(4) $G = D + ARC + ERR = (D + ARC) + ERR = R + ERR.$

These last two summands, namely, R + ERR, partition G into two categories of special interest: retail-based rewards (R, where R = D + ARC) and ERR.

P_3: Let values $f > 0$ and $u > 0$ summarize the MLM's cost and reward structure. If $r > c^\wedge$, where $c^\wedge = (c_1 + c_2)/2$, the following hold: (a) The majority of rewards paid in connection with recruitment are capable of being funded by retail commissions paid in advance of a retail sale (ARC/L > 50%), (b) retail-based rewards are greater than ERR (R > ERR), and consequently, (c) retail-based rewards also constitute the major portion of gross distributor earnings (R/G > 50%). Moreover, $c^\wedge = f + (1/2)u$.

In summary, whenever the percentage of product retailed is greater than $c^\wedge$, that is, whenever $r > f + (1/2)u$, upline rewards have an unambiguous and dominant connection with retail activity; in all likelihood, current case law would not support a pyramid allegation. Also, this "turning point" $c^\wedge$ is again empirically ascertainable: $c^\wedge$ is determined by u and f.

The model thus locates levels of retailing that are useful for assessing whether an MLM may be a pyramid scheme. For a positive retail margin, the interval for the percentage of product retailed to the public (i.e., $0 \leq r \leq 1.00$) is partitioned into three broad regions that are determined by two points, c^* and $c^\wedge$. For $r < c^*$, the majority of both upline rewards and gross distributor earnings are funded by ERR. For $r > c^\wedge$, the upline rewards and gross distributor earnings have a dominant basis in retail sales. Finally, for the range $c^* < r < c^\wedge$, retail activity lies in a gray area noted previ-

[12]The term "primarily" has the meaning of "chiefly," "principally," "for the most part." Under quantification (where feasible), the term certainly denotes a percentage greater than 50%. How much greater is not evident in pyramid cases, because no court or FTC decision has addressed this issue. The model presently focuses on the minimal meaning of this term, namely, "greater than 50%." See the "Discussion" section.

[13]Table 3 illustrates this circumstance. At r = 50%, we find that ERR/L > 50% and ERR/G < 50%. We further note that G = D + L and therefore G = D + ARC + ERR (because L = ARC + ERR). By applying ERR/G < 50% to the latter equation, we obtain (D + ARC)/G > 50%. This confirms that D + ARC constitutes the majority of gross distributor earnings; that is, the major portion of G is retail based, but the major portion of upline rewards is not. Because ERR/L > 50%, more than half of the rewards paid in connection with recruitment have no basis in actual retail sales.

ously: The majority of the upline rewards fail to be retail based, but the major portion of gross distributor earnings is still retail based (in Table 3, see the range 49% < r < 55%).[14]

Discussion, Public Policy, and Managerial Implications

Over the past few decades, there has been increased information regarding certain fraudulent characteristics of pyramid schemes (i.e., large up-front purchases, no effective return policy, products that lack market value, and unrealistic income claims). Federal and state regulatory bodies, the Direct Selling Association, and the Better Business Bureau publish warnings about such practices. The model presented here assists managers and prosecutors by expanding beyond these known frauds to a more complex issue: the importance of retail sales.

Landmark cases of the 1990s that involved commonly purchased products and services increasingly recognized the role of retail selling. In each of these cases, the commissions paid to distributors were derived disproportionately from recruitment, not retail sales. The model heeds the percentage of product retailed to consumers outside the distribution network and the immediate implications for the funding of various rewards. Although total retail could be large in terms of dollars, the relative level of retail (i.e., the percentage of product bought by distributors that is ultimately retailed) may be so low that the MLM's ability to pay rewards is effectively based on the volume of product bought by recruits. Here, ongoing recruitment creates a situation in which the vast majority of distributors reside at or near the base of the recruitment structure, a position where they typically fail to recoup their investments. When new participation inevitably stops because of the limitation on potential recruits, the same vast majority loses money. The model demonstrates that the absence of a deeper analysis of the capacity of retail sales to fund most of the proposed rewards may enable a pyramid scheme to masquerade as a legitimate MLM (as was true of Equinox for many years).[15]

Public Policy Implications

The model provides a common language for identifying factors that are important to understanding the role of retail sales. Currently, state and federal regulations vary considerably in the language they use to describe pyramid scheme activity. Although the model does not provide a comprehensive definition, it provides specific and measurable variables. Also, emphasizing retail sales is consistent with the language of the MLM industry. Many MLM firms describe themselves as primarily in the business of retailing, as an alternative channel of distribution that competes with traditional retailing. As discussed subsequently, emphasizing retail sales enables policymakers to establish a framework—within prosecutorial discretion—that can lead to useful regulations or guides that are consistent with this language.

As a matter of prosecutorial discretion, it is evident that governmental agencies (and specifically the FTC) sought to avoid close calls in bringing pyramid cases during the 1990s. For each of the cases reviewed previously, the prosecuting agency showed that the connection between upline rewards and retail activity was either trivial or so small that any presumption of a primary or even main connection between these two could be overwhelmingly rejected (see, e.g., *JewelWay*, *World Class Network*, *Equinox*). This was achieved without specifying a numerical threshold for the term "primarily" in the government's contention that the system of rewards was based primarily on recruitment. The government chose cases in which success was deemed likely in whatever way this term might reasonably be defined. In this same regard, one of the prosecutorial applications of the model lies in supporting policy decisions that seek to avoid close calls.

First, the model directly identifies contexts that would constitute a close call, as well as other contexts that would not. Using the MLM of Tables 2 and 3 as an illustration, a pyramid allegation would be a close call if the percentage of product retailed to the public was just below c* (there, c* = 49%). Indeed, for retail percentages just below this mark, the ratio ERR/G would also be close to, but just above, 50%. This circumstance may fail to meet a desired threshold for the meaning of "primarily." By restricting a pyramid allegation (say) to retail percentages that are near the lower cut point of the model (e.g., near 40% for this same example), the ratios measuring the system's reliance on recruitment rewards would rise dramatically and thus avoid a close call.[16] Second, any quantification of the term "primarily" implies a policy decision. Wherever the bar may be set for the meaning of this term (e.g., 80%, 70%, or greater than 50%), the model computes a corresponding critical retail percentage that incorporates the chosen threshold. Specifically, a policy decision could change the current reference point of 50% in Definition 2 to (say) 70%. The model provides the method for implementing the policy decision without dictating a decision a priori.

In presenting a tool for analyzing the contribution that retail sales make in covering various commissions paid to distributors, the model uses specific company data and a related method of analysis. This specificity can assist prosecutors during the discovery phase of investigation. Also,

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[14]A mathematical appendix with proofs for the propositions of the model may be obtained by request.

[15]In a simpler form, the first author of this article applied the mathematical model in *Equinox*, which was part of the evidence presented to the court (see Vander Nat Declaration in *Equinox* 1999). Among other things, from an analysis of the compensation plan and Equinox financial statements, he showed that the upline rewards could not be interpreted in any meaningful way as being retail based (i.e., could not function as sales commissions paid in advance of retail sales). During the Preliminary Injunction Hearing, the author was cross-examined on the declaration. The court rendered in written form certain preliminary findings (September 14, 1999). Among other things, the court underscored the issue of retail sales, affirmed that the *Koscot* and *Omnitrition* decisions were the relevant case law in *Equinox*, and stated that the government was likely to win the case on the merits. During trial, a settlement was reached: Equinox agreed to close its doors and pay approximately $40 million in redress. Other than concurring with the FTC order, the court did not express any additional ruling.

[16]For the indicated example, at r = 41%, ERR/L = 96.7% and ERR/G = 72.0%. That is, approximately 97% of upline rewards would have no basis in actual retail sales; also, 72% of gross distributor income would be funded by ERR. As is exemplified here and is provable in the model, ERR/L ≥ ERR/G whenever the retail margin is nonnegative. Therefore, if a desired threshold for the ratio ERR/G is set, the further ratio ERR/L will meet (or exceed) the same threshold. For clarification, we note that this last result is different from the assertion that, at some levels of retail r, we have ERR/L > 50% and ERR/G < 50%. Moreover, this latter circumstance never occurs for $0 \leq r \leq c^*$.

MLM managers may be able to protect themselves against prosecution by collecting the data that would substantiate their claim of significant retail sales. Policymakers and prosecutors can use the model's implications to fashion specific policies that would lead to fewer prosecutions (e.g., by specifying a threshold for the meaning of the term "primarily" under which a pyramid case would be brought). Currently, public policy statements identify the need for retail sales without a quantifiable guide.

In applying the model, however, prosecutors will still encounter issues of market timing and market conditions. An MLM experiencing rapid recruitment may involve distributors who have yet to develop retail sales. Sponsored-volume commissions are paid in anticipation of retail sales, but some distributors may yet need to sell their inventory to nondistributor consumers. A focus on the latter distributors might show that the upline rewards cannot be favorably viewed as ARC. Here, concerns regarding pyramid scheme activity might be addressed by an analysis of the retail sales of more experienced distributors compared with those of less experienced ones and by seeking a trend of increasing retail sales over time. Similarly, over a certain period of time, a new product might not be as successful in the market as expected, so that a certain demand analysis may need to be adjoined with the model. Nonetheless, the current model provides an analytical tool that focuses on the inevitable importance of retailing and its capacity to fund the proposed rewards.

Managerial Implications

As the model confirms, there is more than one way for an MLM to be retail based. The most obvious way is to tie upline rewards directly to recruits' retail activity. Indeed, the following proposition is provable: Assuming that retail sales are sufficient to cover the costs of production, a compensation formula that directly ties upline rewards to the achieved level of retail sales will secure the result that all upline rewards are covered by ARC (i.e., all rewards paid in connection with recruitment will have a retail basis). This is the strongest outcome envisioned by the model.

For example, compensation could be constructed as follows: Through the markup from distributor wholesale cost, a distributor earns (say) a 30% retail margin on direct retail sales. Also, the distributor earns an override of 15% on retail sales made by his or her immediate recruits and an override of 10% on retail sales made by any recruit of the distributor's recruit. (The specific percentages may vary.)[17] Although rewards are paid as a result of recruitment under this type of plan, the design of the plan guarantees that upline rewards are paid only to the extent that corresponding retail sales exist. Many MLMs do not take this clear and simple route, perhaps because existing public policy has not clearly articulated the importance of retail sales.

There may also be other ways to secure the desired objective. The compensation plan could pay upline rewards based on the amount of product purchased by new recruits (the sponsored-volume rewards of Definition 1), while the parent firm adjoins specific rules that effectuate retail sales. For example, the firm could implement and enforce a (strong) 70% rule; that is, distributors must sell 70% of their purchases to nonmembers before placing a new product order with the company. Or, a still stronger version of this rule could be used, namely, that distributors must sell 70% of their purchases to nonmembers before any sponsorship rewards are paid to upline distributors. These or other rules can secure two desired results: (1) As a matter of track record, most of the distributor purchases will be retailed to the public (to prevent inventory loading), and (2) the resulting gross retail sales will be large enough to have the capacity to fund all or most of the upline rewards paid in connection with recruitment, as well as the costs and expenses of the product and the direct retail commissions implicit in retail sales (see, e.g., Table 2). Assuming that these factors hold, most of the upline rewards may reasonably be described as sales commissions paid in advance of retail sales; such an MLM may further be described as retail based.

This conclusion has intuitive appeal in its own right. The model further clarifies that whatever operational rules the firm chooses, these rules must effectuate a level of retailing (i.e., a percentage of distributor purchases to be retailed) that is at least greater than the critical value c* and that, preferably, would be greater than the turning point c^; the latter would secure a dominant connection between upline rewards and retail sales (see P_2 and P_3). There are also natural corollaries for the priorities of MLM managers and owners. If the firm's goal is to establish a retail operation, the emphasis must be on selling product to customers outside the network. As with other retail forms (e.g., franchising), the firm needs to balance the growth of the distributor network with the growth of a customer base outside the network. New distributors provide opportunities for expansion as they reach out to new customers, and the value of this expanding network of distributors is based (or should be based) chiefly on attracting and keeping customers.

The analysis presented here is a generalization of recently prosecuted major pyramid cases. Further research can more fully analyze the specific forms of these schemes while integrating a "buyers' club" and/or a "business support materials" component into the analysis. Further research can also suggest methods of MLM recruitment and compensation that provide successful retail development.

[17]Usually, the firm has a suggested retail price, and the distributor may decide to charge a different price. To accommodate this circumstance, the indicated overrides may be expressed as a certain percentage of the distributor wholesale cost; the latter has a common value for all distributors.

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