

Thought Contagion and Financial Economics: The Dividend Puzzle as a Case Study

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In this paper we explore the connection between the theory of thought contagion and the ways of thinking in financial economics. We argue that financial economics became what it is today not by coincidence, or a methodically optimal process in search of some universal truth that is “out there,” but by an organized campaign to inhibit thinking. We show that much of financial economic thinking is influenced by the modes in which this thought control takes place. We use the dividend puzzle, one of the great enigmas of modern finance, as a case study to demonstrate the validity of our thesis.

Science must begin with myths, and with the criticism of myths.
—Sir Karl Popper

We argue that financial economics became what it is today not by coincidence, or a methodically optimal process in search of some universal truth that is “out there,” but by an organized campaign to inhibit thinking. This process of influencing thinking is now formalized in a subfield of biology referred to as “thought contagion.” In the second section of this paper, we develop the idea of thought contagion, describe its seven modes, and explain the relation of these modes to financial economics.

The rest of the paper is a case study showing how thought contagion works through the example of perhaps the greatest riddle of financial economics: the persistence of firms in paying dividends, often called the dividend puzzle. Our purpose is *not* a comprehensive review of the dividend literature. Rather, we demonstrate what dividends are, how they evolved, and how thought contagion in financial economics formed the development of models that explain dividends as an economically rational transfer of wealth from the firm to the shareholder.

The third section is a review of the logic of why firms pay dividends. The fourth section recasts the dividend payment logic in terms of the principles and nomenclature of the theory of thought contagion. In the fifth section, we put the dividend phenomenon in evolutionary perspective, explaining in these terms what

dividends really are. Brief conclusions are offered in the final section.

Thought Contagion: Theory and Practice

“Training for the Priesthood”

The formalization of the idea of thought contagion comes from a relatively new, emerging subfield of biology called memetics. Lynch [1996] defines memetics as the study of the processes of “thought contagion”:

Like a software virus in a computer network or a physical virus in a city, thought contagions proliferate by effectively “programming” for their own retransmission. Beliefs affect retransmission in so many ways that they set off a colorful, unplanned growth race among diverse “epidemics” of ideas. Actively contagious ideas are now called *memes* (a word that rhymes with “teams”) by students of the newly emerging science of *memetics* (p. 2).

The word *meme* was coined by Richard Dawkins [1976], who formally recognized the newly emerging science of thought contagion (TC) in his book, *The Selfish Gene*, in which he pointed out the similarities between biological and cultural contagion (p. 3).

Lynch identifies seven modes for retransmitting *memes*: quantity parental, efficiency parental, proselytic, preservational, adversative, cognitive, and motivational. Each of these modes “involves a thought contagional ‘carrier,’ or *host*, serving to increase the idea’s ‘infected’ group, or *host population*” (p. 3). The first three modes are general in nature.

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The **quantity parental** mode is the simple idea that children are influenced first and foremost in the family (for example, racism is learned first in the family, unlike a faculty or instinct one is born with). Thus, the more children of the same parentage, the more the memes are transmitted to society.

The **efficiency parental** mode is a safety device to make sure that the memes of the family are transmitted. A special effort must be made within the family because quantity alone is no guaranty of continuing influence. For example, Jews living in the diaspora have for many centuries considered it to be the greatest of tragedies if their children marry out of faith. Some take it so far as to sit shiva (the Jewish tradition of mourning for the dead) for their child if such a marriage takes place. There is no greater tragedy for a parent than to bury a child; yet the intermarriage taboo is so strong that parents can consider a living child to be dead.

The **proselytic** mode, as the name implies, aims to influence society outside the family by impregnating it with beliefs and values that are strongly held within the family. Contagion in this mode is far quicker than that in the family modes, because there is no need to wait twenty or twenty-five years until a new generation establishes its own family and transmits its memes to a new set of children. This mode is very common, and has previously been classified under the rubric of mass persuasion. Convincing the masses that they are part of the Pepsi generation, or the more crude form of brainwashing in the former communist countries, are typical examples of the proselytizing mode. In many instances, this mode manipulates deeply rooted feelings—patriotism, for example—to cover up injustices of society. A prime example is JFK's famous statement, "Ask not what your country can do for you, but what you can do for your country."

A more recent illustration is Ronald Reagan's "window of vulnerability" (a metaphor that to this day we do not fully understand), which opened the floodgates of the arms race and justified a \$4 trillion increase in the national debt. Another example is the brilliant slogan, "Support our troops!" which turned antiwar sentiments around in favor of the Gulf War by making *not* supporting the war tantamount to *not* supporting American soldiers.

In general, the more educated people are, the less effective the first three modes are as permanent transmitters of memes. This is because the intrafamily modes lose their grip with higher levels of education, and proselytizing does not work very well for those who see through the sometimes-crude *sloganeering*. For academic communities, however, departments within universities and schools of thought across groups of universities perform the same role as families in TC.

Klamer and Colander [1990] designed and distributed a survey of thirty-one questions among the doctoral students of six economics departments selected

out of the top ten according to the ranking by citation by Davis and Papanek [1984, p. 228]. After analyzing the results, they conducted intensive interviews with students in four economics departments, condensing the analysis of the survey and the substance of these interviews into nine chapters of a monograph.

The picture emerging from their work is astonishing. In general, the overall education of the new academic cadres is very narrow, and so are their interests outside economics, mathematics, history, and political science. But even within the subject of economics, the major fields of interest are limited to macro- and microeconomics and political economy. Labor, urban and comparative economics, econometrics, public finance, the history of thought, and law and economics score 75% to 98% as being of little or no interest.

Especially revealing is the orthodox indoctrination of students at the University of Chicago. Fully 97% of the students at Chicago agree either strongly or moderately that "Neoclassical economics is relevant for the economic problems of today" (i.e., for making public policy), compared with 76% at Harvard. Also, as students at Chicago are educated over the four-year term of their studies, they become more rigid and conservative in their thinking. In contrast, those at MIT, for example, tend to move in the opposite direction, toward flexibility and liberality.

Students at Chicago also strongly believe that human behavior, according to some convention, has no importance; only 31% agree that it might be important in some areas. This view contrasts with that of students at MIT, where 18% agree that it is "very important" and 69% agree that it "is important in some areas." As one fourth-year student at Chicago succinctly put it, "I feel I have been socialized into the profession, into its way of thinking" (Klamer and Colander [1990, p. 28]). Apparently, this "socialization" is the strongest at Chicago.

This socialization at school is what the first two modes of TC accomplish in the family. But it goes beyond that, according to Klamer and Colander. Consistent with the third mode, the language they acquire becomes unique and obscure.

Outside graduate school, the rhetoric that people use when they talk about the economy is organic—the economy is an organism inhabited by real people who are often involved in a battle between good and evil: "The US is engaged in a trade war with Japan"; "Investors panicked on October 19, 1987"; "Consumers lose confidence"; and "The administration is out of control." Graduate school bans this organic, personalistic rhetoric and replaces it with the abstract, mechanistic, mathematical rhetoric of academic discourse. People become "optimizers." Trade wars become "exchanges in two-goods, two-factors-of-production models with constant technology." And panicky investors become "buyers and sellers who operate under information constraints in a stochastic environment." In this view

of the world, technological constraints, endowments, and random factors reign. For many students, learning the academic rhetoric is like learning a new language. It is painful. ... They are far from sure that they like the new rhetoric (Klamer and Colander [1990, p. 179]).

Life Within the Church

In the sciences, or meta-sciences such as economics, Lynch's other modes of TC come more into play and are more directly relevant to economic theory.

The **preservational** mode promotes ideas so as to influence their hosts for as long as possible. It is similar to a church orthodoxy, something that is especially akin to financial economics. Criticism of the elders of the church can never be on philosophical grounds, but rather on the grounds of what the so-called "data" show or do not show. That is why Kuhn's [1970] ideas of scientific revolutions were accepted with such enthusiasm by those very few financial economists who cared, to one degree or another, about the philosophical underpinnings of their trade. He gave them an explanation of why certain methodologies were anathema and some hope that there might eventually be some change.

The **adversative** mode sabotages or attacks competing ideas, particularly those that were not spawned by the ideology or methodology of the orthodoxy. In financial economics, the sabotage or attack is achieved through the publication and the promotion/tenure processes, where editors of the nobility press are *de facto* gatekeepers, under the disguise of quality control.¹ What is not published by the leading journals of the field, as in a ukase of a monarch, is not and cannot be "quality." But nothing that challenges the basic tenets of the ideology or is not substantiated by data will ever appear in these publications.

The **cognitive** mode exposes as many non-hosts to the basic ideas as possible. Its aim is to fulfill the folksy maxim: "If you can't beat 'em, join 'em." The seven or eight dominant paradigms of financial economics were posited by academics at a handful of schools. The bulk of the published work of their minions overwhelmingly supports these hypotheses. Empirical evidence to the contrary is declared an "anomaly," and pretending that contradictory findings are only anomalies, of course, guarantees the longevity of the paradigms. Consequently, the basic paradigms are rarely abandoned, even when the pile of "anomalies" in the academic dustbin looms over the supportive empirical evidence. Yet these empirically questionable paradigms dominate the texts used by all students of the subject. A prime and revealing example of this mode is the history of the CAPM (see Frankfurter [1995]).

The **motivational** mode is related to the adversative mode. It inspires one to reap the economic benefits of

joining the host by enhancing one's vita, which brings about promotion to a higher rank, a move to a better academic position, and, ultimately, the reward of lucrative consulting assignments.

These other four modes of TC are part and parcel of regular academic life in finance departments. They are institutionalized through the publication process and through the promotion and tenure process that is very much dependent on it. Evidence is again anecdotal, but they have become part of the language. One talks about "major hits" and "minor publications," which incidentally have nothing to do with content but with the publication outlet itself, and "R&R," which stands for revise and resubmit to a "major" journal.

Truth and Doctrine

These modes of TC make the ruling belief structure virtually impenetrable. Although it is possible that, over many years, a new set of beliefs with its own methodology may evolve, it may take a very long time. Consider the example of heliocentrism and its history from the ancient Greeks to this century. In May 1514, Copernicus had written and discreetly circulated a manuscript, a first outline of the arguments eventually substantiated in *De revolutionibus orbium coelestium* (*On the Revolutions of the Heavenly Spheres*). This classic work challenged the geocentric cosmology that had been the dogma from the time of Aristotle.

In direct opposition to Aristotle and the second-century astronomer Ptolemy, who enunciated the details of the geocentric system based on celestial phenomena, came Copernicus. Copernicus proposed that a rotating earth revolving with the other planets about a stationary central sun could account in a *simpler* way for the same observed phenomena of the daily rotation of the heavens, the annual movement of the sun through the ecliptic, and the periodic retrograde motion of the planets.

This *new* theory of the heavens was actually not new at all. It was anticipated in various aspects first by the Pythagoreans and Aristarchus of Samos (with whom Copernicus was familiar), and by the Muslim astronomer Ibn el-Shatir and certain Christian writers of the Middle Ages. It was not until the second half of the twentieth century, however, that the Catholic church officially accepted heliocentrism and rejected geocentrism.

As instructive as this example of heliocentrism is of how TC works, it is perhaps misleading in that it suggests that, sooner or later (and, in the case of heliocentrism, much, much later), truth will win out. The concept of TC becomes especially useful in disciplines such as financial economics where, unlike the natural sciences, there is far less likelihood of some sort of transcendental truth "out there" to be discovered. When truth is a matter of convention and more akin to ideol-

ogy than to physical law, how such ideologies originate, mutate, and propagate is of considerable interest. In fact, the absence of any sort of externally verifiable truth—despite the fiction within financial economics that there is such a thing and that there are empirical methods by which it can be revealed—can make ideologies quite durable.

The ideology that underlies economics, financial or otherwise, is very difficult to replace because its failures to explain and to dictate social policy cannot be measured with accurate instruments, as can the speed of light, the color of stars, or the wavelength of radio signals. Accordingly, the modes of TC ensure that a Kuhnian revolution is very unlikely because they nip in the bud all attempts at such a revolution.

But how well does TC in financial economics really “work” in practice? A direct answer is almost impossible, but a case study may elucidate some of the ways in which it has a strong influence within the discipline. For this paper, we have chosen to consider dividend policy, which, despite five decades of intensive study, remains one of the most prominent unsolved puzzles of finance. And it may be that this failure is a result of TC, which has prevented thinking from taking more potentially fruitful directions toward a solution.

We emphasize that we are using the dividend puzzle to illustrate the applicability of thought contagion to the methodology and methods of financial economics. Our concern is with how dividends have been studied and not with dividends themselves. Therefore, our explanation of the theories of dividends is brief, only long enough to support our contention that thought contagion can explain how we have gone about solving this and all other puzzles in financial economics.

Why Firms Pay Dividends

What makes the analysis of memes in financial economics especially difficult is that even for a single issue such as dividends and dividend policy, there are a number of different “sites” that memes target. In the case of dividends, the obvious site targeted by successive memes is the question of why firms pay dividends. And how the answers to this question—that is, the memes—have changed over time is a familiar tale to most financial economists.

Dividends are taxable distributions of after-tax, past, and present income of firms, in the form of a real asset to current shareholders, in proportion to their ownership.² Most firms tend to follow a pattern of stable or slightly increasing dividend payments, even in the face of weak current income. This, of course, means paying out a higher proportion of earnings, or borrowing cash for maintaining their dividend pattern. When earnings are higher than expected, higher dividends will be paid only when management is convinced that the higher level of

dividends is sustainable in the future. Lintner [1956], who observed this behavior first, is perhaps the most famous (and possibly only) example of grounded field research in finance (Bettner et al. [1994]).

The so-called “dividend puzzle” (Black [1976]; Bernstein [1996]) deals with the double-edged enigma of why individuals like dividends and why this method of income distribution persists in light of quite burdensome double taxation (Crockett and Friend [1988]). If earnings are retained in the corporation, personal income taxes on those earnings are deferred for shareholders. If earnings are distributed in the form of share repurchases rather than dividends, personal income taxes are deferred for those shareholders who do not tender their shares, and are assessed at the lower capital gains rate that prevailed during most of the last four decades for shareholders in need of the liquidity (Modigliani [1982]).

An early explanation for the dividend puzzle was that for some shareholders, whose personal tax liability was insignificant, there was little or no double taxation and therefore no cost to be offset. If this is so, corporations should have shareholder clienteles whose personal tax positions match the corporations’ dividend policies—separating themselves into ownership classes of high-, low-, or no-dividend-paying firms according to their marginal tax brackets. There is mixed information concerning such clienteles (Blume et al. [1974]; Blume and Friend [1987]).

More recent explanations, based on asymmetry of information flows, claim to have found the economic rationale for dividend payments. One explanation is based on the reasonable assumption that managers know more about the prospects of the firm than outsiders (Bhattacharya [1979]). If the prospects are favorable, managers want to alert the investment community (albeit without divulging proprietary competitive information) in order to raise the corporation’s stock price, thereby raising the value of their own shareholdings and enhancing their managerial reputations. These models assume that false information—i.e., signaling better prospects through increases of dividend payments when, in fact, no such prospects are anticipated—are “punished” severely by the know-all, see-all markets.

According to this tale, the dividend increase becomes a reliable signal of higher future earnings. The markets, in turn, properly impound this signal into the price of the stock, thereby offsetting the dissipative tax liability with a higher share value. Managers who increase dividends without the prospect of higher future earnings would pay for their deception later when the implied earnings did not materialize.

The literature, however, has noted that the double taxation of dividends is quite expensive and that there are less expensive ways to affirm the veracity of announcements of favorable prospects (Crockett and

Friend [1988]). Another concern regarding this meme, which does not receive much attention in the literature, is that managers are aware that dividend decisions are subject to interpretation by the investment community, but they do not agree on this interpretation (Crockett and Friend [1988]). That is, there is no verification that the “signal” is unequivocally understood by both the signalee and the signaler, and there is no testamentary evidence that an important reason for increases in dividend payments is the deliberate decision to signal.

Moreover, these models, too numerous to mention, suffer from a lack of possibility of accurately measuring, or even confidently proxying for, their key variables. Thus, they fail at the outset the Friedmanian requirement for “reasonably good” predictive ability, or Popper’s precondition of verifiability, which deems such models *ad hoc*.³

Another variant of the asymmetric information explanation is based on the firm’s executives’ (agents’) intention of self-interestedly managing the corporation for their own benefit, rather than for the benefit of its shareholders (owners) (Easterbrook [1984]). Managers tend to want to undertake projects with safe but insufficient returns in order to protect their positions and perquisites, rather than riskier projects that could generate higher returns for the shareholders. In this scenario, the shareholders’ interest is to force firms to pay out all the income as dividends so that managers are compelled to face the discipline of the market in their procurement of investment funds and are not able to acquire them virtually unnoticed and largely unchecked in the form of retained earnings.

This brief summary of the dividend fables appears to tell us many things. Lintner [1956] noted that many firms follow a similar dividend policy, and subsequent researchers have attempted to explain why. The whole process certainly looks to be consistent with Popper’s [1965] prescription of conjecture and refutation as the correct path of scientific progress. It does not seem to have anything to do with memes, which, as we have argued, have more to do with intellectual fashion than with scientific truth. But telling the tale a bit differently (putting it in a larger context of methodological trends in finance), the memetic nature of the process becomes much clearer.

How to Explain Why Firms Pay Dividends

Lintner’s grounded field research into dividend policy was one of the last gasps of a qualitative approach to finance, which sought to discover what it was that finance practitioners actually did by observing them and then perhaps to extract from these observations (especially observations of the more successful practitioners) normative prescriptions as to how they might

do it better. It was a last gasp in that seeds for a more technical quantitative approach to finance and for its philosophical justification had recently been planted by Markowitz [1952], Friedman [1953], and Modigliani and Miller [1958]. More precisely, Markowitz, Friedman, and Modigliani and Miller were the agents by which memes were introduced into finance from economics.⁴

The work of Markowitz and Modigliani and Miller was actually the tail end of a much larger process of meme transmission in which emigre mathematicians and physicists had introduced apparently rigorous quantitative methods into economics in the 1930s and 1940s (McGoun [1995]). Friedman’s “contribution” was the resuscitation of the positivist/instrumentalist philosophy (which had been dying in the philosophy of science), which found a new life in economics. Instrumentalism was then infused with the ideology of the radical individualism of Adam Smith as interpreted and modified by Friedman.⁵

So, from the beginning, the search for answers to why firms pay dividends was less a dispassionate quest for scientific explanations for Lintner’s observations than the necessary outcome of methodological memes that dictated a new approach to finance to supplant that of Lintner. Ironically, however, Miller and Modigliani [1961] were the first who pointed out the irrelevance of dividends under conditions of no taxes. And although rejecting the notion that, *ceteris paribus*, dividend-paying firms should sell for a higher price than non-dividend-paying firms, Miller and Modigliani argued that, if that were true, it would point to a *systematic irrationality* of the marketplace.

But what method, or methods, of TC caused this to happen? Within finance, Markowitz would not have had anything to gain from the introduction of a complicated and at that time decidedly suspect meme (Bernstein [1992]). Within economics, where philosophy was not then and is not now an important concern, Friedman would not have had anything to gain from the introduction of a quite unfashionable meme, other than the dissemination of his own ideological beliefs (eventually to rule all economic thinking). How, then, did the contagion spread so rapidly?

Most likely it was a combination of two modes. Within operations management and the philosophy of science, the proselytic mode was operating, in which the purpose is to dominate society *outside* the family by impregnating it with beliefs and values that are strongly held *within* the family. Markowitz’s methods were indeed in healthy ascendancy in operations management, but in the philosophy of science Friedman’s instrumentalism was actually waning and needed fertile ground elsewhere in order to survive. This explains the “push” of the meme, but what about the “pull,” bearing in mind that disciplines are clearly resistant to infection by foreign memes?

Although it may sound somewhat strange, the motivational mode probably played an important role. At the time, finance and economics were already undergoing change and were searching for intellectual respectability. The exacting formulation and methods of Markowitz and of Modigliani and Miller provided the sophisticated modernity; Friedman's philosophy provided the intellectual respectability demanded by finance and economics departments so that they could hold their heads high among the other university departments. Although the memes may not have initially offered much competitive advantage within the fields, they promised vast competitive advantage within the larger academic community and were eagerly seized upon.

The combination of Markowitz's, Modigliani and Miller's, and Friedman's memes transformed the worldview of finance in several ways. Because this worldview had become quite quantitative, everything had to be calculable and measurable. Those who made dividend decisions within corporations did so on the basis of rational calculations, and their actions were best assessed through the statistical analysis of aggregate market data. Because the worldview was now positivist, everything was as it ought to be, and the proper test of an explanation for why corporations paid dividends was whether corporations in fact paid dividends for that reason. There was no room for any normative considerations of how they might do it better, because inefficient dividend policies must have already been killed off by the natural selection of the competitive market, a rather Darwinian view.

Therefore, all the explanations of why corporations pay dividends had to fit the mold of a cost benefit calculation; that is, double taxation was a palpable cost, so for dividends to be paid, there must be some larger, more than offsetting, benefit. Actually, the first explanation, the clientele theory, did not propose a benefit to offset the cost; rather, it argued that, for certain investors, there was no cost.

The more modern explanations for dividends are variations of the information theory, signaling theory, and agency theory memes that have infected all parts of finance, at first perhaps via the cognitive mode. These newer memes all wrap rather simple ideas in the essential quantitative/positivist garb of their ancestor memes. Information theory simply identifies who knows what and what matters. Signaling theory implies that someone may want to subtly let someone else know what they know. And agency theory conjectures that someone may know something more than someone else and use it to his or her own benefit ("me-first" rules) and to the other's detriment. Of course, none of these phenomena will come as a surprise to anyone, even those whose education has not been so comprehensive as to include these theories. But without their fashionable raiments, no one would recognize them as worthy of concern.

What has happened in all these so-called theories (which are, in fact, memes) is that human interactions have been commodified, all exchanges are undertaken as the result of rational cost benefit calculations, and all explanations of why firms pay dividends that are *not* cast in these terms are proscribed. There is no mystery concerning the TC of information theory, signaling theory, and agency theory, for by now *all seven* of the modes of transmission have come into play in order to ensure their perpetuation. And even if their influence should begin to wane, because novelty is a staple of academic life (after all, doctoral dissertations must make an original contribution to knowledge), their successors will be virtually indistinguishable in all essential attributes.

So the *tales* of why firms pay dividends, why shareholders like it, and why the market "rewards" dividend-paying firms are not really honest attempts in the saga of a Popperian search for truth, but the history of a disease resulting from the infection of finance by methodological memes. What matters is not whether an explanation has any real value from the standpoint of knowledge and understanding, but whether it is consistent with current intellectual fashion. Methodological memes, however, are not the only memes at work with regard to dividends. The concept of value itself, of which dividend policy is a component, has been shaped by a number of memes over the course of modern history.

What Dividends Are

Nowadays, it is as if we take the notion of value for granted. It seems obvious that the value of a corporation is in (or comes from) the cash flows it generates, and we pay a price for shares in the corporation now in order to receive the benefits of these cash flows in the future. Either we receive these cash flows directly in the form of dividends, or indirectly by selling our shares and receiving from someone else the discounted value of the dividends. When a corporation retains and reinvests its earnings rather than paying them out as current dividends, we believe that these reinvested earnings will eventually reappear as greater future dividends.

But this has not always been what investors have been buying when they bought the shares of a firm. There has been yet another set of memes at work in finance that have concerned the basis of value, and these have influenced the question of why firms pay dividends for a far longer time than the methodological memes discussed in the preceding section.

Around the turn of the century, the function of dividends in the United States and Great Britain was to make equity look like debt.⁶ With debt's contractually specified payments, one could easily compute its value, and, as much as possible with any risky venture, debtholders could depend on receiving a return on their investment.

Being a residual claim on the corporation entitled to no guaranteed periodic cash flows, it was much more difficult for investors to compute the value of equity, as it still is. Before accounting standards and external audits, reported retained earnings were unreliable evidence that shareholders were receiving any return on their investment.⁷

Of course, the nineteenth-century transportation and industrial expansion, during which considerable external financing in the form of both debt and equity was required, was the era of the so-called “robber barons,” and investors were justifiably skeptical of the entrepreneurial promoters/owners/managers of a corporation in which they were solicited to invest. There were numerous examples of fraud by such owners, and an investor had to wonder why wealthy entrepreneurs would raise external funds for a promising venture rather than relying on their own funds and those of their friends.

Dividends, originally, were not a signal that prospects for future income were favorable, as in “signaling theory,” but that current income was, indeed, there. Earnings from which to pay dividends were considered the sole source of value underlying common stock. There was no concern with the ownership of the firm’s income-producing assets, or for the potential to accumulate future cash flows from undistributed income. Dividends were used the same way as interest was used to value debt, with the par value of equity substituting for the face value of debt (Ripley [1915]). There was strong pressure on managers by shareholders to pay hefty dividends. For example, to their future detriment, railroads often deferred essential maintenance in order to pay dividends (Cleveland and Powell [1912]).

Before accounting standards circumscribed the ability of managers to manipulate their accounts, it was not uncommon to decide how much of a dividend should be paid and then make the necessary adjustments (in depreciation, for example) to ensure that the right amount of earnings were available (Withers [1915]), or even to use “creative” accounting to make earnings appear out of thin air (Dewing [1921a]). Investors were not concerned that agents would invest retained earnings in insufficiently risky investments, as in “agency theory,” but that they would be invested in too-risky investments or misappropriated and not invested at all.

Dividends were even paid out when there were no earnings. Some railroads under construction paid dividends out of their capital (Morgan and Thomas [1969]). This would have presented even more of a puzzle for finance theory than double taxation presents for it today. But it is not so puzzling if we recognize that dividends were seen as an indication of the trustworthiness of management and as evidence of a sound investment. Of course, promoters and managers did not fail to take advantage of this perception—attractive dividends made for an active secondary market in a corporation’s shares. The original shareholders could sell out very profitably and/or the cor-

poration could raise additional capital on favorable terms (Dewing [1914]).

It is not hard to see how, under these conditions, the pattern of no-dividend reductions would arise. For most investors, dividends were the sole tangible evidence of the value of their investment. In fact, a concern for steady dividends was supposed to differentiate an investor from a speculator (Lyon [1916]; Dewing [1921b]). A dividend reduction, even by a rapidly growing company, would have been interpreted as a suspicious impairment of value. A finance text from the 1920s recommends in no uncertain terms the dividend behavior we still observe today:

The principle of greatest importance is that regularity in the dividend rate is highly desirable. ... This rate of dividends in a really stable and conservatively managed corporation never varies except when it is increased. And it is not increased until after the directors have assured themselves that in all human probability a later decrease will not become necessary. ... There is a much stronger demand for these shares than for those which are paying irregular dividends. ... It is coming to be more and more widely recognized by bankers, investors, and the public at large, that the ability of a company to maintain regular rates is a better test of its soundness than is its ability to pay high but irregular dividends (Lough [1922, p. 440]).

In short, the value of a corporation came from its current dividend, and that was the reason dividends were paid. Without the dividend, there was no value. As long as this meme concerning value was dominant, there was certainly no dividend puzzle.

But, subsequently, in the 1920s stock prices began to become detached from dividends and seemed to have nothing to do with yield. At this point, value was thought to reside in the assets of the corporation; that is, when you bought shares, you bought a physical piece of the corporation, and as long as those assets were there, the value was there. We suspect that if anyone thought about dividends at all during this time, they were considered something of an anachronism.

Value returned again to dividends, albeit briefly, after the stock market crash of 1929. But then it began to shift to cash flows, perhaps under the influence of rising stock prices and greater faith in accounting standards or the blue sky laws. This is the origin of the dividend puzzle. Today, we also see the value of a corporation residing in its ability to control cash flows, and not just in the cash flows themselves, as in the ascendance of the so-called “market for corporate control.”

There might be another source of value, however, even newer than what we have mentioned so far. Stocks became a storage of value (primarily for retirement funds) as a result of social convention, much the same as paper money. In fact, one of the reasons that the October 1997 “stock market crash that never was” never

was, was because panicking investors could not liquidate in a few days their 401K or 403B investment portfolios. Miraculously, the market recovered!

This latter meme seems to be emerging in the business press, but has not made it yet to the academic press. It probably will not surface until it can be forced into the straightjacket of the existing methodological memes.

Concluding Remarks

Fischer Black [1976], who originally drew attention to the “dividend puzzle,” had this to say in an editorial in the *Financial Analysts Journal* (Black [1990]):

Why do firms pay dividends? I think investors simply like dividends. They believe that dividends enhance stock value (given the firm’s prospects), and they regard dividends as a more ready source of wealth ... (p. 5).

And later in the same editorial:

What if investors were neutral toward dividends? Investment advisers would tell clients to spend indifferently from income or capital gains and, if taxable, to avoid income. Financial analysts would ignore dividends in valuing stock. Economists would treat stock prices and the discounted value of dividends as equal, even when stocks are mispriced. A firm would apologize to its taxable investors when forced by an accumulated earnings tax to pay dividends (p. 5).

This is quite a different view from the time when Black discovered the puzzle. Of course, in 1976, Black was still an academic following the party line. By 1990, he was a senior partner at Goldman Sachs Asset Management, and, as such, he dealt day in and day out with reality. Also, the fairy-tale explanation of signaling with dividends, or Jensen’s [1986] free cash flow hypothesis,⁸ would have been ridiculed by most of the clients of Goldman Sachs. In fact, Black [1990] does not miss a beat to ridicule the latter.

Yet dividends are still on the top of the list of many investment advisers, and generally misunderstood by shareholders and managers alike. In his 1995 “Letter from the Chairman,” Michael Eisner, Disney’s CEO, had this to say:

Eleven years ago I took, and since then I have taken and retaken again, a crash course in financial management from Gary Wilson. ... and Sid Bass. ... I learned and reviewed every year the following:

A company’s management (meaning me and our senior executives) must use excess cash flow in at least one of four different ways ...

We can invest that cash in extensions of our current business ...

We can repurchase our own shares from time to time when market conditions seem appropriate. Disney has done that effectively over the years.

We can distribute excess cash by paying out a large one-time-only dividend to our shareholders in addition to our regularly scheduled dividends that have grown 20% per year. This we have not done because our shareholders have expressed the desire that we use the company and its assets to gain higher return on cash than individuals can ordinarily achieve.

Or we can make an acquisition ...

Hmm. Whatever the crash course Mr. Eisner took in financial management might have been, it was not directed to the basic understanding of the difference between shoveling out cash at a clip of 20% growth per year and meeting the shareholders’ desire to reinvest in the company because of the spectacular returns of Disney. And if Mr. Eisner and his tutors had difficulties understanding the similarities between dividends and share repurchases, and the difference between investing in profitable opportunities and partial liquidation of the firm, then what can one expect from ordinary shareholders?

The myth of dividends is still a myth out there. Only education can change investors’ attitudes. This is not happening, and will not happen in the near future, in spite of Black’s [1990] prophesy, “Dividends that remain taxable will gradually vanish.” The TC in academia will make sure that the dividend puzzle remains a puzzle. This is because the modes of TC are so strong as to provide an impenetrable phalanx of antibodies, the better to withstand any possible infection from alternative memes.

Notes

1. Robert Merton (*père*) referred to the academic publication process as “organized skepticism.” It might be that in a cognitive sense. It is hardly that normatively.
2. This definition separates dividends from stock dividends and stock splits (because they are not in the form of a real asset), share repurchases and greenmail (because they are not in proportion to ownership), and from other means of income distribution.
3. Ad hoc models, according to Popper and common sense, cannot contribute to the growth of scientific knowledge, because they cannot be falsified.
4. Soon thereafter finance started to be referred to customarily as “financial economics.”
5. For a detailed documentation of how Adam Smith’s philosophy was reinterpreted by Friedman, see Collison and Frankfurter [2000].
6. Much of the discussion in this section was inspired by Baskin [1988]. Readers interested in the historical development of dividends should consult this paper.
7. In that era of corporate secrecy, some corporations reported no financial information other than their capitalization and dividend record (Hawkins [1963]).
8. According to this phantasmagoria, shareholders should siphon off “free cash” through dividends from the managers of the firm, who would otherwise squander it by flagrant spending on perquisites.

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