

---

by Benjamin Graham

# The Future Of Common Stocks

*The following article is taken, with slight revisions, from a paper prepared for delivery before a group of corporate pension executives in June 1974. The last half of the article aims to answer specific questions raised in connection with the address.*

Before I came down to Wall Street in 1914 the future of the stock market had already been forecast—once for all—in the famous dictum of J.P. Morgan the elder: "It will fluctuate." It is a safe prediction for me to make that, in future years as in the past, common stocks will advance too far and decline too far, and that investors, like speculators—and institutions, like individuals—will have their periods of enchantment and disenchantment with equities.

To support this prediction let me cite two "watershed episodes"—as I shall call them—that occurred within my own financial experience. The first goes back just 50 years, to 1924; it was the publication of E.L. Smith's little book entitled, *Common Stocks as Long-Term Investments*. His study showed that, contrary to prevalent beliefs, equities as a whole had proved much better purchases than bonds during the preceding half-century. It is generally held that these findings provided the theoretical and psychological justification for the ensuing bull market of the 1920's. The Dow Jones Industrial Average (DJIA), which

stood at 90 in mid-1924, advanced to 381 by September 1929, from which high estate it collapsed—as I remember only too well—to an ignominious low of 41 in 1932.

On that date the market's level was the lowest it had registered for more than 30 years. For both General Electric and for the Dow, the highpoint of 1929 was not to be regained for 25 years.

Here was a striking example of the calamity that can ensue when reasoning that is entirely sound when applied to past conditions is blindly followed long after the relevant conditions have changed. What was true of the attractiveness of equity investments when the Dow stood at 90 was doubtful when the level had advanced to 200 and was completely untrue at 300 or higher.

The second episode—historical in my thinking—occurred towards the end of the market's long recovery from the 1929 to 1932 debacle. It was the report of the Federal Reserve in 1948 on the public's attitude toward common stocks. In that year the Dow sold as low as 165 or seven times earnings, while AAA bonds returned only 2.82 per cent. Nevertheless, over 90 per cent of those canvassed were opposed to buying equities—about half because they thought them too risky and half because of unfamiliarity. Of course this was just the moment before common stocks were to begin the greatest upward movement in market history—which was to carry the Dow from 165 to 1050 last year. What better illustration can one wish of the age-old truth that the public's attitudes in matters of finance are completely untrustworthy as guides to investment policy? This may easily prove as true in 1974 as it was in 1948.

---

*Benjamin Graham, senior author of Security Analysis, first edition of which appeared in 1934, needs no introduction to the readers of this magazine.*

I think the future of equities will be roughly the same as their past; in particular, common-stock purchases will prove satisfactory when made at appropriate price levels. It may be objected that is far too cursory and superficial a conclusion; that it fails to take into account the new factors and problems that have entered the economic picture in recent years—especially those of inflation, unprecedentedly high interest rates, the energy crisis, the ecology-pollution mess and even the movement towards less consumption and zero growth. Perhaps I should add to my list the widespread public mistrust of Wall Street as a whole, engendered by its well-nigh scandalous behavior during recent years in the areas of ethics, financial practices of all sorts and plain business sense.

Of course these elements—mainly unfavorable to the future values of common stocks—should be taken into account in the formulation of today's investments policies. But it is absurd to conclude from them that from now on common stocks will be undesirable investments no matter how low their price level may fall. The real question is the same as it has always been in the past, namely: Is this a desirable time or price level to make equity purchases? We should divide that question, I think, into the following: a) Is this a desirable level to buy stocks in general, as represented by the DJIA or Standard and Poor's 500 (S&P 500)? b) Even if the averages may not be at an attractive level, can investors expect satisfactory results by choosing individual issues that are undoubtedly worth at least what they are selling for? The distinction I have just made is clearly relevant to the present situation because of the recent advent of the "two-tiered market," resulting from the massive preference of institutions for large, high-growth companies. This in turn has brought about disparities in the P/E ratios for issues of investment character—differences as high as ten to one—that have been unexampled in all my experience, except perhaps at the height of the 1929 madness with its celebrated "blue-chip" issues.

My own answer to the double question just posed is as follows: As to the present level of the averages—say, 850 for the Dow and 93 for the S&P 500—the factor most directly affecting current security values and prices is most assuredly the high rate of interest now established for the entire spectrum of bond and note issues. One of the glaring defects of institutional attitudes has been that as recently as early 1973—when they supported the record price level of the averages—they

failed to take into account that AAA bonds were then yielding 7.3 per cent and had been above 8.5 per cent not long before. (As it happened they were destined to surpass the 8.5 per cent rate in 1974.) In 1964 the AAA rate averaged 4.4 per cent. It seems logical to me that the earning/price ratio of stocks generally should bear a relationship to bond-interest rates. If this thesis is accepted in its simplest form we must conclude: If one dollar of Dow earnings were worth \$17 when bond yields were 4.4 per cent, that one dollar is now worth only 52 per cent of \$17, or \$8.80, with AAA bonds at 8.5 per cent. This in turn would suggest a currently justified multiplier of, say, nine for the normal current earnings of the Dow. If you place those earnings at the record 1973 figure of \$86, you arrive at a current valuation of only 775 for the DJIA. You may quarrel with this figure on various grounds. One may be your expectation that bond rates will fall in the future. But that prospect is far from certain, while the present 8-1/2 per cent rate is a fact. Also, if bond yields go down appreciably, then bond prices—especially of the low-coupon, large-discount issues—will advance as well as stocks. Hence such bonds could still work out better than the Dow if and when interest rates decline.

Viewing the matter from another angle, I should want the Dow or Standard and Poor's to return an earnings yield of at least four-thirds that on AAA bonds to give them competitive attractiveness with bond investments. This would mean an earnings yield of 11 per cent, and it brings us smack back to the valuation of about 775 for the Dow that we found by comparing the early 1974 situation with that ten years before.

Furthermore, my calculations of growth rates over the past 25 years give an annual figure for the Dow of only 4-1/2 per cent. If this rate were to continue in the future, the expectable combination of growth plus dividends would produce less than a ten per cent overall return, consisting of four and one-half per cent growth plus a compounded dividend yield of, say, five per cent. This second calculation would make my current 775 valuation for the Dow appear over generous. Incidentally, a corresponding approach to the S&P 500 Index gives a somewhat less favorable result than for the Dow at current levels. The S&P 425 and 500 Indexes have both grown at about a five per cent rate over the past 25 years. But this advantage appears to be offset by their higher P/E ratios compared with the DJIA.

(continued next page)

## Selecting Individual Common Stocks

When we come to valuing individual stocks I should like to divide them into three classes, as I find them in the NYSE list. Group I is the growth issues selling at more than 20 times their last 12 months' earnings. Group II is the relatively unpopular stocks selling for less than seven times recent earnings—i.e., at 15 per cent earnings yield or better. Group III has multipliers between seven and twenty.

In my count of 1530 NYSE issues there were 63, or four per cent of the total, selling above 20 times earnings, of which 24 passed the 30 times mark. By contrast, more than 500—over a third—sold below seven times earnings, and of these about 150—say, ten per cent of the total—were quoted under five times the last 12 months' profits.

If the earnings on which these multipliers are based can be counted on, more or less, in the future—without any special requirements as to growth—it is evident that many NYSE issues can now compete in attractiveness with bonds at 8-1/2 per cent. In this large area of choice there are many that would be suitable for pension-fund investment; many indeed that may be regarded as definitely undervalued. These are especially suited for longer-term commitments as distinguished from short-term speculative purchase. Among the under seven-times-earnings list are huge concerns like Firestone (with \$3 billion of sales) and intermediate-sized enterprises like Emhart, which has paid dividends for 72 years and recently sold under its net-current-asset value.

## The Book-Value Approach

The developments that have produced these extraordinarily low multipliers for so many NYSE (and other) issues now present us with another phenomenon—namely the reestablishment of book value, or net worth, as a point of departure and possible guide to the selection of common stocks. In a large area of the present stock market we could return to a very old-fashioned but nonetheless useful criterion for equity investment—namely the value of the company as a private enterprise to a private owner, irrespective of market quotations for the shares. If the business has been prosperous, and is at least reasonably promising for the future, it should be worth its net asset value; hence an opportunity to buy an interest therein at a substantial discount from net worth could be considered attractive.

As it happens, about half the NYSE companies

were selling last month at less than book value, and about one-quarter, or about 400 issues, at less than two-thirds of net worth. What is equally interesting is that about one-third of all common stocks actually sold both *above* and *below* their net worth in the past 12 months. Certainly more than half fluctuated around this figure in the last five years. For the most part, these issues selling below book are also in the low-multiplier group.

I may be so bold as to suggest that this situation makes possible a quite simple approach to equity investment that is open to almost everyone from the small investor to the quite large pension fund manager. This is the idea of buying *selected* common stocks—those meeting additional criteria of financial strength, etc.—obtainable at two-thirds or less of book value, and holding them for sale at their net asset value—to show a non-spectacular but quite satisfactory 50 per cent profit. We cannot predict with assurance how this apparently too-simple investment program will work out in the future. But I can say that my studies covering the period 1961 to 1974 show the presence of sufficient opportunities of this kind in most years, and also excellent overall results from the assumed operations.

Since I spoke of three groupings of the NYSE list, I should now give my views of Groups I and III. Those selling at intermediate multipliers may present individual opportunities, but they have no special interest for me as a category. But the first-tier, high-growth issues present a real challenge to past experience. Obviously they would be wonderful private or market-type investments if obtainable at book value or even twice that figure. The trouble is, of course, that most of them sell at more than five times book value—and some more than ten times. Last year the ratios were a good deal higher than that. At these levels, they take on a *speculative character* which is due entirely to their price level, and in no sense to any weakness of the companies themselves. (I made this point as long ago as 1958 in an address before the Financial Analysts Federation; it is reproduced as an Appendix to *The Intelligent Investor*.) The speculative risks attached to high-growth stocks have been brought home dramatically in the past 18 months by the price declines in many of these favorites. (I need not give examples.)

However, I do want to use an instance here in connection with a brief discussion of a recently launched academic theory about the stock market, which could have great practical importance if it

coincided with reality. This is the hypothesis of "the efficient market." In its extreme form it makes two declarations: 1) The price of nearly every stock at nearly all times reflects whatever is knowable about the company's affairs; hence no consistent profits can be made by seeking out and using additional information, including that held by "insiders." 2) Because the market has complete or at least adequate information about each issue, the prices it registers are therefore "correct," "reasonable" or "appropriate." This would imply that it is fruitless, or at least insufficiently rewarding, for security analysts to look for discrepancies between price and value.

I have no particular quarrel with declaration one, though assuredly there are times when a researcher may unearth significant information about a stock, not generally known and reflected in the price. But I deny emphatically that because the market has all the information it needs to establish a correct price the prices it actually registers are in fact correct. Take as my example a fine company such as Avon Products. How can it make sense to say that its price of 140 was "correct" in 1973 and that its price of 32 was also "correct" in 1974? Could anything have happened—outside of stock-market psychology—to reduce the value of that enterprise by 77 per cent or nearly six billion dollars? The market may have had all the information it needed about Avon; what it has lacked is the right kind of judgment in evaluating its knowledge.

Descartes summed up the matter more than three centuries ago, when he wrote in his "Discours de la Méthode": "Ce n'est pas assez d'avoir l'esprit bon, mais le principal est de l'appiquer bien." In English: "It is not enough to have a good intelligence"—and I add, "enough information" —"the principal thing is to apply it well."

I can assure the reader that among the 500-odd NYSE issues selling below seven times earnings today, there are plenty to be found for which the prices are not "correct" ones, in any meaningful sense of the term. They are clearly worth more than their current selling prices, and any security analyst worth his salt should be able to make up an attractive portfolio out of this "universe."

### Inflation and Investment Policy

Let us turn now to inflation. Do the prospects of continued inflation make equity purchases undesirable at present market prices or indeed at any conceivable level? It is passing strange that this

question should even suggest itself. It seems only yesterday that everyone was saying that stocks, even at high prices, were definitely preferable to bonds because equities carried an important measure of protection against future inflation.

But it should be admitted that not only recently, but for many years and perhaps decades past, equities as a whole have failed to provide the protection against inflation that was expected from them. I refer to the natural surmise that a higher general price level would produce a higher value for business assets and hence correspondingly higher profit rates in relation to original costs. This has not been borne out by the statistics. The rate of return on book equities as a whole—much understated as they must be in terms of reproduction costs—has at best held constant at around the 10 to 12 level. If anything, it has declined from the 1948 to 1953 period when the Dow was selling at only seven times earnings.

It is true of course that the earnings on the DJIA and the S&P 425 Industrials have tripled from 1947-1951 to 1969-1973. But in the same period the book value of both indexes has quadrupled. Hence we may say that all the increase in post-war earnings may be ascribed to the simple building up of net worth by the reinvestment of undistributed profits, and none of it to the more than doubling of the general price level in those 28 years. In other words, inflation as such has not helped common-stock earnings.

This is a good reason—and there are others—not to be enthusiastic about equities at every market level. This caution is part of my long-held investment philosophy. But what about the current situation? Should inflation prospects dissuade an investor from buying strong companies on a 15 per cent earnings return? My answer would be "no."

What are the investors' real choices—whether as an institution or as an individual? He can elect to keep his money in short-term obligations, at a good yield, expecting that future inflation will eventually produce lower market levels for all kinds of stocks, including those with low multipliers. This choice would be justified when the investor is convinced that stocks are selling above their true value, but otherwise it is only a kind of bet on future market movements. Or he may conceivably decide on an entirely new sort of investment policy—namely, to move from stocks or bonds into things: real estate, gold, commodities, valuable pictures and the like. Let me make three observations here.

The first is that it is impossible for any really

large sums of money—say billions of dollars—to be invested in such tangibles, other than real property, without creating a huge advance in the price level, thus creating a typical speculative cycle ending in the inevitable crash. Secondly, this very type of hazard is already manifest to us in the real estate field, where numerous new ventures, financed through a combination of borrowing and quoted common-stock issues, have encountered problems of all sorts, including large stock-market losses for their investors.

My third observation is on the positive side. I think all investors should recognize the possibility—though not necessarily the probability—of future inflation at the recent 11 per cent rate, or even higher, and should introduce what I shall call a “concrete-object factor” in their overall financial approach. By this I mean that they should not be content to have an overwhelming proportion of their wealth represented by paper money and its equivalents, such as bank deposits, bonds and receivables of all sorts. For the shorter or longer pull—who can really tell?—it may turn out to be wiser to have at least an indirect interest—via the common-stock portfolio—in such tangibles as land, buildings, machinery and inventories. This is relatively easy to accomplish in the execution of an ordinary common-stock investment policy. My point is only that it would be worthwhile to introduce the concept as a specific and measured criterion in analyzing one's resources. That idea is as readily applicable to pension funds as to other portfolios.

It should be obvious from my overall approach to the future of equities that I do not consider such much-publicized problems as the energy crisis, environmental pressures, foreign exchange instability, etc. as central determinations of financial policy. They enter into the value versus price equation in the same general fashion as would any such other adverse factors as 1) a tendency towards lower profit margins and 2) the higher debt burden and the higher interest rate thereon. Their weight for the future may be assessed by economists and security analysts, presumably with the same accuracy, or lack of it, as has characterized such predictive work in the past.

#### **Institutional Dominance, Efficient Markets, and the Prospects for Security Analysis**

Is there an equity bias among money managers? My answer is that there has undoubtedly been such a bias in the past decade, and that it was a powerful force in establishing price levels for the stock

market generally that were out of line with bond yields. It may well have contributed to these high yields themselves, for it deprived the bond market of billions of dollars that went instead into buying shares from former holders at advancing P/E rates. Since concern is now expressed about institutional disenchantment with equities, it may well be that the bias of recent years is not only rapidly disappearing but is being reversed and that it is now the function of real oldtimers like myself to caution against taking on an equally unjustified bias *against stocks at low price levels*.

What will be the effect on performance of having, say, \$200 billion of institutional money in equities, plus, say 11,000 working security analysts, all trying to “beat the averages?” The reader will pardon a reference here to a couplet by Heinrich Heine à propos of the appointment of 45 German professors to some commission of inquiry 150 years ago. He wrote:

“Funf-und-vierzig Professoren—  
Vaterland, du bist verloren!”  
(Forty-five Professors—  
Fatherland, you're ruined!)

If only 45 professors can present such a menace, how about 11,000 analysts?

Seriously, the effect of large-scale participation by institutions in the equity market, and the work of innumerable financial analysts striving to establish proper valuation for all sorts, should be to stabilize stock-market movements, i.e., in theory at least, to dampen the unjustified fluctuation in stock prices. I must confess, however, that I have seen no such result flowing from the preponderant position of the institutions in market activity. The amplitude of price fluctuations has, if anything, been wider than before the institutions came into the market on a grand scale. What can be the reason? The only one I can give is that the institutions and their financial analysts have not shown any more prudence and vision than the general public; they seem to have succumbed to the same siren songs—expressed chiefly in the cult of “performance.” They, too, have largely put aside the once vital distinction between investment and speculation. (This leads me to ask whether some day soon we shall see some legal problems for certain banking institutions growing out of their accountability for the results of *trust* investments made from 1968 to 1973 that failed to meet the strict judicial requirements of the prudent man rule).

Let me give a concrete example of my statement

that institutional investment does not appear to have contributed either stability or rationality to stock prices—American Airlines. The Standard and Poor's Monthly Stock Guide shows the holdings of this and other concerns by about 2000 insurance companies and investment funds, though not by banks and their trust departments. In 1970, the canvassed institutions owned 4.3 million shares of American Airlines, or 22 per cent of the total. The company reported a deficit of \$1.30 per share in 1970, then earnings of 13 cents in 1971 and a magnificent 20 cents in 1972. In response, our so-called efficient stock market advanced the price from a 1970 low of 13 to a new all-time high of 49-7/8 in 1972. This was 250 times that year's profits. Now what did our financial institutions do to hold down this insane speculative binge in the shares? Did they sell out their holdings somewhere along the line, to cash in a profit and rid their portfolios of a clearly overvalued issue? On the contrary. The Guide showed that during this period they actually *increased* their ownership to 6.7 million shares, or by a full 50 per cent, held by 143 companies. And the latest figures, in 1974, show that 117 funds etc. still owned 5.7 million shares or 20 per cent of the total. (In the meantime the company reported a record deficit of \$48 million in 1973, and the price collapsed from 50 in 1972 to 7-1/2 in 1974.)

This story hardly suggests that the institutions have been valiant contributors to "efficient markets" and correct stock prices.

More and more institutions are likely to realize that they cannot expect better than market-average results from their equity portfolios unless they have the advantage of better-than-average financial and security analysts. Logically this should move some of the institutions towards accepting the S&P 500 results as the norm for expectable performance. In turn this might lead to using the S&P 500 or 425 lists as actual portfolios. If this proves true, clients may then find themselves questioning the standard fees most of them are paying financial institutions to handle these investments. (Incidentally, if my half-serious prophecy of a movement towards actual S&P Index portfolios is realized we should have an ironical return to a form of investment in equities that existed here 50 years ago. The first investment funds were actual "trusts," and "fixed trusts" at that. The portfolios were set up, on a once-for-all basis, from the very beginning. Changes could be made only under compulsory conditions.)

A modification of my "fixed fund" suggestion would leave more leeway for the work of financial analysts. This modification would base equity portfolios initially on an actual or presumed imitation of the S&P Index, or—more simply—the DJIA. The operating manager or decision maker would be permitted to make substitutions in this list, but only on a persuasive showing that the issues substituted had distinctly more intrinsic value per dollar of price than the ones to be dropped. Combined with fairly heavy accountability for the results of such departures from the original list, such a program might well improve the actual performance. In any case it would give the financial analysts' profession something to do.

There has indeed been a strong intimation in this article that the DJIA and the S&P Indexes are now selling too high in relation to many issues now purchasable at low P/E ratios. If this view is correct any competent analyst has an excellent present opportunity to earn his pay by recommending desirable substitutes for certain companies in these averages.

Please bear in mind that while I have been making a case for equity investment now—despite, or perhaps because of, institutional disillusionment with them—I am not proposing a 100 per cent stock position for any investor. On the contrary, I think that everyone's total portfolio should always have a minimum component of 25 per cent in bonds, along with a complementary minimum holding of 25 per cent in equities. The remaining half of the funds may be divided between the two, either on a standard 50-50 basis (adjusted to reflect changes caused by significant price movements) or in accordance with some consistent and conservative policy of increasing the bond proportion above 50 per cent when bonds appear more attractive than equities, and vice versa when equities appear more attractive than bonds.

Do equities win by default because there is no assumed liquidity in other alternatives? There are various answers to this query. The first is, of course, that the alternative of putting funds into short- or longer-term debt obligations does not diminish the liquidity factor. Secondly, I could argue that liquidity is itself a minor desideratum in a true investment program, and that too many value considerations have been sacrificed to an assumed need for quick marketability. But thirdly, I could not say to what extent the liquidity factor should enter into consideration of non-income-producing objects—such as paintings, com-

modities, etc.—as alternatives to common stocks. My hunch is that the absence of income—as against 8-1/2 per cent annually on bonds—should be more important here for your investment decisions than the liquidity factor.

### An Indexed Economy and a Managed Economy

What are the implications of an "indexed economy"? I have already stated views of inflation's effect on equities. I feel that an indexed economy—in the full sense of Milton Friedman's recent proposal—is too impractical and remote to warrant serious discussion here. We have it in part in cost-of-living adjustments in union contracts, including to some degree pension plans. There was once an indexed bond issue, put out by Remington-Rand Corporation at the instance of Irving Fisher (then a director), which varied the coupon payments with the cost-of-living index. Conceivably—though not probably—that idea may be revived. However, we have a growing number of debt obligations that vary the coupon rates with changes in current bond yields or bank lending rates. The floodgates seem to be opening here with the offering of \$650 million of Citicorp Floating Rate Notes due in 1989.

We have all become so familiar with a more or less managed economy since the Roosevelt era beginning 40 years ago, that we should be quite inured to its effect on everything including equities. Basically, the intervention of government in the economy has had two opposite effects on common stock values. It has benefited them greatly through its virtual guarantee against the money panics and large-scale depressions of the pre-1935 decades. But it was hurt profits through the maze of restrictions and the numerous other burdens it has imposed on business operations. Up to now the net effect seems to have been favorable to equity values—or at least to their prices. This can be seen at first glance by comparing the Dow or S&P Index lines on a chart before and after 1949. In such comparisons the price declines in 1969 to 70 and 1973 to 74 appear like minor downturns in a massive upward sweep.

Experience suggests therefore that the various threats to equities implied in the last question are not very different from other obstacles that common stocks have faced and surmounted in the past. My prediction is that stocks will surmount them in the future.

But I cannot leave my subject without alluding to another menace to equity values not touched on in my terms of reference. This is the loss of public

confidence in the financial community growing out of its own conduct in recent years. I insist that more damage has been done to stock values and to the future of equities from inside Wall Street than from outside Wall Street. Edward Gibbon and Oliver Goldsmith both wrote that, "History is little more than a register of the crimes, the follies and the misfortunes of mankind." This phrase applies to Wall Street history in the 1968 to 73 period, but with more emphasis to be given to its crimes and follies than to its misfortunes. I have not time even to list all the glaring categories of imprudent and inefficient business practice, of shabby and shoddy ethics perpetrated by financial houses and individuals, without the excuse of poverty or ignorance to palliate their misdemeanors. Just one incredible example: Did anyone ever hear of a whole industry almost going bankrupt because it was accepting more business than it could handle? That is what happened to our proud NYSE community in 1969, with their back-office mix ups, missing securities, etc. The abuses in the financial practices of many corporations during the same period paint the same melancholy picture.

It may take many years—and new legislation—for public confidence in Wall Street to be restored, and in the meantime stock prices may languish. But I should think the true investor would be pleased, rather than discouraged, at the prospect of investing his new savings on very satisfactory terms. To pension-fund managers, especially with large and annual increments to invest, the prospects are especially inviting. Could they have imagined five years ago that they would be able to buy AAA bonds on an eight to nine per cent basis, and the shares of sound companies on a 15 per cent or better earnings yield? The opportunities available today afford a more promising investment approach than the recent absurd idea of aiming at, say, 25 per cent market appreciation by shifting equities among institutions at constantly higher price levels—a bootstrap operation if there ever was one.

Let me close with a quotation from Virgil, my favorite poet. It is inscribed beneath a large picture panel at the head of the grand staircase of the Department of Agriculture building in Washington. It reads:

"O fortunati nimium... (etc.) Agricolae!"

Virgil addressed this apostrophe to the Roman farmers of his day, but I shall direct it at the common-stock buyers of this and future years:

"O enviably fortunate Investors, if only you realized your current advantages!" ■

**Copyright of Financial Analysts Journal is the property of CFA Institute and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.**