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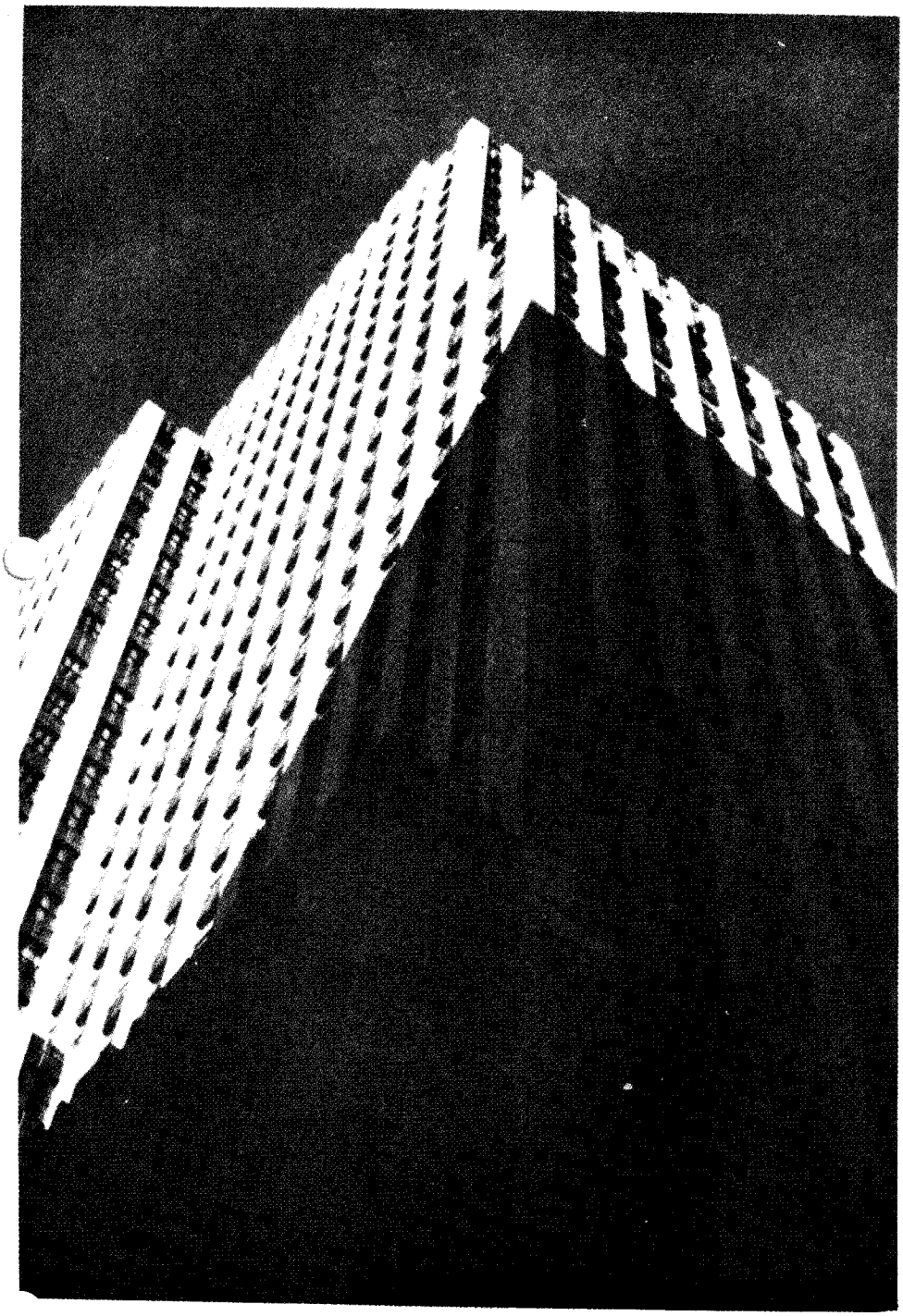

CHARLES S. ISAACS

INDEXED ESCALATION, already a factor in labor contracts, service agreements, social security payments, and other areas, is now moving steadily into rental and leasing agreements for business office and other commercial industrial properties. Recent changes in real estate market conditions resulting from basic national and local economic forces have spotlighted indexed escalation of rent adjustments as a potentially major factor in commercial leasing.

Periodic rent escalation (sometimes in the form of cost-of-living adjustments on short-term leases) has become standard practice over the past decade. But potential institutionalization of indexed escalation in long-term office and other business property lease transactions portends a substantial transformation in traditional lessor-lessee relationships and commercial leasing practices throughout the country.

Advocates of indexed escalation have initiated its use mainly as a means to protect the purchasing power of their future income flow. Several different indices have been used for this purpose, including the consumer price index, the personal consumption expenditure deflator,

This trend, the author contends, could make rentals escalate more rapidly than landlords' costs. Because the escalation formulae can have widely varying effects, tenants should proceed carefully.

the producer price index, and the gross national product deflator. The most commonly utilized yardstick is the "Consumer Price Index For All Urban Consumers" (CPI). Although this index has generated considerable debate among economists recently, it is beginning to find widespread acceptance among landlords who see a need for "real dollar" income protection in long-term office leases. As a result "CPI escalation" has acquired increased importance in the lexicon of corporate real estate.

How indexed escalation works

The CPI is a monthly measure designed by the Bureau of Labor Statistics to measure the impact of inflation on consumer prices. It comprises price changes for various categories of items, which are published separately and are combined in a weighted composite index that purports to reflect the buying habits of consumers. This "market basket" includes food, housing, clothing, transportation, medical care, entertainment, and other goods and services.

Underlying the myriad variations now being used to escalate rentals based on this index is the simple concept of increasing the rent periodically by the percentage increase in the CPI during a designated period. The equations associated with computing the resulting escalations are shown on page 52 (Formula 1). There is no "pure form" of CPI escalation, however. Each negotiation must take into account several major questions and variations:

1. Will the full rent be escalated by the CPI increase, or only part of it? Alternatively, will all or only a portion of the CPI increase be used as the escalation generator?

2. Will the CPI escalation be charged in addition to, or in lieu of, other escalations? Will these supplemental escalations add to the base for further CPI escalation?

3. What is the base period? This is a matter of critical importance. Will it be at the time of signing, of possession, or of prior calculations? Will it be a year, a month, or a quarter?

4. Which geographical area will be used? In addition to the national CPI, there are dozens of others, each of which fluctuate at different rates, according to the demographic characteristics of the designated region.

5. Will there by any "cap," or ceiling, beyond which escalation cannot be charged? Is there a dollar amount or a percentage increase that specifies a maximum rental regardless of CPI increases and/or other escalations?

6. Which CPI is to be used? Since 1978 the Bureau of Labor Statistics has published two consumer price indices—one for "all urban consumers," the other for "urban wage earners and clerical workers." Both are composites based on the buying habits of consumers, but each uses different weights and samples, resulting in different indices and rates of change.

7. Will the CPI used be the composite for "all items," or a subindex such as housing or energy, or even a composite of specified subindices?

8. Will increases be charged according to the percentage increase over the base or over the previous period?

9. Will escalation be calculated annually, monthly, or quarterly? Will it be retrospective (catching up to CPI increases) or prospective (estimating future increases)?

To a prospective tenant, any one of the above listed variables could make the difference between a lease that makes good economic sense and one that doesn't.

How indexing developed

Indexed escalation is the product of changing economic and business conditions as they affected landlord-tenant relationships over the past 30 years.

Back in the 1950s, when inflation averaged 1.5 percent annually, rent escalation clauses were infrequently imposed. Leases were generally written for short terms, providing an opportunity to catch up, both with the market and with inflation, at renewal time.

During the 1960s, many large space users moved from owned to leased facilities, and the median space requirements of traditional lessees grew substantially. As a result, longer term leases became more common. At the same time, inflation began to affect the financial statements of office buildings, and many landlords found themselves incurring increased expenditures for property taxes and operating expenses while rents remained constant, producing declining cash flows for their

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Formula 1
Calculating Consumer Price Escalation

Full CPI escalation for the year n (E_n) is a product of the base rent (R_0) and the accumulated increase in the CPI since the base year.

$$E_n = R_0 \left(\frac{CPI_n - CPI_0}{CPI_0} \right) = R_0 \left(\frac{CPI_n}{CPI_0} - 1 \right)$$

If I_n represents the fractional increase in the CPI of year n over that of the previous year, then

$$E_n = R_0 \left[(1+I_1)(1+I_2)(1+I_3) \ldots (1+I_n) - 1 \right]$$

and the escalated rental for year n (R_n) is calculated as follows:

$$R_n = R_0 (1+I_1)(1+I_2)(1+I_3) \ldots (1+I_n) = R_{n-1}(1+I_n)$$

Formula 2
Profit Inflation Index

Since the landlord's profit (P) in any given year (P_n) is equal to the difference between rent and costs for that year,

$$P_n = R(1+i)^n - T(1+t)^n - O(1+o)^n - F,$$

the Profit Inflation Index (π_n) for year n is derived by calculating the percentage by which P_n exceeds P_0, the profit in the base year. Therefore:

$$\pi_n = \frac{P_n - P_0}{(.01)\,P_0} = \frac{100\,P_n}{P_0} - 100, \text{ or}$$

$$\pi_n = \frac{R(1+i)^n - T\ (1+t)^n - O\ (1+o)^n - F}{(.01)\ (R - F - T - O)} - 100$$

Where:

- T = Base year taxes
- O = Base year operating expenses
- R = Base rent
- i = Projected annual percentage increase in CPI, divided by 100
- t = Projected annual percentage increase in taxes, divided by 100
- o = Projected annual percentage increase in operating expenses, divided by 100
- F = Interest and amortization (fixed debt service)

properties. In order to protect themselves, landlords began to demand provisions for rent escalation as part of their leases.

The most common provision of this type is known nationally as the "actual cost formula," in which increased costs in taxes and operating expenses are allocated to each tenant in proportion to their respective share of occupancy of the building. While simple in concept, problems develop because of the inability of many tenants to verify the expenses claimed, the chronic ambiguity between includable and excludable expenses, and the disinclination of landlords to maintain separate records for this purpose and to have these books checked. Overcoming these problems required a readily verified standard. In New York City, for example, since building workers' wage rates were rising at roughly the same rate as other expenses, many landlords soon opted to base operating escalation on the porter wage, rather than actual costs.

"Penny-per-percent" was the first formula developed to base operating escalation on labor costs. Put simply, rent would be increased by one penny (or more, as negotiated) per square foot for each percentage increase in the porter wage. As wage rates continue to rise, though, equal percentages yielded equal escalation charges to the tenant, but higher costs to the landlord. With inflation accelerating, landlords also desired a mechanism to protect the purchasing power of the portion of rent associated with profit. Tight market conditions in the late '60s were the signal for many landlords to simply drop the "per" from percent.

A "penny-for-penny" formula soon gained wide acceptance among New York City landlords. Basically, it added 1¢ (or more, as negotiated) per square foot for each penny increase in the porter hourly wage. Although the formula has a ring of fairness to it, the resulting escalation was enough, in practice, to increase the purchasing power of the landlord's profit, not just to protect it. With fringe benefits increasing faster than wages, landlords used, whenever possible, the entire wage-fringe package as a base.

Profitable as it seemed at first, even the protection afforded by this formula came into question in 1973–74, when the cost of energy began to soar, far exceeding the rate of increase in wages. Faced with continuing uncertainty concerning the relation of energy to labor in future operating expense statements, some landlords began to negotiate an option to switch back and forth between actual cost escalation and penny-for-penny escalation during the life of the lease.

Others turned to the consumer price index as a gauge by which to increase rentals in accordance with inflation. Landlords and tenants in Los Angeles and, more recently, in Chicago, Boston, and other cities have become accustomed to indexed escalation based on the CPI, although lease terms in these cities are generally shorter than those prevailing in New York. In addition, precedents provided in other major cities of the world are numerous, including the commercial centers of France, Belgium, Spain, Denmark, and the Netherlands.

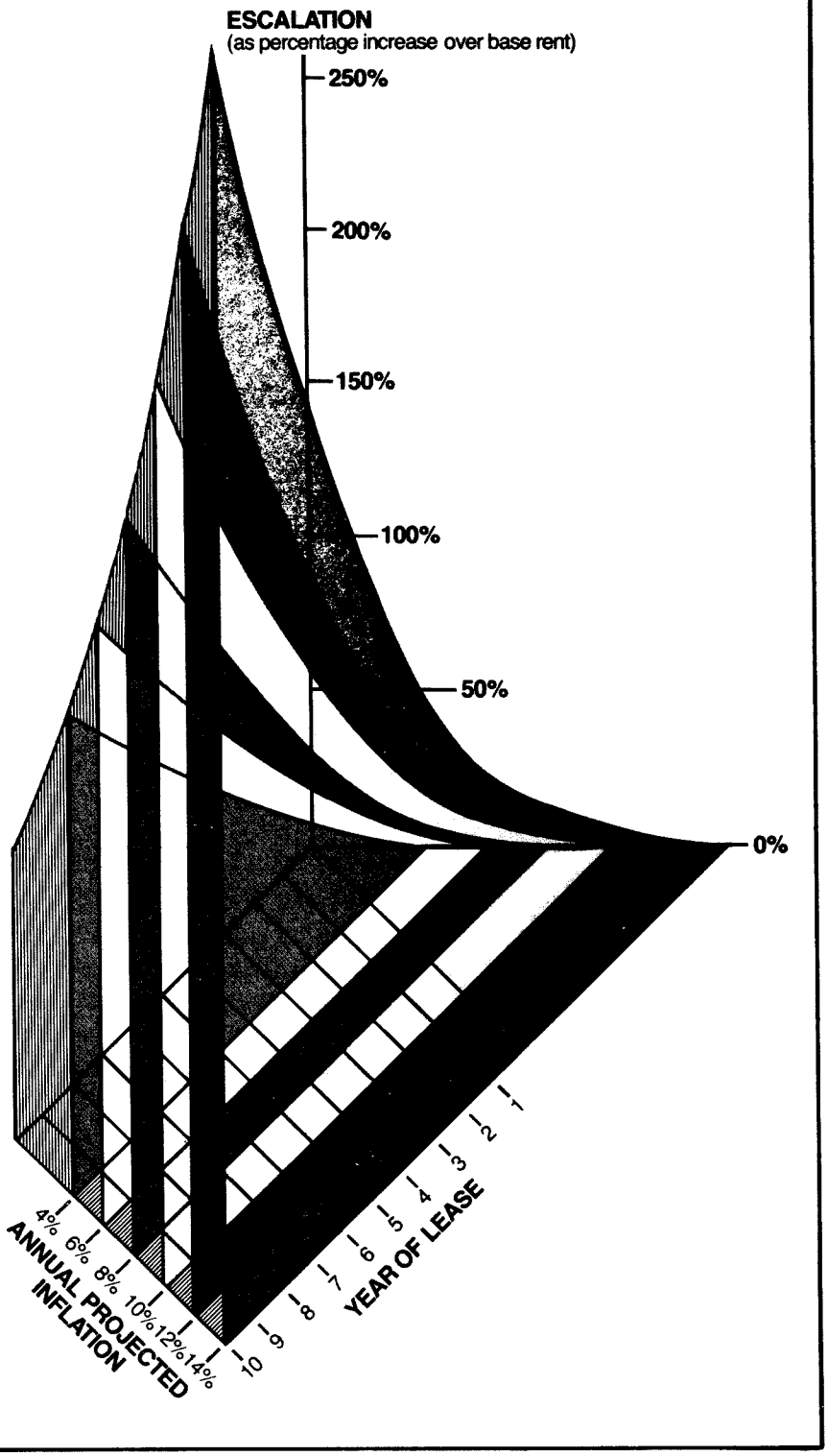
Another recent impetus to indexed escalation was provided by the trend toward variable-rate and rollover mortgage financing, which may eventually end the ability of property owners to allocate a fixed amount for debt service. While this practice has not yet proliferated widely enough to enter into the analyses presented below, it presents another financial uncertainty that landlords will eventually want to pass on to their tenants.

Indexed escalation has thus become an increasingly important factor in lease negotiations, and its impact often exceeds the understanding of the tenant at lease-signing time.

Impact on tenants

The overall impact of indexed escalation on commercial tenants depends on the particular variation chosen. In general, though, the type of formula presented in Formula 1, which is not an unusual one, can offer the landlord a lucrative profit center, as it is likely to escalate rentals beyond escalation in costs. Institutionalization of such a formula in any city could become a factor in an

Figure 1
The Dynamics of Rent Escalation Clauses

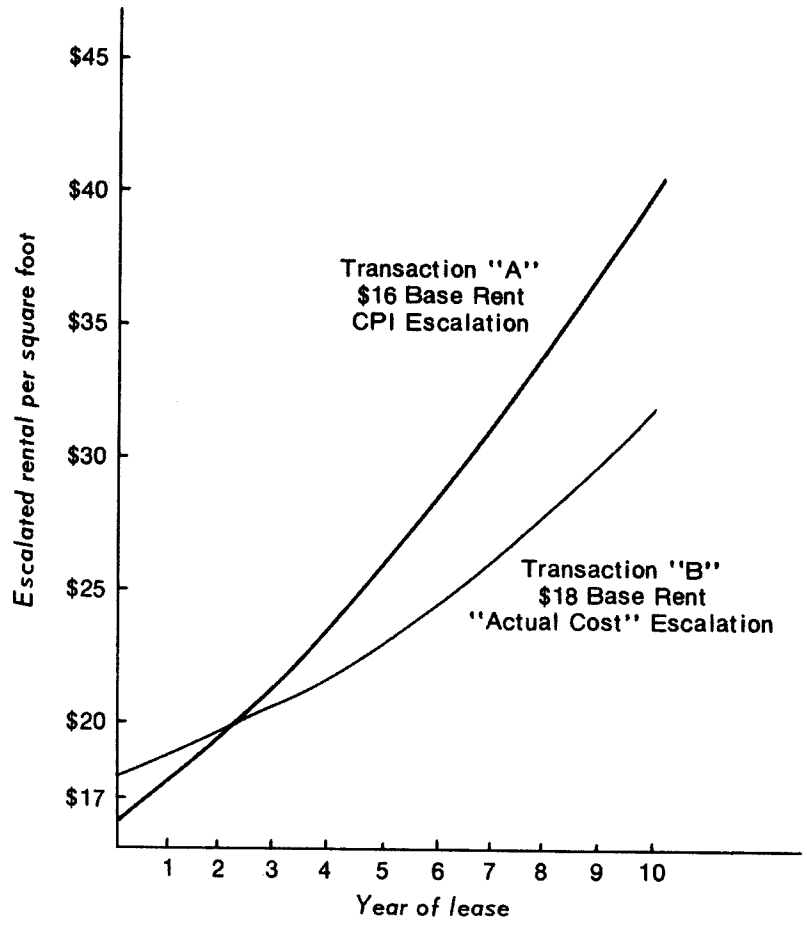


exodus of businesses seeking to avoid it. Unchecked, it could become responsible for the economic failure of many service companies, which are restricted to prime locations, but cannot raise prices commensurate with increases in their rents. Ultimately, of course, this innovation would have a boomerang effect on the landlords, and a devastating effect on the local economy.

Such concern is easily demonstrated. If the CPI increases by an average of 10 percent annually, the escalation in rent formulated in Formula 1 would result in the escalation bills exceeding the rent bill by the eighth year of the lease. The three-dimensional graph in Figure 1 illustrates the dynamics by which this occurs by plotting the impact on rent as a function both of the projected annual increase in the CPI and of the lease year in question. The resulting percentage can be multiplied by the portion of rent subject to CPI escalation to obtain the dollar value of such escalation in any given year of the lease.

While projection of future escalation costs has become a critical factor in evaluating any lease transaction, one should be cautioned that these things are not always what they seem. Figure 2 projects the future rentals associated with two competing lease transactions. Transaction A poses a base rental of $16 per square foot with full CPI escalation, assuming 10 percent annual rate of inflation. Transaction B has an $18 per square foot base rent with escalation based on the more familiar "actual cost" formula, assuming that taxes will increase by 4 percent annually, while increases in operating expenses will exceed the rate of inflation by 50 percent, over bases of $3.50 and $4.00 per square foot, respectively.

Figure 2
Comparison of Competing Transactions



In this analysis, the rental in transaction A surpasses that of transaction B in the third year. During the course of the ten-year term, transaction A is $38.40 per square foot more expensive than transaction B, exclusive of the local occupancy tax impact. In other words, for a 10,000 square foot requirement, the lower rental is more expensive than the higher rental by over $384,000.

Further, it should be noted that this example is based on the relatively high real estate taxes and operating costs that are typical of major New York City office buildings. Where such expenses are lower, the comparative impact of CPI escalation is even greater than described herein. In addition, tenants with indexed escalation liability are denied any savings accrued by landlords resulting from tax-limiting legislation such as California's Proposition 13.

Impact on landlords

The impact of indexed escalation on property cash flow, even given the relatively simple formulation expressed in Formula 1, remains difficult to project. Each building's financial statement would respond

differently, based on the relative weight of each of the following components as a factor of gross income:

1. Property taxes paid to the municipality.

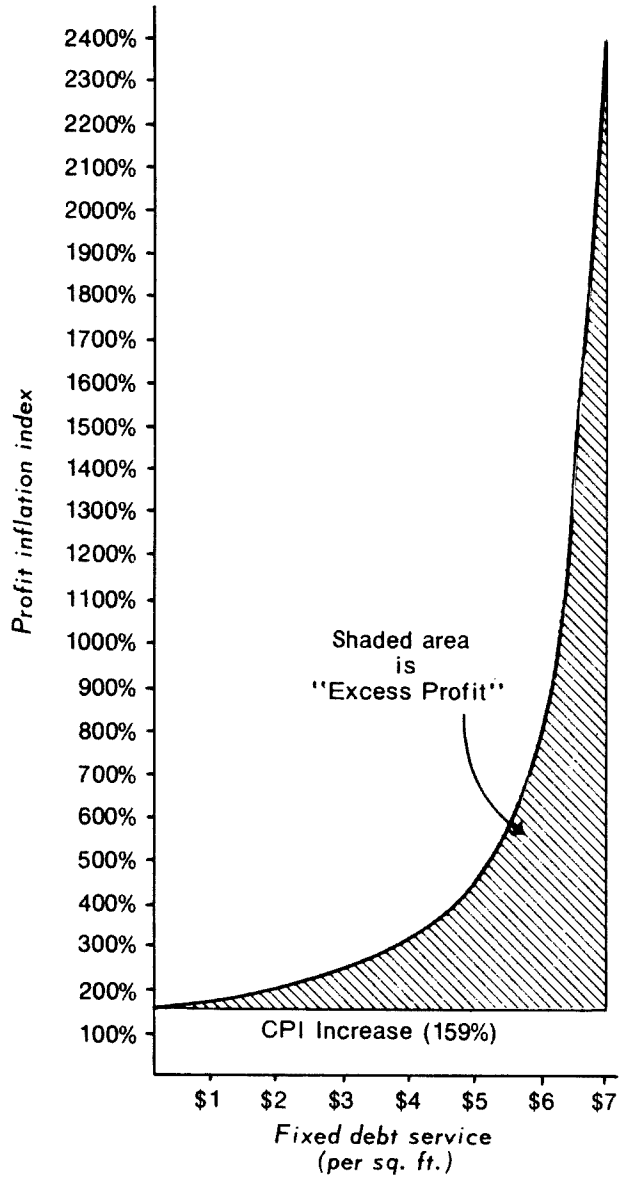
2. Expenses associated with operating the property such as heat, electricity, maintenance, and so on.

3. Interest and amortization on mortgage debt.

4. The remainder, which is the landlord's profit.

As outlined above, the landlords' rationale for imposing indexed escalation has been protection of the purchasing power of their profit from increases in taxes and operating expenses and from inflation. The analysis of the past ten years, though, suggests that, in general, taxes and operating expenses do not fluctuate in direct relation to the CPI. During the past decade, operating expenses have risen at a faster rate than the CPI, while taxes have also risen, but at a much slower rate. Debt service, meanwhile, traditionally remains fixed throughout the period of financing. Full CPI escalation, though, raises the entire rent in accordance with increases in the CPI. Such escalation is bound to increase the landlord's profit, depending on the relationship between fixed and variable costs as components of the base rental.

Figure 3
Index of Profit Inflation



The percentage increase in landlord's profit in any year over the base year, the "profit inflation index," is possible to project, as demonstrated in the eight-variable equation presented in Formula 2.

As an illustration of this calculation, Figure 3 postulates a $15 per square foot base rental, half of which represents taxes and operating expenses at the inception of the lease, which are projected to increase in the aggregate at a rate equal to the projected rate of inflation (10 percent). Given these assumptions, we have charted the profit inflation index for the tenth year of the lease, using the fixed costs per square foot as the independent variable.

The profit inflation index, in this case, exceeds the CPI even where the fixed costs are minimal. However, if the fixed costs are equal to the profit in the base year, the profit triples by the tenth year. In the extreme case, where the fixed costs equal $7 per square foot, the profit increases almost 24 times in the tenth year.

While rent escalation originally

arose from the tendency of taxes and operating expenses to rise with time, indexed escalation as described above is not correlated with these components, but rather with the entire rent. For example, consider a new building constructed in a city's most prestigious area and renting at $30 per square foot, compared with an identical new building ten blocks away that is limited by location to rentals of $20 per square foot. The cost of constructing both buildings will be virtually the same, as will their taxes and operating expenses. By the tenth year of indexed escalation (assuming 10 percent per year), the gap in rentals between the two buildings will grow from $10 per square foot to almost $26 per square foot, even though the two landlords have incurred identical increases in costs. The additional $16 per square foot generated in the more expensive building is, therefore, escalation-created profit.

It can thus be argued that indexed escalation serves a purpose entirely unrelated to those that escalation provisions have historically served —that is, it provides a bonus to the landlord in geometric relationship to inflation, hidden to the tenant and adding significantly to rentals, which have already reached the highest point in our history.

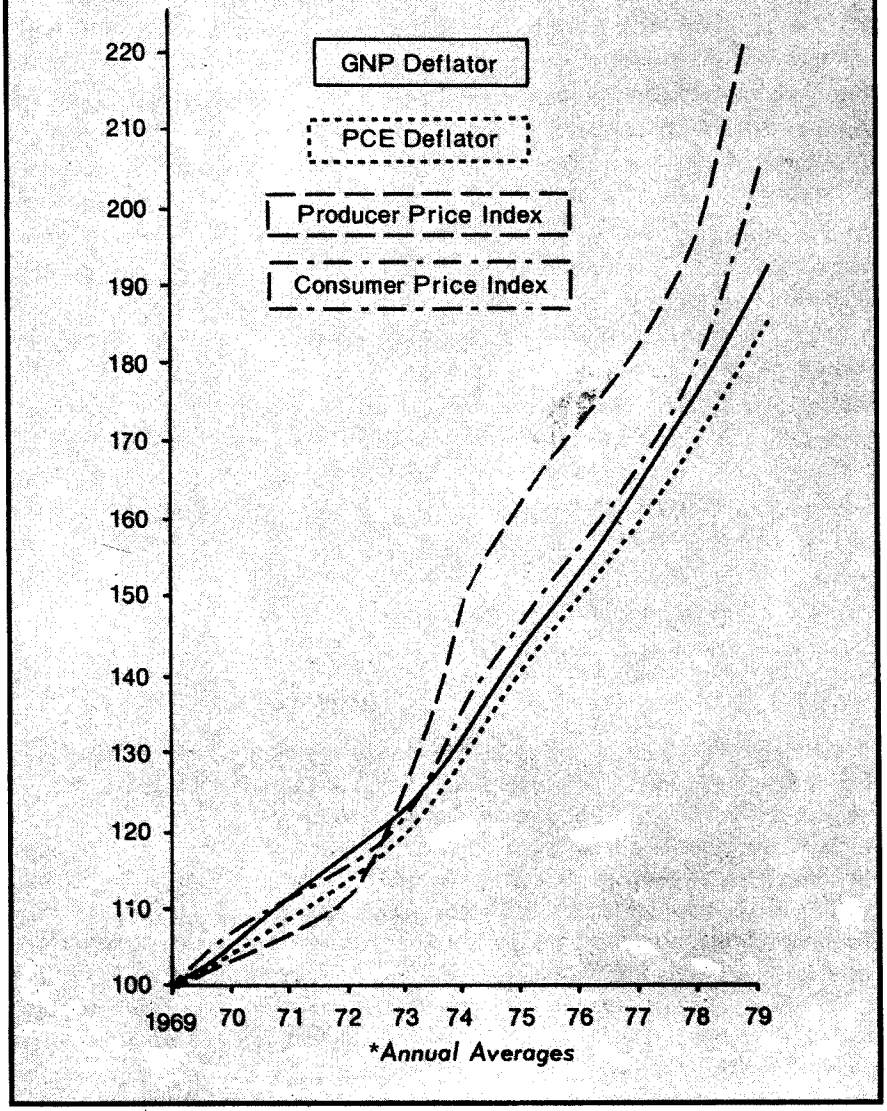
Policy questions

Any innovation that has the effect of redistributing wealth among competing contenders in the economic marketplace is inevitably subjected to rigorous debate regarding its "fairness." Also inevitable is the bias brought to the debate by the economic interests of its participants.

The relationship between market curves and inflation curves, for example, is not at all constant. While inflation has continued uninterrupted, even by recessions, during the past 20 years, the real estate market has experienced a cyclical pattern. Indexed escalation, though, has become a serious landlord demand only during peaks in the market cycle. This suggests that its origin lies not in inflationary pressures, but rather in the opportunity to increase profits when the relocation options available to tenants are severely constricted. It remains to be seen whether the next dip in the market cycle will be accompanied primarily by lower rentals or by the elimination of indexed escalation in new leases, even if double-digit inflation persists.

Another much-debated question concerns the adequacy of the CPI in its purported function—that is, as the

Figure 4
Indices of Inflation*
(1969 = 100)



measure of price inflation's impact on the consumer dollar. The CPI, as well as each of several alternative indices, has attracted its share of advocates and detractors among economists, corporate executives, and public officials. Some who criticize it for overestimating inflation have fastened on the personal consumption expenditure deflator (PCED) as a replacement, an index that periodically adjusts its "market basket" to reflect changes in consumer buying habits due to inflation; but critics of the PCED characterize this method as begging the question. Attempts by others to replace the CPI with the gross national product deflator (GNPD) have been met with attacks on the GNPD's exclusion of interest rates and all imported goods, including fuel, as factors.

Critics who claim the CPI underestimates inflation have pointed out, among other things, the asymmetrical adjustments generated in the CPI by taking alleged improvements in product quality into account while ignoring widespread deterioration in quality, which accelerates replacement expenditures. (Figure 4 charts the movement of the most commonly utilized measures during the past decade.)

For commercial applications, all the above described measuring rods are frequently found inadequate, although the producer price index (PPI) is often preferred. As coping with inflation becomes more necessary for business, many corporations are developing their own inflation indices for internal accounting of depreciation and value of assets. In other words, they require an index tailored to the specific purpose for which it is intended. Thus, on the matter of commercial rentals, acceptance of a device to protect the purchasing power of landlords' profits equitably may depend on the objects of that purchasing power and on their particular relation to overall inflation.

On the subject of application specificity, the question of amortization inevitably arises. Debt service payments, which have been treated above as a cost to the landlord, normally include both interest and amortization. The amortization portion reduces the outstanding principal balance, on an accelerated basis during the term of financing, thus increasing the landlord's equity. Thus, even if the purchasing power of operating profit declines, this factor may be balanced by the gain in equity through amortization.

Property appreciation is another factor affecting real estate assets, which merits consideration in this discussion. While accounting principles treat real estate as a depreciating asset, reality usually proves this to be a fiction, since appreciation has overwhelmingly characterized the historical trend. Internal rate of return analysis, which includes both equity growth and appreciation, will often demonstrate the viability of a real estate investment even when the operating profit is projected to fall behind inflation.

Finally, questions must be raised regarding the long-range economic impact of indexed rentals. Commercial tenants can be expected to fund rent escalations with higher prices whenever possible. Ultimately, consumers will absorb these increases; the CPI will then rise, and rents will escalate further, leading to even higher prices and spiralling inflation unrelated to any increase in production. Thus, a self-fulfilling prophecy is created. Cost-of-living adjustments in labor contracts have been frequently attacked for this very reason, but the effect of inflating several billion dollars in rentals has received little attention. While not a major factor in stimulating inflation, indexed escalation is one example of the "indexing syndrome" endemic to a permanent inflationary spiral. •

Further Cautionary Notes

This analysis should not be construed as a condemnation of all indexed escalation formulae. Some variations limit the indexed portion of escalation to that portion of rent that is associated with net cash flow and combine this with other escalation in proportion to actual costs. Others place a ceiling on the amount of escalation that can accumulate. The possibilities suggested by the variations described above are practically limitless. Furthermore, the history of escalation demonstrates that any formula may provide the potential for abuse. Still, this potential reaches an apex with the introduction of the CPI as a measuring rod.

A major reason for this danger is that few tenants have access to the information necessary to evaluate indexed escalation formulae or to project their future costs, and fewer still have been exposed to the almost infinite variations which might be negotiated. Given a continued tight real estate market, double-digit inflation, and growing national acceptance of these factors, we can anticipate further proliferation of indexed escalation. It has become another major area in which commercial as well as individual tenants should proceed with caution and on the basis of expert advice.