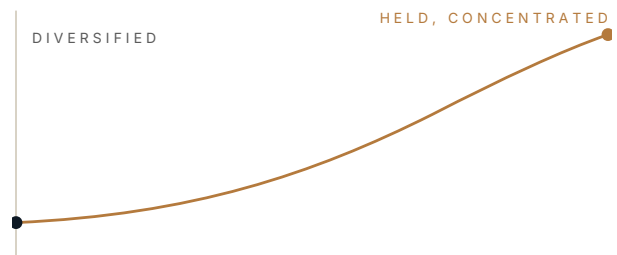


TOPICAL SERIES · THE OWNER'S EFFICIENT FRONTIER

The Real Cost of Waiting to Sell

A concentration-adjusted framework for the hold, grow, or sell decision in the lower middle market



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Cordis Institute for Lower-Middle-Market Research
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BY CORDIS INSTITUTE

THE FINDING

An owner who declines an offer has not merely kept the business. He has repurchased it at a price equal to the proceeds he turned down, and chosen to keep nearly all of one household's net worth in a single illiquid asset. The question is what that position must now earn.

~9%

CONCENTRATION PREMIUM

Annual charge for bearing undiversified single-business risk, base case. Computed, not assumed.

~14%

BREAKEVEN RETURN

Real return on retained equity a typical business must clear to justify holding.

70-80%

NEVER SELL

Share of listed small businesses that fail to close. Exit Planning Institute 2025.

1 in 3

ENGAGEMENTS · NO DEAL

Sell-side engagements ending without a transaction. Pepperdine PCMR 2025.

ABSTRACT

The argument in brief.

Owners of lower-middle-market businesses tend to treat the choice to wait before selling as a small delay, a season or a year. The mechanics of a private sale make it a much longer commitment than that. Buyers price on a multi-year record and a sale process runs close to a year, so a single strong year cannot lift the price and the decision to wait becomes a multi-year bet in practice. This paper reframes the decision as an allocation problem. The comparison that matters is not the business today against the business in three years. It is the return the business will earn on the capital locked inside it against the after-tax return that same capital would earn diversified and liquid, plus a premium for holding nearly all of one household's wealth in a single illiquid asset. We compute that premium rather than assert it, using the standard mean-variance result that a market pays an owner only for the systematic part of the risk they carry. For a typical owner the premium works out near nine percent a year and rises sharply with the volatility of the business, which places the breakeven return on retained equity in the low-to-mid teens in real terms. That range is directionally consistent with the private equity premium literature, in which private business returns have been found no higher, or only modestly higher, than public equity returns despite far greater concentrated risk. When a business compounds retained capital above the hurdle, holding is the better allocation. When it does not, selling and reallocating is. Two facts weigh against casual waiting: most businesses that go to market never sell, and the risks of the intervening years fall largely outside the owner's control.

KEYWORDS mergers and acquisitions, lower middle market, exit planning, opportunity cost, concentration risk, underdiversification, business valuation, private company liquidity

JEL G11, G32, G34, D81

Four takeaways.

01 Waiting is an allocation choice, not a timing choice.

Declining an offer re-buys the business at the price of the forgone proceeds and renews a concentrated, illiquid bet for several more years. The question is not what the business will be worth later. It is the return on the capital trapped inside it.

02 The hurdle can be computed, and it is high.

The concentration premium prices the uncompensated idiosyncratic risk the owner bears. For a typical owner it runs near nine percent a year and rises quadratically with volatility, placing the breakeven near a mid-teens real return on retained equity.

03 A well-run business can still fall short.

The test is not competence but capital. A fine business that compounds retained capital below the hurdle is worth more sold and diversified, which is the quiet reading behind the private equity premium literature.

04 The offer is perishable, and the risks are not the owner's to control.

Most businesses that list never sell, so a genuine offer is rare and does not reliably return. Health, a key departure, and the multiple cycle fall outside the owner's hands over a multi-year hold.

SECTION 01

Introduction.

An owner who decides to wait usually pictures a short pause. The business is held a little longer, the sale pushed to a better moment, the timeline measured in months. What the decision actually commits to is a multi-year record a buyer has not yet seen, produced by a company that still has to be run while the record is made. Section 3 develops the mechanics. In brief, a buyer does not pay for one good year because a buyer prices on an average of several, and converting even that price into cash takes the better part of a year on top. Waiting is the acceptance of a longer transaction, not the deferral of a short one.

The costlier mistake is not the timing but the comparison. Owners weigh the business as it stands against the business as it might be in three years, and the second figure is almost always larger, so waiting looks free. That framing hides the real trade. An owner who declines an offer has not merely kept the business. He has, in effect, repurchased it at a price equal to the proceeds he turned down, and has chosen to keep nearly all of one household's net worth in a single asset that cannot easily be sold. The question is no longer whether the business will be worth more later. It is what that concentrated position now has to earn to justify itself.

That question has an answer, and finding it puts the decision inside a literature it has mostly stood apart from. Meulbroek (2001) showed that an owner who cannot diversify bears risk the market does not pay for, and that the resulting loss of value is largest for exactly the high-idiosyncratic-risk holdings a single private business represents. Kahl, Liu and Longstaff (2003) added the cost of being unable to sell. Moskowitz and Vissing-Jorgensen (2002) documented the empirical shadow of both: across US private businesses, returns were no higher than public equity returns even though owners bore far more, and far less diversified, risk. Their private equity premium puzzle is this paper's decision problem seen from altitude, and it has since been contested, which Section 5 addresses directly. What none of this work has been turned into is a rule an owner can apply to his own business. That is the gap this paper fills. We define a hurdle, the Owner's Efficient Frontier, compute it from observable inputs, and show that a well-run, cash-generating business can fail to clear it while running perfectly well, and that a genuinely high-compounding business can clear it and should then be held.

SECTION 02

Data and Methodology.

This is an analytical paper. Its empirical content comes from published studies, not from any proprietary sample, and that choice bounds the claims.

Five kinds of input do the work. Long-run return evidence from the Morningstar Ibbotson SBBI series and the Damodaran dataset sets the range for what diversified proceeds earn and supplies the market inputs used to price the concentration premium. Underdiversification theory from Meulbroek (2001), Kahl, Liu and Longstaff (2003), Moskowitz and Vissing-Jorgensen (2002), and its revision in Kartashova (2014) supplies both the pricing method and the empirical check. Transaction evidence on how price scales with size comes from GF Data for the sponsored lower-middle-market band, checked against the BVR DealStats Value Index, which covers a broader and

smaller population and is used as a directional cross-reference rather than blended in. Practitioner survey evidence from the IBBA and M&A Source Market Pulse, the Pepperdine Private Capital Markets Report, and Exit Planning Institute readiness work supplies process length and the rates at which sales fail or never happen. Government data from the Small Business Administration Office of Advocacy grounds the claim that the business is the dominant asset on most owning families' balance sheets.

Two cautions govern the numbers. The return figures are long-run averages, and no long-run average describes a particular three-year window, so we treat them as ranges. The illustrative dollar figures used later are invented, set at a single scale to make the arithmetic legible, and describe no real business or engagement.

SECTION 03

Waiting Is a Multi-Year Commitment.

The intuition behind waiting runs into the arithmetic of how private businesses are valued.

A buyer of a lower-middle-market business does not pay for the trailing twelve months on their own. Valuation practice normalizes earnings and, where results trend, weights a multi-year average, so that one unusual year cannot carry the number in either direction. This protects the buyer from a lucky year, and it denies the seller the reward for one. An owner who posts a strong year and takes it to market finds the price set by the multi-year shape of the business rather than its best stretch. Buyers do give weight to a recent step-

change when the trend is real and credibly explained, so the point is one of degree, but the degree matters: one year rarely moves the number far.

Two things follow. Growth undertaken to raise the price has to arrive and then hold long enough to move the average a buyer underwrites, which takes years rather than quarters. And the process of turning a decision into cash is itself slow. The IBBA and M&A Source Market Pulse puts time to close for businesses in the five-to-fifty-million-dollar range near a year, before any wire is sent. An owner who says "one more year" has therefore committed to a two-to-three-year record and the months it takes to sell against it. The pause is a phase.

SECTION 04

The Offer Is a Perishable Asset.

A further fact tends to drop out of the arithmetic of patience, and it cuts harder than any multiple: most businesses that go to market do not sell.

Advisory data compiled by the Exit Planning Institute and echoed across the brokerage field puts the share of listed small businesses that fail to close at seventy to eighty percent, with completion improving materially, though not to certainty, when a qualified advisor runs the process. That base rate skews toward smaller, main-street businesses and should not be read as a completion rate for a fifteen-million-dollar company. The direction is not in dispute, and the demographic moment reinforces it. A large cohort of owners is approaching the exit at once, most without a succession plan, and the number of businesses seeking buyers far

exceeds the number that will find one. An offer, read against that backdrop, is a door most owners never see open, and it does not reliably open twice.

This is the place for the objection an owner will actually raise. He looks at a business that pays him well and asks why he would sell something that is cash-flowing. He may well not sell, and the framework does not tell him to. What it tells him is that keeping the business is a choice with a price, and the price usually goes unmeasured. To keep it is to decline a rare liquidity event and to renew, for several more years, a wager that concentrates a household's wealth in one asset that cannot easily be sold. A cash-flowing business is easy to keep and hard to sell, which is much of why so many are never sold. The discipline is simply knowing what is being turned down.

SECTION 05

The Owner's Efficient Frontier, and the Price of Concentration.

Posed correctly, the decision reduces to one comparison, and pricing it is the contribution of this paper.

Start with what the owner forgoes by holding. The proceeds he declines, net of tax and fees, are capital he could hold diversified and liquid. Call that the

alternative. Holding keeps the same capital in one concentrated, illiquid position. The business is worth holding only if it earns, on that retained capital, enough to beat the alternative by a margin that pays for the

concentration and the illiquidity. That margin is a hurdle, and its size is not a matter of judgment. It can be computed.

The tool is a standard result in portfolio theory. A market compensates an owner for the systematic part of the risk he bears, the part that moves with the broad economy, and pays nothing for the idiosyncratic part

specific to his one company. An owner of a single private business carries both. Meulbroek (2001) built the value version of this argument and found the uncompensated cost large. Stated as a required return, the extra annual return the business must earn over the diversified alternative to pay the owner for the risk the market ignores is, under mean-variance preferences,

$$\text{concentration premium} = (\text{risk aversion}) \text{ times } (\text{share of net worth in the business}) \text{ times } (\text{idiosyncratic share of variance}) \text{ times } (\text{business variance})$$

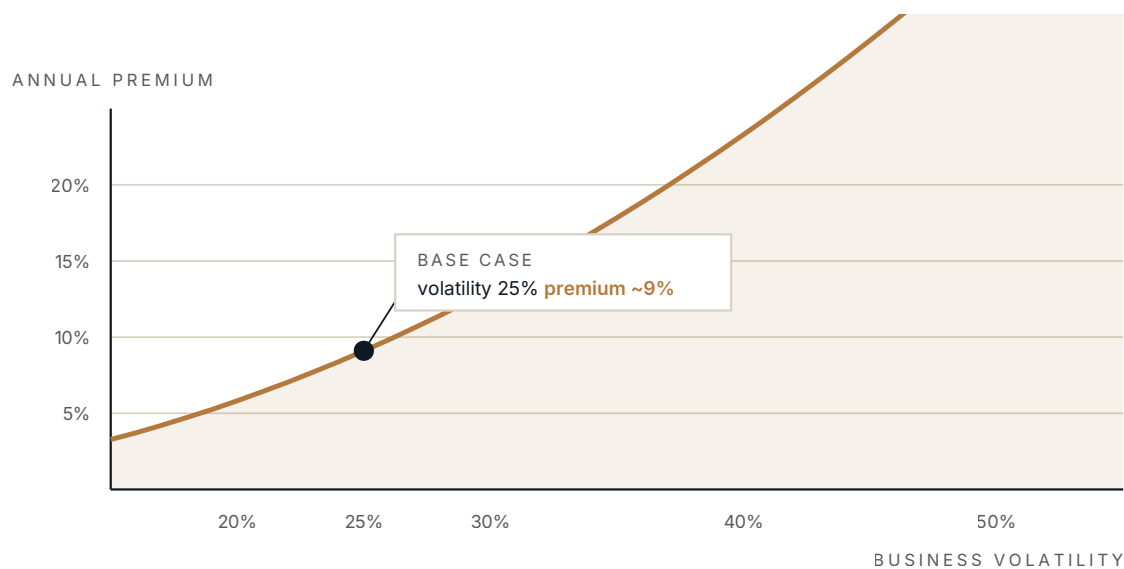
Three features of this expression matter, and each corrects a cruder version. It rises with how much of the owner's wealth sits in the business, so a more concentrated owner faces a higher premium, which is as it should be in a paper about concentration. It uses the idiosyncratic share of variance, not a loose fraction of volatility, so the risk decomposition is the correct one. And it is quadratic in the business's volatility, which means the premium is highly sensitive to that single input. We treat that sensitivity as a reason to estimate volatility soberly and to set it low.

Reasonable inputs give a concrete number. Take moderate risk aversion. Take the business as roughly four-fifths of the owner's net worth, which is typical near an exit. Take its economic-return volatility near twenty-five percent a year, toward the low end of the private-business range and well below venture levels,

and its correlation with the market near three-tenths, so that most of its risk is idiosyncratic and unpriced. Those inputs put the premium near nine percent a year. A steadier, more diversified, more market-linked owner sits closer to five percent. A volatile, fully concentrated one can reach the high teens. The premium is a modeled quantity under stated assumptions, and it moves with the business rather than sitting at a constant.

None of this is a judgment of the owner. An excellent operator can run an excellent business that still fails to clear the hurdle, because the test is not competence but capital: whether the money trapped in the business out-earns the same money set free, once the risk of leaving it concentrated is priced. The business is on trial, not the person running it.

Exhibit 1 The concentration premium climbs, and steepens, with the volatility of the business.

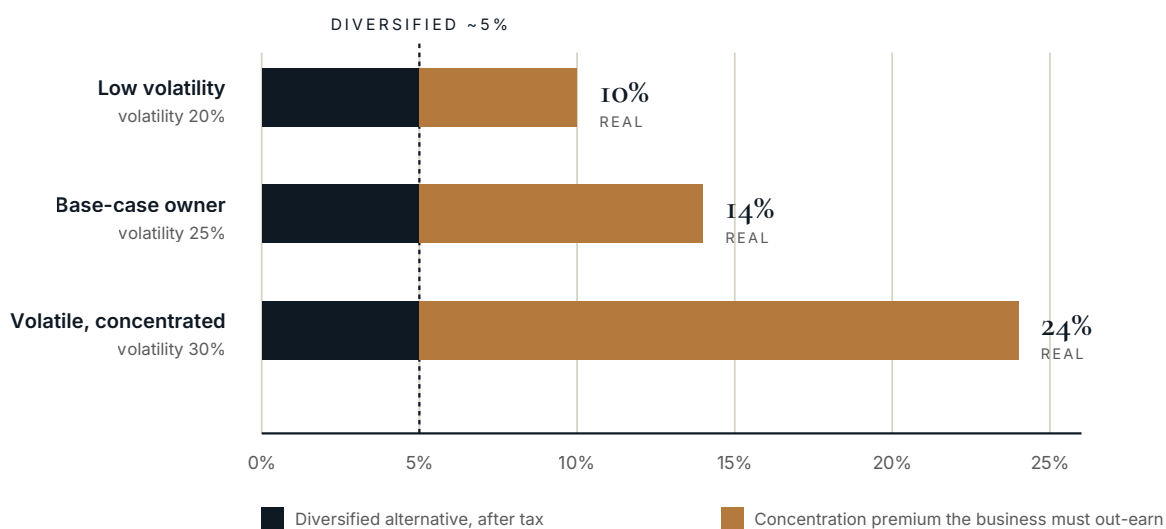


Source · Cordis Institute. Mean-variance certainty-equivalent premium, quadratic in volatility ($A=2$, $w=0.8$, $\rho=0.3$). Illustrative.

SECTION 06

The Hurdle, and the Three Paths.

Exhibit 2 The hurdle rises with the owner's concentration and the volatility of the business.



Source · Cordis Institute. Breakeven real return on retained equity by owner profile (diversified return plus computed concentration premium). Illustrative.

With the premium in hand, the hold decision becomes a single inequality. Holding is the better use of the owner's capital when the business's expected real return on retained equity exceeds the diversified alternative plus the concentration premium:

$$\text{hold if: (real return on retained business equity) is greater than (real, after-tax diversified return) plus (concentration premium)}$$

Each term is estimable. The diversified return, in real, after-tax terms, sits near five percent, below the historical equity mean both because no three-year window is the long run and because a diversifying owner is not holding an all-equity portfolio at its peak. The premium is the nine percent of the previous section for the base case. Taxes enter honestly and modestly. The diversified figure is already after-tax, since selling triggers the capital-gains bill at the decision point, and holding defers that bill, which is worth only the time value on the deferred amount for an owner who will sell

in his lifetime, a few tenths of a percent a year. One case is different and worth naming: an owner with a credible plan to hold to death, whose heirs receive a stepped-up basis, may see the entire embedded gains tax disappear, and for him the hurdle falls materially. This paper addresses the owner who intends to monetize while living.

The base breakeven, then, lands near the low-to-mid teens in real terms, high-teens in nominal terms. The table shows the range.

Breakeven real return on retained business equity, by owner risk profile (illustrative)

OWNER AND BUSINESS PROFILE	RISK AVERSION	SHARE OF NET WORTH IN BUSINESS	BUSINESS VOLATILITY	CONCENTRATION PREMIUM	BREAKEVEN REAL RETURN ON RETAINED EQUITY
Steady, diversified, market-linked	moderate	70%	20%	about 5%	about 10%
Base lower-middle-market owner	moderate	80%	25%	about 9%	about 14%
Volatile, fully concentrated	higher	90%	30%	about 19%	about 24%

Read across a row and the framework speaks. A base-case owner is not clearing the bar by beating a savings account, or even by matching the market. His business has to compound retained capital in the low-to-mid teens in real terms before holding equals diversifying, and higher still if the business is volatile. The empirical literature is the check on this. Moskowitz and Vissing-Jorgensen (2002) found private returns no higher than public despite far greater risk, which is what one expects if most private businesses fall short of a teens-level hurdle. Kartashova (2014) revisited the puzzle and found much of it dissolves with revised data, so private equity may in fact pay a premium. We therefore lean on the puzzle only for direction, not for confirmation of a

specific number, and read the computed breakeven as a floor on what holding must earn rather than a precise reading of what it does.

The familiar three paths now sort by that number. The illustrative figures below sit at one scale for legibility. Take a business that would sell today at an enterprise value near fifteen million dollars, close to six times a normalized operating profit of about two and a half million in the sponsored lower-middle-market band, netting the owner roughly ten and a half million after tax and fees. Path one, sell and diversify, earns the diversified return at spread risk, with a real chance of a flat three-year window that the honest model shows rather than buries. Path two, hold and grow then sell, earns both the eventual sale and the cash distributed along the way, and clears the hurdle only if retained

capital compounds above the breakeven. Path three, hold and run as before then sell, earns its distributions and accepts three more years of concentrated exposure for them. The winner is decided by one estimable

quantity, the return on retained equity against the breakeven, and that quantity can be put to a real business before the decision is made.

SECTION 07

The Asymmetry of the Hold.

If the hurdle sets what holding must earn, the intervening years set the odds, and those odds are lopsided. Waiting asks the owner to underwrite five risks at once, and he controls only the first of them.

The concentration is the first risk, since nearly all of the household's wealth stays in one asset, which is the exposure the premium of Section 5 prices. A key employee or a large customer is the second, either able to leave and take real value with them. The owner's own health and energy is the third, over a hold measured in years. The valuation cycle is the fourth, because the multiple that applies the year he finally sells is set by a market and not by him. The process itself is the fifth,

since a meaningful share of sales that start do not finish. Pepperdine data puts engagement failure near a third, most often on a valuation gap, and while a failed engagement is not the same as a business made worthless, an owner who counted on a clean future sale has counted on something that does not always arrive.

None of these argues for selling. Each argues for pricing the hold honestly. The owner runs the business, but he does not run his own health, his best customer's loyalty, or the multiple three years out, and waiting bets that all of them hold, placed by the one person who cannot make them.

SECTION 08

The Rational Holder, and What the Premium Does Not Claim.

A careful reader will note that owners hold concentrated positions for reasons the arithmetic leaves out, and the point is fair enough to answer rather than wave off.

Two strands of finance make the case. Dyck and Zingales (2004) measured the private benefits of control and found them material, averaging around fourteen percent of value in an international sample, which means an owner may rationally accept a worse purely financial position in return for the control and standing that ownership brings. Mitton and Vorkink (2007) showed that underdiversification can be a rational taste for skewness, a willingness to give up mean-variance efficiency for a small chance at a very

large outcome. Moskowitz and Vissing-Jorgensen themselves floated nonpecuniary benefits and skewness as candidate resolutions of their puzzle.

The framework contests none of it. The concentration premium is the price of the risk being borne, set down in numbers, and pricing a choice is not the same as condemning it. An owner who holds for control, or for the shape of the bet, may be entirely rational, and he is free to pay the hurdle knowingly. What the premium asks is only that he see the figure he is paying, a business that must compound retained capital in the teens, rather than assume that waiting costs nothing. Control value and skewness are reasons the hurdle may be worth paying. They do not make it vanish.

SECTION 09

Implications, Limitations, and a Test.

Three implications follow, and none of them tells an owner to sell.

First, run the comparison in after-tax, whole-picture terms, and compute the hurdle rather than feel for it. Volatility and market correlation set the premium, the

diversified alternative completes the inequality, and the result is a breakeven the owner can hold a sober forecast against. Second, treat that breakeven as the real bar. A business that plausibly compounds retained capital above the teens, with room to grow and a durable position, clears it, and holding is then the better allocation, which the paper states without hedging. A business that throws off cash but grows slowly likely does not, however well it runs. Third, treat an offer as the rare thing it is, since so few businesses sell that an offer in hand carries real option value and declining it has a cost whichever way the comparison points. None of this is tax or investment advice, and a decision of this size should be tested with a qualified advisor and accountant.

The limits deserve equal candor. The premium is a modeled quantity, and its main inputs, the business's volatility and its correlation with the market, are estimated rather than observed for a private company, so the number is a reasoned range and not a measurement. It is quadratic in volatility, which makes that one input decisive and is the reason we set it

conservatively. The return inputs are long-run and cross-market, and compressing them into a multi-year comparison adds path uncertainty the model carries as a range. The completion and failure figures come from populations broader than, and in the small-business case skewed relative to, the sponsored lower middle market, and serve for direction rather than as a rate for any specific deal. The private equity premium literature is itself unsettled, as Section 6 notes, which is why the empirical material is a check and not a proof.

The framework is falsifiable, and the test should be stated. If it holds, then across a panel of realized lower-middle-market holds, businesses whose measured real return on retained equity fell below the computed hurdle should show worse owner-wealth outcomes at eventual exit than matched owners who sold and diversified at the decision point, once control and skewness motives are accounted for. If below-hurdle holders do not underperform reallocators, the premium is overstated and the framework is wrong. No such panel is public today, and building one, with disclosed size and method, is the research this paper points toward.

SECTION 10

Conclusion.

The cost of waiting is not a figure an owner can read off a page, but it is one he can compute. It is the gap between what the business will earn on the money locked inside it and what that money would earn set free, widened by a concentration premium that portfolio theory has known how to price for decades and that, for a typical owner, puts the breakeven in the low-to-mid teens in real terms. Computed and named, the gap

makes the decision legible. Sometimes it favors holding, when the business truly compounds retained capital above the bar. Often it favors reallocating, when a fine business simply cannot, which is the quiet reading behind the private equity premium literature. This paper does not settle which case an owner is in. It insists that the comparison be run, and the hurdle computed, in the terms the owner's own balance sheet demands.

NAMED FINDING

Named Finding.

The decision to hold, grow, or sell a lower-middle-market business is an allocation choice rather than a timing choice. It turns on whether the business's forward real return on the owner's retained, concentrated, illiquid equity clears a hurdle equal to the after-tax diversified return plus a concentration premium. That premium, priced by the mean-variance cost of bearing uncompensated idiosyncratic risk, rises with the owner's concentration and, quadratically, with the volatility of the business, and lands

near nine percent a year for a typical owner, placing the breakeven in the low-to-mid teens in real terms. A profitable, well-run business can fall short of that hurdle, which is consistent with the finding that private business returns have historically been no higher than public equity returns despite far greater risk, and a genuine offer, being rare, carries an option value that raises the cost of declining it.

DISCLOSURE

Disclosure.

The author of record is affiliated with Cordis, an advisory firm active in lower-middle-market mergers and acquisitions, whose engagements include sell-side work. The framework is built to reach a decision to hold as readily as a decision to sell, its hurdle is computed from public

inputs by a published method, and its conclusions rest on public sources and stated, illustrative assumptions. Readers should weigh the analysis on its logic and its sources.

DATA AVAILABILITY

Data Availability.

All data referenced are drawn from publicly available secondary sources cited below. No proprietary or confidential engagement data were used, and the numerical examples are illustrative and invented.

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