Go-to-market strategy

Porter's five forces: industry explains less than the firm does

Porter's five forces map pressures on industry profits. In three studies, firms differ more than industries do; in the middle of the pack the gap closes.

Author
Sinan Isoglu, MBA (Quantic)
Commercial growth leader, lecturer and doctoral researcher

Published
1 November 2026
Reading time
14 min
Words
3,164

Management summary

Porter's five forces is a framework for judging an industry's structure by five pressures on its profits: new entrants, suppliers, buyers, substitutes and rivalry. This essay defines it and reads three peer-reviewed studies that split the variance in profitability between firms into industry and firm effects: business units of large US manufacturers (1974 to 1977), US listed firms from a ranking of 1,000 by market value added (1987 to 1996) and Spanish firms (1995 to 2004). Pooled, stable industry effects explained about 3 to 8 percent of the variance in profitability, firm or business-unit effects about 13 to 47 percent. Counting yearly industry swings, industry matched the firm in the middle of each industry, and among medium-sized Spanish firms on one of two methods. None of the three studies tests the forces themselves. The guidance is the author's and untested.

Contents

§ 1 What are Porter’s five forces? 3
Figure 1 Porter's five forces question in the data: industry and firm effects on profit variance in three studies 4
§ 2 Which pressures do Porter’s five forces name? 5
Figure 2 Which pressures do Porter's five forces name? 6
§ 3 What do the variance decompositions find? 7
§ 4 Why can an industry’s average return mislead a strategy team? 8
Figure 3 Five forces analysis and noisy industry averages: the chance that a high average hides a below-average stable industry effect 9
§ 5 Does industry matter more for firms in the middle of the pack? 10
Figure 4 Five forces and the middle of the pack: variance components after removing each industry's leaders and losers 11
§ 6 Does firm size change how much the industry explains? 12

© 2026 Sinan Isoglu · isoglu.com/insights/journal/porters-five-forces/

§ 7 What can the variance studies not tell a strategy team? 12
Figure 5 Five forces evidence map: what the variance studies show and where they stop 14
§ 8 How should a leadership team use the five forces, given this evidence? 15
Figure 6 A five forces review sheet built on the variance evidence 16
References 17

What are Porter’s five forces?

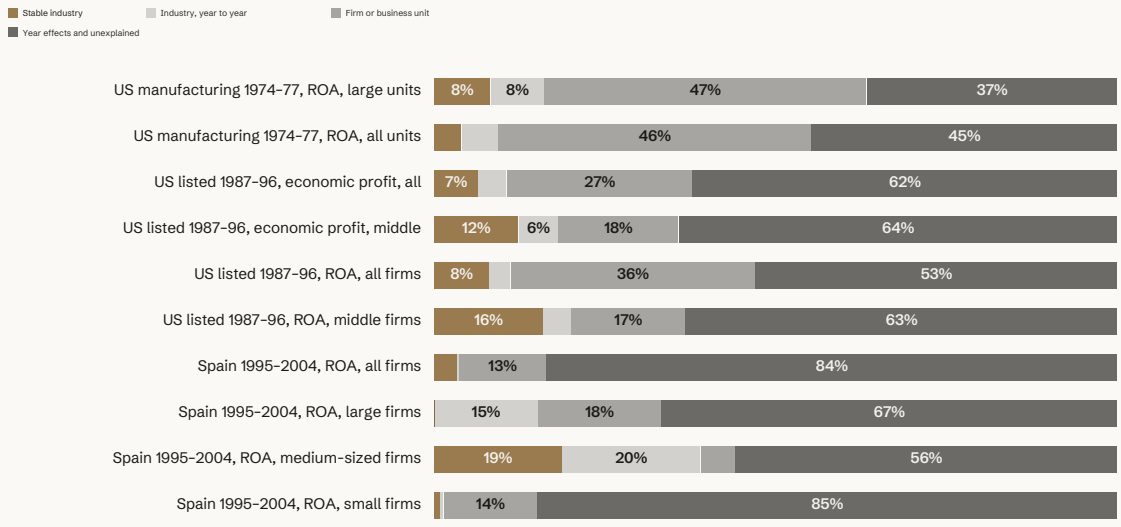
§ 1 of 8

A five forces slide in a strategy review makes a quiet claim: that the industry a business sits in decides much of what it can earn. Porter’s five forces is a framework for judging an industry’s structure by five pressures on its profits: the threat of new entrants, the bargaining power of suppliers, the bargaining power of buyers, the threat of substitute products or services, and the rivalry among existing competitors. In Porter’s framing, the stronger the five, the smaller the share of the value an industry creates that its firms keep; none of the studies below tests that proposition. Michael Porter set the framework out in the Harvard Business Review in 1979; that article is named here as its origin only, and no claim in this essay rests on it.

How much of the difference in profitability between firms goes with their industry? Less than goes with the firm, in every pooled sample held here. Three studies split that variance into its sources: business units of large US manufacturers from 1974 to 1977, US listed firms from a ranking of 1,000 by market value added from 1987 to 1996, and Spanish firms from 1995 to 2004. Pooled, stable industry effects account for about 3 to 8 percent of the variance in profitability (11 percent on a market-value measure), and differences between firms or business units for about 13 to 47 percent. The gap closes in two places. In the middle of each industry, industry effects match the firm’s once yearly swings are counted. Among medium-sized Spanish firms they exceed it on one of the authors’ two methods.

Figure 1 Porter's five forces question in the data: industry and firm effects on profit variance in three studies

Pooled, firms or business units differ more than industries do; in the middle of the pack, counting yearly swings, and among medium-sized firms on one method, industry matches or passes the firm.



Shares of total variance (%), one bar per sample and measure; ROA is return on assets. "Middle" excludes each industry's two leaders and two losers. The studies differ in unit, measure and method, so compare the order within a bar, not shares across bars.

Source Rumelt (1991), Strategic Management Journal 12(3): US FTC Line of Business data, 1974 to 1977, return on assets; large units (sample A) from Table 4, p. 179, all units (sample B) from Table 3, p. 178; firm includes the corporate component. Hawawini et al. (2003), Strategic Management Journal 24(1): 562 US listed firms, 1987 to 1996, Tables 5 and 8, pp. 11 and 13; middle firms exclude each industry's two leaders and two losers. Fernández et al. (2019), BRQ Business Research Quarterly 22(1): Spanish firms, 1995 to 2004, return on assets, variance components analysis, Tables 2 and 3, pp. 29 and 30. Shares of total variance; year effects are counted with the unexplained rest.

This essay’s reading is that the five forces speak most directly to what an industry allows its average member, the part these studies call the industry effect; how well, none of the three studies tests. They are not silent on firm differences either: where one firm faces stronger buyers or closer substitutes than its neighbour, that difference lands in the firm effect, which Rumelt finds “consonant with the presumptions in portions of the business strategy literature”, beginning with Caves and Porter’s mobility barriers. Between about 37 and 85 percent of the variance falls to year effects and to variation the models do not attribute.

Which pressures do Porter’s five forces name?

§ 2 of 8

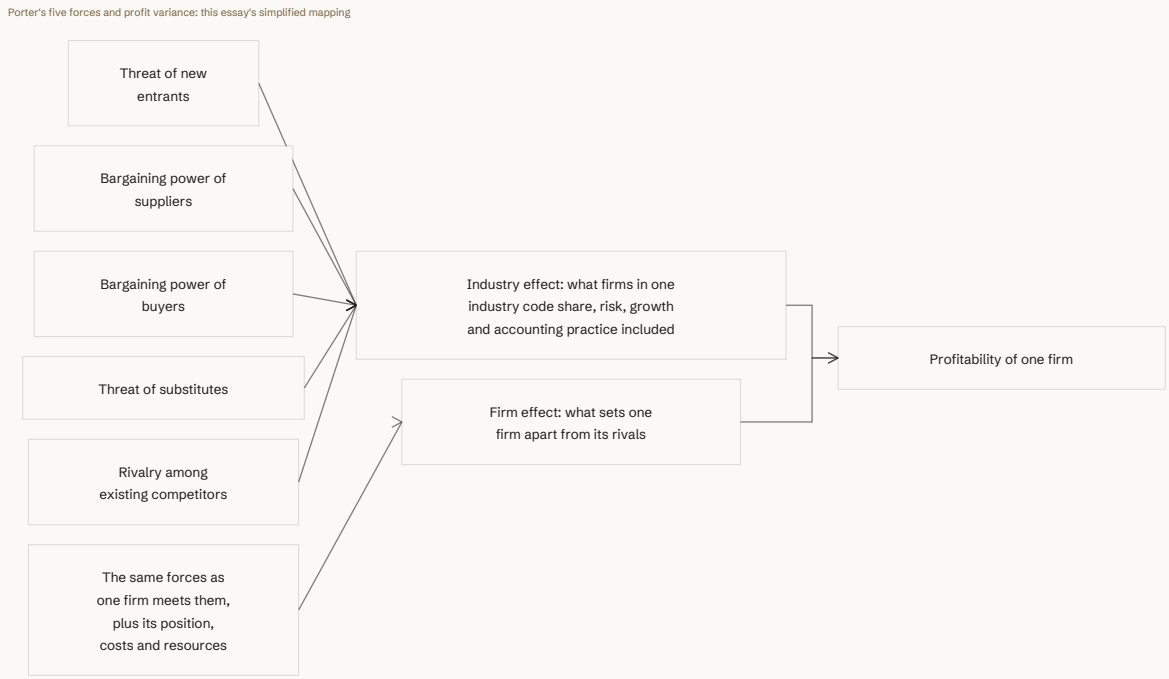
The five forces, in this essay’s words, are these:

1. **Threat of new entrants:** how easily a newcomer can enter and add capacity, limiting incumbents’ prices.
2. **Bargaining power of suppliers:** how far suppliers of inputs or labour can raise prices or shift costs.
3. **Bargaining power of buyers:** how far customers can push prices down or demand more for the same price.
4. **Threat of substitutes:** how readily another product or service meets the same need, capping price.
5. **Rivalry among existing competitors:** how hard incumbents fight on price, features, service and capacity.

Fernández et al. (2019)[1] summarise Porter’s argument as basing the selection of a competitive strategy on two features: “the attractiveness of the industry from the perspective of profitability which is determined by five competitive forces”, and “the position the firm occupies within the industry”. The studies below measure how much of the variance in profitability goes with the industry and how much with the firm. Figure 2 maps the forces onto those two parts; the mapping is this essay’s and a simplification.

1 Fernández, E., Iglesias-Antelo, S., López-López, V., Rodríguez-Rey, M., & Fernandez-Jardon, C. M. (2019). Firm and industry effects on small, medium-sized and large firms' performance. BRQ Business Research Quarterly, 22(1), 25–35.

Figure 2 Which pressures do Porter's five forces name?



Source Diagram from this essay. Sources and interpretation are given in the article.

One caution applies to everything that follows: a variance decomposition measures none of the five forces. Its industry effect is whatever businesses in one statistical industry class share, which Rumelt (1991)[3] says can include differences in "competitive behavior, conditions of entry, rates of growth, demand-capacity conditions, differing levels of risk, differing asset utilization rates, differing accounting practices". It is therefore a ceiling on what industry-level analysis can explain, for industries drawn as the study draws them: in Rumelt's data, explanations "that use industry as the unit of analysis can, at best, explain only about eight percent of the observed dispersion among business-unit profit rates".

3 Rumelt, R. P. (1991). How much does industry matter? Strategic Management Journal, 12(3), 167–185.

What do the variance decompositions find?

Rumelt (1991)[3] used the US Federal Trade Commission's Line of Business data on large corporations' domestic profits by manufacturing industry, 1974 to 1977: 1,774 business units of 457 corporations in 242 industries in his main sample, 2,810 units once smaller ones were added. The measure was return on assets, profit before interest and taxes over total assets. An earlier one-year study of the same data, as Rumelt reports it, had put industry effects at 20 percent; four years let him separate the stable part: "stable industry effects account for only 8 percent of the variance in business-unit returns".

Business units were the larger source. For the main sample, with the second in brackets, his partition reads "8 (4) percent industry effects, 1 (2) percent corporate effects, 46 (44) percent business-unit effects, 8 (5) percent industry-year effects, and 37 (45) percent residual error". In his words, "business-units differ from one another within industries much more than industries differ from one another". Neither relative size nor accounting explains it: Rumelt sets the market-share component from the one-year study at 1.7 percent of his business-unit component, and a test for cost and asset allocations between a corporation's units found nothing.

Hawawini et al. (2003)[2] asked whether the result survives value-based measures: economic profit per unit of capital, which deducts a charge for capital, and market value per unit of capital, with return on assets beside them. Their sample was 562 US listed firms in 55 industries from 1987 to 1996, drawn from a ranking of 1,000 listed firms by market value added. Firm effects again led: 27.1, 32.5 and 35.8 percent of the variance for economic profit, market value and return on assets, against stable industry effects of 6.5, 11.4 and 8.1 percent.

2 Hawawini, G., Subramanian, V., & Verdin, P. (2003). Is performance driven by industry- or firm-specific factors? A new look at the evidence. Strategic Management Journal, 24(1), 1–16.

Fernández et al. (2019)[1] took the question to smaller firms and to Europe: 7,843 Spanish manufacturing and service firms with accounts for every year from 1995 to 2004, sorted into the European Commission's 2003 size classes by employees and turnover in 2004, measured on return on assets. Pooled, the firm effect explained 12.7 percent of the variance and the stable industry effect 3.4 percent. The model left 83 percent unexplained, which the authors note as "a significant part of the variance of ROA".

The levels differ partly because the studies measure different things: business units inside corporations against whole firms, which both later studies say may understate industry, and different measures, methods, countries, decades and industry codes. Hawawini and colleagues[2] also report a 1997 study by McGahan and Porter, not held here, with industry effects of 18.7 percent and firm effects of 36.0 percent on US business segments. What holds across the held samples is the order: pooled, firms or business units differ more than industries do.

Why can an industry's average return mislead a strategy team?

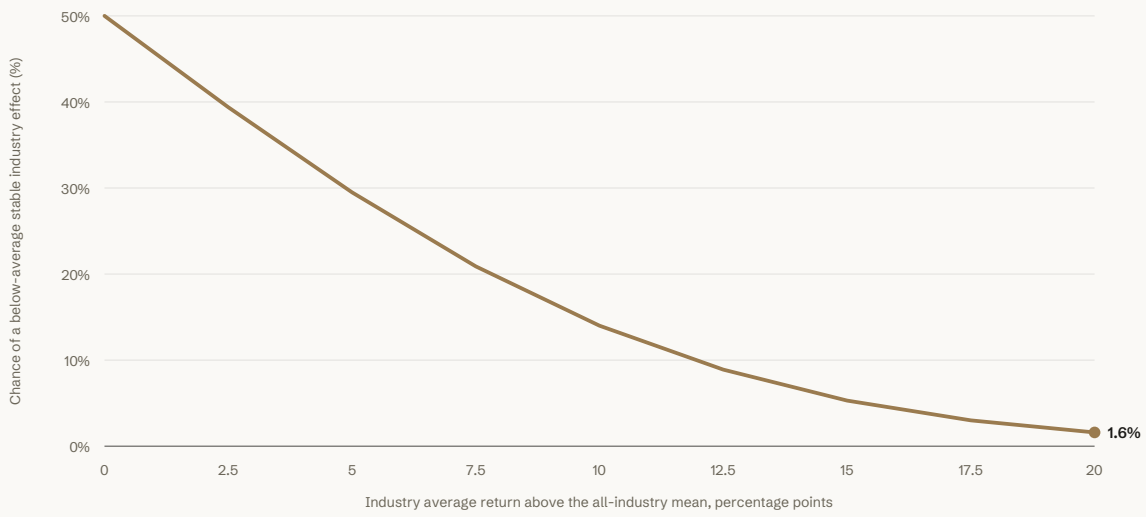
§ 4 of 8

In Rumelt's[3] data "only about 40 percent of the variance among industry returns is actually due to stable industry effects". About another 40 percent came from business-unit effects that "randomly combine to affect industry averages", and the remaining fifth from yearly fluctuations. He concluded that "industry returns are noisy estimates of the true industry effects", and he put a number on the noise.

To be 95 percent confident that an industry's stable effect is positive, "the observed industry average must be at least 15.21 percentage points above the mean". On his normal approximation, only about one industry in forty, some six of 242, would clear that bar. An industry ten points above the mean still had, on his model, a 14 percent chance of a below-average stable effect. Figure 3 draws the whole curve from the parameters he reports, as this essay's computation. Longer averages would remove only the yearly part of the noise, not the mix of business units.

Figure 3 Five forces analysis and noisy industry averages: the chance that a high average hides a below-average stable industry effect

An industry ten points above the mean still had a one-in-seven chance, on Rumelt's model, of a below-average stable industry effect; the chance falls to 5 percent only at about 15 points.



Model assumptions: normal, mean 0.4 times the distance, standard deviation 3.71 points, four-year averages of US manufacturing industries, 1974 to 1977. Longer averages lower the curve only partly: with unlimited years, about 8 percent would remain at 10 points.

Source Computed by this essay from the model in Rumelt (1991), Strategic Management Journal 12(3), p. 181: the stable industry effect given an industry's four-year average return is normal with mean 0.4 times the distance above the all-industry mean and standard deviation 3.71 points (sample A, US FTC Line of Business data, 1974 to 1977). Rumelt reports 0.14 at 10 points and 0.05 at 15.21 points; the other points, and the limit with unlimited years from the components in Table 5, p. 181, are this essay's.

For a strategy team, a five forces assessment that starts from an industry’s recent average margin, in a strategy deck or an investment committee memo, may be reading two or three strong firms or one good year rather than the industry’s stable effect. On this essay’s reading, the average is a prompt to look at the spread between firms, not a verdict on the industry.

Does industry matter more for firms in the middle of the pack?

§ 5 of 8

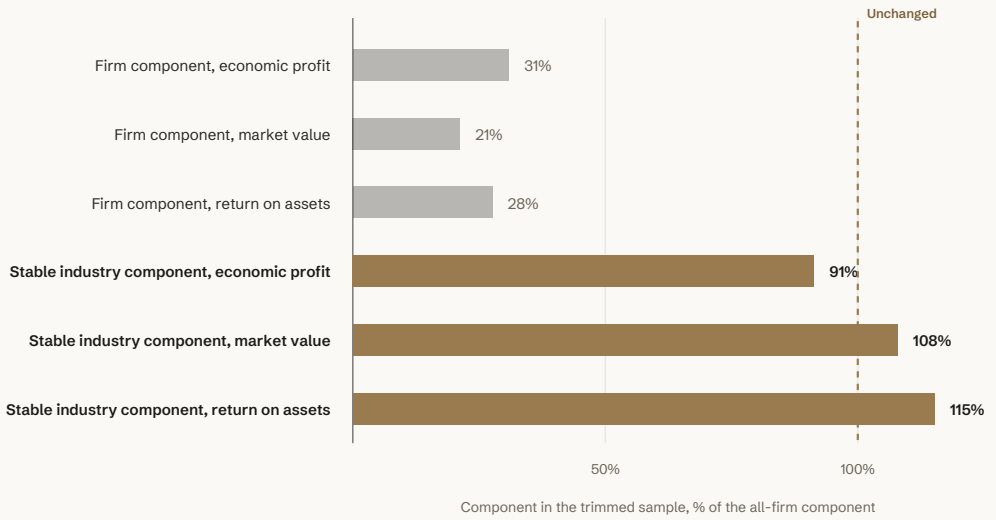
Hawawini and colleagues[2] then removed, in each industry, the two firms that most often had the best results over the decade and the two that most often had the worst, chosen separately for each measure, leaving 342 firms. In this middle of the pack, industry effects counted with their yearly swings matched or exceeded firm effects on every measure: 18.2 against 17.6 percent for economic profit, 20.1 against 16.7 for return on assets and 35.2 against 17.0 for market value. In their words, “only for a few dominant value creators (leaders) and destroyers (losers) do firm-specific assets seem to matter significantly more than industry factors”.

The comparator matters. The yearly component, the authors write, “measures the sensitivity of profitability to the impact of business cycles on the industry”. On stable industry effects alone, the firm still led on both profit measures in the middle of the pack, 17.6 against 12.4 percent for economic profit and 16.7 against 16.0 for return on assets; only market value turned, 30.2 against 17.0.

The shares also hide where the change came from. On the absolute components the paper reports, the firm component fell to between 21 and 31 percent of its all-firm level, while the stable industry component changed little, between 91 and 115 percent, rising on two measures as the authors note (Figure 4, this essay’s arithmetic). What collapsed was the firm component, as removing each industry’s extremes would make it do, which fits the authors’ reading that a few outliers “dominate intra-industry variance and firm effects”.

Figure 4 Five forces and the middle of the pack: variance components after removing each industry's leaders and losers

Without each industry's two leaders and two losers, firm differences shrank to a fifth to a third of their level; the stable industry component stayed between 91 and 115 percent of its own.



The leaders and losers were chosen by the measure itself, so some narrowing is built in. The point is how much of the firm effect four firms per industry carried.

Source Computed by this essay from Hawawini et al. (2003), Strategic Management Journal 24(1): absolute variance components for 562 US listed firms, 1987 to 1996 (Table 4, p. 11), and for 342 firms without each industry's two leaders and two losers (Table 7, p. 13). Each bar is the trimmed-sample component as a percentage of the all-firm component for the same measure.

Two cautions bound the result: the trimming is by the outcome itself, and the sample comes from 1,000 listed firms ranked by market value added, all survivors of the decade, from which the authors warn against generalising. Their explanation, that superior or poor management drives results “irrespective of industry structure”, is a possibility they do not test.

Does firm size change how much the industry explains?

§ 6 of 8

In the Spanish sample the order changed with size class. For the roughly 114 large firms, with 250 or more employees and over 50 million euros turnover, the firm effect explained 18.0 percent and the stable industry effect nothing, while yearly swings by industry explained 15.2 percent. For small firms the firm effect was 13.6 percent against 1.5 percent for industry, stable and yearly together. For the roughly 860 medium-sized firms the order turned: industry effects explained about 39 percent, split almost evenly between stable and yearly, against 5.1 percent for the firm.

The authors read this as a problem of size: in their opinion, medium-sized firms are “disadvantaged competitively with respect to both small and large firms”, and “medium-sized firms can be very profitable if they compete in the right sector”. The study does not test that reading. Pooling sizes, they conclude, can hide an industry effect that “may have been underestimated in the literature”.

The medium-sized result rests on the method. On the authors’ second method, which treats years as fixed effects and has no term for yearly industry swings, industry and firm come out about level for medium-sized firms, 5.2 and 5.6 percent: the tables put the firm marginally ahead, the authors’ text ranks industry first, and “the difference between effects is not significant”. The sample is also Spanish, from a decade of uninterrupted growth, limited to firms with all ten years of accounts, and its firm effect mixes business units and corporations, which may understate industry.

No held study decomposes German, Austrian or Swiss firms’ profits. The size classes follow the European Commission’s 2003 recommendation as the authors apply it, on employees and turnover in 2004, so a reader can sort firms into the same classes; repeating the decomposition needs ten years of accounts for many firms, and the authors name other countries as the next test.

What can the variance studies not tell a strategy team?

§ 7 of 8

Figure 5 sets each answer beside its evidence and where that evidence stops. Three limits run through it:

1 **None of these studies tests the five forces.** They measure on industry codes that, Rumelt allows, may be “too broad to reveal the true strength of industry effects”, and Hawawini and colleagues[2] write that “the SIC system in some cases does not identify strategically relevant industries”.

2 **The firm effect is not strategy.** The models are descriptive, Rumelt’s[3] “offers no causal or structural explanation”, and the interaction between firm and industry cannot be estimated in them, because “the firm factor is nested within the industry”.

3 **The evidence is old and narrow.** The samples end in 2004, and a large part of the variance is due, in Hawawini and colleagues’ words, to “as yet completely unexplained factors”.

Figure 5 Five forces evidence map: what the variance studies show and where they stop

Every finding behind the five forces question comes from a statistical decomposition on industry codes; none of the three studies measures a force.

Question	What the held studies show	Where the evidence stops
How much does stable industry membership explain, pooled?	About 3 to 8% of the variance in profitability (11% on market value); firm or business-unit effects about 13 to 47% (Rumelt, 1991; Hawawini et al., 2003; Fernández et al., 2019)	Industry codes, not competitive arenas; US 1974 to 1996 and Spain 1995 to 2004
Is an industry's average return a reading of its stable effect?	Only about 40% of the variance in four-year industry averages is stable industry effect; 15.21 points above the mean for 95% confidence (Rumelt, 1991)	One data set, US manufacturing 1974 to 1977; a normal model; more years remove only the yearly part of the noise
Does industry matter more in the middle of the pack?	Without each industry's two leaders and two losers, industry effects counted with yearly swings matched or exceeded firm effects on all three measures (Hawawini et al., 2003)	On stable effects alone the firm still led on both profit measures; trimmed by the outcome; survivors only
Does firm size change the answer?	Medium-sized Spanish firms: industry about 39% with yearly swings, firm 5.1%, on variance components analysis (Fernández et al., 2019)	Level on the second method, firm marginally ahead, difference not significant; Spain only; a decade of growth
Does the firm effect measure strategy?	Not shown: it holds whatever sets a firm apart (Rumelt, 1991)	Descriptive models; the firm-industry interaction cannot be estimated in them (Hawawini et al., 2003)

Question	What the held studies show	Where the evidence stops
Do the five forces explain the industry effect?	Not tested by these three studies	The industry effect also holds risk, growth and accounting practice (Rumelt, 1991)

The left column is this essay's set of questions; the other two report the held studies and their own stated limits.

Source Author's evidence map. Rumelt (1991), Strategic Management Journal 12(3), pp. 168, 171, 173, 179 to 182; Hawawini et al. (2003), Strategic Management Journal 24(1), pp. 1, 6, 7, 11 to 15; Fernández et al. (2019), BRQ Business Research Quarterly 22(1), pp. 28 to 30, 32 and 33. The questions and their grouping are this essay's.

How should a leadership team use the five forces, given this evidence?

§ 8 of 8

What follows is this essay's synthesis, not a tested method. The evidence does not retire the five forces; it says which question they answer most directly, and four uses follow:

1. **Use the forces where the decision is about the industry.** Entry, acquisition, exit and portfolio choices bet on what an industry lets its average member keep; the essays on market entry strategy and the growth-share matrix go further.
2. **Read structure over several years and across firms.** One year's average may be one good year or two strong firms, and more years remove only the first of the two.
3. **Place the business before weighting the answer.** In the middle of an industry, the one study that looks finds industry accounting for as much of the differences among such firms as the firm does, once yearly swings are counted; for a leader or a laggard, the work is on what sets it apart, the territory of dynamic capabilities.
4. **Name the binding force.** For how-to-compete decisions, the useful output is not a score per force but the one force, as this business meets it, that caps its price or cost, and what would loosen it.

Figure 6 A five forces review sheet built on the variance evidence

One row per business unit: the decision, the industry definition, the spread over years, the unit's place and the binding force.

Decision	Industry definition	Spread over years	Our place	Binding force
Where to compete, or how? Which years does the case rest on?	Which rivals and substitutes count? Which industry code would a study use?	Margins over five or more years, and how far apart the firms sit	Leader, middle of the pack or laggard? Which size class?	Which force, as we meet it, caps our price or cost? What would loosen it?

A row without a spread rests on one average; a row without a binding force is a template filled in by rote, not an analysis.

Author's worksheet, untested. Fill it before the industry slide is drawn, not after.

Source Author's worksheet. The columns follow Rumelt (1991), pp. 180 to 182, on noisy industry averages; Hawawini et al. (2003), pp. 12 to 14, on leaders, losers and the middle of the pack; and Fernández et al. (2019), pp. 29, 30 and 32, on firm size. Their combination into a review step is this essay's and has not been tested. Reader inputs only; no data supplied.

A team can run the sheet before its next annual strategy review, one row per business unit. An empty spread column means the case rests on one average; an empty last column means the forces were filled in by rote. Whether the sheet improves decisions is untested.

The five forces speak most directly to what an industry lets its average member keep. How far one firm sits from that average is a separate question, and in the pooled evidence it carries more of the variance.

End of essay

References

1 Fernández, E., Iglesias-Antelo, S., López-López, V., Rodríguez-Rey, M., & Fernandez-Jardon, C. M. (2019). Firm and industry effects on small, medium-sized and large firms' performance. BRQ Business Research Quarterly, 22(1), 25–35. https://doi.org/10.1016/j.brq.2018.06.005

2 Hawawini, G., Subramanian, V., & Verdin, P. (2003). Is performance driven by industry- or firm-specific factors? A new look at the evidence. Strategic Management Journal, 24(1), 1–16. https://doi.org/10.1002/smj.278

3 Rumelt, R. P. (1991). How much does industry matter? Strategic Management Journal, 12(3), 167–185. https://doi.org/10.1002/smj.4250120302

How to cite this essay

Isoglu, S. (2026, November 1). Porter's five forces: industry explains less than the firm does. Sinan Isoglu. https://isoglu.com/insights/journal/porters-five-forces/

Online version: https://isoglu.com/insights/journal/porters-five-forces/

Sinan Isoglu, MBA (Quantic)
Commercial growth leader, lecturer and doctoral researcher
© 2026 Sinan Isoglu · isoglu.com · All rights reserved