**Appendix SA.** Comparability measure from De Franco, Kothari and Verdi (2011)

Estimation of the De Franco et al. (2011) measure requires three steps. First, we estimate the following firm-year equation over the most recent 16-quarter period (i.e., the current 4 quarters plus the previous 12).

$$Earnings_{it} = \alpha_{it} + \beta_i Return_{it} + \varepsilon_{it} \quad (3)$$

In Equation (3), *earnings* is quarterly net income before extraordinary items (Compustat Quarterly variable IBQ), deflated by beginning-of-period market value of equity (CRSP variables PRC×SHROUT) and *Return* is the quarterly stock return from CRSP. The coefficients, $\hat{\alpha}_i$ and $\hat{\beta}_i$, proxy for the accounting function of any firm *i* (i.e., the manner in which economic events are reflected in firm *i*'s financial statements). In the second step, we parse all firms within a 2-digit SIC industry into pairs (*i-j*) and estimate the expected earnings of firm *i* and comparable firm *j* using each firm's accounting function from Equation (3), assuming that each firm experienced the same economic event (measured as the return of firm *i*, $Return_{it}$). The result is that firm *i's* and firm *j's* earnings are predicted using firm *i's* (*j's*) accounting function with firm *i*'s returns, as in Equations (4) and (5).

$$E(Earnings)_{iit} = \hat{\alpha}_i + \hat{\beta}_i Return_{it} \quad (4)$$

$$E(Earnings)_{ijt} = \hat{\alpha}_j + \hat{\beta}_j Return_{it} \quad (5)$$

We calculate pairwise accounting comparability as:

$$CompAcct_{ijt} = -1/16 \times \sum_{t-15}^{t} | E(Earnings_{iit}) - E(Earnings_{ijt}) |. \quad (6)$$

In Equation (6), comparability between firm *i* and firm *j* during the 16-quarter estimation period is the negative value of the average absolute difference between the predicted earnings using firm *i*'s and firm *j*'s earnings functions. To aggregate the firm-pair measure into a firm-year measure, we compute a mean $CompAcct_{ijt}$ for each firm-pair *i-j* within a 2-digit SIC industry and denote that as $DKV\_mean_{it}$.[1] As constructed, comparability increases with $DKV\_mean_{it}$.

[1] We select 2-digit SIC industry groupings for all measures of comparability to follow the method originally developed by De Franco et al. (2011). In unreported tests, we re-estimate OLS models, using 3-digit SIC industries with at least six firms in a given industry-year, and obtain qualitatively similar results. We use the mean value of the DKV measure (*DKV_mean*) in our primary tests. *DKV_mean* is correlated with the median value (*DKV_median*) at 0.94 and so the two measures are highly similar. Using *DKV_median* does not affect our results.

**Appendix SB.** Product Market Fluidity measure from Hoberg et al. (2014)

Hoberg et al. (2014, p. 298) state that "fluidity captures how rivals are changing the product words that overlap with firm *i*'s vocabulary". Fluidity represents a measure of market threats for a particular firm in an industry, by measuring how many words for a particular product overlap between rival firms. When a given rival firm *j* responds to firm *i*'s usage of product words (examples from cellular industry include: digital, cellular, analog, internet, iPhone, Android, etc.) by including the same words in its 10-K to describe related product market, firm *j* threatens the competitive position of firm *i*.

To calculate fluidity, Hoberg et al. (2014) first identify subsets of product vocabulary between rival firms in years *t* and *t*-1, and then compare changes in the usage of vocabulary for firm *i* by all other firms *j* in the same industry. Specifically, Hoberg et al. (2014) denote a scalar equal to the number of all unique words used on the product descriptions of all firms in year *t* as $K_t$. $W_{it}$ then denotes an ordered Boolean vector of length $K_t$ identifying which of the $K_t$ words are used by firm *i* in year *t*. Element *k* of vector $W_{it}$ equals 1 if a firm uses word *k* in its product description and 0 otherwise. $W_{it}$ is normalized by the unit length and denoted as $N_{it}$.

Thus, the change in the overall usage of a given word *k* for an industry in year *t* is a vector $D_{t\text{-}1,t}$, where:

$$D_{t\text{-}1,t} \equiv \left| \sum_k \left( W_{k,t} - W_{k,t\text{-}1} \right) \right| \tag{7}$$

A firm's product market fluidity is a dot product between its own word vector $N_{it}$ and normalized $D_{t\text{-}1,t}$:

$$\textit{Product Market Fluidity}_i \equiv \left\langle N_{i,t} \cdot \frac{D_{t\text{-}1,t}}{\left\| D_{t\text{-}1,t} \right\|} \right\rangle \tag{8}$$

Conceptually, fluidity represents a cosine similarity between a firm's own word usage vector $N_{it}$ and the aggregate industry change vector $D_{t\text{-}1,t}$. The dot product in (8) measures the cosine of the angle between two vectors. Cosine similarity in vectors represents the direction between two vectors, thus, two vectors moving in the same direction have a cosine similarity of 1, two vectors with a 90-degree angle have a cosine similarity of 0, and two vectors opposite of each other have a cosine similarity of –1. Because the dot product in (8) is based on non-negative vectors, fluidity is the cosine between vectors in the first quadrant in the coordinate system, where the angle cannot exceed 90 degrees. Thus, fluidity lies in the interval [0,1].

*Product Market Fluidity (Fluidity)* is multiplied by 100 for convenience in presentation. Higher fluidity values represent higher product market competition, as perceived by managers.

**Appendix SC.** Operationalization of Miles and Snow's (1978) strategy typology

To operationalize Miles and Snow's (1978, 2013) strategy typology, Bentley et al. (2013) compute six firm-level measures on a rolling five-year average, with each measure representing a different aspect of firm strategy. These include research and development expenses deflated by sales (to capture new product development), the ratio of selling, general, and administrative expenses to sales (to capture marketing efforts), the annual percentage change in sales (to capture growth), the number of employees to sales (to capture production efficiency), property, plant, and equipment deflated by sales (to capture capital assets), and the standard deviation of the number of employees (to capture organizational stability). Each five-year average is then ranked into quintiles by 2-digit SIC industry-year, and assigned a score of 5 if the value falls in the highest quintile, 4 in the second-highest quintile, 3 in the middle quintile, 2 in the second-lowest quintile and 1 in the lowest quintile. Individual scores are summed across the six variables by year, so that each firm receives a total score between 6 and 30. Firms with total scores between 6-12 are considered Defenders, between 13-23, Analyzers, and between 24-30, Prospectors. In our primary tests, we follow Bentley et al.'s (2013) classification method for partitioning companies into the three categories. In sensitivity tests, we modify the classification method to enhance the validity of our results. For more detail we refer the reader to Appendix 2 in Bentley et al. (2013, p. 810).