6  **EMPIRICAL ANALYSIS II: DYNAMIC-RELATED DIVERSIFICATION**

The second empirical part of this research applies the findings discussed in chapter 5 to a new context. Focusing on the performance effects of dynamic-related diversification, this chapter charts a new course in the strategic management literature and adds to the discussion on *how to diversify*. From an empirical perspective, this chapter forms the core of this research. It builds on the theoretical foundations presented in chapter 2 and combines the research on corporate diversification (chapter 3) and industry dynamism (chapter 4) to answer the research hypotheses of this dissertation.\(^{1160}\) Thereby it uses the empirical results of the preceding chapter among its key inputs.

This chapter is structured into three parts that work towards the test of the research hypotheses developed in section 4.4. First, the measurement of dynamic-relatedness is defined and operationalized (section 6.1). For this purpose, I develop two distinct approaches to determine the relatedness in the diversified firm’s businesses portfolio, based on the dynamism of industries. Second, I outline the research model and discuss the operationalization of the variables used in the econometric models (section 6.2). Third, I discuss the dataset and the econometric approach, conduct the empirical analyses, and analyze the implications of the findings (section 6.3).

### 6.1 Measurement of Dynamic-relatedness

Since research on corporate diversification has a long tradition in the field of strategic management, measures to define the degree of diversification are plenty.\(^{1161}\) Traditional measures range from simplistic business count models and measures focusing on product/market-based relatedness, to alternative measures that encompass still other aspects of a firm’s diversification strategy.\(^{1162}\) However, no single indicator is accepted overall as the dominant measure of diversification.\(^{1163}\) As industry dynamism has not been addressed as a factor influencing the success of a firm’s diversification strategy, no approaches exist to measure the degree of dynamic-related diversification. This necessitates a new approach, tailored to the needs of the current research while also based in the comprehensive groundwork laid by the strategic management literature.

\(^{1160}\) Refer to section 4.4 for the development of the research hypotheses.
\(^{1161}\) See Klier (2009), p. 28.
\(^{1162}\) See section 6.1.1 for a review and discussion of measures of diversification and relatedness.
The requirements for the measure of dynamic-relatedness are similar to those used for the dynamism measure discussed in section 5.1.2.1. Consequently, I focus on building a measure that scores high on reliability\(^{1164}\) and validity,\(^{1165}\) while using objective, secondary data as its input. Popular methods used in the diversification literature are integrated whenever possible. This approach ensures the close alignment and consistency between the measures for dynamic-relatedness and industry dynamism (as developed in section 5.1 and empirically applied in section 5.3).\(^{1166}\)

To develop the dynamic-relatedness measure I proceed as follows. First, traditional approaches to determine diversification and relatedness are reviewed and screened for applicability in this research, as they may provide a starting point from which to develop the new measure.\(^{1167}\) Second, I set out to develop my own approach to measure dynamic-relatedness that I will apply in the econometric analyses that follow.

### 6.1.1 Approaches to the Measurement of Diversification and Relatedness

Most authors classify the approaches to determine diversification into continuous and categorical measures.\(^{1168}\) Continuous measures are usually based on a standardized industry classification scheme\(^{1169}\) and rate a firm’s degree of diversification on a scale from “not diversified” to “highly diversified.”\(^{1170}\) Thus continuous measures focus on the number of a firm’s industries and their relative importance to the firm.\(^{1171}\) Categorical measures, in turn, assign firms to different categories, often based on subjective analysis and expert judgment.\(^{1172}\) Rather than focusing on the mere number of businesses, firms are classified by means of their diversification strategy into related or unrelated industries.\(^{1173}\) While the categorization into continuous and categorical measures captures traditional approaches, it neglects a range of more recent, innovative approaches that depart from past methods in order to incorporate other aspects of diversification and relatedness.\(^{1174}\) These more recent concepts


\(^{1165}\) The literature often differentiates between individual types of validity, i.e., content validity, convergent validity, discriminant validity, and nomological validity. For a review see Bryman and Bell (2007), p. 8.

\(^{1166}\) Note that industry dynamism is the key input factor to determine the dynamic-relatedness of a firm’s diversification strategy.

\(^{1167}\) See section 6.1.1.


\(^{1169}\) The Standard Industrial Classification (SIC) scheme is regularly used in the diversification literature. However, other classification schemes, like the North American Industry Classification System (NAICS), the Global Industry Classification Standard (GICS), or the Nomenclature statistique des activités économiques dans la Communauté européenne (NACE). See Hungenberg (2011), p. 492.


\(^{1173}\) See Nayyar (1992), p. 223.

\(^{1174}\) Pehrsson (2006b) provides an overview of empirical studies that use different measures of diversification and relatedness. (p. 353)