

Factors Influencing the Success of SMEs: Evidence from German Mittelstands

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ABSTRACT

The German mittelstands are widely considered as a pillar of German economy success, especially after World War II. In order to derive some practical experience about the development of small and medium size enterprises (SMEs), this paper helps to review the underlying reasons why German mittelstands can achieve such a phenomenal economic success. This paper reviews empirical studies on the success of German mittelstands and organizes the most significant factors to present a comprehensive analysis. Especially, a micro-perspective method which is at firm-level is applied to organize and conclude applicable guidance for the development of SMEs. In short, this paper finally concludes that the factors influencing the success of German mittelstands include the social market ideology, easy access to finance, efficient human capital and strong core competency of businesses.

Keywords: *German Mittelstands, SMEs, Vocational training, Finance, Integration.*

1. INTRODUCTION

German mittelstands are interpreted as one of the most constructive pillars of German economy, especially in achieving the post-war economic miracle [1,2]. In terms of the German export, around 68% of them are performed by the German mittelstands, which constitute more than 99% of German firms [3]. Due to the phenomenal role that German mittelstands played, increasing number of papers evaluate the mittelstands' business model and the way how SMEs can contribute to national economy [2,3,4,5]. The topic of this paper is to review the environments that nurture German mittelstands and how the main factors facilitate the economic success brought by the group of firms. This paper can assist both entrepreneurs of SMEs and related policy makers in making decisions or policies with ideas that are inspired from the German experience.

Berghoff defines mittelstands as firms owned and run by a family with their original business conventions and summarizes six characteristics of traditional mittelstands [1]. These traits together with external factors cultivate mittelstands' inherent advantages that make them more competitive than other firms in some dimensions and contribute to the large quantities of hidden champions.

Previous studies analyse the threefold banking system in Germany that assists German mittelstands' corporate

financing and management [2,6,7]. Besides, the dual vocational education and training is another highly emphasized institution that provides German mittelstands with sufficient labour force with company-specified skills [4,8]. More specifically, researchers evaluate the mechanism of German mittelstands' superior resilience to financial crisis [9]. However, existing studies and reviews rarely analyse this phenomenon from a firm perspective, which can be more practically useful for entrepreneurs and managers.

This literature reviews the essential environments that contribute to the success of German SMEs from a firm perspective, which can clearly demonstrate how the external factors interact with each other and the company's operation. Data involved are secondary sources including research papers, review and reports mainly collected from Springer, JSTOR, ScienceDirect and SSRN using German mittelstands and SMEs as key words. Finally, 19 articles are applied in this paper.

The rest of this paper is organized as follows. Section2 demonstrates four factors contributing to the success of German mittelstands namely ideology, access to finance, human capital and core competency of businesses. Section3 draws a conclusion.

2. KEY FACTORS

2.1 Ideology

Different mind-sets can be observed in varied economic systems. While the Anglo-American system assesses business value mostly based on short-run profitability, which is directly reflected from the financial reporting, the decision makers in Germany are motivated by the Social Market Economy, also referred to as Rhine Capitalism [10]. The idea of Social Market Economy (Soziale Marktwirtschaft) and the policies favoring SMEs strongly contribute to the post-war German economic miracle [6]. Economic policies are threefold at national, federal and regional levels including introducing property rights, efficient traffic infrastructure and transparent taxation scheme [6]. Especially, from an economic point of view, the social market economy ideology is associated with the favourable business environment and both emergence and spread of social values such as consensus, freedom, responsibility, collaboration and efficiency, which eventually cultivate the unique characters of entrepreneurship that guarantee the success in mittelstands' development [10]. Independence as an honoured quality influences mittelstands' owners' way of financing and most of them eventually choose internal financing methods in financial practice [11]. Besides, a great sense of responsibility of the owners leads to their direct control and decision-making behaviour that are barely achievable in the established multinational firms [10].

2.2 Finance

German local banking system and the national development bank are essential in the mittelstands' finance. Financing can be one of the most challenging problems for a SME to survive. In Germany, mittelstands' access to finance is highly dependant on German banking system, consisting of cooperative banks, public savings banks, and private banks [2,12]. In the 1990s, the largest institution in the bank industry was Sparkassen which had over 750 subsidiaries or branches in different cities or counties [13]. These subsidiaries share joint-liability of each other, enabling them to have greater financial resilience compared with the private banks, especially during the financial crisis [2]. In addition, the government-owned bank Kreditanstalt für Wiederaufbau (KfW, the German Development bank), which is originally established after World War II for reconstruction, offers special loans with low interests benefiting German exporters in acquiring competitiveness in international market [1,13]. KfW also provides more opportunities for SMEs to be accessible to credits by assigning direct credits or collaborated credits with the local banks [2]. Apart from the low-interest loans, governmental funding also exists in forms of targeted funding to support technological government

programs and advancement, which also help build the collaboration between firms and research institutions [2].

Besides, the relationship-based feature of banking system also contributes to effective corporate finance. In German mittelstands' management, it is common that the banks are part of the supervisory team of firms. The regional banks offer financial advisory and consulting service for the firms [12]. And they have majority of the votes in the companies' resolutions. For example, over nine in ten votes of Siemens, Bayer and Volkswagen are controlled by the banks [12]. Banks' close relationship with SMEs can be seen in their participation in the decision-making process of the firms [2]. In the 1980s, around 90% of the capital that is utilized for corporate use sourced from internal funds [13]. Therefore, this also help reduce the information asymmetry in the capital market, saving the transaction cost for firms [12]. Nonetheless, even though classic mittelstands always have a high debt to equity ratio, they still maintain certain independence. Mittelstands tend to finance themselves with existing assets rather than external capital [1,13].

2.3 Human Capital

2.3.1 Vocational training

German dual vocational education and training (VET) system is an institution created by the collaborated force of public and private sectors. The apprenticeship system cultivates graduates with both theoretical and practical competencies to effectively help them match with suitable job positions [4,5,12]. German vocational education effectively directs the young generation to cater to the need of the labour market and development of firms. The representatives of various chambers provide suggestions and proposals on the new practical requirements for the jobs and the Federal Institute for Vocational Education and Training is responsible for the improvement or cancellation of job offers and introduction of new occupations that are closely related to the technological or business innovation [6]. This dual education system increases the efficiency in the labour market and finally contributes to low unemployment rate in youth [2]. The training for students can be updated because of the close connection between company and vocational training. Commitment between mittelstands and their employees also brings mutual trust and loyalty. Although current data might be incomplete, evidence still indicates that employees trained with company-specified skills demonstrate low rates of employee turnover [4,5]. It is estimated that while the average employee turnover rate for all German companies is 7.3%, the figure for German hidden champions is only 2.7 % [5].

2.3.2 Wage bargaining

Collective wage bargaining at an industrial level

started from the regional agreements in German engineering industry, and gradually other industries followed this convention [14]. Two parties directly involved are the trade union and employers' associations, who represents the demands of works council and members of association respectively [2,14] Sectoral level wage bargaining led by employer's association strongly suppressed the income level of employees [2]. Additionally, the central bank (the Deutsche Bundesbank) plays an important role in restraining employee payment that is above the industrial level. The bank may increase the retaliatory interest rate, leading to a higher exchange rate and this difference can be especially harmful for the engineer sector who highly relies on its export market [14]. However, works council plays an important role as a mediator at an establishment level to reduce the conflicts about working payment and conditions at an industrial level and achieve a stable industrial relation [15,16]. Especially from the mid-1980s when the distributional conflicts and wage bargaining developed from the industrial level to the firm-level, works council became increasingly relevant through the application of opening clauses [15]. On the one hand, works councils safeguard the employees' wages and legal rights. The presence of works council indeed has positive impacts on employees' wages no matter qualitatively or quantitatively assessed [15,16]. Besides, works councils provide an opportunity for workers to convey their demands, which is an effective stabilizer of the industrial relation [17]. On the other hand, establishments with works councils use them as a communication and negotiation mechanism to build trust among workers and management, enabling flexibility and practices that can enhance productivity [16]. When works councils reduce the employment-related risk for both enterprise and employee, employees' productivity can be improved because companies would be more generous in investing in employees' skills and workers have greater confidence in their career [14].

2.4 Core Competency

Considered as the backbone of German economy, German SMEs actively participated in establishing Germany as a giant exporter. In 2014, 90% of the German SMEs are exporters [2]. The most recognized representatives of German mittelstands are known as the hidden champions [5,18,19]. Simon defines hidden champions as global top three firms in their field producing highly specialized products [18]. They normally operate in niche industries and form a quasi-monopolistic structure [3]. Among the nearly 2700 hidden champions around the world, 1370 of them originate from Germany [2]. And 74.4% of them operated in exporting activities since their establishments [5].

Two essential characteristics of German hidden champions that contribute to their success are their integration strategy and product differentiation, whose specific practices bring them firm-level advantages to confront with the bargaining power of suppliers and buyers, beat existing rivalries and substitutes and build entry barriers of their industry, as illustrated in Figure 1 (in Appendix).

Normally, SMEs face many specific challenges in their daily operations, such as lack of resources for R&D, dependency on external resources and lack of economies of scale [12]. The vertical integration is an important business strategy used by German hidden champions as an efficient approach to building a comprehensive value chain that not only creates added value to but also guarantees the quality of their products [2,5]. To illustrate, these firms usually start oversea subsidiaries to expand their production line to include more steps that would either reduce their dependency on suppliers or add value to their existing offerings [5]. More than half of the net added value in Germany in 2015 is created by the SMEs [2]. To be brief, forward integration enables German hidden champions to overcome the bargaining power of buyers and suppliers and simultaneously build a stable value chain.

Another dimension of mittelstands' competitiveness lies in the uniqueness of its products. Their specialty skills are the results of high entry barrier of industries in history. Historically, guilds applied strict restrictions on the people who can participate or run a craft business [6,11]. Nowadays, internationalization of German mittelstands is another dominating strategy that helps prevent new entries of future competitors [5]. With the legacy from vocational education and continuous R&D expenditure, German mittelstands are equipped with specified human capital and ability to produce knowledge-extensive products with specialty that differentiate their goods from those produced by other nations. To demonstrate, German SMEs had the most expenditure on research among all the European countries [2]. And the effectiveness of the R&D expenditure can be seen in Germany's excellent performance as the biggest winner of Nobel Prize of several scientific subjects during a period after World War II [5]. Meanwhile, Patent Law introduced in 1812 also reinforces companies' determination in their R&D investment, as a result of which companies such as Siemens that focused on technological development obtained advanced technologies and became leading companies in their industries [5]. Not only the technological innovation can raise the industrial entry barrier, the characteristics of their firm structure also make German mittelstands more competitive than their existing rivalries and substitutes. Compared with the mass producers, mittelstands with a more decentralized organization structure can produce products that meet customers' special needs more effectively because it

avoids the bureaucratic process which normally takes extra time [5]. Besides, the small size of mittelstands and subsidiaries enables the company to build a close relationship with customers in which they can understand and meet customers' special needs with flexibility, and eventually evoke incremental innovation [5].

3. CONCLUSION

German mittelstands are widely recognized to be the main driver of German economic reconstruction and miracle after World War II. This article reviews the factors that contribute to the success of German

mittelstands from a firm's perspective with four dimensions covering ideology, finance, human capital and core competency of mittelstands. Ideology helps shape the inherent cultural characteristics of the entrepreneurs and the mittelstands they established. Mittelstands' wide access to finance, sufficient firm-specified employees and preminent business structure and strategy also facilitate their financial success. Further research can comparatively analysis the muti-country experience of the development of SMEs and the possible effects of adopting existing German mittelstands' conventions as the degree of the universality of German mittelstands remains unclear.

APPENDIX

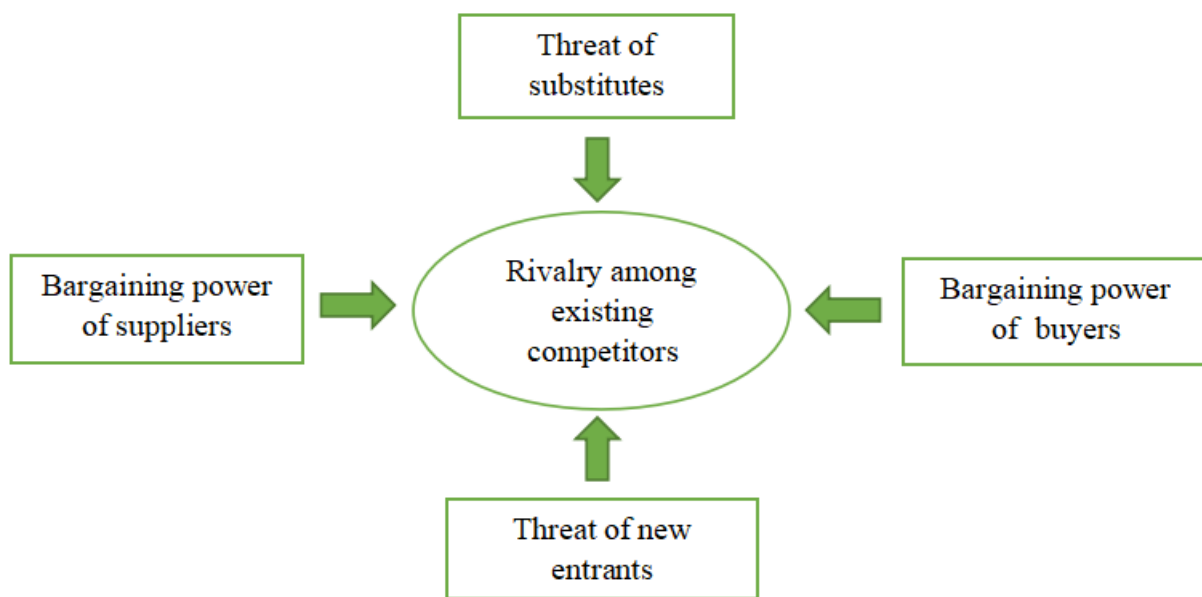


Figure 1. German Mittelstands analysis in Porter's Five Forces model.

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