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from Emerging Markets
Behave Differently?**

Evidence from Austrian
Manufacturing Firms

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Do firms facing competitors from emerging markets behave differently? Evidence from Austrian manufacturing firms

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Abstract

We study the strategic positioning of Austrian manufacturing firms that face competition from emerging markets as opposed to firms that do not. Using a unique sample of large Austrian manufacturing, we find that emerging market competitors are not always a *force majeure*, but the result of the firms' international activity. Existing strengths and weaknesses are more pronounced when firms face competitors from emerging markets. Emerging market competition is associated with a broader product portfolio and triggers portfolio adjustments. Yet, a larger share of the companies facing emerging market competitors neither adjusts the product portfolio nor plans to develop new competences.

Keywords: emerging markets, competition, manufacturing, Austria, dynamic capabilities

JEL: L20, L60, M16

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Do firms facing competitors from emerging markets behave differently? Evidence from Austrian manufacturing firms

1. Introduction

The last decades have seen a wave of internationalisation of firms from developing countries. Especially firms from Brazil, Russia, India, China and South Africa (BRICS) have appeared as new competitors (Athreya and Kapur 2009). As a result, the effects of competition from emerging markets on incumbent firms and markets in industrialised economies have become fiercely debated. A growing literature assesses the effects of import competition, in particular from China, on regional labour markets, productivity and patenting in industrialised economies (Autor, Dorn, and Hanson 2013; Autor et al. 2016). However, firm level evidence is yet rare (Bloom, Draca, and Van Reenen 2016; Yamashita and Yamauchi 2019) and especially the micro-mechanisms are poorly understood.

We empirically study the strategic positioning of firms that face competitors from emerging markets as opposed to firms that do not. The underlying assumption of this study is that firms with competitors from emerging markets face a structurally different competitive situation than firms that do not have emerging market competitors (Bowen and Wiersema 2005; Eisenhardt and Martin 2000; Teece 2007). Conceptually, we draw on the dynamic capabilities approach, which discusses firm-level capacities to orchestrate activities and resources within their competitive environment to maintain a lasting competitive advantage (Teece 2007; Schilke, Hu, and Helfat 2018). This framework is particularly useful when analysing global competitive dynamics changing specialisation and co-specialisation patterns (Katkalo, Pitelis, and Teece 2010).

We make use of a unique dataset of Austrian manufacturing firms. The country context poses a viable setting when discussing the effects of competition from emerging markets. Austria

is an industrialised, small, open economy whose firms rely on international value chains and their positioning in international markets. The industry structure is dominated by skill-intensive, medium-high-tech firms of which some are strongly affected by competitors from emerging markets that increasingly enter the lower end of the quality segments in which they compete (Peneder et al. 2018). This strengthens the external validity of the results.

In particular, we find that

- the presence of competitors from emerging markets is strongly associated with broader geographical activity. Firms serving emerging markets as main markets themselves and the perception that emerging markets will gain further relevance as target markets.
- Even though the data is cross-sectional, we introduce a dynamic perspective by using data from backward- and forward-looking questions. This is the basis for a competitiveness analysis in which we identify differences in the relative positioning between firms exposed to emerging market competition and firms that are not. On average, existing strengths of Austrian firms, such as better production technology or the qualification of staff, are more pronounced for firms that compete with emerging markets.
- Given Austrian firms' market positioning, price and cost leadership is not the strategy of the vast majority of firms, and price competitiveness is generally perceived as a disadvantage relative to competitors.
- Facing emerging market competition is also associated with planned changes in the product portfolio. This indicates a technological reaction to competition which is linked to market repositioning.

- Then again, a larger share of the companies facing emerging market competitors neither adjusts the product portfolio nor plans to develop new competences.

The contribution of this paper is threefold:

First, we provide evidence about the strategic behaviour of firms that face competitors from emerging markets. This adds to the micro-foundations of the dynamic capabilities approach and evolutionary economics. We use largely qualitative information to add to the previous empirical literature, which has largely discussed quantitative firm performance and innovation measures.

Second, we add methodologically by offering a scale that allows researchers to paint a nuanced picture firms' competitiveness. We distinguish between core business models such as price competitiveness, niche markets and broad diversification strategies, and then ask if a comprehensive set of competitiveness domains pose an advantage. This allows us to portray firms' strategic orientation and functional domains.

Third, our findings have practical implications. We add to the literature that seeks to provide guidance to managers who adjust their business strategies in a dynamically evolving competitive environment. We also provide evidence relevant for strategic industrial policies aiming to reduce pressures from low-cost emerging market competitors whilst maintaining a free trade regime.

2. Dynamic capabilities and international competition from emerging markets

A recent strand in economic research has argued that competitors from emerging markets, especially from China, draw on factor endowments unavailable to firms in industrialised economies, which renders them more cost competitive. At the same time their technological

capabilities are increasingly sophisticated allowing them to compete with firms from industrialised economies. This leads to falling employment, profits and prices. Low-skilled workers come under pressure and innovation activity is stifled. There is a stronger reallocation of employment between firms towards technologically more advanced firms. Technical change within firms in industries exposed to strong import competition is accelerated, and more diversified firms tend to switch industries (Autor et al. 2016; Ding, Sun, and Jiang 2015; Becerra, Markarian, and Santalo 2020).

From an organisational perspective, the question arises how competitive advantages can be maintained in spite of intensified competition from increasingly sophisticated emerging market competitors. This problem is best approached by drawing on the dynamic capabilities' framework (Schilke, Hu, and Helfat 2018), whose objective is to explain the sources of enterprises' competitive advantage over time. At its core is the transformation of a firm's existing resource base (Teece, Pisano, and Shuen 1997; Eisenhardt and Martin 2000; Katkalo, Pitelis, and Teece 2010; Kump et al. 2019; Winter 2003).

When firms have assets that are valuable, rare, inimitable, and non-substitutable, they can achieve a competitive advantage over their competitors. In addition, firms' strategies are often complementary to these unique assets and therefore difficult to copy by competitors, which shields them at least temporarily from competition (Barney 2001; Wernerfelt 1995). However, competitive advantages evolve over time, and strategic adjustments are accelerated when new competitors challenge incumbent firms. This requires that firms develop "higher-order capabilities" associated with a learning-to-learn ability (Collis 1994; Winter 2003).

Foreign competitors may have access to alternative sources of comparative advantage, like lower input factor costs or different technological capabilities represent a specific challenge. As these companies enter on the lower end of the product quality ladder in an industry,

international competition generates pressure to improve domestic efficiency and technologies (e.g., Bowen and Wiersema 2005; Chung 2001). Companies on the upper end of the quality ladder will give low quality product lines in which their cost structure puts them at a disadvantage and refocus their product portfolio on product lines where their capabilities allow sustaining a competitive advantage and maximise their profits.

The discussion of the role of dynamic capabilities in response to low cost or low quality competitors can be structured around three processes: sensing of opportunities and threats, transforming their organisations and seizing market opportunities (Teece 2007).

Firstly, successful firms sense market and technological developments putting their competitive advantage at risk or providing new opportunities. The arrival of firms from emerging economies implies that the competitive intensity and the market change quickly. Incumbent firms seek to escape rent-reducing competition effect, and, if they are able to, alter the market in which they operate itself (Teece 2007).

Secondly, existing knowledge, product portfolios and business models are put into question, new knowledge sources are sought and the mix between old and new knowledge is selected. Fast-changing markets are thought to differ from moderately dynamic markets in which change occurs through a small, yet more frequent deepening of related experiences in an 'ad-hoc' fashion (Eisenhardt and Martin 2000; Winter 2003). This increase in competition drives market repositioning (Wang and Shaver 2014). It has also been argued that the appearance of low-cost competitors can be perceived as organisational crisis which triggers reactive organisational change (Gersick 1994), which may comprise enhancing, combining, protecting and sometimes realigning tangible and intangible organizational assets. However, and more generally, these reactions typically entail many functional domains such as alliancing, product development and strategic decision making (Kump et al. 2019; Schilke, Hu, and Helfat 2018). The aim of these

adjustments is to continuously learn about markets and technologies which allows changing the perception of the market.

Finally, firms develop and seize opportunities by introducing new products, processes and services whilst changing existing product portfolios. The literature on the effects of trade liberalisation and market integration supports this perspective. As trade is liberalised and markets start integrating, some firms exit, while surviving firms shed marginally productive products in their efforts to specialise. Their exports increase both in terms of the share of products exported and the export revenue per product (Bernard, Redding, and Schott 2011).

Further empirical studies building on the work of (Melitz and Ottaviano 2008) shows that firms producing goods and services which are easily replaced by low-cost imports from emerging markets decline and exit. Cross-country variance with respect to exit rates indicate differences in firms' underlying capabilities and productivity levels. More productive, technologically advanced firms are able to escape import competition by innovation and diversification, respectively (Bernard, Redding, and Schott 2011; Bloom, Draca, and Van Reenen 2016; Yamashita and Yamauchi 2019; Mion and Zhu 2013).

We examine how manufacturing companies facing emerging market competition differ in these three dimensions from firms that do not. In particular, we study firms' geographical presence, their competitive positioning, their behaviour with respect to portfolio diversification over and above firm characteristics. We use a unique data set on the development of strategic capabilities, value chain positioning and international competition for Austrian manufacturing companies.

3. Research method

Questionnaire design and sampling

Our main data source is a survey of Austrian manufacturing firms about their corporate strategies. The survey was conducted between June and September 2016. The aim of the survey was to gather information about the past, current and future strategies of firms with regard to internationalisation, value chain integration, competition and competence building. The questionnaire focused on firms' positioning in their competitive environment. The questionnaire design relies on both management literature and in-depth interviews with high-level industry representatives. It was implemented in German, the local language.

The adjusted gross sample comprised all firms of the NACE Rev.-2 segment C ("Manufacturing") which reported more than 250 employees in the Herold database, an Austrian provider of firms' addresses. This led to a sample of 498 firms. This list was augmented by a sample of manufacturing firms which reported between 100 and 250 employees and were classified as 'hidden champions' in a publication by Advantage Austria (2015). These additional firms are (i) either positioned among the top three of the global market or lead on its continent in terms of market share, (ii) have revenues which do not exceed four billion USD, and (3) have a low level of public awareness (Simon 2009).

The adjusted gross sample comprised 1005 Austrian, of which 323 responded to the questionnaire, corresponding to a response rate of 32.1%. This high response rate can be attributed to the official support which the survey received by the Austrian Federal Ministry of Transport, Innovation and Technology, the Austrian Federal Ministry of Digital and Economic Affairs and the Oesterreichische Nationalbank, the central bank of the Republic of Austria.

Sample description

The sample is a balanced mix of firms broadly assigned to manufacturing. Approximately 80% of the observations are assigned to manufacturing according to the NACE Rev. 2

classification. Few surveyed firms are active in the services sector (6%), a broadly defined trade and distribution sector (8%) with the remainder being in mining and utilities. Yet, almost all firms in the sample (97%) describe themselves as "industry-oriented" in the broader sense. The self-assessment shows that 17% of the sample perceive themselves as manufacturers of consumer goods, 28% as providers of capital goods and 14% as producers of industrial consumer goods. In addition, 16% self-identify as manufacturers and suppliers of systems and 23% as manufacturers and suppliers of components.

Austria's status as a small open economy is mirrored by the manufacturing firms in the sample, which are highly internationalised. Only two percent report that they do not export their goods and services. 57% of the sample generate at least three quarters of their sales revenue from exports. This implies that Austrian firms are affected by international developments such as the entry of firms from emerging markets.

Strategic decisions are mostly taken in Austria. Even though 40% of the firms belong to an international corporate group, strategic enterprise decisions are mainly taken in Austria. Merely 9% of the enterprises that are part of a corporate group report that strategic management decisions are taken only abroad.

4. Characteristics of firms with competitors from emerging market

We examine how manufacturing firms facing competition from emerging market competitors differ in their corporate strategies from firms that do not. Hence, we start the empirical analysis by defining firms that face competitors from emerging markets. The dataset contains a question requiring a verbal answer asking about the geographic origin of the firm's three main competitors. Almost all firms reported that they compete against firms from the EU-15, with 78% alone reporting that they compete against German companies.

We use this information to create a dummy variable taking on the value of one if the surveyed firm reports at least one competitor from an emerging market, and zero otherwise. We define the following countries as emerging economies: Brazil, China, India, South Africa, Turkey, Russia, Saudi Arabia, Mexico, South Korea, Taiwan and other, not exactly classified emerging Asian economies except China. In total, 18% of the sample face competitors from emerging markets. This variable allows us to split the sample.

Geographical presence

The literature about emerging market competition hinges on a reactive argument: growing global trade flows bring about new competitors from emerging markets and incumbent firms in industrialised economies merely react. However, it is also conceivable that firms from industrialised economies serve emerging markets as their target market for their own goods and services. It is then more likely that these firms also face competitors from emerging economies.

The dataset contains self-reported information about the firms' main markets. The answer options provided are Austria (i.e., the home market), other German speaking countries, other EFTA countries and Old Member States, New Member States, industrialised nations outside of the EU, emerging markets and the category "others".

A fifth of all firms in the sample serve emerging markets as a main market. While this is a substantial fraction of firms, the main markets remain in Europe and in other industrialised economies. 75% of the firms in the sample report German speaking countries (Germany, Switzerland, Liechtenstein) as their main market, while Austria's share is 63%. Approximately 50% report the EU15 or other EFTA economies, 32% other industrialised economies such as the US or Japan and 22% CEE countries as key markets.

The sample also contains perception data about the future relevance of these markets. Firms expect great dynamism for emerging markets. While 44% expect emerging markets to gain

importance in the future, 26% expect them to become less relevant. 46% report that industrialised countries outside the EU (e.g., USA or Japan) will gain relevance, 21% expect declining importance.

It is likely that firms facing competitors from emerging markets perceive the future relevance of target markets differently than firms without competitors from emerging markets. We study these differences by splitting the sample. Indeed, firms facing emerging market competitors assign more importance to emerging markets themselves and other industrialised economies such as the USA or Japan. This is an expression of “wider internationalisation”, implying a wider search radius for opportunities. On the other hand, firms without competitors from emerging markets expect that Austria and German speaking countries in Austria’s vicinity (Germany, Switzerland, Liechtenstein) will gain relevance. This suggests a “home market bias” which may reflect local production networks (Wolf 2000). There are no statistical differences related to the expected future role of Old and New Member States.

Figure 1 about here

Competitiveness profile

Dynamic capabilities perceive the transformation of the resource base to occur intentionally and in alignment with strategic assumptions. Organisational change thus relies on the currently perceived competitive positioning of firms (Teece 2007; Kump et al. 2019). The dataset contains information about the basic strategic tenor of the firm. We find that merely seven percent identify price and cost leadership as the main factor of their competitiveness. 33% pursue a quality leadership strategy, 29% serve niche markets focussing on specific customer segments or product segments and 17% react flexibly on market requirements. There are no statistical

differences between firms with and without emerging market competitors in these strategic dimensions.

However, firms with emerging market competitors differ markedly if they implement a broad diversification strategy: 22% of the firms facing emerging market competitors pursue a diversification strategy as opposed to 13% of the firms that do not. A broader product portfolio seems to increase the exposure to competitors from emerging markets.

Competitive positioning

We draw on the resource-based view and identify firms' self-perceived competitiveness, which can be interpreted as the "sensing" of market developments in the dynamic capabilities' framework. The questionnaire allows us to study broadly defined properties of the competitive positioning. We use two questions sharing the answer categories. The first question is about the perceived competitive advantage that a firm has in a given strategy domain. The second question asks about expectations of industry trends:

- 'How do you rate your company in comparison to its main competitors?'
- 'Which factors will be more or less important for future competitiveness in your industry than today?'

The questions ask about strategy domains and give three answer options: advantage / better / more important, equal, disadvantage / worse / less important. We report the differences between the share of firms reporting to have an advantage and those that report a disadvantage in the respective fields. The domains covered are the technological content of the products, product quality, product design, the breadth of the product portfolio, the depth of the product portfolio, the firm's image / reputation / trade mark / customer trust, the price, the qualification of staff, firm size, the efficiency in production / production processes, Digitalisation (e.g., logistics,

production, sales), consideration of customer requests (Customisation), marketing, sales, the organization of the value chain and customer service / maintenance.

These questions can be interpreted mutually in a type of strengths-weaknesses (current positioning) and opportunities-threats (industry trends) analysis. We link the assessment of the surveyed companies with regard to their entrepreneurial competitiveness with expected industry trends.

We split the sample to distinguish between firms that compete and firms that do not compete against firms from emerging markets. Figure 2 provides a graphical illustration by plotting the aspects that will gain importance in their industry in the future (x-axis) and to the proportion of companies that currently perceive a competitive advantage over their competitors (y-axis). The average shares across all categories are represented by the demarcation lines.

Figure 2 about here

The overall picture that emerges corresponds with the notion of the positioning of a small, open and industrialised economy. Firms rate themselves high in product quality, technological content, image reputation and customization, whereas they have disadvantages in firm size and price competitiveness. While current strengths such as the technological content, product quality or the qualification of the staff are expected to become more important, also digitalization and production processes – where, on average, firms rate themselves not to have advantages - are thought to become more important. Moreover, price competitiveness is expected to gain relevance, which is an aspect where firms see themselves disadvantaged.

Differences in perceptions

There seem to be differences in the perception of the market environment between firms that have competitors from emerging markets and firms that do not. We implement pairwise t-tests to identify statistically significant differences at the 90% level.

Firms' current advantages are more pronounced when they have competitors from emerging markets in the domains design, image, the production process, digitalisation, customisation, marketing and sales. Advantages with respect to portfolio depth and breadth were reported to a lower degree.

There are also differences in the perceptions of future industry trends. While both groups expect digitalisation to become more important, firms that face competition from emerging economies do so to a greater extent. Compared to firms that do not compete against emerging markets, slightly fewer firms expect that the qualification of staff, customization, marketing and sales become more important.

Competitive response

The development and seizing of opportunities by introducing new products, processes and services is an important element of the dynamic capabilities perspective on competitiveness. This goes along with decisions by companies on how to exploit its existing competencies or develop new ones to achieve this.

Figure 3 provides evidence on the diversification of product portfolios in the past and the future. It shows that companies exposed to competition from emerging markets that have adjusted their portfolio in the past five years more frequently intended to do so also in the five years following the survey if compared to companies that were not exposed to this type of competition. This suggests that emerging market competition provides a stimulus to adjust product portfolios on a continuous rather than intermittent base.

Figure 3 about here

However, Figure 4 shows that - relative to companies that are not exposed to emerging market competition - a larger share of the companies facing emerging market competitors are technologically stagnant. This is, they do not adjust their product portfolio and do not plan to develop new competencies. This indicates that these companies either try to exploit their current capabilities and products or refrain from new developments due to competition.

Figure 4 about here

There a high persistency in the competence building strategies for those companies that have planned to adjust their competence base in the five years. This is shown by the diagonal elements of transition plots in Figure 5. Yet, independently of whether firms face emerging market competition or not, one observes a general tendency to broaden the competence base beyond established core competencies. This is shown by the upper off-diagonal elements in the figure. There is little difference in the observed patterns between companies exposed to emerging market competition and companies that are not. This suggests that in advanced economies – if companies adjust their competence base -- they need to broaden it in order to stay competitive. Whether competition comes from emerging markets or not seems to play a subordinate role in this choice.

Figure 5 about here

Regression analysis

We next explore a number of characteristics of firms that face competitors from emerging markets in a regression analysis. We implement logistic regressions with robust standard errors to study the characteristics of firms that face competition from emerging markets. The uncovered coefficients are reported as marginal effects and pose descriptive evidence.

We consider two control variables. First, we use the geographic market orientation, which is captured by a dummy variable taking on the value of one if a firm perceives emerging markets as a primary geographical destination, and zero otherwise. Second, we capture if firms are part of an enterprise group. This may affect resource allocation and strategic decision taking as well as the perception of competition - respondents were asked to answer firm-wide (Beard and Dess 1981; Short et al. 2007). Most firms in the sample (78.5%) are part of an enterprise group. We define a dummy variable taking on the value of one if a firm is part of an enterprise group, and zero otherwise.

In the first specification (1) we ask about market growth. The explanatory variable is based on the question ‘How would you assess the development of the markets for your company’s most important products in the past five years?’ A Likert-scale was used in the questionnaire, with higher values denoting more dynamic developments than lower values. 32% report that the markets that they serve are either in an early stage or have grown dynamically, while only 6% report shrinking markets. The perception of a shrinking market induces the “escape competition effect” on which the literature on dynamic capabilities hinges. Hence, shrinking markets are therefore likely to be associated with the presence of competitors from emerging markets.

The second regression (2) links export intensity with emerging market competition. The literature suggests that internationally active firms are more exposed to emerging market

competition (Hombert and Matray 2018; Yamashita and Yamauchi 2019; Bloom, Draca, and Van Reenen 2016). We use two variables to measure internationalisation. First, we use a question asking about the average export intensity in the last five years. Five brackets were given as answer options – no export, exports amounting between one and 25% of sales revenues, 26% and 75%, 76% and 90% and more than 90%. In addition, we use a measure of the geographical breadth of the firm's presence. This is defined as the sum of main markets served by the firm. Approximately 57% of the surveyed firms report only one or two regions as their main market, while 9% report five or six key destinations. These firms can be described as highly internationalised, global players. We expect more internationalised firms to be more likely to encounter competitors from emerging markets. In this specification, we do not control for a firm's presence in an emerging market, because this information is already contained in the indicator measuring geographical breadth.

The third specification (3) asks if there are size effects associated with emerging market competition. This specification is based on employment information from AMADEUS data. Four size brackets are used to construct an ordinal variable. Firms with fewer than 250 employees serve as the reference group. The other size classes defined are firms with more than 251 and less than 500 employees, between 501 and 1000, and eventually more than 1000 employees. Larger firms are expected to be, on average, more exposed to competition from emerging economies (Bloom, Draca, and Van Reenen 2016; Hombert and Matray 2018).

The fourth regression (4) asks about industry effects by using the four groups of the Pavitt-taxonomy as an independent variables (Pavitt 1984). We use science-based industries as a benchmark, in which innovation is driven by science and R&D. We explore whether specialised suppliers, scale and information intensive industries and supplier dominated industries are more exposed to competition from emerging markets. Older literature suggested that emerging market

competition is associated with low-cost industries (Bowen and Wiersema 2005; MacDonald 1994). This effect should become visible using the Pavitt taxonomy, because low cost industries are usually assigned to the supplier or scale-intensive sector. Yet, this has obviously become challenged by the technological advance of emerging economies.

Regression (5) associates plans to offshore with emerging market competition. We construct a dummy variable taking on the value of one if there are plans to offshore, and zero otherwise. These may refer to any of the following functional domains: strategic management, finance and control, purchase, sales and marketing, innovation and research, design and product adjustment, production, training and customer service maintenance. 22% of the firms in the sample report offshoring plans, with production (ten percentage points) and finance and control (incl. accounting; 5 percentage points) being the most affected activities. Plans to offshore are often linked to cost pressures (Lewin and Peeters 2006; Mukherjee et al. 2019) and therefore likely to be associated with emerging market competition.

Eventually, specification (6) studies the past and future diversification behaviour. We define dichotomous variables using the answers to the questions “Has your company changed its product portfolio in the past five years” and “Does your company plan to change its product portfolio in the next five years?” Diversification in order to escape competition is a key response suggested by the literature on dynamic capabilities outlined above.

Table 1 about here

The exploratory regression results shed light on the characteristics of firms that face competitors from emerging markets (see Table 1). The first regression links emerging market competition with market growth. Firms tend to report that they are active on declining markets.

This association could be the result of more competition and thus perceived decline of market volumes, or the result of shrinking markets per se. This supports escape competition and market development arguments as a reaction to emerging market competition. The second regression finds that both higher export intensity and greater geographical coverage is associated with emerging market competition. This supports the notion that more international activity renders firms more affected by competition.

Another result from the literature is that larger firms are more exposed to emerging market competition. Specification (3) finds a weakly significant relationship between smaller firm size and the exposure to emerging market competition. The control group is composed by firms with fewer than 250 employees. However, this relationship is largely insignificant. Also, specification (4) does not find statistically significant results for sector effects any using the Pavitt taxonomy.

The final two specification link firm behaviour to competitors from emerging markets. We find that facing emerging market competitors is associated with offshoring plans (5). Eventually (6), the coefficient for the variable measuring plans to diversify the portfolio in the future is statistically significant. The marginal effect for past diversification is insignificant.

The data support that firms reporting emerging market competitors are more likely to serve emerging markets as a main market. Descriptive statistics show that 16% of firms that do not perceive emerging markets as their main market face competitors from emerging economies. At 31%, this figure is almost twice as high for firms that perceive emerging markets as a main market. This difference is statistically significant in a Fisher exact test (p-value: 0.01). In addition, the coefficients are positive and significant in almost all specifications. The coefficients for corporate groups are statistically insignificant.

5. Discussion and conclusions

Recent decades have seen a wave of internationalisation of firms from emerging economies, especially from China. This led to a fierce debate about the effects on industrialised economies (Autor, Dorn, and Hanson 2013; Autor et al. 2016) and on firm performance (Bloom, Draca, and Van Reenen 2016; Yamashita and Yamauchi 2019; Hombert and Matray 2018). We draw on the dynamic capabilities' framework and unique survey data to study the competitive positioning of Austrian manufacturing firms in a context in which they compete against firms from emerging markets.

We find that emerging market competition is not always *force majeure* rooting in a more or less sudden openness to international trade and the technological upgrading of emerging economies. In some cases, it seems to be a phenomenon that is triggered by the exploration of global geographical markets by Austrian firms. A greater export share, broader geographical market coverage and serving emerging markets themselves as main markets increases the likelihood of facing emerging market competitors.

We support the notion that emerging market competition is a broad phenomenon, which is largely independent of firm size, industry affiliation or a firm's organisation as a company group. Nevertheless, competition from emerging markets also implies increased cost pressures (Bernard, Jensen, and Schott 2006), which is why firms that face competitors from emerging economies tend to perceive markets as declining and are more likely to react to competition by offshoring.

There is evidence for an escape competition effect. Firms that face competition from emerging markets have a broader product portfolio and are more likely to plan portfolio adjustments. This is in line with Industrial Organization literature which argues the marginal benefit of vertical differentiation increases when low-cost competition increases (Hombert and

Matray 2018; Sutton 1991). However, competing against emerging markets are more likely to be stagnant with respect to their competence development. This is, a larger fraction of firms does not adjust the product portfolio and does not plan to develop new competencies.

The competitive positioning of Austrian firms facing competitors from emerging markets mirrors their current advantages. Existing strengths such as design, image or the production process are – on average - more pronounced when firms face competitors from emerging markets, which corresponds with studies finding that firms facing low-cost competition focus on their factor endowments (Bernard, Jensen, and Schott 2006).

Certainly, this study also has limitations. For instance, the data are confined to a survey among Austrian manufacturing firms. The findings may differ in other contexts, and thus, future research should be expanded to include firms from countries that are not from a small, open economy like Austria or from the service sector. The study uses cross-sectional data, and longitudinal/panel data would add causality. Nevertheless, we believe that we provide important insights about the competitive positioning and behaviour of firms that compete against firms from emerging economies. These results are relevant to both managers and policy makers.

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Tables and figures

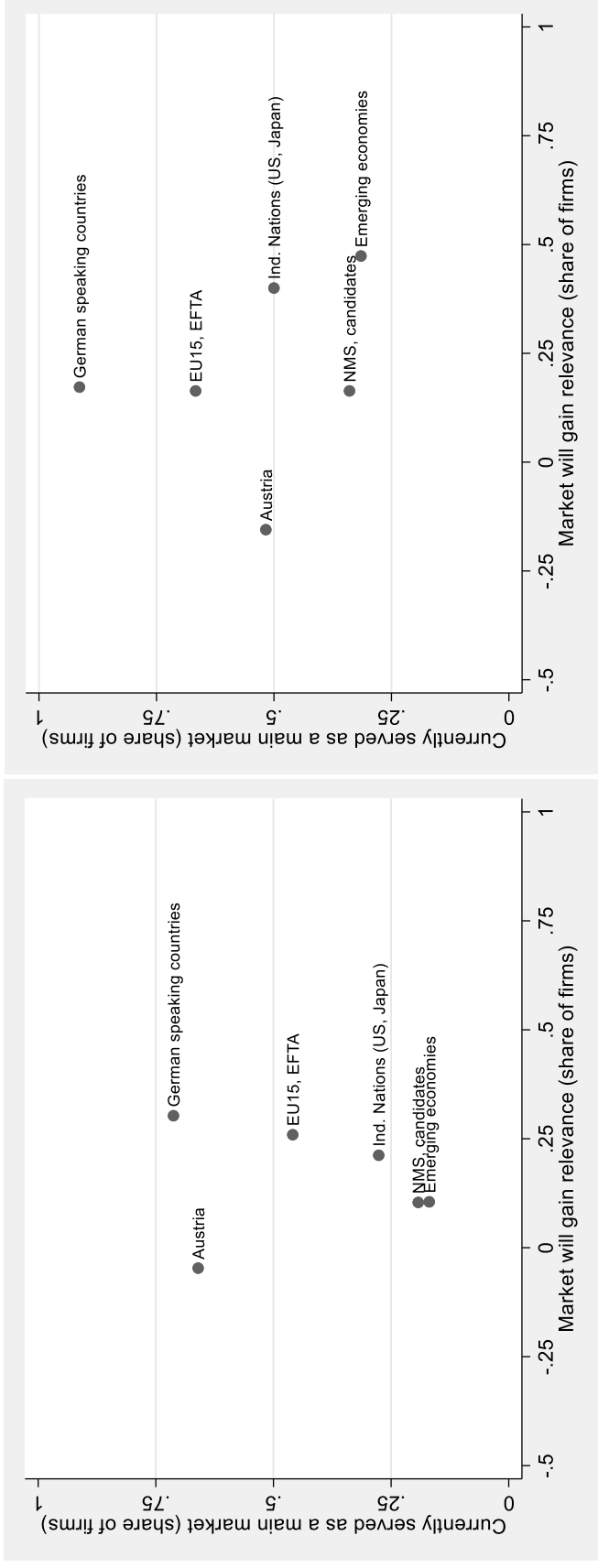
Table 1: Characteristics of firms competing emerging markets, exploratory regression results

	(1)	(2)	(3)	(4)	(5)	(6)
Market growth	-0.04*					
	(0.021)					
Export intensity		0.07***				
		(0.019)				
Geo. Breadth		0.04***				
		(0.014)				
Size (251-500 emp.)			0.10*			
			(0.052)			
Size (501-1000 emp.)			0.06			
			(0.072)			
Size (>1000 emp.)			0.06			
			(0.062)			
Specialised suppliers				-0.03		
				(0.070)		
Scale and information intensive				0.03		
				(0.069)		
Suppliers dominated				-0.10		
				(0.071)		
Offshoring					0.11**	
					(0.046)	
Past diversification						-0.06
						(0.059)
Future diversification						0.11*
						(0.058)
Group	-0.04	-0.07	-0.05	-0.06	-0.05	-0.06
	(0.050)	(0.048)	(0.051)	(0.050)	(0.050)	(0.051)
Main market in em. econ.	0.13***		0.13**	0.11**	0.10**	0.12**
	(0.049)		(0.051)	(0.051)	(0.049)	(0.049)
Observations	320	318	321	315	321	315

Source: Own calculations.

Note: This table shows the results of the logistic regression exploring the characteristics of firms with competitors from emerging markets. The findings show that emerging market competition is particularly associated with declining markets and higher export intensity. There is a weak relationship between emerging market competition and smaller firm size and plans to diversify the product portfolio in the future. The reported coefficients are marginal effects at the mean. Robust standard errors in parentheses, Significance levels: *** p<0.01, ** p<0.05, * p<0.1.

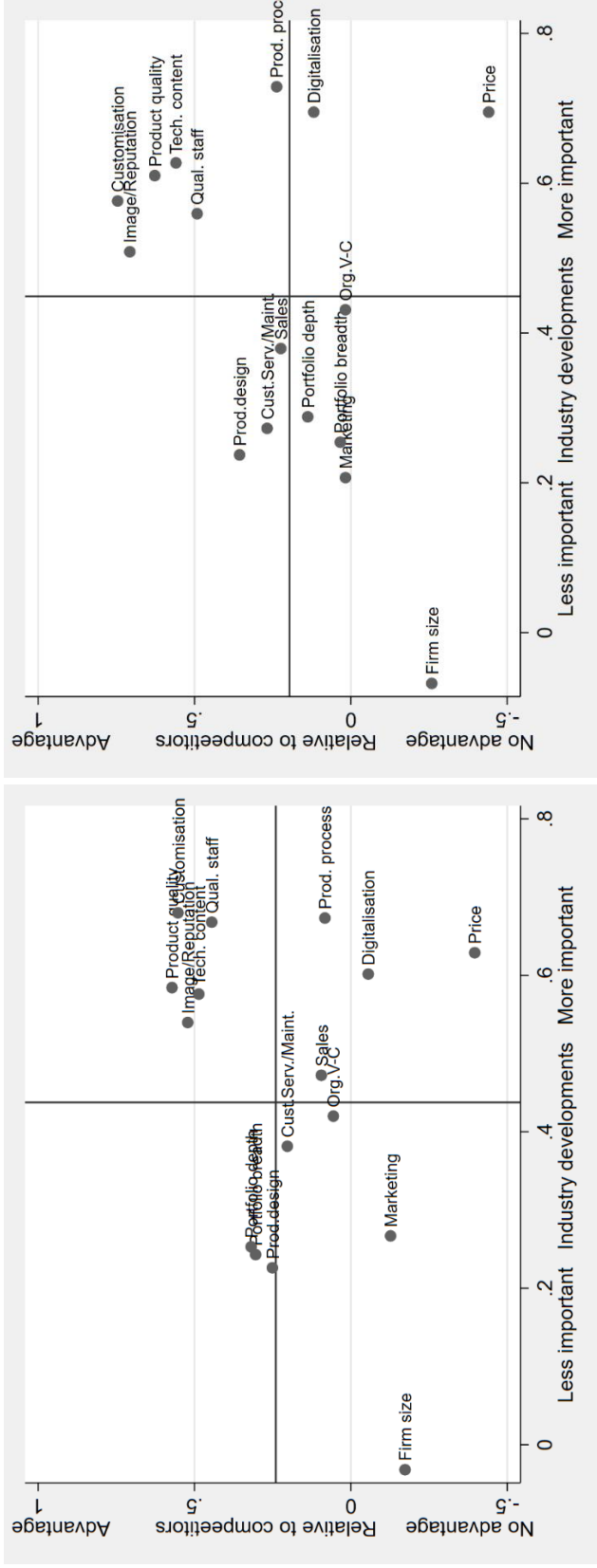
Figure 1: Geographical main and future market, firms without (left) and with (right) competitors from emerging markets



Source: Own illustration.

Note: The graphs are based on the question 'In what geographical markets is your company present with its products?' and 'How would you assess relevance of the following geographical markets for your company in the next five years compared to today?'. Both questions allowed for the same geographical locations. The future relevance reported is the difference between the shares of the companies that expect markets to become "more important" and those that expect the same market to become "less important".

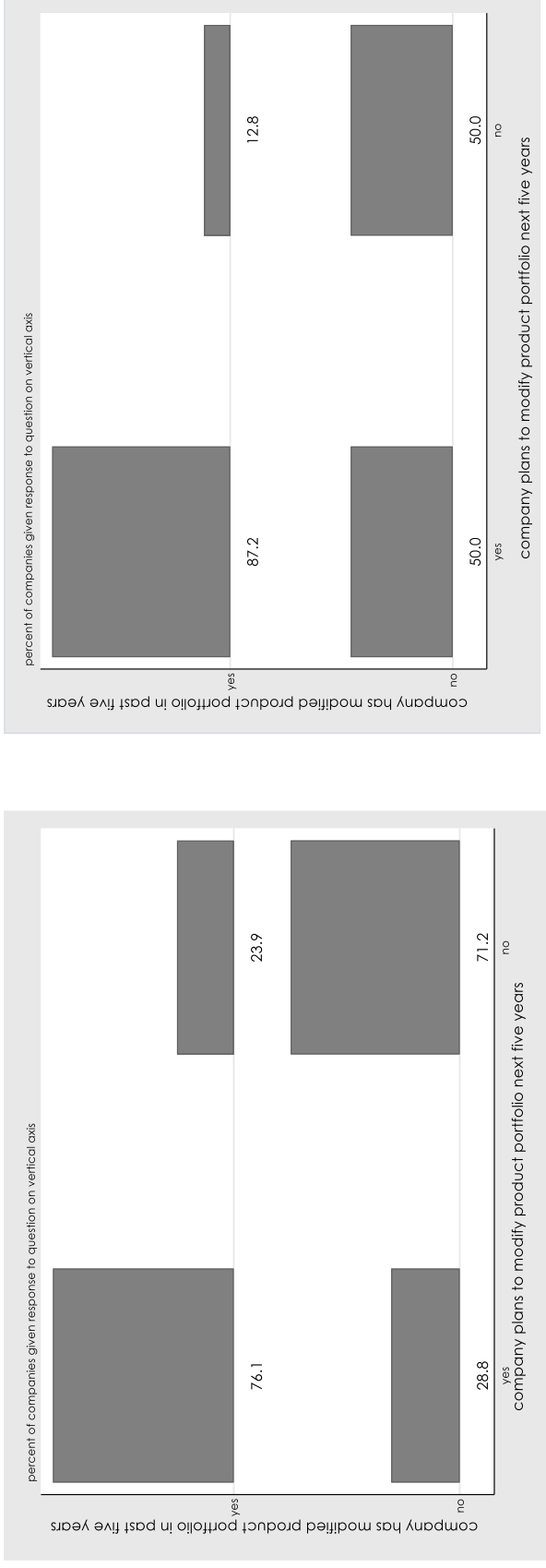
Figure 2: Competitiveness profile, firms without (left) and with (right) competitors in emerging markets



Source: Own illustration.

Note: The graphs are based on the question 'How do you rate your company compared to its main competitors?' and 'Which factors will be more or less important for future competitiveness in your industry than today?'. Both questions allowed for the same answer categories and asked about the same broadly defined strategy fields. Either graph reports the shares of the companies that have reported the categories "advantage" or "will become more important" minus the share that answered "disadvantage" or "will become less important", respectively. The lines represent the average values across all response categories.

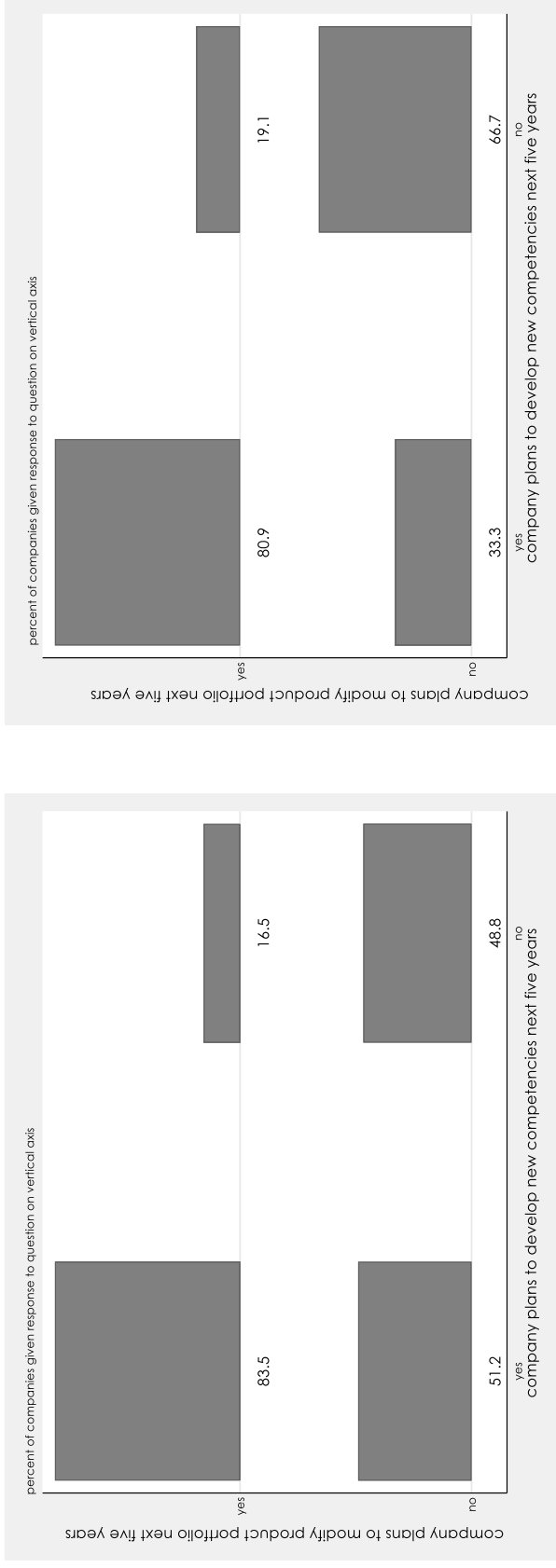
Figure 3: Past and future (planned) product portfolio adjustments, firms without (left) and with (right) competitors in emerging markets



Source: Own illustration.

Note: The graphs are based on the question 'Did you adjust your product portfolio in the past five years?' and 'Do you plan to adjust your product portfolio in the next five years?'. Both questions were binary choice. The figures represent status transitions.

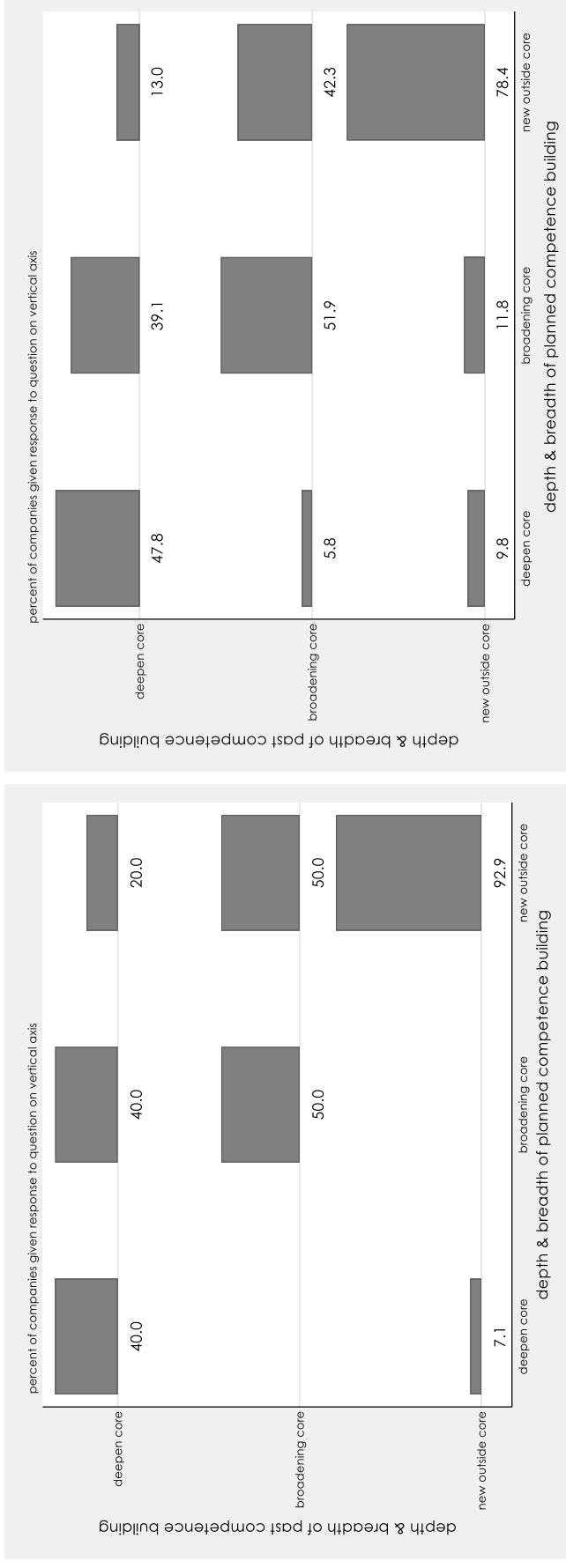
Figure 4: Future (planned) product portfolio adjustments and planned competence building, firms without (left) and with (right) competitors in emerging markets



Source: Own illustration.

Note: The graphs are based on the question 'Do you plan to adjust your product portfolio in the next five years?' and 'Do you plan to build new competencies in the next five years?'. Both questions were binary choice. The figures represent status transitions.

Figure 5: Scope of competence building for firms building new competencies, firms without (left) and with (right) competitors in emerging markets



Source: Own illustration.

Note: The graphs are based on the question ‘When developing new competencies in the past five years, did you... i) ‘deepen existing core competencies?’; ii) ‘...acquire new knowledge complementary to your core competencies?’; iii) ‘... acquire new knowledge outside your existing core competencies?’; and the question ‘When developing new competencies the next five years, do you plan to ...’ with same response categories as for the retrospective question. Number of cases of companies exposed to emerging market competition and building new competencies: n=29; Number of cases of companies not exposed to emerging market competition and building new competencies: n=126;