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# Do entry barriers, perceived by SMEs, affect real entry? Some evidence from the Netherlands

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## *Abstract*

The objective of this paper is to analyse the relationship between perceived entry barriers and real entry. Real entry rates are interpreted as an indicator for the dynamics in an industry. The major hypothesis of this paper is that important entry barriers restrict new entry. Real entry rates are provided by a starter ratio for different industrial sectors and provinces in the Netherlands. Firms were interviewed in December 2004 to obtain data about the perceived importance of a large number of entry barriers (structural as well as strategic). The most important barriers, perceived by firms, are related to acquiring sufficient sales volume and capital, financial risks, cost disadvantages, cost of capital, economies of scale and product differentiation.

The data on perceived entry barriers and information about the attractiveness of the market, are used to explain real entry in the first six months of 2005. Generally, the results confirm the expected relationship between entry barriers and real entry. However, some barriers seem to influence the starter ratio more strongly. Remarkably, several of the most 'important' perceived barriers do not restrict real entry rates. This result contains an interesting lesson for policy makers. They should not address important barriers per se, but scrutinize the effects of barriers that seem to restrict real entry. For example, government regulations are not perceived as one of the most important entry barriers. Nevertheless, this barrier has a strong impact on starter ratios. This result justifies why the Dutch government scrutinizes the relevance of existing rules and regulations.

## Introduction<sup>i</sup>

Entries of new firms into the market foster the dynamics in the economy. Entrants have an equilibrating function, as firms will enter the market if profits are above the long-run competitive level. Consequently, profits are expected to decrease to the long-run equilibrium level. Entrants are also considered as important agents of change, as new firms may introduce new products or production processes. The upshot is that entry contributes to allocative as well as dynamic efficiency in the market (Audretsch and Thurik, 2001). However, several mechanisms can prevent firms from entering the market and hamper the process of allocative and dynamic efficiency. In line with this perspective it is easily understood that barriers to entry constitute an important issue in entrepreneurship and competition policy.

In Blees *et al.* (2003) the results of a comprehensive literature study on entry barriers have been published: the theoretical background and the operating mechanisms are discussed. The report describes in total 37 structural and strategic barriers to entry and discusses the expected specific effects on small businesses. The literature study concludes that small entrants suffer more from barriers to entry than large entrants (often existing companies active in another product or geographical market). For example, it is argued that barriers related to advertising, brand name, capital requirements, cost of operating abroad, high wages, R&D and selling expenses are less restrictive for large entrants.

We expect that firms, that consider entry, ponder the importance of different entry barriers and, in particular, their perceptions with regard to these entry barriers. This paper addresses the relationship between perceived entry barriers and real entry. First we identify the major entry barriers as perceived by firms. Subsequently, we analyse whether these perceptions affect the real starter ratio observed in different sectors and provinces. In general entry barriers will have a negative effect on real entry. However, not all barriers will lead to low start-up ratios. Several sectors in the entrepreneurial economy operate in a turbulent and demanding environment (Audretsch and Thurik, 2001). These attributes may be considered as an entry barrier that restricts entry, but also as a challenge that encourages start-ups. The latter effect may neutralize the former effect. However, not all barriers are harmless. We aim at identifying these barriers by testing the relationship between perceived barriers and real entry.

Several authors stress the need for empirical evidence on extant barriers to entry (Scherer, 1988; Geroski *et al.*, 1990; Bunch and Smiley, 1992; Karakaya, 2002). Blees *et al.* (2003) interpret the mechanisms of each barrier and discuss whether it constitutes a specific hurdle for SMEs. However, this does not necessarily mean that the problem is widespread, nor does it test whether there is a relationship between the barriers and real entry. It is expected that important barriers will have a stronger effect on real entry. The relevance of this approach is discussed by Singh *et al.* (1998: 230). They observe that many theoretical models exist but that empirical evidence in support of these models is rather weak. Subsequently, they raise the question: 'how important empirically are the types of strategic behaviour, which have been modelled [theoretically] so copiously?'

From a policy perspective this is a relevant issue as entrepreneurship and new ventures are encouraged to reduce unemployment and to increase the dynamics in the economy. The

existence of entry barriers is a potential threat for the effectiveness of these policies. In the Netherlands several policy changes are debated and some have been implemented to reduce the barriers to entry start-ups were facing as a result of existing rules and regulations (licences, diploma's).

The next Section starts with a concise overview of the literature on entry barriers. The concept is defined and the method to measure the importance of entry barriers is discussed in Section 3. Subsequently the sample and the questionnaire are presented. In total 1,170 Dutch firms have been interviewed. Sections 4 and 5 discuss the empirical findings.

## 2. Literature review

A large body of literature discusses the importance of entry barriers. Two different traditions can be distinguished: industrial organization (e.g. Bain, 1956; Stigler, 1968; Von Weizsacker, 1980) and strategic management (e.g. Porter 1980, 1985; Singh *et al.*, 1998, Robinson *et al.*, 2001). The first tradition focuses on the industry as the unit of analysis, strives for efficiency and identifies harmful barriers for economic development. Various models are developed to show how entry barriers affect the behaviour of firms and the performance of the industry. One of the main issues concerns the question whether government policy is needed to neutralise the effects of the barriers. The second tradition takes the firm as the unit of analysis and assesses entry barriers as a resource to create competitive advantage for individual firms. In line with this approach superior strategies should create sustainable competitive advantage. In other words, a firm should make use of entry barriers that deter new competitors in the firm's market.

The contradictory assessment of the value of barriers to entry is related to the unit of analysis and the role competition is expected to play in the two traditions. At the firm level it is indeed important to develop resources that are difficult to copy by competitors (Rangone, 1999; Barney, 1991). A reduction of competitive forces is generally in the interest of incumbent firms. However, from a welfare economic point of view, this should not lead to social costs, as a reduction of competitive forces may hamper the allocative and dynamic efficiency of the industry. The latter argument is put forward by Von Weizsacker (1980) to justify public policies. This study does not focus on the role of competition and the assessment of social costs. The objective of this research is to identify important entry barriers perceived by firms (Yip, 1982; Karakaya and Stahl, 1989; Singh *et al.*, 1998; Smiley, 1988). It aims at recognising the major constraints that hamper firms in making their entry decision. The unit of analysis is the firm.

In line with the two traditions, two types of barriers can be distinguished: structural and strategic barriers to entry. The structural barriers stem from market structure characteristics and are widely discussed in the tradition of industrial organisation. Bain (1956) introduced the concept of 'barriers to new competition'. This concept is based on the assumption that competition is key in the operation of industries and that any artificial barrier to competition may reduce the efficient allocation of resources in the industry. Bain stressed the importance of structural characteristics that hamper market entry of potential competitors: economies of scale, technological advantages, absolute cost advantages, etc<sup>11</sup>. The conclusion of this research is that entry-deterrent mechanisms limit the intensity of competition and may enable incumbent firms to raise prices and to realise

supernormal profits. The Chicago School (Stigler, 1968) contributed to the debate on barriers to entry by stressing the importance of costs asymmetry between incumbents and potential entrants: The research should not focus on supernormal profits but on the question whether the conditions of entry for the incumbents were less difficult than for the new entrants. The importance of this argument becomes clear when the advantages of economies of scale are interpreted. According to the Chicago School, scale economies do not represent a barrier to entry if they imply penalties for companies operating at sub-optimal levels of production. A third approach that stems from this tradition focuses on the welfare effects and defines barriers to entry as a difference in cost structures which provokes a distortion in the use of economic resources from a social point of view (Von Weiszacker, cited in Geroski *et al.*, 1990: 10). A discussion of the specific difficulties of these approaches is beyond the scope of this paper. However, what is important is to understand that the different approaches lead to different definitions of entry barriers. We conclude that Bain's perspective provides the broadest scope, while the other two approaches consider additional requirements in order to identify the 'real' barriers that hamper the efficient allocation of resources in the economy.

The strategic management tradition stresses the importance of strategic barriers. Barriers to entry do not only result from structural characteristics of the market but they can be created as a result of strategies of individual firms that reduce the threat of new entrants. Following Barney (1991), firms are advised to 'obtain sustained competitive advantages by implementing strategies that exploit their internal strengths, through responding to environmental opportunities, while neutralizing external threats and avoiding internal weaknesses'. Porter (1980: 9-13) does not define the concept but specifies seven major sources of barriers to entry: economies of scale, product differentiation, capital requirements, switching costs, access to distribution channels, cost disadvantages independent of scale and government policy. Implicitly he uses a broad definition for barriers to entry in order to encompass the barriers that result from strategic behaviour. He provides a kind of typology of barriers to entry that firms should take into account when their competitive strategy is developed. Porter's specification also shows that structural and strategic barriers are related. The barrier may be rooted in the market structure, but this will not discourage firms to react to this characteristic strategically. The upshot is that most structural barriers have a strategic component too. For example, advertising can be considered as a structural phenomenon in the automobile industry, however, each actor may develop its own advertising strategy (brand) that affects new competitors.

### **3. Definition of concepts and data collection**

In line with the broad perspective of this research we used the following definition of barriers to entry: "*all advantages of established sellers in an industry over potential entrant sellers, as perceived by firms which seek to enter a new market*". The focus is on the perception of firms and on entry to a new market. We prefer the concept 'market' to 'industry'. According to Ferguson (1992: 32) markets group together firms producing close substitutes from the buyers point of view, while an industry groups together close substitutes from the suppliers point of view. These are usually broader groupings than markets. The advantage of the market concept is that it has a clearer meaning for the interviewed firm. Small firms operating in a specific niche

do not always have an idea about the potential new competitors in the industry but they have a good overview of potential new competitors in the market in which they are active.

A large number of structural and strategic barriers to entry were presented in the questionnaire (see Annex 1). However, not all the barriers identified in the literature study (Blees *et al.*, 2003) were addressed. Most important were time limitations. On the basis of previous experiences we decided that the total interview by telephone should not take more than 15 minutes. Some issues were difficult to describe in an unambiguous question (e.g. causal ambiguity). Other barriers to entry were covered by the answers on similar barriers (e.g. brand name and customer loyalty are part of advertising; experience advantages are related to cost advantages; government regulations are related to government licences; know how is related to level of technology and patents).

Some aspects were covered by two separate questions in order to be able to make a distinction between the importance of structural characteristics and behavioural characteristics. For example, with regard to advertising we presented two statements: 1. Firms in the market have high expenditures for advertising and promotion (structural), 2. The products are heavily supported by advertisement and promotion in order to make entry to the market less attractive for new competitors (strategic). We claim that the listed barriers to entry in Annex 1 give an overview of the most important barriers discussed in the extant literature.

Incumbent companies were asked to indicate on a five point Likert scale to what extent new competitors would encounter the barrier in question<sup>iii</sup>. Ideally the survey should have addressed new and potential competitors<sup>iv</sup>. However, potential newcomers are difficult to identify and, therefore, we decided to interview incumbents. As we are interested in barriers (potential) entrants may face and not the behaviour of the specific incumbents per se, the questions were directed at practices in the market rather than the firm's specific behaviour. In general, the incumbents were asked to indicate how important a specific barrier is if a comparable company (same size) wants to enter the major product market in which the incumbent is operational. As barriers to entry are related to product markets and most firms manage multi-product operations, we explicitly referred to the most important product market. The advantage of this format for the question is that all companies have experience with the market and, therefore, are able to value the importance of the specific barrier.

As the concepts involved are sometimes difficult to circumscribe in unambiguous questions a pilot study has been carried out in November 2004, in which 40 students participated. The students tested the survey and were asked to write about 100 case studies of the companies they interviewed. The case studies have allowed us to grasp the functioning of the perceived barriers to entry in the different industries under study and, therefore, have facilitated the interpretation of the results of the questionnaire. Moreover, some questions were refined to avoid ambiguous interpretations. The final questionnaire was pre-tested by telephone with potential respondents.

The sample consists of 1,170 Dutch firms in six industries, i.e. furniture, employment agencies, chemical industry, ICT, food (production of bread) and retail (clothing and shoes)<sup>v</sup>. The aim was to collect data for approximately 175-200 firms per sector divided over three size categories (< 10 employees, 10 to < 50 employees, and 50+ employees). Per size category, the firms were selected at random from the Direct Marketing CD-database of MarketSelect<sup>vi</sup>. Especially in the

size category of 50+ employees, in some sectors, all existing firms were contacted because of the limited number of firms with over 50 employees.

In total 3,562 firms were contacted for the telephone survey. This resulted in 1,074 completed responses: a response rate of 30%. Of the contacted firms, 33% refused to cooperate. Another 24% of the contacted firms could not be reached because of an answering machine, get no answer, number engaged or more than 6 attempts with no response. Finally, with 13% of the contacted firms an appointment was made but it did not result in a completed questionnaire because the targeted sample was reached. The other 96 respondents were interviewed by our students in the pilot phase<sup>vii</sup>.

The MarketSelect database was used to test for non-response bias. Smaller firms were more willing to participate in the research than large firms. This holds for the total sample as well as for the sectors furniture, employment agencies, chemical industry and ICT. No significant differences related to size were found for the food industry and retail. In the food industry, firms were less willing to participate in the research compared to the other sectors, probably because of the Christmas rush.

Information about real entry was provided by starter ratios for the six industries (s) mentioned above. In total 12 provinces (p) were distinguished. The survey discussed 23 barriers (i) with the firms and 10 variables were used to express the attractiveness of the market (j). The general model has been modelled as follows:

$$(1) \quad S.Ratio_{p,s} = \alpha + \beta_i Barrier_{i,p,s} + \beta_j Attract_{j,p,s}$$

The following variables were used to express the attractiveness of the market:

1. Failure rate: expressing the number of firms in the sector going bankrupt in the last quarter of 2004.
2. Growth: an average value expressing realized growth of 2003 and 2004 and expected annual growth for the coming 3 years.
3. Margin: an average value expressing the deviation from the realized margin in 2003 and 2004 and the expected annual margin for the coming 3 years.
4. Dynamics: an average value of three items expressing the technological and non-technological dynamics in the market.
5. Capacity: expressing available excess capacity during the last year.
6. Concentration: expressing the market share of the 4 largest suppliers in the market.
7. B2B: dummy =1 if B2B turnover is  $\geq 75\%$ .
8. B2C: dummy =1 if B2C turnover is  $\geq 75\%$ .
9. Market coverage: dummy =1 if the firm's market has a national or international coverage.
10. Size: fulltime workforce, three classes are distinguished: <10, 10-<50 and 50+.

The market attractiveness variables were part of the survey on perceived entry barriers. The starter ratio and failure ratio are derived from datasets available at the Chamber of Commerce and Statistics Netherlands (CBS)<sup>viii</sup>. In the questionnaire some variables are multi-item scales. After a factor analysis to test for unidimensionality, the items of the variables are averaged.



#### 4. Findings: perceived entry barriers

In Table 1 the number of observations per industry and per size class are presented. Most observations are in the class of < 10 employees, or micro firms. In the retail sector, we only have five observations of firms with 50 employees or more. As the sample was drawn from a database including subsidiaries and branches of larger firms, and responses were provided by local managers, the questions concern employment figures of the selected subsidiary. About 40% of the interviewed establishments are related to a larger company.

Table 1 Industry and size (full-time employees)

	<i>Furniture</i>	<i>employ- ment agencies</i>	<i>chemical industry</i>	<i>ICT</i>	<i>food</i>	<i>Retail</i>	<i>Total</i>
< 10 employees	109	128	79	95	82	170	663
10 - < 50 employees	73	41	57	77	37	18	303
50+ employees	27	35	38	43	38	5	186
unknown	3	1	6	1	3	4	18
Total	209	204	174	215	157	193	1,170

Source: EIM

In Table 2 the perceived barriers are presented. Overall, securing input, collusion, knowledge, retaliation and strategic knowledge protection are the least important barriers. According to the interviewed firms most barriers concern unimportant constraints (value lower than 3)<sup>ix</sup>. This can be interpreted as a good sign for the Dutch economy as competitive forces seem to be operational. Remarkably, some of the interviewed managers/owners raised the question why we were bothering about these issues, as solving these problems was considered to be their key competency. However, it is noted that only incumbents were interviewed, which may lead to a certain bias as these firms have surmounted existing barriers. Knowing how to solve a problem makes the problem trivial. To counter this argument it may be stated that only incumbents should be interviewed, as only the opinion of viable firms has to be taken into account.

Table 2 Perceived barriers to entry (differences per sector)<sup>a</sup>

<i>Barrier</i>	<i>furniture (f)</i>	<i>employment agency (e)</i>	<i>chemicals (c)</i>	<i>ict (i)</i>	<i>food (b)</i>	<i>retail (r)</i>	<i>total</i>	<i>Sign. differences</i>
Securing input	1.54	1.13	1.92	1.36	1.77	2.81	1.74	f,b>e; f,e,i<c,r; c,b<r; i<b
Collusion	1.45	2.37	1.50	1.62	1.82	1.89	1.78	f<e,b,r; e>f,c,i,b,r; c<r
Knowledge	1.75	1.46	2.70	2.03	1.94	1.71	1.92	f,e,i,b,r<c; e<i,b
Retaliation	1.71	2.17	2.24	1.84	2.35	2.07	2.04	f<e,c,b; c,b>i
Behaviour knowledge	2.03	1.94	2.70	1.99	2.16	2.06	2.13	f,e,i,b,r < c
Limit pricing	2.15	2.53	2.27	2.05	2.51	2.02	2.25	e,b>i,r
Switching costs	2.00	2.04	2.57	2.93	2.13	1.91	2.27	f,e,b,r<c,i;
Masking profit	1.97	2.44	2.28	2.21	2.47	2.37	2.28	f<e,b,r
Behaviour R&D	2.05	1.90	3.06	2.65	2.31	2.01	2.32	f,e,r<c,i; e<b; c>i,b
Behaviour advertising	2.21	2.52	2.27	2.17	2.46	2.77	2.39	f,c,i<r; e>i
Behaviour distribution channel	1.88	3.00	2.58	2.34	2.52	2.25	2.42	f<e,c,i,b; e>f,c,i,b,r
Government regulations	2.42	2.47	3.35	1.69	3.53	2.06	2.53	f,e<c,b; f,e,c,b>i; e,c,b>r;
Distribution	2.60	2.89	2.99	2.60	3.06	2.55	2.76	f,i,r<b; c>r
Advertising	2.72	2.90	2.68	2.53	2.77	3.24	2.80	f,c,i,b<r; e>i
Excess capacity	2.79	2.95	2.84	2.71	3.25	2.75	2.87	f,i,r<b
Differentiation	2.76	2.65	3.17	3.22	3.21	3.25	3.03	f,e<c,i,b,r
Economies of scale	3.35	2.96	3.27	2.89	3.58	2.93	3.15	f>e,i,r; e,i,r<b; c>i
Costs of capital	3.18	3.21	3.04	2.83	3.66	3.56	3.23	f,c,i<b,r; e<b
Cost disadvantage	3.23	2.93	3.31	2.96	3.74	3.44	3.24	f,e,c,i<b; e<c,r; i<r
Behaviour differentiation	3.24	3.11	3.40	3.22	3.63	3.44	3.32	e,i<b
Financial risk	3.40	3.38	3.53	3.10	3.84	3.88	3.50	f,e,i<b,r; c<r; c>i
Capital	3.55	3.29	3.59	3.03	3.99	3.89	3.53	f,c,b,r>i; f,e,c,<b; e<r
Sales volume	3.80	3.72	3.90	3.79	4.03	3.83	3.84	e<b (p<.10)
Mean score all barriers	2.31	2.52	2.64	2.43	2.68	2.64	2.52	f<e,c,b,r i<c,b,r

<sup>a</sup> significant at  $p<.05$  unless otherwise indicated. The reply options were: 1 = not at all, 2 = nearly not, 3 = somewhat, 4 = to a large extent, 5 = to a very large extent

Source: EIM

In general the ranking of the importance of specific barriers to entry coheres between the sectors: securing input and collusion are of minor importance for all but two sectors (respectively retail and employment agencies), while sales volume and capital are most important for all sectors. However, for all barriers some significant sectoral differences are observed at the 5% level, except for sales volume, which is significant at the 10% level. For instance, securing input is relatively important in the retail sector and knowledge is relatively important in the chemical industry. In the last column of Table 2 the significant differences are presented.

The most important barrier is the procurement of a viable sales volume. The average value attached to this barrier is significantly higher than the average value for other barriers. It may be argued that this high value results from the cumulative effect of all kinds of other (strategic) barriers (collusion, retaliation, limit pricing, switching costs). However, the values given to these specific entry barriers were significantly lower than the importance given to sales volume. This indicates that the problem is more related to the operation of normal competitive processes and, subsequently, that the requirements for successful entry (and survival) are not easy to meet.

Other important barriers are cost disadvantages, strategic behaviour related to differentiation and financial risk. Two sectors, employment agencies and ICT, have relatively low scores, whereas the food industry shows the highest scores on these barriers. Overall, the firms value only a few barriers as important constraints. Finance and sales volume are key issues in all sectors. The ICT and furniture industry are sectors with relatively low barriers, the chemical, retail and food industry show relatively high values for the barriers under consideration.

## **5. Findings: relationship between barriers and real entry**

All barriers discussed in Section 4 and all variables expressing the attractiveness of the market are integrated in the general model (1). The general model has been estimated and in order to identify the major drivers the least significant variables have been eliminated in a stepwise process (backward regression)<sup>x</sup>. This process completed as soon as all retained variables were significant at the 5% level. We preferred the general to specific procedure over the specific to general procedure as it starts the identification process on the basis of all information available. However, we checked the reliability of the outcome by running the stepwise specific to general model (forward regression) and we observed that it only leads to minor deviations with regard to the coefficients. The same variables are identified and the coefficients obtain the same signs and significance levels.

Table 3 presents the results of the specific model. Several barriers and attractiveness variables do indeed affect the starter ratio. However, the margin, size, excess capacity and market coverage are not retained in the specific model. Market growth has the expected positive sign and concentration the expected negative sign. Dynamics in the market and the failure rate are positively related to the starter ratio, which indicates that turbulence in the market, despite some negative consequences, has a positive overall effect on entry. Sectors that are more BTB oriented (in our sample especially employment agencies and ICT) have a higher entry rate. This is in line with the findings of Karakaya and Stahl (1989) that entry barriers in B2B markets are (on average) less severe.

Table 3 Starter ratio, market attractiveness and perceived entry barriers

<i>Variables</i>	<i>Perception Barriers (Table 2)**</i>	<i>Unstandardized Coefficients <math>\beta</math></i>	<i>Std. Error</i>	<i>t</i>	<i>Sig</i>
Constant		5.223	.474	11.028	.000
Failure rate	Attract.	2.689	.582	4.617	.000
Capital	3.53	-.194	.074	-2.693	.007
Econ. of scale	3.15	-.202	.067	-2.997	.003
Gov. policy	2.53	-.633	.058	-10.906	.000
Switching costs	2.27	.300	.063	4.788	.000
Retaliation	2.04	-.174	.068	-2.574	.010
Behaviour R&D	2.32	-.241	.066	-3.665	.000
Securing input	1.74	-.205	.073	-2.797	.005
Concentration	Attract.	-.156	.074	-2.109	.035
B2B	Attract.	.647	.182	3.559	.000
Dynamics	Attract.	.873	.095	9.153	.000
Growth	Attract.	.013	.003	3.831	.000

\* The model is derived from general to specific (stepwise procedure, all variables significant at 5% were retained). For the presented model in this table we obtained an R Square = 0.302 and an Adjusted R Square = 0.293.

\*\* For each entry barrier the average value presented in Table 2 is given. Attract. indicates that the variable expresses an element of the attractiveness of the market

Source: EIM

A striking result is that several of the perceived 'most important' entry barriers do not show up in Table 3. Sales volume, financial risks, cost disadvantages, costs of capital and behaviour with regard to differentiation were expected to affect real entry. Of the most important perceived entry barriers only capital and economies of scale are retained in the model presented in Table 3. Remarkably also the 'least important' entry barrier, securing input, is influencing the starter ratio.

Most signs are negative and reflect the expected influence on real entry. The effect of switching costs is somewhat unexpected. It seems that the direct negative impact is overruled by the positive consequences that may apply after successful market entry. The results also confirm that both structural barriers (capital, economies of scale, government regulation) and strategic barriers (switching costs, retaliation, behavior R&D and securing input), influence the starter ratio.

## 6. Conclusions

The question raised by Singh *et al.* (1998) regarding the need for empirical evidence for the importance of entry barriers is highly relevant. Some issues seem to be purely based on theory, while other barriers do play a role in the real business world and need proper attention of policy makers.

The 'most important' perceived barriers are rooted in characteristics of the market structure: sales volume, capital, financial risks, cost disadvantages, costs of capital, economies of scale. Only one of the major barriers stems from strategic behaviour: behaviour with regard to differentiation. Although some differences between sectors are observed, the ranking of the importance of specific barriers to entry coheres between sectors.

In general the results confirm the expected relationship between entry barriers and real entry. However, some barriers seem to influence the starter ratio more strongly. Remarkably, several of the 'most important' perceived barriers do not restrict real entry rates (e.g. sales volume, financial risk, behaviour differentiation) while the 'least important' barrier influences that starter ratio significantly. Interestingly, the results confirm that both structural and strategic barriers influence starter ratios. In the debate on entry barriers some researchers stress the importance of one of the two strands of barriers. Table 3 does not provide any support for either of these views.

This result contains an interesting lesson for policy makers. They should not address important barriers per se, but scrutinize the effects of barriers that seem to restrict real entry. For example, government regulations are not perceived as one of the most important entry barriers. Nevertheless, this barrier has a strong impact on starter ratios. This result justifies why policy makers in the Netherlands scrutinize the relevance of existing regulations in their attempt to reduce the large number of rules and regulations.

## Literature

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## Annex 1: Barriers to entry derived from the literature survey

<i>Barrier to entry</i>	<i>Source</i>	<i>Constitutes a barrier mainly for SMEs</i>	<i>Constitutes a barrier mainly for Les</i>	<i>Constitutes a barrier mainly for both</i>
Access to distribution channels (distribution)	Porter 1980; Yip 1982; Karakaya & Stahl 1989; Han et al. 2001	*		
Access to knowledge / patents	Yip 1982; Harrigan 1983; Karakaya & Stahl 1989; Shepherd 1997			*
Advertising	Spence 1980; Harrigan 1981; Yip 1982; Netter 1983; Schmalensee 1983; Karakaya & Stahl 1989	*		
Capital requirement	Bain 1956; Porter 1980; Harrigan 1981; Yip 1982; Karakaya & Stahl 1989; Shepherd 1997	*		
Collusion	Singh et al. 1998			*
Cost disadvantages (absolute cost advantages of incumbents)	Bain 1956; Scherer 1970; Yip 1982; Karakaya & Stahl 1989; Geroski et al. 1990; Han et al. 2001			*
Cost of capital / special risks and uncertainties	Demsetz 1982; Shepherd 1997	*?		
Customer switching costs	Porter 1980; Klemperer 1987, 1992; Karakaya & Stahl 1989; Shepherd 1997; Shy 2002			
Differentiation	Bain 1956; Porter 1980; Schmalensee 1982; Karakaya & Stahl 1989; Shepherd 1997; Martin 2002	*		
Economies of scale	Bain 1956; Dixit, 1980; Scherer 1980; Spence 1980; Harrigan 1981; Schmalensee 1981; Yip 1982; Geroski et al. 1990;	*		
Excess capacity	Spence 1977; Dixit 1980; Harrigan 1983; Lieberman 1987; Bunch & Smiley 1992; Shepherd 1997; Singh et al. 1998		*	
Financial risk / sunk costs	Bain 1956; Porter 1980; Baumol et al. 1982; Geroski et al. 1990; Sutton 1991; Shepherd 1997			*

Government regulations	Porter 1980; Dixit & Kyle 1985; Karakaya & Stahl 1989; Shepherd 1997			*
Limit pricing	Bain 1951, 1956; Milgrom & Roberts 1982; Geroski et al, 1990; Bunch & Smiley 1992; Singh et al. 1998		*	
Masking profit / gaps and asymmetric information	Milgrom & Roberts 1982; Geroski et al. 1990; Bunch & Smiley 1992			*
Retaliation	Scherer 1980; Yip 1982; Karakaya & Stahl 1989; Bunch & Smiley 1992; Gatignon et al. 1997; Shepherd 1997; Thomas 1999		*	
Sales volume	Yip 1982			*?
Securing input / control over strategic resources	Scherer 1970; Yip 1982; Karakaya & Stahl 1989; Shepherd 1997; Singh et al. 1998; Cabral 2000			*
Strategic behaviour advertising	Bunch & Smiley 1992; Singh et al. 1998		*?	
Strategic behaviour differentiation / packing the product space	Schmalensee 1978; Bunch & Smiley 1992; Shepherd 1997; Cabral 2000	*		
Strategic behaviour distribution channels	Singh et al. 1998	*	*?	
Strategic behaviour knowledge / pre-emptive patents	Bunch & Smiley 1992; Singh et al. 1998	*?		
Strategic behaviour R&D	Harrigan 1981; Yip 1982; Daems & Douma 1985; Bunch & Smiley 1992; Singh et al. 1998	*?		

**Endnotes:**

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<sup>i</sup> These are the views of the authors and need not reflect those of EIM. We would like to thank all students who participated in the fieldwork and the course ‘Small Business Economics’. Their reports, enthusiasm and critical comments were highly appreciated.

<sup>ii</sup> The emphasis of Bain on market structure has been criticized within the discipline of Industrial Organisation. By the late 1970s these views became known as the ‘The New Industrial Organisation’ (Geroski et al.,1990). They stressed the importance of behaviour as a determinant for market performance and market structure (in the long run). The approach comes close to the tradition of strategic management as behavioural aspects are considered to be key. However, in line with the tradition of Industrial Organisation, the unit of analysis is the industry.

<sup>iii</sup> The reply options were: not at all, nearly not, somewhat, to a large extent, to a very large extent (or alternatively: strongly disagree, disagree, not agree / not disagree, agree, strongly agree).

<sup>iv</sup> Even the group of new and potential competitors can be considered as too broad. For the research information from the ‘marginal entrant’ is needed. This marginal firm is indeed difficult to identify.

<sup>v</sup> The SBI-code of the Chamber of Commerce for the industries were 361 (furniture), 74501 (employment agencies), 24 excluding 241 (chemical industry), 721 and 722 (ICT), 158 (food, production of bread) and 5242 and 5243 (retail, clothing and shoes).

<sup>vi</sup> The database is based on information on business registrations by the Chambers of Commerce, address information by TPG Post and checks by MarketSelect.

<sup>vii</sup> For most barriers, no significant differences were found between the data from the telephonic interview and the students’ interviews. Therefore, pooling the data is admissible.

<sup>viii</sup> We obtained the number of firms active in the industry at January 1<sup>st</sup> 2005 from Statistics Netherlands (CBS). This number is rounded at fives by the CBS itself. For the industries of chemical industry (242, 243, 244, 245, 246, 247) and retail (52421, 52422, 52423, 52424, 52425, 52426, 52427, 52431, 52432) this can be more inaccurate due to rounding at each sub-industry.

<sup>ix</sup> The scores have the same range as previous research, see e.g. Smiley (1988) and Karakaya (2002).

<sup>x</sup> Tests demonstrate that multicollinearity is not a problem in the analysis.