

Trends in the entry and exit of convenience stores and specialist grocery stores

Introduction

1. Appendix 5.1 analysed the trends in the overall numbers of convenience stores and specialist grocery stores, both over the long term and in the recent past. This appendix looks in more detail at the changes in the structure and composition of the UK grocery retail landscape. We evaluate trends in the number of convenience stores and specialist grocery stores in high street and town centres surveyed by Experian Goad, and also at trends that result from a larger store entering these areas.¹
2. We observe a complex picture of both entry and exit of convenience stores and specialist grocery stores since 1999. In general, in the 1,115 high streets and town-centre locations surveyed, convenience store numbers have increased while specialist grocery stores have declined. The ongoing entry of convenience and specialist grocery stores of all types over the period suggests that barriers to establishing a new store, where there is sufficient demand for one, are not prohibitive.
3. Our econometric analysis indicates that entry by a larger store into an area results in an increased rate of net exit for greengrocers and local food markets. In contrast, the net rate of exit for bakeries declines with local entry by new larger stores. Other types of specialist grocery stores seem unaffected by the entry of a larger store.
4. We review the trends of convenience and specialist grocery stores across 1,115 high streets and town centres contained in our Experian Goad sample. First, we analyse the exit and entry rates of these stores in each of the areas (see paragraphs 5 to 8). Next we consider the effect on the number of convenience and specialist grocery stores that we can observe after a larger store has opened in an area. In particular, we carry out an econometric analysis that controls for existing trends in the number of convenience stores and specialist grocery stores in order to isolate the effect of a larger store entering a particular location (see paragraphs 9 to 22).

Trends in specialist and convenience stores

5. The Experian Goad database allows us to analyse the entry and exit of convenience stores and specialist grocery stores that have been surveyed regularly since 1999.² We discuss the parameters of this dataset, and submissions that we have received on it, in Annex 1. Annex 2 presents the graphs which underpin our conclusions.
6. Our analysis shows that between 1999 and 2006 there has been considerable 'churn' of convenience stores and specialist grocery stores, with substantial entry and exit of these grocery stores in all categories. We observe an overall decline in the number of convenience stores and specialist grocery stores in the 1,115 areas surveyed in the Experian Goad data. We note the following:

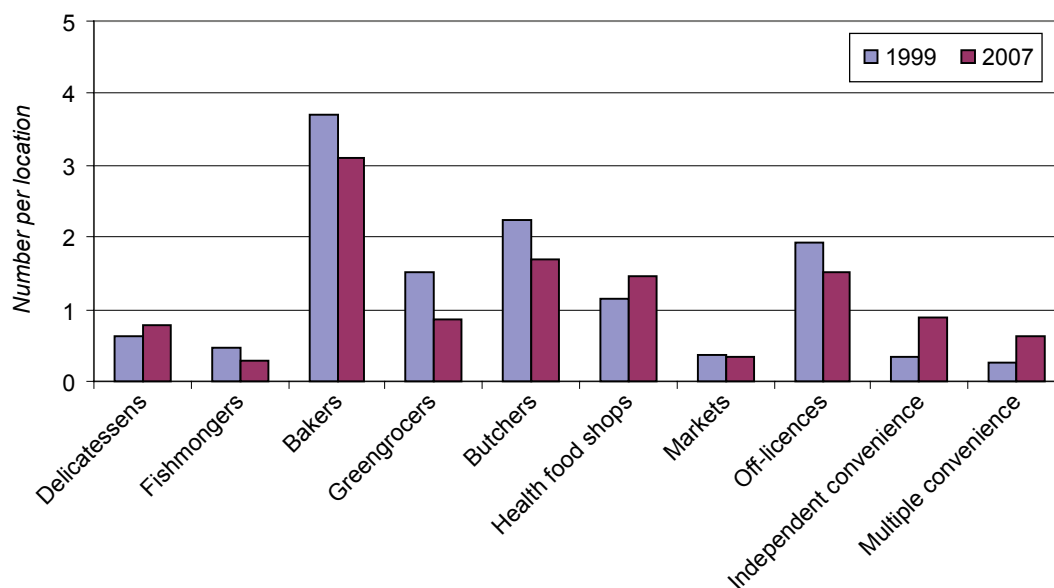
¹A larger grocery store has a net sales area in the range of, or larger than, 1,000 to 2,000 sq metres.

²Experian is a global analysis and information company that also provides data and analysis for leading grocery retailers in the UK. Charles Goad started the Goad database in 1965 at the request of the Department of Trade and Industry (now BERR).

- (a) Within the overall decline in the number of convenience stores and specialist grocery stores, the number of general convenience stores has substantially increased in the areas surveyed. Notably, the growth in convenience stores owned by the large grocery retailers is mirrored by the growth of non-affiliated independent convenience stores.
 - (b) The decline in the number of some types of specialist grocery stores is reducing over time. This indicates that many specialist grocery stores continue to survive despite the apparent pressures of increasing competition from larger stores and national trends towards convenience shopping at the expense of speciality shops. Moreover, this evidence is not consistent with the argument that a decline in the high street is gathering pace; rather the decline appears to be slowing.
 - (c) Even where exit rates are substantial and the sector appears to be in serious decline, entry continues to occur. This suggests a lack of prohibitive barriers to entry as new specialist grocery retailers open where sufficient demand for such stores exists.
 - (d) In some cases we see large increases in the exit rates. For example, 2003 and 2004 saw an unusually large exit rate from the off-licence sector. This might reflect the effect of below-cost selling by some retailers of the products in which these shops specialize. However, this may also reflect the increased competition provided by larger stores.
 - (e) Finally, delicatessens and health food stores have seen net entry over the last eight years. This may reflect broad trends in consumer demand towards premium and healthier food, both of which are also evident in the leading grocery retailers' move towards stocking healthy own-label ranges and fresh fruit and vegetables.
7. Figure 1 aggregates the graphs shown in Annex 2 by comparing the number of stores in each sector in 1999 with the number that we observe in 2007. It shows an increase in the number of health food shops, delicatessens and convenience stores. However, in absolute terms the decline in the number of greengrocers, butchers, bakeries, fishmongers and off-licences has outweighed these increases. As a result, for the selected sectors below, the average number per location has fallen by one store or 8 per cent over the course of this period.

FIGURE 1

Average number of convenience stores and specialist grocery stores per location, by sector (1999 vs 2007)



Source: CC analysis of Goad data.

- This overview indicates a reduction in the choice of store that consumers typically face in these areas. However, this does not, in itself, tell us anything about the range of products that those consumers are offered. Moreover, it is not clear what has caused these changes. In the next section we examine whether the changes in each sector can be attributed to the effect of a larger store entering the surveyed area.

Entry analysis on specialist and convenience stores

- We have analysed the Experian Goad dataset to assess the extent to which the opening of new larger stores in a shopping area has an impact on the entry or exit of convenience stores and specialist grocery stores.
- In this analysis we examine the impact of larger grocery store openings in the shopping area on the net exit rate of convenience stores and specialist grocery stores. The net exit rate is the aggregate of the exit and entry rates that are used in Annex 2 to identify levels of churn in each sector. We define the net exit rate as follows:

$$(1) NEX\%_t = \frac{Exit_t - Entry_t}{Incumbents_{t-1}}$$

- Here $NEX\%_t$ represents the net exit rate of a specific category of retailer at time t . $Exit_t$ and $Entry_t$ are exit and entry events that have occurred in period t . $Incumbents_{t-1}$ is the number of incumbent retailers at the end of period $t-1$. We note that the focus on the net exit rate means that an increase in the net exit rate may reflect *either* more exit events *or* less entry events. Thus it is not informative on the level of churn but rather the overall change in the number of stores in a given sector.
- In our analysis in the next section we take the net exit rate of locations in which a larger store has entered and compare it with a control group of locations in which entry has not occurred. We then control for fixed location-specific effects and

location-based trends, that is, the identified trend of growth or decline of that sector in the town absent the entry of a larger store.

13. In summary, this analysis shows that over 1999 to 2006 entry by a larger store into a high street or local shopping area caused net exit by greengrocers and local markets and the net entry of bakeries. During this period, larger store entry had no identifiable effect on fishmongers, butchers, off-licences, delicatessens, convenience stores and health food stores.
14. Further, the analysis shows that during the period the entry of a convenience store operated by Tesco, Sainsbury's or M&S increased the net exit rate of convenience stores and specialist grocery stores.
15. The ACS, in reviewing this analysis based on Experian Goad data, told us that it was surprising that the presence of new larger stores encouraged the entry of independent convenience stores. It said that the data was unlikely to be representative of developments in the wider UK grocery market, and our reliance on it, in this context, was incorrect.³ However, our analysis does not show this. Rather, it shows that while there is an upward trend in the number of convenience stores, larger store entry had no identifiable effect.

Econometric analysis

16. In this empirical analysis we estimate the effect of local entry by larger stores on the retail composition of shopping centres. We evaluate this effect on the net exit rate of various categories of retailers by using a difference-in-difference estimator to evaluate such an impact.
17. Using panel data we specify a simple empirical model as follows:
 (1) $NEX\%_{it} = A_i + \delta AT_{it} + \beta_1 SUPENT_{it} + \beta_2 TMS_{it} + \varepsilon_{it}$
18. In this model $NEX\%_{it}$ represents the net exit rate of a specific category of retailer in location i at time t . A_i is the fixed effect for each location and T is a time trend, therefore AT_{it} is the time trend for each location. $SUPENT_{it}$ represents the entry of a larger store in location i at time t . The variable TMS_{it} represents the opening of a convenience store bearing the fascia of Tesco, M&S or Sainsbury's in the surveyed area.⁴ We vary the $SUPENT_i$ variable to focus our analysis on entry by the leading four retailers or on the location of entry (town centre, edge of centre or out of centre). The model can be specified as follows:⁵
 (2) $NEX\%_{it} = A_i + \delta AT_{it} + \beta_1^{TC} SUPENT(TC)_{it} + \beta_2^{EOC} SUPENT(EOC)_{it} + \beta_3 TMS_{it} + \varepsilon_{it}$
 (3) $NEX\%_{it} = A_i + \delta AT_{it} + \beta_1^{TC} SUPENT(TC)^{big4}_{it} + \beta_2^{EOC} SUPENT(EOC)^{big4}_{it} + \beta_3 TMS_{it} + \varepsilon_{it}$
19. In interpreting the results that follow, we note that the dependent variable is the net exit of stores. Therefore, we take positive coefficient estimates to indicate a factor that discourages entry or encourages exit.
20. The entry of a new larger store into a location is shown to increase the net exit rate of greengrocers and markets. In particular, a new larger store opening within the town

³Further details of the ACS criticisms of this data are contained in Annex 1.

⁴It has been submitted that such stores compete using advantageous purchasing terms and thereby force the exit of competing convenience and specialist grocery retailers.

⁵We also tried the regression with lagged dependent variables to see if the response to entry was delayed by a year. The results were generally insignificant.

centre adversely affects the number of markets. In contrast, a new larger store entry into any site within the area affects the net exit rate of greengrocers.

21. The net exit rate of bakeries is reduced when a new larger store enters the area. This might therefore be comparable with the results identified by Tesco in Professor Neil Wrigley's work on the effect of entry by a Tesco Express into a town.⁶ In this study the increased footfall created by the new larger store drawing customers into the town centre increased the opportunities for further entry by other retailers. However, we note that only bakeries enjoy this beneficial effect. Some sectors appear unaffected by the entry whilst, as noted, some sectors decline in the face of competition from the new larger store.
22. In general, the entry of a convenience store with a Tesco, Sainsbury's or M&S fascia has little effect on the net exit rate of specialist grocery stores. However, the net exit rate of health food shops is sharply increased when a convenience store with a Tesco, Sainsbury's or M&S fascia appears in the area. This might be taken to reflect the strength of these stores in health-based product categories.

TABLE 1 Results of regression (1)

	<i>Net exit rates</i>		
	<i>Convenience stores</i>	<i>Independent convenience stores</i>	<i>Multiple convenience stores</i>
SUPENT	6.39 (1.26)	1.14 (0.16)	-6.94 (-1.24)
TMS	18.27† (3.12)	13.3 (1.32)	18.14‡ (3.36)
Location fixed effect	Yes	Yes	Yes
Location fixed effect × time	Yes	Yes	Yes
Observations	3,848	2,329	2,517
R ²	0.433	0.464	0.546

Source: CC analysis of Goad data.

* $p < 0.05$.

† $p < 0.01$.

‡ $p < 0.001$.

Note: t statistics in parentheses.

⁶Wrigley, N: *The effects of corporate foodstores on the high street: Rebalancing the debates?*
www.competition-commission.org.uk/inquiries/ref2006/grocery/pdf/third_party_submissions_other_org_prof_neil_wrigley.pdf;
 and *Relocalising Food Shopping*:
www.competition-commission.org.uk/inquiries/ref2006/grocery/pdf/third_party_submissions_other_org_prof_neil_wrigley_no2.pdf.

TABLE 2 **Results of regression (2)**

	<i>Net exit rates</i>		
	<i>Convenience stores</i>	<i>Independent convenience stores</i>	<i>Multiple convenience stores</i>
SUPENT(TC)	1.26 (0.12)	8.22 (0.57)	-0.926 (-0.08)
SUPENT(EOC)	-9.55 (-0.57)	-26.72 (-0.94)	-3.28 (-0.18)
TMS	18.33† (3.13)	13.46 (1.34)	17.96‡ (3.33)
Location fixed effect	Yes	Yes	Yes
Location fixed effect × time	Yes	Yes	Yes
Observations	3,848	2,329	2,517
R ²	0.433	0.464	0.545

Source: CC analysis of Goad data.

* $p < 0.05$.

† $p < 0.01$.

‡ $p < 0.001$.

Note: *t* statistics in parentheses.

TABLE 3 **Results of regression (1)**

	<i>Net exit rates</i>				
	<i>Greengrocers</i>	<i>Bakeries</i>	<i>Butchers</i>	<i>Fishmongers</i>	<i>Delicatessens</i>
SUPENT	5.535† (2.42)	-5.162† (-3.21)	-0.0354 (-0.02)	3.493 (1.23)	-4.591 (-1.17)
TMS	2.538 (0.67)	3.909 (1.49)	-3.824 (-1.39)	4.429 (0.92)	-1.931 (-0.34)
Location fixed effect	Yes	Yes	Yes	Yes	Yes
Location fixed effect × time	Yes	Yes	Yes	Yes	Yes
Observations	5,259	7,481	6,550	2,307	3,214
R ²	0.515	0.308	0.439	0.659	0.529

Source: CC analysis of Goad data.

* $p < 0.05$.

† $p < 0.01$.

‡ $p < 0.001$.

Note: *t* statistics in parentheses.

TABLE 4 Results of regression (2)

	<i>Net exit rates</i>				
	<i>Greengrocers</i>	<i>Bakeries</i>	<i>Butchers</i>	<i>Fishmongers</i>	<i>Delicatessens</i>
SUPENT(TC)	5.440 (1.06)	-7.502* (-2.22)	-1.083 (-0.32)	12.72 (1.58)	-12.21 (-1.41)
SUPENT(EOC)	-2.316 (-0.43)	1.133 (0.30)	-7.052 (-1.87)	12.36 (1.71)	12.74 (1.41)
TMS	2.526 (0.67)	3.923 (1.49)	-3.835 (-1.40)	4.301 (0.89)	-2.100 (-0.37)
Location fixed effect	Yes	Yes	Yes	Yes	Yes
Location fixed effect × time	Yes	Yes	Yes	Yes	Yes
Observations	5,259	7,481	6,550	2,307	3,214
R ²	0.514	0.308	0.439	0.660	0.529

Source: CC analysis of Goad data.

* $p < 0.05$.

† $p < 0.01$.

‡ $p < 0.001$.

Note: t statistics in parentheses.

TABLE 5 Results of regression (1)

	<i>Net exit rates</i>			
	<i>Health foods</i>	<i>Off-licences</i>	<i>Off-licences</i>	<i>Markets</i>
SUPENT	-3.319 (-1.43)	0.880 (0.42)		0.205 (0.08)
SUPENT(big4)			2.814 (1.12)	
TMS	8.890* (2.41)	-3.861 (-1.24)	-3.894 (-1.25)	3.003 (0.64)
Location fixed effect	Yes	Yes	Yes	Yes
Location fixed effect × time	Yes	Yes	Yes	Yes
Observations	5,378	6,322	6,322	2,109
R ²	0.366	0.424	0.424	0.598

Source: CC analysis of Goad data.

* $p < 0.05$.

† $p < 0.01$.

‡ $p < 0.001$.

Note: t statistics in parentheses.

TABLE 6 Results of regression (2 and 3)

	<i>Net exit rates</i>			
	<i>Health foods</i>	<i>Off-licences</i>	<i>Off-licences</i>	<i>Markets</i>
SUPENT(TC)	-6.455 (-1.34)	-0.884 (-0.20)		12.80† (2.63)
SUPENT(EOC)	8.244 (1.60)	-1.781 (-0.35)		-4.564 (-0.84)
TMS	8.936* (2.42)	-3.839 (-1.23)	-3.872 (-1.24)	2.463 (0.53)
SUPENT(TC)big4			3.508 (0.77)	
SUPENT(EOC)big4			-0.323 (-0.05)	
Location fixed effect	Yes	Yes	Yes	Yes
Location fixed effect × time	Yes	Yes	Yes	Yes
Observations	5,378	6,322	6,322	2,109
R ²	0.366	0.424	0.424	0.600

Source: CC analysis of Goad data.

* $p < 0.05$.

† $p < 0.01$.

‡ $p < 0.001$.

Note: t statistics in parentheses.

Experian Goad data

1. Goad data has been collected on more than 1,000 shopping centres since 1965. At present, there are 1,300 surveyed shopping centres. The dataset we have used in our analysis covers 1,115 shopping centres across the UK for the period 1999 to 2007. These locations are defined consistently throughout the dataset though they have no fixed size in geographic or demographic terms. We have removed any new locations during this period from our analysis to maintain the consistency of the sample.
2. Experian's Goad data is collected in person by Experian's own team of surveyors on either an annual or biennial survey of specified shopping centre locations, in which the type of business conducted at each outlet within that location is recorded. The descriptions are based on three levels of aggregation: primary activity, category and Goad class. The surveyors collect information on: primary activity; retail category; fascia; company details; address; estimated floorspace and Ordnance Survey co-ordinates. Each address is given a unique Goad number. This allows us to observe whether a store with certain characteristics remains at that address each time the survey is conducted.
3. We received submissions relating to the Experian database from both the ACS¹ and the GeoData Institute (GDI)² at the University of Southampton (commissioned by Tesco). The ACS submissions, whilst accepting the validity of the Experian Goad database, suggested that the data is not representative of the whole of the UK, and suggests that weight is put on the IGD database (see Appendix 5.1). The ACS noted that the Experian Goad database covered only shopping centre locations and was incomplete because many convenience outlets operated in estates, non-central neighbourhoods and other secondary areas and villages were not covered by this database.³
4. In contrast, the GDI submission supports the analysis undertaken in this appendix and goes on to extend it in a number of ways. First, it looks at regional variations in the trends we identify. It then also examines the different trends that are evident in different types of convenience stores (eg symbol groups). This submission points towards the existence of a considerable entrepreneurial dynamic in this sector.
5. Given the data collection methodology employed by Goad, we are confident that its dataset is robust. We looked at the previous recorded use of convenience stores to assess whether the high level of growth in convenience stores represented a reclassification of existing stores or completely new entry. We found that around 10 per cent of new convenience stores represent reclassifications from other retailing categories (ie stores that retained the same fascia while changing sector). Nevertheless, 65 per cent of convenience store entry occurs on sites which were not

¹ACS submission:

www.competition-commission.org.uk/inquiries/ref2006/grocery/pdf/main_party_submissions_acs_response_working_papers.pdf and hearing of 14 June 2007.

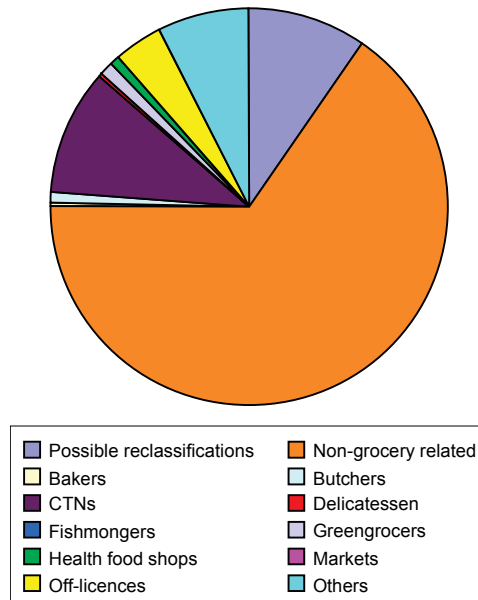
²Submission to the Competition Commission by the GeoData Institute, University of Southampton, advised by Professor Neil Wrigley (University of Southampton) and Professor Graham Clarke (University of Leeds), August 2007.

³We note that the Experian Goad data is focused on shopping centres rather than town centres, although in small towns this is likely to be the same. Experian Goad includes some non-central and other secondary areas where these areas contain a shopping centre.

previously involved in the groceries trade, or any subsection of it.⁴ A further 25 per cent of new entry by convenience stores reflected changes in ownership as well as category. As a result, we do not consider that the high level of entry in convenience stores in the Goad data can be explained by classification issues (see Figure 1).

FIGURE 1

Previous site use for convenience store entrants



Source: CC analysis of Goad data.

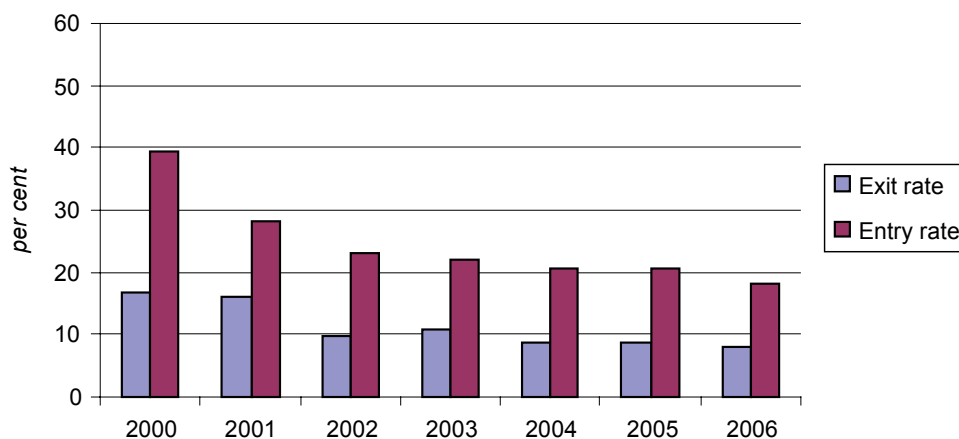
⁴These sectors were not in our dataset, therefore we do not know what these stores were used for, or who owned them, prior to them becoming a convenience store.

Entry and exit of convenience stores and specialist grocery stores

- In the figures below, we have defined entry as the appearance of a new store in a sector, but not a transfer of the ownership of a store within a sector (eg a change in the ownership of a butcher's shop).

FIGURE 1

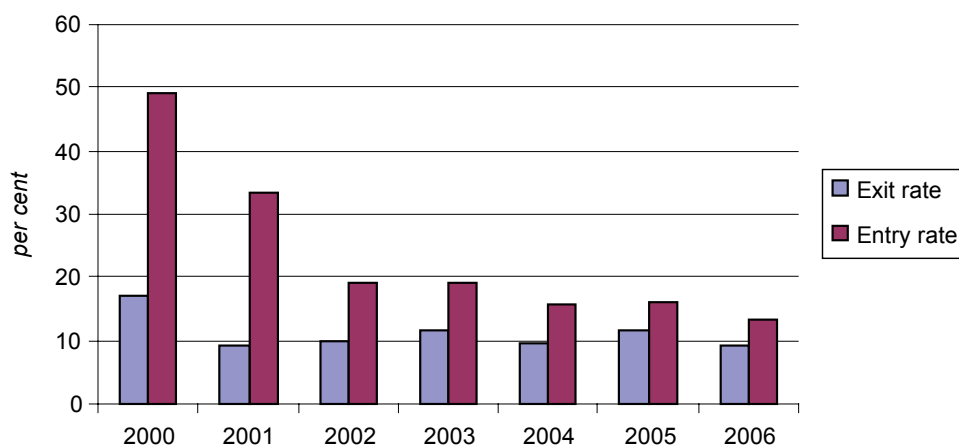
Non-affiliated independent convenience stores (<280 sq metres): exit and entry rates



Source: CC analysis of Goad data.

FIGURE 2

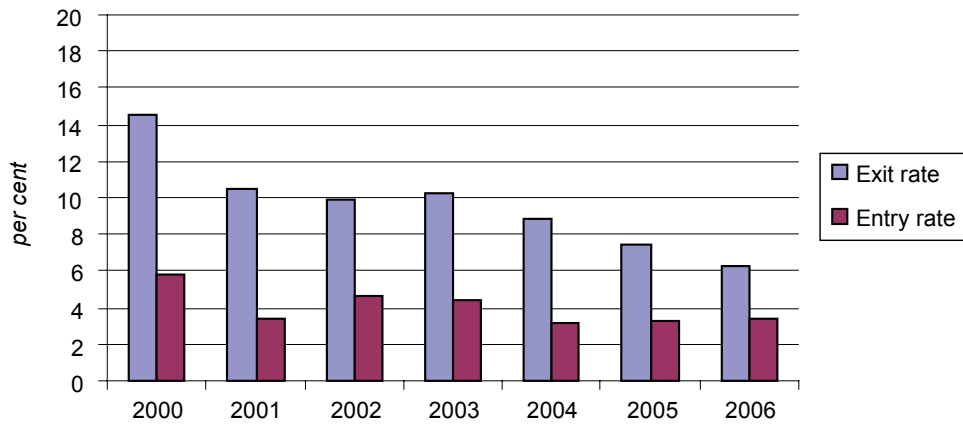
Multiple convenience stores (<280 sq metres): exit and entry rates



Source: CC analysis of Goad data.

FIGURE 2

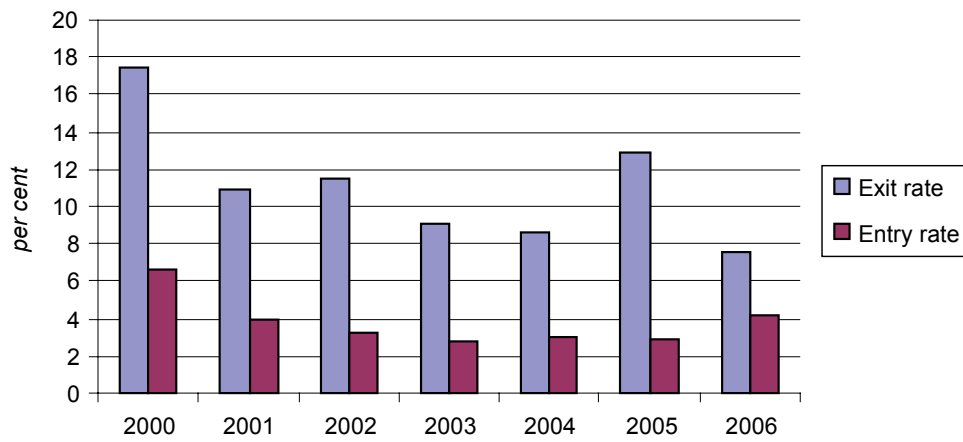
Fishmongers: exit and entry rates



Source: CC analysis of Goad data.

FIGURE 3

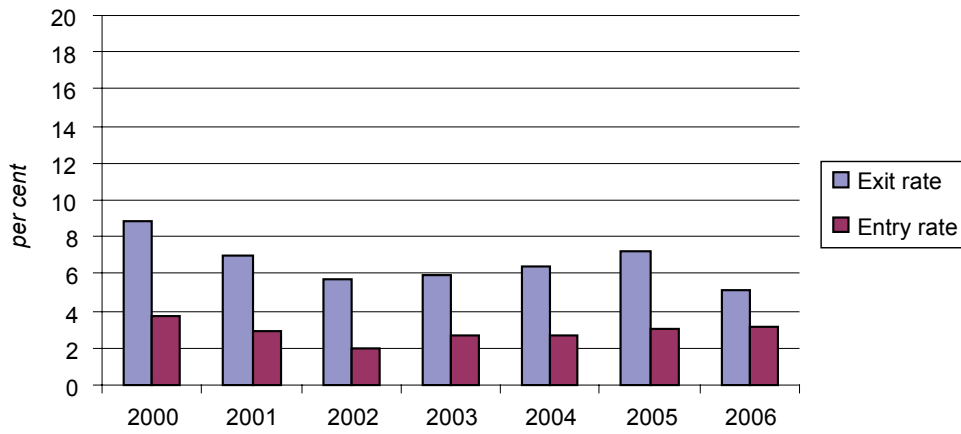
Greengrocers: exit and entry rates



Source: CC analysis of Goad data.

FIGURE 4

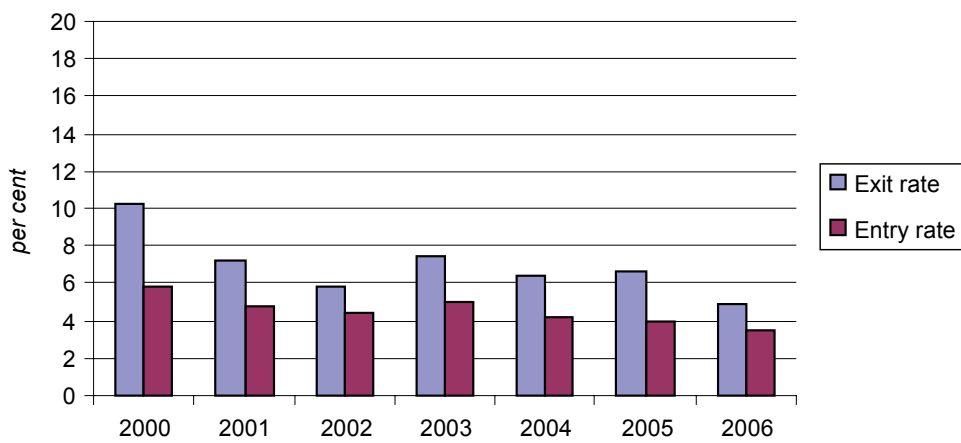
Butchers: exit and entry rates



Source: CC analysis of Goad data.

FIGURE 5

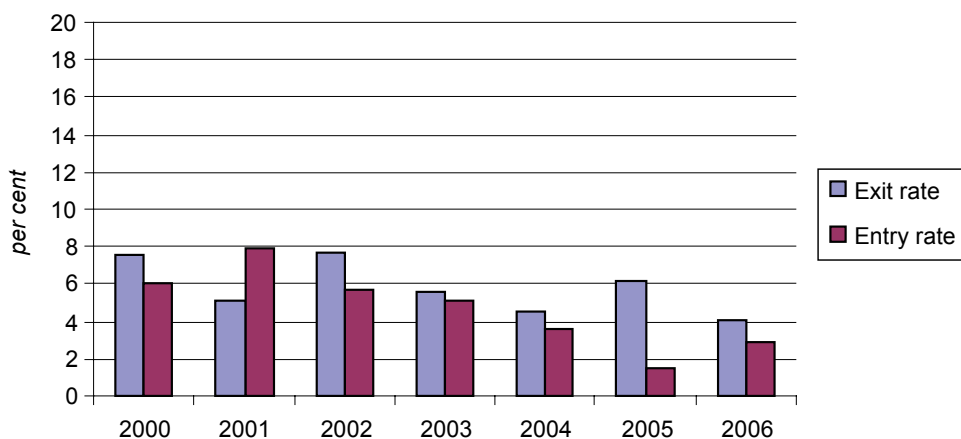
Bakeries: exit and entry rates



Source: CC analysis of Goad data.

FIGURE 6

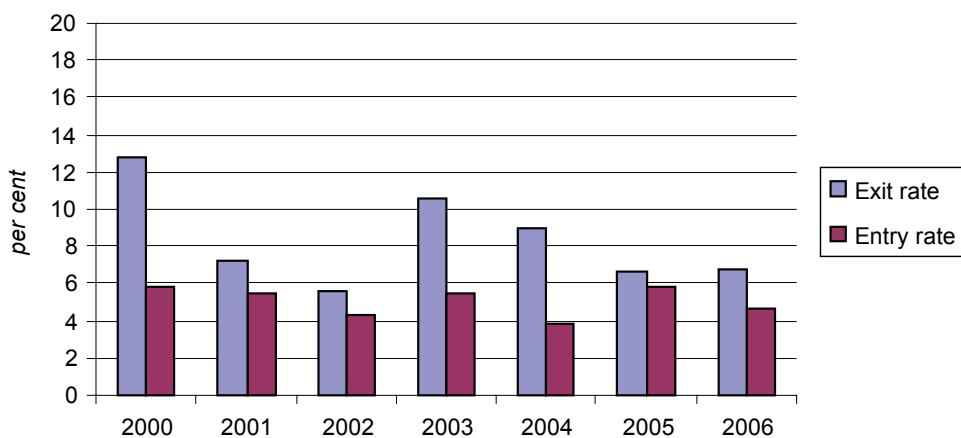
Markets (street and farmers markets): exit and entry rates



Source: CC analysis of Goad data.

FIGURE 7

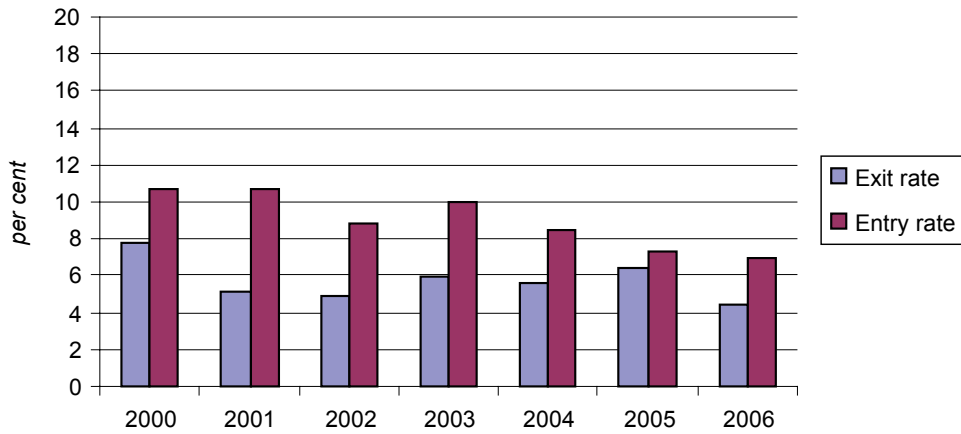
Off-licences: exit and entry rates



Source: CC analysis of Goad data.

FIGURE 8

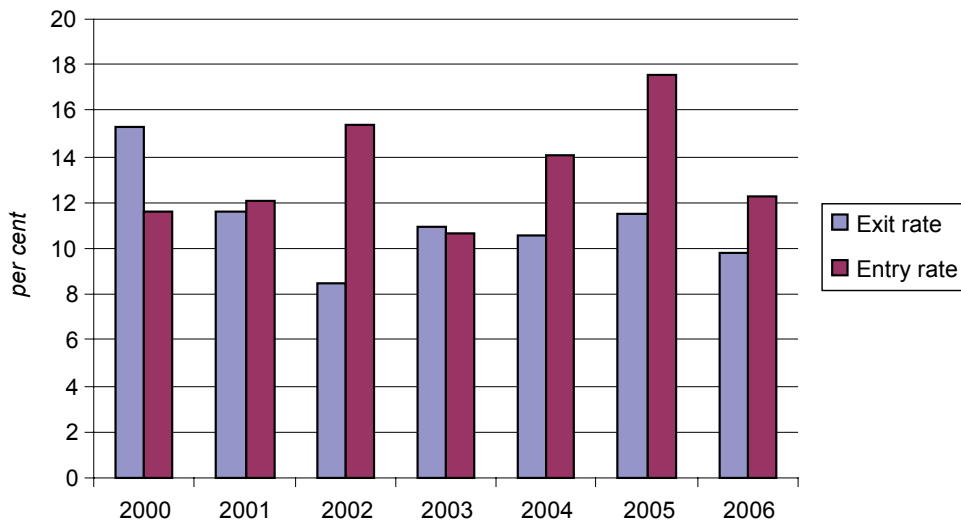
Health food shops: exit and entry rates



Source: CC analysis of Goad data.

FIGURE 9

Delicatessens: exit and entry rates



Source: CC analysis of Goad data.