Food safety and quality, strategic levers for European products in emerging markets: the case of China.

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Introduction

While a huge literature exists on evaluating consumer preferences for food attributes in Western countries, our knowledge concerning food safety issues in emerging economies is still scant. Among such economies, China is particularly noted for the poor reputation enjoyed by its food products worldwide. Chinese food is mostly associated with health risk in the minds of international consumers, especially of Europeans. This reputation has been gained due to a series of violations of food safety standards and hygiene rules and some major domestic toxic food incidents. Just to mention a few notable examples, the European Union banned the imports of products of animal origin from China in 2002 (EU, 2002) due to medicine residues discovered in imported products; in 2004, Europe and the U.S. banned imports of Chinese meat and poultry products, following the outbreak of bird flu. The domestic food-poisoning incident of the melamine-contaminated powdered milk in 2008 spread far and wide, causing serious international concern. In China the food safety issue emerged essentially as a trade concern at the beginning of the new millennium. Nevertheless, recent food-poisoning incidents have had evident repercussions also in Chinese consumer beliefs and concerns (Wang et al., 2008). According to a recent survey (Jiawei, 2010) food safety is currently the Chinese people's first worry. In this context, European producers believe that EU products might be straightforwardly deemed, by Chinese consumers, safe and somehow "superior" to domestic production. Therefore, there is scope for developing an empirical, robust assessment of Chinese consumer attitudes to food safety issues and of their perception of EU food products in China.

This paper specifically evaluates Chinese consumer preferences among contrasting meat production systems using a generalized random-parameter logit model for ranked outcome (Train, 2003), with particular focus on pork, the most popular meat in China. The purpose of this study is twofold. The first aim is to evaluate the relationship between selected intrinsic and extrinsic product attributes and Chinese consumer evaluations and preferences, with particular focus on food safety issues. Chinese concerns on food safety are jointly evaluated with the main intrinsic attributes including livestock process, taste and animal welfare, and with extrinsic quality indicators such as country of origin. Secondly, this paper investigates the role of country of origin in Chinese consumer decisions and preferences. The research question lies in understanding whether the "domestic" food attribute is considered by Chinese consumers as a positive attribute, as is the case of their European counterparts.

2. Recent socio-economic development in China

Since opening up to the market economy in the 1980s, the income of the Chinese has grown considerably. Suffice it to think that in six years there has been the same increase as was seen in 30 years in Italy. However, the general increase in wealth among the Chinese population has not been matched by an equitable distribution either among social classes or geographical areas. Indeed, an evident gap may be observed in terms of wealth and per capita income between urban and rural areas. According to data supplied by the Central Statistics Office of Beijing for 2009, mean monthly income in Shanghai (urban area) was 17,175 yuan (about 1,900 euro) while the equivalent calculation for rural areas was 5,153 yuan (about 590 euro) (Interprofessionalnetwork, 2010). This evident difference in income has resulted in a different propensity for consumption, including food, summarised in table 1.

The diet of the urban population, which enjoys a higher income, is rich and varied, with a significant consumption also of animal-based proteins from meat, eggs, fish and milk derivatives. By contrast, in rural areas the diet is based essentially on consumption of often home-grown products such as cereals (rice in the south, wheat in the north) and vegetables.

The main protein source is from eating fish, generally freshwater, raised in ponds which are part of family-run farms (ISMEA, 2008). In rural areas pig farms are found with a certain frequency. The low consumption of pork, as of other meats, may be attributed to the fact that pigs are an important source of income for peasant families. Hence the consumption percentage by livestock farmers is particularly low especially in low-income areas.

Tab 1- *Food consumption trends in China by geographical area (kg/per-capita/year)*

Products	Urban area			Rural area		
	1995	2004	*var%*	1995	2004	*var%*
Cereals	97,0	78,2	*-19,4*	258,9	219,3	*-15,3*
Vegetables	116,5	122,3	*5,0*	104,6	106,6	*1,9*
Fruit	45,0	52,8	*17,3*	13,0	17,0	*30,8*
Pork and cow meat	19,8	22,9	*15,7*	11,3	14,8	*31,0*
Poultry	4,0	8,4	*110,0*	1,8	3,1	*72,2*
Milk and its derivates	5,3	20,3	*283,0*	0,6	2,0	*233,3*
Fresh eggs	9,7	10,4	*7,2*	3,2	4,6	*43,8*
Fishery	9,2	12,5	*35,9*	3,1	4,5	*45,2*
Oils and fats	7,1	9,3	*31,0*	5,8	5,3	*-8,6*
Sugar	1,7	0,0	*0,0*	1,3	1,1	*-15,4*
Alcoholic beverages	9,9	8,9	*-10,1*	6,5	7,8	*20,0*

Source: our elaboration on ISMEA data, 2008

The diet of the urban population, which enjoys a higher income, is rich and varied, with a significant consumption also of animal-based proteins from meat, eggs, fish and milk derivatives. By contrast, in rural areas the diet is based essentially on consumption of often home-grown products such as cereals (rice in the south, wheat in the north) and vegetables. The main protein source is from eating fish, generally freshwater, raised in ponds which are part of family-run farms (ISMEA, 2008). In rural areas pig farms are found with a certain frequency. The low consumption of pork, as of other meats, may be attributed to the fact that pigs are an important source of income for peasant families. Hence the consumption percentage by livestock farmers is particularly low especially in low-income areas.

The general increase in income among the Chinese, albeit heterogeneous, is matched by increasing demand for safe, innovative and high-quality food products that are giving rise to an organisational re-structuring of the domestic and international agri-food sector (ICE, 2010; Arora and Vamvakidis, 2010; Lockie, 2009). One aspect that is arousing particular interest on the part of academics is the attention of consumers not only to the product *per se* but also to the production process used (de Barcellos *et al.,* 2010). As occurs in many countries in the Western world, an interest is developing in issues concerning animal welfare, organic products and the use of GMOs (Zanoli and Naspetti, 2002; Cembalo, 2007, Moschini *et al.*, 2005). This interest seems to come from the conviction that every production process has a corresponding different end product quality both as regards intrinsic attributes and those of an ethical and environmental type (Grunert, 2005). The tendency to consider the production process important has major effects not only on aggregate consumer demand but also on production and society. Much legislation that regulates production and economic agents of agri-food chains is fruit of such changes, as are the self-regulations set up by the GDO.

From this point of view, the production of pork is no exception. This has attracted the attention of both Western and Chinese consumers to aspects such as stocking density, the environmental impact of pig farms and treatment of pig slurry (Krystallis *et al.*, 2009; Vanhonacker *et al.*, 2009).

In order to better understand the results of the study that will be described in the sections below and the possible implications and marketing strategies, it is necessary to stress that the

new demands described above are to be integrated with the rich food tradition which the Chinese have and of which they are proud. The origins of the food culture in China date back to the Shang period (16th century BC). In that period, the scholar Yi Yin formulated the theory of harmonization of food products, according to which the five flavours (sweet, sour, bitter, piquant and salty) correspond to the nutritional needs of the five main body organs (heart, liver, spleen/pancreas, lungs and kidneys). Since then, for the Chinese there is a law of living called TAO (the Way), which is manifested through the action of two opposite and complementary forces, Yin and Yang, which are the the principles – negative and positive – of universal life. Moreover, in China, though not laying down precise rules on diet, religion contributes to determining social behaviour deriving from political and economic relationships. Thus Chinese culture, under the influence of Buddhist religion, is based on elaborate social strata of a feudal type. Hence, in the Chinese tradition, beef, mutton and pork could be consumed by an emperor, beef by feudal lords, mutton and pork by ministers, fish by generals and plants by the people who would not have been able to afford meat and fish anyway (Interprofessionalnetwork, 2010; Calosso, 2010).

Of course, feudal stratification in the strict sense no longer occurs in civilized Chinese society. However, it has filtered down strongly into personal behaviour. Ten per cent of the Chinese population (over 100 million people) belong to a higher socio-economic class. This élite considers social status more important than material wealth. Together with the middle-high class, they believe that a high-class brand creates a strong identity or status, insofar as it leads to greater social awareness. These classes express a growing demand for processed food, opening up to foreign influences, which are neither accepted with prejudice nor viewed passively.

Survey and data

A structured research-administered survey was developed to investigate Chinese consumer preferences for pork products and process attributes. The survey was one of the research activities of the Q-PorkChains EU FP6 Project, which focuses on the development of the European pork industry, testing and supplying innovations in order to improve global competitiveness. In detail, 500 urban participants were randomly selected from the top ten Chinese provinces in pork production and consumption according to data from the National Bureau of Statistics of China from 1996 to 2005. Six reference cities were selected, covering geographically almost the whole country: Nanjing, in the south-eastern coastal region; Chengdu, in the southwest, Wuhan in the middle, Changchun in the northeast, Beijing in the north, and Guangzhou in the south of China. Nevertheless, the field survey was restricted to two kinds of retailing: supermarkets and local markets. The data we will analyze come from three sections of the questionnaire: 1) socio-demographic characteristics of the respondent; 2) food-related lifestyle (FRL) (Brunsø, and Grunert, 1995) and Schwartz portrait value (PVQ) questions, (Schwartz *et al*., 2001); 3) 16 verbal descriptions of various pig farms based on a ranked choice experiment, with each respondent rating 16 pig production profiles through an 11-point Likert scale. The latter was organized around a fractional factorial main effect orthogonal design, attempting to evaluate pork attributes in detail. Each profile consists of five different attributes, including food safety and hygiene effort, scale-alternative farm enterprises, meat taste, country of origin attribute and a "quality" attribute. The last attribute seeks to distinguish the consumer's meat preferences towards product standardization versus product adaptation to the local environment (Table 1).

Table 1: Description of survey profiles (full orthogonality).

card	farm_type	pig_origin	pork_taste	food_safety	quality
1	industrial farm	imported from Europe	tasty meat	strict regulation to food safety	standard quality
2	small family farm	traditional Chinese	tasty meat	food safety is not an important factor	quality according biological
3	industrial farm	traditional Chinese	lean meat	food safety is not an important factor	quality according biological
4	industrial farm	traditional Chinese	tasty meat	normal attention to food safety	standard quality
5	small family farm	imported from Europe	lean meat	normal attention to food safety	standard quality
6	small family farm	imported from Europe	tasty meat	normal attention to food safety	quality according biological
7	industrial farm	imported from Europe	lean meat	food safety is not an important factor	quality according biological
8	small family farm	traditional Chinese	tasty meat	strict regulation to food safety	quality according biological
9	large-scale farm	imported from Europe	tasty meat	food safety is not an important factor	standard quality
10	small family farm	imported from Europe	tasty meat	food safety is not an important factor	quality according biological
11	large-scale farm	traditional Chinese	lean meat	normal attention to food safety	quality according biological
12	small family farm	traditional Chinese	lean meat	food safety is not an important factor	standard quality
13	small family farm	traditional Chinese	lean meat	strict regulation to food safety	standard quality
14	small family farm	imported from Europe	lean meat	food safety is not an important factor	standard quality
15	large-scale farm	imported from Europe	lean meat	strict regulation to food safety	quality according biological
16	large-scale farm	traditional Chinese	tasty meat	food safety is not an important factor	standard quality

Section 2 aims to fully outline consumer behaviour in food consumption, exploring their attitudes towards environmental protection and nature, industrial food production, technological progress, animal welfare and food and environment. For the above reason 23 dimensions of the food-related lifestyle (FRL) instruments were computed using 69 questions included in the survey section. The 23 FRL dimensions are: *Importance of product information*, *Attitudes to advertising*, *Enjoyment from shopping*, *Speciality shops*, *Price criteria*, *Shopping list*, *Health*, *Price/quality relation*, *Novelty, Organic products*, *Taste*, *Freshness*, *Interest in cooking*, *Looking for new ways*, *Convenience*, *Whole family*, *Planning*, *Women's tasks* (for further details see annex 2). At the same time 56 questions were used to formulate the 10 Schwartz portrait values.

3. Methods

The main objective of the empirical method described below is to investigate the heterogeneity in consumer preferences, exploiting the available measured information for the purpose of consumer analysis and market segmentation. The specific statistical model objective is to attach to each choice's profile a probabilistic fully informative "event" that yields a significance test performed on coefficient estimates.

The theoretical framework we are going to evoke is thoroughly consistent with classic well-known random utility maximization analysis. If a number J of a consumption alternative is available to a consumer (in our case 16), each observed choice j will represent the outcome of an income-constrained utility maximization exercise, which implies that each observed purchase will be such that U(j*) = U(j) for each alternative j in the choice set J. In his seminal paper McFadden (1974) showed that, under the assumption that an unobservable utility component ε_{ij} or error term is assumed to have a type one extreme value distribution, observed discrete choices may be modelled using the conditional logit model consistently with the assumption of utility maximization.

A generalization of the conditional logit model for ranked outcomes and random parameters is applied here. Let the outcome of the choice experiment, the individual rate of each profile, be $Y_{ij}=m$. It indicates that alternative j was rated m by the *i-th* individual interviewed, with $j \in$ J alternatives and m an integer value that goes from M (best rate) to 1 (worst rate). U_{ij} is the utility associated by the *i-th* individual to the alternative j. We assume that $U_{ij} \geq U_{ik}$ when $Y_{ij} > Y_{ik.}$, and $U_{ij}=U_{ik}$ when $Y_{ij}= Y_{ik}$ with the alternative $k \in J$ and $k \neq j$. In this way we appeal to the transitivity of preferences, recoding ratings to ordinal ranks (Holmes *et al.*, 1998).

The utility U_{ij} is the sum of an observable component μ_{ir} and a stochastic component ε_{ij}:

(1) $U_{ij}=\mu_{ij}+\varepsilon_{ij}$.

The observable component μ_{ij} can be decomposed into a linear function of explicative variables:

(2) $\mu_{ij}= \beta x_j$

where the x_j vector contains variables that vary over the j alternatives (i.e different levels of product and process attributes).

To maximize his/her utility the consumer is assumed to choose the alternative with the most desired set of attributes. The probability that the individual values alternative j more highly, Y_{ij} = M, across the set of other possible alternatives J is defined by the probability that the utility of alternative j is greater than or equal to the utility accruing on each and every other alternative within the choice set:

(3) $\Pr(U_{ij})= \Pr\{U_{ij}>\max(U_{ik},...,U_{iJ})\}$

According to McFadden (1974) if ε_{ij} are *iid* Gumbel distributed, then the probability of choosing alternative j is logit:

(4) $$\Pr(U_{ij})=\frac{\exp(\mu_{ij})}{\sum_{j=1}^{J}\exp(\mu_{ij})}.$$

In a complete ranking we observe J-1 sequential choices and so we are interested in the joint probability of a sequence of ordering:

(5) $\Pr(U_{ij} \geq U_{ij} \geq \ldots U_{iJ}) = \prod_{j=1}^{J} \frac{\exp(\mu_{ij})}{\sum_{k=1}^{J} \delta_{ijk} \exp(\mu_{ik})}$. with δ_{ijk}= 1 if $Y_{ij} > Y_{ik,}$ and 0 otherwise.

Empirically, equation 5 can be estimated using maximum likelihood estimation

(6) $\text{Log L} = \sum_{i=1}^{n} \sum_{j=1}^{J_i} \mu_{ij} - \sum_{i=1}^{n} \sum_{j=1}^{J_i} \log\left[\sum_{k=1}^{J_i} \delta_{ijk} \exp(\mu_{ik}) \right]$

In the specific case we assume that the eq.2 parameters are distributed in the sample according to a distribution (a normal distribution in our case), defined by the parameters of location (μ) and scale (σ) that become the objective of the estimation. Hence equation 1 becomes:

(7) $U_{ir} = \mu_{ir} + \varepsilon_{ij}.$

$= \beta_i x_j + \varepsilon_{ij}$

$= \beta x_j + v_i x_j + \varepsilon_{ij}$

where $\beta_i = \beta + v_i$, $v_i \sim N(0, \sum_\beta)$ and the errors ε_{ir} are type-II extreme-value distributed.

Routines based on maximum simulated likelihoods methods (Train, 2003) are available, obtaining consistent estimates of these parameters. The estimation presented here is derived using 150 Halton draws (Train, 1999) for the simulation. Simulated likelihood estimates for random parameter rank-ordered logit models are reported in Tab 3.

Tab 3- Random Parameter Rank-Ordered Logistic Model

	Farm Type		Pigs Origin	Pigs Taste.	Food Safety		Qualiy
	Industrial	Small familiar	European	Tasty meat	Standard	Strict	Diversified
Coefficient μ	0.285	0.122	-0.28	0.0038	1.66	1.81	-0.431
(pvalue)	0	0	0	0.89	0	0	0
Coefficient σ	0.242	-0.173	0.406	0.162	0.822	0.984	0.502
(pvalue)	0	0.062	0	0.013	0	0	0

The above estimated parameters can be interpreted in the following way: the economic intuition of the parameters of location (μ) is strictly based on the associated marginal utility of the corresponding profile's attribute, and they can be scored as well in terms of proportional odds ratios such as a usual logistic regression. A deep marketing interpretation is directly sticked to the estimated parameters of scale (σ). They explain the taste heterogeneity across the individuals of the respective profile's attribute. Such heterogeneity is shown well enough in the following violin plots (Fig 1, Fig 2).

In order to account for the taste heterogeneity found, with particular reference to the European attribute of the origin of pigs, we should segment the population, exploiting all the available data.

Fig 1: Violin plots of estimated coefficients

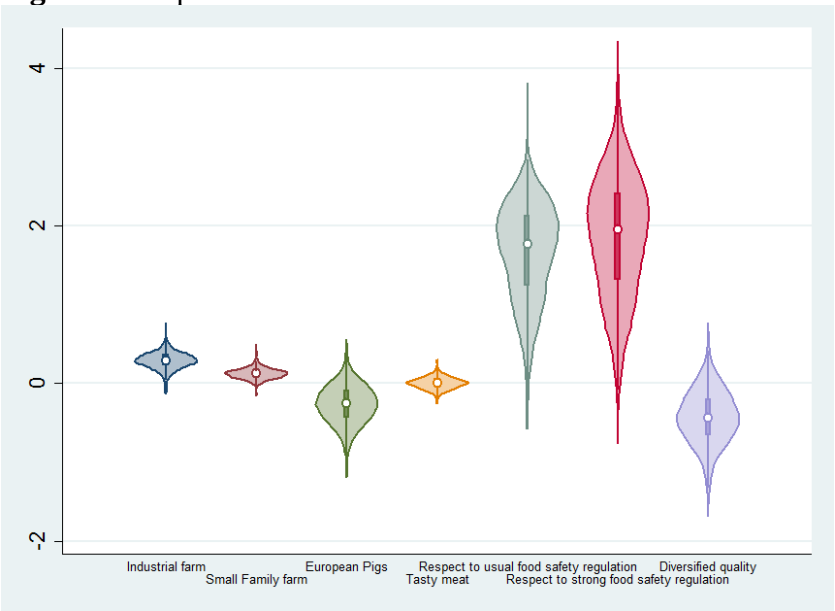
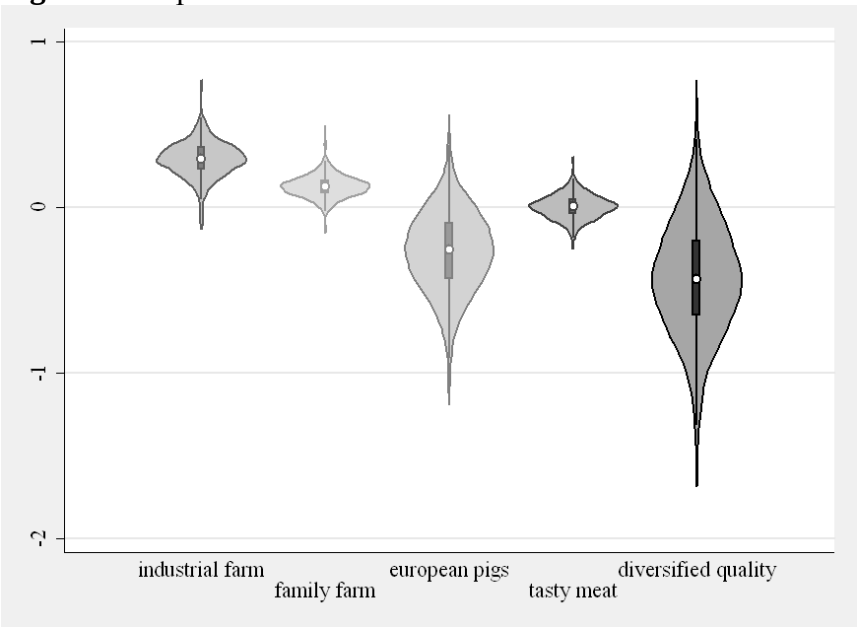


Fig 2: Violin plots of selected coefficients



In order to account for the taste heterogeneity found, with particular reference to the European attribute of the origin of pigs, we should segment the population, exploiting all the available data. Sections 1 and 2 of the questionnaire can provide us with extensive individual characteristics of the interviewees. This information was included in the model, modifying equation 7. It becomes:

(8) $U_{ir} = \beta x_j + \gamma j z_{ij} + v_i x_j + w_{ij} z_{ij} + \varepsilon_{ij}$

where $\beta_i = \beta + v_i$, $v_i \sim N(0, \sum_\beta)$, $\gamma_{ij} = \gamma_j + w_{ij}$, $w_{ij} \sim N(0, \sum_{\gamma j})$, and the errors ε_{ir} are type-II extreme-value distributed.

The z_{ij} vector contains variables that represent the interactions between the social and psychological and behavioural characteristics of each individual i (θ_i) with the characteristics of each alternative (x_j).

(9) $z_{ij} = \theta_i \times x_j$.

Estimation of γ_j parameters, conceptually "taste-parameters" (eq. 8), allows us to capture part of the heterogeneity of consumer preferences due to their individual characteristics. The outcome will measure the causal relationship between consumer characteristics and habits and the attitudes towards different profile attributes exploiting the revealed preferences of the choice experiment.

Empirically, due to the massive quantity of information at our disposal, three different model estimations were first performed. The models differ in their specific set of explanatory variables. The estimation exercise captures two aims. The first is to select the main variables impacting on consumer choices. The second is to check which class of instruments (PVQ, FRL or socio-demographic characteristics of the interviewees) shows the most effective explanatory power, being able to best interpret Chinese consumer preferences on pork attributes.

While in the first model only individual socio-characteristics were included in the vector (θ_i), in the second we use as explanatory variables the PVQ measures. A model selection procedure was performed according to the values of AIC (Akaike information criterion) and BIC (Bayesian information criterion) (Table 4). The socio-demographic characteristics of the individuals fit our experiment choice better than the PVQ and FRL measures. Nonetheless, a selected bundle of statistically significant variables across the different models show the best "in sample" goodness of fit (Table 5). The next section will discuss in detail the results of the latter model in order to characterize the latent consumer demand for European pig meats.

Table 4- Goodness of fit of different sets of explanatory variables

Explanatory variables included	AIC	BIC
Individual socio-demographic characteristics	24127	24856
Individual PVQ measures	24305	24937
Individual FRL measures	24360	25526
Selection of significant variables	24043	24772

Tab 5- Rank-Ordered Logistic Model, using selected variables

	Industrial pig farm		Family pig farm		European Origin		Tasty Meat		Normal Safety		Maximum Safety		Diversified Quality	
	Coef.	P>z	Coef.	P>z	Coef.	P>z	Coef.	P>z	Coef.	P>z	Coef.	P>z	Coef.	P>z
Fixed effect	0.21	0.00	0.07	0.02	-0.24	0.00	-0.01	0.51	1.40	0.00	1.52	0.00	-0.37	0.00
SECURTY	0.04	0.30	-0.02	0.62	-0.02	0.38	-0.01	0.54	0.15	0.01	0.12	0.05	-0.04	0.19
CONVIN	0.04	0.23	0.05	0.14	0.02	0.48	0.00	0.98	-0.01	0.90	0.06	0.32	-0.05	0.12
SNKMEAL	-0.06	0.10	-0.07	0.01	0.06	0.04	-0.05	0.03	0.07	0.19	0.09	0.14	0.04	0.19
SECURITY	-0.16	0.00	-0.08	0.02	0.04	0.19	-0.02	0.40	-0.10	0.11	-0.14	0.04	0.09	0.01
CONFORMITY	0.03	0.56	0.01	0.81	-0.06	0.09	0.01	0.85	-0.11	0.10	-0.10	0.15	-0.05	0.25
TRADITION	0.09	0.05	0.01	0.75	0.09	0.01	-0.02	0.52	0.11	0.07	0.13	0.06	-0.03	0.44
Ethn. Global	-0.04	0.18	0.01	0.80	-0.03	0.27	0.04	0.11	-0.22	0.00	-0.25	0.00	0.06	0.02
Economic Status	0.01	0.01	0.01	0.07	0.01	0.91	0.01	0.45	-0.01	0.15	-0.01	0.08	-0.01	0.69
Weight	0.01	0.10	0.01	0.31	-0.01	0.04	0.01	0.56	-0.01	0.22	-0.01	0.05	0.01	0.91
Guangzhou	-0.34	0.01	-0.14	0.20	0.31	0.00	0.15	0.07	-0.35	0.03	-0.43	0.02	0.22	0.07
Wuhan	-0.19	0.13	0.05	0.66	0.08	0.42	0.08	0.29	-0.03	0.85	-0.08	0.65	0.32	0.00
Nanjing	-0.24	0.06	-0.08	0.47	0.11	0.26	0.01	0.92	-0.29	0.09	-0.41	0.03	0.29	0.02
Beijing	-0.30	0.01	-0.11	0.28	0.20	0.03	-0.03	0.74	-0.23	0.19	-0.12	0.56	0.41	0.00
Changchun	0.09	0.49	0.06	0.59	-0.20	0.06	0.10	0.21	1.15	0.00	1.39	0.00	0.22	0.05

N. Obs 479

4. Results

Analysis of Chinese consumer preferences provides some interesting cues for reflection. The first is the importance played in consumer choices by aspects of food hygiene. The second involves the role played by the origin of pork.

As regards food hygiene, in table 3 it is possible to observe that both the type of livestock farm and great attention to food safety aspects are attributes of pork that positively affect consumer choices. With regard to the European product origin, on average this has a negative effect on purchase choice. However, with an analysis in greater depth, thanks to the use of the econometric approach with random parameters, we note the existence in the Chinese market of significant taste heterogeneity. Again, in table 4, we may observe that the type of farm, product origin and approach to food safety are attributes for which the variance in the estimated distribution is significant. This situation means that although, on average, the effects of the attributes mentioned are those described above, Chinese consumers show a taste heterogeneity that makes market segmentation possible. The distributions estimated for each attribute are reported in figures 1 and 2. In particular, figure 2 shows that the violin plot for the European origin of meat presents, as indicated above, a negative mean value but a distribution tail of appreciable thickness in its positive values. This pattern makes it possible to identify a segment of consumers that appreciates the European origin of meat. The size of this potential market has been estimated at 12.3%.

So as to better characterise the potential market segments, table 4 reports the estimates of interactions between taste/preference and socio-demographic characteristics. As regards the high attention to food safety aspects, consumers from Changchun or from larger cities and who are better educated are more greatly influenced. Younger consumers, residents in larger cities, especially Beijing and Guangzhou, represent those that most appreciate European pork. In particular, in the province of Guangzhou the potential market for meat from Europe reaches an estimated share of 17.5%. By contrast, the effects estimated for PVQ (table 5) show that consumers who prefer European meat are non-conformist. They respect not only the traditions of their own country but also those of other cultures.

5. Conclusion

Analysis of Chinese consumer preferences yielded interesting results in two different fields of discussion. The first concerns the econometric approach used. A random parameter logit approach supplied a clear picture of how the various attributes affect consumer choices. Moreover, the econometric model described together with the two broad sets of covariates considered, that of socio-demographic characteristics and that of PVQ, also managed to detect and characterise potential market segments. The second sphere of discussion to be considered is that concerning the Chinese market as a potential and innovative outlet for European products. Although the Chinese market is traditionally characterised by a gastronomic culture which is profoundly different from its Western counterpart, the recent socio-economic changes that are modifying the profile of emerging countries have given rise to a new, ever-increasing demand for Westernization. This new demand on the part of Chinese society is creating new spaces for products such as European ones which are imbued not only with strong cultural value but also enjoy high standards of quality and food safety. Both the characteristics in question ensure that European products may represent a satisfying response to changes in food demand for broad sectors of the Chinese market.

As regards meat from Europe, the segment identified presents a non-negligible share of about 13%. Moreover, this market niche seems identified also thanks to the socio-economic covariates and the PVQ used. Finally, the segment would also be easily accessible, being likely to be more highly concentrated in larger urban areas and in the province of Guangzhou.

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