

The Link between Consumers and Passenger Vehicle Preferences in China

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It has been well documented that the Chinese economy has experienced quite spectacular economic growth over the last decade with little sign of abatement. By 2005 China had become the fourth largest economy in the world (ABC 2006). Gross Domestic Product growth averaged a quite remarkable 9.5% over the period 2000-2005 and per capita income reached US\$ 1250 (SBC 2005). Such outcomes have a direct impact on segments of the consumer market. For example, the Chinese automotive market is now the world's second largest, with 5.76 million units produced annually (CAAM 2006). The market exceeds that of Japan and is just behind the US. It is of little surprise that the major world players in motor vehicle manufacturing have sought to exploit the Chinese market particularly through the provision of joint venture operations. Competition within the market is fierce as producers try to secure market share. This study examines dimensions of consumer preference and choice by exploring the linkage between aspects of Chinese motor vehicle consumer characteristics (age and income) and vehicle country and brand preference. Specifically it analyses which group of consumers (differentiated by age and income) favour, either Germany, Japan, US, French, Korea or China as the source of origin for vehicle purchase, and which vehicles (VW, Toyota, GM, Citroen, Hyundai and FAW etc.) are preferred. Moreover, it tests which vehicle features are most influential in determining the propensity to purchase.

Key words: automotive market, consumer preference, consumer characteristics, county preference, brand preference, Chinese market.

Relevant Theme: Trade and investment, or Other topics related to Chinese economic studies.

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1. ABSTRACT

It has been well documented that the Chinese economy has experienced quite spectacular economic growth over the last decade with little sign of abatement. By 2005 China had become the fourth largest economy in the world (ABC 2006). Gross Domestic Product growth averaged a quite remarkable 9.5% over the period 2000-2005 and per capita income reached US\$1250 (SBC 2005). Such outcomes have a direct impact on segments of the consumer market. For example, the Chinese automotive market is now the world's second largest, with 5.89 million units produced annually (CAAM 2006). The market exceeds that of Japan and is just behind the US. It is of little surprise that the major world players in motor vehicle manufacturing have sought to exploit the Chinese market particularly through the provision of joint venture operations. Competition within the market is fierce as producers try to secure market share. This study examines dimensions of consumer preference and choice by exploring the linkage between an aspect of Chinese motor vehicle consumer characteristics (age) and vehicle country and brand preference. Specifically it analyses which group of consumers (differentiated by age) favour, either Germany, Japan, US, French, Korea or China as the source of origin for vehicle purchase, and which vehicles (VW, Toyota, GM, Citroen, Hyundai and FAW etc.) are preferred. Moreover, it tests which vehicle features are most influential in determining the propensity to purchase.

2. INTRODUCTION

The Chinese automotive market has grown rapidly in recent years but particularly since China entered the WTO in 2003. As reported by Chinese Association of Auto Manufactures (2006) total vehicle sales were up by a massive 14 percent over the previous year to 5.89 million in 2005, and up 3.7 million vehicles over 2000 (China Automotive systems 2006). Vehicle sales continue to rise in 2006 with a 70% rate of growth (seasonally adjusted) in January. It is not inconceivable that Chinese passenger vehicle sales may hit 4 million in 2006 making it the second largest auto consume in the world, just behind US.

The booming demand for motor vehicles in China has made China the most rapidly growing automotive market in the world. In consequence, many of the world's largest vehicle manufacturers have entered the Chinese market. An increasingly wide range of models are being exposed to the Chinese consumer. However, it has become apparent that the Chinese PMV market differs from many of those in the west and that some assumptions, procedures and approaches that prove true for a western market may not prove so in China. Some brand vehicles are popular in western countries, but they are not popular in the Chinese market. For example, some manufacturers and models whilst well favoured by the Chinese consumers do not achieve like success in other markets.

In addition, it is clear that, as with most consumers, the Chinese consumer appears well aware of product difference between foreign models and do rank foreign producers and models against each other. For some Chinese consumers the 'country-of-origin' is itself an important factor to be considered when purchasing a vehicle. For example, many Chinese consumers believe vehicles made in developed countries such as Germany and Japan to have inherent high quality, design and prestige. Alternatively, some consumers will favour a brand/model name (such as VW, GM, Toyota or Honda) as the most important consideration rather than the the actual 'country of origin' of the vehicle.

Given the current importance of the Chinese market and its enormous potential for growth it is apparent that car manufacturers, both domestic and international, will be presented with great challenges as well as great opportunities in the near future. Thus it beneficial to determine the country of origin and model/brand preferred by Chinese PMV consumers and to determine which segment of the potential consumer market prefers which model/brand of vehicle. Futhermore, it is valuable for both marketers and PMV makers to have some detailed insights into the factors influencing consumer preference and choice. This paper will consider the factors of:

- age group
- product attributes
- vehicle features such as price, air condition and safety equipment.

3. COUNTRY IMAGE EFFECTS

Although 'country-of origin' research is well documented in the international business and marketing literature, few studies have explored the use consumer characteristics and country image effects on automotive vehicles particularly in developing countries (Alden, Steenkamp and Bartra 1999).

However, the impact of 'country-of-origin' on the demand for PMVs within particular markets has been the subject of several studies, including product in general, classes of products, specific types of products and specific brands (see Bilkey and Nes 1982, Lee, Yun and Lee 2005). Most of these studies examined the PMV market of developed countries. There are few studies of this nature of the PMV markets of developing economies or studies that seek to compare 'country-of -origin' considerations between developed and less developed countries

Nebenzahl, Jaffe and Lampett (1997) note that consumers employ of the 'country-of-origin' of product as an indication of product quality. In particular, American consumers tend to prefer indigenously made products (Gallup 1991, Swift 1989). The majority of British and Spanish consumers prefer a car of domestic origin to a foreign car (Peris et al. 1993). Gurhan-Ganli and Maheswaran (2000) find that Japanese consumers evaluated home-country products more favourably than foreign country products, regardless of product superiority. Alternatively, in one of the few studies of the PMV market in developing economies, Heieh (2004) found that consumers in the developing economies preferred PMVs that originated from developed countries rather than domestically produced PMVs. Products made in Germany and Japan tend to enjoy a world-wide reputation for quality. For example, Klien and Ettenson (1999) note that consumers often judge a German car as being reliable, technologically advanced and of high quality partiality because Germany is seen as a country of hard working, meticulous and well-educated people. Alternatively, products made in less developed countries often suffer from negative 'country-of-origin' effects (Gaedeke 1973, Bandyopadhyay and Banejee 2002). However there are differences in the 'country-of -origin' effect between countries. For example, people in the USA may perceive Korean produced product as being generally lower priced and of average

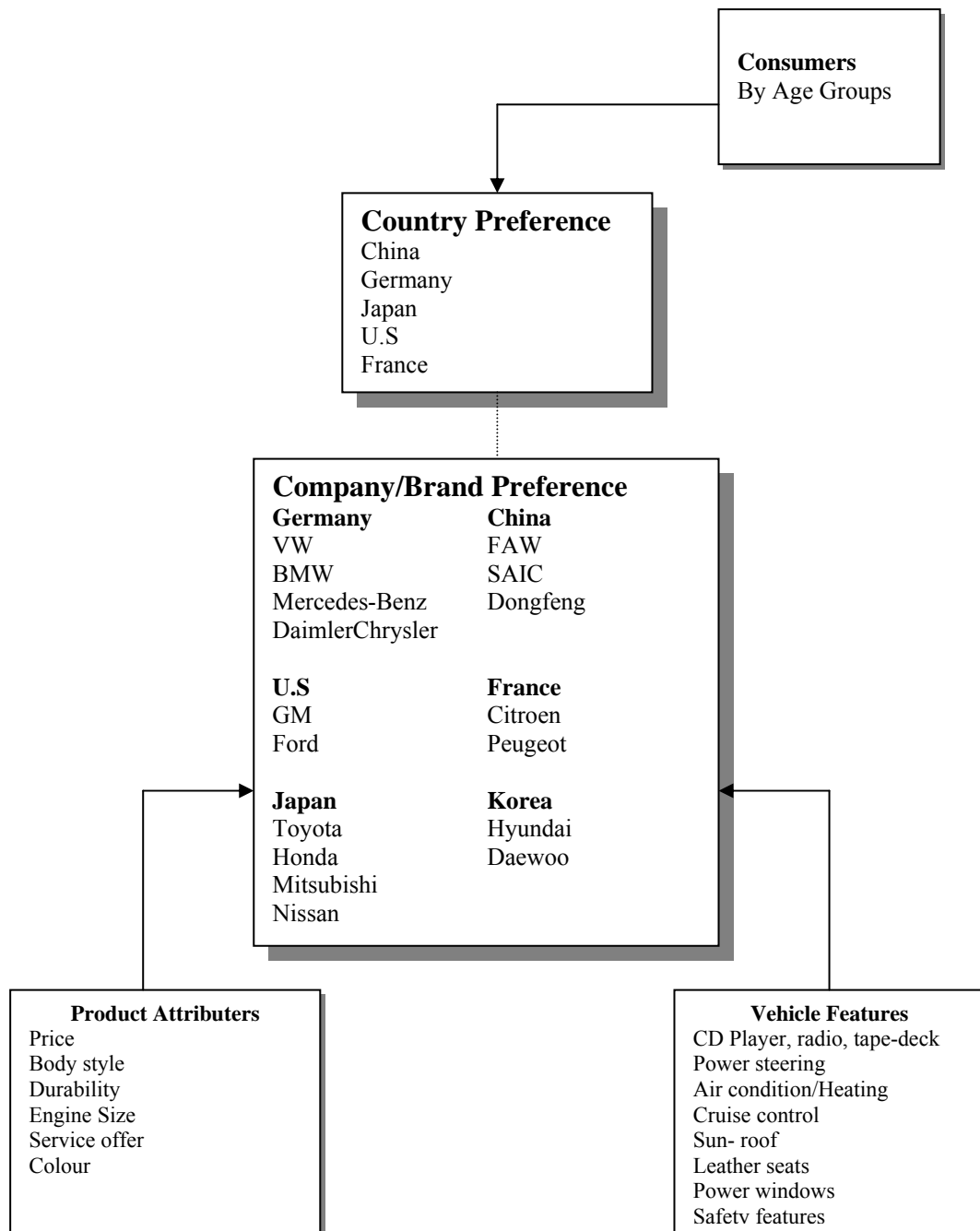
quality, whereas consumers from South-East Asia countries generally think Korean products give an attractive price-quality balance (Amine, Chao and Arnold 2005).

Previous research on country-of-origin effects focused on the general effects of phenomena (Lee, Yun and Lee 2005) with little attention to differences in individual characteristics and decision content. This study is of particular relevance, as it will examine aspects of individual characteristics within and between consumers to determine some of the key differentials that prompt PMV selection within the Chinese market. Specifically it will examine how different age and income strata evaluated 'country-of-origin' effect (Germany, USA, Japan, Korea, France and domestic) and determined model and brand preference.

4. METHOD AND SAMPLE

The aim of the study is to develop a model to analyse consumer preference for a vehicle's country of origin based on age group, and to test which factors (including product attributes and vehicle features) were the most influential in determining vehicle preference. Thus, the study will determine which country of origin for a PMV and which brand of motor vehicle most closely aligns to the consumer preference of potential Chinese purchasers of motor vehicles. Figure 1 develops the conceptual framework.

Figure 1
Conceptual Framework of Consumer Vehicle Preference



A survey technique method (utilising an English language questionnaire)¹ was used to collect data for testing the conceptual model via a sample centred in Beijing. The

¹ A native Chinese speaker then translated the questionnaire into Chinese. In addition, a Chinese academic, with particular expertise in the research of international business activity in China then reviewed this translation to ensure that Chinese respondents would have a full understanding of the terminology employed.

development of the questionnaire involved the following stages. Firstly, a review of the business and marketing literature applicable to consumer preference and the demand for PMVs was undertaken. Secondly, a number of development scale measures of the potential determinants of consumer preference for PMVs in China were formulated. Thirdly, the measures were ranked in a five-point Likert-type scale that graded for example, “importance for purchasing a German vehicle” from (1) ‘not important’ to (5) ‘of the highest importance’.

The data was collected in Beijing the capital of China which has a population of 14 million and a total vehicle population of 2 million with new vehicle sales running at 280,000 a year (Chao, 2003). The Beijing PMV market was considered representative of the Chinese new motor vehicle market as it applies to higher income and consumer-minded Chinese. The survey sought to capture a diverse socio-economic group of respondents by collecting data at a variety of locations. Thus potential survey respondents were approached randomly at or near four major car retail outlets of the city. Chinese nationals were employed to conduct the 15 minute survey. The survey was conducted over a three month period and finished in February 2005. A total of 398 questionnaires were collected that included 371 valid and 27 invalid responses.

In the sample, 61% of the respondents are males whilst 39% are female. The respondents have a mean age of 35 years and an age range of 18 to 70 years. Two percent of respondents are aged between 18 to 20 years, forty-four percent between 21 to 30 years old, twenty-nine percent between 31 to 40 years old, twenty percent are between 41 to 50 years old and 5% over 51 years old.

Respondents to the survey covered most of the major occupation groupings of Beijing. Thirty-one percent self-classified themselves as working in the ‘Professional or Education sector’, 21% as ‘Company Workers’, 13% (48 respondents) as ‘Senior Management’, 11% (41 respondents) as ‘Government’ sector employees, 9% as ‘Private Business Owners’, 11% as ‘Students’ with ‘Others’ at 4%.

Given that the level of average income in Beijing in 2003 was RMB13,882 (US1,690) (Beijing Daily, 2004), the pattern of income distribution of the respondents was of interest. Much of the surveyed population enjoyed average annual income levels considerably above the average. Only 13% had an annual income of less than 10,000 RMB and thus fell below the average income for Beijing. Thirty-seven percent received between RMB 11,000 and RMB 30, 000 per annum and would classify in the average to medium income range. Twenty-five percent earned RMB 31,000 to 50,000 and could be classified as high middle-income earners whilst 11% were classified as very high-income earners with an annual income between RMB 51,000 to 80,000. Eight percent were classified as extremely high-income earners with an annual income of RMB 81,000 while 4% were classified as super- high income earners with an annual income between RMB101,000-200,000.

Moreover, in whole sample, 34% owned a vehicle at the time of the survey while 66% did not.

5.CONSUMER AGE GROUP AND COUNTRY OF ORIGIN PREFERENCE

The first area of analysis considered the relationship between the age group of the potential consumer and ‘country- of -origin preference’. There were six age groups of respondents (Table 2). Older people (over 50) were most favourably disposed towards domestic brands with more than 90% rating Chinese produced vehicles between 3-5 on the preference scale. However, this view was not held by the young, especially in the age group 21-40, with over 50% rating Chinese domestically produced PMVs between 1-2 on the preference scale. Young Chinese were clearly more aware and responsive to western culture and as such heavily favoured foreign developed vehicles which they associated with modern technology, design and style.

Germany ranked highest as the preferred country of origin for PMVs. A very significant 81% of the 41-50 age group highly favoured German vehicles with more than 28% of these respondents rating them in the top preference rating of 5. A consideration may be that this age group were the most affluent and could therefore afford the high priced, high standard German vehicles. However, 22% of 21-30 age

group and 19% of the 31-40 age group, also ranked German made vehicles in the top preference rating of 5. Japanese vehicle were highly rated for reliability, quality and good value for price particularly amongst the over 41 age group with 75% rating Japanese vehicle at 3-5 on the preference scale. However this was not a sentiment widely held by younger Chinese potential PMV consumers with 38% of the age group 18-30 ranking Japanese vehicles at 1 –2 on the preference scale. This outcome is in contrast to the results published by Klien, Ettenson and Morris 1998 who argue that older Chinese held negative views towards Japanese products (including PMVs) because of lingering hostility associated with the Sino-Japanese war whilst the young held more positive attitudes. This research discovered that a significant proportion of young consumers disliked Japanese vehicles.

About 60% of all respondents rated US vehicles in the high preference scale rating of 3-5 whilst 40% ranked them in the 1-2 rating scale. The young (under 21 age group) were very favourably disposed towards US sourced PMVs with 63% ranking them in the 3-5 preference scale as were the 31-40 and the 41-50 age groups where 58% rated US vehicles in the 3-5 preference scale.

French vehicles were held in fairly high regard across all age groups with more than 50% of respondents ranking French PMVs in the 3-5 preference scale. The over 60 age group held these cars in very high regard although it should be noted that the population sample for this group was small. The under 21 year age group rated French vehicles highly with a 76% rating for the 3-5 preference scale, whilst the 31-40 year age group rated them at 59% for the 3-5 preference scale. In contrast, the 21-30 and the 41-50 age groups rated French vehicles less highly with both groups ranking them at 49% on the unfavourable preference scale of 1-2.

Korean sourced vehicles had an ambiguous favourable ‘country –of –origin’ rating than those of other countries with a strong association in the minds of potential Chinese consumers of ‘lower price and average quality’. However, potential Chinese PMV purchasers did not hold them in general high regard with more than 50% of respondents ranking Korean vehicles in the unfavourable 1-2 preference rating. The 41-50 age group held them in the lowest regard with 78% rating them on the 1-2 preference scale. Likewise the 51-60 at 63%, the 31-40 and under 21 age group

ranked them poorly with 63% and 61% rating respectively on the 1-2 preference scale. The 21-30 age group gave Korean vehicles the highest rating but even here a majority (52%) rated them on the 1-2 preference scale.

Table 2. Consumer Age and Country of Origin Vehicle Preference: Cross-Tab Analysis

China	1		2		3		4		5		Total
Age	Not Important								Highest Importance		
>21	25%	2	12.5%	1	37.5%	3	25%	2	0%	0	8
21-30	15%	24	36%	59	34%	56	9%	14	6%	10	163
31-40	20%	22	34%	37	31%	33	9%	10	6%	6	108
41-50	19%	14	24%	18	42%	31	9%	7	5%	4	74
51-60	6%	1	6%	1	63%	10	25%	4	0%	0	16
>60	0%	0	0%	0	100%	2	0%	0	0%	0	2
Total	17%	63	31%	116	36%	135	10%	37	5%	20	371
Germany											
>21	0%	0	37.5%	3	37.5%	3	12.5%	1	12.5%	1	8
21-30	8%	13	15%	24	34%	55	21%	35	22%	36	163
31-40	5%	5	14%	15	30%	32	33%	36	19%	20	108
41-50	0%	0	12%	9	30%	22	30%	22	28%	21	74
51-60	6%	1	13%	2	38%	6	31%	5	13%	2	16
>60	0%	0	0%	0	0%	0	0%	0	100%	2	2
Total	5%	19	14%	53	32%	118	27%	99	22%	82	371
Japan											
>21	25%	2	13%	1	38%	3	25%	2	0%	0	8
21-30	25%	41	13%	22	37%	60	17%	27	8%	13	163
31-40	11%	12	13%	14	37%	40	31%	33	8%	9	108
41-50	5%	4	16%	12	32%	24	34%	25	12%	9	74
51-60	13%	2	13%	2	44%	7	31%	5	0%	0	16
>60	0%	0	0%	0	50%	1	50%	1	0%	0	2
Total	16%	61	14%	51	36%	135	25%	93	8%	31	371

US	1		2		3		4		5		Total
	Not Important								Highest Importance		
>21	13%	1	25%	2	38%	3	25%	2	0%	0	8
21-30	18%	29	30%	49	34%	56	11%	18	7%	11	163
31-40	13%	14	30%	32	37%	40	17%	18	4%	4	108
41-50	7%	5	35%	26	42%	31	14%	10	3%	2	74
51-60	19%	3	19%	3	44%	7	6%	1	13%	2	16

>60	0%	0	0%	0	50%	1	0%	0	0%	0	2
Total	14%	52	30%	112	37%	138	13%	49	5%	20	371
France											
>21	13%	1	13%	1	63%	5	0%	0	13%	1	8
21-30	21%	35	28%	46	31%	50	15%	24	5%	8	163
31-40	10%	11	30%	32	44%	48	9%	10	6%	7	108
41-50	14%	10	35%	26	35%	26	11%	8	5%	4	74
51-60	19%	3	31%	5	31%	5	13%	2	6%	1	16
>60	0%	0	0%	0	100%	2	0%	0	0%	0	2
Total	16%	60	30%	110	37%	136	12%	44	6%	21	371
Korea											
>21	0%	0	63%	5	13%	1	0%	0	0%	0	8
21-30	32%	52	30%	49	28%	45	6%	10	1%	1	163
31-40	25%	27	36%	39	31%	33	6%	6	3%	3	108
41-50	35%	26	43%	32	19%	14	3%	2	0%	0	74
51-60	25%	4	38%	6	25%	4	6%	1	6%	1	16
>60	0%	0	0%	0	100%	2	0%	0	0%	0	2
Total	29%	109	35%	131	27%	99	5%	19	4%	13	371

6. CONSUMER AGE AND BRAND/MODEL PREFERENCE

In association with a 'country-of-origin' preference respondents, again based on age-group, were queried as to their preference (again on the rating scale of 1 [least preferred] –5 [most preferred]) for a particular brand and/or model of PMV. That is, consumers were asked which models of German, French, US, Korean sourced vehicles they favoured. The results are tabulated in Table 3.

Table 3 Brand/Model Preference for PMVs of Selected Countries

	Age >21	21-30	31-40	41-50	51-60	>60	Total (Mean)
Auto Company: GERMAN							
VW	2.88	2.76	3.02	3.31	3.00	3.00	2.96
BMW	3.13	3.77	3.80	3.89	3.25	4.00	3.77
Mercedes-Benz	3.25	3.80	3.80	4.01	3.75	4.50	3.83
DaimlerChrysler	3.00	2.79	2.91	2.70	3.06	3.50	2.82
US							
GM	2.50	2.47	2.66	2.82	2.63	3.50	2.61
Ford	2.38	2.61	2.75	2.86	2.63	3.50	2.70
JAPANESE							
Toyota	2.75	2.75	2.88	3.29	2.87	3.50	2.91
Honda	2.50	2.76	2.81	3.24	2.69	3.50	2.87
Mitsubishi	2.13	2.87	2.82	3.27	2.56	3.50	2.88
Nissan	2.88	2.52	2.81	3.04	2.75	3.50	2.73
FRENCH							
Citroen	2.38	2.36	2.70	2.58	2.81	3.50	2.53
Peugeot	2.50	2.54	2.54	2.45	2.69	3.00	2.53
CHINESE							
FAW	2.75	2.42	2.48	2.50	2.50	3.00	2.47
SAIC	3.38	2.37	2.42	2.43	2.63	3.50	2.43
Dongfeng	2.63	2.31	2.34	2.32	2.44	3.50	2.34
KOREAN							
Hyundai	2.63	2.27	2.45	2.22	2.31	3.50	2.33
Daewoo	2.38	2.01	2.20	1.96	2.25	3.50	2.07

Germany

With respect to German- sourced PMVs Chinese consumers, across all age groups, had a first preference for Mercedes-Benz (m=3.83 rating) closely followed by BMW (m=3.77). The 41-50 and over 60 age groups ranked the mean for Mercedes Benz at over 4.00. Their appeal across the age divide can be seen by the high ranking afforded them by the 21-40 age group (m=3.80) and even in the under 21 age group (where it could be surmised that the car was out of reach for most in this group) it had a mean

preference rating of 3.25. BMW was also held in high regard with the over 60 age group at (m=4.0), the 41-50 age group at (m=3.89) and the 21-40 age group at (m=3.77/3.88). VW were one of the first foreign car-makers to establish a presence in China (1973) and therefore the brand is familiar to many Chinese. The survey found VW held in modest regard across all age groups with an increased preference rating amongst older potential buyers. The 41-50 age group (m=3.31) held the brand in the highest repute. However, the younger the potential buyer the less the regard afforded VW with those in the under 21 age group (m=2.88) and in the 21-30 age group (m=2.78) more ambivalent towards the brand. Paradoxically, Daimler-Chrysler found most favour at the two extremes of the age groups surveyed with the older age groups 51-60 (m=3.06) and > 60 (m=3.50) and the youngest group age <21 (m=3.00) rating the brand highest.

Japan

The Japanese have an interesting model profile in China. It appears Chinese consumers appreciate Japan as a 'country-of-origin' but do not rate individual brands strongly as a most favoured PMV. Toyota (the largest selling automotive company in the world), entered the Chinese market in the late 1990s. This placed it at some disadvantage as compared to VW, Citroen and Daimler-Chrysler which entered in the 1970s and 1980s. Older consumers rated Toyota highest with the over 60 age group at (m=3.50). The 41-50 age group were the only other age cohort to rate Toyota above 3 on the preference scale (m=3.29). A similar result was achieved for the other Japanese producers with the 41-50 age group at (m=3.24) and the over 60 age group at (m=3.50) for Honda, Mitsubishi and Nissan vehicles.

The USA

Chinese consumers tend to broadly appreciate US sourced vehicles without ranking them highly as a preferred vehicle. They rate well behind German and Japanese vehicles in this respect (which is supported by 'country-of-origin' data mentioned above). Both GM and Ford enjoy strongest support in the over 60 age group with a ranking of 3.5 on the preference scale whilst the 41-50 age group also rated ranked Ford and GM fairly strongly (m=2.86) and GM (m=2.82). There was little variation in the other age groups with a rating of 2.38 to 2.63 on the preference scale.

FRANCE

As with US sourced vehicles Chinese consumers remain reasonably ambivalent about French sourced PMVs. No age group rates them particularly highly as a preferred choice nor ranked them poorly on the preference scale. Older potential consumers (51-60 and over 60 age groups) favoured them over the young but all age groups rated them in or about mid-way on the preference scale.

CHINA

The youngest age group (aged less than 21, mean= 2.75) and oldest (aged over 60, mean =3.00) rated FAW vehicles more highly than other Chinese produced PMVs. Young people (aged less 21, mean= 3.38) also rated SAIC vehicles fairly highly. It seems young people like Chinese vehicles, especially those produced by SAIC. However no age group surveyed were favourably disposed towards Dongfeng vehicles.

KOREA

The over 60 cohort held both models of Korean cars in fairly high regard age with a mean = 3.5 on the preference scale. Interestingly, the youngest age group ranked both models at the second highest level of preference (2.68 mean for Hyundai and 2.38 for Daewoo). Generally however Korean sourced models (particularly Daewoo) did not rank highly on the preference scale across all cohorts.

7.VEHICLE ATTRIBUTES AND CONSUMER PREFERENCE

Both correlation and regression analysis are used in order to test the factors of product attributes and vehicle features that determine company/brand preference. Firstly, Pearson correlations between product attributes (6 variables), vehicle features (8 variables) and company preference, total seventeen companies, including four German companies, two US companies, four Japanese companies, two French companies, three Chinese companies, and two Korean companies are employed. There are numerous high correlations between particular vehicle attributes and particular vehicle makes. For example, between price and Mercedes Benz.

To test vehicle attributes and vehicle features for each company, a stepwise regression model is displayed in Table 4. For example, with VW vehicles, of the 14 product attributes and vehicle feature variables, the first variable to enter stepwise regression is Leather seats ($\beta = -.274$ $\rho < 0.01$), following by CD/radio/tape ($\beta = .176$ $\rho < 0.01$), Power steering ($\beta = .171$ $\rho < 0.01$), and Colour ($\beta = -.111$ $\rho < 0.05$). VW are not seen to provide leather seats and this is a negative view of the attributes provided. Secondly, the colours available for the vehicles are seen as a poor, but power steering and the sound system are seen as positive attributes.

The regression model is not predictive in the sense of deriving levels of preference based upon attributes. The choice of a vehicle requires more than is measured by these attributes (hence the low R^2 values). The decision to prefer (or buy) depends upon a mix of issues not fully described by the measured attributes. What the regression does provide is an assessment of extreme attribute importance (at a statistically significant level). The attributes measured by the regressions are the most critical to the measure of preference, either positively or negatively. They form the discriminating variables that are most important in distinguishing between brands. For example, if a greater colour choice were provided the level of preference for Nissan would increase. At the same time, the advantages Nissan holds over other models (air conditioning and price) should be kept in a relative basis with other models. Because the regression is step-wise the level of significance of each attribute is in decreasing order as the coefficient becomes smaller.

There is a high level of emphasis on safety features. This may be explained by the family transport focus of the purchase and perhaps the large number of new drivers on

congested roads. Power steering is also important followed by the sound system and leather seats. . This may be interpreted as an expectation to have to pay for attributes, although Daewoo could be interpreted as over priced. Body styling seems to be considered poor in Chinese vehicles. Interestingly price is not as significant as might have been thought in determining preference

**Table 4 Significant Variables from Vehicle Companies
Stepwise Regressions**

VW		BMW		Mercedes-Benz	
<i>Variable</i>	<i>Coefficient</i>	<i>Variable</i>	<i>Coefficient</i>	<i>Variable</i>	<i>Coefficient</i>
Leather seats	-.274	Safety features	.150	CD/radio/tape	.226
CD/radio/tape	.176	Cruise control	.137	Safety features	.195
Power steering	.171				
Color	-.111				
R	0.32	R	0.25	R	0.33
R ²	0.11	R ²	0.06	R ²	0.11
F-statistics	11.60***	F-statistics	12.25***	F-statistics	21.63***
DC		GM		Ford	
<i>Variable</i>	<i>Coefficient</i>	<i>Variable</i>	<i>Coefficient</i>	<i>Variable</i>	<i>Coefficient</i>
Power steering	.212	Power steering	.194	CD/radio/tape	.210
CD/radio/tape	.120	CD/radio/tape	.180		
		Power windows	-.119		
R	0.28	R	0.31	R	0.21
R ²	0.08	R ²	0.10	R ²	0.05
F-statistics	15.69***	F-statistics	9.50***	F-statistics	16.37***
Toyota		Honda		Mitsubishi	
<i>Variable</i>	<i>Coefficient</i>	<i>Variable</i>	<i>Coefficient</i>	<i>Variable</i>	<i>Coefficient</i>
CD/radio/tape	.154	Cruise control	.160	Safety features	.189
Price	.119	Air condition	.137	Leather seats	.112
Color	.105				
R	0.23	R	0.24	R	0.23
R ²	0.06	R ²	0.06	R ²	0.05
F-statistics	7.10***	F-statistics	11.59***	F-statistics	10.54***
Nissan		Citroen		Peugeot	
<i>Variable</i>	<i>Coefficient</i>	<i>Variable</i>	<i>Coefficient</i>	<i>Variable</i>	<i>Coefficient</i>
Air condition	.129	CD/radio/tape	.156	Safety features	.127
Price	.119				
Color	-.107				
R	0.21	R	0.16	R	0.13
R ²	0.05	R ²	0.03	R ²	0.02
F-statistics	5.44***	F-statistics	9.25***	F-statistics	2.47**
FAW		SAIC		Dongfeng	
<i>Variable</i>	<i>Coefficient</i>	<i>Variable</i>	<i>Coefficient</i>	<i>Variable</i>	<i>Coefficient</i>
Body Style	-.197	Power steering	-.167	Safety features	.162
Power steering	.117			Body Style	-.132

R	0.23	R	0.17	R	0.20
R ²	0.05	R ²	0.03	R ²	0.04
F-statistics	9.85***	F-statistics	10.59***	F-statistics	7.85***
Hyundai			Daewoo		
<i>Variable</i>	<i>Coefficient</i>	<i>Variable</i>	<i>Coefficient</i>		
Power windows	-.178	Safety features	.134		
Leather seats	.157	Price	-.121		
Cruise control	.145				
R	0.21	R	0.16		
R ²	0.05	R ²	0.03		
F-statistics	5.88***	F-statistics	4.93***		

8.CONCLUSION

This paper has sought to determine the extent of a linkage between PMV country of origin and brand preference and a range of age cohorts of potential Chinese purchasers of PMVs. The paper has shown that preference for a particular country of origin for a vehicle showed some common trends across all age groups (such as the high ranking afforded German sourced vehicles and the lower rating of Korean sourced vehicles), whilst at the same time noting that the age cohorts did differ in preferences for vehicles sourced from a number of the other countries (Japanese and US sourced vehicles.) In addition, the study examined which vehicles (VW, Toyota, GM, Citroen, Hyundai and FAW etc.) preferred across the age cohorts. Again some commonality amongst the age groups was revealed with a strong preference for example, for Mercedes Benz and BMW (notwithstanding price) for German sourced vehicles across all cohorts. However, the age groups did differ in preference for particular models from a given country in that, for example, whilst the youngest and oldest age groups rated the Chinese produced FAW highly, the other age cohorts did not share this sentiment. Finally, while the analysis is not predictive of consumer preference it does reveal, via regression analysis, which vehicle attributes were of importance in the formation of vehicle preference. For example, the lack of power windows in the Hyundai was a negative influence on the preference for that model while safety features were rated as a very positive influence on preference formation for Mitsubishi vehicles.

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