

Demand Under the Ban

China Ivory Consumption Research 2020

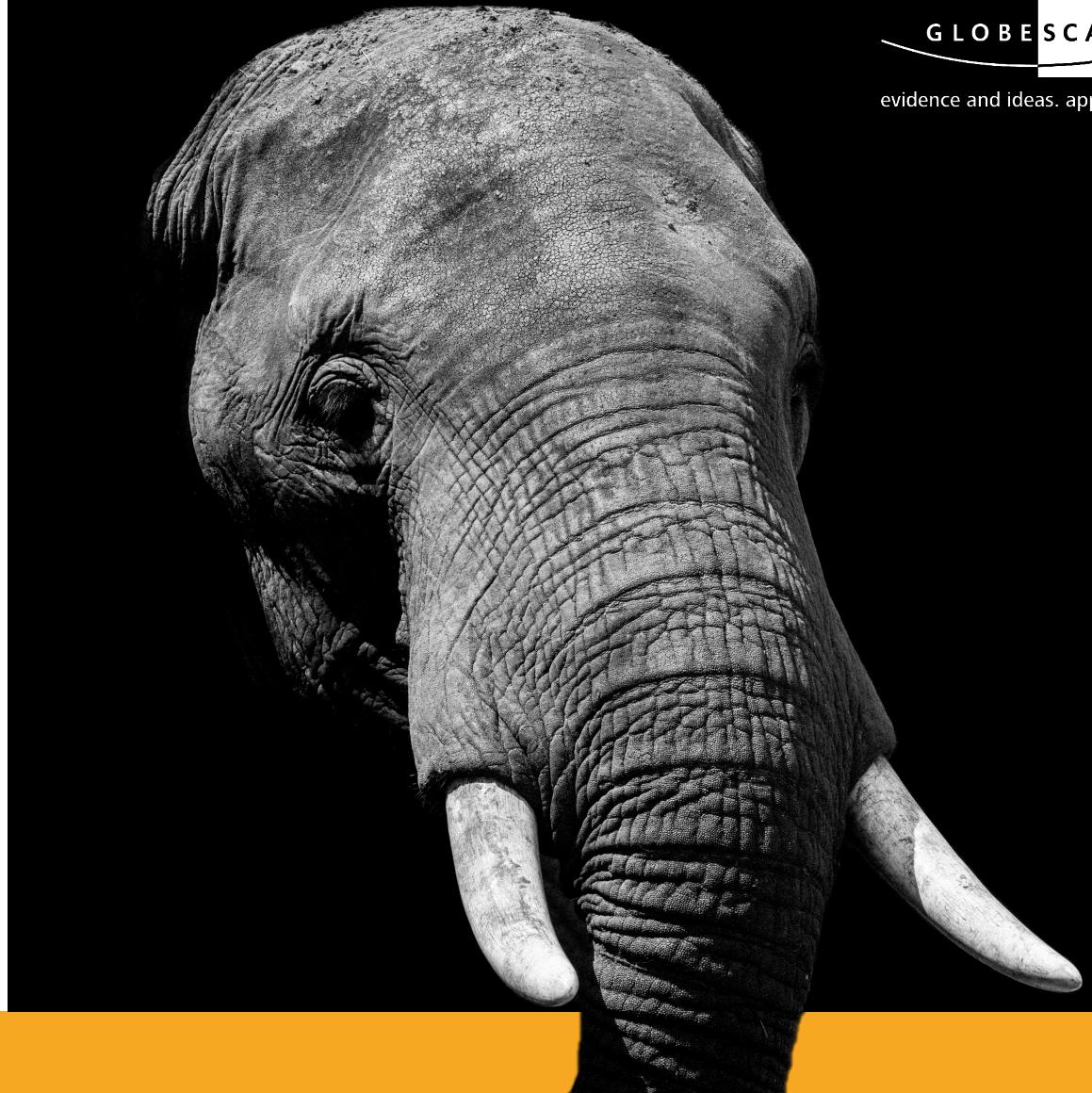
A report from GlobeScan Incorporated
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Project: 3737



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1. Background and Objectives



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Foreword by WWF

The large-scale consumption of wildlife parts, products, and derivatives across the globe is increasingly being recognized as a driving factor toward substantial declines in populations for many species. Mainland China (hereafter referred to as ‘China’ in this report) is thought to be one of the largest markets, leading conservation professionals to explore the potential for targeted advocacy, social marketing, and multi-media campaigns to deliver real and rapid impact in reducing this demand. WWF have implemented several behavior change interventions in recent years to reduce demand for illegal wildlife products like ivory, pangolin scales, rhino horn, and tiger bones. Consumers including outbound tourists, persistent buyers, collectors, businessmen, and traditional medicine users have been targeted in those behavior change interventions.

Within this context, a “game-changing” ban on commercial processing and trade in elephant ivory was implemented by the State Council, China’s Cabinet on 31 December 2017. TRAFFIC and WWF commissioned GlobeScan before the ban became effective in 2017 to conduct the largest-ever ivory consumer research in China. This research seeks to discover the nature of ivory consumption in 15 major cities in China, to understand consumers’ perception toward the ivory ban, and to assess effective messaging and mechanisms for demand reduction based on a pre- and a post-ban surveys, conducted in September – October 2017 (pre-ban), May – June 2018 (post-ban), May – July 2019 (post-ban) and October 2020 - January 2021 (post-ban). The research will also serve as the foundation of WWF’s future behavior change strategies and interventions.

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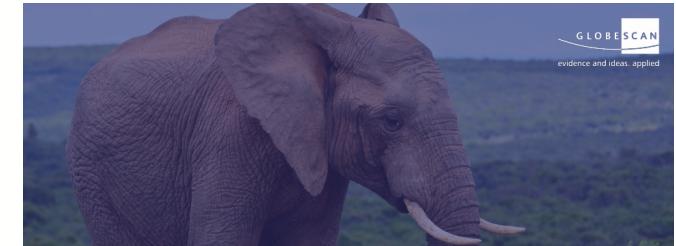
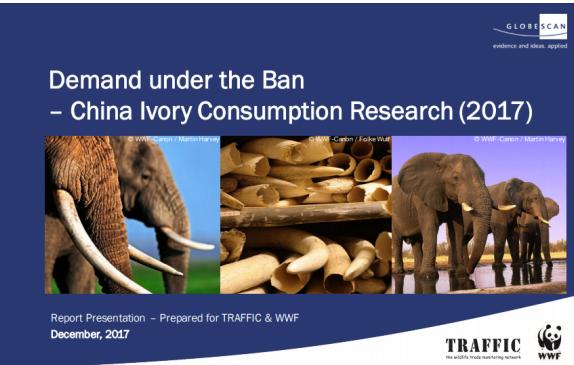
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Research Objectives – Context

In late 2020, WWF commissioned GlobeScan to conduct research to build upon previous consumer analysis and to generate up-to-date insights about ivory consumption and consumer perceptions toward the ivory ban after its implementation (December 31, 2017). This study follows previous research conducted by GlobeScan in 2017, 2018 and 2019 on both the pre- and post-domestic ivory ban in Mainland China. We identify



target consumer groups, products, and drivers of consumption that need to be addressed as a priority and provide data for designing, developing, and delivering interventions. By continuing to monitor the perceptions and actions of Chinese consumers, WWF can incorporate changes in consumer behavior into their latest demand reduction campaigns and thereby increase the effectiveness of these campaigns.

Research Objectives

The objectives of these studies – the Pre-ban survey (2017) and Post-ban surveys (2018, 2019 and 2020) – can be summarized as follows:

- Understand to what extent the implementation of the ban has impacted ivory purchase and if this trend is continuing over time.
- Measure the awareness and perceptions of the ban and its influence on the decision-making processes of buyers and/or potential buyers.
- Identify the key consumer/buyer segments of elephant ivory (products) before the implementation of the ban, and track if their perceptions, awareness, and purchase behavior is changing after the ban.
- Track the size of these segments to see whether consumers are becoming more influenced by the ban (with a specific focus on Diehard Buyers in 2020).
- Identify the prevalence of ivory purchase in the 15 selected target cities and the changes over time.
- Identify the major motivations driving these purchases and the deterrents that buyers perceive.
- Analyze psychosocial and socio-demographic characteristics, attitudinal dimensions, and other aspects of each consumer segment in order to gain insight into:
 - A. The specific triggers, motivations, and drivers for each segment's use or purchase of each of these products;
 - B. The underlying desire to purchase or own ivory and the barriers which will deter (potential) buyers from future purchase;
 - C. The awareness and attitudes of each consumer segment toward legislative provisions, penalties, and other deterrents restricting or prohibiting the use of these products.
- Test various concept messages (in the Pre-ban Survey) and campaign awareness/effectiveness (in the Post-ban Surveys) as input for future ivory demand reduction communication and behavior change interventions.
- Dig deeper into the profile of Diehard Buyers, as well as their attitudes and behavior, as this specific group is being regarded as the driving force of elephant ivory consumption.

Note on COVID-19: While COVID-19 undoubtedly affected the actions, perceptions and opinions of the people surveyed in this study, in order to keep the questions comparable with previous years, we did not specifically address the pandemic in our questionnaire.

Research Design

Survey Design

This study uses quantitative data collection to answer the research questions. Quantitative data collection provides robust, comparable results that allow for analysis of trends and preferences across a large geographic area. These data can be used to spot trends in ivory consumption, beliefs, knowledge, and attitudes. This four-year study is the first long-term, comparable study of the purchase behaviors and attitudes toward ivory products among Chinese participants from a consumer perspective.

Consumer Sampling

According to China Internet Watch, the national internet penetration rate in China is 70 percent, but in urban centers it is estimated to be 77 percent, with different genders, ages, and education levels well represented online. This has led China to be one of the most Internet-driven economies in the world. As with the 2017, 2018 and 2019 surveys, the 2020 survey utilized the ability of online research to gain insights from a wide variety of participants. Participants could answer the survey either on their smartphones or on their computers, at their convenience.

The 2020 survey was primarily conducted in late 2020 (Oct – Dec) and analyzed in 2021. Participants from an online panel were invited to participate in the online survey via email. The survey had a questionnaire with a median length of 20 minutes.

Survey participants could indicate the city in which they live from a list of 16 cities – Beijing, Shanghai, Guangzhou, Chengdu, Xiamen, Kunming, Fuzhou, Xi'an, Shenyang, Tianjin, Nanning, Chongqing, Nanjing, Jinan, Shenzhen and Hangzhou. This allowed for a broad geographic range of participants while still focusing on the key areas known to be of importance in the ivory trade. For this survey, the cities have been reclassified into layers (not related to China city tiers) as per TRAFFIC's definition, in order to adequately reflect the trade of ivory in China (see Slide 10). Hangzhou was added to the 2019 survey because market visits conducted by WWF and TRAFFIC indicate that it might be an important market for ivory purchase. In order to keep the 2020 results comparable with the previous surveys, Hangzhou was analyzed separately and is presented separately in Chapter 6.

Any participants under 18 years of age and those not living in one of the 16 selected cities were screened out and were not allowed to participate in the survey.

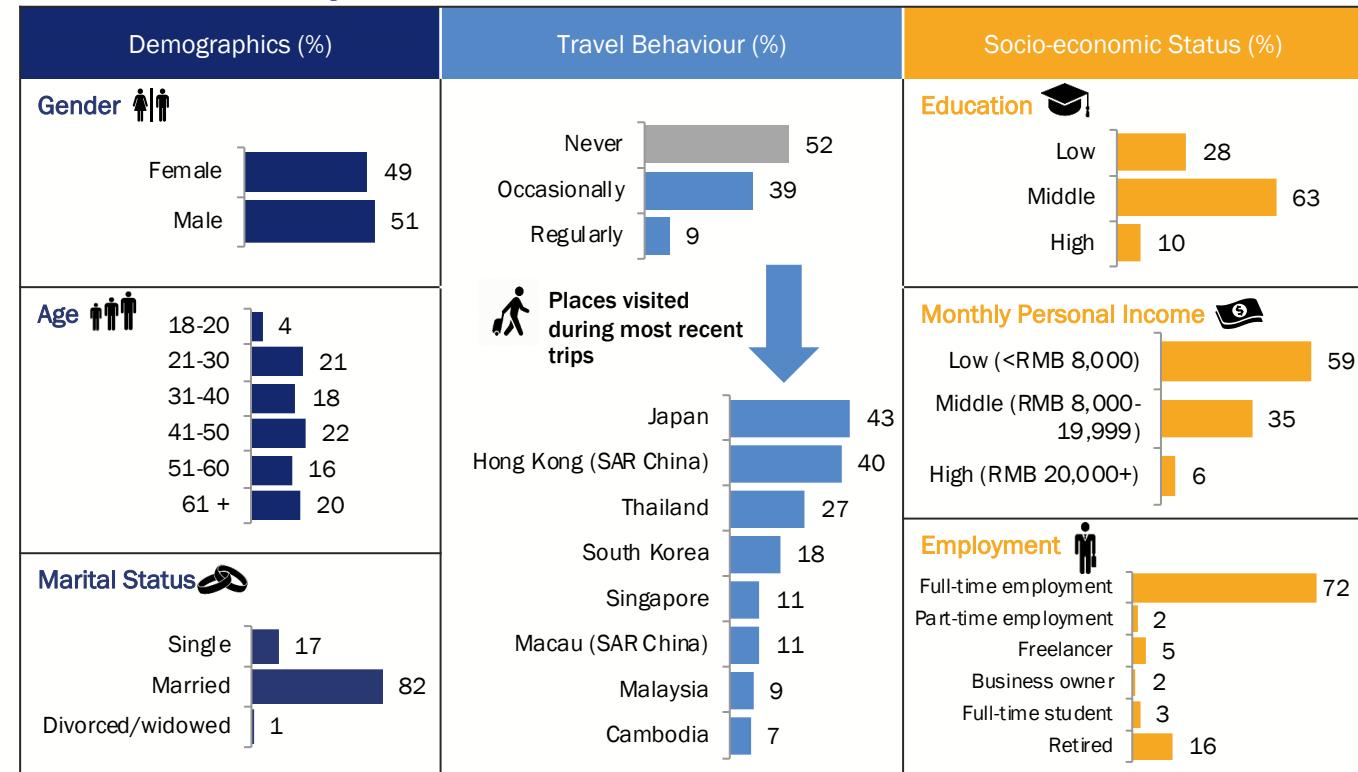
An additional “booster” was conducted on ivory buyers. Responses from 500 ivory “ever buyers” were collected in addition to the main fieldwork sample. These were analyzed and the resulting 64 Diehard Buyers were added to the Diehard Buyers from the overall fieldwork (including Hangzhou), yielding 288 Diehard Buyers in total on which extra analyses could be conducted. To maintain consistency and comparability between groups and between years, the boosters are not included in the general report but are presented in Chapter 7.

Total Sample Profile – Post-ban Survey 2020

The same quotas for age, gender, city, and the same “soft quotas” for education were used as per previous surveys (based on Mainland China general population sample).

As with the demographic profiles from previous years, the participants of the 2020 survey were selected to be representative of the national population of Mainland China and the demographics after weighting deviate less than 1 percentage point from the nationally representative demographics (See Slide 107).

The majority of participants have received a mid-level of education, are married, are employed full time, and earn less than RMB 8,000 monthly. 9 percent of participants are regular travelers in 2020 (see note on travel), with Japan, Hong Kong (SAR China) and Thailand being the places they visited the most recently.



Note on travel. Travel was greatly disrupted in 2020 but for some months that were included in the 12 months prior to data collection, international travel was still possible. Regular Overseas Travelers are defined by their general travel habits; this category does not refer to people who traveled regularly in 2020.

Geographic Scope

Definition: City Layers

Cities were divided into layers 1, 2, and 3 per TRAFFIC's definition (from 2017; these have been kept the same for comparability) to reflect the ivory trade and consumption in major cities in China. Grouping cities by layers allows for comparisons on the dynamics of ivory trade to be made between types of markets (cities).

TRAFFIC nominated these cities as being strategic and active centers of the ivory trade in China in 2017, rather than being representative of China as a whole. This is different from a geographical spread as used in past surveys on ivory.

Hence, the data in the report are centered on these selected cities rather than being representative of the whole country.

Hangzhou was reported to be a possible important market for ivory trade in 2019 and was added to the survey with $n = 200$ participants in 2019 and 2020. To keep the results comparable to previous years these data were analyzed separately (see Chapter 6).



Coverage by City

The (weighted) sample achieved by Layer in the 2020 Post-ban Survey is as follows:

- $n=920$ in **Layer 1** cities (Beijing, Shanghai, Guangzhou, Chengdu)
- $n=460$ in **Layer 2** cities (Xiamen, Kunming, Fuzhou, Xi'an, Shenyang, Tianjin)
- $n=620$ in **Layer 3** cities (Nanning, Chongqing, Nanjing, Jinan, Shenzhen)
- $n=200$ in **newly added** city in 2019 and 2020 (Hangzhou)

Analysis Deployed: Market Segmentation

Market Segmentation is a statistical process that divides a broad target market into a subset of smaller segments, or groups, based on natural points of differentiation between consumers in that market. In order to identify homogenous groups of customers in terms of their behavior, intentions, attitudes, and motives, we have developed a custom segmentation using the Decision Tree statistical algorithm (see Slides 114 - 115)

Why Perform a Market Segmentation?

A market segmentation provides organizations with targeted intelligence on discrete groups of consumers, providing evidence to support positioning and communication strategies for target consumer segments. This allows us to identify swing groups for strategic communications. We can also track these segments over time and see how public perception shifts between years.

Segmentation Analysis: Methodology Used

The model developed in 2017 was also used in 2018, 2019 and 2020 to predict the likelihood of buying ivory after the ban is imposed, and to identify segments of participants sharing similar patterns of responses to the question on past purchases, intention to purchase, and advocacy for ivory consumption.

Input variables include: attitudes, motives and barriers to purchase; past/future intention to purchase; and agreement/disagreement with the ban. Based on this predictive modeling, we have identified three distinct segments: Diehard Buyers, Ban Influenced Citizens, and Rejectors.

This segmentation is a different indicator than the Ivory Purchase Index (IPI) (see explanation in the next slide), which was also deployed. While both indicators use different methodologies to be compiled, they share common input variables. Both indicators include past and future purchase, measured before and after the participants read the notice of the ban in the survey. However, the segmentation also includes attitudes, motives, and barriers, unlike the IPI.

Participants are not re-interviewed between years to assess their personal shifts between segments. Rather, the segments and the shifts between them are indicative of general trends, not individual changes.

Segmentation Analysis – Post-ban Surveys

In order to recreate the segments (e.g., Diehard Buyers, Ban Influenced Citizens, and Rejectors) identified in the Pre-ban poll, statistical algorithms were used and extracted using Discriminant Function Analysis.

Analysis Deployed: Ivory Purchase Index

Ivory Purchase Index: Definition

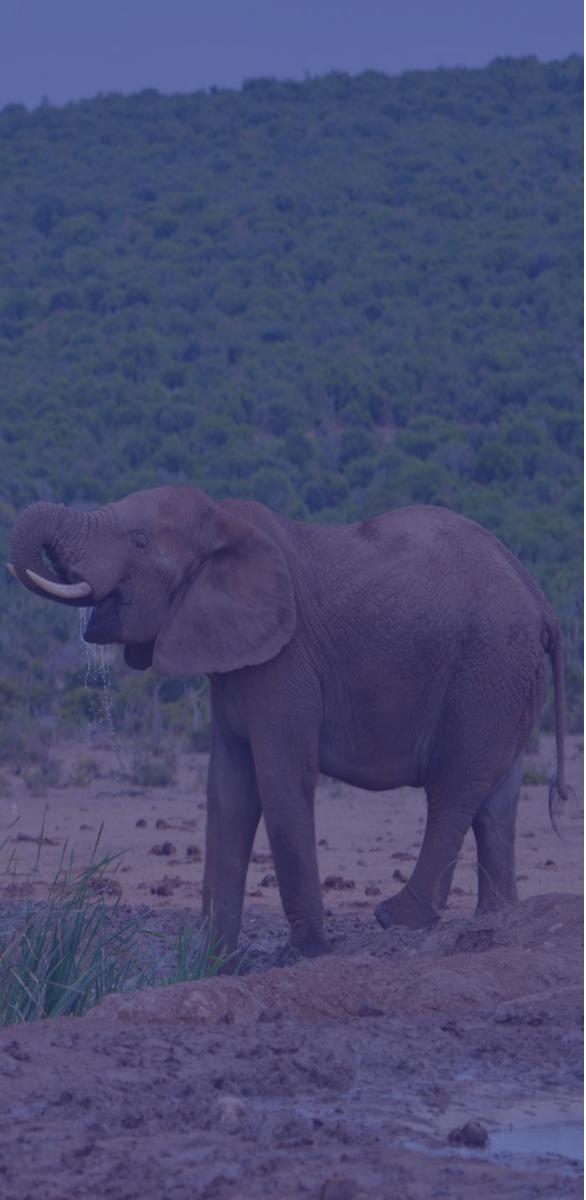
For this survey, we have recreated the Ivory Purchase Index developed in the Pre-ban Survey.

- The Ivory Purchase Index can be considered as a barometer or a measure of purchase intention or attractiveness.
- It allows us to customize strategies and messages for specific sub-groups, e.g., buyer segments, city layers, age groups, etc.
- The Ivory Purchase Index helps to see the overall picture, i.e., who are the most persistent ivory buyers.

How Is it Compiled?

- The Index is an aggregate measure that distils many indicators down to a single number enabling quick comparisons across buyer segments, city layers, age groups, etc.

- The Ivory Purchase Index was developed by reducing all attributes that were related to past and future purchase of ivory down to three dimensions:
 - Past purchase
 - Future purchase
 - Impact of the ivory ban (i.e., future purchase of ivory after implementation of the ban and recommendation to purchase ivory after implementation of the ban).
- It is a sum of these three dimensions/sub-indices, based on a 10-point scale, with 1 being lowest (least persistent in buying ivory) to 10 being the highest.



2. Key Findings



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Overall Stated Ivory Purchase Behavior

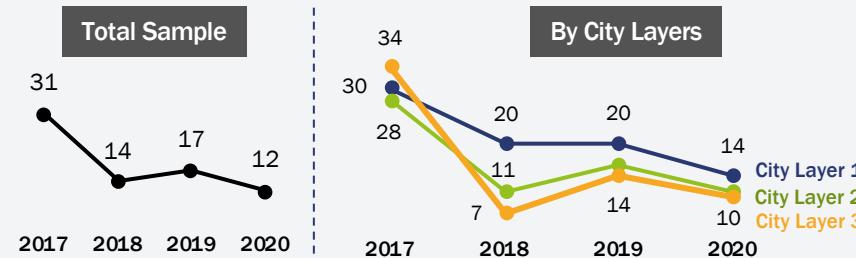
Self-reported purchase of ivory in the past 12 months has reduced from 2019 levels (17%) to 12 percent in 2020, the lowest of the four years surveyed.

- As the ivory purchase rate has dropped, the differences between Layer 1, 2 and 3 cities has become less pronounced.
- Ivory purchase channels have changed little since 2019. Although overseas travel was drastically reduced, ivory buyers bought ivory on short trips while travel was still possible.
- Among those who have bought ivory in the past, almost half are occasional or 'one-time' buyers, but a third claim to have bought ivory once every 1-2 years or with even more frequency.
- Over half of the participants who had bought ivory in the past 12 months had bought it as a gift for a friend or family member.
- Intention to purchase ivory in the future continues to decrease and is now less than half of (pre-ban) 2017 levels, both before and after mentioning the ivory ban.

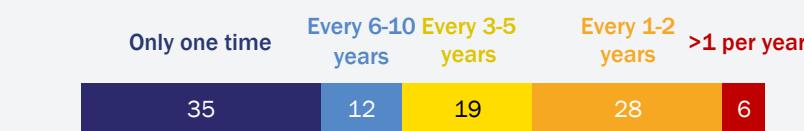
12%

Bought ivory in the past 12 months

Past Purchase Incidence Trend (%)



Ivory Purchase Frequency (%)



66%

Bought ivory as a gift for friend/family/business



Top Ivory Purchase Channels:



Retail store in China (68%)



Short-term trips overseas (46%)



Market stall in China (45%)

Future Purchase Intention (Total %)

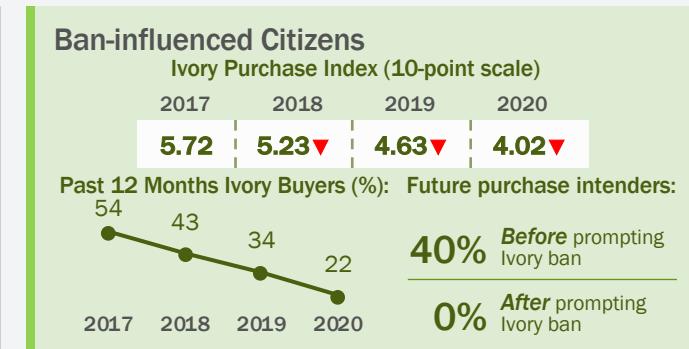
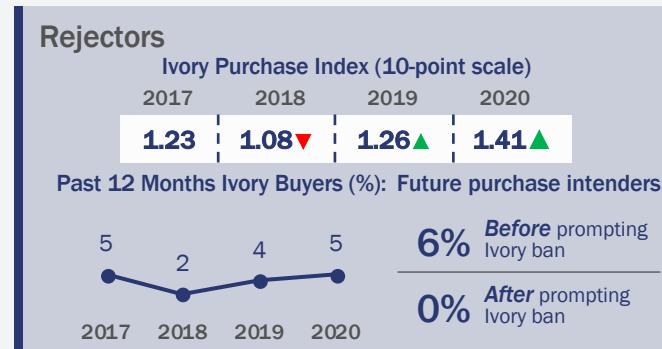
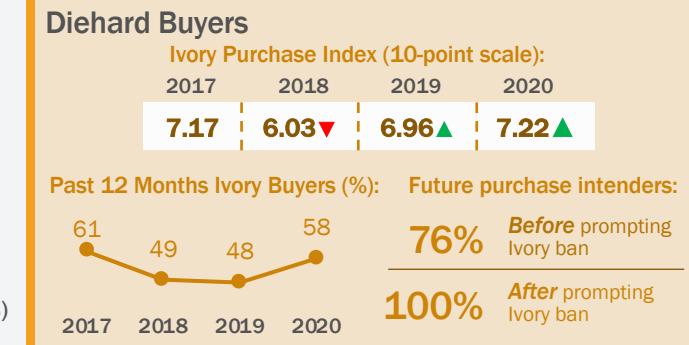
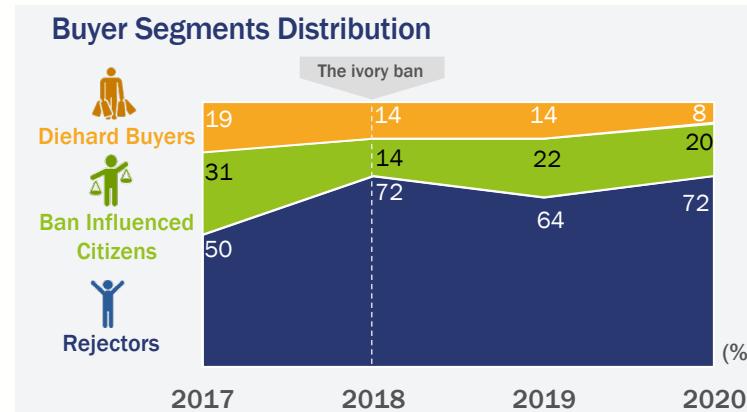
Before mentioning the ivory ban
After mentioning the ivory ban



Buyer Segments: Purchase Behaviors

Among the buyer segments, the proportion of Diehard Buyers has become smaller, while Rejectors have grown.

- Some Diehard Buyers and / or Ban Influenced Citizens in previous years have become less firm in their desire to buy ivory, leading to these sections shirking as some of these people become Rejectors.
- Although the proportion of Diehard Buyers has declined, those remaining have seen a significant increase in their ivory purchase index score. Because this segment is smaller than previous years, these participants can be regarded as the “core” Diehard Buyers, with a higher score than ever on the Ivory Purchase Index.
- Ban Influenced Citizens are buying significantly less ivory and have a significantly lower intention to purchase in the future. This segment’s likelihood to buy ivory in the future has decreased by more than half since 2017.

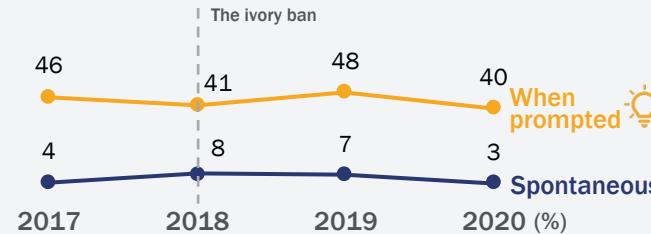


Awareness of and Attitude toward the Ivory Ban

Spontaneous mention of the ivory ban has decreased since 2019. Participants are more likely to reference wildlife laws in general or CITES and are less likely to identify the 2017 ivory ban.

- In 2020, 88 percent of participants believe that the buying / trading of ivory in China is illegal, a statistically significant increase from 2019 (85%). Although participants are aware that ivory sale is illegal, spontaneous identification of the 2017 ivory ban specifically has declined since 2019 (7% - 3%) and prompted awareness of the ban has also declined (48% - 40%).
- Online channels are the dominant sources of awareness about the ivory trade ban, as they were in previous years. .
- Participants strongly believe that the effects of the ban will be positive, with the “negative” responses that it will make them purchase ivory elsewhere or make people purchase ivory via illegal channels remaining low, though they have increased since 2019.

Awareness of the Ban

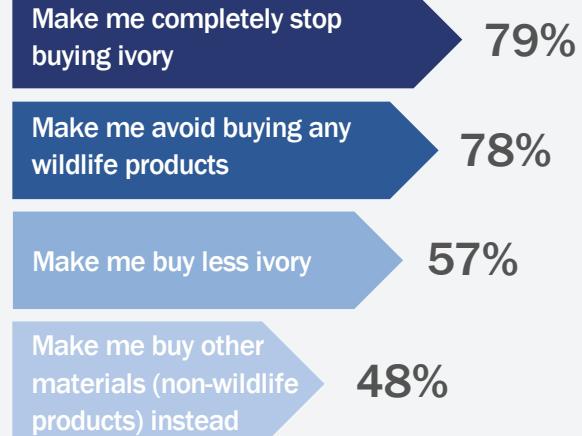


Top Sources of Awareness

- Offline channel
- Online channel



Impact of the Ivory Ban



Top alternatives to ivory:
Gold (39%) and silver (33%)

Drivers and Deterrents of Ivory Purchase

The relative strength of drivers and deterrents for ivory purchase changed little since 2019. As in 2019, drivers and deterrents across the segments are similar, but the strength of the belief held are different.

- Participants are most concerned about the extinction of elephants and the cruelty related to ivory trade, as they were in 2019.
- Diehard Buyers considered ivory's artistic value to be more important than the deterrents.
- The legal consequences of ivory is also a highly reported deterrent from purchase.
- Other strong opinions included the desire to share information on illegal ivory purchase with family, friend or the authorities.
- The least important driving factors are the belief that ivory helped with business relationships, brings good health and that it indicates social status and power, though these beliefs are stronger in the Diehard Buyers segment.

Top Drivers and Deterrents Across all Three Segments

■ Drivers of Ivory Purchase
■ Deterrents of Ivory Purchase



Least represented
opinions expressed by
participants:



Ivory indicates wealth, power
and social status



Ivory gifts help to build
business relationships

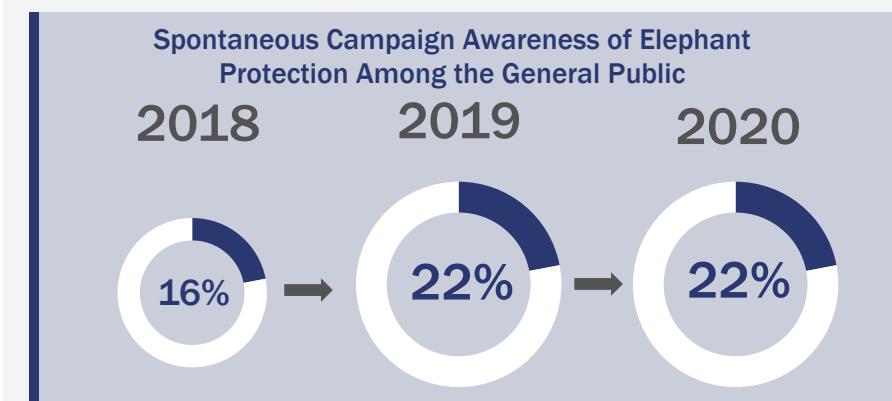


Ivory has healing powers and
brings good health

Awareness of and Attitude toward Campaigns

Spontaneous campaign awareness has remained steady in 2020 and continues to rise among the target group of Regular Overseas Travelers, while remaining steady for Diehard Buyers, another important target group (Note: there is significant overlap between these groups).

- When prompted, 11 percent of participants say they have seen the Ma Weidu Campaign. The group with the highest campaign recall are Diehard Buyers (22%), Ivory Past 12 Month Buyers (29%), and Regular Overseas Travelers (29%).
- 64 percent of Diehard Buyers report that they found the video to be persuasive, though this is higher among Rejectors (85%) and Ban Influenced Citizens (75%).
- 39 percent of Diehard Buyers report that they learned something useful from the video and 38 percent of Diehard Buyers say that the campaign will make them convince others not to buy ivory.



- 11%** Recall of seeing the Ma Weidu Campaign video
↳ **82%** Think that it is **memorable / persuasive**
↳ **81%** Liked the video

More than **7 in 10** participants who planned to buy ivory changed their mind after learning about the laws and seeing the Ma Weidu Campaign

Most Impressive Element Of The Video

The Poached Elephants



Top 3 reactions to the Ma Weidu campaign:

- I will share information about animal protection (44%)
- I made a commitment to protect elephants and avoid ivory purchase (42%)
- I will convince others not to buy ivory (41%)



3. Analysis

3.1 Segmentation of the Market



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Segmenting the Market

Segments are derived using predictive modeling that takes ivory purchase, intention to purchase, attitudes, motives, and barriers toward ivory into account (See Slide 11). Segments tend to have broadly similar characteristics each year. Below are the characteristics for the 2020 segments:

Rejectors



- Rejectors are those who are least likely to purchase ivory. They are more likely to be in the 41-50 age bracket, tend to have a mid-level of education, have a lower income, and tend not to travel regularly compared to the other segments. Almost none have purchased ivory in the past 12 months or intend to purchase it in the next 12 months.
- Rejectors are strongly concerned about the extinction of elephants and animal cruelty. They are also the most likely to share information about animal protection on social media.
- A significant portion knows about the ivory ban in China. This awareness is acquired mostly through online news portals, mobile apps or social media. They strongly believe that the ban is important, and do not believe that ivory brings good health or indicates wealth and power.
- Although only one in ten Rejectors has seen the Campaign, it resonates strongly among the segment once they've seen it.

Ban Influenced Citizens



- Ban Influenced Citizens are those for whom the ivory trade ban in China plays a strong role in their decision making. They tend to be female, have a middle-high education, and have a low-medium income. They have lower ivory purchase rate than Diehard Buyers and their purchase in the past 12 months is decreasing significantly over the four years.
- Before being prompted about the ivory ban, 40 percent of this segments said they are likely to purchase ivory in the future. After being prompted about the ban, this percentage dropped to 0.
- Ban Influenced Citizens believe more strongly in the artistic value of ivory than Rejectors but report a high rate of concern about the illegality of purchase. They are unlikely to recommend others to purchase ivory.
- The vast majority of them haven't seen the Campaign. However when prompted, it resonates strongly among them.

Diehard Buyers



- Diehard buyers are those who are least likely to be swayed from purchasing ivory. In 2020, they are statistically more likely to be female, have a higher income than the other segments, have a medium-high education, and travel more regularly compared to the general population. Their past ivory purchase rate is increasing significantly in 2020, and their intention to purchase ivory in the future remains significant, despite the ivory ban.
- Their most strongly held opinions about ivory relate to its artistic value and cultural heritage, and they are less concerned with price. 61 percent say they have heard of the ivory trade ban when prompted, but they have the lowest rates of knowledge that ivory is illegal to transport internationally.
- They have the highest rates of prompted Campaign recognition of the Campaign tested. However the Campaign doesn't resonate among them as much as for the other two groups.

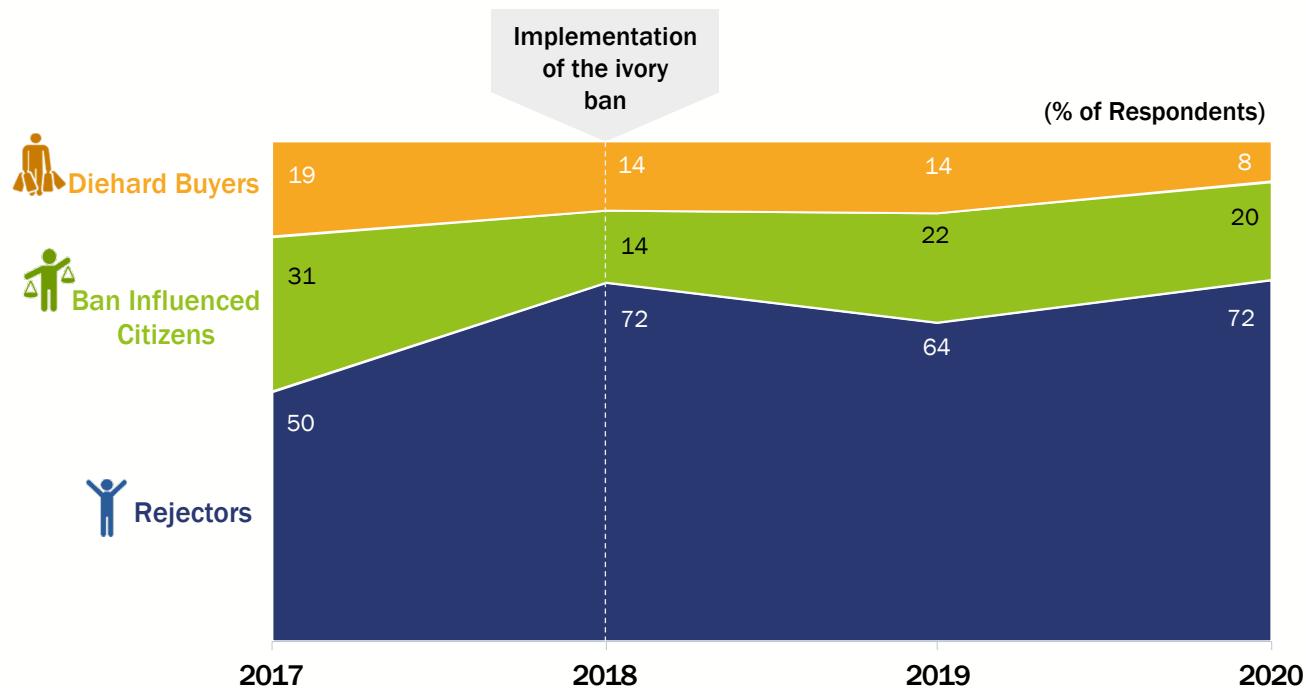
Buyer Segments Distribution – Four-year Comparison

In 2020, the most noticeable shift between segments is the decrease of the percent of Diehard Buyers from 14 percent to 8 percent and the increase in firm Rejectors.

After remaining relatively stable in size during the two years following the ivory ban (14% in 2018 and 2019), the Diehard Buyers segment further shrank to 8 percent in 2020, less than half the level of the 2017 survey.

Ban influenced Citizens have stabilized over the past year. Those who remain in this segment have a below-average knowledge that ivory is illegal to buy (81%) and low awareness of the ban (27%, prompted), indicating that these participants are less exposed to communications or campaigns and could potentially shift to Rejectors if they became aware.

The Rejectors reached again their largest share in 2020, equal to the level in 2018 immediately after the ban was implemented (72%).



Base: Total sample in 15 selected cities, 2017 Survey / 2018 Survey / 2019 Survey / 2020 Survey : n=2000 (Weighted data)

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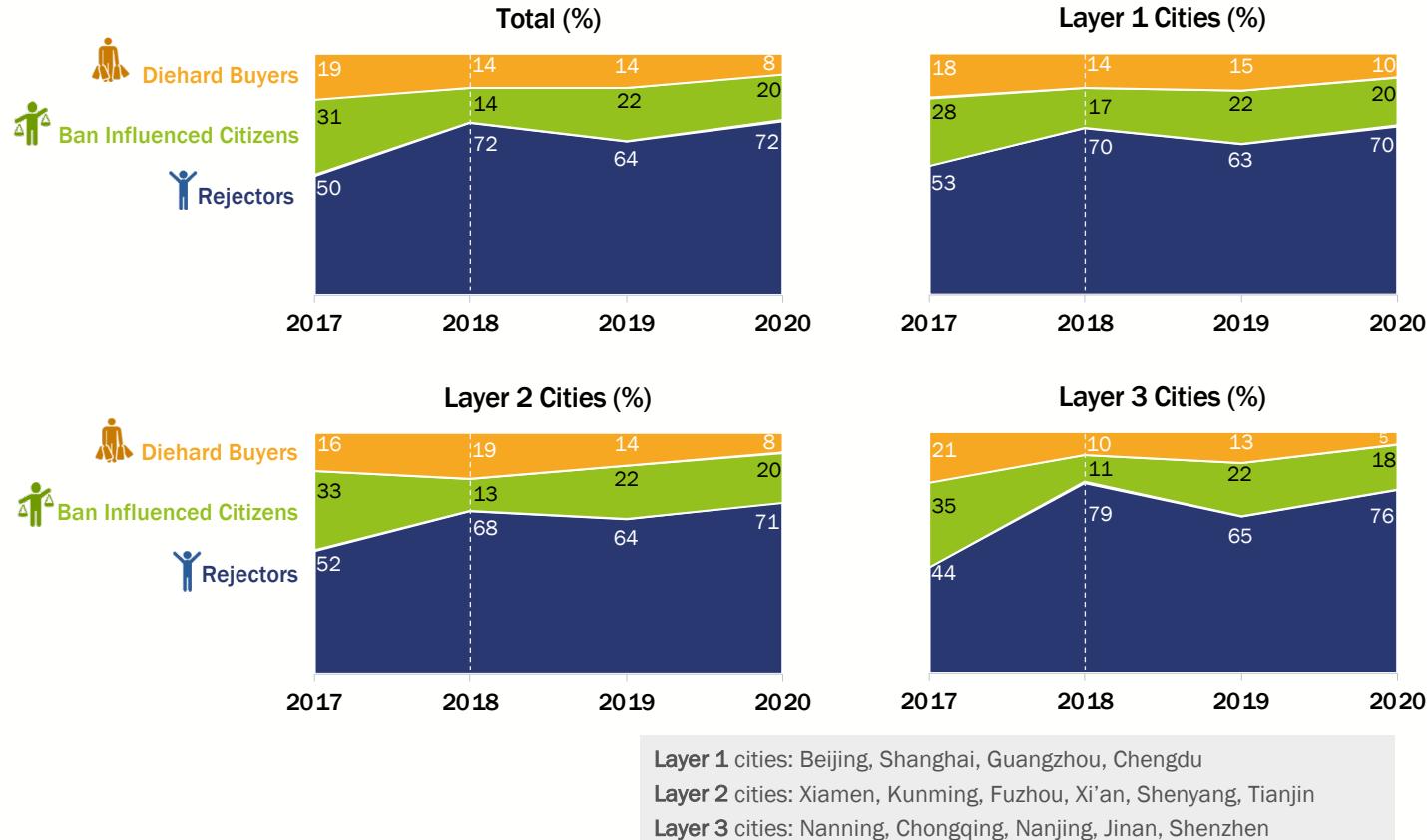
Buyer Segments Distribution by City Layer

A similar pattern is observed among each city layer compared with the total sample, i.e. the Diehard Buyer segment is shrinking, while the Rejector segment is increasing.

In Layers 1 and 2, the Rejectors segment has reached its largest size since 2017. The Rejectors segment is even larger in Layer 2 (71%) than it was in 2018 (68%).

Ban Influenced Citizens have remained relatively stable in each city layer over the past year, with only a small decrease recorded.

The largest shifts between segments are recorded in Layer 3 cities, with only 5 percent of the populations identified as Diehard Buyers and 18 percent identified as Ban Influenced Citizens.



Base: Total sample in 15 selected cities, 2017 Survey / 2018 Survey / 2019 Survey / 2020 Survey : n=2000 (Weighted data)

Buyer Segments Profile – Rejectors

Rejectors of ivory purchase have maintained a broadly-similar profile since before the ban, with a greater degree of similarity between 2019 and 2020.

Compared to a nationally-representative profile, Rejectors tend to be medium or low income, with a mid or low education, and are less likely to travel overseas.

Ivory Rejectors are slightly less likely to travel outside China than the general population in 2020. Non-travelers comprise a greater proportion of rejectors since the ban has come into effect.

The proportion of Rejectors in each Layer has remained similar since the ban was implemented in 2018, with slightly less than half of them living in Layer 1 cities.



		2017 n=1000	2018 n=1446	2019 n=1274	2020 n=1446
Gender	Female	45	49	48	47
	Male	55	51	52	53
Age	18-30	23	22	24	24
	31-40	19	15	19	18
	41-50	21	21	23	24
	51-60	18	18	16	15
	61 and above	19	23	18	19
	High	9	23	7	9
Education	Middle	63	65	64	64
	Low	29	12	29	28
	High income	12	9	4	6
Income Level	Medium income	34	53	32	35
	Low income	54	38	64	59
Travel Overseas*	Never	32	64	64	55
	Occasionally	49	30	29	39
	Regularly	19	6	7	6
City Layers	Layer 1	50	44	46	45
	Layer 2	24	22	23	23
	Layer 3	27	34	31	33

S1. City of residence, S2. Age, S3. Gender, S4. Monthly Personal Income. S5. Education. Q39. Travel behavior - Weighted data
Base: Rejectors in 15 selected cities for 2017/2018/2019/2020, n=1000/n=1446/n=1274/n=1446

*See slide 7 for note on travel

Buyer Segments Profile – Ban Influenced Citizens

Ban Influenced Citizens are skewed towards older age groups, lower education/income and non-travelers compared to the past three years.

The profile of Ban Influenced Citizens has changed in 2020 compared to the past three years for several demographics.

Their share of non-travelers (which could potentially be impacted by the COVID-19 pandemic), of low-income participants and low-education participants has increased in 2020.

Almost half of Ban Influenced Citizens live in Layer 1 cities, as observed in 2019.



		2017 n=628	2018 n=286	2019 n=441	2020 n=391
Gender	Female	52	54	56	51
	Male	48	46	44	49
Age	18-30	27	43	28	29
	31-40	18	26	18	14
	41-50	25	15	20	15
	51-60	12	8	16	20
	61 and above	18	8	19	21
Education	High	10	38	13	9
	Middle	61	52	61	56
	Low	28	10	27	36
Income Level	High income	14	13	5	4
	Medium income	43	44	45	34
	Low income	43	44	49	62
Travel Overseas	Never	21	41	41	55
	Occasionally	56	43	40	33
	Regularly	23	16	19	12
City Layers	Layer 1	42	55	46	47
	Layer 2	24	22	23	24
	Layer 3	34	23	31	29

S1. City of residence, S2. Age, S3. Gender, S4. Monthly Personal Income. S5. Education. Q39. Travel behavior – Weighted data
Base: Ban Influenced Citizens in 15 selected cities for 2017/2018/2019/2020, n=628/n=286/n=441/n=391

Buyer Segments Profile – Diehard Buyers

The profile of Diehard Buyers has seen some significant changes in 2020 vs 2019, particularly in terms of gender, education and travel behavior.

In 2020, Diehard Buyers are more likely to be female, similar to their gender profile pre-ban.

They are also more skewed towards middle education compared to previous years. The share of non-travelers has dropped to its 2017 level and the portion of regular Diehard Buyers travelers is significantly larger than among the other segments in 2020.

Since the ban was implemented in 2018, Diehard Buyers are increasingly more living in Layer 1 cities (from 45% in 2018 to 56% in 2020).

		2017 n=372	2018 n=268	2019 n=285	2020 n=164
Gender	Female	54	43	43	59
	Male	46	57	57	41
Age	18-30	28	22	29	25
	31-40	16	23	18	23
Education	41-50	17	31	20	19
	51-60	17	12	14	17
Education	61 and above	21	12	19	16
	High	9	33	15	18
Education	Middle	63	62	56	73
	Low	27	5	29	10
Income Level	High income	15	13	8	13
	Medium income	42	61	42	45
	Low income	42	26	50	41
Travel Overseas	Never	18	38	36	20
	Occasionally	52	36	41	51
	Regularly	30	27	23	29
City Layers	Layer 1	46	45	50	56
	Layer 2	19	33	22	24
	Layer 3	35	23	28	20

S1. City of residence, S2. Age, S3. Gender, S4. Monthly Personal Income. S5. Education. Q39. Travel behavior – Weighted data
Base: Diehard Buyers in 15 selected cities for 2017/2018/2019/2020, n=372/n=268/n=285/n=164



3.2 Ivory Purchase Behavior



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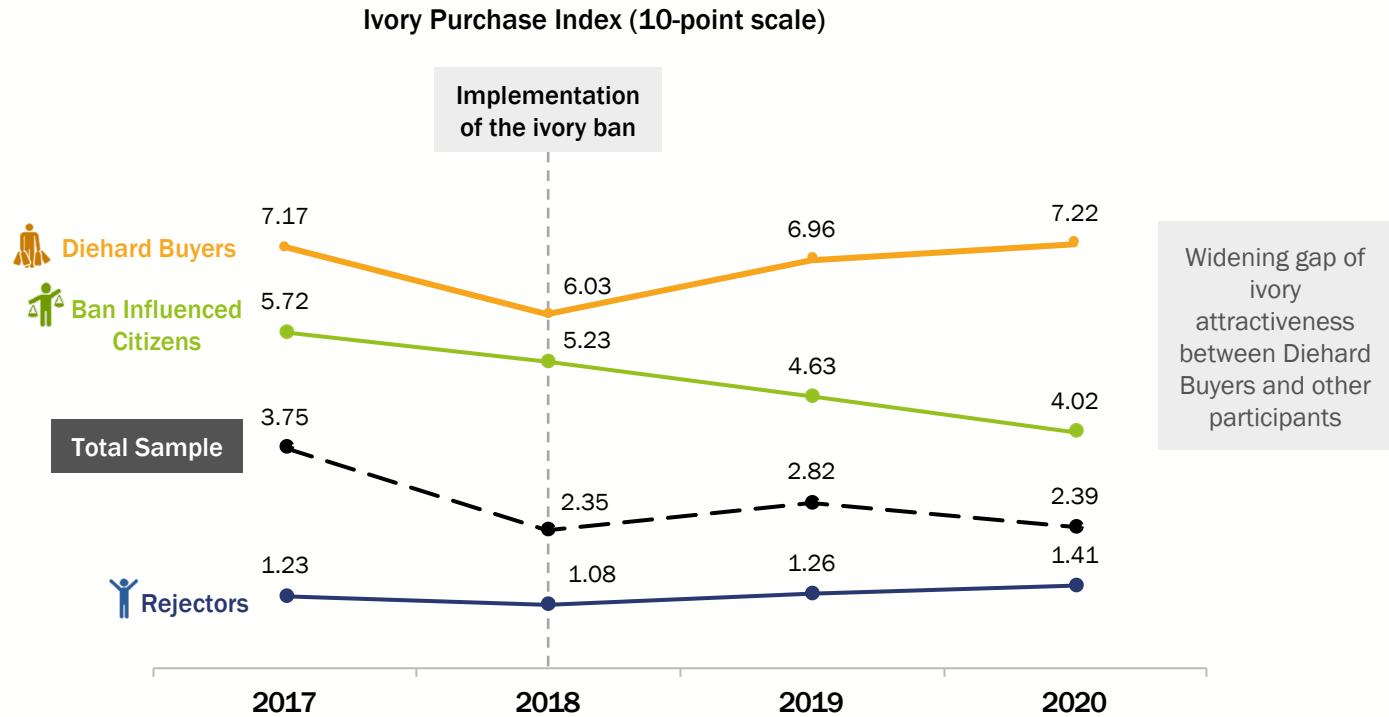
Ivory Purchase Index - Four-year Comparison (Total and Segments)

Overall, ivory remains less attractive to participants after the ban compared to pre-ban levels. With the stated decrease in ivory purchase between 2019 and 2020, the ivory purchase index has declined correspondingly.

The ivory purchase index (see Slide 12 for full explanation) represents how attractive ivory purchase is to the buyer on a 10-point scale.

The attractiveness of ivory has decreased overall but for the Diehard Buyers segment, the Ivory purchase Index has reached its highest level since the measurement started. This is likely influenced by the shrinking of the Diehard Buyers segment so that only the core Diehard Buyers remain (who are strongly attracted by ivory).

Since the ban was implemented, Ban Influenced Citizens are finding ivory consistently less attractive to purchase, while Rejectors maintain a very low level of desire to purchase ivory.



Ivory Purchase Index – Other Sub-groups

Ivory has lost attractiveness particularly among the younger participants, among non- or occasional travelers and across all city layers since 2019.

The Ivory Purchase Index has reached its lowest levels among the young participants, particularly those aged 18-30, since the measurement started. It shows a decline of ivory attractiveness among young people.

Ivory has also significantly lost attractiveness among those who don't travel regularly vs 2019. However, its attractiveness remains relatively high among the regular overseas travelers.

In the Layer 1 cities, the Ivory Purchase Index has reached its lowest level since 2017.

Note: In 2018, we had relatively few participants of 61 and above in our sample. In 2019 and 2020, we were able to interview a larger number of this elderly category, similar to 2017 and therefore the specific +61 category for 2018 has to be reviewed with caution.

Ivory Purchase Index (10-point scale)

		2017	2018	2019	2020
	Total Sample	3.75	2.35	2.58	2.39
Age	18-30	3.85	2.90	3.05	2.38
	31-40	3.68	3.16	3.01	2.74
	41-50	3.54	2.31	2.55	2.35
	51-60	3.38	1.87	2.42	2.48
Travel Overseas	61 and above	3.80	1.32	2.95	2.06
	Never	2.46	1.63	1.94	1.56
	Occasionally	3.78	2.85	3.46	2.93
	Regularly	4.65	4.79	5.06	4.88
City Layers	Layer 1	3.63	2.71	2.99	2.51
	Layer 2	3.43	2.35	2.75	2.37
	Layer 3	4.17	1.81	2.61	2.24

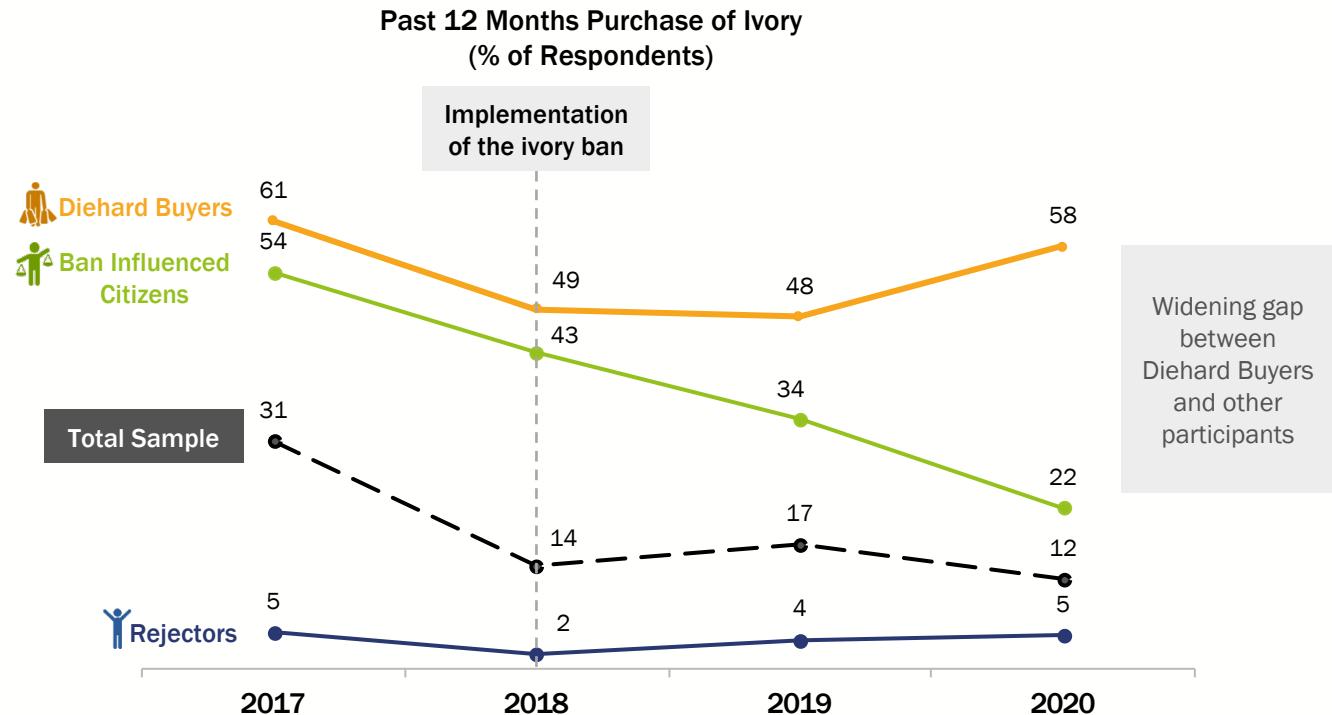
Purchase of Ivory in Past 12 Months - Four-year Comparison (Total and Segments)

At 12 percent, the self-reported incidence rate of ivory purchase in the past 12 months (P12M) has reached its lowest level since measurement began.

The decrease in reported incidence is driven by a continuous and significant drop of ivory purchase among the Ban Influenced Citizens segment. The P12M purchase incidence among this segment has dropped to less than half over the past four years (from 54% to 22%).

However, there has been a sharp increase in the ivory purchase rate of Diehard Buyers in 2020, almost equaling the 2017 pre-ban survey.

The widening gap between Diehard Buyers and the other segments is aligned with the pattern observed for ivory attractiveness (i.e. Ivory Purchase Index). The size of the Diehard Buyers segment is at its lowest percentage since 2017, with only the core Diehard Buyers remaining (i.e. those who are the most persistent in their behavior and intention to purchase ivory).



Purchase of Ivory in Past 12 Months – Other Sub-groups

The past 12 months purchase incidence drop is mostly driven by the younger participants aged 18-30, and those with a lower income and a lower education vs 2019.

A decrease in reported incidence is reflected in most groups of consumers but is driven by a large decrease in incidence among participants aged 18-30 and 61+.

There have been decreases in the incidence rates in each city layer. The largest drop in ivory purchasing habits compared to 2019 levels is recorded among those who live in Layer 1 cities.

Non-travelers and occasional travelers have also seen a decrease in their ivory purchase habits, while Regular Overseas Travelers maintained a relatively high level of ivory purchase in the past 12 months (44%) and maintains its level as the only group that has a higher reported rate of purchase than in 2017.

**Past 12 Months Purchase of Ivory
(% of Respondents)**

	Total Sample	2017	2018	2019	2020
Gender	Female	32	16	17	16
	Male	29	13	17	9
Age	18-30	31	22	19	13
	31-40	28	24	20	18
Education	41-50	30	12	13	12
	51-60	30	9	10	11
Income Level	61 and above	34	1	22	7
	High	26	28	26	26
Travel Overseas	Middle	31	9	16	14
	Low	32	8	16	3
City Layers	High income	31	24	29	25
	Medium income	38	15	22	20
	Low income	25	10	13	6
Travel Overseas	Never	15	4	6	2
	Occasionally	34	21	23	18
	Regularly	40	45	48	44
City Layers	Layer 1	30	20	20	14
	Layer 2	28	11	16	11
	Layer 3	34	7	14	10

Purpose of Last Ivory Purchase *in Past 12 Months*

Those who purchased ivory in the past 12 months mostly intended to offer it as a gift to a friend or a family member.

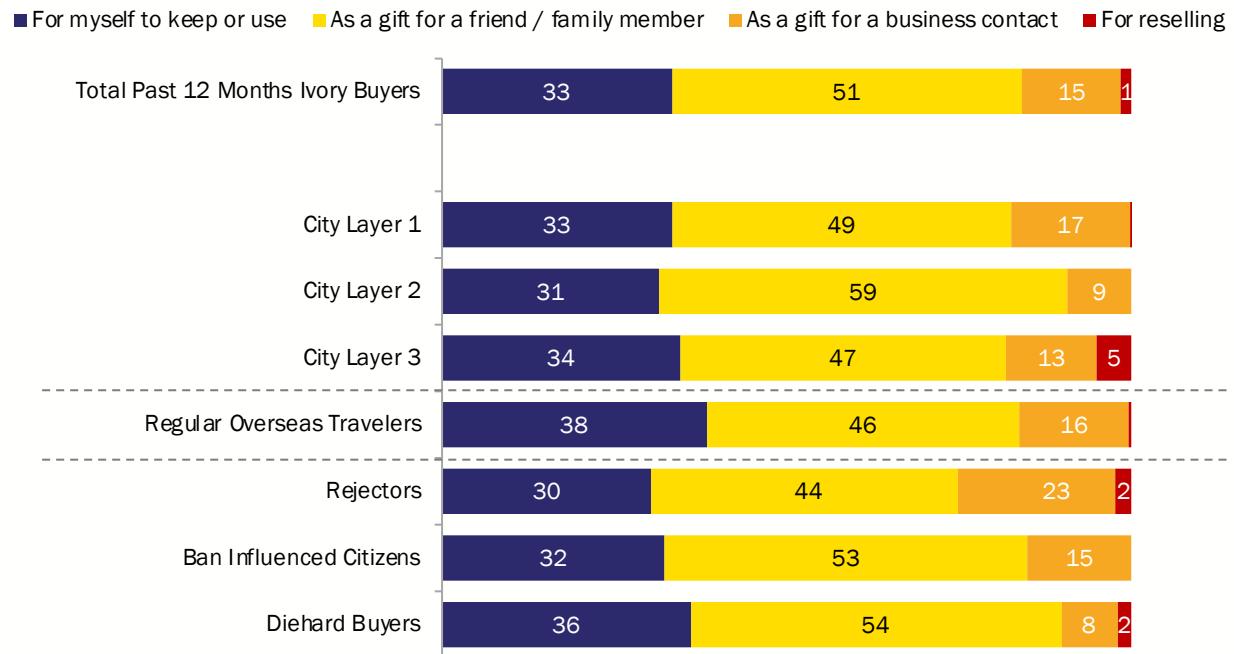
Over half (51%) of the P12M ivory buyers intended to offer the ivory purchased as a gift to a friend or a family member. This is particularly driven by the buyers who live in Layer 2 cities and Diehard Buyers.

A third of the buyers also purchased ivory with the intention to keep it for themselves, particularly the Regular Overseas Travelers.

The reasons for buying ivory among Rejectors are more diverse, with almost one in four purchasing ivory to be offered as a gift for a business contact.

Only 1 percent claim that they bought ivory to resell it; these buyers are mostly living in Layer 3 cities.

Purpose of Last Ivory Purchase in Past 12 Months – 2020
(% of Past 12 Months Ivory Buyers)



Q2h. [2020 new question]. Thinking of the last time you bought ivory, what purpose did you buy it for? – Weighted data

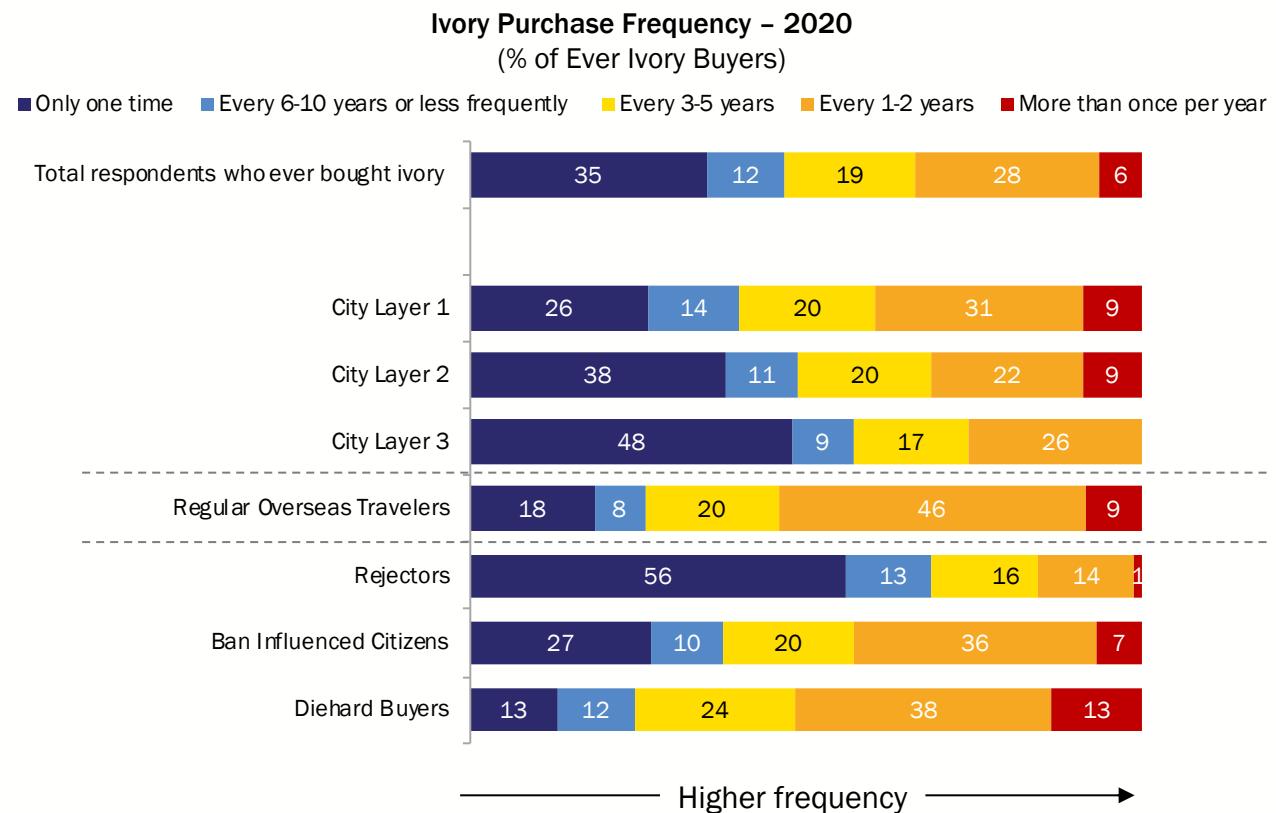
Base: Past 12 Months Ivory Buyers, n=245; City layer 1/layer 2/layer 3, n=131/51/63; Regular Overseas Travelers, n=80; Rejectors/Ban Influenced Citizens/Diehard Buyers , n=65/85/94

Ivory Purchase Frequency

Among those who have bought ivory any time in the past, almost half are occasional or ‘one-time’ buyers. However, a third claim to buy ivory at least every 1 to 2 years.

The frequency of ivory purchase varies widely by sub-group. Buyers who live in Layer 1 cities are more likely to be ‘frequent’ buyers, i.e. 40 percent claim to buy ivory every 1 to 2 years or more frequently, while those who live in Layer 3 cities are more likely to be occasional buyers, i.e. 48 percent of the Layer 3 buyers purchased ivory only once in the past vs 26 percent in Layer 1 cities.

Regular Overseas Travelers and Diehard Buyers are those who buy ivory the most frequently, i.e. 55 percent and 51 percent respectively buy ivory every 1 to 2 years or more frequently. As expected, Rejectors are the least frequent buyers, with seven in ten (69%) claiming to buy ivory every 6 to 10 years or less frequently.



Q2g. [2020 new question]. How frequently do you buy ivory? – Weighted data

Base: Ever bought ivory, n=387; City layer 1/layer 2/layer 3, n=193/82/112; Regular Overseas Travelers, n=102; Rejectors/Ban Influenced Citizens/Diehard Buyers, n=160/121/106

Ivory Purchase Channels - Four-year Trend

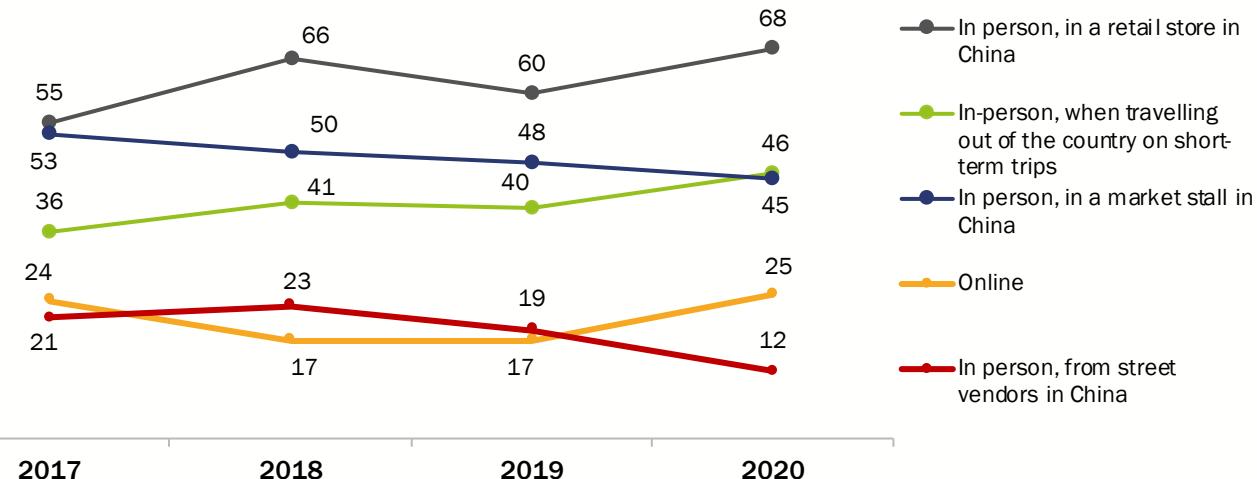
Among the channels used to purchase ivory in the past 12 months, retail stores remain the leading channel while online purchase increased in 2020.

The purchase of ivory in person from a retail store has reached its highest level since 2017 (68%). Buying ivory online has become significantly more prevalent in 2020 vs 2019, with 25 percent of the buyers having used this channel in 2020. Note: These increases are relative to other purchase channels, with the overall purchase in each channel declining by nature of the lower overall ivory purchase rate.

E-commerce platforms remain the most used online channel for ivory purchase, though it has declined, and the importance of artefact collection websites have been increasing steadily.

Category websites and social media have been declining in prominence.

Top 5 Ivory Purchase Channels* - Among ivory purchasers (%)



Online Channels for Ivory purchase
Among online buyers (%)



	2017	2018	2019	2020
E-commerce platform	81	97	92	75
Artefact collection website, app and forum	49	61	62	73
Second-hand trade apps			23	38
Short video apps			21	30
Forum (e.g. Baidu forum)			23	26
Category website (equivalent to Craigslist)	52	36	33	25
Social media	34	40	26	21

*Note: Top channels were selected based on the 2020 data.

Q3a. Where did you purchase ivory in the past 12 months?; Q3b. Could you please indicate which online source(s) you purchased ivory from? – Weighted data
(Please note that timeframe of question has changed over time to reflect the desired information to be gathered in each study)

Base: 2020 Past 12 Months Buyers, n=245; 2019 Past 12 Months Buyers, n=338; 2018 Buyers since 2018, n=246; 2017 Ever Buyers, n=958

Online ivory buyers, 2020: n=61 / 2019: n=59 / 2018: n=42 / 2017: n=230



Ivory Purchase Channels – Other Sub-groups

The purchase of ivory in person from a retail store in Mainland China remains the most commonly cited source of ivory purchase.

Regular Overseas Travelers report significantly higher rates of purchase abroad or online.

The purchase of ivory when traveling out of the country on a short trip is the second most popular purchase channel among the majority of sub-groups.

Ivory Purchase Channels – 2020 (% of Past 12 Month Ivory Buyers*)	Total	Layer 1	Layer 2	Layer 3	Regular Overseas Travelers	Rejectors	Ban Influenced Citizens	Ban Influenced Citizens	Diehard Buyers
	(n=245)	(n=131)	(n=51)	(n=63)	(n=80)	(n=65)	(n=86)	(n=94)	
1 In person, in a retail store in China	68	65	75	67	75	49	73	76	
2 In-person, when traveling out of the country on short-term leisure/business trips	46	50	40	44	59	44	46	48	
3 In person, in a market stall in China	45	44	49	44	43	37	54	43	
4 Online	25		29	22	20	36	22	29	24
5 In-person, at an auction	17		18	21	10	23	12	18	19
6 In person in China, from a private individual	13		14	11	11	12	12	7	19
7 In person, from street vendors in China	12		13	8	12	16	6	6	21
8 In-person, when traveling out of the country on long-term trips for work	8		7	13	7	12	4	8	11

Q3a. Where did you purchase ivory in the past 12 months? – Weighted data

* Timeframe of question has changed over time to reflect the desired information to be gathered in each study

Base: 2020 ivory buyers, n=245; City layer 1/layer 2/layer 3, n=131/51/63; Regular Overseas Travelers, n=80; Rejectors/Ban Influenced Citizens/Diehard Buyers, n=65/86/94

Ivory Purchase Outside Mainland China – Among Travelers

Of those who travel outside of Mainland China at least occasionally, 15 percent say they have purchased ivory abroad at some point in their lives, decreasing sharply from 27 percent in 2019.

Thailand remains the most popular destination that participants say they have ever purchased ivory. Cambodia has risen to the 2nd most important destination in 2020, tied with Hong Kong SAR.

The share of travelers who bought ivory in one of these top 3 destinations has increased but as the overall number of travelers who bought ivory has declined in 2020, this does not necessarily represent a higher number of buyers in each of these destination.

2018 2019 2020

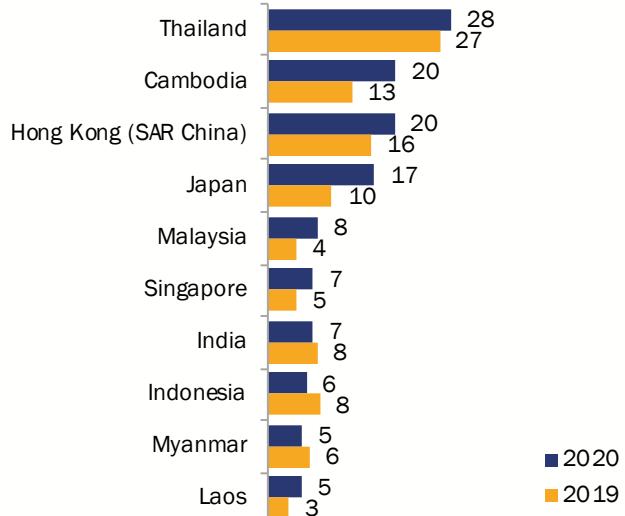
18% 27% 15%

... of Travelers who Bought Products Made from Ivory on Trips Outside Mainland China in the Past



Countries and Regions[^] where Products Made from Ivory Were Bought on Trips Outside Mainland China

(% Among those who bought ivory outside Mainland China)



[^]Only countries and territories with 5 percent or above indicated

Note: The prominence of some destinations over others may reflect the popularity of these areas as holiday destinations. The format of travel question was refined between 2018 and 2019 and results are therefore not directly comparable to 2018.

Note on COVID-19: Travel was greatly disrupted in 2020 but for some months that were included in the prior 12 months, international travel was still possible

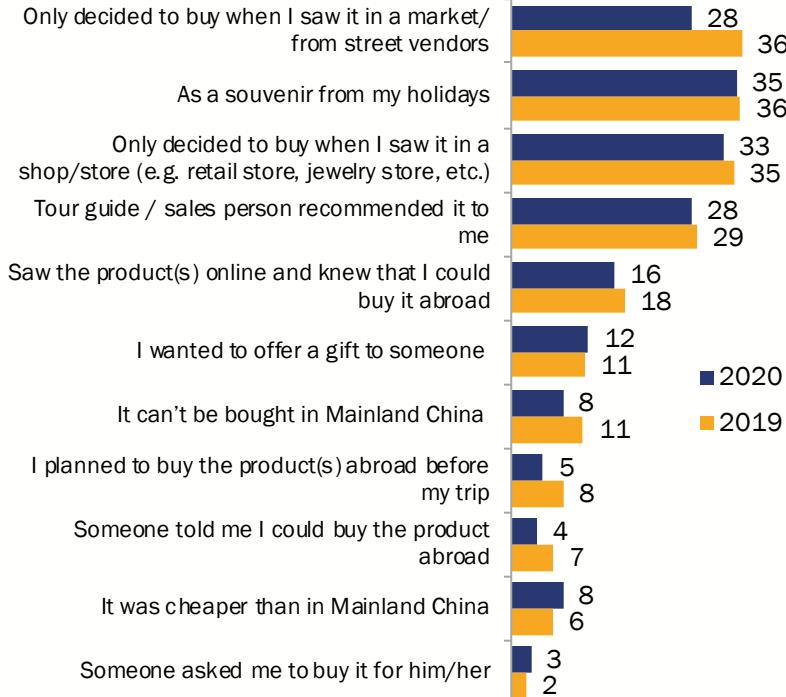
Reasons for Purchasing Ivory Outside Mainland China*

Participants who have ever purchased ivory outside of Mainland China tended to do so without having planned it prior to their trip; most overseas ivory purchasers only decided to purchase ivory while abroad.

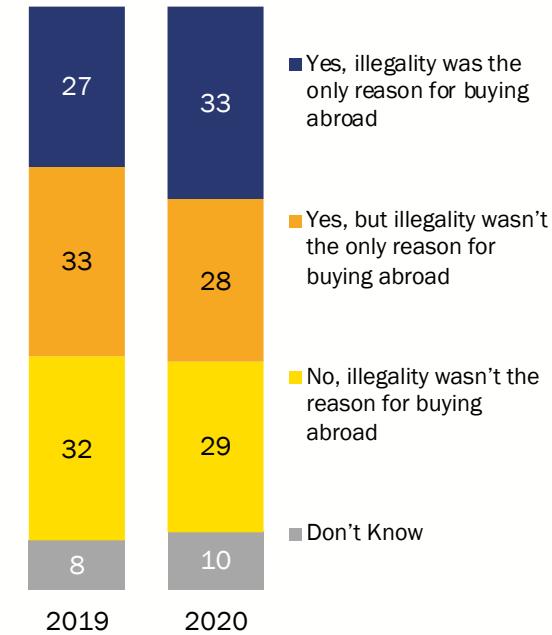
A third of the overseas buyers (33%) reported that illegality in China was the only reason they bought abroad. This reason has increased significantly vs 2019.

Over 50 percent of participants bought ivory abroad at least partly because it is illegal to purchase in Mainland China. Less than one-third of people bought ivory abroad exclusively for reasons other than its illegality in Mainland China.

Why did you buy ivory products abroad? (% of Respondents)



And Did You Buy Ivory Products Abroad Because They Are Illegal in Mainland China? (% of Respondents)



Q43 [2019/2020 question]. Why did you buy ivory products abroad? (Respondents were presented with a list of options); Q44 [2019/2020 question]. And did you buy these ivory products abroad because they are illegal in Mainland China? – Weighted data

Base: Overseas ivory buyers 2019/2020: n=241/n=144

*See slide 7 for note on travel.

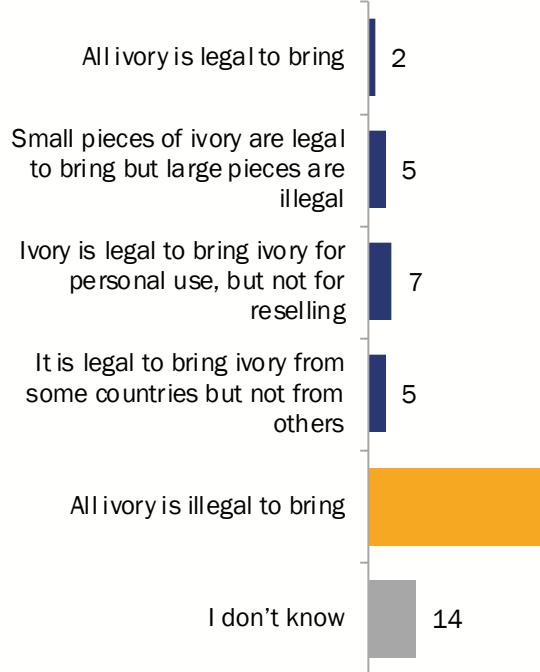
Bringing Ivory Products Back to China

Almost three quarters (73%) of the participants surveyed believe that all ivory is illegal to bring back to Mainland China, while 19 percent think that it is legal (in different ways), and 14 percent do not know.

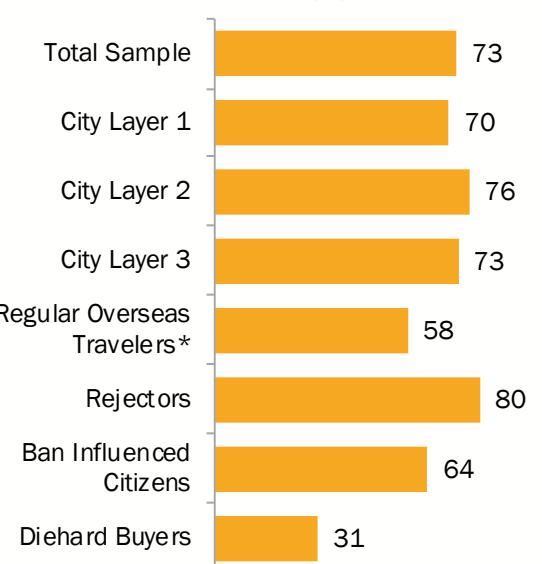
Rejectors have the highest awareness of the illegality of bringing ivory back to China, while only 31 percent of the Diehard Buyers claim that it is illegal.

More than four in ten Regular Overseas Travelers are either not sure or believe that it is legal to bring some ivory back to China.

Is it legal to bring ivory back into Mainland China from abroad? – 2020 (%)



All ivory is illegal to bring – by sub-groups - 2020 (%)



*Note: this group overlaps with other segments

Q21. [2020 revised question]. Is it legal to bring ivory back into Mainland China from abroad? Please select all that apply. – Weighted data

Base: Total sample, n=2000; City layer 1/layer 2/layer 3, n=920/460/620; Regular Overseas Travelers, n=181; Rejectors/Ban Influenced Citizens/Diehard Buyers, n=1446/391/164

Alternatives to Ivory

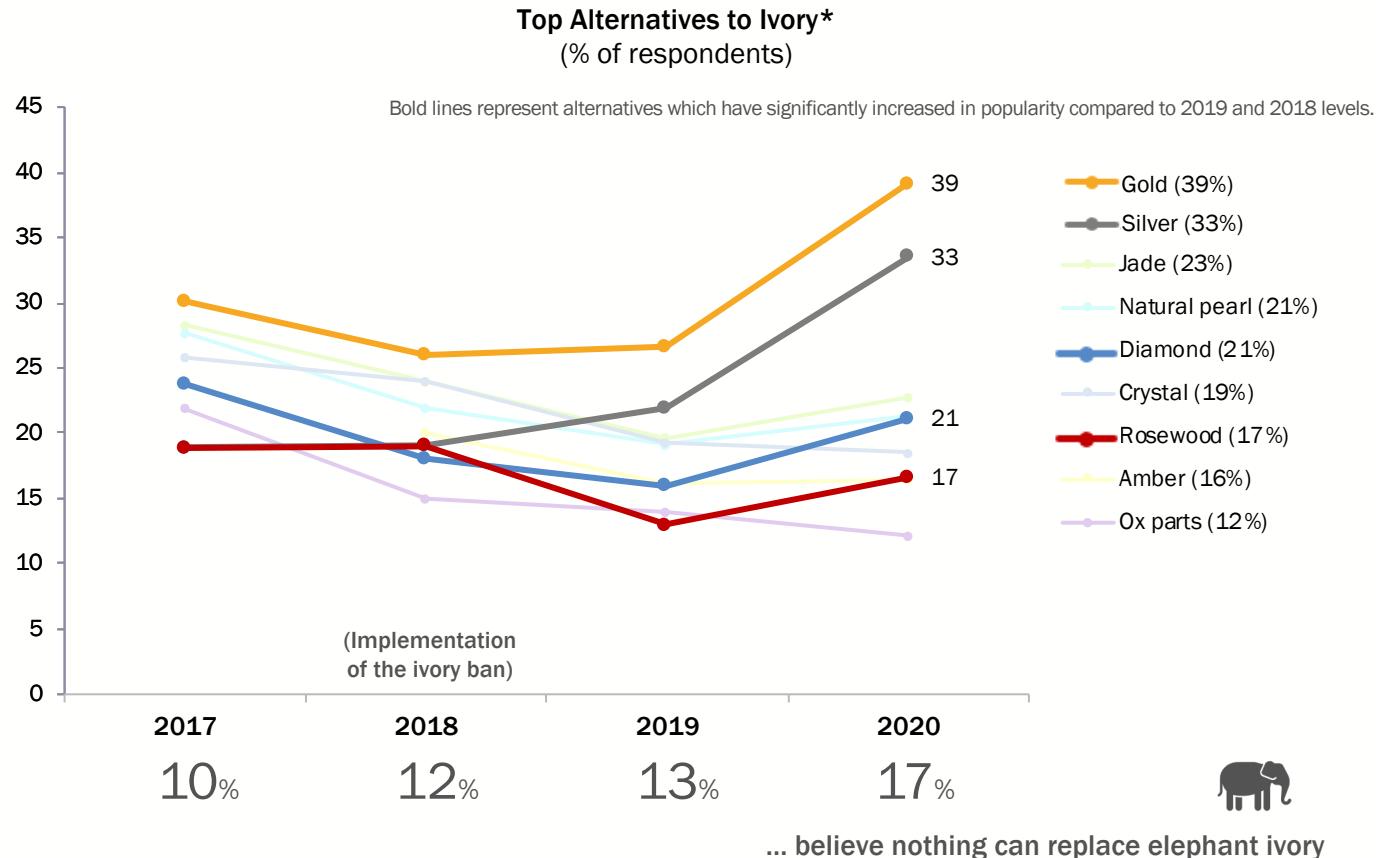
Gold and silver remain the most popular alternatives to ivory since 2019. These alternatives have gained popularity in 2020.

The popularity of the majority of alternatives to ivory have not changed significantly since 2019.

Gold, Silver and Diamond have significantly increased in popularity as an ivory alternative compared to 2019 and 2018 levels. Rosewood has increased in popularity compared to 2019.

17 percent of the participants surveyed believe that nothing can replace ivory, the highest share across the past four years.

Other animal products such as mammoth ivory (6%), walrus ivory (5%), Hawksbill shell (4%) were ranked low as alternatives to ivory (data not shown).



*Note: Top alternatives were selected based on the 2020 data, only showing those >10%.

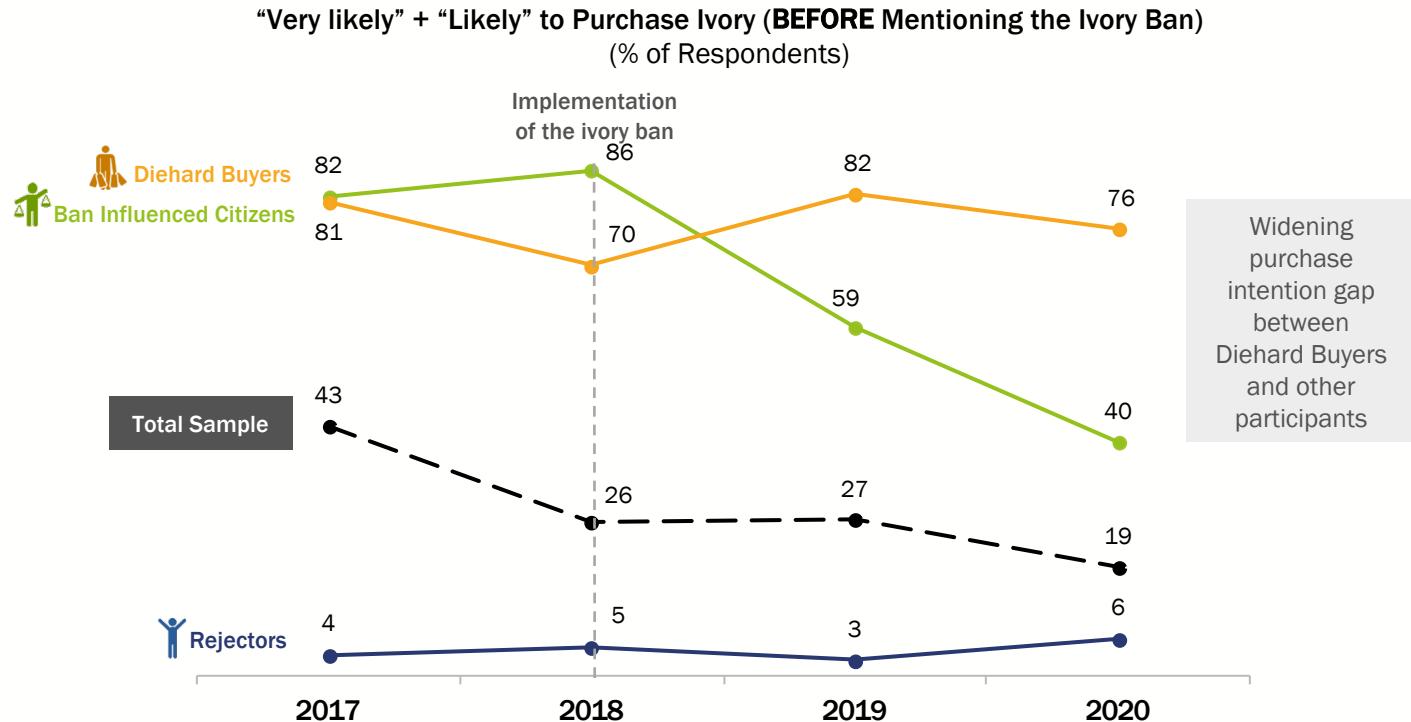
Intention to Purchase Ivory Ever in the Future

Asked **before** Mentioning the Ivory Ban, with 2017–2020 Comparison

At 19 percent, intention to purchase ivory in the future has dropped significantly since 2019. Intention to purchase ivory in the future (before the ban is mentioned) is driven primarily by Diehard Buyers.

There is a continuous and significant decline in the intention to purchase ivory in the future among Ban Influenced Citizens (before the ban is mentioned), dropping by more than half since 2018 (from 86% to 40%).

Purchase intention among Diehard Buyers remains high, with only a slight (non-significant) decrease in 2020.



Q5a. How likely will you be to purchase ivory and/or anything made of ivory in the future? – Weighted data

Base: 2017/2018/2019/2020 Total Sample, n=2000; Rejectors, n=1000/n=1446/n=1274/n=1446; Ban Influenced Citizens, n=628/n=286/n=441/n=391; Diehard Buyers, n=372/n=268/n=285/n=164

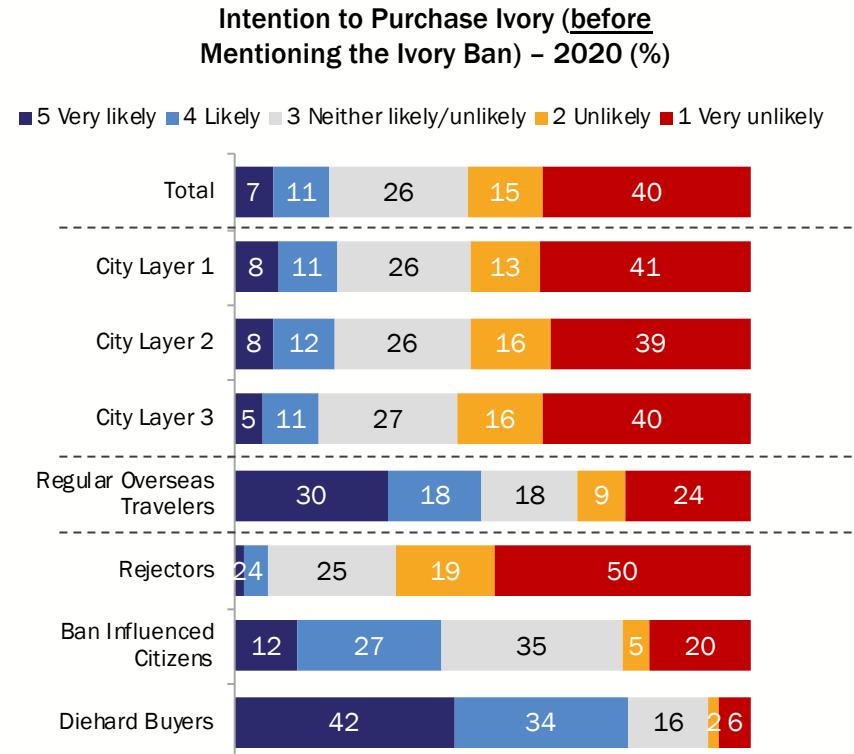
Intention to Purchase Ivory Ever in the Future

Asked **before** Mentioning the Ivory Ban, with 2017–2020 Comparison – Other Sub-groups

For many sub-groups, intention to purchase ivory has dropped to its lowest level since measurements began.

Intention to purchase ivory in the future (before the ban is mentioned) is driven primarily by Regular Overseas Travelers (48%) and Diehard Buyers (76%).

There is a continuous and significant decline in the intention to purchase ivory in the future among Ban Influenced Citizens (before the ban is mentioned), dropping by more than half since 2018 (from 86% to 40%).



“Very likely” + “Likely” to Purchase Ivory before Mentioning the Ivory Ban (%)

	2017	2018	2019	2020
43	26	27	19*	
39	29	27	19	
40	27	25	20	
49	18	26	16	
49	58	53	48	
4	5	3	6	
82	86	59	39	
81	70	82	76	

Note: Green indicates the lowest point at which the most “preferable” result is observed

* Figure is higher than the numbers that appear in the chart to the left due to rounding

Q5a. How likely will you be to purchase ivory and/or anything made of ivory in the future? – Weighted data

Base: 2017/2018/2019/2020 Total Sample, n=2000; Rejectors, n=1000/n=1446/n=1274/n=1446; Ban Influenced Citizens, n=628/n=286/n=441/n=391; Diehard Buyers, n=372/n=268/n=285/n=164

Scatterplot Analysis

Breakdown by Key Sub-groups

This scatterplot analysis is based on “stated” response: the percentage of participants who claim to have purchased ivory in the past 12 months for each sub-group (% “Bought in Past 12 Months”) and the percentage of participants who claim they are likely to purchase ivory in the next 12 months.

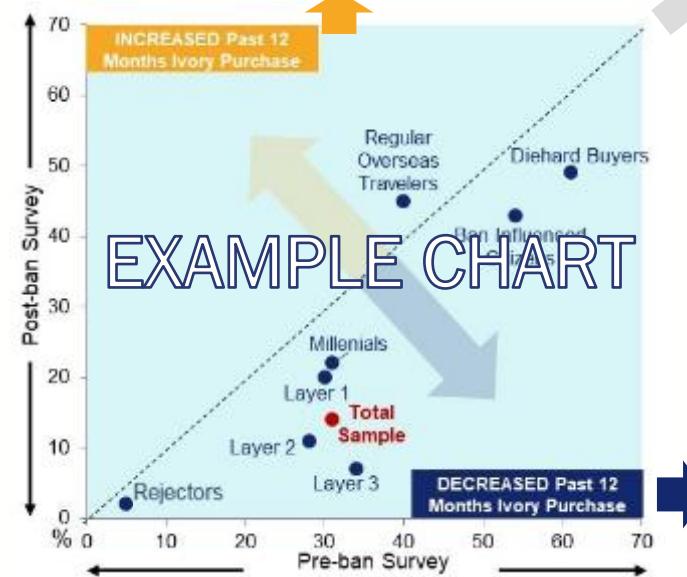
This analysis provides a picture of the ivory purchase evolution in 2020 vs 2019 (past year) as well as 2020 vs 2017 (pre-ban).

This chart is useful to identify which sub-groups have been most influenced by the ban (i.e., those furthest below the diagonal axis) and those who are the most persistent and for whom messages or actions are required as a priority (i.e., those who are furthest above the diagonal axis).

Groups close to the line may be experiencing minor fluctuations; groups farther from the line are exhibiting a larger change in their behavior or intentions.

- Sub-groups located significantly above the diagonal axis have increased their purchases or intend to purchase ivory in the stated time period.
- These groups may require further initiatives to alter their ivory purchases or intent.

The diagonal axis indicates the same % as the previous measured year (2019 or 2017). The closer sub-groups are to this diagonal, the less their purchase or intent to purchase has changed.



- Sub-groups located significantly below the diagonal axis have decreased their purchases or intent to purchase ivory in the stated time period.
- This may indicate the effect of the ban or behavior change initiatives.

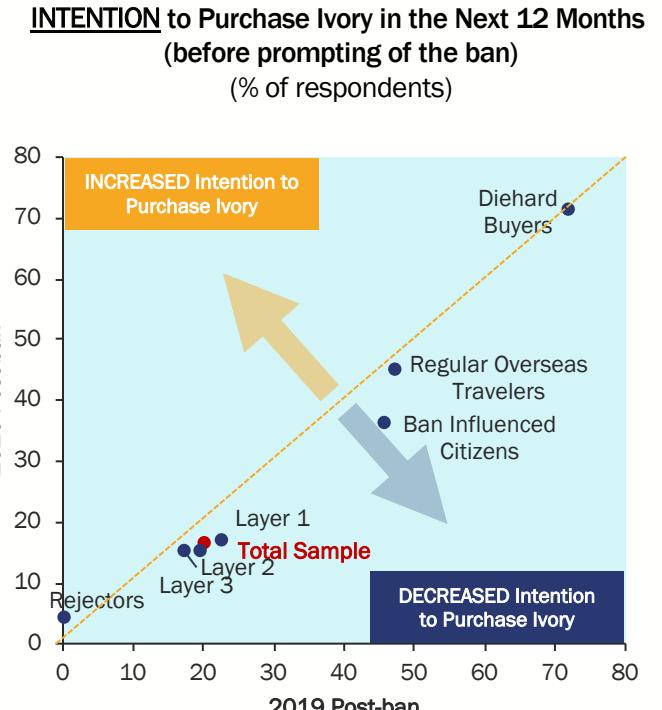
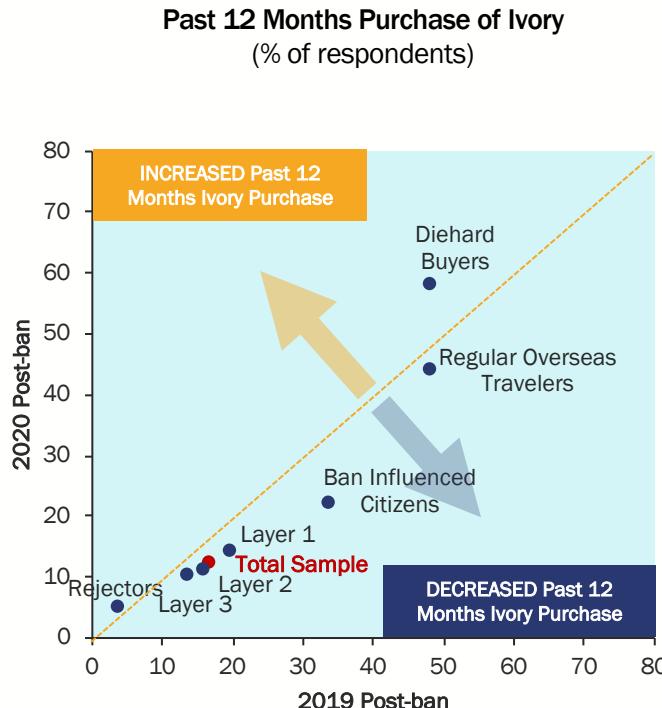
Past and Future Purchase – Trends for Key Sub-groups, 2020 vs 2019

Diehard Buyers bought more ivory in 2020 vs 2019, while Ban Influenced Citizens purchased less ivory, with less intention to purchase in the next 12 months as well.

The largest decrease in past purchase and future intention to purchase ivory is among Ban Influenced Citizens.

Regular Overseas Travelers have a similar level of intention to purchase compared with 2019.

Diehard Buyers did show a significant increase in their purchase of ivory in 2020 vs 2019. This trend could be due to the fact that only the core diehard buyers remain (this segment is smaller than 2019), hence the higher purchase incidence.



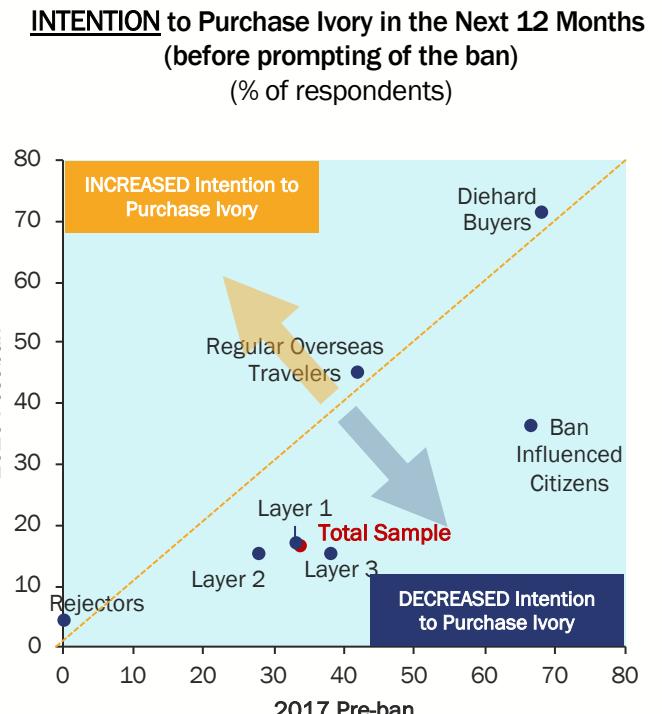
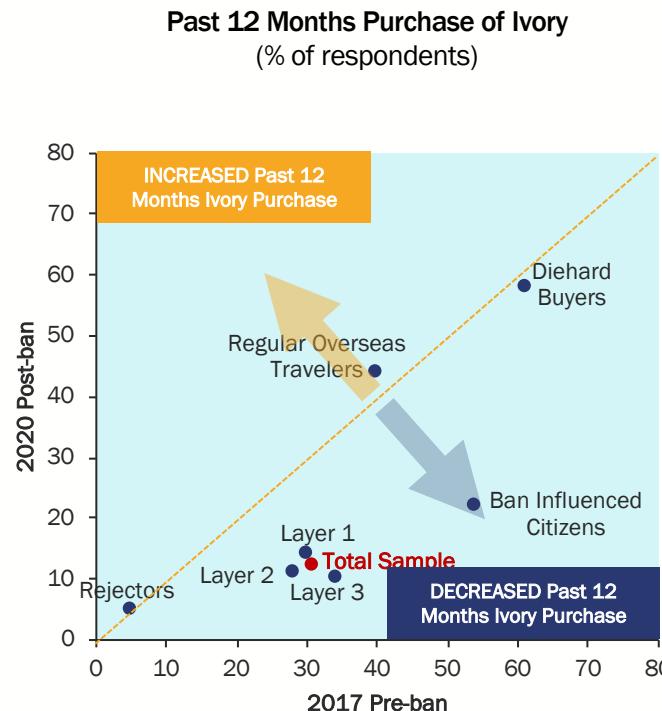
Past and Future Purchase – Trends for Key Sub-groups, 2020 vs 2017

The overall rate of ivory purchase and intention to purchase from 2017 to 2020 has declined significantly, mostly driven by the Ban Influenced Citizens.

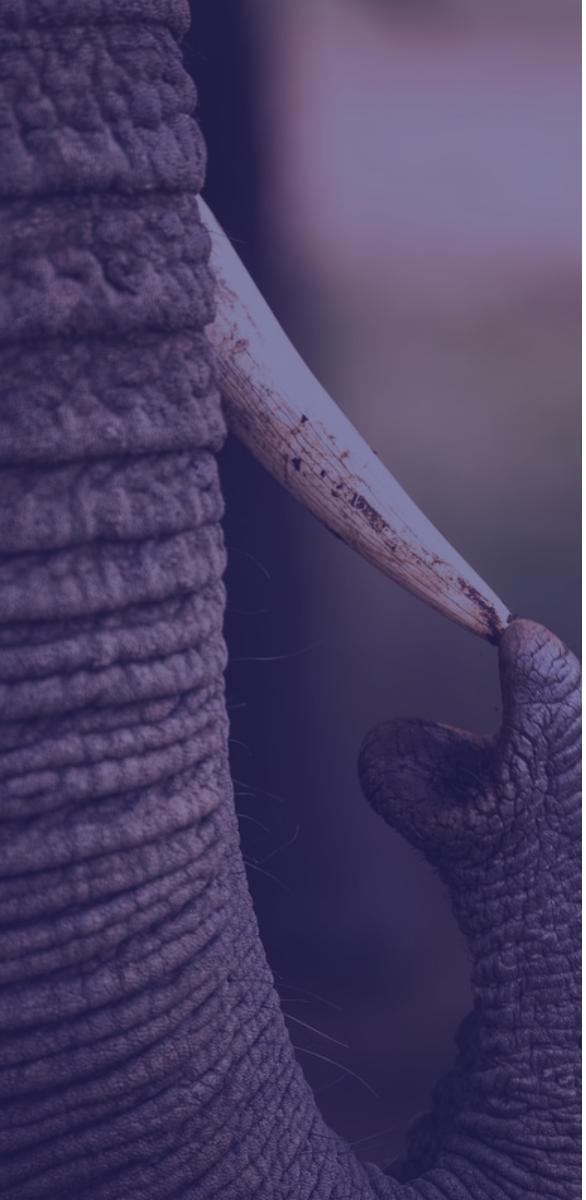
Regular Overseas Travelers are the only group purchasing slightly more ivory than they did in 2017, with Diehard Buyers and Regular Travelers the only groups intending to purchase more ivory in the next 12 months.

Diehard Buyers decreased in their intention to purchase ivory between 2017 and 2018 (previous reports) but have increased to higher-than-2017 levels in 2020.

Ban Influenced Citizens have exhibited the largest decrease in past purchase and future intention to purchase.



Note: Intention to purchase ivory in the future is separate to the Ivory Purchase Index, which combines a number of factors to reflect a group's overall ivory purchase persistence.



3.3 Drivers and Deterrents of Ivory Purchase



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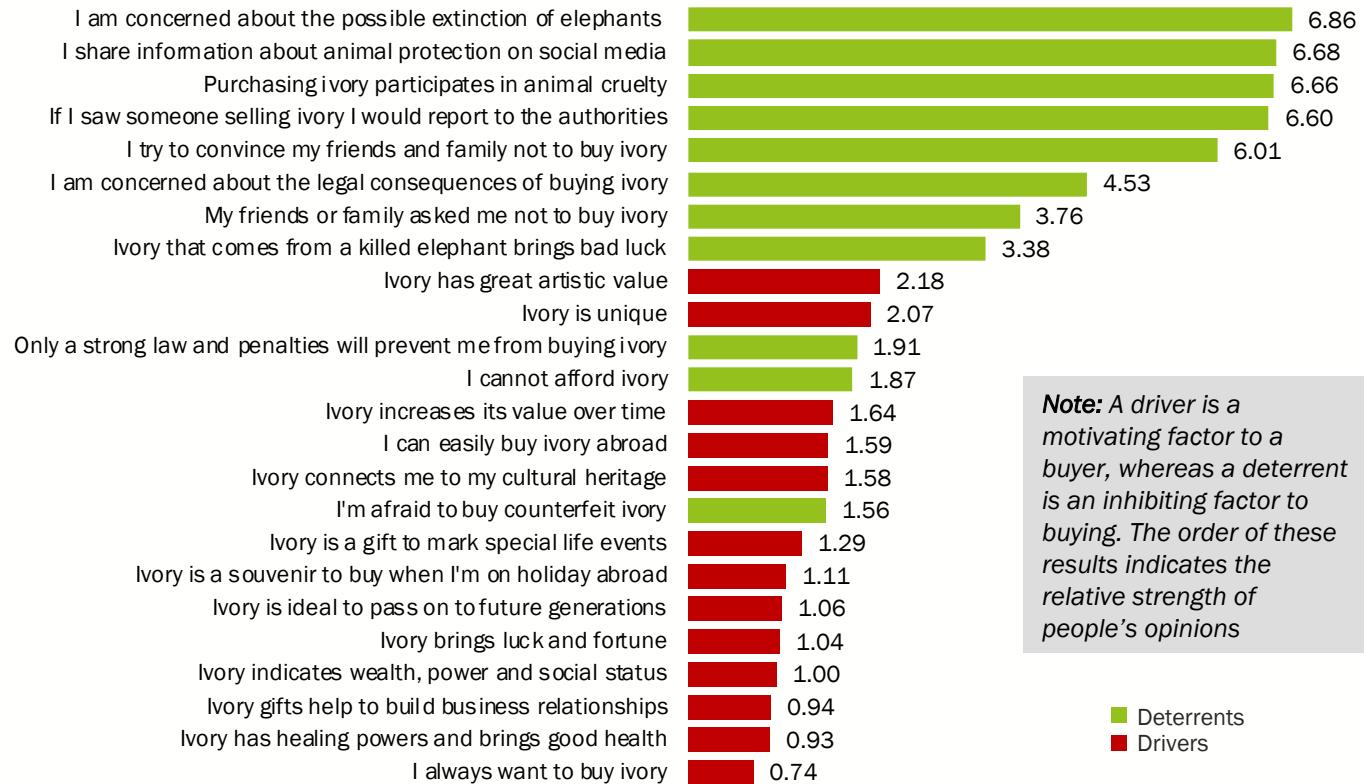
Attitudes toward Ivory Purchase

Concern about the extinction of elephants and animal cruelty are two of the top deterrents to ivory purchase, while ivory's artistic value and uniqueness are the top drivers.

Participants report that they would share information about animal protection and report ivory selling to the authorities. These are among the most strongly-held opinions of the statements presented.

Superstitious beliefs about ivory, such as its ability to bring luck or its healing powers rank low among people's strongly-held beliefs.

↑
Relative strength of
opinions



Note: A driver is a motivating factor to a buyer, whereas a deterrent is an inhibiting factor to buying. The order of these results indicates the relative strength of people's opinions

■ Deterrents
■ Drivers

Q9 [Similar question asked in 2017. Same question asked in 2019]. Now we will focus on ivory and its purchase. On the following screens we will provide you lists of various statements. For each screen please select the statement which describes your opinion the most, and the statement which describes your opinion the least. – Weighted data. Results are scaled out of 10.
Base: Total sample, n=2000 in 15 selected cities

Drivers and Deterrents of Ivory Purchase – by Key Segments

The factors most influencing Diehard Buyers' ivory purchase attitudes include ivory's perceived artistic value. However, the relative strength of this beliefs is far lower than the belief among Rejectors that ivory should not be sold.

Diehard Buyers and Regular Overseas Travelers do not find the price, the availability or the concern of fake ivory to be strong deterrents for purchasing it.

All groups score low on the statement that they “always” want to buy ivory and do not believe that ivory has healing powers, though Diehard Buyers find this to be a more important driver than Rejectors.

Note: The most strongly held beliefs and the least strongly held beliefs of the total population are reflected with relative uniformity by each of the city layers and are not shown here.

Beliefs About Ivory
(Top 3 and Bottom 3 Most Strongly Held Beliefs)

	Total	Regular Overseas Travelers*	Rejectors	Ban Influenced Citizens	Diehard Buyers
Top 3 opinions	n=2000	n=181	n=1446	n=391	n=164
Bottom 3 opinions					
I am concerned about the possible extinction of elephants	6.86	4.95	7.64	5.48	3.19
I share information about animal protection on social media	6.68	5.19	7.43	5.34	3.23
Purchasing ivory participates in animal cruelty	6.66	4.80	7.54	5.09	2.64
Ivory has great artistic value	2.18	3.35	1.81	2.94	3.69
I cannot afford ivory	1.87	1.31	2.05	1.48	1.25
I can easily buy ivory abroad	1.59	1.78	1.53	1.73	1.81
I'm afraid to buy counterfeit ivory	1.56	1.67	1.52	1.62	1.76
Ivory indicates wealth, power and social status	1.00	1.96	0.67	1.54	2.61
Ivory gifts help to build business relationships	0.94	1.64	0.69	1.34	2.13
Ivory has healing powers and brings good health	0.93	1.73	0.66	1.34	2.29
I always want to buy ivory	0.74	1.44	0.47	1.18	2.07

*Note: this group overlaps with other segments

Q9 [Similar question asked in 2017 and 2019]. Now we will focus on ivory and its purchase. On the following screens we will provide you lists of various statements. For each screen, please select the statement which describes your opinion the most, and the statement which describes your opinion the least. – Weighted data

Base: Total sample, n=2000

Drivers and Deterrents of Ivory Purchase – Trend Top 8

The top drivers of ivory purchase remained the same in 2020 vs 2019, with very few changes in the rankings.

Although not directly comparable, the top two opinions in 2017 (Pre-ban) are similar to those in the post-ban measures (elephant extinction and animal cruelty). However, there is a stronger focus on the risks of purchasing ivory.

The deterrents to ivory purchase are more strongly ranked in 2020 than they were in 2019.

***Note:** The question was divided into two sections in the 2017 survey, i.e. drivers and deterrents were rated separately, hence the data is not comparable (N.C.) to 2019 and 2020.

2017 Pre-Ban*		
1	I am concerned about the possible extinction of elephants	N.C.
2	Purchasing ivory participates in animal cruelty	N.C.
3	I am concerned that ivory might be illegal to buy	N.C.
4	There are strong penalties for ivory buyers	N.C.
5	I feel embarrassed to purchase ivory	N.C.
6	Ivory that comes from a killed elephant brings bad luck	N.C.
7	Ivory is a risky investment	N.C.
8	I do not want to buy ivory counterfeit unintentionally	N.C.

2019 Post-Ban		
1	I am concerned about the possible extinction of elephants	5.95
2	Purchasing ivory participates in animal cruelty	5.65
3	I share information about animal protection on social media	5.64
4	If I saw someone selling ivory I would report to the authorities	5.42
5	I try to convince my friends and family not to buy ivory	4.78
6	I am concerned about the legal consequences of buying ivory	3.80
7	Ivory that comes from a killed elephant brings bad luck	3.35
8	My friends or family asked me not to buy ivory	3.32

2020 Post-Ban		
1	I am concerned about the possible extinction of elephants	6.86
2	I share information about animal protection on social media	6.68
3	Purchasing ivory participates in animal cruelty	6.66
4	If I saw someone selling ivory I would report to the authorities	6.60
5	I try to convince my friends and family not to buy ivory	6.01
6	I am concerned about the legal consequences of buying ivory	4.53
7	My friends or family asked me not to buy ivory	3.76
8	Ivory that comes from a killed elephant brings bad luck	3.38

Q9 [Similar question asked in 2017 and 2019]. Now we will focus on ivory and its purchase. On the following screens we will provide you lists of various statements. For each screen, please select the statement which describes your opinion the most, and the statement which describes your opinion the least. – Weighted data



3.4 Awareness of and Attitudes toward the Ivory Ban

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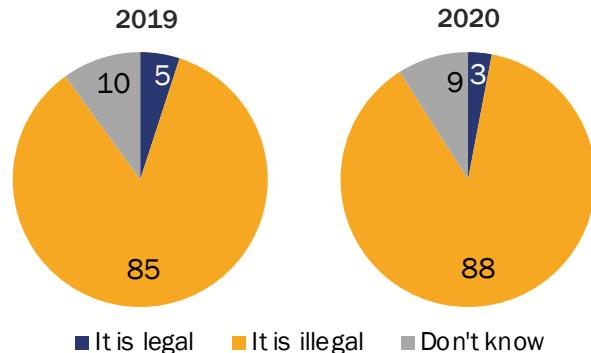
GLOBESCAN

Necessity of Legal Control over the Trade of Ivory

In 2020, 88 percent of participants believe that the buying / trading of ivory in China is illegal, a statistically significant increase from 2019 (85%). Public support for a ban on ivory trade has increased from 2019 across all segments except Diehard Buyers. The largest increase in support is seen in the Ban Influenced segment.

Diehard buyers have a lower rate of knowledge that all ivory purchase is illegal (65%) than Ban Influenced Citizens (81%) or Rejectors (92%). (Data not shown)

Do You Know Whether Buying/Trading Ivory within China Is Legal or Not?

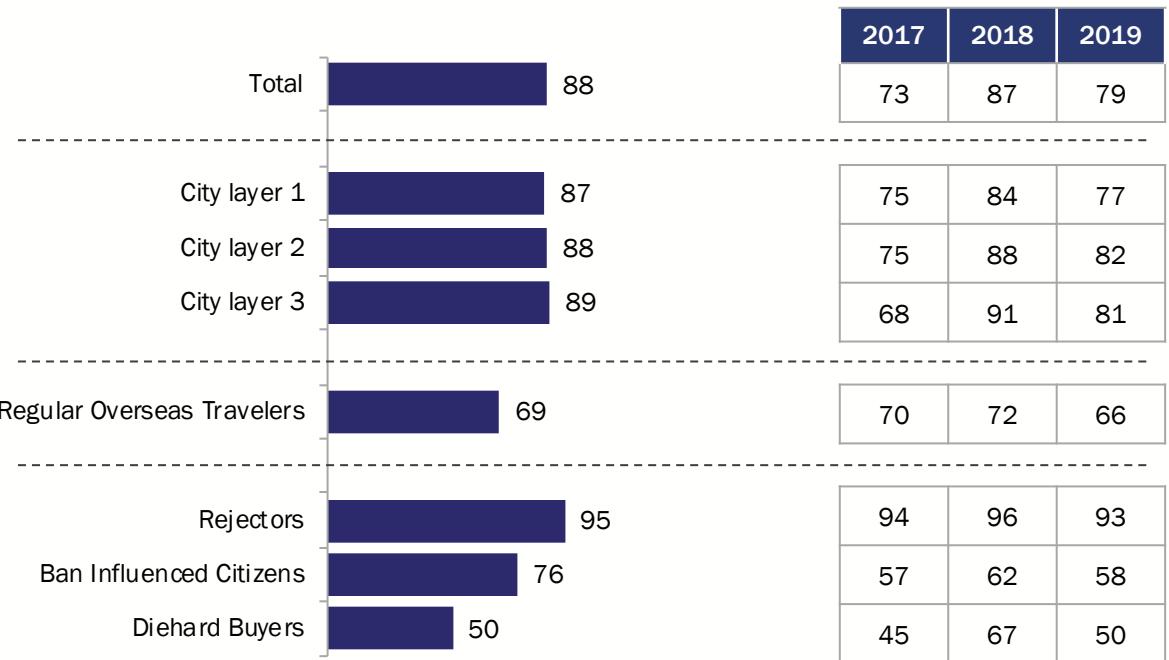


Q12a. Using a scale from 1 to 5, where 1 means no control, and 5 means total ban, please tell us how much legal control over the trade of ivory you think is necessary?;

Q12b. [2019 new question] Do you know whether buying / trading ivory within China is legal or not? - Weighted data

Base: Total sample, n=2000; City layer 1/layer 2/layer 3, n=920/460/420; Regular travelers, n=181; Rejectors/Ban Influenced Citizens/Diehard Buyers, n=1446/391/164

Agree on Legal Control over the Trade of Ivory – 2020*
(% Top-2-Box, 4+5: "I Would Support a Total Ban on All Buying, Selling, Importing, and Exporting of Ivory")



*Note: These results reflect the opinion of consumers before they were asked to read the ivory ban notice

Awareness of Regulations (Unprompted Answers)

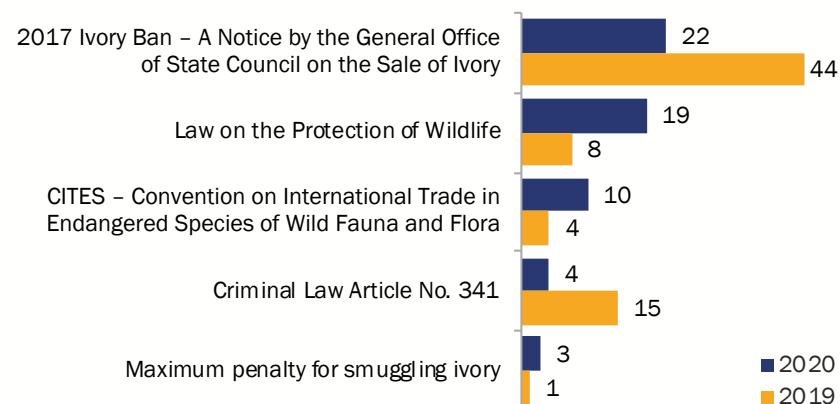
While 88 percent of participants believe that buying ivory is illegal, only 12 percent say that they are aware of agreements or regulations that are in place to control ivory trade.

The percentage of people that say they are aware of regulations relating to ivory trade in China has dropped since 2019. Among the people who claim awareness, the number that correctly identified the ivory ban in 2017 has also dropped from 44 percent to 22 percent.

The percentage of people referencing CITES and the “law on the protection of wildlife” have risen since 2019, while the percentage of people referencing China’s 1997 hunting / wildlife trade law (Article 341) has dropped.



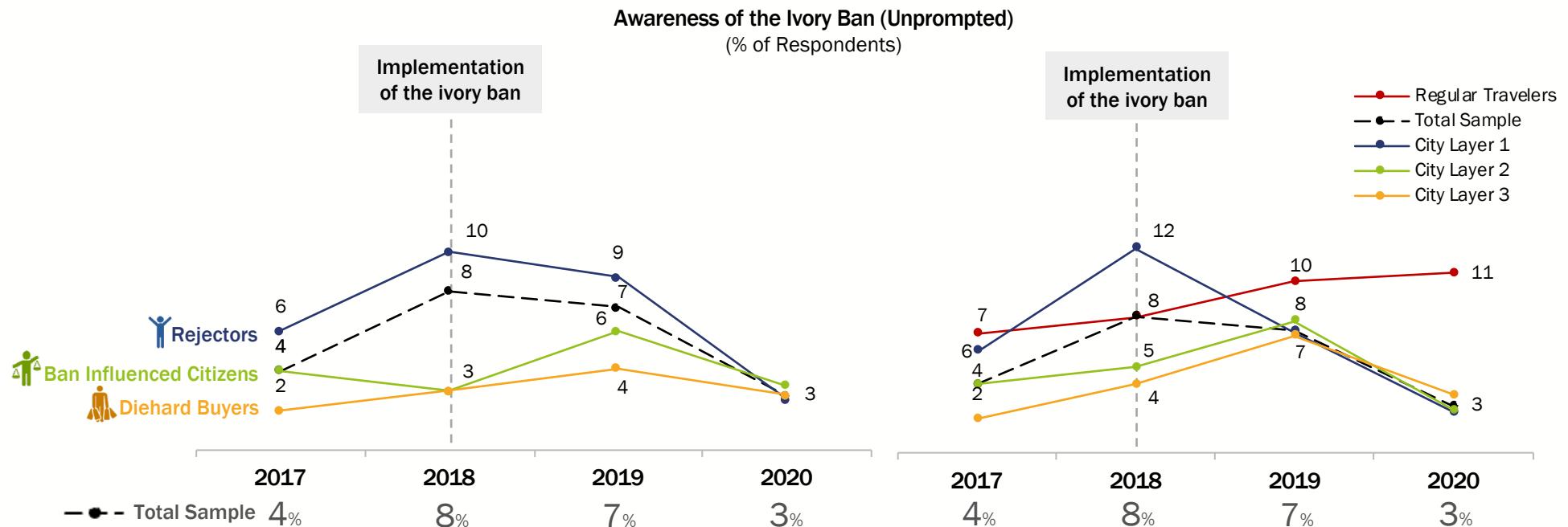
Top Regulations/Agreements Respondents Are Aware of
(% Among Those Aware, Open-ended Answers)



Awareness of the Ivory Ban (Unprompted)

4-year Comparison – Buyer Segments and Other Sub-groups

A total of 3 percent of participants correctly identified the specific ivory ban without being prompted in 2020, lower than in previous years. However, the target group of Regular Overseas Travelers continues to maintain high recognition.



Q13. Are you aware of any agreements or regulations controlling the sale of ivory in China? – Weighted data

Base: Total sample in 15 selected cities, 2017 Survey: n=2000 / 2018 Survey: n=2000 / 2019 Survey: n=2000 / 2020 Survey: n=2000

Awareness of the Ivory Ban (Prompted)

4-year Comparison

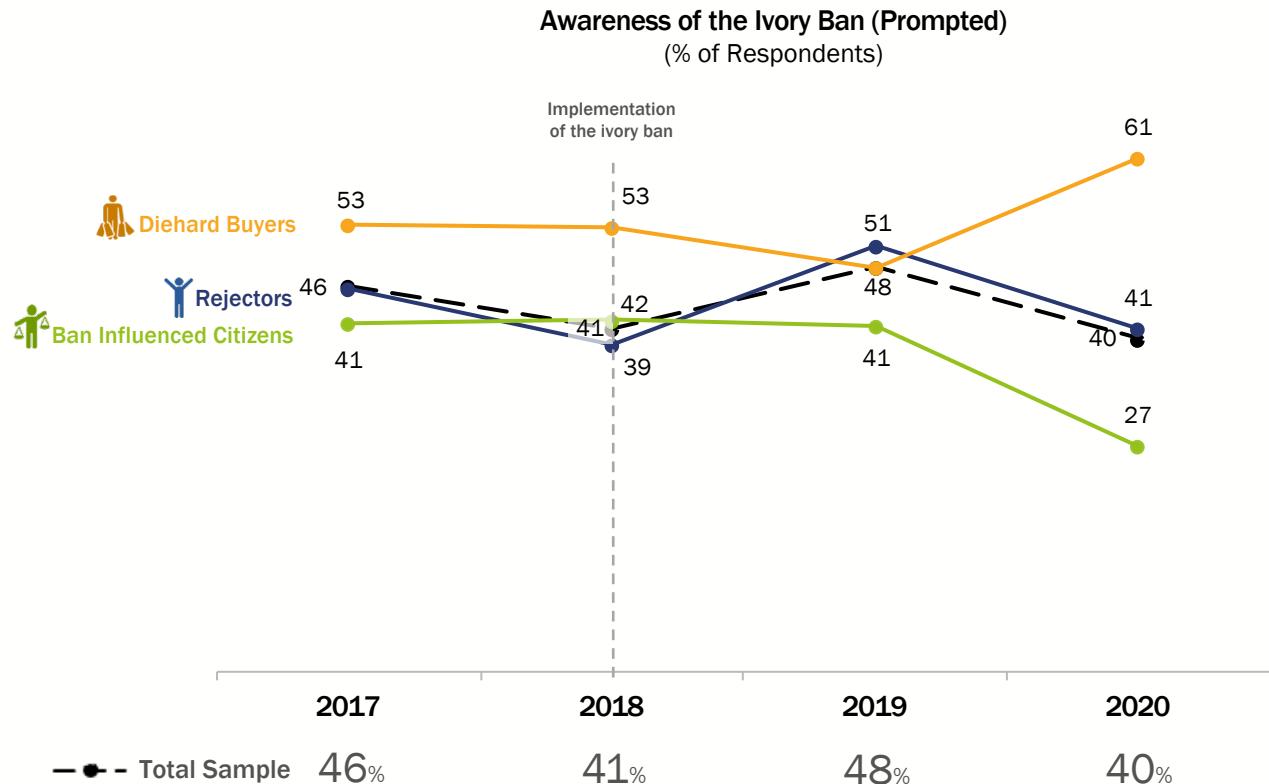
Overall, recognition of the ivory ban has decreased, driven by Rejectors and Ban Influenced Citizens.

After a summary of the ivory ban is shown to them, 40 percent of people say they are aware of it.

A greater proportion of Diehard Buyers are aware of the ban, with over 6 in 10 saying that they have heard of it.

Rejectors and Ban Influenced Citizens are less likely than any other year to report that they have heard of the ivory ban.

Although the level of knowledge about the ban is lower in 2020, the number of people who said they had never heard of it (40%) remained stable, with a significantly higher percentage of people reporting they “don’t know” if they have heard of the ban before.



Q14a. Have you ever heard about this ban on ivory trade? – Weighted data

52

Base: Total sample in 15 selected cities, 2017 Survey: n=2000 / 2018 Survey: n=2000 / 2019 Survey: n=2000 / 2020 Survey: n=2000

Awareness of the Ivory Ban (Prompted)

4-year Comparison – Other Sub-groups

The lower stated awareness of the ban is driven by low education, low-income, young, non-travelers.

Regular overseas travelers are increasing in their recognition of the ivory ban and are the group that are most likely to recognize it.

Participants aged 18 – 30 are less likely to be aware of the ivory ban, compared with previous years, as well as those with a low income or a low education.

Awareness of the Ivory Ban (Prompted)
(% of Respondents)

		2017	2018	2019	2020
	Total Sample	46	41	48	40
Gender	Female	48	43	46	39
	Male	44	39	50	40
Age	18-30	51	53	55	34
	31-40	49	51	53	43
	41-50	39	46	44	50
	51-60	46	24	36	40
	61 and above	43	26	50	34
	High	61	56	60	64
Education	Middle	37	37	49	43
	Low	60	26	44	23
	High income	61	31	48	58
Income Level	Medium income	41	42	47	50
	Low income	46	42	50	31
	Never	29	31	39	25
Travel Overseas	Occasionally	48	54	57	52
	Regularly	62	58	66	73
	Layer 1	56	45	51	41
City Layers	Layer 2	35	38	47	36
	Layer 3	38	37	44	41

Sources of Awareness of the Ban

Post-ban Survey Only

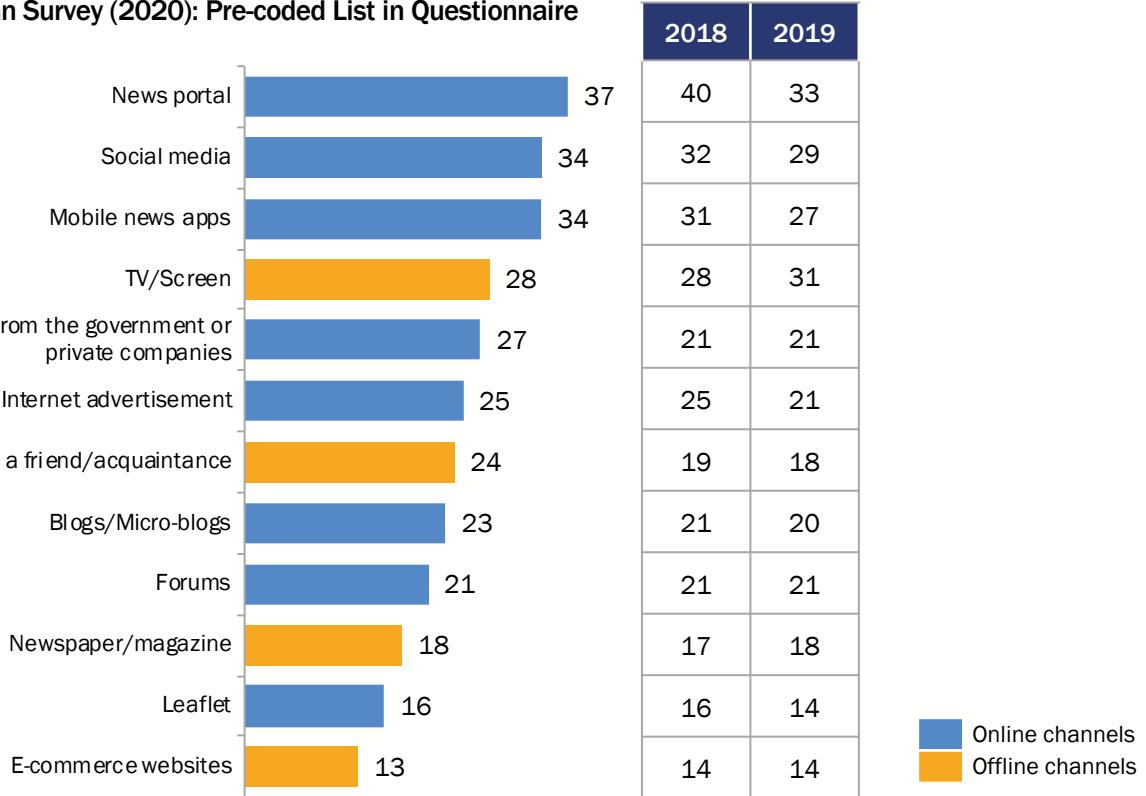
The order and importance of each channel of communication for knowledge on the ivory ban has remained relatively stable since 2018.

As in previous years, the primary channels through which people learned about the ivory ban are online channels.

TV/Screen is the highest ranked offline channel (though some may perceive this as online), followed by word of mouth from friends or acquaintances.

Social media has risen in relative prominence.

Top 12 Sources of Awareness (%)
Post-ban Survey (2020): Pre-coded List in Questionnaire



Sources of Awareness of the Ban by Sub-groups

Top 4 channels

News portals and social media are two of the top four channels across all groups.

Regular Overseas Travelers are more likely to have seen information on search engines.

The majority of differences between the sub-groups are not statistically significant.

Sources of Awareness of the Ban -2020 Among respondents who are aware of the ban (%)	Total (n=796)				Regular Overseas Travelers	Rejectors	Ban Influenced Citizens	Diehard Buyers
		Layer 1 (n=376)	Layer 2 (n=164)	Layer 3 (n=256)	(n=131)	(n=1446)	(n=391)	(n=164)
1 News portal	37	38	38	35	42	38	33	35
2 Social media	34	33	31	37	40	33	39	33
3 Mobile news apps	34	35	28	36	40	34	33	32
4 TV / Screen	28	26	26	31	22	30	18	26
5 Official websites from government or companies	27	28	29	24	36	27	25	27
6 Search engine/Internet advertisement	25	26	30	21	40	24	32	28
7 From a friend/acquaintance	24	25	19	27	26	25	24	19
8 Online: Blogs/Micro-blogs	23	23	25	19	24	21	23	30
9 Online: Forums	21	21	23	18	24	19	23	24
10 Newspaper/magazine	18	18	20	16	28	17	21	20
11 Leaflet	16	15	16	18	17	16	18	16
12 Online: E-commerce websites	13	13	15	14	18	12	15	20
13 From a family member	13	13	13	14	14	14	14	6
14 Official websites from NGOs	13	14	10	14	21	11	17	22
15 Billboards at transportation knots	11	12	11	9	14	10	10	20
16 From colleagues	11	10	11	11	9	10	12	13

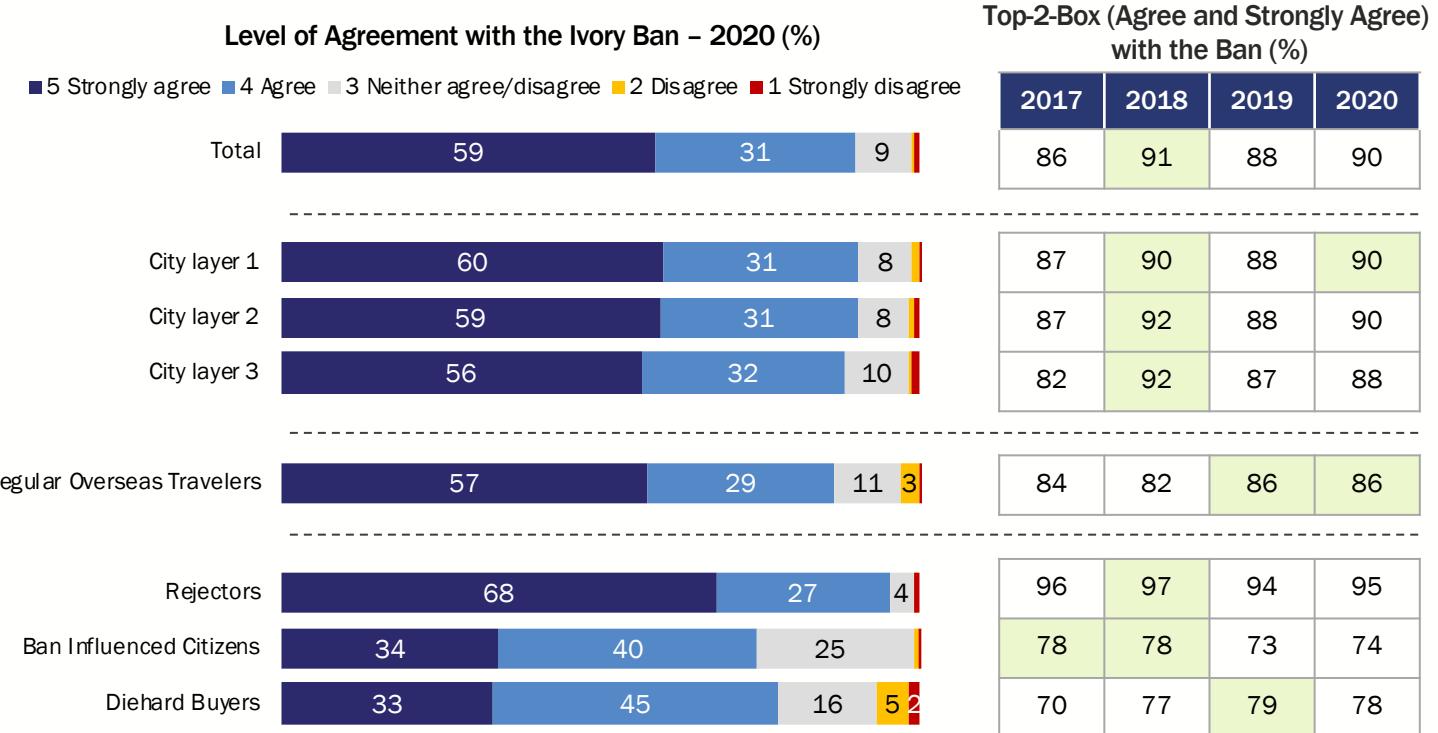
Q14b. You said that you heard about the ban on ivory trade. Where did you hear about this ban? – Weighted data
Base: Aware of the ban, n=796

Level of Agreement and Support for the Ban

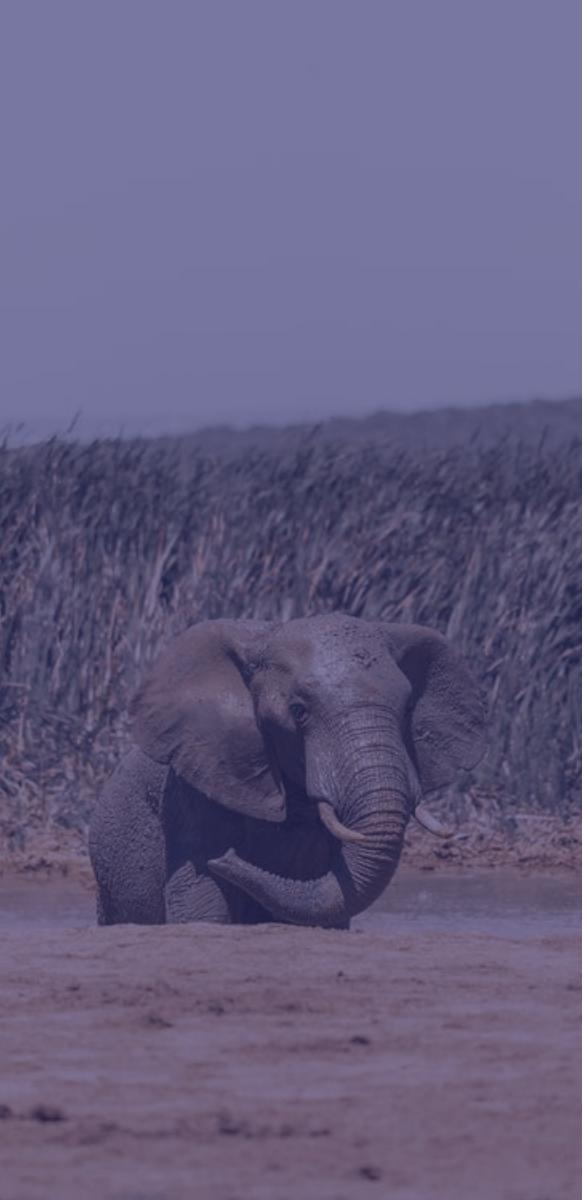
Having dipped slightly in 2019, the level of support for the ban in 2020 has risen statistically significantly to 90 percent.

Stated agreement for the ban remains high, even among Regular Overseas Travelers and Diehard Buyers – two groups with elevated rates of ivory purchase and intention to purchase.

As in 2019, disagreement with the ban remains highest among Diehard Buyers, while Ban Influenced Citizens are most likely to be unsure of their feelings towards it.



Note: Green indicates the highest point at which a “preferable” result is observed

A photograph of a large elephant, likely an African elephant, standing in a field of tall, dry grass. The elephant is facing towards the left of the frame. The background shows more of the same grassy landscape under a clear sky.

3.5 The Effect of the Ban on Ivory Purchase Behavior



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Impact of the Ban

Asked after Reading the Notice of the Ban

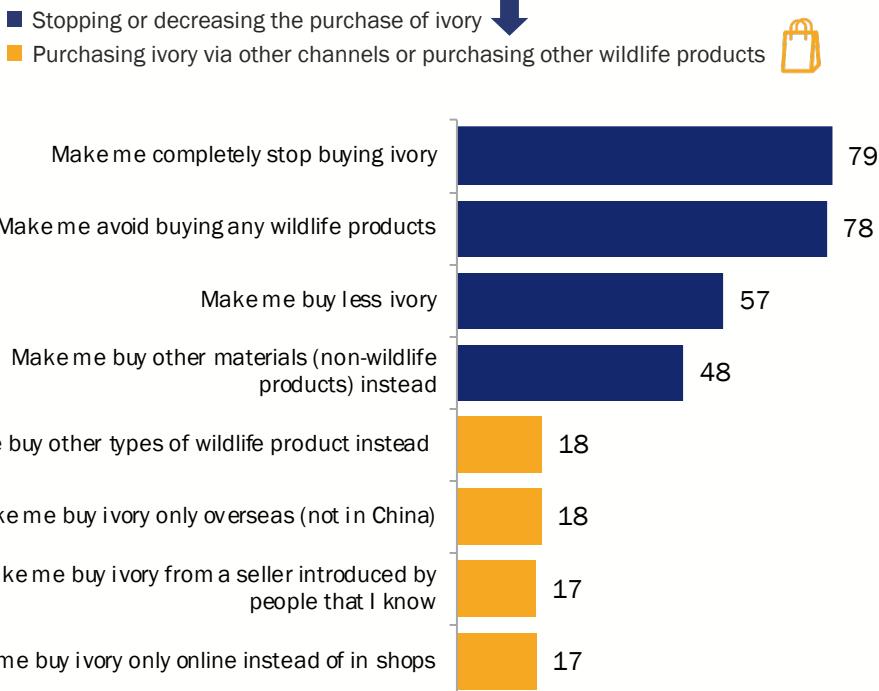
The impacts of the ivory ban on people's behavior have remained similar to 2019.

8 out of ten participants say that the ivory ban will make them stop buying ivory or avoid buying wildlife products.

Participants' perception of the ivory ban as leading to other wildlife purchase or ivory purchase through other channels (overseas or online) has remained lower than 2017 and 2018 rates but has risen significantly since 2019.

Impact of the Ban -2020
% Top-3-Box (7 "Strongly agree"+ 5+6)

Statements related to...



Top-3-Box by Year (%)

2017	2018	2019
74	83	78
71	74	75
68	61	69
57	63	42
34	31	13
36	24	12
Not asked in previous years		
33	22	11

Q16a. Please indicate to what extent you agree or disagree with each of the following statements. Please use a scale of 1 to 7 where 1 means that you "strongly disagree" and 7 means that you "strongly agree" with the statement. – Weighted data

Intention to Purchase Ivory after Mentioning the Ivory Ban

Top-2-Box Comparison of Past Four Years

Stated future intention to purchase ivory dropped from 19 percent before mentioning the ban (slide 40) to 8 percent after mentioning it.

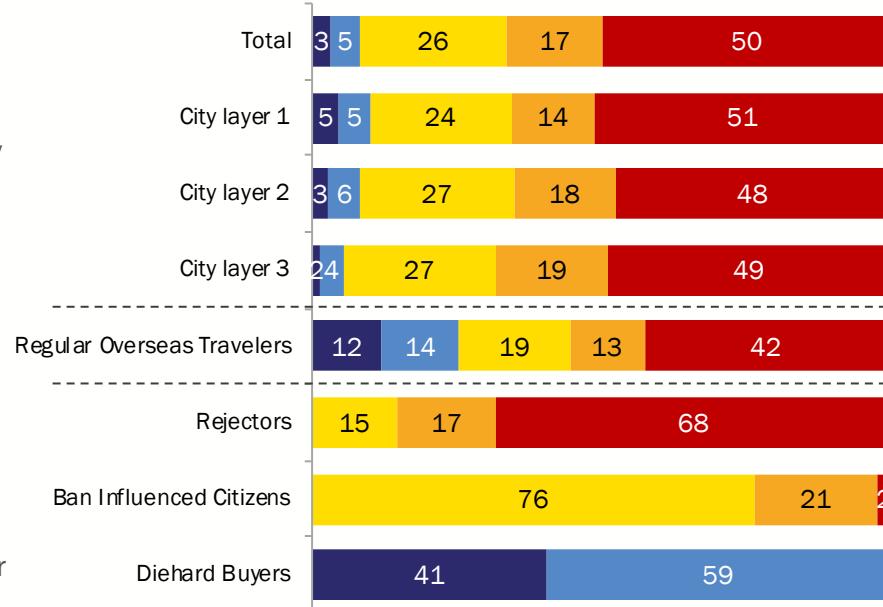
Intention to purchase ivory in the future has declined steadily since 2017 and is at its lowest among most groups in 2020.

A significantly smaller proportion of participants in 2020 say that they are likely to buy ivory in the future than in any of the previous years.

Only Regular Overseas Travelers have maintained their likelihood to buy ivory in the future.

Intention to Purchase Ivory (After Mentioning the Ivory Ban) – 2019 (%)

■ 5 Very likely ■ 4 Likely ■ 3 Neither likely/unlikely ■ 2 Unlikely ■ 1 Very unlikely



“Very likely” + “Likely” to Purchase Ivory after Mentioning the Ivory Ban
– Four-year Comparison (%)

2017	2018	2019	2020
18	14	14	8
18	14	15	10
15	19	14	8
20	10	13	5
25	37	27	26
As per segments definition, there are no Rejectors and no Ban Influenced Citizens likely to purchase in the future. Please refer to Slide 115 for more details.			
98	100	100	100

Note: Green indicates the lowest point at which a “preferable” result is observed

Reasons Not to Purchase Ivory in the Future

Before and After Mentioning the Ivory Ban Comparison

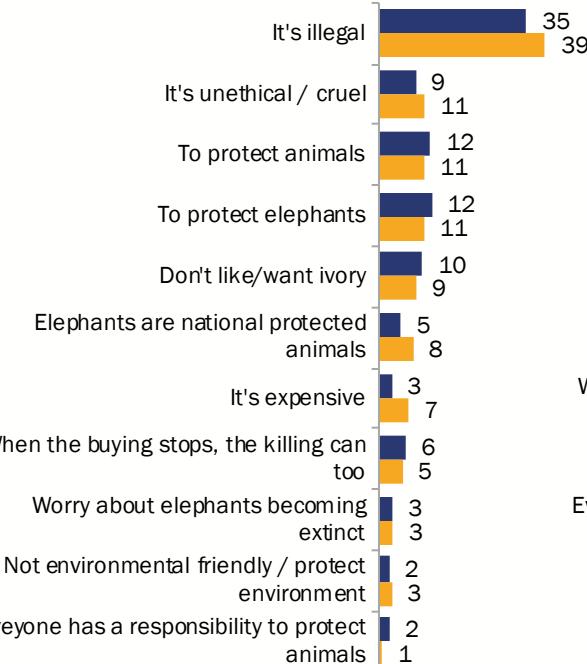
The illegality of ivory purchase is the most significant reason why respondents do not intend to purchase ivory in the future before and after they had been prompted about the ban.

Open ended questions were asked to participants if they said they did not want to buy ivory. Illegality of ivory was more often cited as the reason not to purchase ivory after the ban was mentioned but has decreased since 2019.

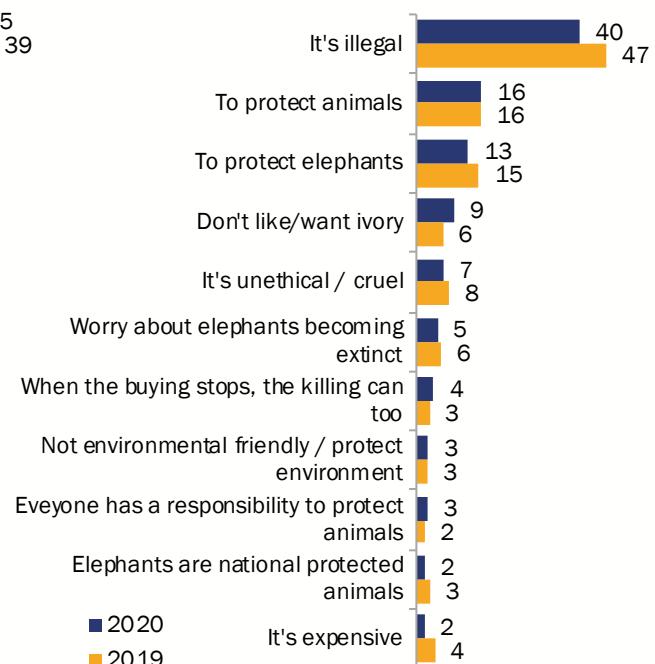
Among the other reasons given by respondents for not purchasing ivory in the future, most are related to environmental aspects such as extinction or animal protection/welfare. Other reasons for not purchasing ivory are related to the ivory itself, i.e., that respondents do not like ivory or cannot afford it.

Self-reported Reasons Why Unlikely to Buy Ivory in the Future (%)
– (Open-ended Answers)

Asked before Mentioning the Ivory Ban



Asked after Mentioning the Ivory Ban



Q6,Q17b [2019 new question]. Why do you say that you are unlikely to buy ivory in the future? [Open-ended answers] – Weighted data

Base: 2019/2020 Non-intenders before mentioning the ban, n=802/1101; Non-intenders after mentioning the ban, n=1195/1325

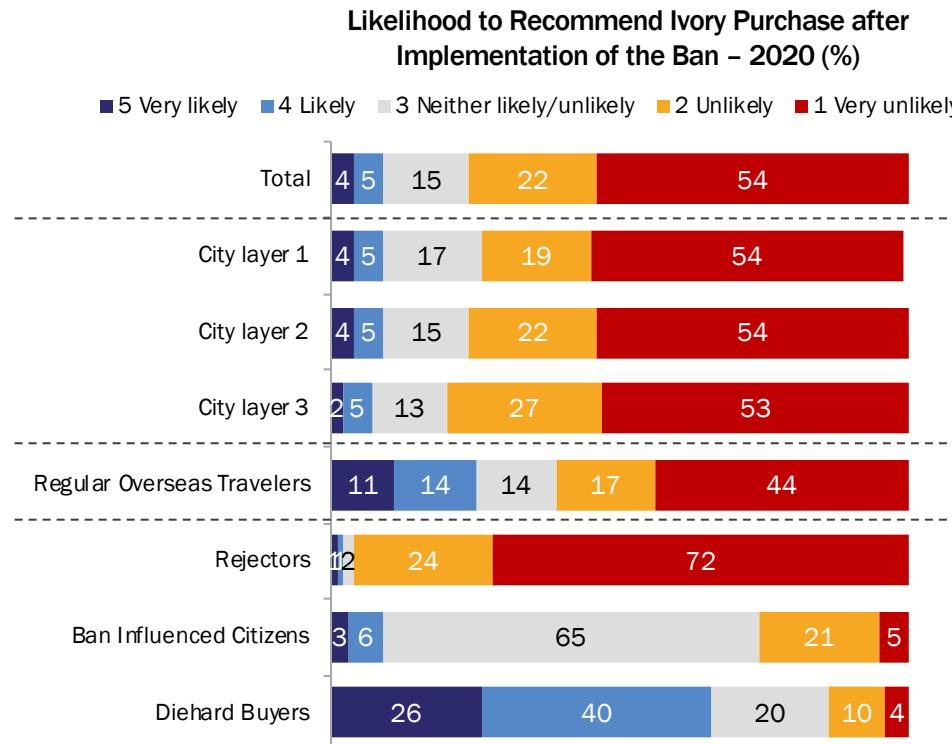
Likelihood to Recommend Ivory Purchase

Asked after Mentioning the Ivory Ban – with Year Comparison

Participants across almost all sub-groups are less likely to recommend ivory purchase than they were in the past two years.

Rejectors and participants from Layer 3 cities and are the least likely to recommend ivory purchase, while Diehard Buyers are the most likely to recommend it. Ban Influenced Citizens are the most uncertain.

Regular Overseas Travelers are the only group to keep a significant and stable intention (one in four) to recommend the purchase of ivory in 2020 vs 2019.



"Very likely" + "Likely" to Recommend Ivory Purchase after Implementation of the Ban – Four-year comparison (%)

	2017	2018	2019	2020
15	14	13	9	
15	14	13	10	
10	19	15	10	
17	10	12	7	
22	38	23	25	
0	3	1	2	
11	14	9	9	
59	70	71	66	

Note: Green indicates the lowest point at which a "preferable" result is observed

Q18. How likely are you to recommend purchasing ivory or products made of ivory to family members or friends since the ivory ban is implemented? – Weighted data

Base: Total sample, n=2000; City layer 1/layer 2/layer 3, n=920/460/620; Regular travelers, n=181; Rejectors/Ban Influenced Citizens/Diehard Buyers, n=1446/391/164

Intention to Purchase Ivory – Regulated vs Unregulated

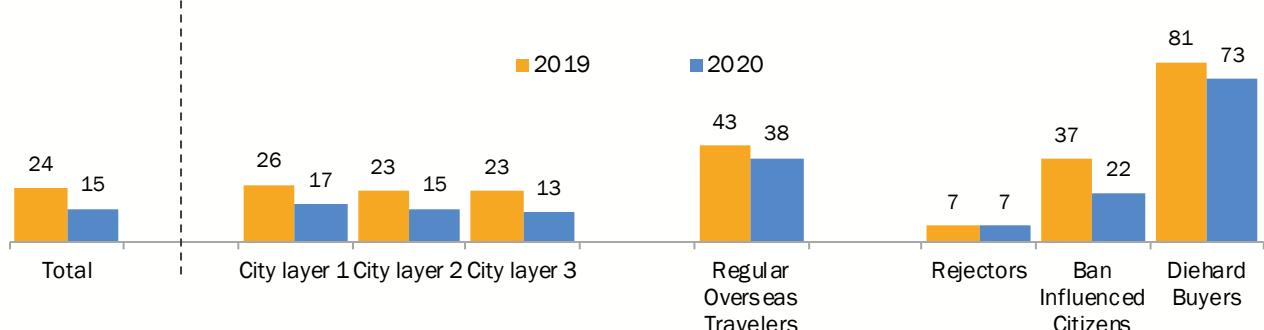
The likelihood to purchase ivory if it became legal to purchase has dropped in 2020 vs 2019. However, there are still more participants who agree that they would be likely to buy ivory if it became legal compared to their likelihood to purchase knowing that there is a ban.

There is a drop in the fundamental intention to buy ivory, i.e. if the legal barrier is removed, the number of participants who say they would purchase ivory in the future has decreased in 2020 vs 2019.

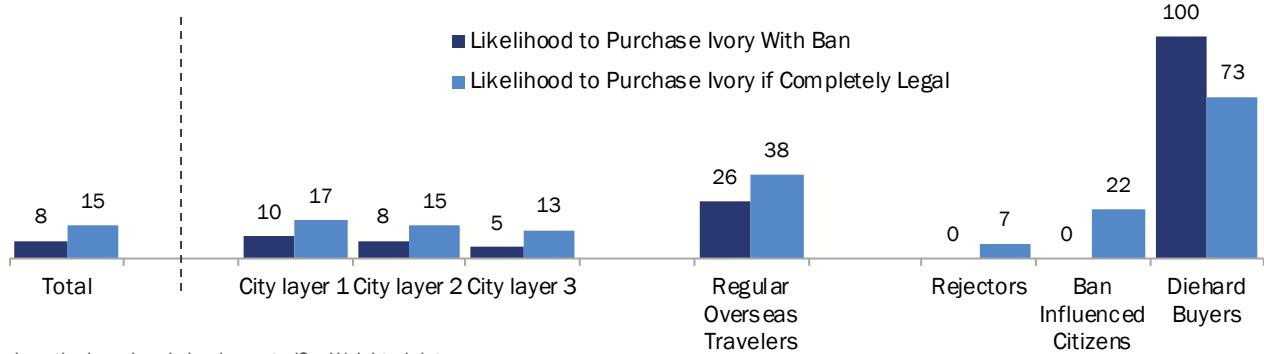
If the ban on ivory were removed, intention to purchase nearly doubles, from 8 percent to 15 percent.

Ban Influenced Citizens and Regular Overseas Travelers have the largest increase in intention to purchase if ivory became legal.

Likelihood to purchase ivory if it is Completely Legal and Unregulated
“Very likely” + “Likely” – 2020 vs 2019 (%)



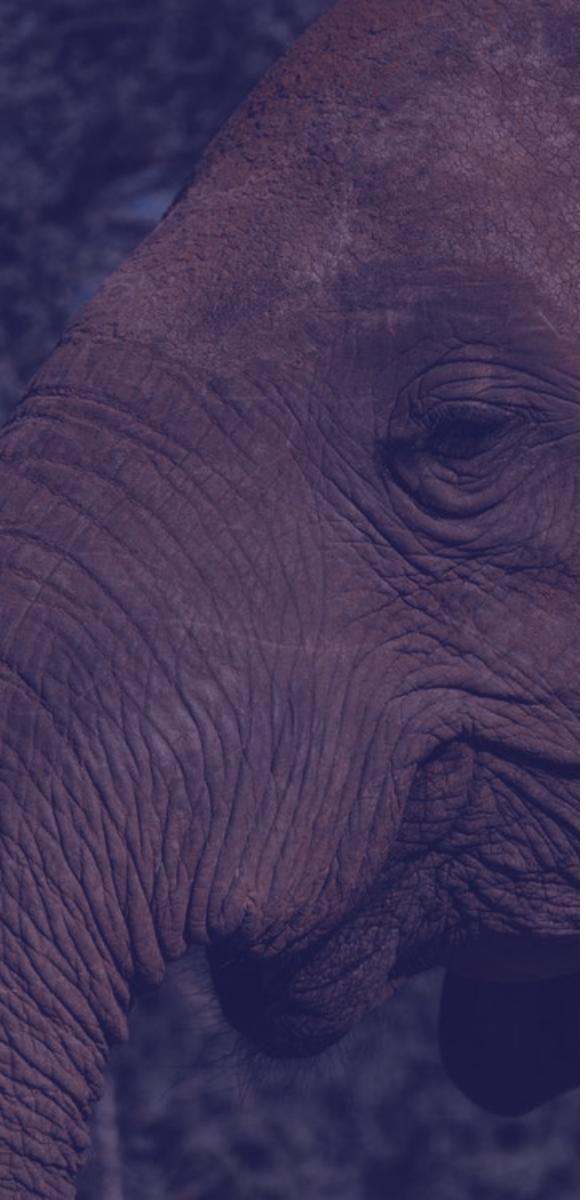
“Very likely” + “Likely” to Purchase Ivory after Mentioning the Ivory Ban
vs “Very likely” + “Likely” to Purchase Ivory If it Is Completely Legal and Unregulated – 2020 (%)



Q17a. How likely will you be to purchase ivory and/or anything made of ivory since the ivory ban is implemented? – Weighted data

Q20 [2019/2020 question]. And if the purchase of ivory was completely legal and unregulated in Mainland China, how likely will you be to purchase ivory and/or anything made of ivory in the future? – Weighted data

Base: Total sample, n=2000; City layer 1/layer 2/layer 3, n=920/460/620; Regular travelers, n=181; Rejectors/Ban Influenced Citizens/Diehard Buyers, n=1446/391/164



3.6 Campaign Recall, Recognition, and Effectiveness

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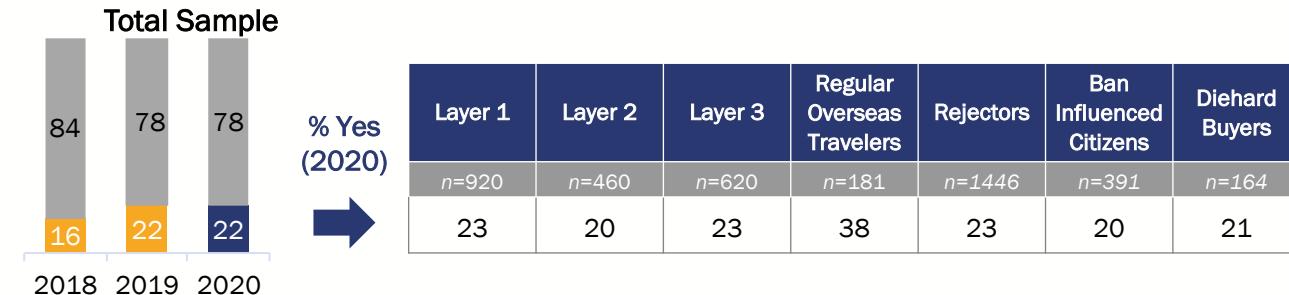
Awareness of Any Ivory Campaigns (Spontaneous)

As in 2019, 22 percent of participants say they are aware of campaigns or advertisements against ivory trade and/or about elephant protection in 2020.

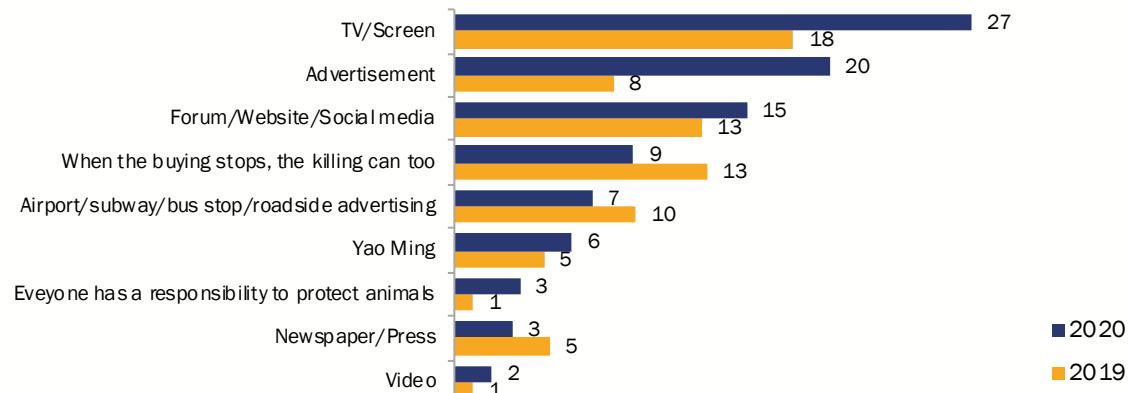
Regular Overseas Travelers stand out with a significantly higher rate of campaign exposure than other segments, while campaign exposure within city layers and segments is now similar.

TV / Screens remain the most popular avenue that people identify as having seen campaigns, followed by advertisements and online sources.

Have You Ever Seen and/or Heard Any Campaigns or Advertisements Against Ivory Trade and/or About Elephant Protection?



Campaigns and/or Elements of Campaigns Recalled Spontaneously (% among Those Who Recall Campaigns) (Open-ended Answers)



Q22. Have you ever seen or heard any campaigns or advertisements against ivory trade and/or about elephant protection? – Weighted data

Q22. Please describe the campaigns or advertisements that you have seen before, such as what you have seen and where you have seen them [Open-ended answers] – Weighted data

Base: Total sample, n=2000 in 15 selected cities; Those who recall campaigns for 2019/2020, n=450/447

Ma Weidu Campaign Recognition – Among Total Sample

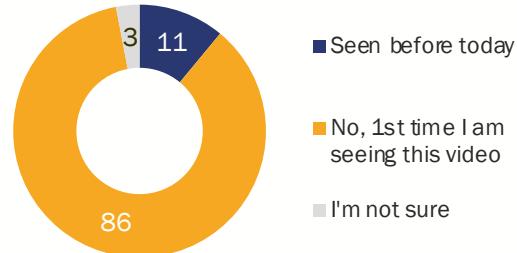
Overall, after seeing the video of the Ma Weidu Campaign, just over one in ten (11%) recognized it.

Despite a relatively low recollection rate, the Campaign resonates strongly after being seen, i.e. more than eight in ten of those who viewed this video claim that they liked it (81%). There is little difference between the perceptions of the video as memorable, persuasive, likeability, and impressiveness i.e. participants who liked the video also found it memorable.

The main effect it has on the participants' behavior is to incite them to continue to share information about animal protection (44%).



Recall / Seen Video (After watching video)
(% of respondents)



Q24. Have you seen this video before today? – Weighted data

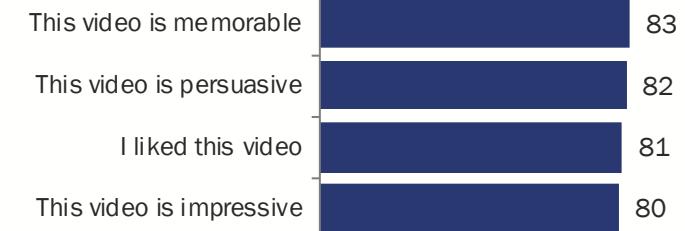
Q24b. How would you rate the video under the following categories – Weighted data

Q27. Which of the following statement(s) describe your opinion and behavior the most after seeing this campaign? Please select all that apply. – Weighted data

Base: Total Sample, n=2000 in 15 selected cities

Campaign Diagnostic – 7-point scale

(% of respondents, Top-2-Box '6+7 Strongly Agree')



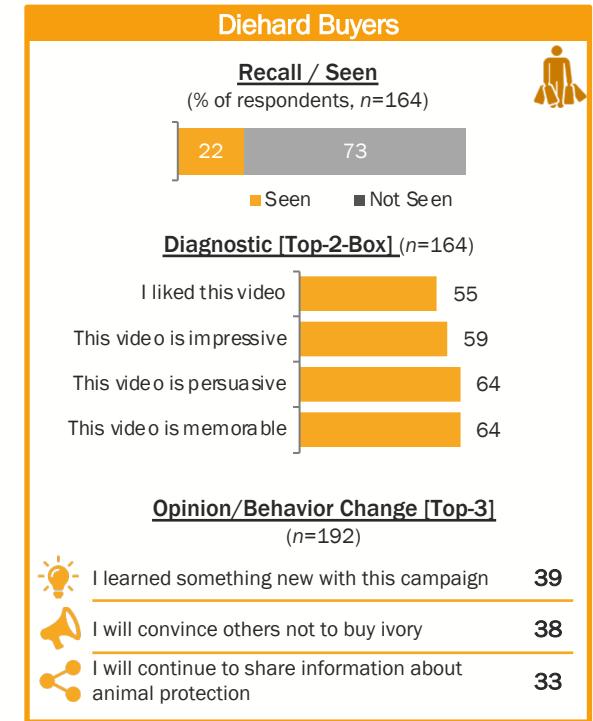
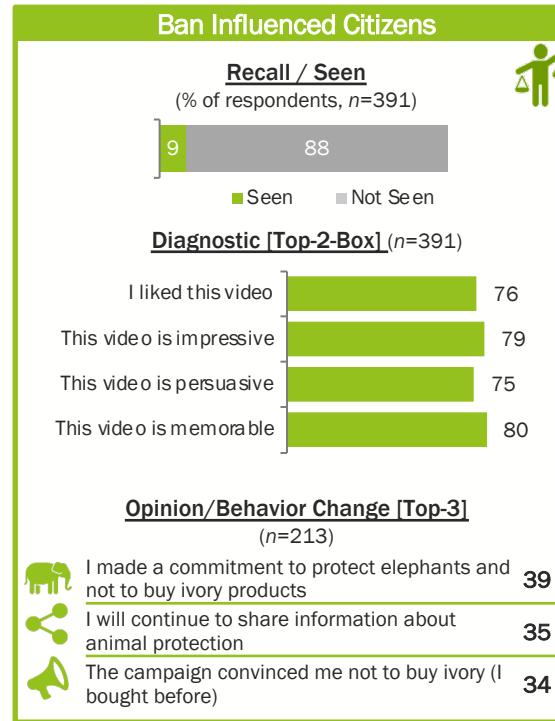
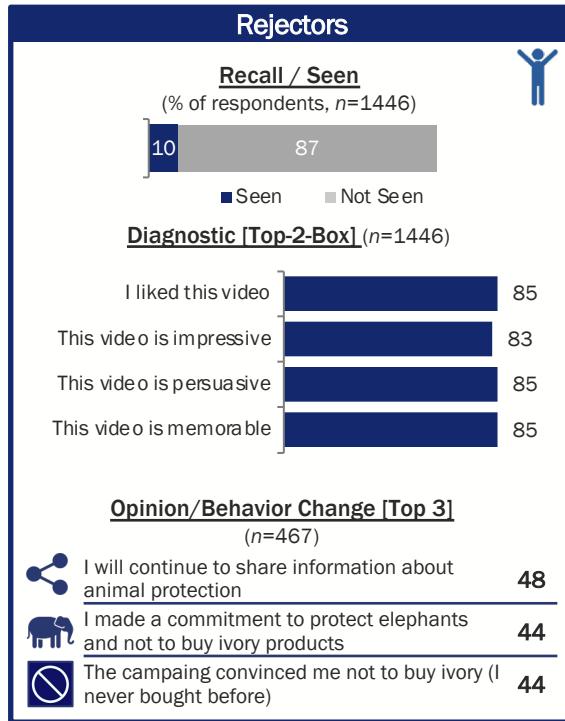
Opinion/Behavior Change [Top 3 of 9]

(% all respondents)

	I will continue to share information about animal protection	44
	I made a commitment to protect elephants and not to buy ivory products	42
	I will convince others not to buy ivory	41

Campaign Recognition – By Segment

Diehard Buyers have the highest rate of campaign recollection of the three segments, which coincides with this group being the target audience during the campaign launch. Their recognition of the Campaign is twice as high as for Rejectors or Ban Influenced Citizens. However, responses to the video are significantly more positive among Rejectors and Ban Influenced Citizens.



Q24. Have you seen this video before today? – Weighted data

Q24b. How would you rate the video under the following categories – Weighted data

Q27. Which of the following statement(s) describe your opinion and behavior the most after seeing this campaign? Please select all that apply. – Weighted data

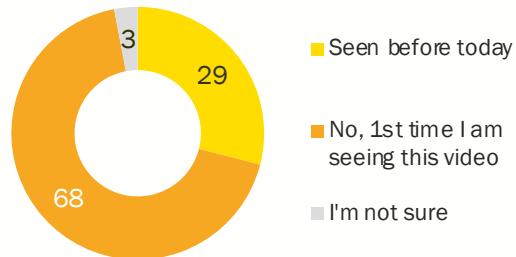
Base: Total Sample, n=2000 in 15 selected cities

Campaign Recognition – Regular Overseas Travelers

Regular Overseas Travelers recognized the Campaign at a higher rate than Diehard Buyers, and more of them believe that the campaign is impressive, persuasive and memorable than Diehard Buyers.

The Campaign also made a strong impact on the behavior of Regular Overseas Travelers, with more than half of them (52%) claiming that they will convince others not to buy ivory after seeing this video.

Recall / Seen Video (After watching video)
(% of respondents, Regular Overseas Travelers)



Q24. Have you seen this video before today? – Weighted data

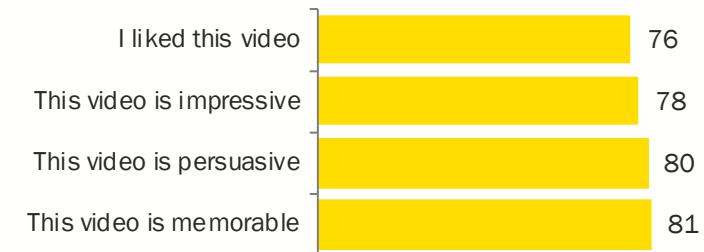
Q24b. How would you rate the video under the following categories – Weighted data

Q27. Which of the following statement(s) describe your opinion and behavior the most after seeing this campaign? Please select all that apply. – Weighted data

Base: Regular travelers, n=181

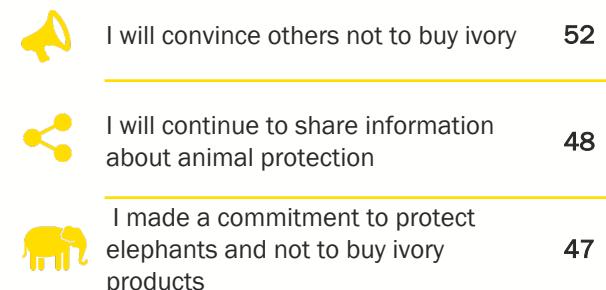
Campaign Diagnostic– 7-point scale

(% of respondents, Top-2-Box '6+7 Strongly Agree')



Opinion/Behavior Change [Top 3 of 9]

(% all respondents)



Elements of Campaign

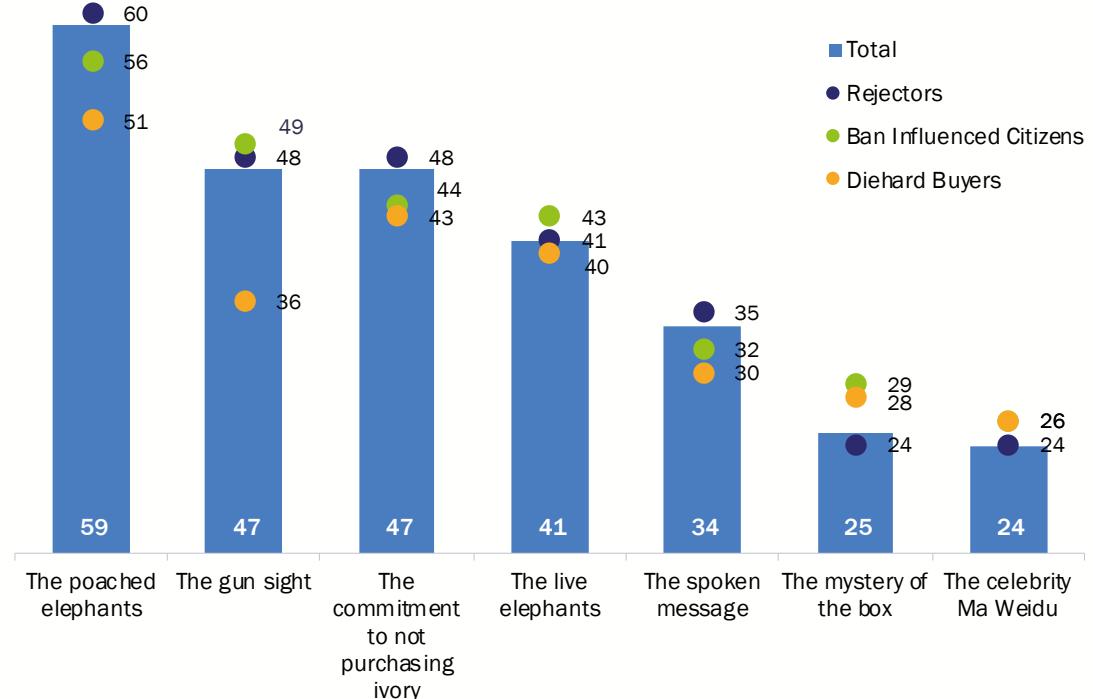
In the Ma Weidu Campaign, the poached elephant is reported as the element that “resonated” the most among participants, followed by the gun sight and the commitment to not purchasing ivory.

While Rejectors are overall more impressed by the different elements of the video than the other segments, the live elephant resonated the most among Ban Influenced Citizens vs other sub-groups.

The gun sight resonates significantly less among Diehard Buyers than with other sub-groups, while the mystery of the box (as for the Ban Influenced Citizens) and the celebrity resonated more positively among them than among the other segments.

Most Impressive Elements in the video

(% of Respondents)



Q26. Which of the following elements from this video resonates most with you? – Weighted data

Base: Total sample, n=2000 in 15 selected cities / Rejectors/Ban Influenced Citizens/Diehard Buyers, n=1446/391/164

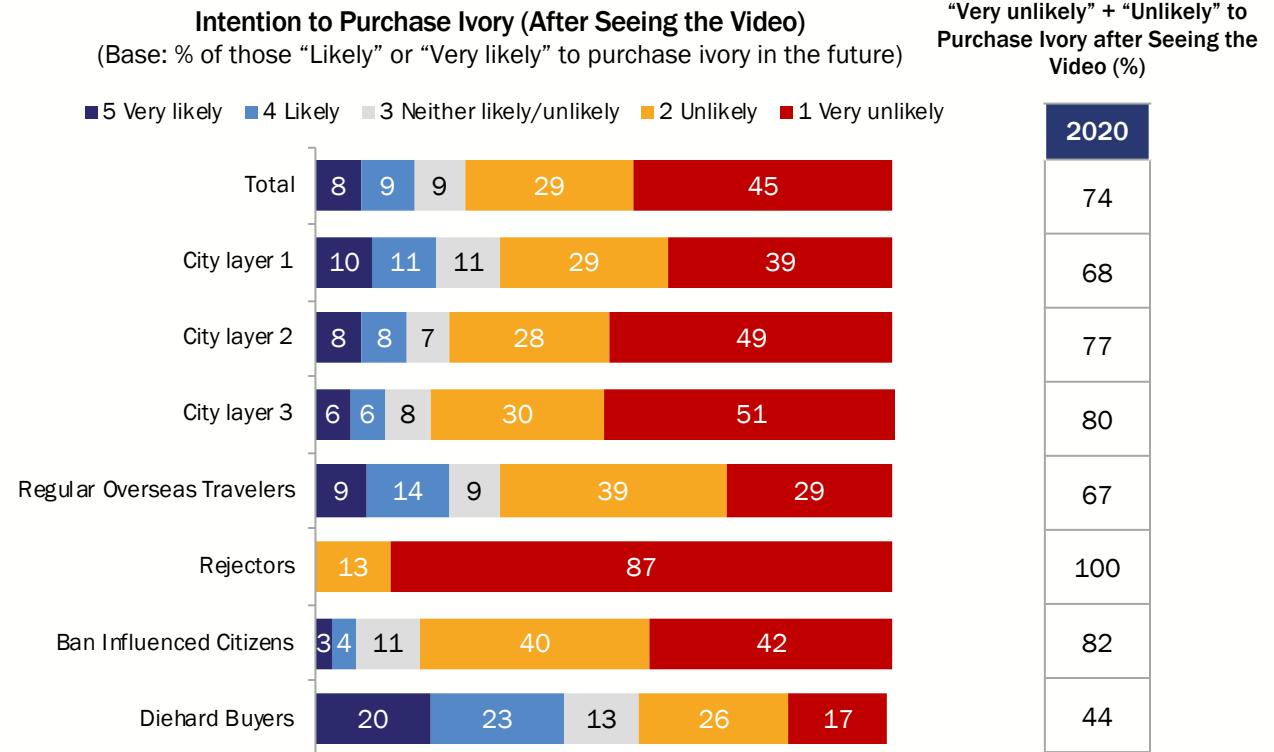
Intention Change After Seeing the Video – Among Future Ivory Purchase Intenders

Among participants who reported that they want to buy ivory in the future (before mentioning the ban), mentioning the ban combined with the Ma Weidu Campaign has a large impact on changing their desire to buy it.

Overall, almost three quarters (74%) of future intenders to buy ivory changed their mind after having heard of the ban and seen the campaign video.

At city level, the interventions have the most impact on Layer 3 cities, with 80 percent of those who said that they intend to buy ivory in the future changing their mind after hearing of the ban and seeing the video.

Among Diehard Buyers who intended to buy ivory, 44 percent saying that they are unlikely or very unlikely to buy after campaign and ban exposure.



Q27b. After seeing the video, how likely are you to buy ivory in the future? – Weighted data

Base: Those “Likely” or “Very likely” to buy ivory in the future (from Q5a), n=371; City layer 1/layer 2/layer 3, n=181/89/101; Regular travelers, n=87; Rejectors/Ban Influenced Citizens/Diehard Buyers, n=91/156/124

Reasons Why People Changed Their Mind after Seeing the Video

When asked, participants who had intended to buy ivory but decided not to buy it after having been informed of the ban and seen the Ma Weidu Campaign video are more likely to cite the video as the reason for changing their mind.

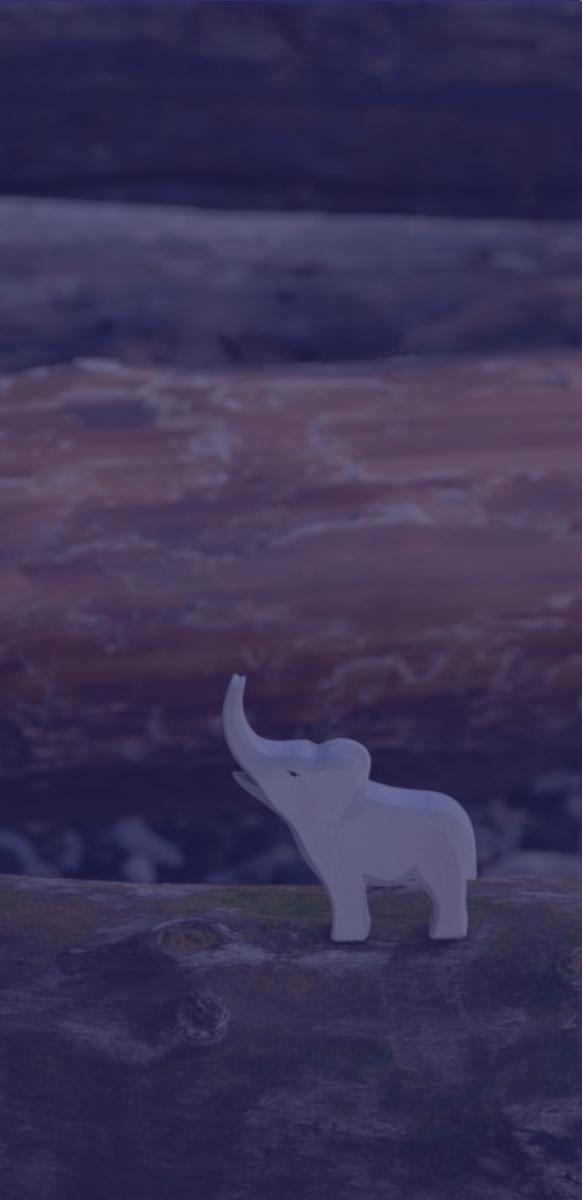
This group say that the message to protect elephants and the cruelty are the primary drivers. Participants also referred to the similarities between elephants and humans.

After having seen the video, only 7 percent say that the illegality of purchase is the primary reason for changing their mind.

Reasons Why Ivory Intenders Decided Not to Buy Ivory after the Video – 2020*	Total	Layer 1	Layer 2	Layer 3	Regular Overseas Travelers	Rejectors Influenced	Ban Influenced Citizens	Diehard Buyers
	(n=273)	(n=123)	(n=69)	(n=81)	(n=58)	(n=91)	(n=128)	(n=54)
1 Protect animal / elephants so they will not be killed	31		35	34	23	32	31	31
2 Poaching is cruel / it is a pity to see elephants suffer	18		21	17	16	17	13	22
3 Elephants are like humans / we should respect their lives	15		18	12	15	12	20	14
4 Elephants will go extinct	8		6	7	10	5	10	5
5 This video (overall) persuaded me to stop buying	7		7	6	8	7	4	8
6 Elephant's eyes (in the video)	7		4	9	10	8	4	10
7 It is illegal	7		6	10	5	8	13	4
8 "Everyone has a responsibility to protect animals"	6		8	3	5	3	6	7
9 "When the buying stops, the killing can too"	4		4	3	7	9	4	5

Q27c. What made you change your view of buying ivory in the future? [open-ended question] – Weighted data

*Base: Those “Likely” or “Very likely” to buy ivory in the future (from Q5a) and “Unlikely” or “Very unlikely” to buy ivory after watching the video (from Q27b), n=273



4. Conclusions and Recommendations



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Conclusions – Starting Points for Recommendations (1)

Overall, 2020 has seen a significant drop in ivory purchase and in desire to buy ivory in the future showing that the impacts of the ban have persisted through the three years following its implementation.

- After a large decrease in ivory purchase rates between 2017 and 2018, purchase rates levelled out in 2019. In 2020, the purchase rates have further decreased significantly, but persist among specific target groups.
- The proportion of the population that are defined as Diehard Buyers has decreased significantly. However, the remaining “core” Diehard Buyers are even more firm in their beliefs about ivory purchase and have a higher ivory purchase index, a higher ivory purchase rate and their intention to buy ivory in the future has remained steadily high. Diehard Buyers are also the most frequent ivory buyers, with the highest proportion saying that they buy ivory more than once per year.
- With a slight decrease in the proportion of Ban Influenced citizens, the number of firm Rejectors of ivory purchase has increased significantly and is similar to 2018 levels. Ivory is becoming increasingly less attractive to Ban Influenced citizens and their purchase rates continue to decline, as does their intention to purchase. Ban Influenced Citizens

have had the largest increase in support for the ivory ban. Ivory attractiveness and purchase rates remain low for Rejectors.

- Ivory buyers are mostly buying it as a gift for a friend or relative, followed by personal use. There is a significant increase in people buying ivory online compared to 2019, through this channel is still comparatively low. Ivory purchase on social media and on category websites has been declining steadily over the last three years. Luxury products, such as gold, silver and diamond increased significantly in their popularity as alternatives to ivory, as did rosewood.
- The differences in attitude, motivations and behavior of consumers in layer 1, 2 and 3 cities are diminishing year on year.
- Regular overseas travelers, although they could not travel for much of the twelve-month period prior to the survey, remain the only group to have increased their purchase rate of ivory compared to 2017 levels. The overall purchase of ivory outside of Mainland China has dropped but this is expected to have been strongly influenced by the difficulty traveling for much of the year.

Note on COVID-19: While COVID-19 undoubtedly affected the actions, perceptions and opinions of the people surveyed in this study, in order to keep the questions comparable with previous years, we did not specifically address the pandemic in our questionnaire.

Conclusions – Starting Points for Recommendations (2)

- Drivers and deterrents for ivory purchase have remained largely unchanged since 2019, with concerns about elephant extinction and animal cruelty still the most strongly-held beliefs among the participants in this survey. As in 2019, the most strongly held belief for Diehard Buyers is a driver to purchase - the perception of the artistic value of ivory.
- The percentage of people who believe ivory is illegal to trade in China remains high and has increased significantly since 2019. In all groups except Diehard Buyers, there is an increase in their support of a total ban on ivory trade. Ban Influenced Citizens have seen the biggest increase in their support of a total ban.
- Unprompted and prompted recognition of the ivory ban have dropped, though Regular Overseas Travelers have maintained a higher level of prompted and unprompted awareness and Diehard Buyers have their highest level of prompted awareness in the four years to date. This drop in specific recognition of the ban could be partly driven by greater exposure to more current wildlife trade regulation, leading to people not being able to identify the ivory legislation, as recognition of CITES and the law on the protection of wildlife increased .
- When informed about the ban, participants mostly report that it would deter ivory purchase behavior. However, the proportion of people for whom the ivory ban would influence them to buy ivory through another channel or buy other ivory products, while remaining low, has risen significantly.
- Campaign recognition is lower than previous campaigns but is highest among Diehard Buyers and Regular Overseas Travelers. The campaign video resonates strongly with participants, especially the poached elephant, the gun sight and the commitment to not purchasing ivory. While some Diehard Buyers remain determined to buy ivory, the combination of information on the ivory ban and the campaign video appears to have a strong deterring effect from their intention to buy ivory in the future.

Recommendations (1)

Because many of the differences observed in 2020 are trends that are continuing from previous years, many of the recommendations remain similar to 2019. Continuing with measures that are seeing declines in ivory purchase and purchase intention as well as increases in positive attitudes will continue to have benefits.

RECOMMENDATIONS BY POPULATION SEGMENT

- **Regular overseas travelers: Watch for a re-emergence** – Although they could not travel for much of 2020, this group has maintained their perceptions, attitudes and intentions to purchase ivory. Regular overseas travelers continue to be the group that is most likely to be aware of the ivory ban and have the highest rates of campaign awareness and recognition. Their lower rate of ivory purchase in 2020 may be driven by the inability to travel for part of the year, but their intention to buy in the future remains significant and with increased post-pandemic travel, could re-emerge.
- **Target layer 1, 2 and 3 cities with online campaigns** – The differences between the surveyed cities has become less pronounced year on year. Online access in Layer 2 and 3 cities is growing and the increasing use of online, social media and precision campaigns on elephant conservation across the nation, comparing to the tradition billboard campaigns which are mostly focused on Layer 1 cities, can have a greater effect on these cities. Continuing to use online campaigns will make sure that these cities are effectively targeted.

- **Ban Influenced Citizens: Continue to target this group** – the number of Ban Influenced Citizens is remaining steady, while their ivory purchase rates and intention to purchase are dropping year-on-year. Ban Influenced Citizens have a poor knowledge that bringing ivory into China is illegal but high support for an ivory ban. They remain heavily influenced by knowledge of the ban and perceive the campaign video positively. A significant number of Ban Influenced Citizens who had previously bought ivory were convinced by the video not to buy it again and only a small number report that they still plan to buy ivory after learning of the ban and seeing the video. Informing this group about the laws and effects of ivory trade will help them to become more effective advocates.
- **Diehard Buyers: Keep focus on this group**– Although the size of this group has diminished, Diehard Buyers have increased in their purchasing habits, intention and action meaning the remaining members of this segment are more diehard than ever. This group buys ivory most frequently and they have the highest rate of misconceptions that ivory is legal to buy in China. However, this group also has the highest rate of campaign awareness among the three segments and more than four in ten were swayed by the knowledge of the ban coupled with the campaign video. Targeted, precision marketing at this segment can be an effective use of resources.

Recommendations (2)

- Rejectors: Continue to aim for their participation in ivory campaigns –** Rejectors continue to have a low rate of campaign awareness among the three segments but the highest desire to share conservation materials. Engaging with this segment will help disseminate the conservation messages to groups that are more inclined to purchase ivory, which will drive the greater social unacceptability of ivory purchase.

COMMUNICATIONS RECOMMENDATIONS

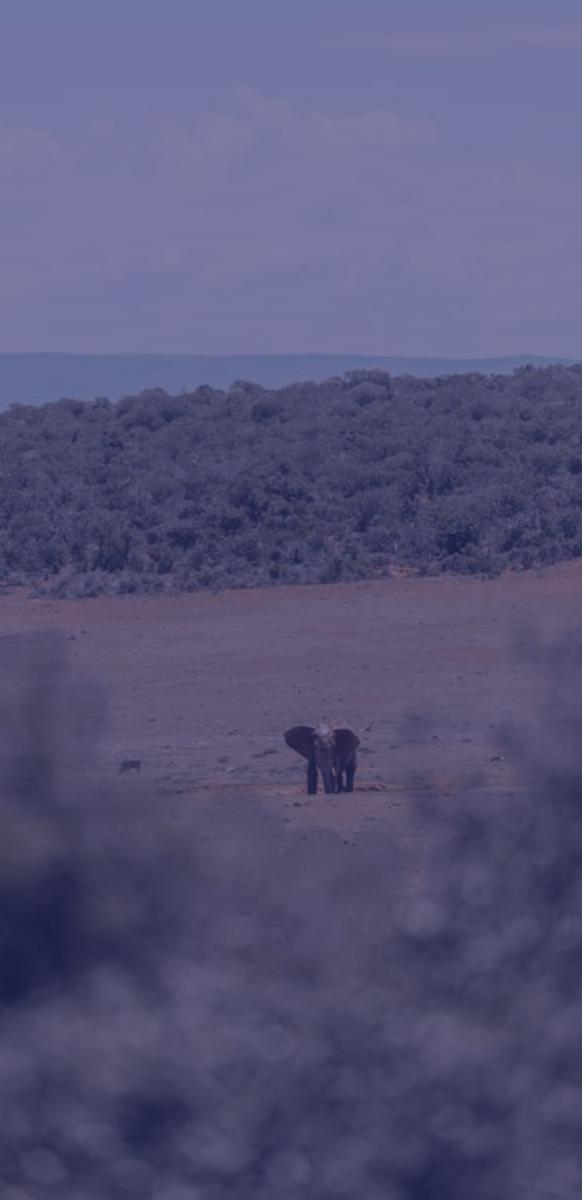
- Focus on luxury goods as alternatives –** Gold, Silver and diamonds are increasingly being seen as suitable alternatives to ivory. Promoting these can help reduce demand for ivory. Diehard Buyers are more likely than in 2019 to accept gold, silver or diamonds as alternatives.
- Combine knowledge of the ban with campaign videos to create intention change –** Exposure to the ivory ban coupled with campaign messages reduces intention to purchase dramatically, even among diehard buyers. Multiple sources of intervention will help increase the efficacy of campaigns.
- Continue the message that it's illegal to bring ivory back to China -** This message needs to be reinforced for the likely travel boom that will follow the COVID-19 pandemic.

RECOMMENDATIONS FOR IVORY CHANNELS

- Continue to put pressure on online trade –** Online trade of ivory, though still comparatively low, is increasing and potentially poses serious issues as ivory in shops and markets is shut down. Social media continues to decrease as an online purchase channel, while Artefact collection websites and second-hand trade apps are increasing in prominence.
- Tailor campaigns for online sharing and TV/ Screen –** With the majority of information about the ban, and with many respondents saying that they would like to 'share' elephant conservation campaign, these two channels should be targeted with messages above other forms.

RECOMMENDATIONS FOR RESEARCH

- Take stock and regroup for insights –** Because COVID-19 delayed research in 2020 and the pandemic is still ongoing, 2021 would be a perfect year to take the information gathered across four years and conduct international workshops to spread the information and gather insights as to how to best go forward. It would also be an opportunity to triangulate this research with market availability data and trend data in product throughput and price, to get a comprehensive picture of what is happening with ivory value chains going into China. Once the pandemic is over, it would be very worthwhile to revisit the topic but for 2021, while the effects are likely to still be felt quite heavily, ivory purchase is unlikely to change drastically.



5. Deep Dive on Diehard Buyers: Understanding Diehard Buyers' Behavior and Attitudes



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Note on Diehard Buyers (From Main Sample and Booster Sample)

Methodology and Sampling

- In order to conduct additional analysis on Diehard Buyers, “booster samples” were added to the main fieldwork. The booster samples were gathered after completing the general fieldwork by targeting participants who had bought ivory in the past. Responses from 500 ivory “ever buyers” were collected in addition to the main fieldwork sample. These were analyzed and the 64 Diehard Buyers that resulted from this sample were added to the Diehard Buyers that came from the overall fieldwork (including Hangzhou), yielding 288 Diehard Buyers on which extra analyses could be conducted. These data were weighted to more closely resemble the natural fallout from the main sample but did not change in number. To maintain consistency and comparability between groups and between years, the boosters are not included in the general report but are presented here in a separate chapter.

Purpose

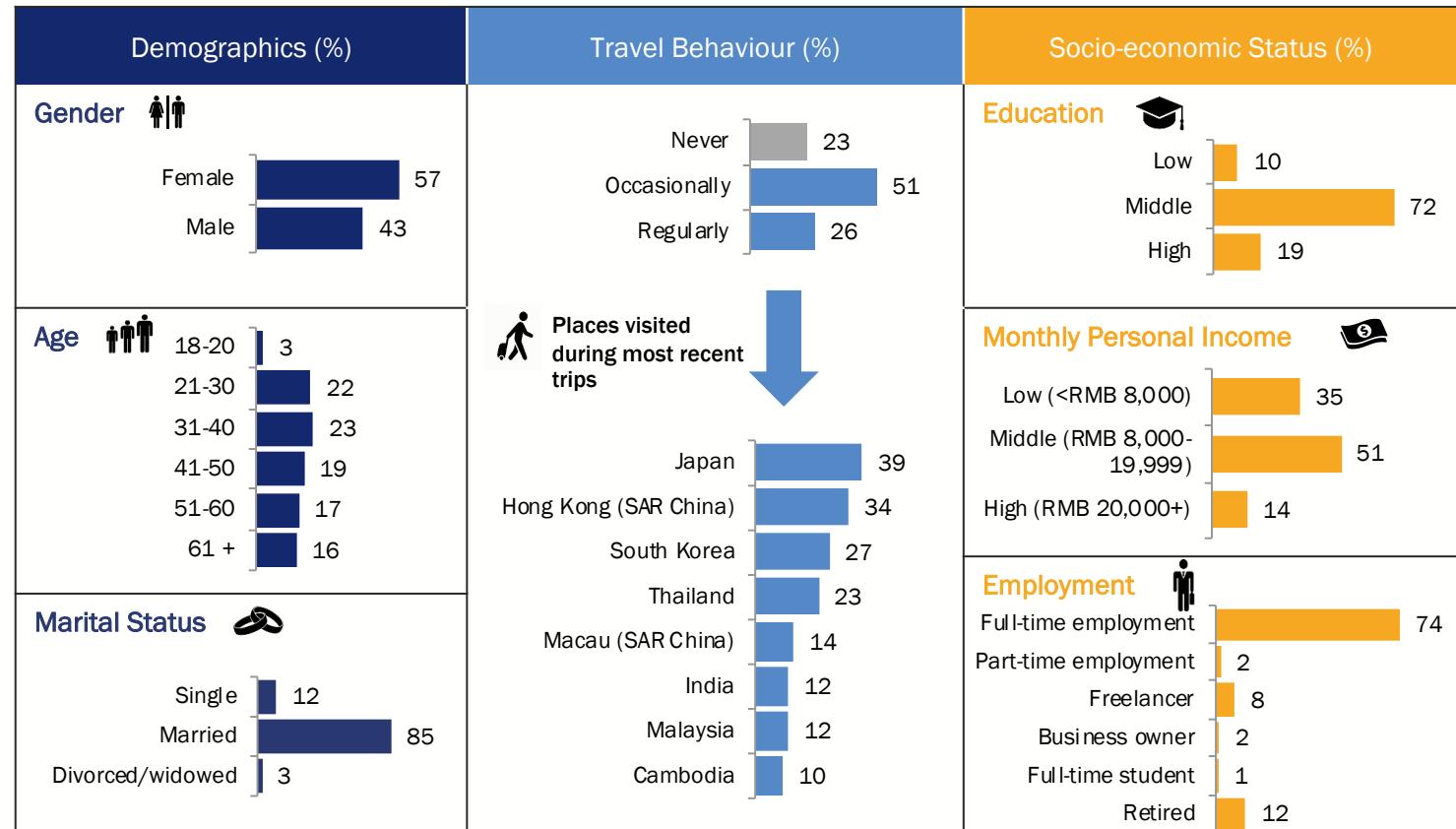
- The objective of the booster sample is to better understand the Diehard Buyers segment’s behaviors and attitudes by increasing the size of the sample to one that can be broken down by sub-group. This chapter provides a more nuanced look at this group of ivory buyers that are more determined than ever in their convictions and actions around ivory

purchase.

- This chapter contains responses to the questionnaire from participants that were recruited from outside of the nationally representative sample used in the main report. Thus, the Diehard buyers in this chapter **should only be used to provide analysis of sub-groups within Diehard Buyers** (e.g. Diehard Buyers who travel regularly, Diehard Buyers aged 31-40). The Diehard buyers in this chapter are not natural fallout from the overall fieldwork, therefore the total numbers in this chapter should not be used as the representative totals for Diehard buyers to compare with other segments (e.g. rejectors) and other demographics (e.g. layer 1 cities) in the main report Chapter 1-4.
- For the purpose of the analyses in this chapter, Hangzhou is included with Layer three cities.

Introduction and Participants' Profile – Diehard Buyers

The age, gender, and education of the Diehard Buyers from the booster sample added to the Diehard Buyers from the main sample (including Hangzhou) were weighted to be similar to the natural fallout of Diehard Buyers from the main sample, though it differs slightly.



S2. Age; S3. Gender; S4. Monthly personal income; S5. Education; Q36. Current marital status; Q37. Household composition; Q38. Employment; Q39. Travel behavior– Weighted data

Base: 2020 Diehard Buyers (From Main Sample + Booster Sample), n=288

Summary and Key Learnings on Diehard Buyers

Within Diehard Buyers, some demographics and traits stand out as affecting participants' ivory perceptions and purchasing habits more than others. These are shown on the right and constitute the Core Diehard Buyers.

Compared with regular Diehard Buyers, this group show many of the same attributes but to a higher degree.

Although all Diehard Buyers value the artistic aspects of ivory, Core Diehard Buyers are significantly more likely to value ivory's cultural heritage.



- Live in Layer 1 Cities
- Age 31-40
- Regular overseas travelers
- High income (monthly >RMB20k)
- High education (university graduates or above)

Core Diehard Buyers* are significantly **more likely to ...**

- Have purchased ivory in the past 12 months
- Be willing to buy ivory in the future
- Be aware of the ivory ban (when prompted)
- Buy ivory If It Is completely legal and unregulated

Why Core Diehard Buyers want ivory?
(Top drivers)



Ivory has great artistic value



Ivory connects me to my cultural heritage



Ivory is unique / is a gift to mark special life events



* When comparing within each demographics sub-group

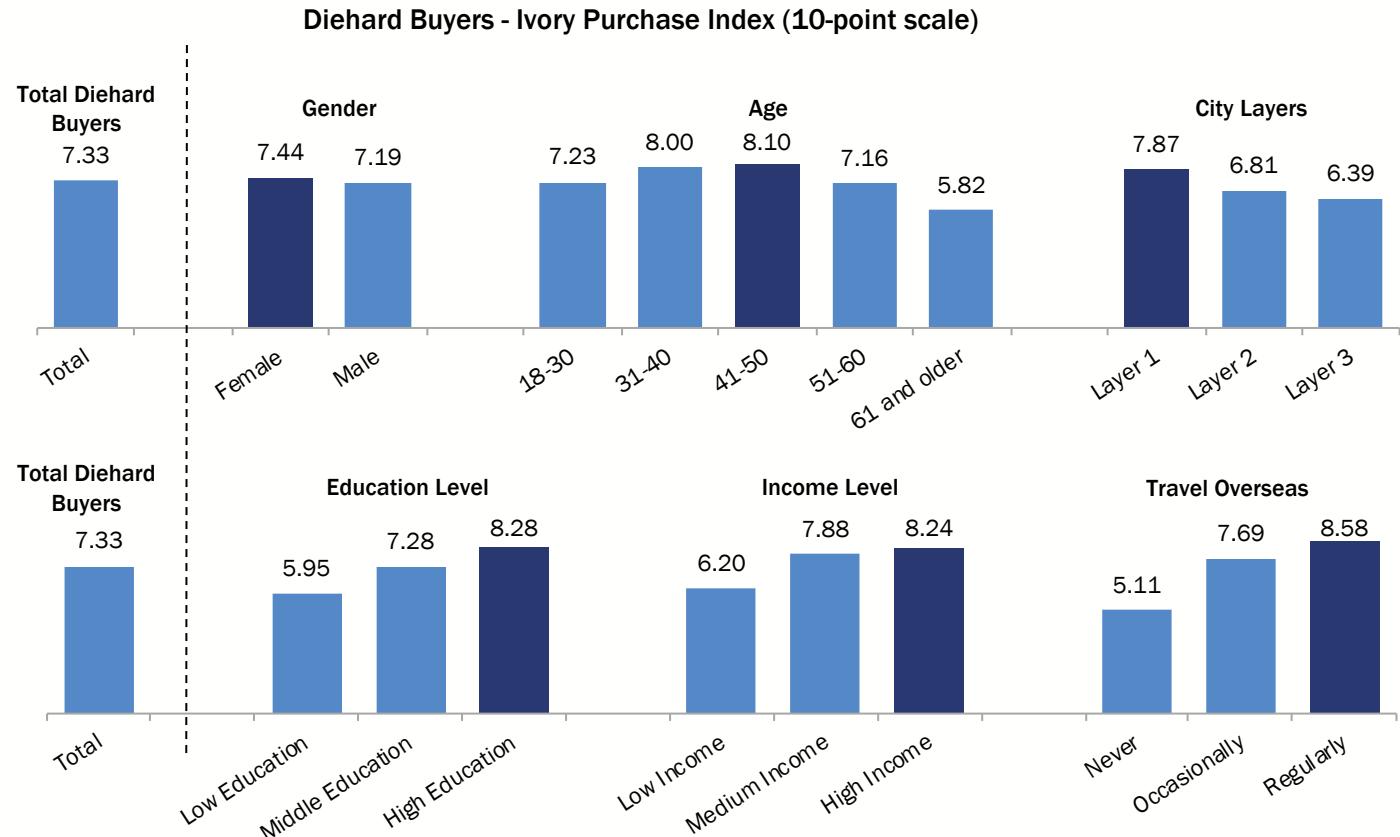
Ivory Purchase Index - by Diehard Buyers Key Sub-Groups

Among Diehard Buyers, ivory is most attractive to those who live in Layer 1 cities, aged 31-50 years old, with higher education and high income, and who travel regularly.

Overall Diehard Buyers have the highest Ivory Purchase Index of all three (i.e., Diehard Buyers, Ban Influenced Citizens and Rejectors). This is driven by Diehard Buyers with higher education and high income, regular travelers and those who live in Layer 1 cities. It is also particularly high among Diehard Buyers aged 31-50, who represent 41 percent of this segment, and consequently are the 'core' Diehard Buyers.

Diehard Buyers who travel regularly (29% of this segment) have the highest Ivory Purchase Index of all Diehard Buyers sub-groups.

The Ivory Purchase Index doesn't differ significantly between genders, i.e. both male and female Diehard Buyers are attracted to ivory at similar rates, females a bit more.

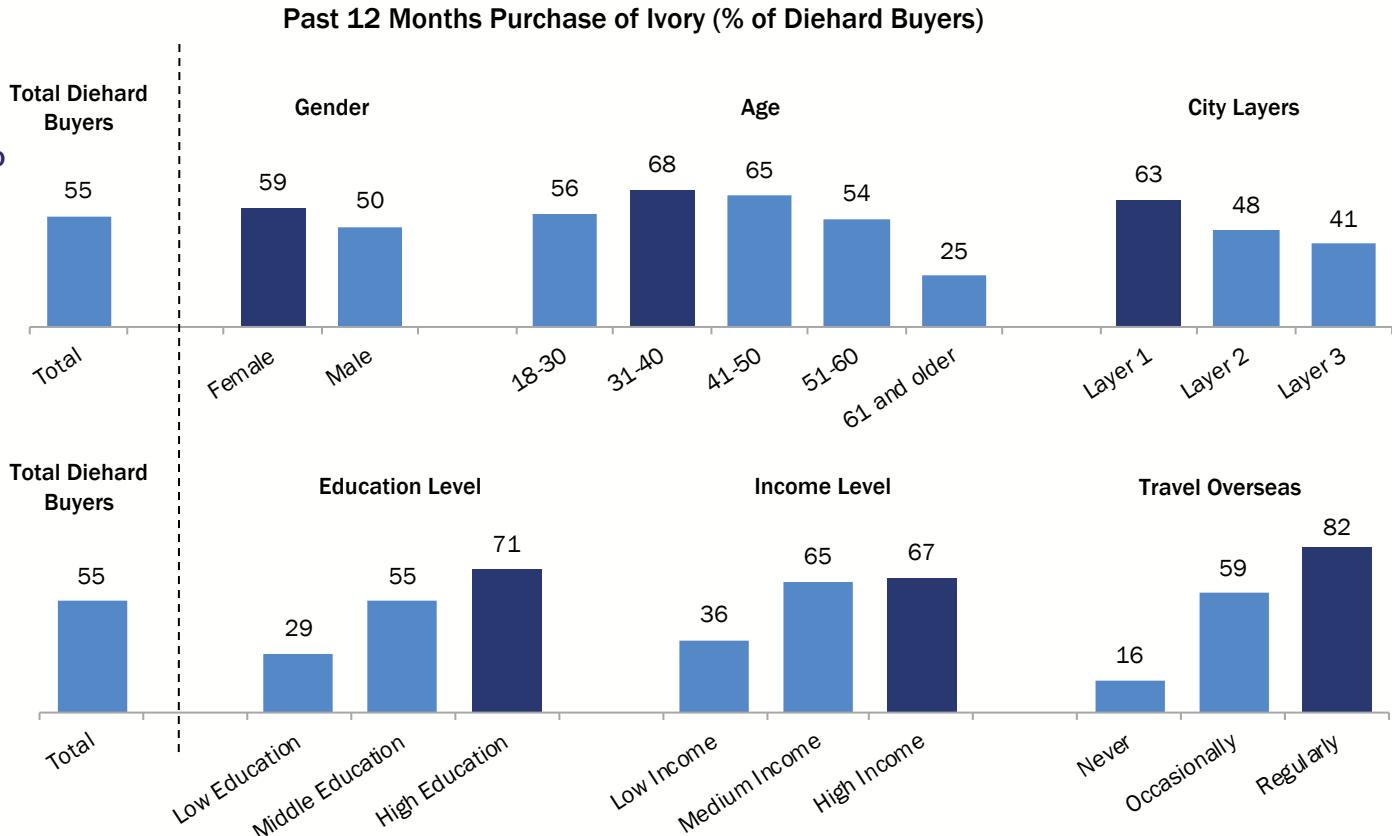


Purchase of Ivory in Past 12 Months – by Diehard Buyers Demographics

The self-reported incidence rate of ivory purchase in the past 12 months (P12M) of Diehard Buyers is the highest, compared to Ban Influenced Citizens and Rejectors. It is particularly driven by the Diehard Buyers who travel regularly and have a higher education.

The P12M purchase of ivory differs most by type of traveler among the Diehard Buyers, i.e. the majority of Diehard Buyers who travel regularly have bought ivory recently (82%), while less than 2 in 10 (16%) of the non-travelers (who represent 20% of the Diehard Buyers) bought ivory in 2020. This highlights the need to expose travelers to any communication aimed at Diehard Buyers.

In terms of profile, the P12M purchase of ivory among Diehard Buyers reflects how attracted they are to ivory (i.e. Ivory Purchase Index). Those with high education, high income, aged 31-50 and who live in Layer 1 cities are those with the highest recent purchase incidence.





Ivory Purchase Channels – Diehard Buyers

The purchase of ivory in person from a retail store in Mainland China remains the most commonly cited source of ivory purchase among all sub-groups of Diehard Buyers.

Diehard Buyers who are Regular Overseas Travelers report significantly higher rates of purchase abroad, while Diehard Buyers aged 41+ report the highest rates of ivory purchase online.

The purchase of ivory in market stalls in China is the second most popular purchase channel among the majority of sub-groups.

Diehard Buyers - Ivory Purchase Channels
(% of Diehard Buyers who are Past 12 Months Ivory Buyers)

Diehard Buyers (Main + Boosters)	(n=159)	Layer 1	Layer 2	Layer 3	18-30	31-40	41-50	51-60	61 and older	Regular Overseas Travelers
		(n=104)	(n=32)	(n=23)	(n=40)	(n=45)	(n=36)	(n=27)	(n=12*)	(n=62)
1 In person, in a retail store in China	72	67	77	85	69	69	66	75	*Small Base	81
2 In person, in a market stall in China	49	51	45	46	43	44	68	56		50
3 In-person, when travelling out of the country on short-term leisure/business trips	46	48	42	45	51	41	48	44		56
4 Online	27	31	18	20	26	19	35	39		31
5 In-person, at an auction	23	25	19	22	38	10	28	20		26
6 In person in China, from a private individual	20	19	21	23	25	18	19	13		18
7 In person, from street vendors in China	18	21	11	13	25	29	5	4		23
8 In-person, when travelling out of the country on long-term trips for work	11	12	15	2	13	11	13	13		13

Note: Green indicates the top 2 purchase channel by sub-group

Q3a. Where did you purchase ivory in the past 12 months? – Weighted data

Base: 2020 Diehard Buyers who are past 12 months ivory buyers, n=159; *Small Base < n=20

Ivory Purchase Outside Mainland China – Among Diehard Buyers and Travelers

Overall, 48 percent of Diehard Buyers who travel regularly overseas have bought ivory outside of Mainland China.

Diehard Buyers report Japan as the country in which they are most likely to have bought ivory while outside Mainland China, while Diehard Buyers who travel regularly overseas report are more likely to buy ivory in Thailand

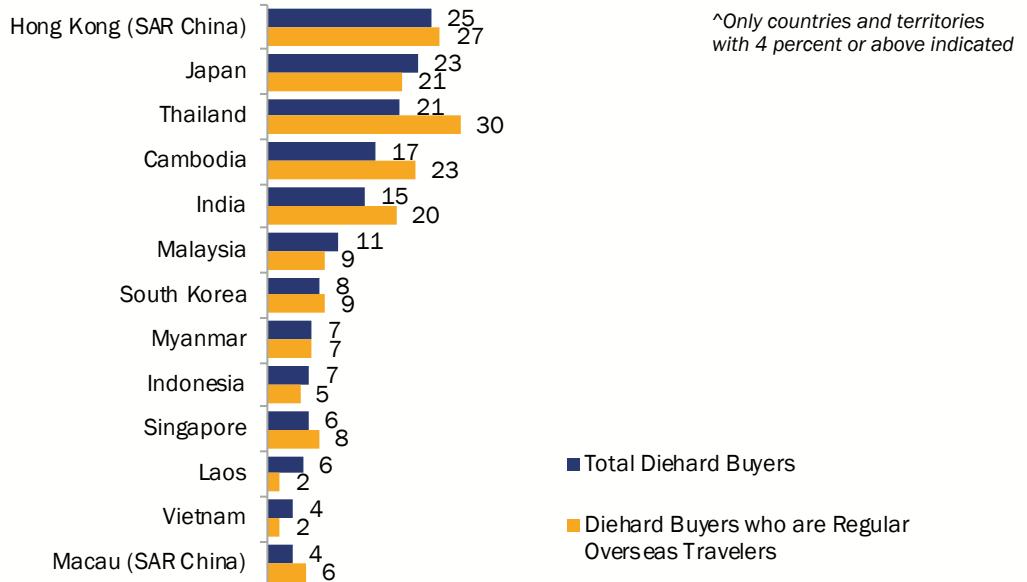
Regular Overseas Travelers who are Diehard Buyers report elevated levels of ivory purchase but the countries in which they buy the products are similar.

48%

... of Diehard Buyer Travellers Bought Products Made from Ivory on Trips Outside Mainland China in the Past



Countries and Regions[^] where Ivory Were Bought on Trips Outside Mainland China
(% Among Diehard Buyers who bought ivory outside Mainland China)



Note: The prominence of some destinations over others may reflect the popularity of these areas as holiday destinations.

Note on COVID-19: Travel was greatly disrupted in 2020 but for some months that were included in the prior 12 months, international travel was still possible

Reasons for Purchasing Ivory Outside Mainland China*

Diehard Buyers who have ever purchased ivory outside of Mainland China tended to do so without having planned it prior to their trip; most of these overseas ivory purchasers only decided to purchase ivory while abroad.

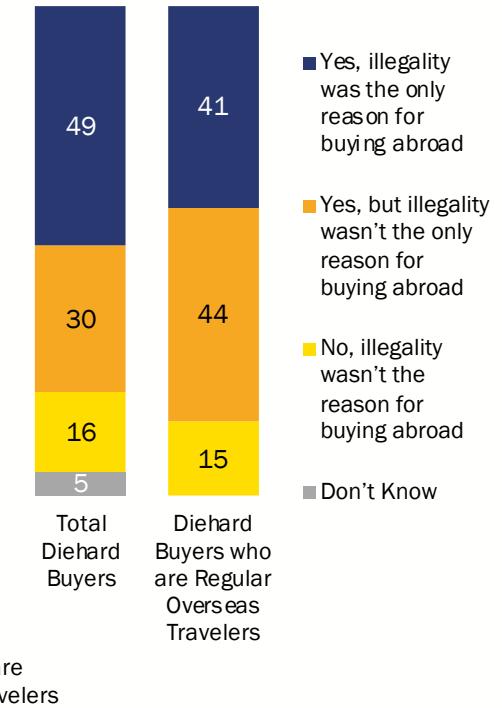
The majority of Diehard Buyers who are Regular Overseas Travelers decided to buy ivory abroad without planning, once they saw it in a store (56%).

Half of the Diehard Buyers who bought ivory overseas (49%) reported that illegality in China was the only reason they bought abroad, and a further third say that illegality was a factor. Fewer than two in ten Diehard Buyers who bought ivory abroad did so exclusively for reasons other than its illegality in Mainland China.

Why did you buy ivory products abroad?
(% of Diehard Buyers who are Overseas Ivory Buyers)



And Did You Buy Ivory Products Abroad Because They Are Illegal in Mainland China?
(% of Diehard Buyers who are Overseas Ivory Buyers)



Q43 [2019/2020 question]. Why did you buy ivory products abroad? (Respondents were presented with a list of options); Q44 [2019/2020 question]. And did you buy these ivory products abroad because they are illegal in Mainland China? – Weighted data

Base: Diehard Buyers who are Overseas ivory buyers: n=107; Diehard Buyers who are Regular Overseas Travelers and overseas ivory buyers: n=44

*See slide 7 for note on travel.

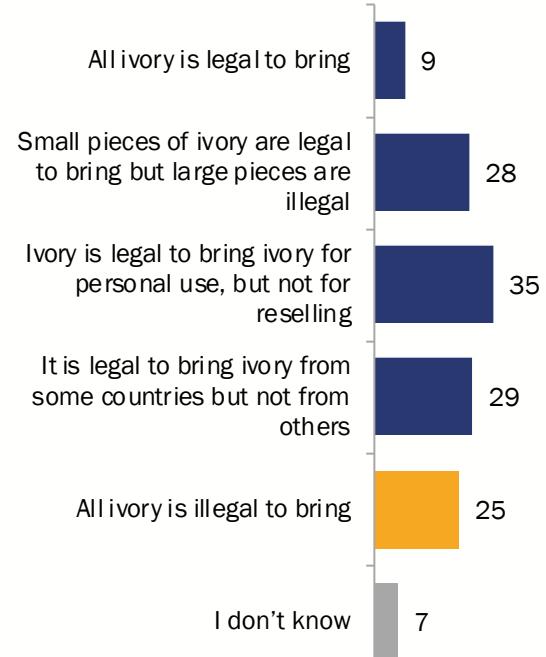
Bringing Ivory Products Back to China – Among Diehard Buyers

Only a quarter (25%) of the Diehard Buyers surveyed believe that all ivory is illegal to bring back to Mainland China, while the majority (68%) think that it is legal (in different ways), and 7% do not know.

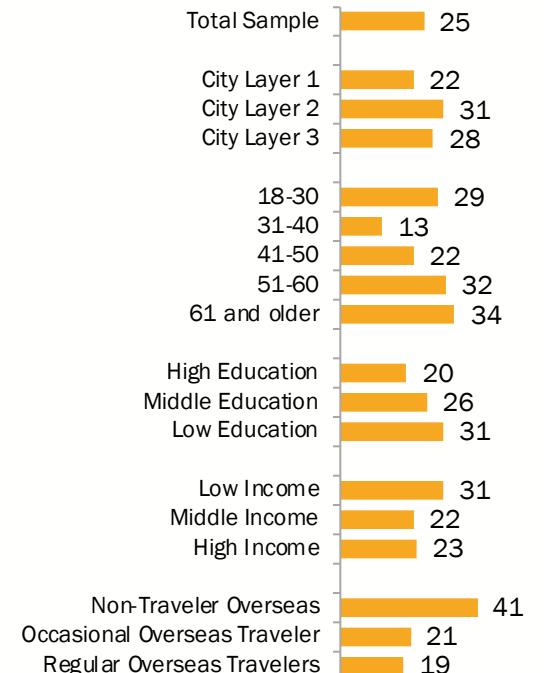
Diehard Buyers who are non-overseas travelers have the highest awareness of the illegality of bringing ivory back to China (41%), while only 19% of those who travel regularly overseas claim that it is illegal.

Among City Layers, the Diehard Buyers who live in Layer 1 cities have a lower awareness of the illegality of bringing ivory back to China (22%) compared to those who live in Layer 2 cities (31%).

Is it legal to bring ivory back into Mainland China from abroad?
(% of Diehard Buyers)



All ivory is illegal to bring – by sub-groups - 2020 (%)



Q21. [2020 revised question]. Is it legal to bring ivory back into Mainland China from abroad? Please select all that apply. – Weighted data
Base: 2020 Diehard Buyers (From Main Sample + Booster Sample), n=288

Intention to Purchase Ivory Ever in the Future

Asked **before** Mentioning the Ivory Ban – Diehard Buyers Sub-groups

The vast majority of Diehard Buyers intend to purchase ivory in the future when asked before mentioning the ivory ban, especially those aged 31-50, those who live in Layer 1 cities and those who travel regularly.

The intention to purchase ivory in the future (before the ban is mentioned) is driven primarily by the Diehard Buyers who are Regular Overseas Travelers (89%) and those aged 41-50 (90%).

There is a lower intention to purchase ivory among the younger Diehard Buyers (69%), those aged 61+ (68%) and those who live in Layer 3 cities (69%), before the ban was mentioned.

Diehard Buyers - Intention to Purchase Ivory before mentioning the ivory ban

(Base: % of those “Likely” or “Very likely” to purchase ivory in the future)

■ 5 Very likely ■ 4 Likely ■ 3 Neither likely/unlikely ■ 2 Unlikely ■ 1 Very unlikely

Diehard buyers (Main + Boosters) 42 35 15 3 5

“Very likely” + “Likely” to Purchase Ivory before mentioning the ban (%)

Layer 1 48 34 16 2

77

Layer 2 40 32 10 3 15

82

Layer 3 27 42 18 7 6

72

69

18-30 34 35 25 3 3

69

31-40 40 46 8 15

86

41-50 49 41 10 0

90

51-60 49 21 18 2 10

70

61 and older 41 28 10 8 13

68

Regularly 65 24 6 14

89

Q5a. How likely will you be to purchase ivory and/or anything made of ivory in the future? – Weighted data

86 Base: 2020 Diehard Buyers (From Main Sample + Booster Sample), n=288

Drivers and Deterrents of Ivory Purchase – Top Influencing Factors

The factor most influencing Diehard Buyers' ivory purchase attitudes is ivory's perceived artistic value. This factor is also the dominant belief and driver among Diehard Buyers who travel regularly.

Diehard Buyers do not find the price, the availability or the concern of fake ivory to be strong deterrents for purchasing it.

Diehard Buyers who are also Regular Travelers or live in Layer 1 cities or are aged 31 - 40, strongly hold beliefs in favor of purchasing ivory, i.e. their top 3 beliefs are all drivers of ivory purchase. They believe that ivory has great artistic value, that it connects them to their cultural heritage and are also motivated to purchase ivory for gifting.

Gifting is also a strong driver of ivory purchase among the Diehard Buyers who live in Layer 1 cities and those aged 31-40.

In green: Deterrents
In red: Drivers

Among All Diehard Buyers

- ① Ivory has great artistic value
- ② I share information about animal protection on social media
- ③ I am concerned about the possible extinction of elephants

Top 3 Beliefs About Ivory*

Among Diehard Buyers who Live in Layer 1 Cities / Age 31-40 / Regular Travelers

- ① Ivory has great artistic value
- ② Ivory connects me to my cultural heritage
- ③ Ivory is a gift to mark special life events

Among Diehard Buyers who Have High Education (University Graduate or above) or Have High Income (Monthly RMB >20K)

- ① Ivory has great artistic value
- ② Ivory is unique
- ③ I share information about animal protection on social media

* Including the 4th belief if the difference is equal to 0.01 or less in the MaxDiff score (see next slide)

Q9 [Similar question asked in 2017 and 2019]. Now we will focus on ivory and its purchase. On the following screens we will provide you lists of various statements. For each screen, please select the statement which describes your opinion the most, and the statement which describes your opinion the least. – Weighted data

Base: 2020 Diehard Buyers (From Main Sample + Booster Sample), n=288

Drivers and Deterrents of Ivory Purchase – by Diehard Buyers Sub-groups (1)

In green: Deterrents In red: Drivers	Top 3 opinions* Bottom 3 opinions*	Total Diehard Buyers	Layer 1	Layer 2	Layer 3	18-30	31-40	41-50	51-60	61 and older	Regular Overseas Travelers
		n=288	n=164	n=67	n=57	n=72	n=66	n=55	n=49	n=46	n=75
Ivory has great artistic value	3.62	3.90	3.42	3.02	3.58	3.79	4.47	3.48	2.55	4.17	
I share information about animal protection on social media	3.09	3.01	3.04	3.39	3.69	2.88	2.14	3.21	3.46	2.85	
I am concerned about the possible extinction of elephants	3.00	2.71	3.46	3.30	2.98	2.81	2.31	3.19	3.92	2.28	
Ivory connects me to my cultural heritage	2.98	3.30	2.57	2.51	3.08	3.16	3.64	3.08	1.64	3.58	
Ivory is unique	2.93	3.15	2.59	2.67	2.86	2.97	3.42	3.16	2.14	3.48	
Ivory is a gift to mark special life events	2.92	3.15	2.61	2.58	2.79	3.07	3.23	3.18	2.23	3.51	
If I saw someone selling ivory I would report to the authorities	2.79	2.55	3.00	3.22	3.11	2.53	1.80	2.64	3.96	2.39	
Ivory increases its value over time	2.78	2.94	2.54	2.63	2.61	2.78	3.23	3.09	2.22	3.39	
Ivory indicates wealth, power and social status	2.69	2.98	2.30	2.29	2.93	2.65	2.81	2.91	1.99	3.42	
Ivory brings luck and fortune	2.65	2.88	2.49	2.16	2.54	2.80	3.37	2.73	1.66	3.43	
Purchasing ivory participates in animal cruelty	2.54	2.39	2.60	2.92	3.00	2.38	1.61	2.44	3.27	1.99	
I try to convince my friends and family not to buy ivory	2.53	2.39	2.62	2.81	2.71	2.42	1.87	2.38	3.35	2.05	
Ivory is a souvenir to buy when I'm on holiday abroad	2.48	2.56	2.35	2.38	2.42	2.46	2.56	2.76	2.19	2.95	
I am concerned about the legal consequences of buying ivory	2.46	2.23	2.57	3.01	2.59	2.12	2.07	2.67	3.00	1.86	
Ivory is ideal to pass on to future generations	2.34	2.45	2.13	2.27	2.29	2.42	2.67	2.50	1.75	2.84	
Ivory has healing powers and brings good health	2.33	2.52	2.12	2.01	2.33	2.50	2.69	2.28	1.70	2.99	
Ivory gifts help to build business relationships	2.19	2.30	2.05	2.03	2.17	2.28	2.51	2.14	1.76	2.59	
My friends or family asked me not to buy ivory	2.19	2.00	2.62	2.21	2.21	2.05	1.72	2.12	2.97	1.61	
I always want to buy ivory	2.12	2.31	1.78	1.97	1.90	2.28	2.47	2.16	1.78	2.58	
Only a strong law and penalties will prevent me from buying ivory	2.09	2.04	1.90	2.43	2.21	1.93	2.11	1.67	2.53	1.80	
I'm afraid to buy counterfeit ivory	1.87	1.81	1.96	1.97	1.76	1.86	1.65	2.12	2.09	1.78	
I can easily buy ivory abroad	1.87	1.89	1.83	1.85	1.99	1.89	1.89	1.89	1.59	1.87	
Ivory that comes from a killed elephant brings bad luck	1.77	1.61	2.09	1.85	2.01	1.35	1.51	1.60	2.48	1.02	
I cannot afford ivory	1.32	1.22	1.26	1.69	1.12	1.21	1.49	1.17	1.79	1.08	

* Including the 4th opinion if the difference is equal to 0.01 or less

Q9. Now we will focus on ivory and its purchase. On the following screens we will provide you lists of various statements. For each screen please select the statement which describes your opinion the most, and the statement which describes your opinion the least. – Weighted data

Base: 2020 Diehard Buyers (From Main Sample + Booster Sample)

Drivers and Deterrents of Ivory Purchase – by Diehard Buyers Sub-groups (2)

In green: Deterrents In red: Drivers	Top 3 opinions* Bottom 3 opinions*	Total Diehard Buyers n=288	Education			Income		
			Low	Medium	High	Low	Medium	High
			n=28	n=206	n=54	n=102	n=146	n=39
I share information about animal protection on social media	Ivory has great artistic value	3.62	3.49	3.53	4.00	3.19	3.91	3.64
I am concerned about the possible extinction of elephants	I share information about animal protection on social media	3.09	2.65	3.10	3.29	3.46	2.77	3.29
I am concerned about the possible extinction of elephants	Ivory connects me to my cultural heritage	3.00	3.25	3.06	2.62	3.68	2.61	2.66
Ivory connects me to my cultural heritage	Ivory is unique	2.98	2.47	2.98	3.23	2.52	3.22	3.28
Ivory is unique	Ivory is a gift to mark special life events	2.93	2.12	2.96	3.23	2.59	3.01	3.52
Ivory is a gift to mark special life events	If I saw someone selling ivory I would report to the authorities	2.92	2.73	2.92	3.00	2.53	3.14	3.07
If I saw someone selling ivory I would report to the authorities	Ivory increases its value over time	2.79	2.64	2.77	2.93	3.21	2.48	2.81
Ivory increases its value over time	Ivory indicates wealth, power and social status	2.78	2.75	2.81	2.72	2.63	2.88	2.82
Ivory indicates wealth, power and social status	Ivory brings luck and fortune	2.69	2.42	2.72	2.72	2.21	2.96	2.91
Ivory brings luck and fortune	Purchasing ivory participates in animal cruelty	2.65	2.15	2.71	2.67	2.10	2.95	2.96
Purchasing ivory participates in animal cruelty	I try to convince my friends and family not to buy ivory	2.54	2.41	2.63	2.29	2.88	2.26	2.71
I try to convince my friends and family not to buy ivory	Ivory is a souvenir to buy when I'm on holiday abroad	2.53	2.00	2.68	2.23	3.20	2.08	2.48
Ivory is a souvenir to buy when I'm on holiday abroad	I am concerned about the legal consequences of buying ivory	2.48	2.49	2.48	2.44	2.28	2.67	2.28
I am concerned about the legal consequences of buying ivory	Ivory is ideal to pass on to future generations	2.46	2.33	2.59	2.05	2.83	2.27	2.26
Ivory is ideal to pass on to future generations	Ivory has healing powers and brings good health	2.34	2.23	2.31	2.52	2.01	2.56	2.38
Ivory has healing powers and brings good health	Ivory gifts help to build business relationships	2.33	2.21	2.33	2.39	2.00	2.55	2.34
Ivory gifts help to build business relationships	My friends or family asked me not to buy ivory	2.19	2.16	2.17	2.27	1.86	2.41	2.22
My friends or family asked me not to buy ivory	I always want to buy ivory	2.19	2.22	2.23	2.02	2.61	1.92	2.06
I always want to buy ivory	Only a strong law and penalties will prevent me from buying ivory	2.12	2.04	2.17	1.97	1.76	2.38	2.11
Only a strong law and penalties will prevent me from buying ivory	I'm afraid to buy counterfeit ivory	2.09	2.44	2.06	1.98	2.07	2.08	2.14
I'm afraid to buy counterfeit ivory	I can easily buy ivory abroad	1.87	1.92	1.86	1.90	1.91	1.88	1.78
I can easily buy ivory abroad	Ivory that comes from a killed elephant brings bad luck	1.87	1.83	1.86	1.92	1.61	2.01	1.99
Ivory that comes from a killed elephant brings bad luck	I cannot afford ivory	1.77	1.91	1.84	1.43	2.23	1.45	1.74
I cannot afford ivory	I cannot afford ivory	1.32	1.54	1.34	1.16	1.37	1.38	1.00

* Including the 4th opinion if the difference is equal to 0.01 or less

Q9. Now we will focus on ivory and its purchase. On the following screens we will provide you lists of various statements. For each screen please select the statement which describes your opinion the most, and the statement which describes your opinion the least. – Weighted data

Base: 2020 Diehard Buyers (From Main Sample + Booster Sample)

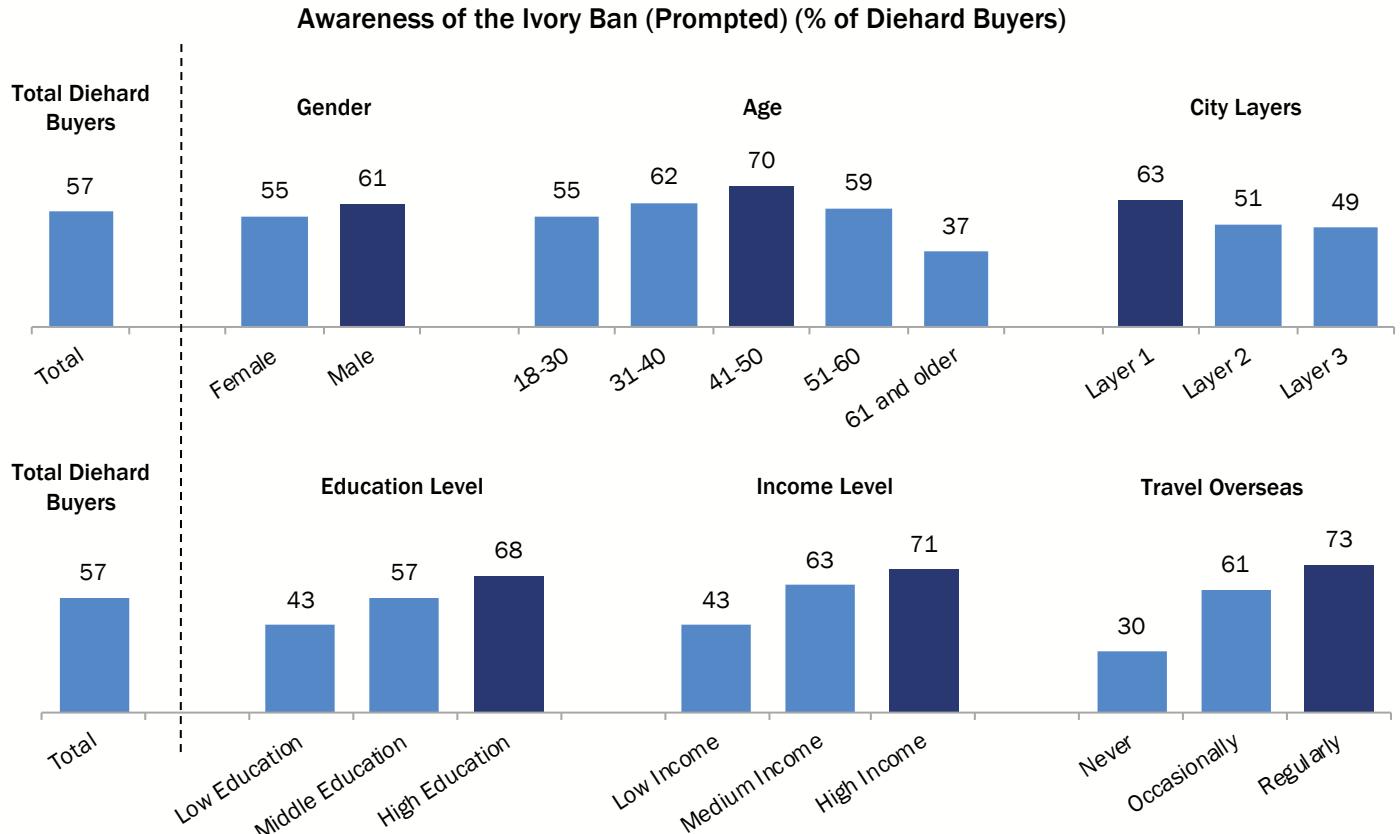
Awareness of the Ivory Ban (Prompted) – by Diehard Buyers Demographics

Diehard Buyers have a higher awareness of the ivory ban than the other segments e.g. Rejectors (when prompted). This awareness is mostly driven by the Diehard Buyers aged 41-50, with high income and who travel regularly.

Diehard Buyers aged 18-30 and particularly those aged 61 and older are less likely to be aware of the ivory ban, compared with other age groups.

The awareness of the ban differs the most by type of traveler among the Diehard Buyers, i.e. the majority of Diehard Buyers who travel regularly are aware of the ban (73%), while less than a third (30%) of the non-travelers (who represent 20% of the Diehard Buyers) heard of the ban.

Awareness is also significantly higher among Diehard Buyers who live in Layer 1 cities, suggesting room to increase exposure to communications in the other City Layers.



Impact of the Ban Among Diehard Buyers

Asked after Reading the Notice of the Ban

Information on the ban influenced Diehard Buyers; after reading the notice of the ban, seven in ten say that it will make them buy less ivory or completely stop buying ivory.

Reading the notice of the ban mostly convinced Diehard Buyers who live in Layer 3 cities, and those aged 31-40, to decrease their purchase of ivory.

However, being aware of the ban had lower impact on Diehard Buyers who travel regularly, who had lower agreement scores than the total Diehard Buyers across all statements.

Impact of the Ban Among Diehard Buyers % Top-3-Box (7 "Strongly agree"+ 5+6)

Statements related to...

- Stopping or decreasing the purchase of ivory
- Purchasing ivory via other channels or purchasing other wildlife products



	Diehard Buyers (Main + Boosters)	Layer 1	Layer 2	Layer 3	18-30	31-40	41-50	51-60	61 and older	Regular Overseas Travelers	
		n=288	n=164	n=67	n=57	n=72	n=66	n=55	n=49	n=75	
1	Make me buy less ivory	74	72	71	81	73	82	71	64	76	62
2	Make me avoid buying any wildlife products	71	62	86	79	69	72	65	71	78	62
3	Make me completely stop buying ivory	70	68	73	71	71	73	68	60	75	68
4	Make me buy ivory only online instead of in shops	68	66	68	71	68	68	73	67	61	62
5	Make me buy ivory from a seller introduced by people that I know	67	70	61	68	74	75	60	65	58	60
6	Make me buy other materials (non-wildlife products) instead	66	68	62	65	71	79	59	51	65	59
7	Make me buy ivory only overseas (not in China)	66	67	62	67	69	71	60	61	66	59
8	Make me buy other types of wildlife product instead	62	64	58	60	69	72	55	59	48	55

Note: Green indicates the top 2 statements with highest agreement

Q16a. Please indicate to what extent you agree or disagree with each of the following statements. Please use a scale of 1 to 7 where 1 means that you "strongly agree" and 7 means that you "strongly disagree" with the statement. – Weighted data

Base: 2020 Diehard Buyers (From Main Sample + Booster Sample), n=288

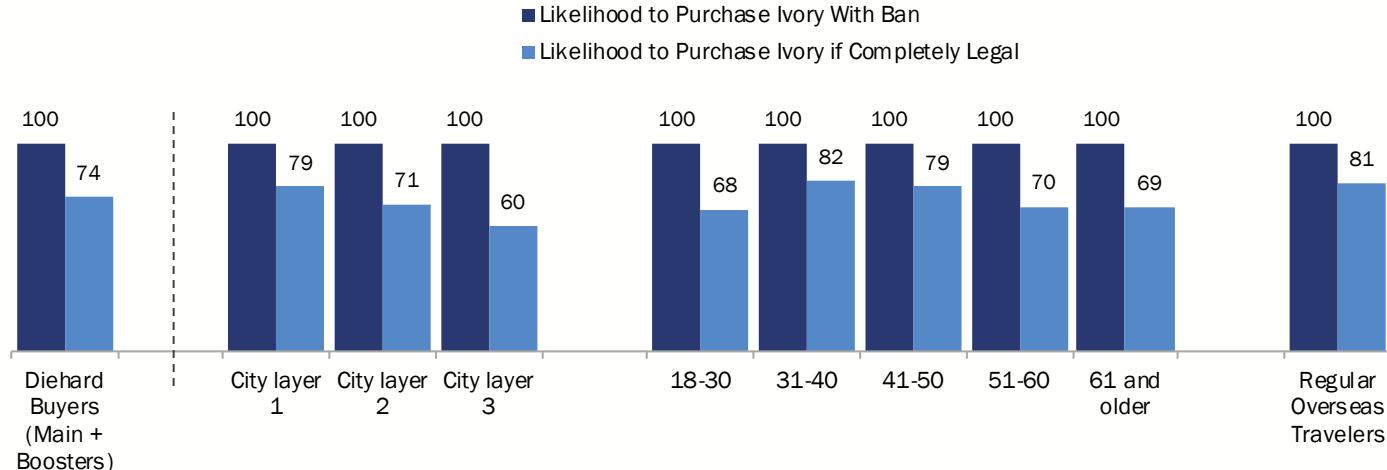
Intention to Purchase Ivory – Regulated vs Unregulated

The likelihood to purchase ivory if it became legal to purchase remains relatively high in 2020 among the Diehard Buyers segment (74%) and among its key sub-groups.

The fundamental intention to buy ivory, i.e. if the legal barrier was removed, is highest among the Diehard Buyers who travel regularly (81%) and those aged 31-40 (82%). The lowest intention to purchase ivory if it became legal is recorded among the younger Diehard Buyers (aged 18-30) (68%) and those who live in Layer 3 cities (60%).

While all Diehard Buyers intend to purchase ivory even after being aware of the ban (Note: *Intending to purchase ivory after reading about the ban is a variable used to define the Diehard Buyers segment*), the levels of purchase intention remains high in a context where ivory would be legal to purchase and unregulated.

“Very likely” + “Likely” to Purchase Ivory after Mentioning the Ivory Ban
vs “Very likely” + “Likely” to Purchase Ivory If it Is Completely Legal and Unregulated – 2020 (% Diehard Buyers)



Q17a. How likely will you be to purchase ivory and/or anything made of ivory since the ivory ban is implemented? – Weighted data

Q20 [2019/2020 question]. And if the purchase of ivory was completely legal and unregulated in Mainland China, how likely will you be to purchase ivory and/or anything made of ivory in the future? – Weighted data

Base: 2020 Diehard Buyers (From Main Sample + Booster Sample), n=288

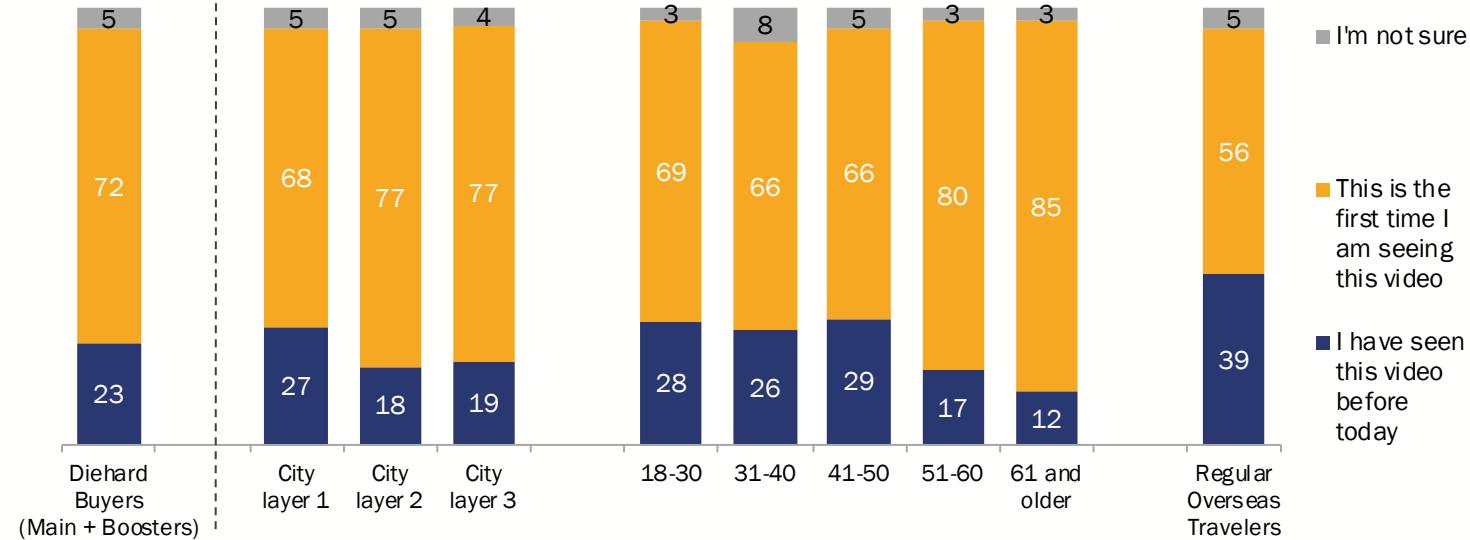
Campaign Recognition – Among Diehard Buyers Key Sub-groups

The Diehard Buyers have a significantly higher recollection of the Ma Weidu Campaign than the other segments. Among the Diehard Buyers segment, this higher recognition is particularly driven by those who travel overseas regularly, indicating that this campaign is reaching its target audience.

Among Diehard Buyers, the Regular Overseas Travelers recognized the Campaign at a higher rate than the other key sub-groups, with almost four in ten of them claiming that they saw it (39%).

The Campaign has been seen at most by the Diehard Buyers who live in Layer 1 cities (27%). Younger Diehard Buyers are also more likely to have seen the campaign than those aged over 50 years old.

Recall / Seen Video (After watching video)
(% of Diehard Buyers)



Q24. Have you seen this video before today? – Weighted data

Base: 2020 Diehard Buyers (From Main Sample + Booster Sample), n=288

Campaign Recognition – Among Diehard Buyers Key Sub-groups

The Campaign made an impact on the behavior of Diehard Buyers, especially by making them want to convince others not to buy ivory and by telling them something new.

The Diehard Buyers who live in Layer 1 cities, aged 18-30 and who travel regularly are the most likely to want to convince others not to buy ivory after seeing the Campaign.

The Campaign also has an informative role and told something new to Diehard Buyers, particularly to those who live in Layer 1 cities, aged 41-50 and those who travel regularly.

Diehard Buyers who live in Layer 3 cities are the most likely to have stopped buying ivory after seeing this Campaign.

**Opinion/Behavior Change After Seeing the Video
(% of Diehard Buyers)**

	Diehard Buyers (Main + Boosters)	Opinion/Behavior Change After Seeing the Video (% of Diehard Buyers)									
		Layer 1	Layer 2	Layer 3	18-30	31-40	41-50	51-60	61 and older	Regular Overseas Travelers	
	n=288	n=164	n=67	n=57	n=72	n=66	n=55	n=49	n=46	n=75	
1	This campaign makes me to convince others not to buy ivory	39	45	32	32	49	33	43	27	42	38
2	I learned something new with this campaign	35	40	29	26	35	31	53	27	27	41
3	I will continue to share information about animal protection in the future	33	37	29	28	41	35	38	16	32	33
4	This campaign convinced me to stop buying ivory even though I bought before	30	26	30	40	24	35	33	26	31	28
5	I made a commitment to protect elephants and not to buy ivory products	29	25	27	42	25	28	27	37	30	34
6	I shared this campaign online	22	22	18	26	17	28	31	15	20	28
7	This campaign convinced me not to buy ivory though I had never bought before	22	21	26	21	23	24	18	14	32	9
8	This campaign did not persuade me	12	14	14	5	10	14	12	17	9	14
9	I don't believe what this campaign says	12	15	10	5	8	14	6	10	21	9

Note: Green indicates the top 2 statements with highest score

Ivory Purchase Intention Change After Seeing the Video – Among Diehard Buyers

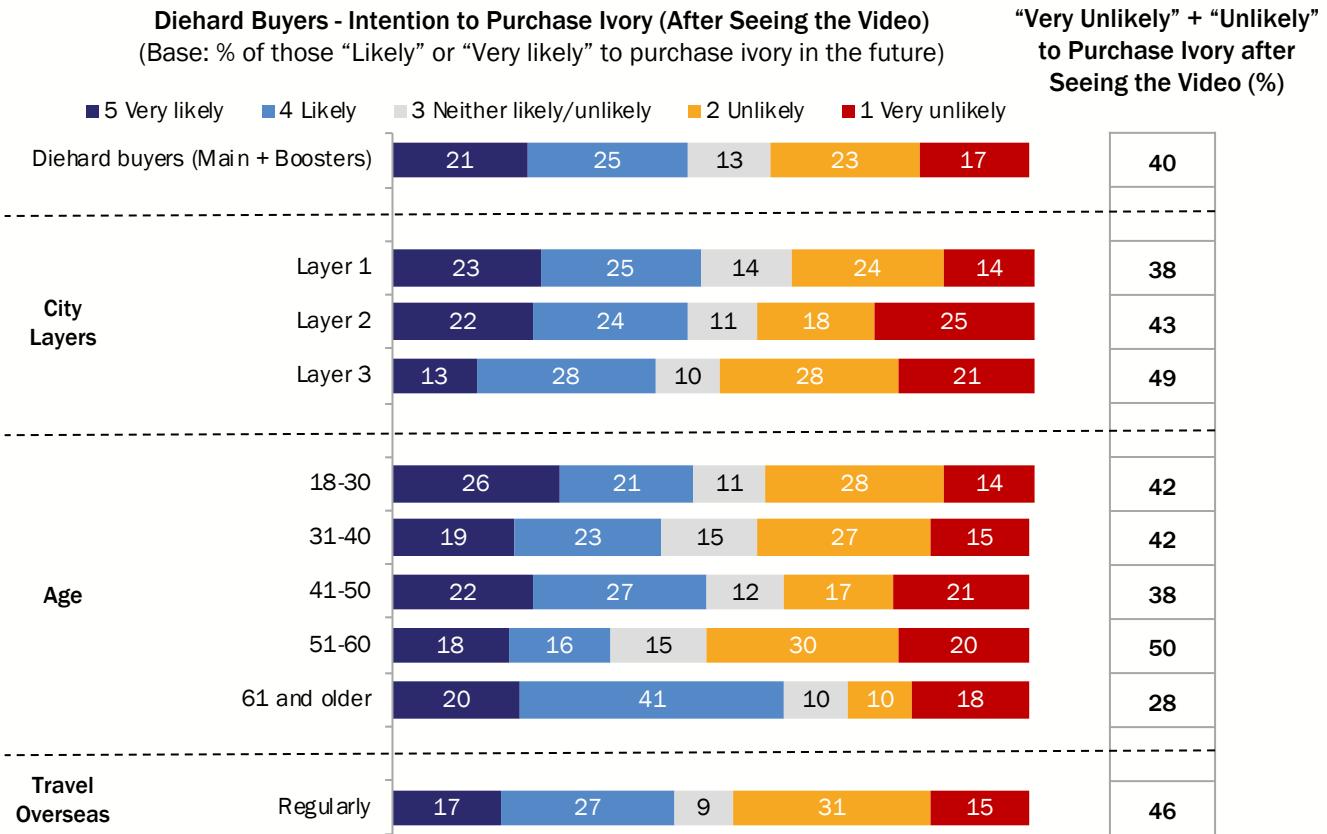
Among the Diehard Buyers who reported that they want to buy ivory in the future (before mentioning the ban), mentioning the ban combined with the Ma Weidu Campaign has a significant impact on their desire to buy it.

Overall, less than half of the Diehard Buyers still intend to purchase ivory in the future after hearing about the ban and seeing the video.

Overall, 40 percent of Diehard Buyers are (very) unlikely to purchase ivory in the future after hearing about the ban and seeing the video.

Diehard Buyers aged between 51 and 60 have the highest possibility to change their behavior compared to other age groups.

It is also worth noting that almost half of the regular travelers (the Diehard Buyers who bought ivory the most in 2020) are likely to change their mind after being exposed to the campaign and hearing of the ban, suggesting a good possibility of a positive impact of the campaign and ban communications on them.



Q27b. After seeing the video, how likely are you to buy ivory in the future? – Weighted data

Base: Diehard Buyers (From Main Sample + Booster Sample) who are “Likely” or “Very likely” to buy ivory in the future (from Q5a), n=222



6. Hangzhou Chapter



Supported by the
 Federal Ministry
for Economic Cooperation
and Development

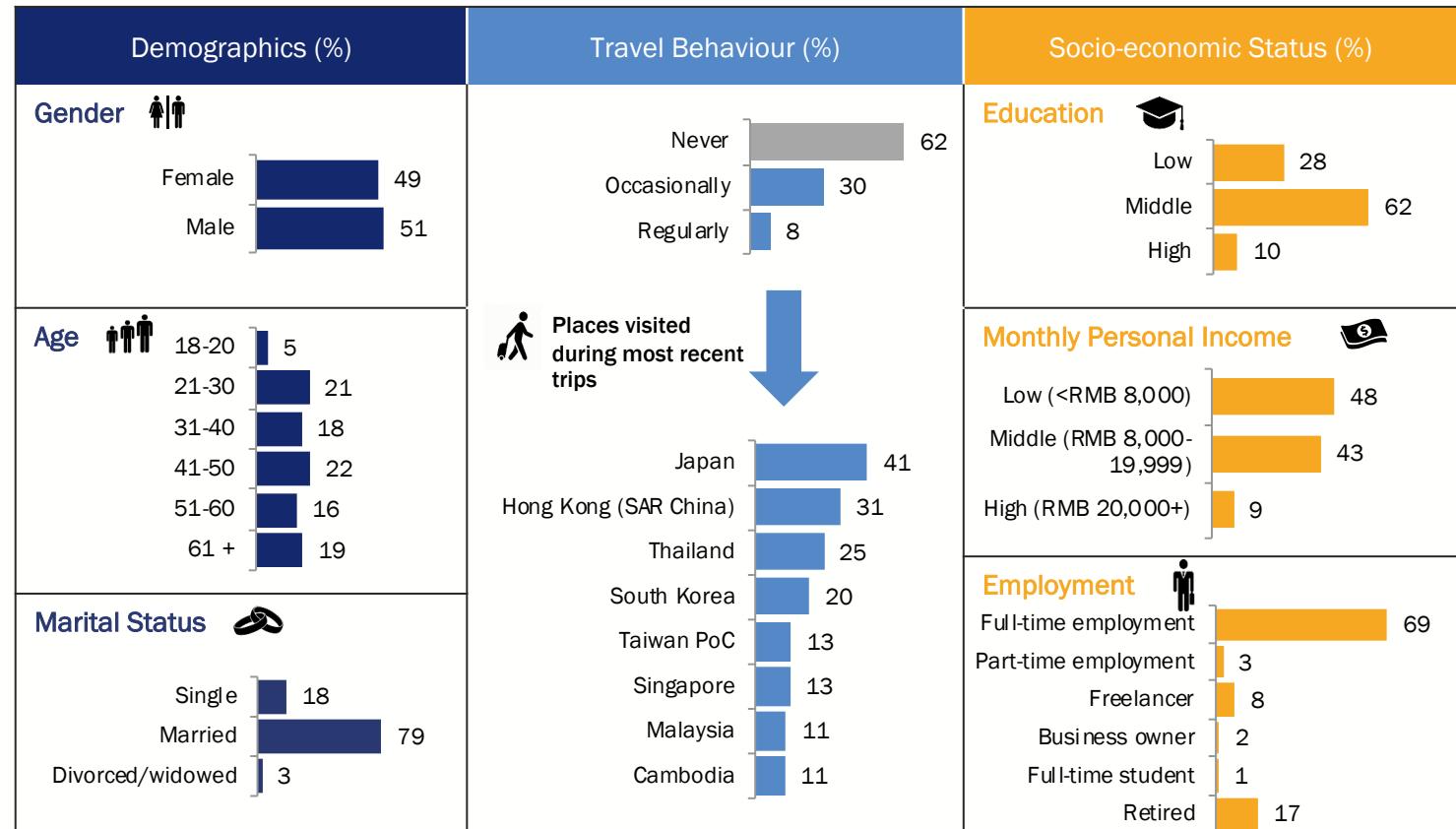


Introduction and Participants' Profile - Hangzhou

With the reported rise in prominence of Hangzhou as a trade center for ivory, the decision was made to include this city since the 2019 ivory survey. In order to keep the results comparable with previous studies, data from Hangzhou are analyzed separately.

To ensure comparability, a sample of $n=200$ participants were interviewed with the same questionnaire as the other $n=2000$.

The same quotas for age, gender, education and income were used to weight the data to ensure it was representative of the overall profile of participants.



S2. Age; S3. Gender; S4. Monthly personal income; S5. Education; Q36. Current marital status; Q37. Household composition; Q38. Employment; Q39. Travel behavior- Weighted data

Base: Hangzhou, $n=200$

Purchase of Ivory in Past 12 Months – Hangzhou

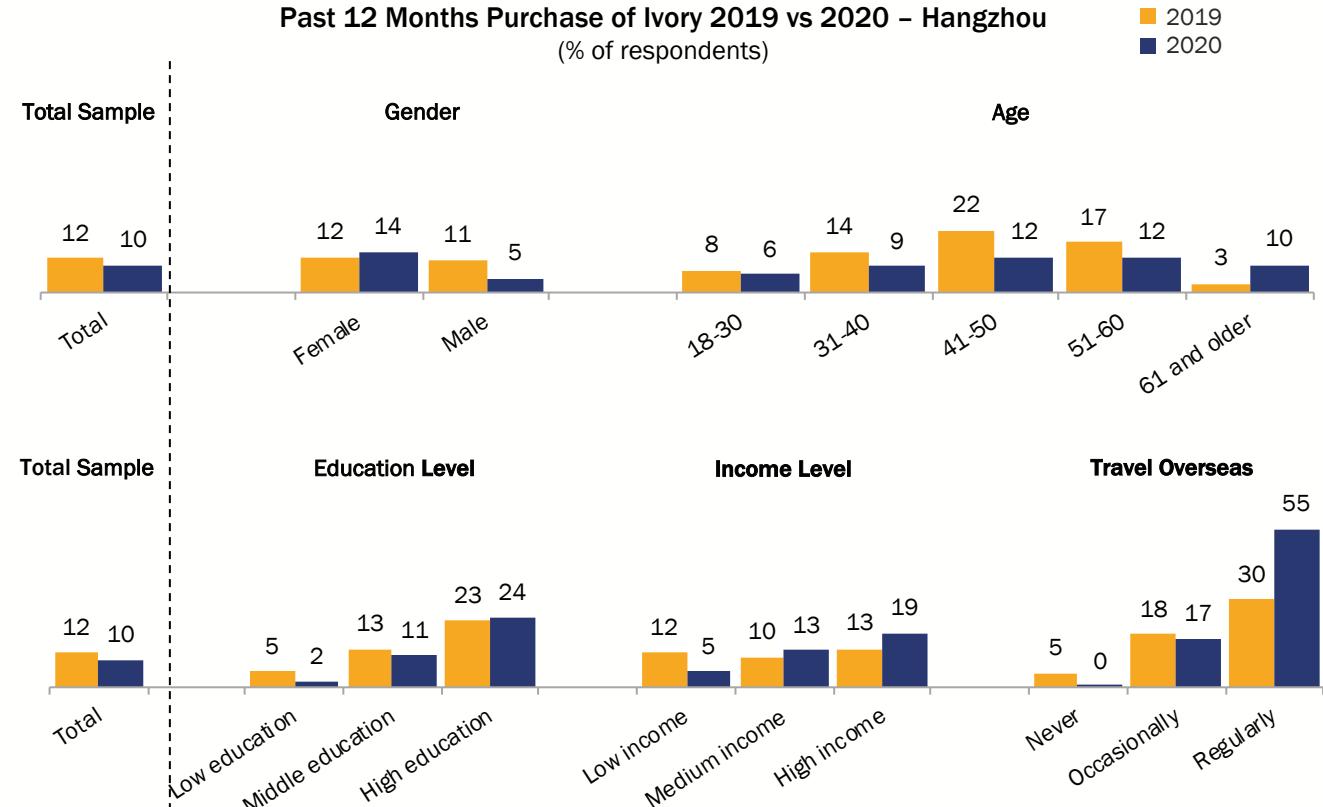
Overall, the purchase rates for ivory in the past 12 months has declined slightly in Hangzhou. Similar to 2019, the 2020 results in Hangzhou most closely reflect the rates in Layer 3 cities.

As with the other cities, demand in Hangzhou is driven by people with high education and who travel outside of Mainland China regularly. The distribution of ivory purchase across age groups is getting more even.

In Hangzhou, 55% of regular travelers bought ivory in the past 12 months, which is higher than those in other cities (44%).



Q2e. And have you bought ivory, or any product or object made of ivory, for yourself or someone else, in the past 12 months? – Weighted data
Total Sample Base: n=2000; Hangzhou Base: n=200



Intention to Purchase Ivory – Hangzhou

Before and after Mentioning of Ivory Ban

Compared to 2019, fewer respondents are likely to purchase ivory in the future in Hangzhou, similar to the trend observed in other cities.

There is a one-third decrease of purchase intention when the ivory ban was mentioned to the respondents.

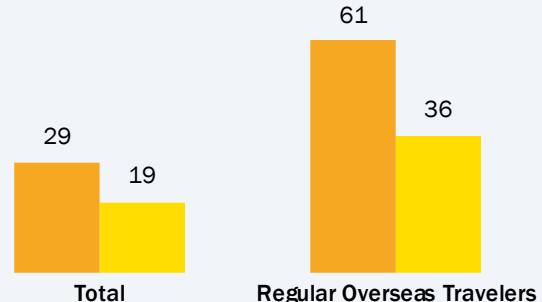
This gap is especially pronounced in the group of regular overseas travelers compared to other groups.

“Very likely” + “Likely” to Purchase Ivory – Hangzhou

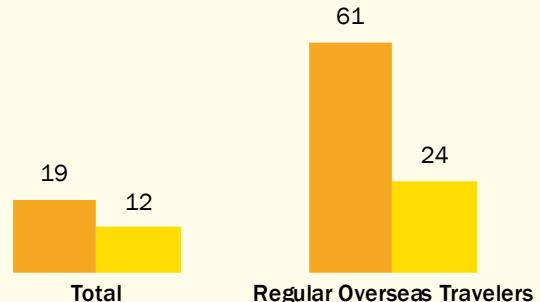
(% of respondents)

Before mentioning the ivory ban
After mentioning the ivory ban

2019



2020



Q5a. How likely will you be to purchase ivory and/or anything made of ivory in the future? – Weighted data

Q17a. How likely will you be to purchase ivory and/or anything made of ivory since the ivory ban is implemented? - Weighted data

2019/2020 Hangzhou Base: n=200; Regular travelers, n=19/16

Purchase Channels – Hangzhou

Among the channels used to purchase ivory in the past 12 months, retail stores remain the leading channel.

Overseas purchase during short-term trips and online purchase saw increase in 2020, though the small sample size of respondents should be noted.

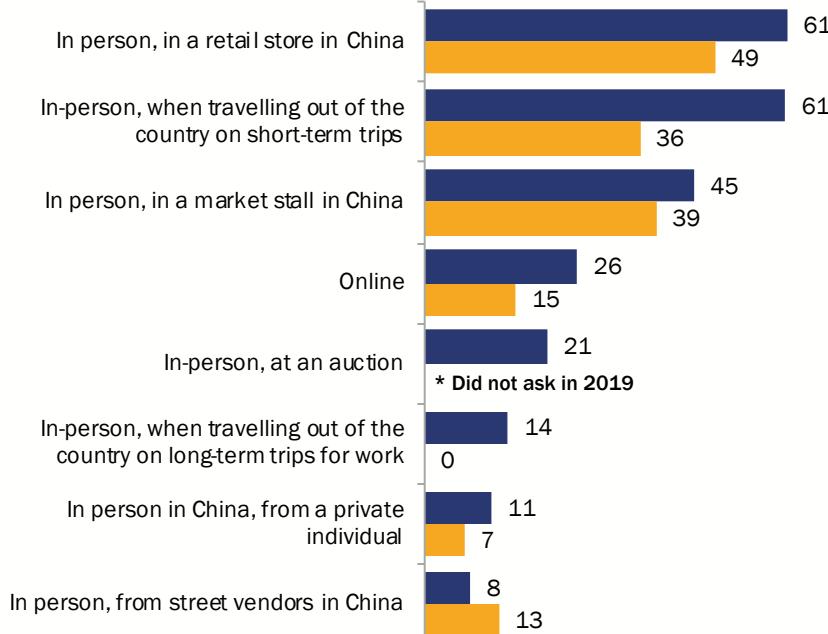
There are no notable differences in purchase channels between Hangzhou and rest of the cities, as the top four channels are the same.

Note: On this question, respondents could select multiple answers, leading to what appears to be a rise in all forms of ivory purchase despite a decrease in reported ivory consumption.

Ivory Purchase Channels – Hangzhou

Among past 12 months buyers (%)

■ 2020
■ 2019



Q3a. Where did you purchase ivory in the past 12 months? – Weighted data

2019/2020 Hangzhou Base: Past 12 Months Buyers, n=24/19

Awareness of Regulations (Spontaneous Answers) – Hangzhou

Although the awareness of ivory trade regulations is similar compared to 2019, there are much less respondents (9%) who correctly identified the 2017 ivory ban.

The percentage of people referencing the “law on the protection of wildlife” has seen a major increase in 2020, becoming the most cited agreement.

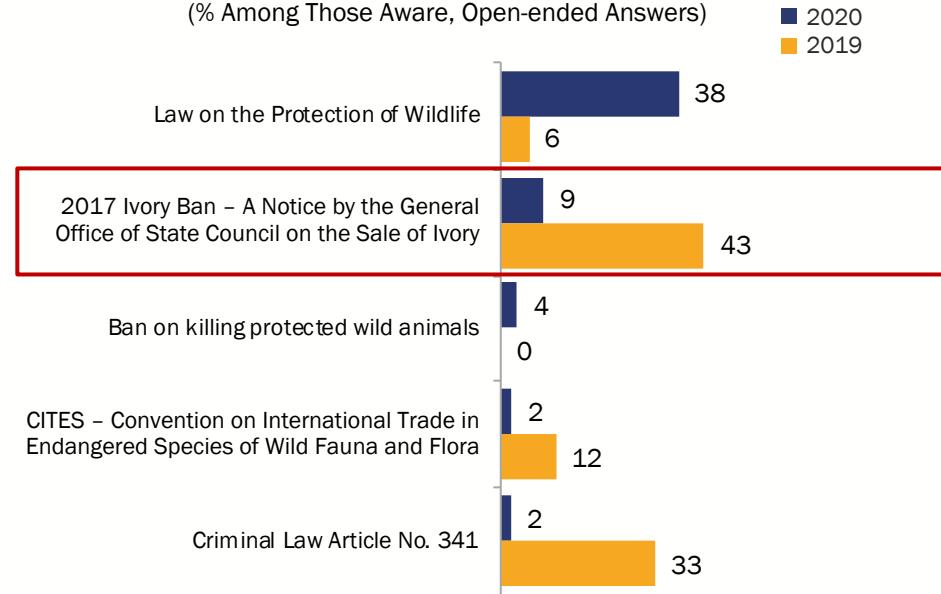
Unlike last year, there are only 2% respondents in Hangzhou incorrectly identified Article No. 341 as the legislation that controls ivory – this being an article relating to general wildlife conservation.

Awareness of Current Regulations - Hangzhou
(% of Total Sample)

2019 2020

12% 11%

Top 5 Regulations/Agreements Aware - Hangzhou
(% Among Those Aware, Open-ended Answers)

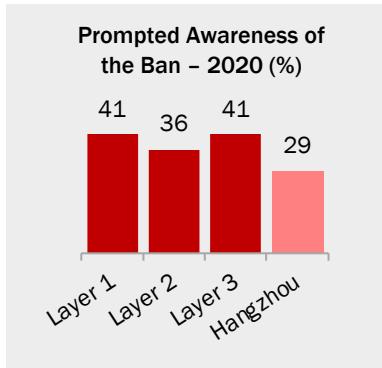


Q13. Are you aware of any agreements or regulations controlling the sale of ivory in China? – Open-ended question – Weighted data
Hangzhou Base: n=200

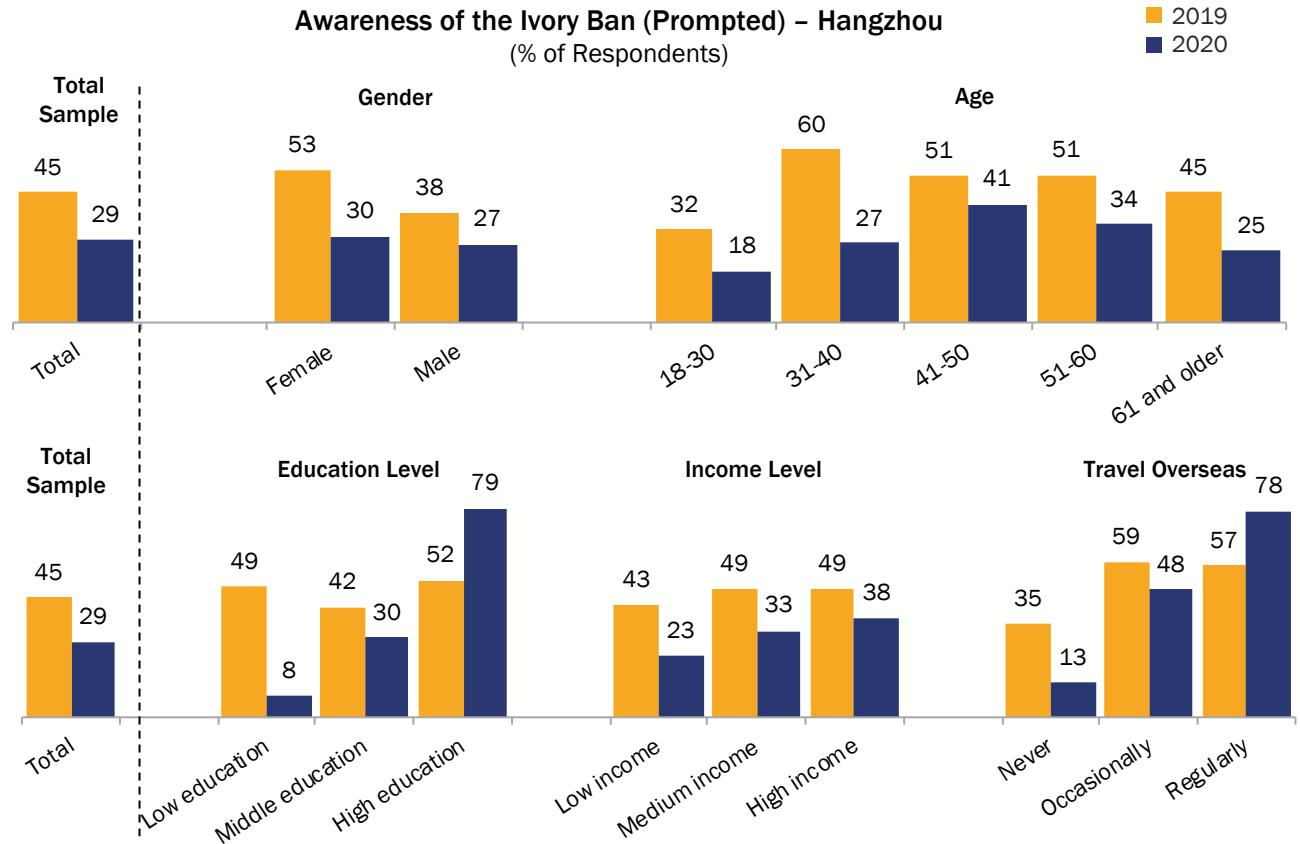
Awareness of the Ivory Ban (Prompted) – Hangzhou

Compared to 2019, Hangzhou respondents are less likely to claim that they are aware of the ban after being prompted. It is also significantly lower than other cities as well.

However, there is an increase in awareness of the ivory ban among respondents with high education and regular travelers. They are also among the groups which have a higher incidence rate for past 12-month purchase in 2020.



Q14a. Have you ever heard about this ban on ivory trade? – Weighted data
Total Sample Base: n=2000; Hangzhou Base: n=200



Recall of Ivory Campaigns – Hangzhou

The spontaneous awareness of ivory campaigns in Hangzhou has decreased since 2019. It is also significantly lower than other cities as well.

Respondents in Hangzhou have a lower recognition of Ma Weidu's campaign compared to other cities.

Have you ever seen and/or heard any campaigns or advertisements against ivory trade and/or about elephant protection? – Hangzhou

2019

20%

2020

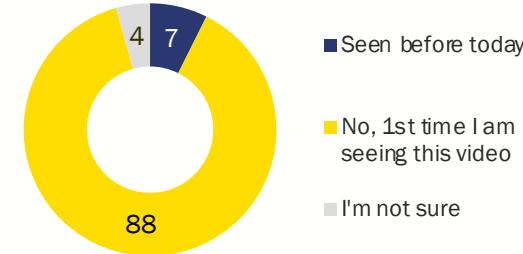
12%

Other Cities Total

2020

22%

Recall / Seen Video of Mai Weidu Campaign (After Watching Video) – Hangzhou
(% of respondents)



Other Cities Total

Seen before today

11%

Q22. Have you ever seen heard any campaigns or advertisements against ivory trade and/or about elephant protection? – Weighted data

Q24. Have you seen this video before today? – Weighted data

103 Hangzhou Base: n=200



7. Appendices



Supported by the
 Federal Ministry
for Economic Cooperation
and Development



Methodology Overview: Quantitative Research

Sample of Consumers and Other Sub-groups

Among the total representative sample, a specific sample of **Past 12 Months Consumers (P12M)** of ivory was identified for specific analysis. This sample allows the uncovering of the motivations, drivers, and inhibitors of consumers of ivory. “**Ever Consumers**” are defined as anyone who has bought ivory, even if only once. This includes the option “ivory” as an answer to the instruction: “please indicate if you have ever bought this material or anything made from this material,” and those who answered “yes” to “Have you ever bought ivory, or any product or object made of ivory, for yourself or someone else?” P12M consumers are defined as Ever Consumers who said yes to the question “And have you bought ivory, or any product or object made of ivory, for yourself or someone else, in the past 12 months?” Analyses were also conducted among other sub-groups of participants: for instance, the data were analyzed by gender, age, city, purchase intention, etc.

Nationally Representative Sample

The total sample size achieved was $n=2,016$ (unweighted), which we weighted toward $n=2,000$, for ease of comparison with the pre-ban and the 2018 and 2019 survey, which each had a weighted total of $n=2,000$. This robust sample size has a margin of error of roughly 2 percent.

To ensure this sample was representative of the population of China, **quotas on gender, age, and income** were set from the start of fieldwork and were monitored regularly during the fieldwork.

Comparison with Other Surveys

This survey is based on a selected sample, with a choice of cities being considered active ivory markets and the key metrics cannot be compared one-on-one with other surveys (except for the Pre-ban 2017 Survey, Post-ban 2018 Survey and Post-ban 2019 Survey).

The 2020 Survey follows the Pre-ban baseline survey conducted in September – October 2017 and the Post-ban surveys conducted in May – July 2018 and May-July 2019. Relevant comparisons and trends can be observed as the four surveys are based on the same methodology and the same sampling plan.

While the data / key metrics are specific for the 15 cities, the underlying patterns on segmentation, purchase behavior, and communications are relevant for all ivory buyers, and the results can inform demand reduction campaigns throughout China.

Methodology Overview: Sampling and Quotas

Sampling Plan

- The fieldwork was monitored daily and detailed checks of interim data were performed during fieldwork (at 10%, 40%, 55%, and 80% of sample completion) to ensure data quality and consistency.
- The census data from the National Bureau of Statistics of China was used to set these quotas: <http://www.stats.gov.cn/tjsj/ndsj/2016/indexeh.htm>

Quotas on Age (out of age 18+)	%
18-20	4.5
21-30	20.8
31-40	18.3
41-50	21.7
51-60	16.0
61 and over	18.7

Quotas on Gender	%
Female	48.8
Male	51.2

Quotas on Education	%
High	9.5
Middle	62.3
Low	28.2

The following quotas were used for all three studies (2017, 2018, 2019 and 2020):

Layers	Soft Quotas on City	Soft Quotas %
Layer 1 cities	Beijing	12.5
	Shanghai	12.5
	Guangzhou	12.5
	Chengdu	12.5
Layer 2 cities	Xiamen	25 (Layer 2 cities combined)
	Kunming	
	Fuzhou	
	Xi'an	
	Shenyang	
	Tianjin	
Layer 3 cities	Nanning	25 (Layer 3 cities combined)
	Chongqing	
	Nanjing	
	Jinan	
	Shenzhen	

Analysis Deployed: The MaxDiff Question (1)

MaxDiff Description: Using the MaxDiff Question

MaxDiff (Maximum Differentiation Scaling) builds upon a long-established theory about how people make choices. It assumes that participants' choices are more relative/comparative than absolute.

MaxDiff is an approach for capturing relative scores (e.g., importance, preference, agreement, attitude) for a set of items.

With MaxDiff, participants are shown a set of items and are asked to indicate the item that best describes their opinion, and the item that least describes their opinion, for example:

Please consider how important different features are when selecting a fast food restaurant.

Considering only the features below, which is the Most Important and which is the Least Important?

Most Important		Least Important
<input type="radio"/>	Reasonable prices	<input type="radio"/>
<input type="radio"/>	Healthy food choices	<input type="radio"/>
<input type="radio"/>	Has a play area	<input type="radio"/>
<input type="radio"/>	Clean bathrooms	<input type="radio"/>

The items are grouped using MaxDiff algorithm in order to ensure that each item and each pair of items is shown an equal number of times. Usually, participants see each pair of items at least two or three times. A list of 20 attributes typically requires 10 to 16 sets/screens.

Item scores are then estimated on a respondent level using a Hierarchical Bayes (HB) method, and transformed to a numeric scale, e.g., a 5- or 10-point scale. The larger the score, the higher the importance of the item for that respondent.



Analysis Deployed: The MaxDiff Technique (2)

Reasons for Using MaxDiff in this Research

Using MaxDiff provides a better differentiation between the item importance compared to rating scales, mainly because:

- With rating scales, there can be many straight-line answers, such as giving ratings of 3 to all 20 items on a 5-point scale;
- Cultural biases in the use of the scale. For example, participants in China tend to use the top portion of the scale, while participants in Germany tend to use the middle or bottom portions of the scale;
- Research has shown that importance scores obtained with MaxDiff range from 0 to 10 compared to the range from 5 to 8 obtained with stated importance ratings (e.g., everything is important).

MaxDiff scores, if they result from “most important” vs “least important” scales, could replace other predictive modeling, e.g., regression and path analyses which we normally use to extract derived importance scores. This is due to the fact that this method, in this particular case, already indicates importance in driving the desired outcome. MaxDiff scores allow for any kind of statistical analysis we could consider doing with responses obtained using rating scales.

What Can We Do with MaxDiff Scores?

MaxDiff scores could be reported in a similar way to reporting rating scales (e.g., averages, percentages, crosstabs, bar charts). With MaxDiff, we can measure importance, preference, performance, and many other variables.

Methodology Overview: Weighting and Rounding

Weighting

- After fieldwork was closed and the final data quality checks were performed (e.g., removal of bad records with incomplete answers), a weighting by age, gender, education and city layers has been applied on the total sample in order to fully match the quotas and correct (small) deviations in the sample completion compared to the quota set.
- This report presents only weighted results/data, and all the sample sizes indicated are weighted samples.
- The final sample achieved was $n=2,000$ or $n=2,016$ (target sample).
- The reason for weighting the data after fieldwork – even if the quotas have been well monitored – is to fully align the demographic sub-groups with the quotas in order for the total sample to be representative of the target population by age, gender, education and city layer. Income has been monitored in order to align with the average income, but was not used as a hard quota.

Rounding

- Numbers and percentages shown at first decimal in tables and graphs in this report are the result of rounding.
- Rounding to the nearest integer has been applied and may add up to more or less than 100%.

Questionnaire and Participants' Quality

- To assure that participants answer honestly and “neutral” when they are qualified for the survey, it is important that the survey topic is not mentioned in the invitation.
- The email received by the potential participants only mentions the general topic of “lifestyle and shopping practices.”

Margin of Error in Surveys

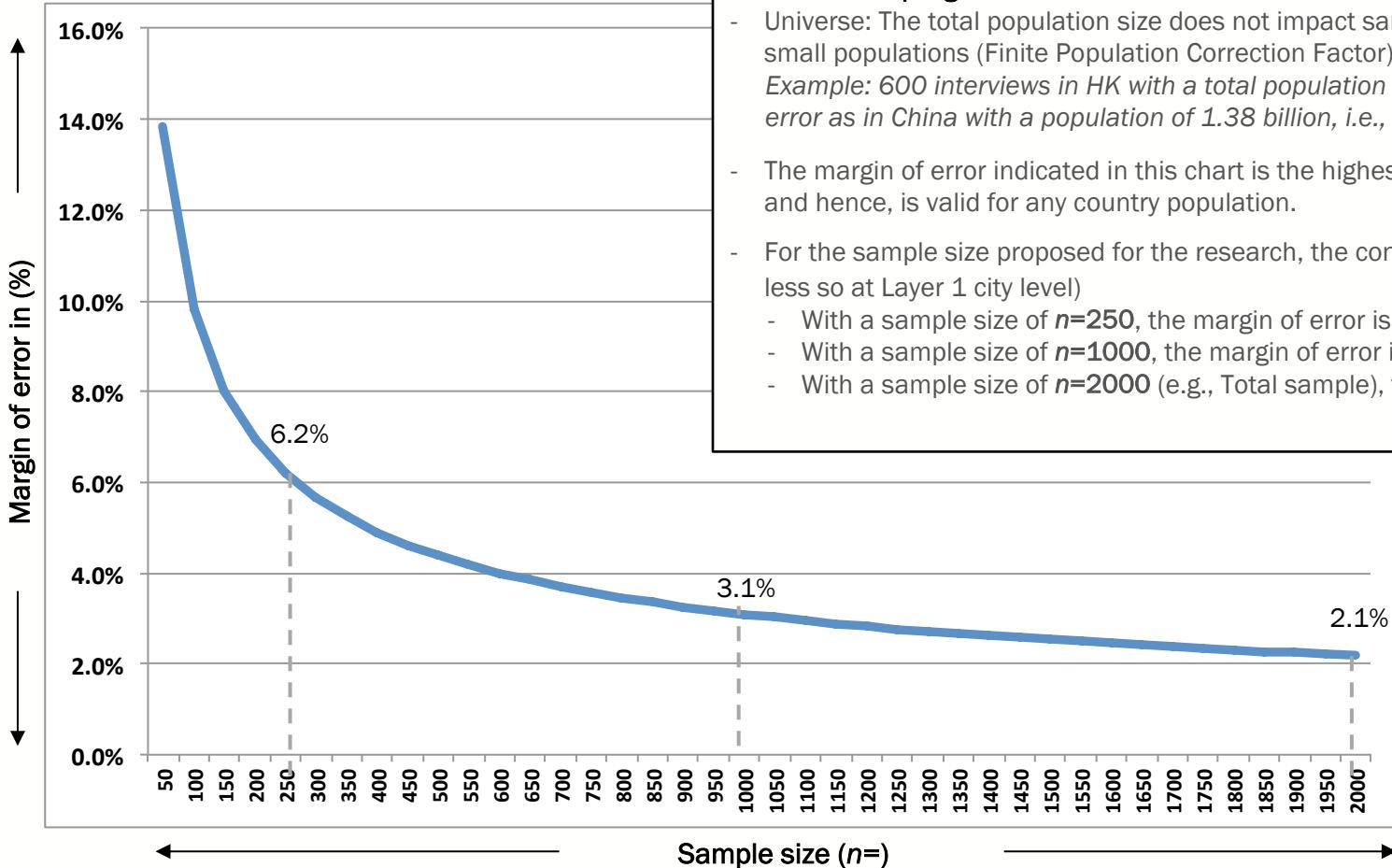
Margin of Error: Definition

In reports on public opinion polls, a “margin of error” is often stated. The margin of error estimates the accuracy of the sample compared with the entire population. A margin of error of plus or minus 3 percent at a 95 percent confidence interval would mean that if we examined 100 truly random samples of a particular size, in 95 of such samples the figures would be within three percentage points of the “true” answer that would result from interviewing the entire population. Generally speaking, the larger the sample, the lower the margin of error (see illustration in the next slide).

- However, calculated margin of error is valid only upon the assumption that the sample is truly random, with every member of the population having an equal chance of being included in the survey. This assumption is not met in the majority of contemporary opinion polls, because the samples are drawn using complex systems of stratification and quotas or are obtained from panels of volunteers, as in the case of this study.

- Even though margin of error is not applicable to nonrandom samples, it can be used as a rough tool to assess patterns in the collected data. For example, a 5 percentage point difference between males and females in a sample of 1,000 participants may indicate a pattern, while a 10-point difference in opinion between smaller demographic groups may not.
- The sampling methodology for this study was tailored to the overall objective of understanding the awareness, knowledge, and perception of the consumption of ivory products. Industry standards and best practices suited to geographic realities have been applied throughout.

Margin of Error in Surveys



About the Sampling Error:

- Universe: The total population size does not impact sampling error, except for small populations (Finite Population Correction Factor).
Example: 600 interviews in HK with a total population of 7.2 million has the same error as in China with a population of 1.38 billion, i.e., 4.0%.
- The margin of error indicated in this chart is the highest for any population size, and hence, is valid for any country population.
- For the sample size proposed for the research, the confidence level is strong (but less so at Layer 1 city level)
 - With a sample size of $n=250$, the margin of error is 6.2%
 - With a sample size of $n=1000$, the margin of error is 3.1%
 - With a sample size of $n=2000$ (e.g., Total sample), the margin of error is 2.1%

The Decision Tree – General

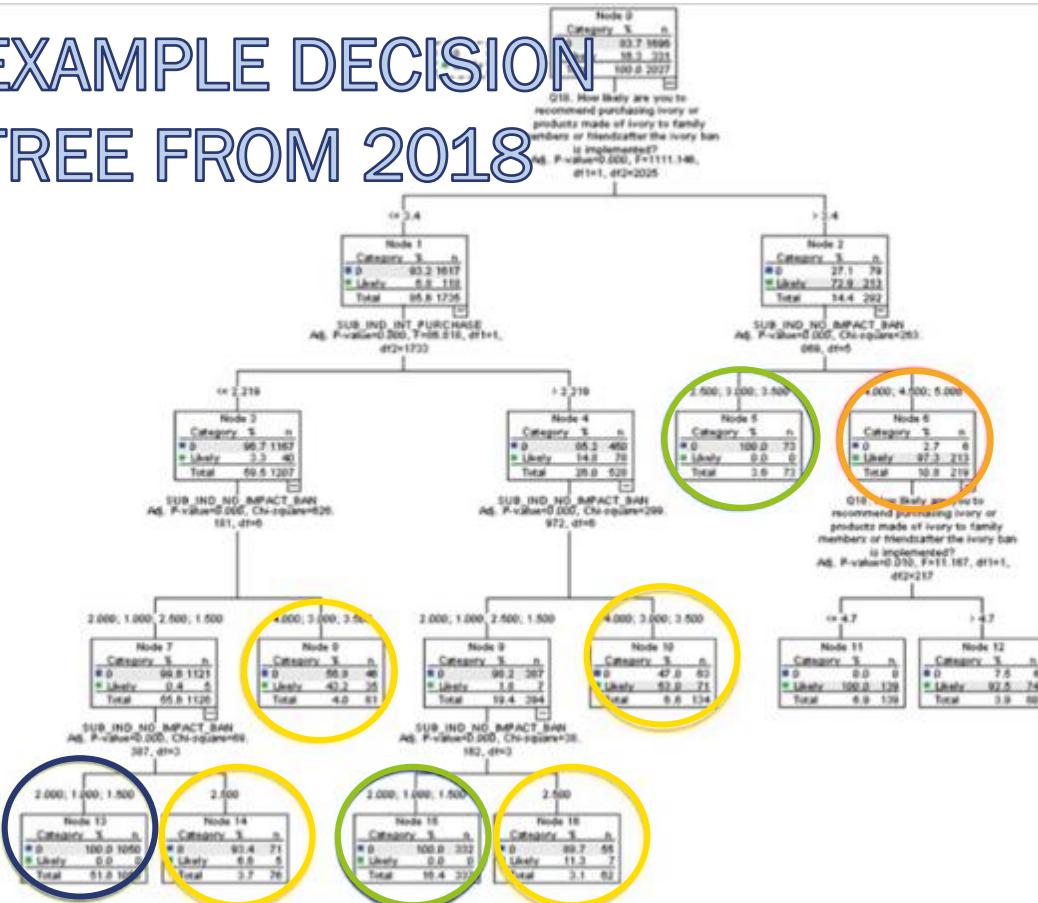
The Decision Tree methodology is a commonly used data mining method for establishing classification systems based on multiple covariates or for developing prediction algorithms for a target variable. This method classifies a population into branch-like segments. It follows the same approach as humans generally follow while making decisions. It is a map of the possible outcomes of a series of related choices. Interpretation of a complex Decision Tree model can be simplified by its visualizations (see example in the next slide).

A decision tree depicts rules for dividing data into groups. The first rule splits the entire data set into some number of pieces, and then another rule may be applied to a piece, different rules to different pieces, forming a second generation of pieces. In general, a piece may be either split or left alone to form a final group. The leaves of the tree are the final groups, the unsplit nodes (i.e. the circles in the tree in the next slide).

For a tree to be useful, the data in a leaf must be similar / homogeneous with respect to some target measure, so that the tree represents the segregation of a mixture of data into purified (or homogeneous) groups, as obtained in our segmentation, where the end groups are the 3 consumer segments Diehard Buyers, Ban Influenced Citizens and Rejectors. Each of these segments have a very distinct profile and behavior.

Example Decision Tree – 2018 Survey

EXAMPLE DECISION TREE FROM 2018



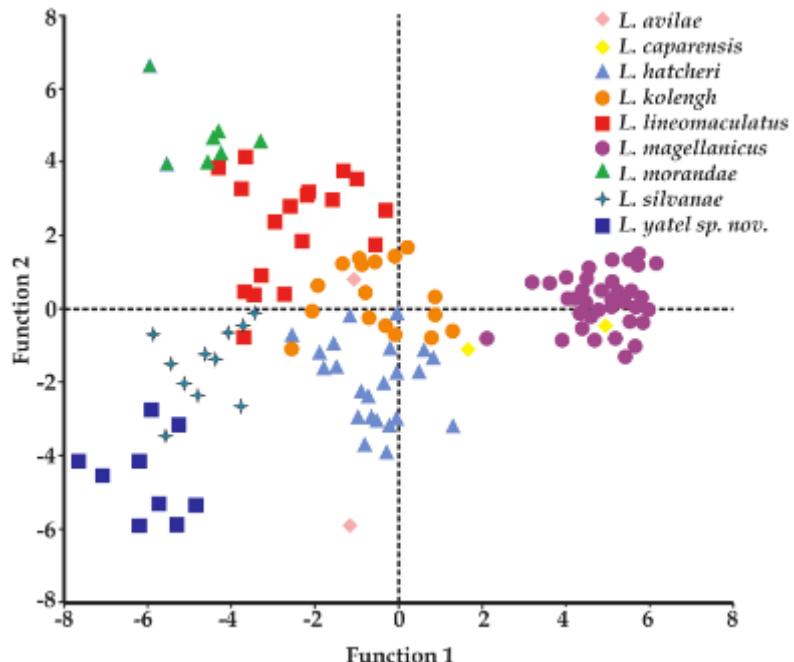
- Diehard Buyers (orange circle): 97.3 percent (100 percent in 2019) are likely to buy ivory despite the ban and are very likely to recommend purchasing ivory.
- Ban Influenced Citizens (two green circles): 100 percent (also 100 percent in 2019) of them will stop buying ivory after the ban is imposed. The difference between the two is in the likelihood to recommend ivory to family members or friends.
- Rejectors (blue circle): Not buying and not intending to buy ivory independently of whether the ban is imposed or not.
- The four yellow circles are heterogeneous and include both intended buyers and those who would stop purchasing. Therefore, we re-allocated the former to Diehard Buyers and the latter to Ban Influenced Citizens.
- Eight segments in total (e.g., eight circles) could have been more descriptive of the population, though of much less practical value, so we opted for three segments.
- The Decision Tree explains over 90 percent of the purchasing intent after the ban is imposed.

Segmentation Methodology: Discriminant Function Analysis

Discriminant Function Analysis

- In order to recreate the segments (e.g., Diehard Buyers, Ban Influenced Citizens and Rejectors) identified in the Pre-ban poll, we used a statistical algorithm extracted using a Discriminant Function Analysis (DFA).
- DFA is a statistical method that is used to understand the relationship between a “dependent variable” and one or more “independent variables.” A dependent variable is the variable that a researcher is trying to explain or predict from the values of the independent variables. It is a statistical procedure that classifies unknown individuals and the probability of their classification into a certain group (such as sex, species, or ancestry group). For our studies, we use a DFA to classify participants into their respective segments using inputs from a range of questions. By assigning values to certain responses and plotting data points on a graph, patterns start to emerge (see example).
- For detailed information, please check out:
https://en.wikipedia.org/wiki/Linear_discriminant_analysis

An example of a DFA used to test how genetically distinct different species are from each other is shown below. Source: Abdala, et al. (2014). New Patagonian species of *Liolaemus* (Iguania: Liolaemidae) and novelty in the lepidosis of the southernmost lizard of the world: *Liolaemus magellanicus*. Zootaxa, 866(4)



Definitions

City Layers

- Layer 1: Beijing, Shanghai, Guangzhou, Chengdu
- Layer 2: Xiamen, Kunming, Fuzhou, Xi'an, Shenyang, Tianjin
- Layer 3: Nanning, Chongqing, Nanjing, Jinan, Shenzhen
- Hangzhou: Analyzed separately, not included in any City Layer

Income*

- Low income: Monthly personal income (before taxes) under RMB8,000 (approx. USD1,200)
- Medium income: Monthly personal income (before taxes) between RMB8,000 and RMB20,000 (USD1,200–3,000)
- High income: Monthly personal income (before taxes) above RMB20,000 (>USD3,000)

Education Level

- Low education: No formal education / some elementary/primary school
- Middle education: Some high school or secondary school / completed high school or secondary school / completed technical or vocational school/training
- High education: College or university graduate / completed post-graduate degree

Travel Behavior outside China

- Never: Never travel outside China
- Occasional: Travel outside China once per year or less frequent
- Regular: Travel outside China more than once per year

*Income brackets were set based on the average salary of the internet population in the 15 cities surveyed, i.e., higher than the China average salary (estimated to be approximately RMB8,000 per month; Source: China Daily article, 23 June 2017, http://www.chinadaily.com.cn/bizchina/2017top10/2017-06/23/content_29853826.htm

Ivory Ban as Seen by Participants in the Link on Screen

Link

- Official text in Chinese (seen by participants):

http://www.gov.cn/zhengce/content/2016-12/30/content_5155017.htm

- English non-official translation:

<https://newsroom.wcs.org/News-Releases/articleType/ArticleView/articleId/9578/China-Announcement-of-Domestic-Ivory-Ban-in-2017--English-Translation.aspx>

索引号：000014349/2016-00266 主题分类：市场监督、安全生产监管\其他
发文机关：国务院办公厅 成文日期：2016年12月29日
标 题：国务院办公厅关于有序停止商业性加工销售象牙及制品活动的通知
发文字号：国办发〔2016〕103号 发布日期：2016年12月30日
主 题 词：

国务院办公厅关于有序停止商业性加工销售象牙及制品活动的通知 国办发〔2016〕103号

各省、自治区、直辖市人民政府，国务院各部委、各直属机构：
为加强对象牙的保护，打击象牙非法贸易，经国务院同意，现就有序停止商业性加工销售象牙及制品活动的有关事项通知如下：

一、分批次停止商业性加工销售象牙及制品活动。2017年3月31日前先行停止一批象牙定点加工单位和定点销售场所的加工销售象牙及制品活动，2017年12月31日前全面停止。国家林业局要确定具体单位名录并及时发布公告。相关单位应在规定期限内停止加工销售象牙及制品活动，并到工商行政管理部门申请办理变更、注销登记手续。工商行政管理部门不再受理经营范围涉及商业性加工销售象牙及制品的企业设立或变更登记。二、积极引导象牙雕刻技艺转型。停止商业性加工销售象牙及制品活动后，文化部门要引导象牙雕刻技艺传承人及相关从业者转型。对象牙雕刻国家级、省级非物质文化遗产项目代表性传承人开展抢救性记录，留下其完整的工艺流程和核心技艺等详细资料；对象牙雕刻技艺名师，鼓励其到博物馆等机构从事相关艺术品修复工作；对象牙雕刻技艺传承人，引导其用替代材料发展其他牙雕、骨雕等技艺。非营利性社会组织团体、行业协会可整合现有资源组建象牙雕刻工作室，从事象牙雕刻技艺研究及传承工作，但不得开展相关商业性活动。

三、严格管理合法收藏的象牙及制品。禁止在市场摆卖或通过网络等渠道交易象牙及制品。对来源合法的象牙及制品，可依法加载专用标识后在博物馆、美术馆等非销售性场所开展陈列、展览等活动，也可依法运输、赠与或继承；对来源合法、经专业鉴定机构确认的象牙文物，依法定程序获得行政许可后，可在严格监管下拍卖，发挥其文化价值。

四、加强执法监管和宣传教育。公安、海关、工商、林业等部门要按照职责分工，加强执法监督，继续加大对违法加工销售、运输、走私象牙及制品等行为的打击力度，重点查缉、摧毁非法加工窝点，阻断市场、网络等非法交易渠道。要广泛开展保护宣传和公众教育，大力倡导生态文明理念，引导公众自觉抵制象牙及制品非法交易行为，营造有利于保护象牙野生动植物的良好社会环境。

各省、自治区、直辖市人民政府和有关部门要高度重视，加强组织领导，明确责任分工，确保停止商业性加工销售象牙及制品活动顺利进行，并妥善做好相关单位和人员安置、转产转型等工作，切实维护好社会和谐稳定。

国务院办公厅
2016年12月29日

(此件公开发布)

Drivers and Deterrents of Ivory Purchase – by Key Sub-groups

Top 3 opinions
Bottom 3 opinions

	Total	Layer 1	Layer 2	Layer 3	Regular Overseas Travelers	Rejectors	Ban Influenced Citizens	Diehard buyers
	n=2000	n=920	n=460	n=620	n=181	n=1446	n=391	n=164
I am concerned about the possible extinction of elephants	6.86	6.66	6.94	7.08	4.95	7.64	5.48	3.19
I share information about animal protection on social media	6.68	6.49	6.85	6.84	5.19	7.43	5.34	3.23
Purchasing ivory participates in animal cruelty	6.66	6.52	6.67	6.86	4.80	7.54	5.09	2.64
If I saw someone selling ivory I would report to the authorities	6.60	6.46	6.72	6.72	4.77	7.43	5.05	2.93
I try to convince my friends and family not to buy ivory	6.01	5.85	6.17	6.14	4.36	6.82	4.47	2.59
I am concerned about the legal consequences of buying ivory	4.53	4.51	4.51	4.59	3.71	5.00	3.63	2.58
My friends or family asked me not to buy ivory	3.76	3.72	3.93	3.69	3.09	4.08	3.24	2.17
Ivory that comes from a killed elephant brings bad luck	3.38	3.52	3.19	3.33	2.23	3.79	2.50	1.88
Ivory has great artistic value	2.18	2.19	2.21	2.16	3.35	1.81	2.94	3.69
Ivory is unique	2.07	1.96	2.07	2.22	2.73	1.86	2.46	2.99
Only a strong law and penalties will prevent me from buying ivory	1.91	1.96	1.91	1.81	1.94	1.87	1.99	2.03
I cannot afford ivory	1.87	1.86	1.91	1.85	1.31	2.05	1.48	1.25
Ivory increases its value over time	1.64	1.62	1.71	1.63	2.37	1.36	2.14	2.90
I can easily buy ivory abroad	1.59	1.60	1.51	1.65	1.78	1.53	1.73	1.81
Ivory connects me to my cultural heritage	1.58	1.61	1.56	1.55	2.57	1.23	2.25	3.04
I'm afraid to buy counterfeit ivory	1.56	1.56	1.58	1.55	1.67	1.52	1.62	1.76
Ivory is a gift to mark special life events	1.29	1.35	1.23	1.24	2.36	0.94	1.92	2.88
Ivory is a souvenir to buy when I'm on holiday abroad	1.11	1.15	1.04	1.09	1.96	0.81	1.63	2.46
Ivory is ideal to pass on to future generations	1.06	1.10	1.05	1.01	1.83	0.78	1.57	2.27
Ivory brings luck and fortune	1.04	1.10	1.00	0.99	1.97	0.71	1.60	2.64
Ivory indicates wealth, power and social status	1.00	1.07	0.99	0.91	1.96	0.67	1.54	2.61
Ivory gifts help to build business relationships	0.94	1.00	0.92	0.86	1.64	0.69	1.34	2.13
Ivory has healing powers and brings good health	0.93	0.97	0.87	0.91	1.73	0.66	1.34	2.29
I always want to buy ivory	0.74	0.81	0.69	0.67	1.44	0.47	1.18	2.07

Q9. Now we will focus on ivory and its purchase. On the following screens we will provide you lists of various statements. For each screen please select the statement which describes your opinion the most, and the statement which describes your opinion the least. – Weighted data

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