

Elephant Ivory Trade in China: Trends, Drivers and Possible Solutions



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African elephants are in great danger

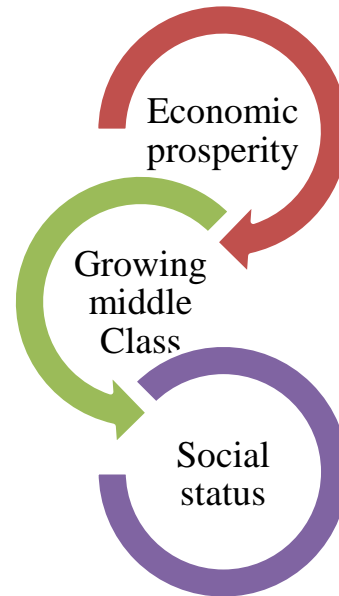


Estimated poaching rate (~7%, 2010-2012) exceeds nature population growth rate (CITES Secretariat, 2014; Wittemyer et al., 2014).





Chinese demand for ivory is widely blamed



General western perception (Gao & Clark, 2014)



international



Slaughtering Of Elephants Is Soaring Because Of China's Demand For Ivory

by MARK MEMMOTT

September 05, 2012 9:00 AM

theguardian



THE WALL STREET JOURNAL.

The New York Times



Chinese government denies the allegations

China has made great efforts to crack down on ivory smuggling, and related criminal activity has decreased remarkably in recent years.

... We expect these **people to take an objective view of China, rather than look through tinted glasses...**

--- HONG Lei, Foreign Ministry spokesman
(Xinhua, 2012)





Research objectives

- **Who I am:** independent observer and participant
 - Chinese citizen & Conservationist
 - Graduate student at Yale University
- **Research questions:**
 - 1) How do China's domestic ivory market influence the conservation of African elephants?
 - 2) What do different groups (or players) think of the influence?
- **Research objectives:** description, explanation and prescription
 - Help achieve a more comprehensive and contextual understanding about the problem;
 - Help facilitate the search for solutions that secure the common interests.



Data collection

– Fieldwork in China, Kenya, Tanzania, Botswana (Sep. 2012 – Jun. 2014)

- Semi-structured interview (n=31)
- Informal discussion (n=65)
- Market survey
- Participant observation (n>6 events)

– Statistics & Written records

- Ivory auction records (n=12,382; 2002-2013)
- Online ivory advertisements (n=300)
- Chinese news articles (n=1,327; 2003-2013)
- Official documents (n>20) and books (n=7)





Ivory Registration and Identification Policy

“Only government-approved ivory factories and retail outlets are allowed to engage in ivory trade.”

“One ivory product one identification card. Each ivory product is inseparable from its own identification card.”

- China State Forestry Administration (SFA)



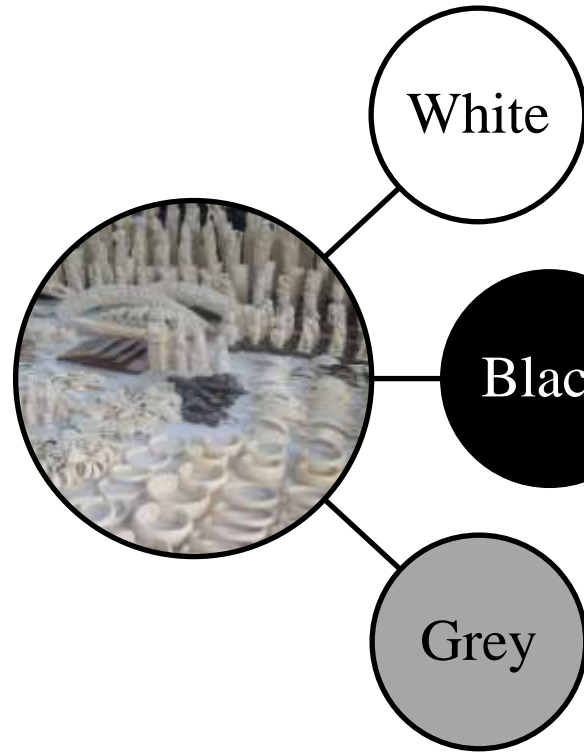
Approved ivory shops



Ivory Identification Card



White, black and grey markets



White

Legal licensed factories and outlets



Black

Illegal market: online and off-line



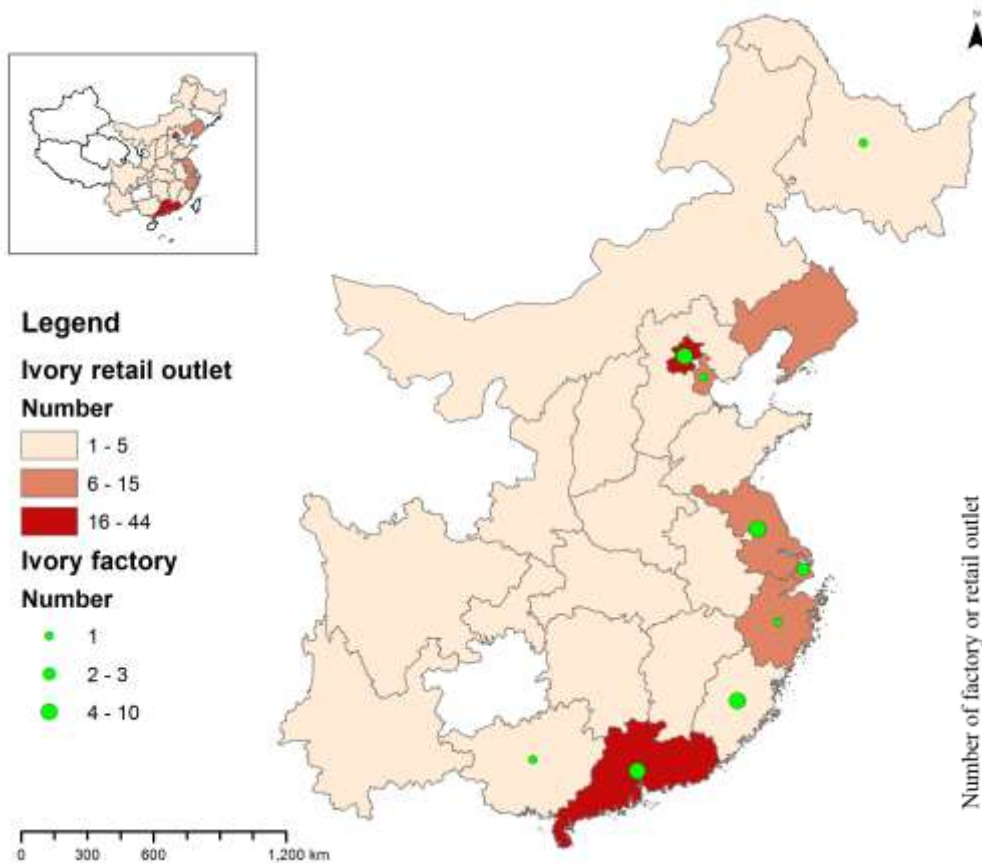
Grey

Live auction of ivory product, whose legality is unclear





White market



	<u>2004</u>	<u>2013</u>
Factories:	9	- 37
Retail outlets:	31	- 145

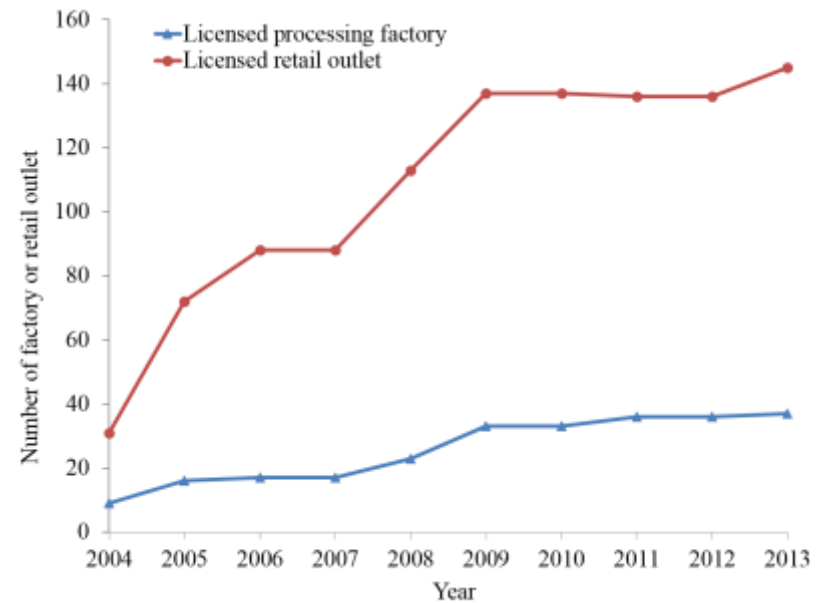


Fig 1. Distribution of legal ivory markets in China.

Fig 2. The number of legal ivory factories and outlets from 2004 to 2013



Black market

Type	Number of records	Weight or size	Price per gram	
			Range	Mean ± SE
<i>Raw ivory</i>				
Trimmed whole tusk	6	623–1847 g	1.71–2.60	2.15 ± 0.15
Tusk section	43	28–1386 g	1.95–3.74	2.74 ± 0.06
Tip with cover (Jian Zi)	9	62.7–323 g	2.28–3.74	2.89 ± 0.14
“Pie” (Bing Zi)	21	41–112 g	1.95–3.74	2.78 ± 0.07
“Pillar” (Zhu Zi)	9	82–1386 g	2.03–3.25	2.63 ± 0.13
Other tusk fragments	4	28–181 g	1.95–2.93	2.40 ± 0.20
Carving waste (Xiao Liao)	20		0.65–1.63	1.03 ± 0.06
<i>Semiworked ivory</i>				
Polished tusk	1	–	2.93	2.93
Polished tip	7	44–672 g	2.93–5.54	4.15 ± 0.29
Polished tusk end	1	21 g	4.55	4.55
Plain plaque	2	6–12 g	1.95	1.95 ± 0.00
<i>Worked ivory</i>				
Bangle	28	$d = 5.7\text{--}6.3\text{ cm}$; width = 1.8–2.0 cm	4.88–10.73	
Plain ring	65	30–60 g	2.93–6.67	
Carved ring	7	40–60 g	4.55–8.78	
Rectangular pendant	28	$4 \times 6 \times 1\text{ cm}^3$	3.25–8.94	
Guru bead	8	$r = 2.0\text{ cm}$	5.47–8.78	
Misc., i.e. figurine, bracelet	7		4.88–6.83	

The 2014 price of raw ivory was **US\$ 2,150** per kg

- 10 times of the price in Africa.
- 3 times of the black market price in 2010.





Grey market

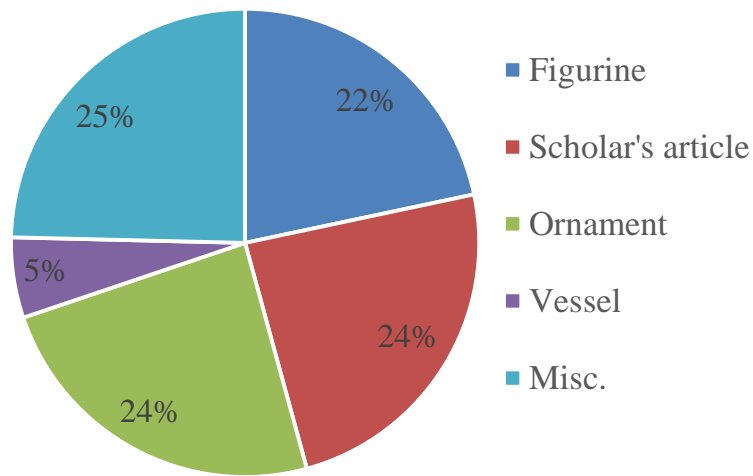


Fig 3. Different types of ivory items auctioned in China Guardian in 2011. The highest price realized for a single item was **US\$ 295,250**.

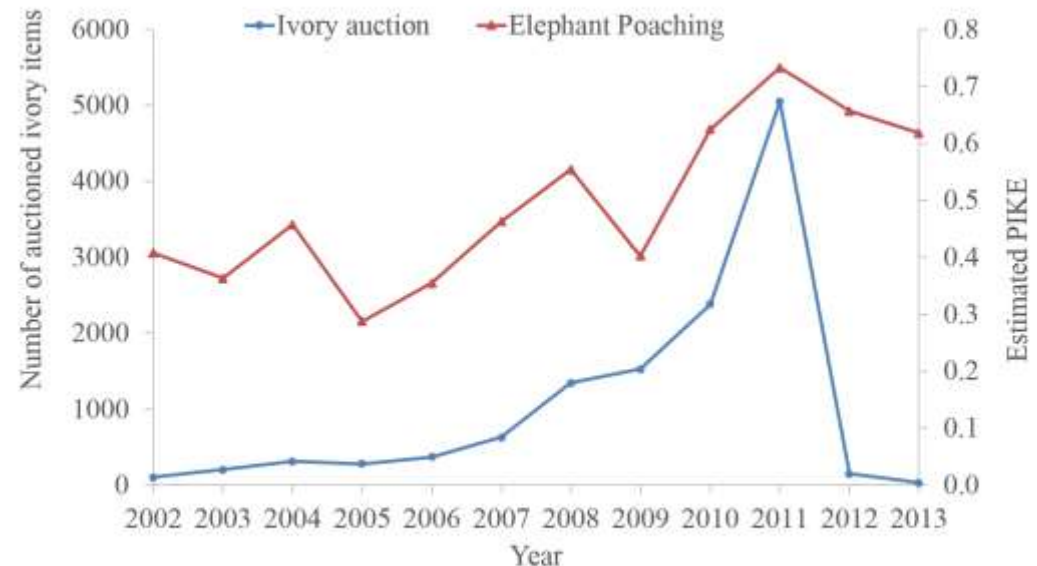


Fig 4. The number of ivory items traded in China's auction market is significantly positively correlated to the level of elephant poaching in Africa (2002 – 2011, $r=0.873$, $p=0.001$)



Ivory values from a Chinese perspective

Aesthetic value
“beauty”

Culture value
“history, heritage”

Middle class

Religious value
“blessing”



Social value
“social status”



Medical value
“health”

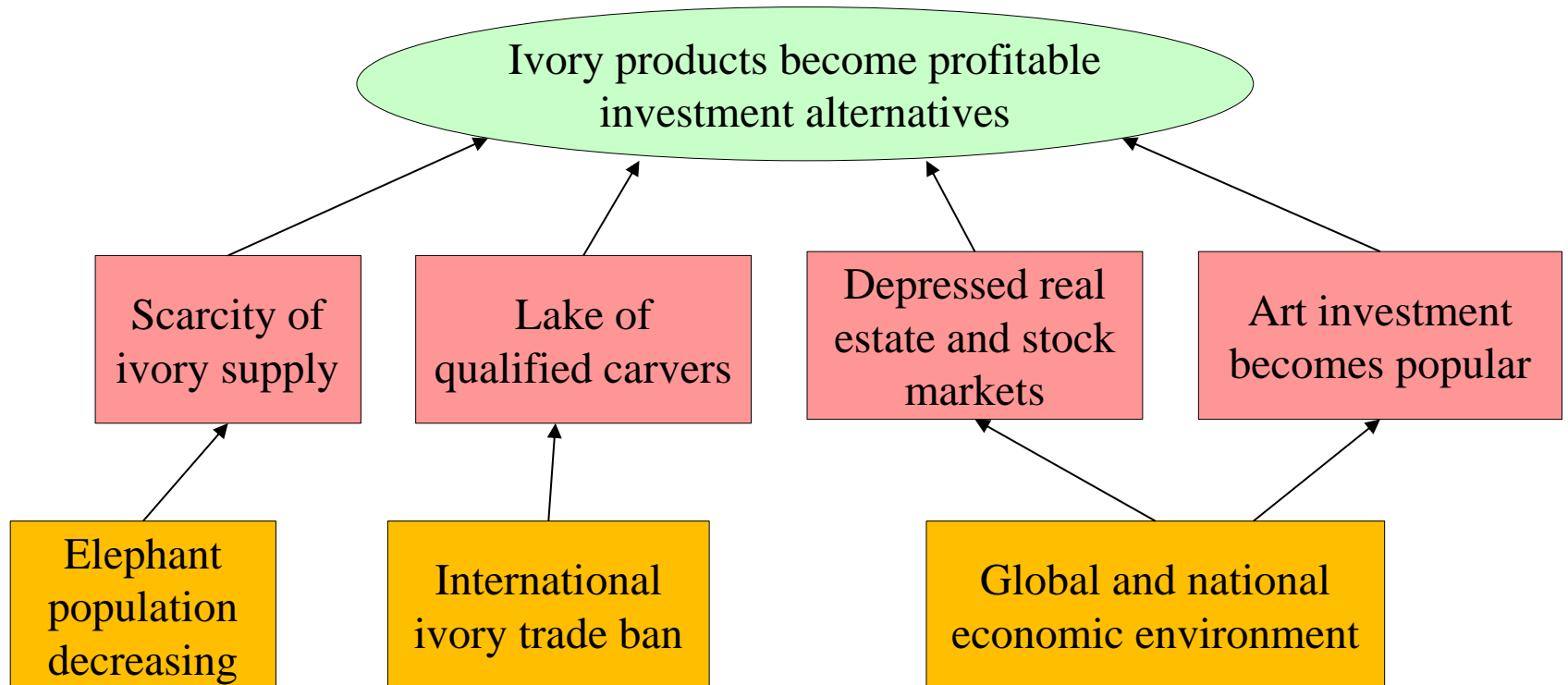
Economic value
“investment”

“Baofahu”
(the sudden rich)





Ivory = “White Gold”





- Key findings:
 - “white”, “black”, and “gray” markets
 - Art investment boom since 2008
 - Given the evidence that is now available, it is inescapable that the current Chinese domestic ivory market is an important driver of the elephant poaching problem.
- Recommendations:

Law
Enforcement

Multi-agency cooperation, regulation, policing, and monitoring.

Awareness
Raising

More targeted, addressing the driver of art investment.

Coalition
Building

Involve art investment community, cultural preservation groups, and religious groups.



Decision Process: entry points for possible solutions



Intelligence

Obtaining, processing, and distributing of information



Promotion

Mobilizing public support for a policy



Prescription

Setting rules, regulations laws or policies



Invocation

Allocating human, financial, and logistical resources etc.



Implementation

Policy enforcement and judiciary to resolve disputes



Evaluation

Assessment of success and decision process



Understand the extremely complex social context



Translating research into actions!

THANK YOU!

Yale



Share information with decision makers to influence policy formulation and prescription

Give Talk to the public to encourage public participation

Work with media to change public perception



Organize multi-cultural tour to promote China-Africa cooperation on elephant conservation



Publications:

Gao, Y., & Clark, S. G. (2014). Elephant ivory trade in China: Trends and drivers. *Biological Conservation*, 180, 23-30.
Gao, Y. (2014). Elephant ivory trade in China: Comparing different perspectives. *Tropical Resources Bulletin*, 32-33, 101-107.
Gao, Y., & Clark, S. G. (Under review). Perceptions and information on elephant ivory trade in China: Opportunities and recommendations. *Oryx*.