Feasibility of introducing "Best Buys" alcohol harms reduction strategies in a low regulation region: A qualitative study from Hong Kong

Prof Jean H. Kim

The Chinese University of Hong Kong

香港中文大學
The Chinese University of Hong Kong

Introduction & Context

In recognition of the significant health burden caused by alcohol (5.9 % of all deaths and 5.1% of all DALYs each year) the World Health Organization has outlined a series of recommendations for governments.

WHO's "Best Buys" strategies

- Most feasible and cost-effective for prevention and control of non-communicable diseases (NCD)
- **Alcohol "Best Buys"** for reducing alcohol-related harms:

- **Increasing alcoholic beverage taxes**
- **Regulating the availability of alcoholic beverages** (e.g. via reduced hours of sale)
- **Comprehensive advertising, promotion and sponsorship bans**

(WHO, 2010; Isaranuwatchai, 2020)

How applicable are WHO Best Buys to settings like Hong Kong?

"Best Buys" have been shown to be very cost-effective strategies but the evidence has primarily come from countries with relative high levels of alcohol use and high levels of alcohol harms.

In the WHO Southeast Asian & Western Pacific Regions– governments have not been as quick to develop well-defined alcohol policies.

Recent concern on the transferability of international findings to settings with different drinking environments and contexts

thebmj

Analysis » Health, Wealth, and Profits

Prevention of non-communicable disease: best buys, wasted buys, and contestable buys

BMJ 2020 ; 368 doi: https://doi.org/10.1136/bmj.m141 (Published 28 January 2020)

Key messages

- WHO's list of best buy interventions aims to assist the global community's fight on non-communicable diseases
- Best buys evaluated in one setting may not be cost effective in other settings
- Evaluation of context is essential to ensure resources are best deployed towards universal health coverage
- National or international hubs could help with this evaluation and build evidence to get cross sectoral support towards preventing non-communicable disease

Alcohol policies in Hong Kong

- The Hong Kong Government has identified reducing alcohol-related harm as one of the public health priority areas
- Alcohol use in Hong Kong has been heavily promoted by low taxation, ubiquitous availability, and unregulated marketing practices
- The scope and range of implementation fall short of the WHO's "Best Buys" recommendation

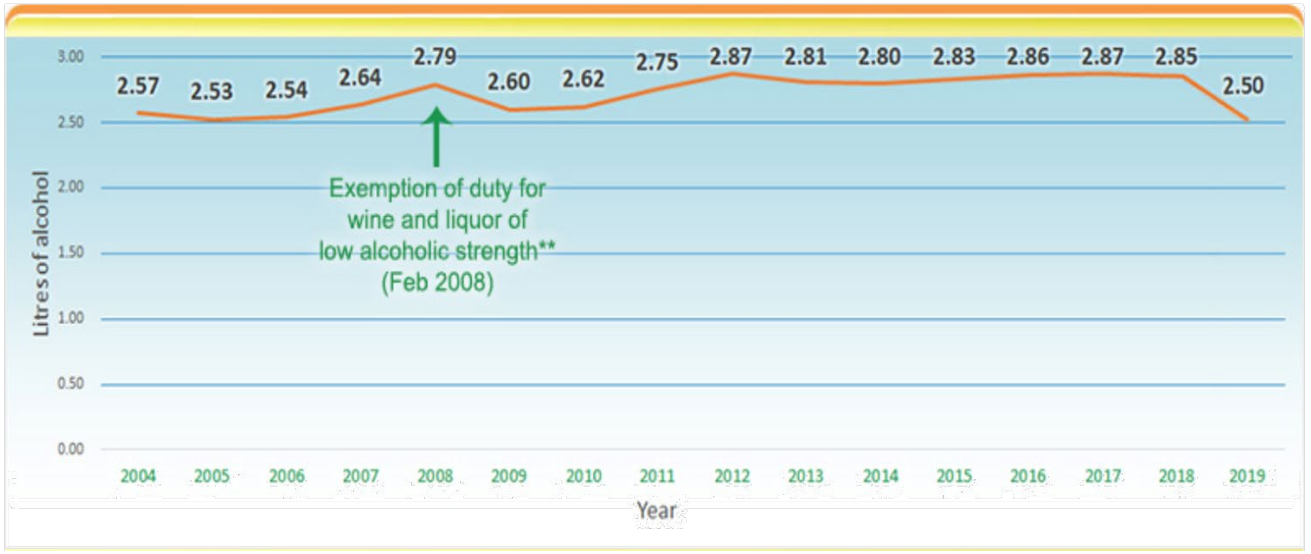
- **Beer and wine taxes eliminated in 2008**
- 100% duty on spirits with 30% alcohol by volume (ABV)

- Restrictions on television advertising hours (4pm-8:45pm)
- Television advertisements content not allowed to encourage underage drinking

- Liquor Licensing Board issues licenses and regulates **on-premises** drinking venues
- Minimum age of 18 for on-premises drinking and off- premises sale

- Drink-driving countermeasures
- Campaigns and school-based programmes
- Limited treatment and brief intervention

Hong Kong Drinking Context



- Although Hong Kong has low per capita consumption of alcohol, there is greater uptake of drinking in past decade
- Prevalence of ever drinkers: 66.6% (2006) - 82.0% (2011) - 85.2% (2012)
- In 2018 (prior to COVID), 29.7% of 18-74 year olds were past-year drinkers
  - 10.2% were weekly drinkers
  - 5.5% past-month binge drinker (versus 30.5% in South Korea, 29.5% in UK)
  - 2.1% had an alcohol use disorder

(Department of Health, 2020; Behavioural Risk Factor Survey, 2016; Chung et al., 2013; Kim et al., 2008; Wang et al, 2013)

First-hand alcohol-related harms– harms to drinkers (n=949)

- Prevalence

	Lifetime Prevalence *% (95%CI)*	Past-year Prevalence *% (95%CI)*
Physical and mental health harms	45.1 (42.0-48.3)	15.7 (13.5-18.2)
Work-related harms	22.9 (20.3-25.7)	7.5 (6.0-9.3)
Friendship and social network harms	23.9 (21.3-26.7)	6.6 (5.2-8.4)
Public harms	13.8 (11.7-16.2)	4.1 (3.0-5.6)
Family harms	11.1 (9.2-13.2)	3.2 (2.2-4.5)
Any first-hand harms	*54.3 (51.1-57.4)*	*21.2 (18.7-23.9)*

- The most common first-hand alcohol-related harms in the past year

	Male (n=608)	*Female (n=341)*	*Overall (n=949)*
	% (95%CI)	*% (95%CI)*	*% (95%CI)*
Had short-term health problems like nausea or hangovers or sleep problems after drinking	12.0 (9.6-14.8)	12.3 (9.2-16.3)	12.1 (10.2-14.4)
Missed work/school or came in late the day after drinking	7.1 (5.3-9.4)	5.3 (3.3-8.2)	6.4 (5.0-8.2)
Blacked-out or lost consciousness after drinking	5.3 (3.7-7.4)	3.8 (2.2-6.5)	4.7 (3.6-6.3)
Did something very embarrassing after drinking that caused regret	4.3 (2.9-6.2)	4.4 (2.7-7.2)	4.3 (3.2-5.8)
Got verbally harassed or yelled at in public after drinking	3.6 (2.4-5.4)	1.5 (0.6-3.5)	2.8 (2.0-4.1)

First-hand alcohol-related harms among Irish population: any harms (20%); health harms (13.2%); friendship harms (5.9%); family harms (3.4%); work-related harms (5.7%) *(NACD, 2012)*

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Second-hand alcohol-related harms (harms to others) (n=3200)

- Prevalence

	Lifetime Prevalence *% (95%CI)*	Past-year Prevalence *% (95%CI)*
Public harms	38.3 (36.6-39.9)	12.9 (11.8-14.1)
Friendship and social network harms	16.1 (14.9-17.4)	6.7 (5.8-7.6)
Family harms	13.2 (12.1-14.4)	5.2 (4.5-6.0)
Work-related Harms	5.5 (4.8-6.4)	1.9 (1.6-2.4)
Any second-hand harms	*45.3 (43.5-47.0)*	*18.2 (16.9-19.5)*

Prevalence of second-hand alcohol-related harms in Australia (73%), US (53%), New Zealand (71%), Thailand (79%)
(Laslett, 2011; Greenfield, 2014; Casswell, 2011; Waleewong, 2017)

- The most common second-hand alcohol-related harms in the past year

	Male (n=1480) *% (95%CI)*	*Female (n=1720)* *% (95%CI)*	*Overall (n=3200)* *% (95%CI)*
Been inconvenienced by drunks vomiting, urinating or littering	10.3 (8.8-11.9)	8.2 (7.0-9.6)	9.2 (8.2-10.2)
Had to go out of the way to help drunk friends	7.6 (6.3-9.0)	4.0 (3.2-5.1)	5.7 (4.9-6.5)
Felt unsafe in public places (e.g. street or MTR)	5.9 (4.8-7.2)	5.3 (4.4-6.5)	5.6 (4.8-6.4)
Been kept awake at night or disturbed by drinkers	5.4 (4.4-6.7)	4.9 (4.0-6.1)	5.2 (4.4-6.0)
Had worries or stress about the drinking behaviours of family members/relatives	4.3 (3.3-5.4)	3.4 (2.6-4.3)	3.8 (3.2-4.5)

Public acceptability of "Best Buys" (n=4000)

Strategies	*% of Supporting Respondents (n=4000) % (95%CI)*
Drinking Age Verification for Young Drinkers	
Requesting ID at stores	83.6% (82.4-84.7)
Requesting ID at bars and restaurants	81.4% (80.1-82.6)
Taxation and Pricing	
Implementing a moderate beer and wine tax (e.g. 5-10%)	68.7% (67.2-70.1)
Re-introducing a heavy 30% beer and wine tax	41.4% (39.9-43.0)
Setting a minimum alcohol price	33.7% (32.3-35.2)
Restriction of Availability	
Convenience stores not being permitted sell alcohol after a certain time	51.9% (50.3-53.4)
Introducing "last order times" in bars	44.5% (42.9-46.0)
Limiting the number of alcohol serving establishments outside of the tourist areas	40.7% (39.2-42.3)
Advertisement Restriction	
Banning large alcohol ads on public billboards and public transport	34.9% (33.4-36.4)
Banning all alcohol advertising on TV, radio & magazines	34.2% (32.8-35.7)
Greater social media regulation of alcohol ads	32.9% (31.4-34.4)
Sponsorships and Events Restriction	
Banning alcohol event sponsorship	19.5% (18.3-20.8)
Restricting high publicity drinking events	17.7% (16.5-18.9)

Interventions aiming to change the behaviour of young people are generally more popular than others

- Relatively low prevalence of drinking in HK compared to Western countries
- No beer and wine taxes in Hong Kong

- Laissez-faire economic culture
- "Big market, small government"

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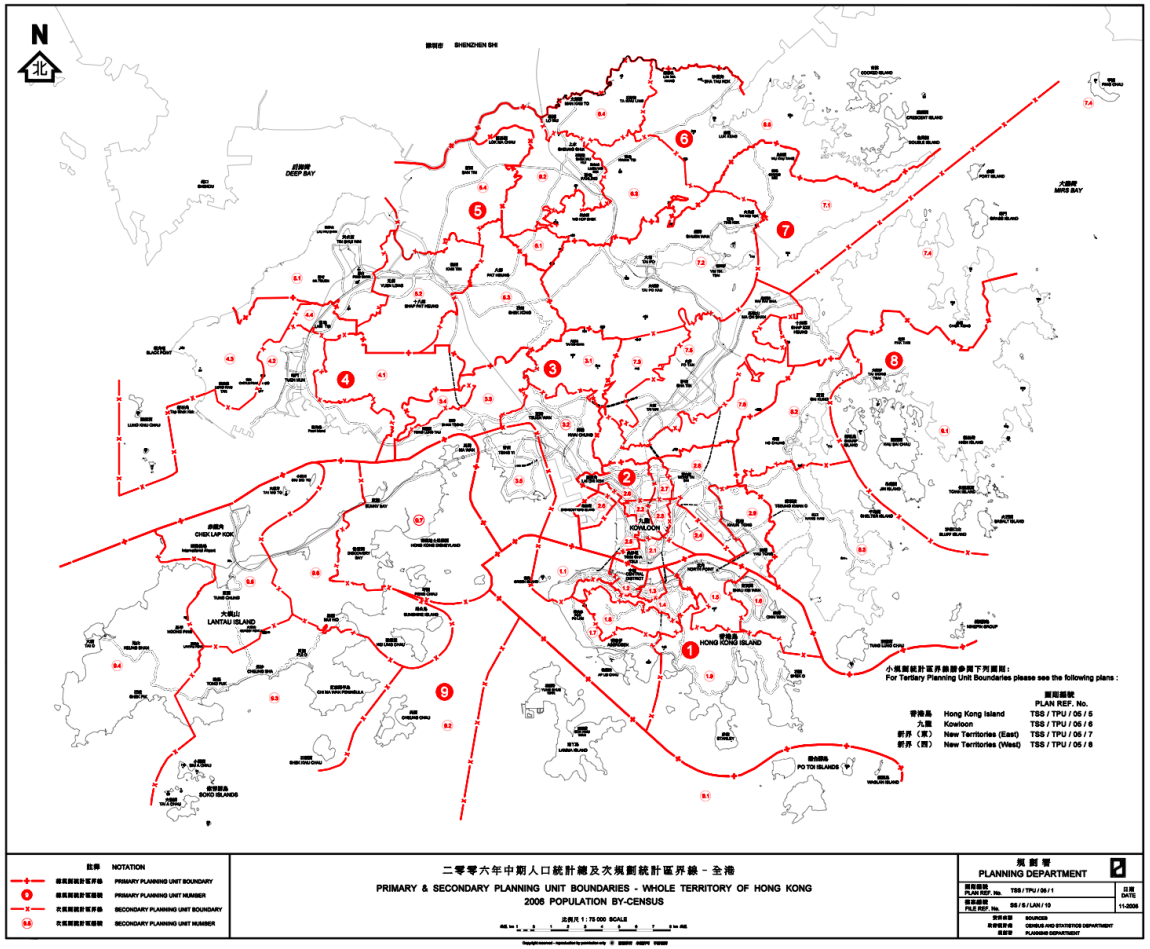
Hong Kong Alcohol Outlet density

- Descriptive characteristics of sample – cluster level

Variable	Clusters (n=39)
	Mean (range)
Number of alcohol serving outlets	219.60 (0.00-1073.00)
Density of alcohol serving outlets *(per 1,000 people)*	3.86 (0.00-78.24)

- 93.3% of respondents felt there is no need to change the number of neighbourhood alcohol outlets.
- **No significant association** between alcohol outlet density and the experience of any first-hand or second-hand alcohol-related harms **except for being inconvenienced by drinkers**



Census and Statistics Department, 2018; Liquor Licensing Board, 2018)

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Results: Perceived consequences of "Best Buys" (n=4000)

Consequences of strategies	*% of Supporting Respondents (n=4000)*
Drinking Age Verification for Young Drinkers	*% (95%CI)*
Will reduce underage drinking	82.4 (81.1-83.5)
Is bad for business and economy	28.5 (27.1-29.9)
Will negatively affect local lifestyle	27.0 (25.6-28.4)
Tax and Price Increases	
Will reduce alcohol-related harms in Hong Kong	57.9 (56.3-59.4)
Is bad for business and economy	41.7 (40.1-43.2)
Will negatively affect local lifestyle	35.7 (34.3-37.2)
Restriction of Availability	
Will reduce alcohol-related harms in Hong Kong	68.9 (67.4-70.3)
Is bad for business and economy	48.5 (47.0-50.0)
Will negatively affect local lifestyle	40.9 (39.4-42.4)
Advertisement Bans	
Will reduce alcohol-related harms in Hong Kong	34.1 (32.6-35.6)
Is bad for business and economy	34.0 (32.5-35.5)
Will negatively affect local lifestyle	25.3 (24.0-26.7)
Will infringe economy freedom	40.3 (38.8-41.8)
Sponsorships and Events Bans	
Will reduce alcohol-related harms in Hong Kong	35.6 (34.1-37.1)
Is bad for business and economy	46.2 (44.6-47.7)
Will negatively affect local lifestyle	29.7 (28.3-31.1)
Will infringe economy freedom	44.7(43.1-46.2)

Will reduce underage drinking

Will reduce alcohol-related harms

Bad for business & economy

Will negatively affect local lifestyle and Hong Kong's global image

Will infringe on economic freedoms

Research Gaps & Study Objective

Drinking & Harms Levels

- Low prevalence of past-year drinking (29.7%) and past-month binge drinking (5.5%)
- Moderate level of harms in the past year
  - First-hand harms (21.2%) *among past-year drinkers*
  - Second-hand harms (18.2%) *among general population*
  - High-risk groups: young people and binge drinkers
- Very low prevalence of serious drinking-related harms (e.g. assault, injury) due to lack of firearms, 24-hr public transport and high visibility of criminal behaviors

Public Acceptability

Currently very limited regulation of alcohol.

Low public acceptability for most alcohol harms reduction measures except those that prevent underage drinking and drink driving

Low acceptability for reductions in alcohol marketing

Concerns about harming the economy and image of Hong Kong as a global tourist destination

What is the Feasibility

What is the perceived feasibility of implementing the more acceptable WHO's Alcohol "Best Buys" to Hong Kong

based on a key informant interviews of individuals with expertise in the adoption and implementation of alcohol policies?

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Data collection

- **Design:** Semi-structured in-depth interviews of 17 key informants involved in the the sale, distribution, promotion, and control of alcohol (n=4 government officials, 4 F &B workers, 5 alcohol retailers, 4 alcohol marketing professionals)– individual recruited until data saturation was achieved.
- **Time and setting:** March 2019 – March 2021, Hong Kong Interviews were guided by a pilot-tested interview protocol, and audio-recorded after obtaining informed consent from participants
- **General views of alcohol** as a public health problem in Hong Kong

[Interviewees were presented the result of public acceptability from the previous telephone survey]

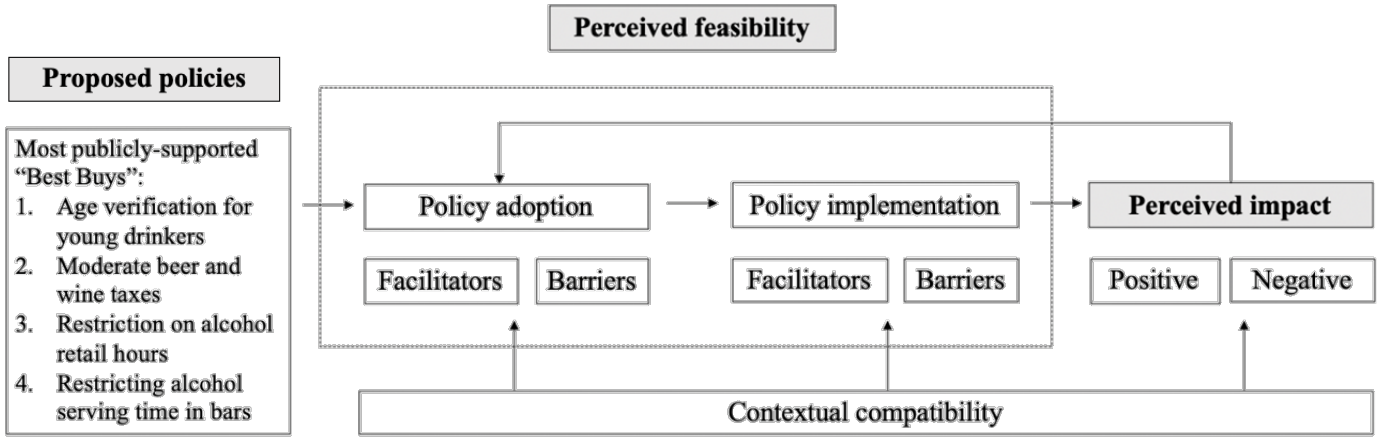
  - Age verification for alcohol purchase in stores, bars and restaurants
  - Moderate beer and wine taxes (e.g. 5-10%)
  - Convenience stores not being permitted sell alcohol after a certain time
  - Bars should have 'last orders'

- Views on the **feasibility** of the most publicly endorsed "Best Buys"
- Perception of **potential impacts** of implementing the above strategies
- Alcohol policy actions perceived to be **feasible and effective**

Qualitative thematic analysis

- **Verbatim transcription and coding**
- **Combination of deductive and inductive analyses**
  - Deductive approach
    - *"The process of collective political decisions could be divided into phases* ***policy adoption and implementation****."*

      ——Weimer and Vining, 2010
    - Initial thematic headings:
      - Possible barriers and facilitators to policy adoption and implementation
      - Perceived short-term and long-term impacts on drinking, local environment, and stakeholders
      - Contextual factors that influence the policy-making and policy impact



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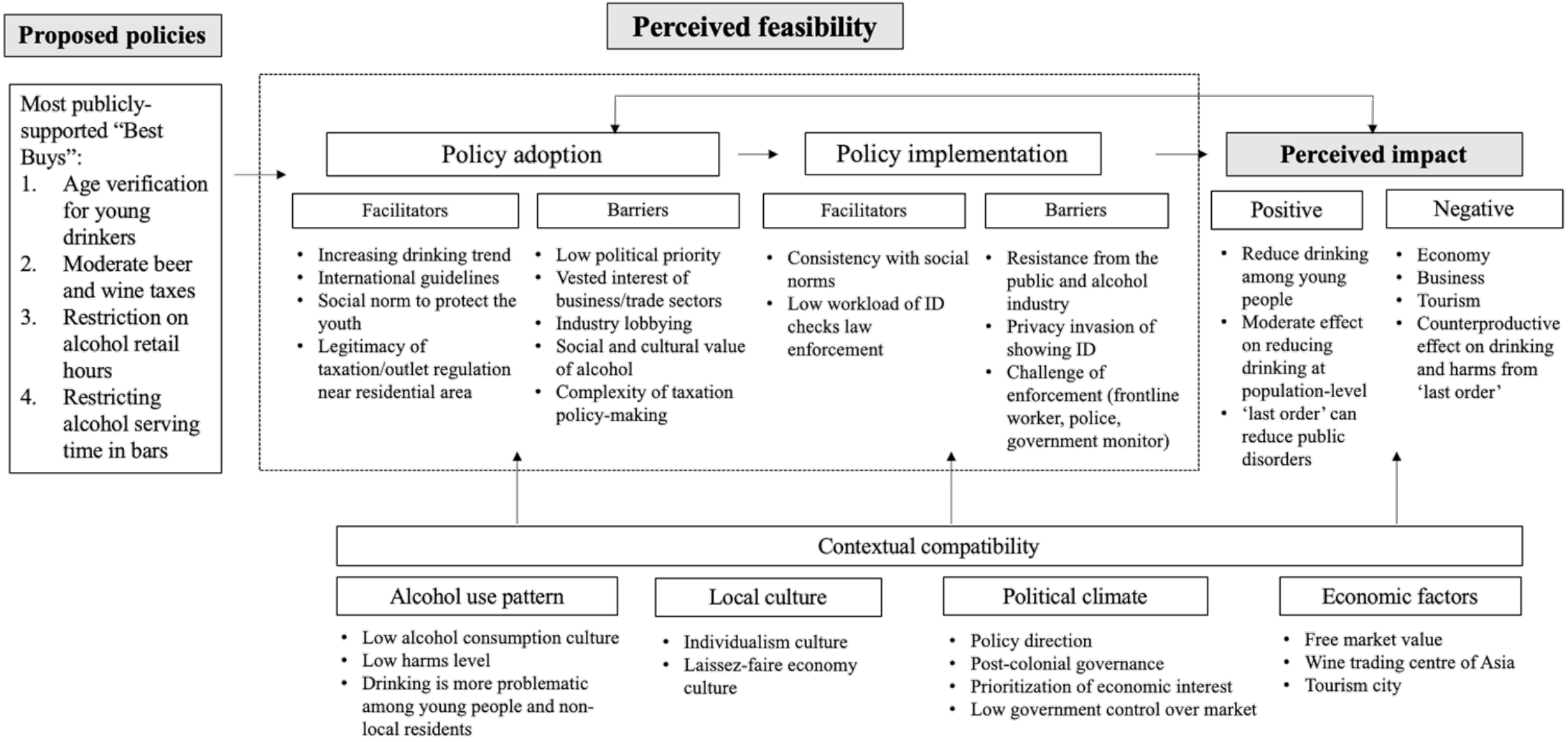
Thematic Structure



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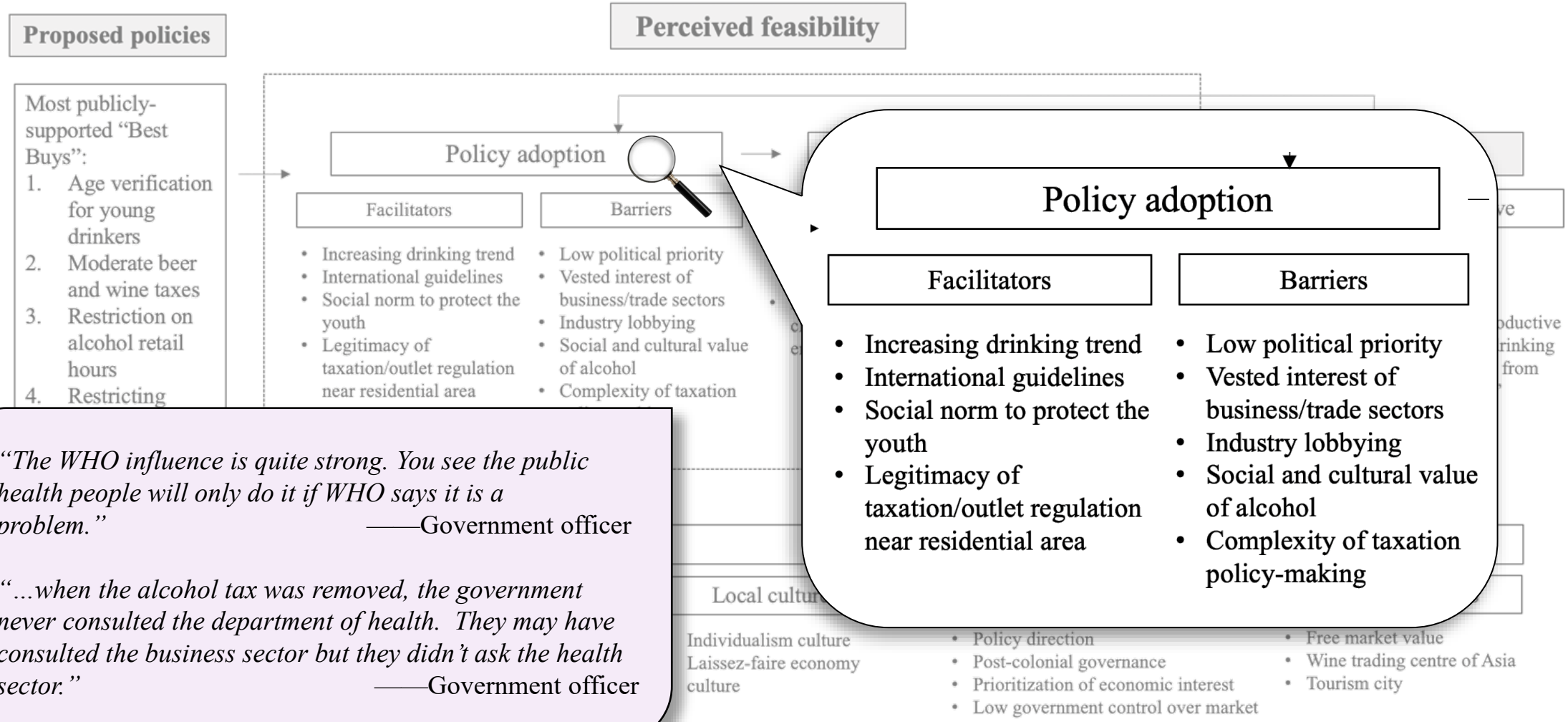
Results: Themes



"The WHO influence is quite strong. You see the public health people will only do it if WHO says it is a problem." ——Government officer

"…when the alcohol tax was removed, the government never consulted the department of health. They may have consulted the business sector but they didn't ask the health sector." ——Government officer

Policy adoption

Facilitators	Barriers
• Increasing drinking trend • International guidelines • Social norm to protect the youth • Legitimacy of taxation/outlet regulation near residential area	• Low political priority • Vested interest of business/trade sectors • Industry lobbying • Social and cultural value of alcohol • Complexity of taxation policy-making

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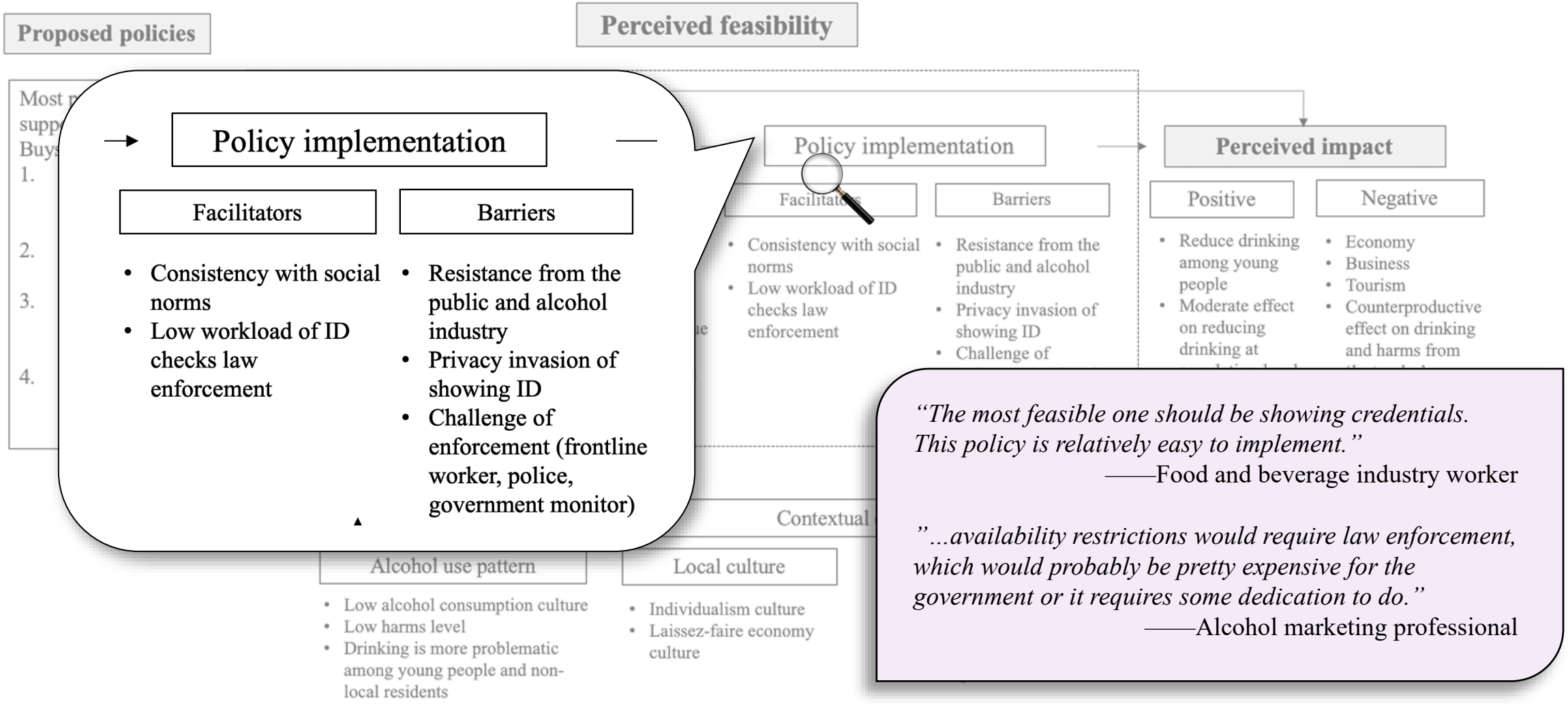
Results: Themes



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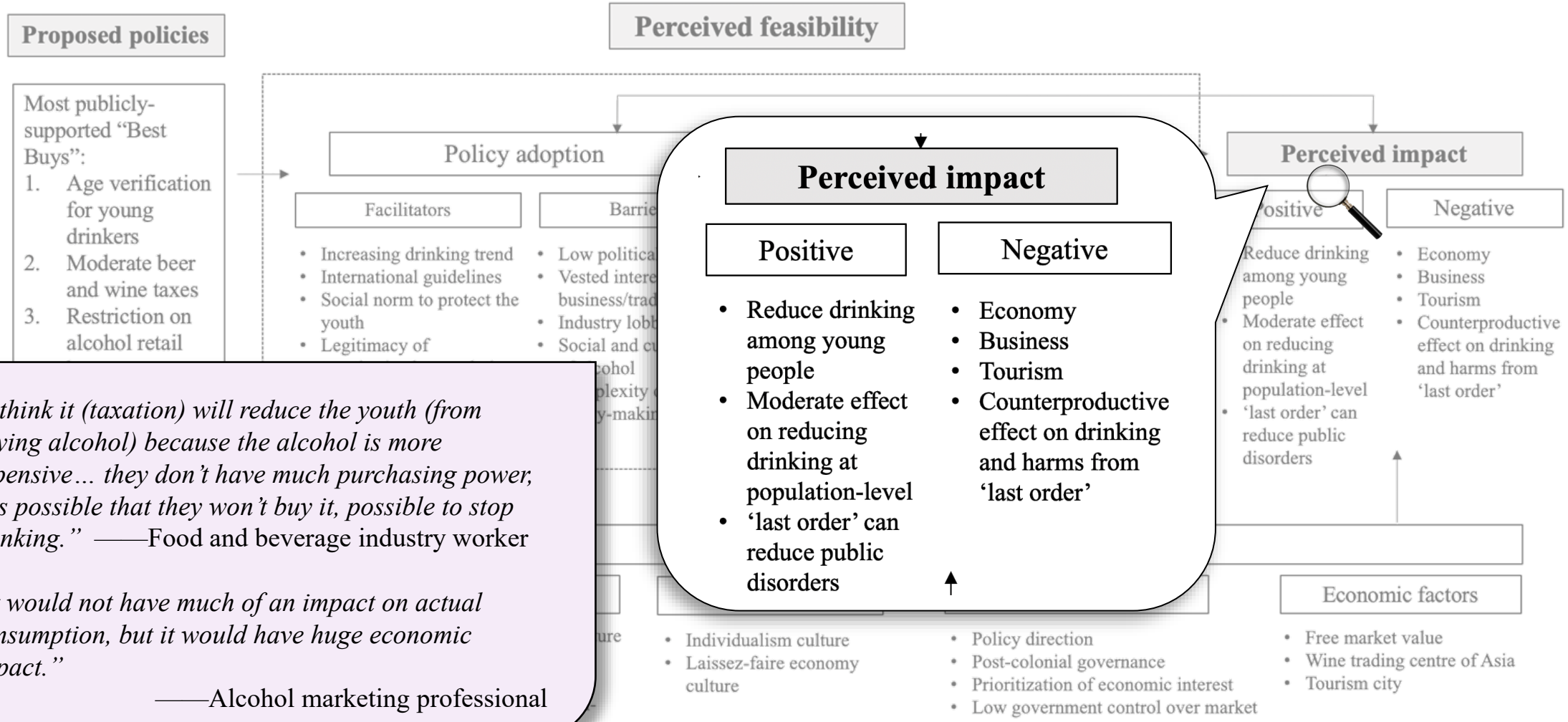

"I think it (taxation) will reduce the youth (from buying alcohol) because the alcohol is more expensive… they don't have much purchasing power, it is possible that they won't buy it, possible to stop drinking." ——Food and beverage industry worker

"It would not have much of an impact on actual consumption, but it would have huge economic impact."

——Alcohol marketing professional

Results: Themes

Proposed policies

Most publicly-supported "Best Buys":
1. Age verification for young drinkers
2. Moderate beer and wine taxes
3. Restriction on alcohol retail hours
4. Restricting alcohol serving time in bars

Perceived feasibility

Policy adoption

Facilitators
- Increasing drinking trend
- International guidelines
- Social norm to protect the youth
- Legitimacy of taxation/outlet regulation near residential area

Barriers
- Low political priorit
- Vested interest of business/trade secto
- Industry lobbying
- Social and cultural
of alcohol
- Complexity of taxation policy-making

- Challenge of enforcement (frontline worker, police, government monitor)

drinking at population-level
- 'last order' can reduce public disorders

and harms from 'last order'

"The alcohol problems here in Hong Kong are not serious, so it is very difficult to legislate it. There is simply no need." ——Alcohol retailer

"You just reduced it (tax) 10 years ago, so government will make a big loss." ——Government officer

Contextual compatibility

Alcohol use pattern
- Low alcohol consumption culture
- Low harms level
- Drinking is more problematic among young people and non-local residents

Local culture
- Individualism culture
- Laissez-faire economy culture

Political climate
- Policy direction
- Post-colonial governance
- Prioritization of economic interest
- Low government control over market

Economic factors
- Free market value
- Wine trading centre of Asia
- Tourism city

Is Hong Kong ready? Not yet…

Main Findings

- Alcohol marketing restrictions
  - Least public support; lowest perceived effectiveness; minimal priority
- Moderate beer and wine tax and bar service hour restriction
  - Fair public support but low feasibility of adoption and implementation in real world
  - Lack of political pressure; complicated vested interests in policy-making (e.g. increased revenue for government)
- Age verification for alcohol purchase
  - Highly supported and feasible, but is currently under enforced

Barriers

- Barriers to public support: scepticism of policy effectiveness; negative expectancies on local economy, Common belief in health benefits of moderate drinking and low belief in harms, Laissez-faire economic culture
- Barriers to alcohol policy adoption: industry lobbying, lack of advocacy, insufficient scientific evidence of harms, general attitude that government should have a noninterventionist role in affairs that may affect the economy

Possible Options

- Education & information campaign of alcohol-related harms and effectiveness of harms countermeasures
- Greater involvement of relevant stakeholders (e.g. health professionals, law enforcement) in alcohol policy formulation

Conclusions & Future research

- A limitation of the current study was that some potentially relevant stakeholder groups (e.g. law enforcement) were not interviewed.

- When adopting global-level recommendations, local contextual factors must be analysed and carefully considered
- Implementation of measures must be contextualized for local settings
- There is a need for an international guideline on application of international findings to local contexts

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香港中文大學 CUHK
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Thank you!

References

- Branch Centre for Health Protection Department of Health. (2016). *Behavioural Risk Factor Survey (April 2016)*.
- Casswell, S., Harding, J. F., You, R. Q., & Huckle, T. (2011). Alcohol's harm to others: self-reports from a representative sample of New Zealanders. *New Zealand Medical Journal*, *124*(1336).
- Census and Statistics Department - The Government of Hong Kong SAR. (2018). *2016 Population By-census*. https://www.censtatd.gov.hk/hkstat/sub/sp459.jsp
- Chung, R. Y., Kim, J. H., Yip, B. H., Wong, S. Y. S., Wong, M. C. S., Chung, V. C. H., & Griffiths, S. M. (2014). Alcohol Tax Policy and Related Mortality. An Age-Period-Cohort Analysis of a Rapidly Developed Chinese Population, 1981–2010. *PLoS ONE*, *9*(8), e99906.
- Chung, V. C. H., Yip, B. H. K., Griffiths, S. M., Yu, E. L. M., Kim, J. H., Tam, W. W. S., Wong, A. H. C., Chan, I. W. T., & Lau, J. T. F. (2013). The impact of cutting alcohol duties on drinking patterns in Hong Kong. *Alcohol and Alcoholism*, *48*(6), 720–728.
- Department of Health - The Government of Hong Kong SAR. (2013). *Action Plan to Reduce Alcohol-related Harm in Hong Kong*.
- Department of Health - The Government of Hong Kong SAR. (2020). *Alcohol Consumption Per Capita in Hong Kong*. https://www.change4health.gov.hk/en/alcohol_aware/figures/alcohol_consumption/index.html
- Greenfield, T. K., Karriker-Jaffe, K. J., Giesbrecht, N., Kerr, W. C., Ye, Y., & Bond, J. (2014). Second-hand drinking may increase support for alcohol policies: New results from the 2010 National Alcohol Survey. *Drug and Alcohol Review*, *33*(3), 259–267.
- Ho, J. W. C., Lam, T. H., Tse, C. W., Chiu, L. K. M., Lam, H. S., Leung, P. F., Ng, K. C., Ho, S. Y., Woo, J., Leung, S. S. F., & Yuen, S. T. (2004). Smoking, drinking and colorectal cancer in Hong Kong Chinese: a case-control study. *International Journal of Cancer*, *109*(4), 587–597.
- Hong Kong Liquor Licensing Board. (2018). *List of Licensed Liquor Premises*.
- Hong Kong Medical Association, & Hong Kong Medicine Association. (2016). *Survey on Alcohol Control Policy*.
- Ireland National Advisory Committee on Drugs. (2012). *Drug use in Ireland and Northern Ireland: Alcohol Consumption and Alcohol-Related Harm in Ireland 2010/2011 Drug Prevalence Survey - Bulletin 7*.

References

- Isaranuwatchai, W., Teerawattananon, Y., Archer, R. A., Luz, A., Sharma, M., Rattanavipapong, W., Anothaisintawee, T., Bacon, R. L., Bhatia, T., Bump, J., Chalkidou, K., Elshaug, A. G., Kim, D. D., Reddiar, S. K., Nakamura, R., Neumann, P. J., Shichijo, A., Smith, P. C., & Culyer, A. J. (2020). Prevention of non-communicable disease: Best buys, wasted buys, and contestable buys. *The BMJ*, *368*.
- Kim, J. H., Lee, S., Chow, J., Lau, J., Tsang, A., Choi, J., & Griffiths, S. M. (2008). Prevalence and the factors associated with binge drinking, alcohol abuse, and alcohol dependence: a population-based study of Chinese adults in Hong Kong. *Alcohol and Alcoholism*, *43*(3), 360–370.
- Kim, Jean H., Wong, A. H., Goggins, W. B., Lau, J., & Griffiths, S. M. (2013). Drink driving in Hong Kong: the competing effects of random breath testing and alcohol tax reductions. *Addiction*, *108*(7), 1217–1228.
- Kim, T. Y., & Shong, Y. K. (2017). Active surveillance of papillary thyroid microcarcinoma: A mini-review from Korea. In *Endocrinology and Metabolism* (Vol. 32, Issue 4, pp. 399–406). Korean Endocrine Society.
- Laslett, A. M., Room, R., Ferris, J., Wilkinson, C., Livingston, M., & Mugavin, J. (2011). Surveying the range and magnitude of alcohol's harm to others in Australia. *Addiction*, *106*(9), 1603–1611.
- Pun, V. C., Lin, H., Kim, J. H., Yip, B. H. K., Chung, V. C. H., Wong, M. C. S., Yu, I. T. S., Griffiths, S. M., & Tian, L. (2013). Impacts of alcohol duty reductions on cardiovascular mortality among elderly Chinese: a 10-year time series analysis. *Journal of Epidemiology and Community Health*, *67*(6), 514–518.
- Waleewong, O., Jankhotkaew, J., Thamarangsi, T., & Chaiyasong, S. (2017). Prevalence of harm from others' alcohol drinking and the relationships with demographics and the respondents' drinking behaviors in Thailand. *Journal of Substance Use*, *22*(6), 605–611.
- Wang, M. P., Ho, S. Y., & Lam, T. H. (2013). Underage alcohol drinking and medical services use in Hong Kong: a cross-sectional study. *BMJ Open*, *3*(5), e002740.
- World Health Organization. (2011). *Global status report on noncommunicable diseases 2010*.
- World Health Organization. (2018). *Global status report on alcohol and health 2018.*

Stakeholder category and job description of interviews

Interviewee	*Stakeholder Category*	*Job Position*
Interviewee 1	Alcohol retailer	Convenience store cashier
Interviewee 2	Alcohol retailer	Wine specialty shop owner
Interviewee 3	Alcohol retailer	Beer counter owner
Interviewee 4	Alcohol retailer	Beer company manager
Interviewee 5	Alcohol retailer	Online alcoholic beverage store corporate development manager
Interviewee 6	Food & beverage industry	Restaurant & Bar waitress
Interviewee 7	Food & beverage industry	Hotel catering manager
Interviewee 8	Food & beverage industry	Restaurant & Bar manager
Interviewee 9	Food & beverage industry	Wine bar manager
Interviewee 10	Marketing professional	Alcohol company marketer
Interviewee 11	Marketing professional	Online wine app marketer
Interviewee 12	Marketing professional	Alcohol magazine marketer
Interviewee 13	Marketing professional	Alcohol company marketing executive
Interviewee 14	Government officer	Government officer in alcohol control
Interviewee 15	Government officer	Public health practitioner in non-communicable disease
Interviewee 16	Government officer	Member of executive council
Interviewee 17	Government officer	Consultant for the government on public health