

We know what the real target is, but we need to consult the public and then we'll need to have some very careful decisions to make sure that if we are going to move forward with legislation in this area, is properly designed to deal with those legitimate concerns.

... I'm thinking really outside tobacco I should say.¹³⁰

6.43 The International Chamber of Commerce has noted:

With the plain packaging principle, the elimination of branding creates a severe trade restraint, interfering with the legitimate growth of markets and very real adverse precedential implications for other legal and branded products and services.¹³¹

6.44 Similarly, the UK arm of the International Chamber of Commerce has observed:

This is not just an issue for the tobacco industry and health groups. The introduction of plain packaging legislation would break new ground for the UK in terms of how commercial expression is regulated – the possible consequences of which need to be carefully considered for the economy as whole. ...

What might be viewed as a justifiable measure in narrow terms, could set a precedent which would be hugely damaging to global trade.¹³²

6.45 Indeed, the UK House of Commons' Health Select Committee has included plain packaging for alcohol as part of its current inquiry into the Government's alcohol strategy.¹³³

6.46 A link between Plain Packaging for tobacco and alcohol is by no means far-fetched. The WHO states that alcohol causes greater harm than tobacco globally in terms of disability-adjusted life years lost¹³⁴ and that it is the world's "*third largest risk factor for disease burden*".¹³⁵ The New Zealand Government appears to consider that alcohol consumption imposes enormous costs on New Zealand society in terms of crime and public health.¹³⁶ While it is often asserted that tobacco is unique in that no degree of tobacco consumption is safe, this overlooks the fact that government and cancer research agencies state that there is no safe level of alcohol consumption:

¹³⁰ TV3 News, *The Nation* (interview) (7 July 2012), available at <http://www.3news.co.nz/NZ-to-calibrate-response-on-ETS--Groser/tabid/1356/articleID/260480/Default.aspx>.

¹³¹ BASCAP, "Submission to the Australian Department of Health and Ageing Consultation 2011" (Annex I).

¹³² PR Newswire, "ICC Stresses need for wider perspective on Plain Packaging", (13 April 2012), available at <http://www.prnewswire.co.uk/news-releases/icc-stresses-need-for-wider-perspective-on-plain-packaging-147327435.html>.

¹³³ "Government's alcohol strategy", (26 March 2012) available at <http://www.parliament.uk/business/committees/committees-a-z/commons-select/health-committee/news/12-03-26-alcohol-torcfe/>.

¹³⁴ WHO, "Global Health Risks: Mortality and burden of disease attributable to selected major risks" (2009) at p 10, available at http://www.who.int/healthinfo/global_burden_disease/global_health_risks/en/index.html.

¹³⁵ WHO, "Alcohol" (February 2011), available at <http://www.who.int/mediacentre/factsheets/fs349/en/index.html>.

¹³⁶ Office of the Minister of Justice, Cabinet, Alcohol Law Reform, (5 August 2010), at pp 9-10 and 86-89 available at <http://www.justice.govt.nz/policy/crime-prevention/alcohol/documents/alcohol-law-reform-cabinet-paper-final.pdf>.

The evidence linking alcohol and cancer has been very strong for many years. The International Agency for Research on Cancer (IARC) first said that there is 'sufficient evidence' that 'alcoholic beverages are carcinogenic to humans' back in 1988.

...

The evidence has strengthened since, with hundreds of studies showing the same thing. Alcohol causes seven types of cancer: mouth, oesophageal, pharyngeal, laryngeal, breast, colorectal and liver.

The most recent estimates from a large European EPIC study suggest that anywhere from 13,000 to 17,000 cases of cancer in the UK are caused by alcohol. ...

Studies have consistently shown that there is no safe threshold. Just three units a day – the amount in a pint of strong lager or a large glass of wine – can significantly increase the risk.¹³⁷

- 6.47 Professors Sellman and Connor of the University of Otago are campaigning aggressively for disproportionate restrictions of the alcohol industry,¹³⁸ and the former has gone so far as to suggest that alcohol would appropriately be classified as a Class B drug.¹³⁹

- 6.48 Further, the New Zealand and Australian Governments have stated that:

The chronic disease burden caused by poor diet is the largest cause of ill health in the community. It has a greater impact than smoking, physical inactivity and alcohol misuse. ... In New Zealand, approximately one in three adults is overweight and one in four obese, while one in five children aged 2–14 is overweight, and one in 12 is obese.¹⁴⁰

- 6.49 Professor Hoek, whose writings concerning graphic health warnings and Plain Packaging appear to have influenced the Ministry of Health, has drawn an explicit connection between tobacco and fast food, argues for advertising restrictions for all

¹³⁷ Cancer Research UK, "Presenting the evidence" *GP Cancer Insight*, Issue 4, (July 2011), available at <http://publications.cancerresearchuk.org/publicationformat/formatnewsletter/gp-newsletter-july2011.html>. See also ALAC "Chronic Alcohol Use", available at <http://www.alac.org.nz/alcohol-you/your-body-alcohol/health-effects/chronic-alcohol-use> and see Cancer Society "Alcohol and Cancer Risk" (March 2009) available at http://www.cancernz.org.nz/assets/files/docs/info/IS_AlcoholandCancerJune09.pdf.

¹³⁸ D Sellman, "Ten things the alcohol industry won't tell you about alcohol", (2009), available at <http://www.alcoholaction.co.nz/pdfs/Ten%20Things%20Powerpoint.pdf>. See also Professors Geoffrey Robinson, Jennie Connor and Doug Sellman, "Opinion: Heed Maori Party on booze, Mr Key", *New Zealand Herald*, (11 June 2012) available at http://www.nzherald.co.nz/opinion/news/article.cfm?c_id=466&objectid=10812099.

¹³⁹ D Sellman, "If alcohol was a new drug", *NZMJ* 25 September 2009, Vol 122 No 1303, available at <http://journal.nzma.org.nz/journal/122-1303/3800/>.

¹⁴⁰ Legislative and Governance Forum on Food Regulation (convening as the Australia and New Zealand Food Regulation Ministerial Council), "Response to the Recommendations of Labelling Logic: Review of Food Labelling Law and Policy" (2011) at p 7, available at <http://www.foodlabellingreview.gov.au/internet/foodlabelling/publishing.nsf/content/home>.

manner of food products consumed by children,¹⁴¹ and appears to suggest that fast food should be “de-normalised”:

Is it fair to compare food with tobacco?

‘While food and tobacco are different (tobacco is unambiguously harmful, good food is important to life), not all foods are ‘healthy’. Energy-dense and nutrient-poor (EDNP) foods are linked to obesity which, in turn, increases the risk of serious chronic illnesses such as diabetes. Where products present risks to public health, it seems reasonable to review the marketing used to promote them with the marketing used to promote other unhealthy products, such as tobacco.’

...

Should we be supporting fast food de-normalisation campaigns?

...

‘... The wide availability of fast food and its dominant commercial presence will make fast food denormalisation campaigns difficult to undertake, unless these are funded at the same level. We need first to change the food marketing environment so healthy eating (or unhealthy food avoidance) campaigns can have more effect.’¹⁴²

- 6.50 We draw attention to these statements about alcohol and fast food, not because we endorse the views of those who advocate radical and misconceived measures with respect to these products, but to illustrate the risks to the New Zealand economy which would be created by Plain Packaging.
- 6.51 By contrast with the views of Professors Sellman, Connor and Hoek, the New Zealand and Australian Governments take the view that a very cautious approach to labelling is warranted for the food and beverage sector, including alcohol:

[F]ood and beverage manufacturing in New Zealand is crucial to the New Zealand economy, employing approximately 20% of the working population with sales of approximately \$27 billion per annum. Foods and beverages account for more than half of New Zealand’s total merchandise exports at around \$15.3 billion per annum, with domestic retail sales of \$12.4 billion each year.

Any regulatory decisions affecting the sector need to be reasonable and sensible. In addition the outcomes need to be practical to enforce by regulators. Any regulatory decisions impacting on the international competitiveness of the Australian and New Zealand food industries will need to be carefully considered. ...

The food labelling regulatory framework must strike a balance between seeking to ensure good public health outcomes (both short and longer term) and ensuring a strong

¹⁴¹ Janet Hoek and Ninya Maubach, “Self-regulation, marketing communications and childhood obesity: A critical review from New Zealand”, 39 Loy LAL Rev 139 (2006). available at <http://digitalcommons.lmu.edu/llr/vol39/iss1/6>.

¹⁴² “‘Big Food’ needs scrutiny – experts” (20 June 2012), available at <http://www.sciencemediacentre.co.nz/2012/06/20/big-food-needs-scrutiny-experts/>.

and profitable food industry. For this reason, the development of a response and plan of action to the recommendations of *Labelling Logic* has been a complex task.¹⁴³

- 6.52 Unjustifiable discrimination would occur were the Government not to approach tobacco regulation in a similarly balanced manner.
- 6.53 Leaving that aside, if the Government resolves to pursue Plain Packaging for tobacco products, a dangerous precedent for other industries would have been set – most notably New Zealand's crucial food and beverage sector.
- 6.54 The Government would (as we have noted above) have limited its ability credibly to challenge overseas regulatory measures that harm New Zealand's export sector, but would also find itself subjected to increasingly strident demands from lobby groups for the extension of Plain Packaging and other de-normalisation policies to a wide range of consumer products.

SIGNIFICANT BURDENS ON RETAILERS

- 6.55 Retailers face many challenges in order to make a living, and unsurprisingly, it is often smaller, independently-owned retailers who are most affected by adverse economic developments and regulatory change (like the recent implementation of the retail display ban for tobacco products). BAT representatives call on many retailers and, in so doing, gain an understanding of their concerns.
- 6.56 Small retailers already feel rightly aggrieved about the retail display ban, which has increased transaction times and exposed them to security risks.
- 6.57 Plain Packaging would impose further burdens on these retailers. It would compound the logistical problems created by the retail display ban. Transaction times would become even longer. Stock management would become even more time-consuming due to the difficulty of quickly and accurately counting high value stock when all packaging looks essentially the same.
- 6.58 In Australia, the annual cost to each retailer from these problems has been estimated as follows:¹⁴⁴
- (a) stock management costs: A\$1,200-A\$5,500;
 - (b) transaction costs: A\$3,000-A\$27,000; and
 - (c) product selection errors: A\$180-A\$1,400.
- 6.59 Stock management and transaction time problems also heighten retailers' very real concerns about personal safety and loss of sales to store theft.

¹⁴³ Legislative and Governance Forum on Food Regulation (convening as the Australia and New Zealand Food Regulation Ministerial Council), "Response to the Recommendations of *Labelling Logic*: Review of Food Labelling Law and Policy (2011)" at p 8, available at <http://www.foodlabellingreview.gov.au/internet/foodlabelling/publishing.nsf/content/home> (emphasis added).

¹⁴⁴ Deloitte, "Tobacco Packaging Regulation: An international assessment of the intended and unintended impacts" (May 2011), at pp 55-56, available at <http://www.bat.com/deloittereport>.

- 6.60 Small retailers are an important part of the community, and additional burdens for them would negatively impact the wider economy.

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7 INADEQUATE POLICY ANALYSIS IN THE RIS

SUMMARY

- 7.1 The RIS prepared by the Ministry of Health fails to meet even rudimentary standards for regulatory analysis and is wholly inadequate as a basis for the enactment of legislation.
- 7.2 Most notably, the RIS:
- (a) fails to acknowledge that Plain Packaging would amount to an unjustifiable violation of international trade rules and an uncompensated expropriation of property rights, in breach of fundamental principles and international law;
 - (b) defines the policy objective too narrowly, targeting packaging specifically (rather than a reduction in tobacco consumption), and thus pre-justifies the choice of Plain Packaging;
 - (c) exaggerates the so-called "evidence" as to the likely effectiveness of Plain Packaging and the conclusions of the studies upon which it relies;
 - (d) fails to acknowledge the severe limitations of these speculative studies, which are based on surveys and focus groups;
 - (e) fails to acknowledge that graphic health warnings had no impact on tobacco consumption trends when introduced in New Zealand in 2008;
 - (f) understates the serious risks of adopting Plain Packaging;
 - (g) fails to consider less trade restrictive and less damaging alternative options for reducing tobacco consumption; and
 - (h) fails properly to assess the overall net effects of Plain Packaging.
- 7.3 Plain Packaging legislation enacted on the basis of the RIS would represent poor-quality regulation that fails to comply with the Government's commitment that it will:
- (a) introduce new regulation only if satisfied that it is "*required, reasonable and robust*"; and
 - (b) "*require there to be a particularly strong case made for any regulatory proposals that are likely to ... impair private property rights, market competition, or the incentives on businesses to innovate and invest*".¹⁴⁵
- 7.4 We have identified in this section the most severe defects in the RIS which are directly relevant to a cost/benefit assessment for Plain Packaging. The RIS contains a raft of

¹⁴⁵ Government Statement on Regulation: Better Regulation, Less Regulation (17 August 2009) at p 2, available at <http://www.treasury.govt.nz/economy/regulation/statement/govt-stmt-reg.pdf> (emphasis added).

additional, unsupported and incorrect assertions upon which we do not comment here, but which we should not be assumed to accept.

- 7.5 By letter dated 23 August 2012, BAT requested from the New Zealand Treasury under the Official Information Act 1982 copies of working papers relating to the Treasury's review of the RIS. The Treasury extended the time limit for providing its response, and no working papers have been received to date.
- 7.6 As is explained below, the overall net effect of adopting Plain Packaging would be a clear and material detriment to New Zealand.

THE STATUS QUO IS INADEQUATELY AND IMPROPERLY DEFINED

- 7.7 The RIS acknowledges that New Zealand already has a "*comprehensive suite*" of tobacco control initiatives, including high excise taxes, education campaigns, a retail display ban, an advertising ban, and new enforcement tools.¹⁴⁶ As has been explained above in Section 3, some of these initiatives are yet to come into force, or have only recently done so. The RIS does not provide any proper assessment of how the status quo is likely to evolve under these current measures and so fails to assess the need for further regulation against the correct benchmark.
- 7.8 The RIS also accepts that existing tobacco control initiatives – such as the tobacco excise tax – could be strengthened over time, but states that such enhancements should be regarded as part of the status quo.¹⁴⁷ This is an error. The status quo should take into account only those changes which have already been adopted. As a result of its faulty definition of the status quo, the RIS assesses the impact of Plain Packaging against the wrong benchmark.

THE PROBLEM AND POLICY OBJECTIVE ARE IMPROPERLY DEFINED

- 7.9 Coherent public health regulatory analysis should always:¹⁴⁸
- (a) begin with the identification of a relevant health risk; and
 - (b) proceed to evaluate the net benefit of each viable remedy, so that the most effective and efficient means of addressing the risk can be identified from among the range of available alternatives.
- 7.10 The RIS properly acknowledges that the purpose of New Zealand's tobacco control policies is to reduce smoking prevalence.¹⁴⁹ Accordingly, the RIS should have identified and compared the net benefits of various tobacco control measures that would contribute to this objective.

¹⁴⁶ At para 2.

¹⁴⁷ At p 1.

¹⁴⁸ The Treasury, *Regulatory Impact Analysis Handbook* (November 2009), at pp 9-13, available at <http://www.treasury.govt.nz/publications/guidance/regulatory/impactanalysis/ria-handbk-nov09.pdf>.

¹⁴⁹ At para 9.

- 7.11 Instead, the RIS defines the policy problem as “*the continued ability of the tobacco industry to use packaging in a way that allows advertising and promotion of tobacco products*”.¹⁵⁰
- 7.12 Defining the problem in this way pre-justifies Plain Packaging and excludes proper consideration of all relevant alternatives.
- 7.13 This is inconsistent with the approach set out in the New Zealand Treasury’s *Regulatory Impact Analysis Handbook*. The *Handbook* states that a proper impact analysis exercise should:

... identify the root cause of the problem

The objectives should be clear and should not pre-justify a particular solution. They should be specified broadly enough to allow consideration of all relevant alternative solutions. ... The objectives should focus on the desired final outcome [reduced tobacco consumption in this case] rather than the means of achieving it [e.g. regulation of packaging]. ...

...

[Regulators should] [i]dentify the full range of policy options that may fully or partially achieve the stated objectives and thereby address the identified problem. ...

...

The net benefit (or cost) of each option should also be assessed.¹⁵¹

THE FULL RANGE OF FEASIBLE OPTIONS HAS NOT BEEN CONSIDERED

- 7.14 The RIS considered only three options in detail, and dismissed three others as unrealistic. Those six options considered were as follows:
- (a) Option 1: status quo;¹⁵²
 - (b) Option 2: increased and refreshed health warnings;¹⁵³
 - (c) Option 3: regulatory change to require Plain Packaging of tobacco products;¹⁵⁴
 - (d) Option 4: increased public education about the effects of tobacco packaging;¹⁵⁵
 - (e) Option 5: voluntary agreements with industry or self-regulation;¹⁵⁶ and

¹⁵⁰ At p 3.

¹⁵¹ The Treasury, *Regulatory Impact Analysis Handbook* (November 2009), at pp 9-12, available at <http://www.treasury.govt.nz/publications/guidance/regulatory/impactanalysis/ria-handbk-nov09.pdf> (emphasis added).

¹⁵² At para 15.

¹⁵³ At para 19.

¹⁵⁴ At para 22.

¹⁵⁵ At para 26.

(f) Option 6: supply control measure (monopsony).¹⁵⁷

- 7.15 As we commented above, Option 1 is incorrectly defined. By definition, the status quo should not take into account the effect of new initiatives which could be pursued in the future but which have not been adopted as Government policy.
- 7.16 Likewise, Option 2 has been improperly defined. It conflates two different ideas. It may be worthwhile for the Government to improve its existing health warnings without increasing their size. They could be targeted at specific social groups to address any demonstrated information deficits, should be fact-based, and should aim to inform rather than merely to shock. These possibilities have not been considered.
- 7.17 What the Ministry of Health had in mind under Option 4 is unclear. To the extent that the Ministry considered public education campaigns concerning solely the (non-existent) effect of packaging on tobacco consumption, Option 4 was misconceived since it could have no rational connection to improved public health.
- 7.18 If in relation to Option 4 the Ministry of Health dismissed the possibility of improved, targeted education campaigns, it did so wrongly. The RIS simply asserts that education campaigns “*can be costly*”,¹⁵⁸ but makes no attempt to quantify their costs or assess them against the benefits of a successful education campaign. Further, no evidence is cited to support the assertion that education campaigns are “*not sufficient in and of themselves to spark behavioural change*”.¹⁵⁹ Contrary to the Ministry’s assertion, there is empirical evidence demonstrating that well-designed youth education campaigns can reduce the incidence of smoking among youth, as we have explained in Section 3 above.
- 7.19 The RIS was also wrong not to consider further alternatives. As we explain in Section 3, there are a number of alternatives – such as a minimum price and more rigorous prosecution of retailers who sell cigarettes to children – which the Government should consider in preference to the draconian, ineffective and risky step of introducing Plain Packaging. Those alternatives are not referred to at all in the RIS. Until they are considered, the RIS cannot be relied upon as anything like coherent public policy analysis.

¹⁵⁶ At para 27.

¹⁵⁷ At para 28.

¹⁵⁸ At para 26.

¹⁵⁹ At para 26.

THE BENEFITS OF PLAIN PACKAGING HAVE BEEN EXAGGERATED

REDUCED TOBACCO CONSUMPTION

- 7.20 One of the RIS's most severe defects is its exaggeration of the conclusions of the speculative studies arguing for Plain Packaging. Thus, the RIS asserts that:

Combined with other mutually supporting measures in a comprehensive tobacco control programme, plain packaging will lead to a reduction in smoking rates, improvements to the health and well-being of the public

...

[Plain Packaging is] [l]ikely [to cause an] increase in quit rates, reduced uptake, reduced relapse and ultimately a reduction in tobacco consumption in New Zealand. Lower rates of smoking will result in reduced health impacts of second-hand smoke¹⁶⁰

- 7.21 This is pure speculation. The only "evidence" specifically referred to in the RIS in support of these propositions is a paper by Quit Victoria and, by extension, various studies mentioned therein based on opinions expressed by participants in focus groups and surveys.
- 7.22 Yet, like the PHRC Review,¹⁶¹ the Quit Victoria paper does *not* state that the various speculative studies cited therein establish that Plain Packaging *would actually reduce tobacco consumption*. Instead, it merely asserts (for example) that Plain Packaging would improve the effectiveness of health warnings and that tobacco companies' opposition to Plain Packaging suggests that the measure would work.¹⁶² The Quit Victoria paper thus contains no conclusion which supports the RIS's categorical assertion that Plain Packaging would reduce tobacco consumption and improve public health.
- 7.23 Indeed, as has been explained in Section 2 above, there is no evidence whatsoever to support the Ministry's assertions about reduced tobacco consumption.
- 7.24 It is clear from the failure of graphic health warnings that speculative studies of the sort reviewed in the Quit Victoria report are unreliable and that limiting branding and requiring shocking images to appear on packs does not reduce consumption. Surprisingly, the RIS makes no reference to the failure of the graphic warnings.
- 7.25 At the very least, the RIS should have discussed the nature of the studies upon which the Ministry relied and should have noted the limitations which these studies themselves acknowledge. The Treasury's *Handbook* outlines the analysis which should have been (but apparently was not) performed by the Ministry as part of "an evidence-based approach to policy development":

¹⁶⁰ At pp 8 and 10. See also at para 34 (emphasis added).

¹⁶¹ PHRC Review at p 87.

¹⁶² Quit Victoria, Cancer Council Victoria, "Plain packaging of tobacco products: a review of the evidence" (May 2011), at p 4, available at <http://tobacco.health.usyd.edu.au/assets/pdfs/tobacco-industry/Background-report-on-plain-packaging.pdf>.

This means providing references and sources for assertions made (such as about the nature of the problem and about the expected viability or effectiveness of policy options), and for all estimates of costs, benefits and risks. Evidence may be quantitative or it may be qualitative; in each case the strengths, biases and limitations of the information sources should be explained. Where there are information gaps, for instance where there are no data available to support the analysis, this should be explicitly stated.¹⁶³

- 7.26 The RIS also states that the *“likely increase in quit rates [as a result of Plain Packaging] is not quantifiable, as it is not possible to estimate the impact of one intervention alone”*.¹⁶⁴ This is unsatisfactory and incorrect. If no incremental reduction in tobacco consumption arising from Plain Packaging could be identified, then it cannot be credibly asserted that Plain Packaging would be beneficial or is necessary.
- 7.27 Further, the New Zealand Treasury appears to consider that reductions in tobacco consumption as a result of tobacco excise tax increases are quantifiable with a fair degree of precision.¹⁶⁵ The charts reproduced in Section 2 above also confirm that excise tax increases have had a measurable effect on tobacco consumption.
- 7.28 It is not legitimate for the Ministry to infer that its tobacco control initiatives apart from excise tax increases have reduced tobacco consumption but that their effects are somehow un-measurable solely because they cannot be separated from those of other measures. Unless the Ministry can point to solid evidence to the contrary, if a tobacco control measure, like Plain Packaging, has no measurable effect on consumption, then the correct inference is that, like graphic health warnings, the measure is ineffectual.

ELIMINATION OF TOBACCO PROMOTION

- 7.29 The RIS asserts that Plain Packaging is desirable:¹⁶⁶
- (a) because tobacco packaging is a *“highly effective form of tobacco marketing”* and to reduce the appeal of smoking for youth;
 - (b) to make the existing health warnings more effective; and
 - (c) to prevent colours such as *“gold, blue, silver and purple”* from causing consumers to believe that some cigarettes are less harmful than others.
- 7.30 We have addressed these points above. In summary:

¹⁶³ The Treasury, *Regulatory Impact Analysis Handbook* (November 2009), at p 8, available at <http://www.treasury.govt.nz/publications/guidance/regulatory/impactanalysis/ria-handbk-nov09.pdf> (emphasis added)

¹⁶⁴ At p 10.

¹⁶⁵ Regulatory Impact Statement, Increase in Tobacco Excise and Equivalent Duties, (20 April 2012), at p 6, available at <http://www.treasury.govt.nz/publications/informationreleases/ris/pdfs/ris-tsy-iteed-may12.pdf>: “Price elasticity of demand constant at -0.5. A 10% increase in price leads to 5% decrease in consumption.”

¹⁶⁶ At paras 6 and 7.

- (a) there is no evidence that packaging influences smoking initiation or cessation or the overall level of tobacco consumption. The function of trade marks and branded packaging is to allow consumers to identify products which they have already chosen to consume, as the Government itself recognises;¹⁶⁷
- (b) prominent and shocking graphic health warnings were introduced in 2008. They were ineffectual, not because they are insufficiently prominent, but because packaging does not affect smoking decisions and because smokers have been aware of the risks for decades; and
- (c) there is no evidence that colours neutralise consumers' existing awareness of the risks of smoking or prevent consumers from seeing and assimilating health warnings. The studies relied upon in the Quit Victoria paper and the PHRC Review do not establish that any branded cigarette packs are viewed as safe or that people would smoke less if all cigarettes were sold in plain packs of uniform colour. If there were evidence that misleading material is present on tobacco packaging, the New Zealand Commerce Commission could exercise its extensive powers under the Fair Trading Act 1986.

COMPLIANCE WITH THE FCTC

- 7.31 The RIS incorrectly suggests that the FCTC requires Plain Packaging.¹⁶⁸ As we have explained above, the FCTC's non-binding guidelines merely recommend that Plain Packaging be considered and recognise that its adoption may be precluded by domestic or international law.

THE COSTS OF PLAIN PACKAGING HAVE BEEN UNDERSTATED

- 7.32 Both the RIS and the Consultation Document appear to proceed under the misapprehension that Plain Packaging would be entirely costless. Plain Packaging would in fact impose a number of very significant costs on the Government, private parties and the industry.

DETRIMENT TO TRADE AND COMPETITION

- 7.33 The RIS reflects a failure to understand the effect of Plain Packaging on competition in the tobacco market. As we have commented above in Section 6, Plain Packaging would severely reduce brand differentiation and thereby intensify price competition, reduce prices and increase tobacco consumption.
- 7.34 Given the view expressed in the RIS that tobacco consumption is detrimental, a reduction in prices causing consumption to increase must be seen as counterproductive and as a significant cost of adopting Plain Packaging.
- 7.35 Further, the expropriation of intellectual property rights and downward pressure on prices resulting from Plain Packaging would cause very significant financial losses for

¹⁶⁷ IPONZ, "What is a trade mark?" <http://www.iponz.govt.nz/cms/trade-marks/what-is-a-trade-mark>.

¹⁶⁸ At pp 8-9.

BAT, New Zealand retailers and others involved in the tobacco industry, for which compensation would be due.

DETRIMENT TO CONSUMERS AND ECONOMIC INEFFICIENCY

- 7.36 The shift towards commoditisation of the market, reduction of information available to consumers, and diminished innovation resulting from Plain Packaging would all be economically inefficient. The RIS does not adequately address, let alone quantify, these significant costs.

INCREASE IN ILLICIT TRADE

- 7.37 As is explained above in Section 6, Plain Packaging would expand the illicit tobacco market in New Zealand. This would give rise to significant costs, including reduced Government revenues and increased crime. This risk is dismissed in the RIS without adequate explanation.

BREACH OF WTO AGREEMENTS AND INVESTMENT TREATIES

- 7.38 As we have explained above in Section 4 of this Response, by introducing Plain Packaging, New Zealand would be very publicly and deliberately breaching its obligations under the WTO agreements and several Investment Treaties.
- 7.39 This would expose the Government to significant legal costs, liability for damages under Investment Treaties, and a formal request that the Plain Packaging legislation be repealed. Australia's Department of Health and Ageing suggested that legal costs associated with Plain Packaging were likely to exceed A\$10 million.¹⁶⁹ We have explained that they may well be significantly higher. No attempt is made in the RIS to quantify New Zealand's exposure to awards of compensation, which would be substantial.

DAMAGING PRECEDENT

- 7.40 As we have commented above, other countries and foreign investors would be rightly concerned if New Zealand were to introduce Plain Packaging. If New Zealand does not respect trade marks and other intellectual property in which companies around the world invest in order to differentiate their products and allow consumers to identify them, then international businesses could become reluctant to do business with, or invest in, New Zealand. Indeed, the RIS acknowledges that *"there is potentially a negative reputational impact in the global investment market for interference with intellectual property."*¹⁷⁰
- 7.41 The RIS seeks to downplay this significant risk by reference to the alleged uniqueness of the tobacco industry. This is misconceived. As has been explained above in

¹⁶⁹ Health Reform Briefing note sent under cover of email (18 February 2010).

¹⁷⁰ At para 23.

Section 6, the Hon Tim Groser¹⁷¹ and others have recognised that Plain Packaging would set a concerning precedent internationally and in New Zealand for a range of industries.

- 7.42 As has been explained above in Sections 5 and 6, the effects of Plain Packaging would not be limited to deterring investment in New Zealand. New Zealand's exports could be damaged as Plain Packaging would set a precedent for decreased respect for brands and intellectual property rights worldwide. Adopting Plain Packaging would make it difficult for the New Zealand Government credibly to oppose measures taken overseas to the detriment of brands and trade marks that are vital to New Zealand's export sector.

DISREGARDING FUNDAMENTAL COMMON LAW PRINCIPLES

- 7.43 As we have noted above in Section 4, the Government appears to consider that an alcohol advertising ban could interfere with fundamental common law principles and property rights. Under section 9(1) of the Trade Marks Act 2002, a trade mark is personal property. Plain Packaging would, in particular, prohibit the use of registered tobacco device marks. This would offend against the fundamental common law principle that property rights should not be expropriated without payment of compensation. The RIS is defective in failing even to acknowledge this (contrary to the requirements of the Treasury's *Handbook*¹⁷² and the Legislation Advisory Committee's *Guidelines on Process and Content of Legislation*¹⁷³) and in failing to present a "particularly strong case" to justify the measure.¹⁷⁴

CONCLUSION AND QUALITATIVE NET BENEFIT ASSESSMENT

- 7.44 The RIS is superficial and unsound, particularly in exaggerating the conclusions of the speculative literature arguing in favour of Plain Packaging and in failing to consider alternative policy options. It falls far short of demonstrating that Plain Packaging is reasonable, let alone necessary.
- 7.45 The table below provides a qualitative assessment of the overall benefits and costs of Plain Packaging. The measure would clearly result in a material net cost to New Zealand.

¹⁷¹ TV3 News, *The Nation* (interview) (7 July 2012), available at <http://www.3news.co.nz/NZ-to-calibrate-response-on-ETS--Groser/tabid/1356/articleID/260480/Default.aspx>.

¹⁷² The Treasury, *Regulatory Impact Analysis Handbook* (November 2009), at pp 36-38, available at <http://www.treasury.govt.nz/publications/guidance/regulatory/impactanalysis/ria-handbk-nov09.pdf>.

¹⁷³ Legislation Advisory Committee, *Guidelines on Process and Content of Legislation*, 2001 edition and amendments, at pp 47-55, available at http://www2.justice.govt.nz/lac/pubs/2001/legislative_guide_2000/combined-guidelines-2007v2.pdf.

¹⁷⁴ Government Statement on Regulation: Better Regulation, Less Regulation (17 August 2009) at p 2, available at <http://www.treasury.govt.nz/economy/regulation/statement/govt-stmt-reg.pdf>.

BENEFITS	COSTS
<u>ZERO</u> (The RIS fails to demonstrate that Plain Packaging would reduce tobacco consumption)	Increased tobacco consumption (due to a shift towards commoditisation, lower prices and increased illicit trade)
	Damaging precedent creating serious risk of adverse impact on New Zealand's exports
	Disincentive to invest in New Zealand due to reduced protection for intellectual and other property rights
	Expansion of illicit tobacco market, leading to increased criminal activity, loss of tax revenue, and exposure of consumers to risky unregulated tobacco products
	Reduced producer and consumer surplus (due to shift to commoditisation, reduction in information available to consumers, and diminished innovation)
	Increased regulatory and cost burden on retailers
	Cost of defending Investment Treaty arbitration (could be NZ\$10-20 million for each arbitration) and liability in damages to tobacco companies (would be significant – e.g. BAT's after tax profits for 2011 were NZ\$121 million)
	Cost of defending WTO proceedings
	<u>OVERALL NET IMPACT:</u> <u>A material net cost to New Zealand</u>

APPENDIX 1—SCHEDULE OF CONSULTATION QUESTIONS ANSWERED

The following table cross-references the Sections in this Response to the questions in the Consultation Document.

Response Section	Consultation Document Question(s)
1. Executive Summary	1
2. Plain Packaging would not reduce tobacco consumption	2 and 3
3. Effective alternatives are available	3
4. Plain Packaging would violate New Zealand's international obligations and fundamental norms	5
5. Damage to New Zealand's international standing	5
6. Plain Packaging would have serious unintended consequences	5, 6, 9, 10, 17, and 18
7. Inadequate policy analysis in the RIS	7

APPENDIX 2—EXPERT REPORT OF PROFESSOR JONATHAN KLINK

RELEASED UNDER THE
OFFICIAL INFORMATION ACT



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October 2, 2012

I, Jonathan Klick, am a tenured full professor of law at the University of Pennsylvania in Philadelphia, Pennsylvania (USA). I am also the Erasmus Chair of Empirical Legal Studies at Erasmus University Rotterdam (the Netherlands). This position is partially funded by an Erasmus Mundus grant from the European Commission. I was previously the Jeffrey A. Stoops Professor of Law and Economics at the Florida State University. I have held visiting professor positions at Columbia University, Northwestern University, the University of Southern California, the University of Hamburg, and have been invited to be a visiting professor at the Yale Law School. I am the editor of the *International Review of Law and Economics*.

In 2010, I taught honors-level econometrics as the Erskine Fellow in the Department of Economics and Finance at the University of Canterbury in Christchurch, New Zealand. This class focused on the problems of causal inference in non-experimental settings.

I have also taught courses on statistics and causal inference to state and federal judges in the United States through George Mason University's Law and Economics Center. I have taught similar material to state attorneys general, congressional staffers, and law professors through the Center's programs.

My training includes a master's degree in economics from the University of Maryland at College Park, a Ph.D. in economics and a J.D. in law, both from George Mason University. Professionally, I have served as a research economist on statistical methodology issues for the U.S. Bureau of Economic Analysis. I have also served as a senior economist for the RAND Corporation, contributing to its working paper series and presenting my empirical work at a number of RAND events, including its board meetings.

My academic work on the causal effects of health regulations on behavior has been published in the *Journal of Law and Economics*, the *Journal of Legal Studies*, the *Journal of Law, Economics, and Organization*, the *American Law and Economics Review*, and *Health Economics*.

I have presented my research at Harvard University, including the Harvard Medical School, Yale University, Stanford University, the University of Chicago, and many other top universities throughout the world.

My complete CV is attached to this letter.

I have been retained by British American Tobacco (New Zealand) Limited to offer my opinion on the literature regarding the effect of plain packaging on smoking rates as it pertains to the New Zealand Ministry of Health's July 2012 consultation. This letter provides a summary of my evaluation of this literature.



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Executive Summary

The literature on plain packaging provides neither a reliable nor a relevant foundation for plain packaging regulations. From a relevance standpoint, there is not a single research article that examines the effect of plain packaging on actual smoking decisions. Instead, the vast majority of papers in this literature simply ask people about their preferences over pack designs, the qualities they associate with various packs, or the effect they think differing pack designs might have on their smoking habits. There has never been a published study validating these measures as useful predictors of smoking behavior.

Beyond this fundamental problem, all of the studies examine short term reactions to plain packs. From a policy perspective, this presents a problem since such short term reactions may be driven by the impression that the plain packs are simply different or odd. In a setting where plain packs are mandated, there will no longer be a difference between one pack and another. Further, as time goes on, individuals will become familiar with the plain packs, eliminating the impression that they are odd. Given these effects, even if the plain packaging studies do identify an effect on subjective impressions, these impressions may not continue under a plain packaging regulation and any effects that do exist are likely to dissipate.

Even putting these crucial relevance issues aside, this literature is methodologically flawed. The lack of double blind designs¹ makes it likely that subjects are influenced by the expectations and preferences of the researcher. Given the widespread recognition that blinding is an important element of study designs across academic fields, it is disconcerting that no studies in the plain packaging literature follow best practices in this regard. Moreover, the samples examined in this literature likely suffer from self-selection problems that could create statistical bias. Many of the researchers fully admit that the samples they use are not representative of the populations studied. Finally, given the policy preferences of the public health community, this is an area where publication bias is likely to be severe. Each of these flaws has the strong potential to overstate the true magnitude of any effect of plain packaging on stated intentions and subjective impressions, which are, in any event, unreliable predictors of actual behavior.

Although plain packaging proponents suggest that the consistency of results in the literature provide evidence that is greater than the sum of the individual studies, this is not correct. Repeating the same logical and methodological flaws does not eliminate those flaws. The scientifically honest approach to this literature is to infer that the extant literature provides no insight into how plain packaging would affect smoking.

¹ In a double-blind design, the subjects cannot identify who the researcher is and the researcher cannot identify who a specific subject is. Such an approach minimizes the likelihood that the presumed preferences of the researcher will influence how the subject answers questions and, because the subject knows the researcher cannot identify her, it is less likely that she will modify her answers to avoid embarrassment or some other negative feeling associated with others knowing her true beliefs.

The Literature on Plain Packaging and the Reviews Relied on by the Ministry of Health

The New Zealand Ministry of Health consultation on plain packaging relies heavily on two reviews of the literature. While the Public Health Research Consortium's report *Plain Tobacco Packaging: A Systematic Review* concludes that there is "some evidence" that plain packaging "may" affect smoking behaviour, it admits that this conclusion is speculative given the lack of research that actually examines smoking outcomes (p. 87). The second document that forms the research basis for the consultation, Quit Victoria's report *Plain Packaging of Cigarettes: A Review of the Evidence*, ignores these problems and embraces plain packaging despite the lack of reliable evidence showing it will reduce tobacco use.

Lack of real world evidence

The fundamental shortcoming of the literature is summed up nicely in the Public Health Research Consortium (PHRC) report *Plain Tobacco Packaging: A Systematic Review* when it states, "It has not yet been possible to evaluate the impact of the policy in practice (p. v)." Virtually all of the studies in this literature examine the subjects' stated views of plain packaging but observe no actual smoking choices. Researchers jump from these stated positions to the conclusion that plain packaging will lower smoking rates.

The New Zealand Ministry of Health is also quick to jump to conclusions that are not actually demonstrated by the underlying literature. For example, in its Regulatory Impact Statement, the Ministry asserts "tobacco packaging has become the tobacco industry's key marketing tool to attract and retain customers (paragraph 6)" implying that packaging is effective in increasing the total demand for tobacco. No study has demonstrated this. The tobacco industry's interest in packaging is completely consistent with a desire to compete over market share even if the size of the overall market is unaffected by packaging. Paragraph 7 goes on to assert that current packaging attracts new smokers, an issue that has never been examined in the literature given that actual smoking behaviors are not analyzed in any existing study. These unsubstantiated assertions are carried over in the Ministry's consultation document which fails to note that none of the existing research papers looks at the effect of plain packaging on actual smoking decisions.

There is no published study validating any link between the kinds of outcomes analyzed in the plain packaging literature, such as subjective impressions or stated intentions, and real world smoking decisions. As a general matter, marketing scholars are skeptical that such survey based information is very useful in predicting ultimate consumption behavior.²

In the entire literature on plain packaging, there are only two studies that examine anything beyond stated impressions or intentions. These studies that observe some behavioral effect present significant problems for the claim that plain packaging will reduce smoking.³

² Pierre Chandon, Vicki Morwitz, and Werner Reinartz, "Do Intentions Really Predict Behavior? Self-Generated Validity Effects in Survey Research," *Journal of Marketing*, 69: 1-14 (2005).

³ A third article, Munafò M, Roberts N, Bauld L, Ute L (2011). Plain packaging increases visual attention to health warnings on cigarette packs in non-smokers and weekly smokers but not daily smokers.

Crawford Moodie (the lead author on the PHRC Report) and coauthors⁴ ask subjects to put their cigarettes in researcher provided plain packages and then record details about their smoking behavior over a two week period. Most individuals did not change their behavior at all when using the plain packages, even though virtually all individuals expressed negative opinions of the plain packs. This highlights the problems of jumping from claims that individuals view plain packs negatively to the conclusion that plain packages will reduce smoking relative to the status quo. Even among the few individuals who indicated some behavioral changes, these changes, such as smoking less around others or forgoing a cigarette at a specific time, provide no evidence that these individuals actually smoked less in total. Further, there was no statistically significant difference in how individuals viewed health warnings between the branded and plain packages, as noted in the PHRC report (p. 54). This last finding suggests that plain packaging bears little relationship if any to the New Zealand Ministry of Health's goal of increasing the effectiveness of health warnings on tobacco products.

This study also presents significant challenges with respect to extrapolating its results to predict the effect of plain packaging in New Zealand. The negative impressions of the plain packaging and any behavioral changes resulting from those impressions were very likely motivated by the fact that the packs were different rather than because they were plain. Many of the subjects' responses suggested this, noting the novelty of the pack. Under a plain packaging regime, such novelty would disappear as all packs would be packaged similarly. Further, this study, like all others, focuses on short term impressions of plain packaging. As individuals become familiar with such packs, any perceived differences are likely to fade.

This study provides another reason to doubt the conclusion that negative impressions of plain packages will translate into less smoking, though it goes unnoticed by the authors. Namely, in this design, smokers were provided with after-market packs to put their cigarettes into, and none of the subjects reported any inconvenience or hesitance in doing so. This suggests, in a plain pack regime, if individuals really do dislike plain packs, it would be low cost for them to simply put their cigarettes in different after-market packages. Given all of these issues, it seems unlikely that plain packaging will have an effect on smoking rates.

The other study to observe some measure of behavior related to plain packaging uses an auction to elicit the value smokers place on plain and branded packs.⁵ The Thrasher et al study finds that individuals value plain packs less than branded packs. There are a number of methodological and interpretive problems with the study.⁶ The primary problem arises from the fact that the mean

Addiction, 106(8): 1505-1510, examines eye movements but not any direct smoking behavior. A follow-up article, Olivia Maynard, Marcus Munafò, and Ute Leonards, "Visual Attention to Health Warnings on Plain Tobacco Packaging in Adolescent Smokers and Non-Smokers," *Addiction* (forthcoming) does the same for a sample of school children, but it too does not observe any actual behavior related to smoking.

⁴ Moodie, C., Mackintosh, AM., Hastings, G., Ford, A. "Young Adult Smokers' Perceptions of Plain Packaging: A Pilot Naturalistic Study." *Tobacco Control* 20: 367-373 (2011).

⁵ James F. Thrasher, Matthew C. Rousu, David Hammond, Ashley Navarro, and Jay R. Corrigan, "Estimating the impact of pictorial health warnings and "plain" cigarette packaging: Evidence from experimental auctions among adult smokers in the United States," *Health Policy* 102: 41-48 (2011)

⁶ Briefly, since the purpose of this letter is not to discuss methodological issues in great depth, the model used to analyze the data in Thrasher et al is a random effects model which essentially assumes that each time a given smoker evaluates the value of a pack of cigarettes, he randomly draws a baseline value from some unknown distribution. Thus, if he evaluates the value on a Monday, his baseline value could be \$10, while on a Tuesday it

valuation of the branded packs sold through the auction was lower than the actual price of cigarettes in the given markets where the research was conducted. That is, the smokers who were the subjects in the study generally pay X for their cigarettes yet they were only willing to pay something less than X for the cigarettes in the auction. This suggests the existence of an external validity problem even for this study that examined actual behavior with real consequences. If such generalizability problems exist for a study like this, it seems very likely that the results from studies that simply ask subjects for their impressions or intentions (with no ultimate consequences for the subjects) cannot be extrapolated to predict the consequences of a plain packaging regulation.

This auction study too suffers from the shortcoming that any identified effect of plain packaging may be an artifact of the packs simply being different. In an environment where all packs are plain, any differential opinions may disappear, especially after smokers have some time to adjust to the new packaging.

All of the other studies in this literature rely on stated impressions and smoking intentions, as opposed to actual smoking decisions.⁷ The link between these impressions and intentions and actual smoking behavior has not been validated. As stated in the PHRC report, "Without any form of validation (such as validating reported changes in cigarette consumption) [self-reported impressions and intentions] have quite weak predictive validity (p. 89)." Given this, it is not possible to draw reliable conclusions about the effects of plain packaging on smoking in the real world, and, yet, this does not stop many of the researchers in this area from becoming advocates for plain packaging regulations. For example, although Crawford Moodie recognizes this fundamental disconnect between the evidence and the conclusion that plain packaging will reduce smoking, as noted above in the PHRC report (of which he is the main author), it does not stop him from advocating for a plain packaging mandate.⁸ This movement between scholarship and advocacy, especially given the paucity of reliable evidence, is very troubling and reflects an absence of scientific impartiality.

could be \$2, and those values would be statistically independent despite the fact that many of his characteristics that affect his valuation remain constant. If the more appropriate fixed effects model (i.e., the baseline value for a given person's choice stays fairly constant), the likelihood the authors would have found statistically significant differences between plain and branded pack valuations would decline. Another methodological problem comes from the authors' failure to account for dependence across their observations. That is, if a given individual made 10 choices in the experiment, the authors count that as 10 statistically independent observations even though a given person's choice in one round is likely to be highly correlated with his choice in another round. This too inflates the statistical significance of the authors' results.

⁷ This focus on stated impressions continues in the literature that post-dates the PHRC report as well. For example, in Christine White, David Hammond, James Thrasher, and Geoffrey Fong, "The Potential Impact of Plain Packaging of Cigarette Products Among Brazilian Young Women: An Experimental Study," *BMC Public Health*, 12: 737 (2012), 640 Brazilian women were shown standard or some version of a plain pack (either with brand descriptors or not) and then asked about their perceptions of the cigarettes' appeal, taste, health risk, smoothness, and smoker attributes. Although the authors conclude that "the findings provide support for plain packaging regulations, such as those proposed in Australia," none of their studied outcomes involved actual smoking decisions. Further, one of their impressionistic measures, perceived health risks, exhibited no statistically significant difference between branded and plain packages. Lastly, although the authors claim they examine a "behavioral" measure of appeal since they asked individuals what pack of cigarettes they would like to receive, individuals were not given the policy relevant choice between a plain pack and no pack; and actual smoking behavior is not observed.

⁸ See, for example, Moodie, C., Hastings, G. "Plain Packaging: A Time for Action." *European Journal of Public Health* 20(1): 10-11 (2010).

Methodological errors and biases

However, even if the fact that the literature does not examine policy relevant metrics such as actual smoking behavior is ignored, the literature is rife with methodological errors and biases that limit the ability of an impartial referee to draw any conclusions about the likely effect of a plain packaging regulation. As Moodie et al note in the PHRC review (Table 4.1), very few of the studies they examined had representative samples.

Even representative samples in this context could generate troubling biases. Specifically, researchers have raised the concern that in contexts where it is relatively easy for subjects to intuit the preferences of the researcher, subjects will provide answers that confirm the researcher's expectations even if they do not conform to the subjects' actual beliefs.⁹ This expectancy bias undermines the validity of the research. There are no examples in this literature where researchers take measures to eliminate such sources of bias, such as using double blind experiments.¹⁰ Instead, in every article in the literature, it is clear to the subjects that the researchers are public health researchers. This leaves open the distinct possibility that the subjects are hoping to somehow impress, or at least not offend, the researchers by providing the socially acceptable responses.

Another large concern in this literature arises from publication bias. That is, given the policy preferences of the public health community, it is extremely unlikely that a study concluding that plain packaging will not have a negative effect on smoking will be accepted by a journal such as *Tobacco Control* or any of the other public health journals that publish articles on the topic. This implies that if one were to estimate the likely effect of a plain packaging regulation on smoking rates based solely on the published literature, she would overstate the negative effect of such a regulation on smoking rates. Further, given that this publication bias is predictable, it is unlikely that researchers will even write up results that do not conform to the desired result. Thus, this bias cannot be mitigated by looking for unpublished studies with contrary findings because of the so-called "file-drawer" problem in which researchers abandon their research before circulating or publicizing a draft when they believe their results will not be well-received.¹¹

Given these problems, the PHRC report's claim to provide a "systematic" review is somewhat misleading. These publication and file-drawer biases make any review of this type fundamentally incomplete in that the published literature likely is a selected sample of all inquiries started with respect to the topic. In a more important sense, the PHRC report's claim (p. v) that "This consistency of evidence can provide confidence about the observed potential effects of plain packaging" is patently false. Consistent results from studies that uniformly have the same methodological problems provide zero confidence in any conclusion except, perhaps, that the research designs were flawed in consistent ways.

The Quit Victoria report, *Plain Packaging of Cigarettes: A Review of the Evidence*, covers largely the same underlying research but it does not provide even the small acknowledgement of the flaws in the literature that the PHRC report does. The Quit Victoria report is quite selective in the views it presents.

⁹ For a seminal treatment, see Rosenthal, R. (1976). *Experimenter Effects in Behavioral Research*. New York: John Wiley.

¹⁰ See supra note 1 for a discussion of the merits of double blind research designs in this context.

¹¹ For a discussion of this problem, see Jeffrey D. Scargle (2000). "Publication Bias: The 'File-Drawer Problem' in Scientific Inference." *Journal of Scientific Exploration* 14 (2): 94–106.

For example, in discussing the Canadian Department of Health's Report "When Packages Can't Speak: Possible Impacts of Plain and Generic Packaging of Tobacco Products," the Quit Victoria Report gives the impression that the Canadian Report clearly supports the proposition that plain packaging will reduce smoking. The Canadian Report itself, however, notes that any effect is likely to be small ("A close examination of these responses suggests that effects will be more marginal than large." p. 7), and it also notes that its conclusion that there would be any effect is based purely on theoretical arguments as opposed to any empirical evidence. The Canadian Report also notes that a fundamental short-coming in the literature is its failure to examine actual smoking behavior noting "Theoretically, plain and generic packaging should strike at the very process of adolescent decision making related to cigarette adoption. But presently there is little empirical evidence to support this theory (p. 2)."

There is no mention in the Quit Victoria report of the admission in the Canadian review of the fundamentally speculative nature of the conclusion regarding the effect of plain packaging on actual smoking. In discussing some of their conclusions, for example, the Canadian review states "Taken as a whole, these findings suggest that plain and generic packaging will, to some unknown degree, encourage non-smokers not to start smoking and smokers to stop smoking. The absolute extent of this influence cannot be validly determined by research that is dependent on asking consumers questions about what they think or what they might do if all cigarettes were sold in the same plain and generic packages (p. 129)." It is interesting that the Canadian review, published in 1995, recognized that "The extent of change in incidence is impossible to assess except through field experiments conducted over time (p. 158)," and, yet, despite the fact that no such field experiment has been performed in the 17 intervening years, plain packaging proponents proclaim confidence in an unreliable research base.

The Quit Victoria report also places heavy weight on the notion that because tobacco companies are opposed to plain packaging, this is evidence that plain packaging will reduce smoking (see, for example, section 6). The report nowhere mentions the possibility that packaging is important for inter-brand competition. That is, the desire to compete for a greater share of a market of a given (or even declining) size is sufficient to explain an opposition to plain packaging. On the whole, the Quit Victoria report provides a misleading impression of what the current literature implies for the effect of a plain packaging regulation on smoking behavior.

The Quit Victoria report provides no new analysis of the literature and it avoids providing any constructive criticism of the research or any recognition of the limits of the research base. Given this, reliance on the Quit Victoria report is imprudent from a policy standpoint.

This brief summary of the literature suggests that there is no scientific basis upon which to conclude that plain packaging will lead to a reduction in smoking by discouraging young people from taking up smoking, encouraging people to quit smoking, or by discouraging relapse among people who have quit smoking. Only two studies in the entire literature plausibly examine actual smoking outcomes, and neither of them examines children or people who have quit smoking. Further, these studies provide little indication that plain packaging will increase quit rates. All of the other studies have significant methodological problems. Even putting that aside, these studies make the unsubstantiated jump from stated impressions and intentions to actual behavior. There is no evidence to validate this link, as the PHRC report readily concedes. The Quit Victoria report simply ignores this fact.

Given that New Zealand's goal, as stated in this consultation, is "to further reducing the prevalence of smoking in New Zealand. [The government] has set an aspirational long-term goal of making New Zealand essentially a smokefree nation by 2025 (p. 1)" it is essential that any regulatory analysis focuses

on evidence that relates to actual smoking behavior. The issues examined in the literature, such as subjective impressions of plain packaging, have no validated relationship to New Zealand's policy goals.

Proper Research Design

The ideal research design for studying the effects of plain packaging on smoking outcomes would involve randomly selecting some markets (for example individual cities), introducing plain packaging in those markets, and observing actual smoking behavior over an extended time period (e.g., 1-2 years) in the plain package markets as compared to the markets that retained branded packaging. The randomization would ensure that any observed change was not due to pre-existing trends or other confounding variables. Further, by making all of the packs in the market plain, the design would avoid the possibility that smokers were simply reacting to the fact that the plain packs were different from other available packs. Comparing smoking rates to control markets where branded packs remain would account for general changes in smoking behavior over time. Studying smoking behavior over an extended time period would rule out the possibility that any change was simply a short term reaction to the oddness of the new packs. Most important, this design would focus on actual smoking behavior rather than self-reports of impressions and intentions which are not generally predictive of actual smoking behavior. Such a study does not exist in the literature. It is important to note that such an experiment could only be run by a government¹², yet no government has publicly contemplated running such an experiment before instituting plain packaging regulations even though this would be the best way to provide reliable guidance as to the effect of such a regulation.¹³

While it may seem that such experimentation is not feasible, similar methods have been used in the past to help predict how behavior will respond to different policy choices. One of the seminal examples involves the British electricity market. Between 1966 and 1972, a sample of British residential electricity customers (n = 3,420) was randomized across three different pricing schemes¹⁴ and a control group that faced conventional pricing. Actual consumption was monitored over a long period to generate confidence in the likely effects of using different pricing policies. This field experiment exhibited all of the elements discussed above, and the results of this inquiry are still cited today in discussions of electricity consumption.¹⁵ Employment policies have also been studied via field experiments throughout Europe, including the Restart Program in the U.K.¹⁶

¹² An individual company could not change the packaging of competing brands, and the industry could not coordinate on such an experiment due to competition laws.

¹³ For a detailed conceptual discussion of the value of running these kinds of field experiments to evaluate regulations, see Michael Abramowicz, Ian Ayres, and Yair Listokin, "Randomizing Law," 159 University of Pennsylvania Law Review 929 (2011).

¹⁴ One group faced higher prices in the seasons with high demand; another group faced higher prices in high demand seasons and during high demand periods of the day; the third group paid a reduced rate for consumption below some pre-determined level and an increased rate above that level of usage.

¹⁵ For a detailed discussion of the results of this field experiment, see Boggis, J. G., Domestic Tariffs Experiment, Load and Market Research Report No. 121, The Electricity Council, 1974.

¹⁶ For a discussion of the findings from the Restart field experiment, see Peter Dolton and Donal O'Neill, "The Restart Effect and the Return to Full-time Stable Employment," *Journal of the Royal Statistical Society. Series A (Statistics in Society)* 159(2): 275-288 (1996) and Michael White and Jane Lakey, "Restart Effect: Does Active Labour Market Policy Reduce Unemployment?," Policy Studies Institute at the University of Westminster (1992). For a broader review of European efforts to use field experiments to evaluate labor market policy, see Björklund and Regnér, "Experimental Evaluation of European Labour Market Policy," in *International Handbook of Labour Market Policy and Evaluation*, Edward Elgar Publishing, 1996.

Although not used for evaluation purposes by government entities, there have been a number of policy-relevant field studies performed in New Zealand. For example, World Bank researchers implemented a field experiment in which they provided financial literacy training to Pacific Islander migrants and East Asian migrants in New Zealand regarding financial remittances to their home countries. A randomly chosen subset of the sample was provided with information regarding the costs associated with remitting money in different fashions. Relative to the control group, members of which were not provided with this information, the treatment group members were significantly more likely to know what the cheapest method of remittances is and to have actually compared costs among different methods when making a remittance.¹⁷

This policy relevant field experiment suggests the feasibility and the value of using more methodologically sound research designs to analyze behavior. Implementing something along these lines in the plain packaging context would improve our knowledge of the effects of plain packaging immensely.

A second best approach would examine the change in smoking outcomes in a jurisdiction that adopts plain packaging over an extended time period as compared to non-adopting jurisdictions. While such a design would have the benefit of examining actual smoking behavior, causal inference would be difficult in many practical circumstances given the non-random adoption of the regulation. In many cases, the adopting jurisdiction will be one with an especially steep pre-adoption downward trend in smoking (as fewer people smoke, all other things equal, anti-smoking regulations tend to be more politically palatable) which may be difficult to control for, and often when jurisdictions adopt such policies, they do it as part of a bundle of tobacco policies, making it difficult to parse out the effects of any individual policy.

Unfortunately, in the plain packaging literature, nothing approaches the ideal approach or even the second best approach because actual smoking behavior is never observed. Instead, virtually all of the existing research examines individuals' perceptions of packages or their smoking intentions. Neither of these reliably translates into valid predictions of real world behavior.

Conclusion

The literature in this area is unreliable and largely irrelevant to the question of how plain packaging would affect smoking rates in New Zealand. This is true even if all of the flawed studies are combined, since there is no sense in which the individual flaws somehow cancel each other out. There is no sound scientific basis for the claim that plain packaging will reduce smoking.

¹⁷ John Gibson, David McKenzie, and Bilal Zia, "The Impact of Financial Literacy Training for Migrants," The World Bank, Policy Research Working Paper 6073 (May 2012).

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Property and Environment Research Center: Julian Simon Fellow (Summer 2009).

The RAND Corporation, Institute for Civil Justice: Senior Economist (2007 – 2009).

Northwestern University Searle Center: Visiting Scholar (January 2009); Instructor in Judicial Education Program (Spring 2009 – Spring 2010); Senior Economist (Spring 2009 – Spring 2010).

University of Hamburg: Visiting Professor of Law and Economics (Summer 2008, 2010, 2011).

Columbia Law School: Visiting Professor (Spring 2008).

University of Southern California School of Law: Visiting Professor (August/September 2007).

Northwestern University School of Law: Visiting Professor (November 2006).

Florida State University: Assistant Professor of Law (Summer 2004 – Summer 2007); Jeffrey A. Stoops Professor of Law (Summer 2005 – Spring 2008); Associate Professor (August 2007 – Spring 2008); Courtesy Professor of Economics (Summer 2004 – Spring 2008).

American Enterprise Institute: Associate Director of Liability Project (June 2003 – June 2005).

The Mercatus Center: Research Fellow in Health Policy (September 2001 – March 2002); Dorothy Donnelley Moller Research Fellow (March 2002 – June 2003).

TEACHING EXPERIENCE

University of Pennsylvania Law School: *Corporations; Torts; Law & Economics; Empirical Finance; Law & Economics of Crime; Health Policy; Statistics for Lawyers; Empirical Law & Economics* (2007 – Present).

Goethe-Universität Frankfurt: *Empirical Law & Economics* (2011).

Max Planck Research School: *Empirical Law & Economics* (2011).

University of Canterbury: *Econometrics II* (2010).

Max Planck Institute for Foreign and International Private Law: *Statistics for Lawyers* (2010).

University of Hamburg: *Empirical Law and Economics; Econometrics* (2008, 2010, 2011).

Columbia University School of Law: *Corporate Finance; Health Law, Economics, and Policy* (2008).

Florida State Law: *Business Associations; Corporate Finance; Strategy in Law and Business*; (2004 – 2007).

George Mason University: *Econometrics; Microeconomics* (2000, 2003).

Prince George's Community College: *Microeconomics; Macroeconomics* (1999, 2000).

REFEREED PUBLICATIONS

- "Valid Inference in Single Firm, Single Event Studies," (with Jonah Gelbach and Eric Helland) *American Law and Economics Review* (forthcoming).
- "The Effect of Abortion Liberalization on Sexual Behavior: International Evidence," (with Sven Neelsen and Thomas Stratmann) *American Law and Economics Review* (forthcoming).
- "Does Anyone Get Stopped at the Gate? An Empirical Analysis of State Adoption of the *Daubert* Trilogy," (with Eric Helland) *Supreme Court Economic Review* (forthcoming).
- "The Effect of Contract Regulation on Franchising," (with Bruce Kobayashi and Larry Ribstein) *Journal of Institutional and Theoretical Economics*, 168(1), 38-53 (2012).
- "The Perils of Empirical Work on Institutions," *Journal of Institutional and Theoretical Economics*, 166(1): 166-170 (2010).
- "Strong Claims and Weak Evidence: Reassessing the Predictive Ability of the IAT," (with Hart Blanton, James Jaccard, Barbara Mellers, Gregory Mitchell, and Philip Tetlock) *Journal of Applied Psychology*, 94(3): 567-582 (2009).
- "Transparency Should Trump Trust," (with Hart Blanton, James Jaccard, Barbara Mellers, Gregory Mitchell, and Philip Tetlock) *Journal of Applied Psychology*, 94(3): 598-603 (2009).
- "Differential Victimization: Efficiency and Fairness Justifications for the Felony Murder Rule," (with Nuno Garoupa) *Review of Law and Economics*, 4(1): 407-418 (2008).
- "Social Networks, Self Denial, and Median Preferences: Conformity as an Evolutionary Strategy," (with Francesco Parisi) *The Journal of Socio-Economics*, 37(4): 1319-1327 (2008).
- "Do Spa Visits Improve Health: Evidence from German Micro Data," (with Thomas Stratmann) *Eastern Economic Journal*, 34(3): 364-374 (2008).
- "Abortion Access and Risky Sex Among Teens: Parental Involvement Laws and Sexually Transmitted Diseases," (with Thomas Stratmann) *Journal of Law, Economics, and Organization*, 24(1): 2-21 (2008).
- "Diabetes Treatments and Moral Hazard," (with Thomas Stratmann) *Journal of Law & Economics*, 50(3): 519-538 (2007).
- "Medical Malpractice Reform and Physicians in High Risk Specialties," (with Thomas Stratmann) *Journal of Legal Studies*, 36(S2): S121-S142 (2007).
- "The Tradeoff Between Regulation and Litigation: Evidence from Insurance Class Actions," (with Eric Helland) *The Journal of Tort Law*, 1(3): Article 2 (2007).
- "The Effect of Judicial Expedience on Attorney Fees in Class Actions," (with Eric Helland) *The Journal of Legal Studies*, 36(1): 171-187 (2007).
- "Salvation as a Selective Incentive," *International Review of Law and Economics*, 26(1): 15-32 (2006).
- "A Law and Economics Perspective on Terrorism," (with Parisi and Garoupa) *Public Choice*, 128(1-2): 147-168 (2006).
- "The Two Dimensions of Regulatory Competition," (with Parisi and Schulz) *International Review of Law and Economics*, 26(1): 56-66 (2006).
- "Subsidizing Addiction: Do State Health Insurance Mandates Increase Alcohol Consumption?," (with Thomas Stratmann) *The Journal of Legal Studies*, 35(1): 175-198 (2006).
- "Preemption in the Rehnquist Court: A Preliminary Empirical Assessment," (with Michael Greve), *Supreme Court Economic Review*, 14: 43-94 (2006).
- "Are Mental Health Insurance Mandates Effective?: Evidence from Suicides," (with Sara Markowitz) *Health Economics*, 15(1): 83-97 (2006).
- "Limited Autocracy," *Review of Law and Economics*, 1(2): 293-304 (2005).
- "Intra-Jurisdictional Tax Competition," (with Parisi) *Constitutional Political Economy*, 16(4): 387-395 (2005).
- "Using Terror Alert Levels to Estimate the Effect of Police on Crime," (with Alexander Tabarrok) *The Journal of Law and Economics*, 48(1): 267-279 (2005).
- "Data Watch: Tort-Uring the Data," (with Alexander Tabarrok and Eric Helland) *The Journal of Economic Perspectives*, 19(2): 207-220 (2005).
- "The IOM Report: Too Quick to Diagnose Bias," (with Sally Satel) *Perspectives in Biology and Medicine*, 48(1): S15-S25 (2005).

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REFEREED PUBLICATIONS (CONTINUED)

- “The Effect of Abortion Legalization on Sexual Behavior: Evidence from Sexually Transmitted Diseases,” (with Thomas Stratmann) *The Journal of Legal Studies*, 32(2): 407-434 (2003).
- “The Disunity of Unanimity,” (with Parisi) *Constitutional Political Economy*, 14(2): 83-94 (2003).
- “The Differential Calculus of Consent,” (with Francesco Parisi) *The Journal of Public Finance and Public Choice*, 20(2-3): 115-123 (2002).
- “Do Dollars Make a Difference?: The Relationship Between Expenditures and Test Scores in Pennsylvania’s Public Schools,” *The American Economist*, Vol. 44(1): 81-87 (2000).

LAW REVIEW PUBLICATIONS

- “Recessions and the Social Safety Net: The Alternative Minimum Tax as a Counter-Cyclical Fiscal Stabilizer,” (with Brian Galle) *Stanford Law Review*, 63(1): 187-246 (2010).
- “Federalism, Variation, and State Regulation of Franchise Termination,” (with Bruce Kobayashi and Larry Ribstein) *Entrepreneurial Business Law Journal*, 3(2): 355-380 (2009).
- “Passive Discrimination: When Does It Make Sense to Pay Too Little?” (with Jonah Gelbach and Lesley Wexler) *University of Chicago Law Review*, 76(2): 797-857 (2009).
- “Agency Costs, Charitable Trusts, and Corporate Control: Evidence From Hershey’s Kiss-Off,” (with Robert Sitkoff) *Columbia Law Review*, 108(4): 749-838 (2008).
- “Mandatory Waiting Periods for Abortion and Female Mental Health,” *Health Matrix*, 16(1): 183-208 (2006).
- “Government Regulation of Irrationality: Moral and Cognitive Hazards,” (with Greg Mitchell) *Minnesota Law Review*, 90(6): 1620-1663 (2006).
- “Wealth, Utility, and the Human Dimension,” (with Francesco Parisi) *NYU Journal of Law & Liberty*, 1(1): 590-608 (2005).
- “The Micro Foundations of Standard Form Contracts: Price Discrimination vs. Behavioral Bias,” *Florida State University Law Review*, 32(2): 555-569 (2005).
- “Functional Law and Economics: The Search for Value-Neutral Principles of Law Making,” (with Francesco Parisi) *Chicago-Kent Law Review*, 79(2): 431-450 (2004).
- “Econometric Analyses of U.S. Abortion Policy: A Critical Review,” *Fordham Urban Law Journal*, 31: 751-782 (2004).

BOOK CONTRIBUTIONS, ENCYCLOPEDIA ENTRIES, MONOGRAPHS, REVIEWS, ETC.

- “Regulation and Litigation: Complements or Substitutes,” (with Eric Helland) *The American Illness: Essays on the Rule of Law* (Yale University Press, forthcoming).
- “Why Aren’t Regulation and Litigation Substitutes?: An Examination of the Capture Hypothesis,” (with Eric Helland) *Regulatory Breakdown? The Crisis of Confidence in U.S. Regulation* (University of Pennsylvania Press, forthcoming).
- “Mobile Phones and Crime Deterrence: An Underappreciated Link,” (with John MacDonald and Thomas Stratmann) *Handbook of Criminal Law* (Law and Economics Handbook Series, Edward Elgar, forthcoming).
- “Abortion Access and Risky Sex,” (with Thomas Stratmann) *Handbook of Family Law* (Law and Economics Handbook Series, Edward Elgar, forthcoming).
- “Functional Law and Economics: The Search for Value Neutral Principles of Rule-Making,” (with Francesco Parisi; reprinted from 79 Chi.-Kent. L. Rev. 431) *History of Law and Economics* (Edward Elgar, forthcoming).
- “Global Justice and Trade,” (with Fernando Teson) *Global Justice and International Economic Law: Opportunities and Prospects* (Cambridge University Press, 2012).
- “The Law and Economics of Regulatory Competition,” *Production of Legal Rules, Encyclopedia of Law and Economics*, 2nd ed. (Edward Elgar, 2011).
- “Fire Suppression Policy, Weather, and Western Wildland Fire Trends: An Empirical Analysis,” (with Jason Johnston) *Wildfire Policy: Law and Economics Perspectives* (RFF Press, 2011).

BOOK CONTRIBUTIONS, ETC. (CONTINUED)

- "Legal Origins and Empirical Credibility," *Does Law Matter? On Law and Economic Growth*, Ius Commune Europaeum 100 (Intersentia Publishers, 2011).
- *The Empirical Revolution in Law and Economics: Inaugural Lecture for Erasmus Chair in Empirical Law and Economics* (Eleven International Publishing, 2011).
- "Response to Reducing Soda Consumption," (with Eric Helland) *Regulation*, 34(2): 3 (2011).
- "Slim Odds," (with Eric Helland) *Regulation*, 34(1): 20-23 (2011).
- "The AMT's Silver Lining," (with Brian Galle), *Regulation*, 33(3): 24-29 (2010).
- "The Dangers of Letting Someone Else Decide," *Slippery Slopes and the New Paternalism*, Cato Unbound (2010).
- "Revealing Revealed Preferences," *Slippery Slopes and the New Paternalism*, Cato Unbound (2010).
- "Police, Prisons, and Crime," (with Alexander Tabarrok) *Law and Economics of Crime* (Edward Elgar Publishing, 2010).
- "A More Equitable and Efficient Approach to Insuring the Uninsurable," (with Eric Helland) *Our Fragmented Health Care System: Causes and Solutions* (Oxford University Press, 2010).
- "What Drives the Passage of Damage Caps?" (with Catherine Sharkey) *Empirical Studies of Judicial Systems Around the Globe* (Institutum Jurisprudentiae, Academia Sinica, 2009).
- "Terrorism," (with Nuno Garoupa and Francesco Parisi) *Criminal Law and Economics* (Edward Elgar Publishing, 2009).
- "Functional Law and Economics," (with Francesco Parisi) *Theoretical Foundations of Law and Economics* (Cambridge University Press, 2009).
- "Econometric Studies of Law," "Functional Law and Economics," "Multivariate Methods in Legal Studies," and "Formal Methods in Legal Scholarship," *Encyclopedia of Law and Society* (Sage Publications, 2007).
- *The Health Disparities Myth: Diagnosing the Treatment Gap* (with Sally Satel): AEI Press, 2006.
- "Are Doctors Biased?" (with Sally Satel) *Policy Review*, 136(April & May): 41-54 (2006).
- "First, Do No Harm . . ." (with Thomas Stratmann) *Regulation*, 26(1): 9 (2003).
- "Drug Re-Importation's No-Win Solution," *Regulation*, 25(1): 6-7 (2002).

RECENT PRESENTATIONS

- Cornell University, Empirical Health Law Conference (April 2012).
- Brooklyn Law School, Federalist Society Workshop (March 2012).
- Washington University in St. Louis Law School, Federalist Society Workshop (March 2012).
- Penn/NYU Law & Finance Conference (February 2012).
- West Virginia University Economics Seminar, (February 2012).
- Rotterdam Institute of Law and Economics Workshop (December 2011).
- Regulatory Breakdown Conference, Penn Program on Regulation (September 2011).
- Journal of Institutional and Theoretical Economics Conference (June 2011).
- Law and Economics Center, Workshop on Empirical Methods for Law Professors (May 2011).
- Queen's University, Faculty of Law, Law and Economics Workshop (April 2011).
- European Masters in Law and Economics Program, Mid-Year Meeting Keynote Lecture (February 2011).
- AALS, Law and Economics Panel (January 2011)
- Law and Economics Center, American Disease Conference (December 2010)
- University of Arizona/Resources for the Future, Wildfire Symposium (November 2010).
- George Mason University, Levy Workshop (November 2010).
- Erasmus University Rotterdam, European Doctorate in Law and Economics Seminar (October 2010).
- Erasmus University School of Law, Inaugural Empirical Legal Studies Chair Lecture (November 2010).
- University of Amsterdam, Center for the Study of EU Contract Law, Workshop (October 2010).
- University of Otago, Economics Department Seminar (September 2010).
- University of Canterbury, Economics and Finance Department Seminar (September 2010).
- University of Hamburg, Hamburg Lectures on Law and Economics (July 2010).
- Penn Law European Society, Academic Program Lecture (June 2010).
- American Law and Economics Association, Annual Conference (May 2010).
- St. Louis Lawyers Chapter of the Federalist Society, Health Care Reform Lecture (April 2010).
- Temple University Beasley School of Law, Human Behavior Colloquium (April 2010).
- University of Virginia Law School, Olin Conference on Crime (March 2010).
- Erasmus University School of Law, Behavioral Approaches to Contract and Tort Group (January 2010).
- European Doctorate in Law and Economics Program, Erasmus University Rotterdam (January 2010).
- Northwestern University Federalist Society Panel Discussion (November 2009).
- University of Illinois Corporate Colloquium (November 2009).
- New York Law School Federalist Society, Health Care Lecture (October 2009).
- Fordham University Federalist Society, Health Care Reform Debate (October 2009).
- University of Pennsylvania, Wharton Research Scholars Seminar (September 2009).
- Property and Environment Research Center (August 2009).
- Harvard Medical School, Race Disparities Panel (April 2009).
- Stanford Law School, Law and Economics Workshop (February 2009).
- University of Virginia School of Law, Law & Economics Workshop (January 2009).
- Southern Economic Association, Annual Meeting (November 2008).
- Northwestern University, Searle Center, Symposium on Civil Liability (October 2008).
- University of Pennsylvania Law School, Faculty Retreat (September 2008).
- Harvard University, Petrie-Flom Center, Our Fragmented Health Care System (June 2008).
- CUNY Graduate Center/NBER, Seminar in Health, Labor, and Demography (May 2008).
- Columbia University, Empirical Methods and the Law Workshop (May 2008).
- The Rand Corporation, Institute for Civil Justice Annual Board Meeting (March 2008).
- George Mason University, Philosophy, Politics, and Economics Workshop (March 2008).
- Columbia University Law School, Faculty Workshop (March 2008).
- Claremont McKenna College/RAND, The Future of Securities Litigation Conference (February 2008).
- University of Michigan Law School, Law and Economics Workshop (February 2008).
- American Economic Association, Annual Meeting (January 2008).

RECENT PRESENTATIONS (CONTINUED)

- Harvard Law School, Law and Economics Workshop (November 2007).
- Conference on Empirical Legal Studies (November 2007).
- Emory University School of Law, Faculty Colloquium (November 2007).
- Rice University/University of Houston Economics, Microeconomics Workshop (October 2007).
- University of Pennsylvania Law School, Faculty Workshop (October 2007).
- George Mason University School of Law, Levy Fellows Workshop (October 2007).
- The RAND Corporation, Institute for Civil Justice Workshop (September 2007).
- University of Southern California School of Law, Faculty Workshop (September 2007).
- University of Southern California School of Law, Faculty Workshop (August 2007).
- Yale Law School, Faculty Enrichment Lectures (July 2007).
- Florida State College of Law, Primer on Statistics for Legal Scholars (July 2007).
- Federal Trade Commission, Behavioral Economics and Consumer Policy Workshop (April 2007).
- Yale Law School, Law Economics and Organization Workshop (March 2007).
- Florida State University, Center for Demography and Population Health Workshop (March 2007).
- University of Toronto, Law & Economics Workshop (February 2007).
- Florida State University Department of Economics, Faculty Workshop (March 2007).
- University of Georgia School of Law, Faculty Workshop (February 2007).
- University of Southern California School of Law, Law and Economics Workshop (February 2007).
- Cornell Department of Policy Analysis and Management, Faculty Workshop (November 2006).
- Boston University School of Law, Faculty Workshop (November 2006).
- University of Illinois College of Law, Faculty Workshop (November 2006).
- Northwestern University School of Law, Faculty Workshop (October 2006).
- Conference on Empirical Legal Studies (October 2006).
- American Law and Economics Association, Annual Meeting (May 2006).
- University of Maryland Department of Economics, Labor/Public Workshop (April 2006).
- Columbia University School of Law, Blue Sky Workshop (March 2006).
- American Enterprise Institute, Health Disparities Myth Panel (February 2006).
- William & Mary School of Law, Faculty Workshop (February 2006).
- Georgetown University Law Center, Law and Economics Workshop (February 2006).
- George Mason University School of Law, Levy Workshop (February 2006).
- Northwestern University School of Law, Faculty Workshop (February 2006).
- American Association of Law Schools, Annual Meeting (January 2006).
- International Society for New Institutional Economics, Annual Meeting (September 2005).
- Northwestern University School of Law, Law and Economics Workshop (September 2005).
- University of California Berkeley, Law and Economics Workshop (August 2005).
- Southeastern Association of Law Schools, Annual Meeting (July 2005).
- American Law and Economics Association, Annual Meeting (June 2005).
- West Virginia University Department of Economics, Faculty Workshop (January 2005).
- Southern Economics Association, Annual Meeting (November 2004).
- International Society for New Institutional Economics, Annual Meeting (September 2004).
- American Law and Economics Association, Annual Meeting (May 2004).