

Fixing the Legal and Administrative Design of the Qianhai Special Economic Zone

Bryane Michael, University of Hong Kong

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Abstract

Qianhai - an innovation park in Shenzhen - seeks to become a global centre of innovation. Yet, problems with its legal design plague the US\$4.5 billion project. Some of these include weak and abstract rulemaking as well as a lack of objectives and devolved authorities. Fixing the existing law governing the Qianhai region will require a Hong Kong-Shenzhen Agreement (giving Hong Kong a greater stake and say in the region), privatizing the Qianhai Authority, revising Hong Kong law to allow for easier and more profitable university spin-outs, retargeting the subsidized used on the region, as well as fixing the innovation agencies in the region (most notably Hong Kong's).

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Introduction

Qianhai - an innovation park in Shenzhen (China) - promises to become one of Asia's (if not the world's) innovation hubs. At least according to much of the media hype.¹ Yet, the law governing the potentially new international financial centre appears as a confused mix of Shenzhen's law and acts potentially giving the region a limited amount of self-rule.² By 2020, the region had lost much of its élan -- in part because the region had no way to incorporate Hong Kong authorities' views or resources.³ What went wrong with Qianhai's legal design - and how might agreements with Hong Kong and/or modifications to the existing rules help fix it?

In this article we argue for six major 'fixes' to the legal instruments governing Qianhai. First, we argue for making Qianhai's rulemaking 'harder.' Second, we argue for a Hong Kong-Shenzhen Agreement (giving Hong Kong a greater stake and say in the region). Such an agreement might also promisingly import the more useful parts of Hong Kong law. Third, privatize the Qianhai Authority -- giving it a hard profit motive. Fourth, revise Hong Kong law to allow for easier and more profitable university spin-outs. Fifth, retargeting the large subsidies used on the region. Sixth, fix the innovation agencies in the region (most notably Hong Kong's), partially by making them accountable for their outcomes.

A few caveats before we begin. First, critics of the Qianhai project will not like our article. Instead of offering criticisms, we try to offer concrete (if even unrealistic) proposals for improving Qianhai's design. Many of our peers may dislike such a pro-active approach - even if we have no personal stake, interest, or investment in the region.⁴ Second, we chose to go wide rather than deep. Many readers will certainly have preferred we choose one topic - and analyse it much more in-depth. We can only apologize. We could choose to present this very novel law - and our proposals for fixing it -- or leave the reader without anything. Few scholars and practitioners take any interest in this important, burgeoning and sometimes receding area of law. Third, we fall into nowhere comfortably -- neither innovation law, trade law, administrative (local government) law, nor anywhere else. We focus on the intersection of these branches - offering recommendations without satisfactory reference to each literature. Our already long article would groan under the weight of such references.

¹ The SCMP, for example, noted almost 50,000 new firms setting up in the area in 2018. See Enoch Yiu, *40,900 New Firms Set Up in Qianhai Zone in 2017 but Hong Kong Broker Tenants Still in Short Supply*, SCMP FEB. 26, available [online](#).

² Such autonomy 'fits' within the broader framework of the Shenzhen-Hong Kong Modern Service Industry Cooperation district. For a media description of (and unabashed Western cheerleading for) the Cooperation District, see Geoffrey Garrett, *Bay Area 2.0: How Hong Kong and China are Forging a New Innovation Economy*, KNOWLEDGE@WHARTON, available [online](#).

³ Interestingly, the author's name does not appear on the highly critical article. See [no author], *Shenzhen dumps nearly all its bold plans for Qianhai*, SCMP 16 OCT., available [online](#).

⁴ For one critique (among many sure to come), see Zuo-zhen Liu & Jian-nan Li, *The Rule of Law Experiment in China's Pilot Free Trade Zones: The Problems and Prospects of Introducing Hong Kong Law into Guangdong*, HAGUE J. ON THE RULE OF LAW 10, 2018, 341-364.

Background on Qianhai's 'Law'

In theory, Qianhai represents a special economic zone comprised of two special economic zones – Shenzhen and Hong Kong. Yet, the *dirigiste* approach to lawmaking around the Qianhai scheme seems to run counter to the *laissez-faire* approach which has made Hong Kong successful in the past.⁵ Yet, unlike *digisime* French-style, Chinese administrative law governing Qianhai relies far more on political statements than actual lawmaking as commonly understood in the West.⁶ The *Overall Development Plan of Qianhai Shenzhen – Hong Kong Modern Service Industry Cooperation Zone* sets out – in an almost brochure-like format – the major elements of the proposed Qianhai development project in 2010.⁷ These include features like the bonded port, the target industries, and the desire (for a lack of a more appropriate legal concept) to ease financial regulations.

Two years later (in 2012), the adopted *Supporting Policies of the Development and Opening up of Qianhai Shenzhen–Hong Kong Modern Service Industry Cooperation Zone of Shenzhen* represent a repeat of many of the items described in the Overall Development Plan – with the use of more commanding language.⁸ Following the biannual pattern of “lawmaking”, the *Authority of Qianhai Shenzhen-Hong Kong Modern Service Industry Cooperation Zone Objectives of Reform and Innovation in 2014* represents a set of instructions to the Qianhai Authority to engage in particular tasks (like “to close the Pingnan railway acquisition negotiation as soon as possible”).⁹
¹⁰ In the Overall Development Plan, the text gives instructions to private actors as “one must...”

⁵ *Dirigism* refers to the (French) philosophy in administrative law encouraging government to allocate resources through administrative act – rather than allowing market actors to fully make these decisions. For more on the Chinese dirigiste approach, see Jean-Francois Huchet, *From Dirigisme to Realism: Chinese Industrial Policy in the Era of Globalisation*, In Xavier Richet, Violaine Delteil and Patrick Dieuaide, *STRATEGIES OF MULTINATIONAL CORPORATIONS AND SOCIAL REGULATIONS*, 2014, Springer, available [online](#).

⁶ Backer provides a useful discussion of the role of speeches by senior Communist Party officials in setting rights and obligations for executive administrative action. Xu, on the other hand, provides a fascinating and useful explanation for such an “abstract” method of regulating executive action (as the provinces hold much more power than the central level and as such persuasion represents the main tool of influence). See Larry Backer, *Party, People, Government, and State: On Constitutional Values and the Legitimacy of the Chinese State-Party Rule of Law System*, 30 *BOSTON U. INT’L L. J.* 1, 2012, available [online](#). See also Cheng-gang Xu, *The Fundamental Institutions of China's Reforms and Development*, 49 *J. OF ECON. LIT.* 4, 2011.

⁷ See The State Council’s Approval of “The Overall Development Plan of Qianhai Shenzhen – Hong Kong Modern Service Industry Cooperation Zone.” *Guo Han (2010) 86*, Aug 26, 2010, available [online](#).

⁸ State Council, Approval of The State Council on “The Supporting Policies of the Development and Opening up of Qianhai Shenzhen–Hong Kong Modern Service Industry Cooperation Zone of Shenzhen, *State Council Document No. (2012)58*, 2012, available [online](#).

⁹ See Authority of Qianhai Shenzhen-Hong Kong Modern Service Industry Cooperation Zone Objectives of Reform and Innovation in 2014, *Shen Ban Zi (2014) 4*, 2014, available [online](#) at 35.

¹⁰ The document containing these procedures also includes a number of specific policies aimed at financial institutions. The discussion of policies/laws aimed at building joint/common financial markets between Hong Kong and Shenzhen could fill a second, larger paper. Thus, we avoid any discussion of the relevant financial policies (except those specifically focused on promoting scientific and technological innovation). Anyway, recent studies have shown that financial market liberalisation policies will have less of an effect than anticipated. See Hung-Gay Fung, Jot-Zhang, and Gai-yan Yau, *Reported Trade Figure Discrepancy, Regulatory Arbitrage, and Round-Tripping: Evidence from the China–Hong Kong Trade Data*, 42 *J. OF INT’L BUS. STUD.* 1, 2011, available [online](#).

without defining who specifically must comply.¹¹ Many of the provisions admonish organisations like banks, law firms and international schools to expand cooperation with Hong Kong (and visa versa!).¹²

Such lawmaking takes place against the background of policy-cum-lawmaking aimed at promoting integration in the Guangdong region (including Hong Kong, Shenzhen and the Guangzhou region). The two agreements for the liberalisation of trade in services represent the most parts of that cooperation. *The Agreement between the Mainland and Hong Kong on Achieving Basic Liberalisation of Trade in Services in Guangdong* signed at the end of 2014 represents one of the more important aspects of the Agreement for our purposes.¹³ The Agreement further develops the “most favoured treatment” principle. Such a principle requires that, in terms of mutual recognition of service-related law, Hong Kong and the Mainland will apply the most “favourable” treatment offered to any other party.¹⁴ The document does not define what “less favourable” means – leaving it up to executive agencies to decide. More worryingly, Annexes I and II of the Agreement provide a 220 page list of exempted services (basically everything!) and descriptions of the types of cooperation that specific types of services might form.¹⁵ The *Agreement on Trade in Services* (signed the next year in 2015) basically represents a restatement of the previous year’s agreement.^{16 17} **Despite claiming to value the principle of most favoured treatment, both jurisdictions actively and highly regulate such trade.**¹⁸ Qianhai thus represents an opportunity for such liberalisation without the politically unpalatable effects on the whole city (cities).

Administrative rulemaking for Qianhai represents a serious hindrance for the scheme. Qianhai’s *Supporting Policies* provide an example of the style of administrative lawmaking for the Qianhai region. These policies represent a typical abstract statement of policy goals and desires (for lack of a better word).¹⁹ The wording consists of numerous statements like “innovation shall be promoted” without reference to a specific organisation or goals.²⁰ At least 12 regulations have

¹¹ The State Council’s Approval of “The Overall Development Plan of Qianhai Shenzhen – Hong Kong Modern Service Industry Cooperation Zone.” *Guo Han* (2010) 86, Aug 26, 2010, available [online](#).

¹² The visa versa part of the Policies represents a concern – as in theory the central government has no authority to issue orders to private institutions in Hong Kong under the Basic Law.

¹³ See Mainland and Hong Kong Closer Economic Partnership Arrangement (CEPA) Agreement between the Mainland and Hong Kong on Achieving Basic Liberalisation of Trade in Services in Guangdong (signed on 18 December 2014), available [online](#).

¹⁴ Service Trade Agreement, 2015, available [online](#), at chap.3, art. 4.

¹⁵ See The Mainland’s Specific Commitments on Liberalisation of Trade in Services for Hong Kong, available [online](#), at Table 1, p. 3.

¹⁶ Hong Kong has not yet submitted its list of restrictions. If Hong Kong wants to promote integration, its public officials should not ask for many such exemptions. See available [online](#).

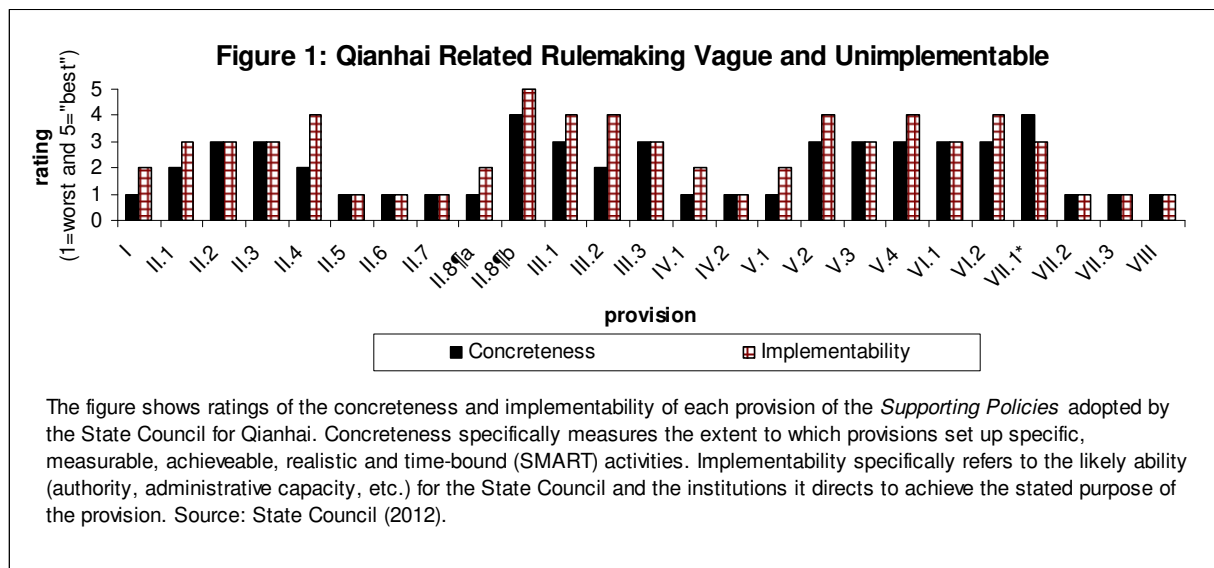
¹⁷ The Comprehensive Plan for Shenzhen (2007-2020) also supposedly provides policies for economic integration between Hong Kong and Shenzhen. However, we could not find a copy of the Plan online.

¹⁸ In its information note, the Hong Kong government claims that favourable treatment covers about 95% of all services. Yet, a close look at the negative and positive lists given in the Agreement places this claim very much in doubt.

¹⁹ See Supporting Policies at 30.

²⁰ Unsurprisingly for readers familiar with Chinese administrative law, much administrative lawmaking consists of political objectives (ie. “promote harmony and growth in a socialist system.”) The arbitrary and capricious nature of administrative action on the Mainland thus flows inexorably from the nature of its administrative law. For a

such a format, providing competencies to numerous executive agencies to engage in further rulemaking. Figure 1 shows the concreteness and implementability of each provision in the *Supporting Policies* (as compared to law from other countries and measured on a scale from 1 to 5). Concreteness relates to the extent that the provision provides specific rights and/or obligations resulting in specific actions. Implementability relates to the extent that executive agencies can actually implement the provision given their budget, resources and competencies. As previously mentioned, many of the *Supporting Policies* provisions relate to political wishes rather than the detailed partitioning of rights and responsibilities typically associated with administrative law.



Qianhai-related rulemaking also fails to provide a clear division of authority or responsibilities. In the case of the *Supporting Policies*, they vests authority in at least 8 institutions to make further rules. These include the National Development and Reform Commission, the People’s Bank of China, China Banking Regulatory Commission, China Securities Regulatory Commission and China Insurance Regulatory Commission.²¹ The *Framework Agreement on Hong Kong/Guangdong Co-operation* also calls on the Guangdong Provincial People’s Government to engage (abstractly) in cooperation.²² The *Authority of Qianhai Shenzhen-Hong Kong Modern Service Industry Cooperation Zone Objectives of Reform and Innovation* (Authority Objectives) document further represents a calling on various agencies (mostly financial like the SAFE or insurance regulator) to make rules.²³ **Despite the stated aim of simplifying regulations and business in Qianhai, the regulatory structure of the region will likely mushroom into an unwieldy mesh of political objectives posing as regulations.**

fascinating discussion of the role of political statements as quasi-law, see Jian-fu Chen, CHINESE LAW: CONTEXT AND TRANSFORMATION, 2008, available [online](#).

²¹ Supporting Policies at II.8.

²² Id at VIII. See also Framework Agreement on Hong Kong/Guangdong Co-operation, *LC Paper No. CB(1)1559/09-10(01)*, 2010, at Annex A and B, available [online](#).

²³ See Authority of Qianhai Shenzhen-Hong Kong Modern Service Industry Cooperation Zone Objectives of Reform and Innovation in 2014, *Shen Ban Zi* (2014) 4, 2014, available [online](#) at 35.

All indications suggest that the Mainland government will adopt many more political objectives dressed up as regulations. Government's regulation of venture capital in the region provides yet another example.²⁴ That law gives the Municipal Technology Administrative Authority power to oversee a Venture Capital Association – a mandatory sector grouping for venture capitalists.²⁵ Strangely, the law provides for the self-regulation of the sector in Chapter VII while providing for government regulation in article 5(4). The law further gives the Municipal Industrial and Commercial Authority the mandate to vet applications – except for applications made by foreigners (which the Municipal Foreign Trade and Economic Cooperation Authority handles).²⁶ In theory, investors would agree to register as a “venture capital institution” in order to qualify for the application of preferential policies.²⁷ Yet, the law does not define these policies – only promising to draft these policies later. Almost 15 years later, the only noticeable preferential policy consists of slight tax relief.²⁸

Hong Kong's agreements with the Mainland fail to agree on principles in order to sign numerous agreements which cover micro-issues. The Hong Kong government only provides information online about 7 frugally-worded agreements; including the 2013 Mainland/Hong Kong Science and Technology Co-operation Committee Agreement, an Intent on Co-operation in Innovation and Entrepreneurship Base for the Youth in Shenzhen and Hong Kong (also from 2013), a 2010 Agreement on Joint Promotion of Hong Kong/Guangdong Industry-Academia-Research Co-operation and other good-sounding abstractions like “innovation circles” and “innovation platforms”²⁹ Even within the law profession, a large group of rules still fail to provide an adequate basis for cross-border legal work.³⁰

Even the regulatory instrument creating the Authority of Qianhai represents a bundle of redundant political goals. The Authority itself cites 15 mandates, likely taken from the regulatory instrument establishing the Authority.³¹ At the head of the list, the Authority has the mandate to “organize and develop [*sic*] the development strategy and planning of the Zone.”³² The Qianhai Authority's “major functions” nowhere mention Hong Kong's participation in the Authority or its activity. The Authority represents a non-profit statutory board which the Shenzhen Municipal Government established. Thus, **the Qianhai Authority has no incentive to make profits or to**

²⁴ See Regulations of Shenzhen Special Economic Zone on Venture Capital, 2003, available [online](#).

²⁵ *Id.* at art. 5.

²⁶ *Id.* at art. 5¶2 and 5¶3.

²⁷ *Id.* at Chap. 2 sec.1 for the definition of these institutions and Chap. V for the description of promised preferential treatment.

²⁸ For a friendly overview of the applicable law (as it stands more recently), see Ping Zhang and James Wang, Venture capital investment in China: market and regulatory overview, Global Guide to Venture Capital, 2014, available [online](#).

²⁹ See Directory on Hong Kong Science and Technology Resources, 2016, available [online](#).

³⁰ See Report on the Development of the Legal Profession in Qianhai, The Law Society of Hong Kong Working Party on Qianhai Project, November 2012, available [online](#).

³¹ An internet search failed to dig up the instrument establishing the Authority (at least in English). Several references to these unavailable regulations include the *Interim Procedures for Authority of Qianhai Shenzhen-Hong Kong Modern Service Industry Cooperation Zone of Shenzhen Municipality* and the *Implementation Methods for Qianhai's Administrative Review*. We can not provide references to these documents, as we could not find English language versions online.

³² Qianhai Authority, About Us, 2016, at point 1, available [online](#).

include Hong Kong into its plans. Yet, as we pointed out in our literature review, the Qianhai project will likely fail without Hong Kong's significant participation.³³

The 2018 Hong Kong-Shenzhen Agreement on Qianhai

The Qianhai authorities could avoid such a regulatory mess if they allowed for the direct effect of certain parts of Hong Kong's economic, commercial, and financial law in Qianhai. At least 80% of the stated policies in the documents we have reviewed above address areas where Hong Kong has significantly fewer regulations than Shenzhen. These areas range from business registration to investment fund management. Qianhai even created a separate anti-corruption authority as a clear sign that the zone can not rely on local institutions.³⁴ The bulk of the Qianhai rules appear to try to make Qianhai regulations and practices more like Hong Kong's. As we showed in the literature review, Hong Kong's rules generally perform better than the Mainland's attempts to mold them in the context of Mainland law. **If Qianhai wants to adopt Hong Kong-like policies, why not just adopt Hong Kong's policies directly?**³⁵

The legality of the use of parts of Hong Kong's law relies on several well-established principles and practice in the Hong Kong-Shenzhen area. First, contract law in both jurisdictions allows for the use of foreign law.³⁶ Thus, in theory, as many firms can use Hong Kong law for their contracts as wanted – with others opting out at will. Second, the raft of trade agreements in the Guangdong region further provide for the recognition of one jurisdiction's standards (like Hong Kong) by the other (like Shenzhen).³⁷ Many of the agreements we reviewed above provide for either harmonization or mutual recognition – in effect making Hong Kong law applicable in some shape, way or form in Shenzhen/Guangdong. Third, government officials and businesspersons alike can try to rely on legal cooperation agreements between Hong Kong and China. The *Framework Agreement on Hong Kong/Guangdong Cooperation* provides for the “coordination” of law and mechanisms for law enforcement.³⁸ Fourth, various piece-meal projects already “import” Hong Kong law into Shenzhen. The Co-operation Agreement on the Shenzhen/Hong Kong Innovation Circle Interactive Base, the establishment of liaison offices between the Hong Kong Science Park and the Shenzhen High-tech Industrial Park, and the setting up of a Shenzhen/Hong Kong Productivity Foundation by the Hong Kong Productivity Council basically

³³ The word “fail” is relative – as such failure would merely likely consist of just another property development project in Shenzhen.

³⁴ Even before Qianhai becomes operational, its anticorruption agency has found evidence of bribery involving an engineer working on/at the site. See Shenzhen Daily, Qianhai engineer admits to ¥200k in corruption, 25 Nov, 2014, available [online](#).

³⁵ That is not say that Hong Kong policymakers are immune to such abstract policymaking. Charles Mok's recommendations for promoting innovation are just as abstract as the Mainland governments. See Charles Mok, Promoting Technology, Developing an Innovation-based Economy Recommendations on the Innovation and Technology Bureau, Preliminary Proposal, 2014, available [online](#).

³⁶ For the specifics of such choice of forum, see Qing-Jiang Kong and Min-fei Hu, *The Chinese Practice of Private International Law*, 3 MELB. J. OF INT'L L., 2002, available [online](#).

³⁷ For more analysis of the CEPA, see Roger Chan, *Hong Kong's Position in Guangdong under “One Country, Two Systems”*, 24 SEOUL J. OF ECON. 2, available [online](#).

³⁸ See LegCo Panel on Administration of Justice and Legal Services, Framework Agreement on Hong Kong/Guangdong Co-operation, *LC Paper No. CB(2)1580/09-10(01)*, 2010, available [online](#). As previously mentioned, we could not find the original in English.

try to set-up Hong Kong rules and practices in Qianhai. **Allowing for direct effect of some of Hong Kong's laws would be easier than drafting inefficient local versions in/for Qianhai.**

The use of Hong Kong law in both jurisdictions would likely have the same effect as performance-based budgeting. Performance-based budgeting allocates resources for specific policy goals (like increasing the number of new innovations per year by 5% for example). At the Guangdong level, the government has already started implementing performance-based budgets – with limited success.³⁹ Ironically, the lack of specific policy goals has represented a barrier to the effectiveness of the approach in Guangdong.⁴⁰ Econometric evidence furthermore shows that performance-based budgeting saves resources at the province level.⁴¹ At the other extreme, Hong Kong's budgeting system – and legal drafting style in general – focuses more on details and the mechanics of implementation.⁴² The high quality of legal drafting in Hong Kong stems (at least in part) from the wide range of training and advisory resources available to Hong Kong's legal drafters.⁴³ **The merging of Shenzhen and Hong Kong legal drafting styles would thus likely produce performance-based regulation needed for Qianhai's successful operation.** Drafters could easily take the policy objectives from Shenzhen regulations and “attach” Hong Kong's practical regulations and supervision.⁴⁴

What about regulations which can not be unilaterally adopted by Qianhai? For example, anticorruption measures governing the ICAC can not apply in Qianhai (and the ICAC can not investigate in the region).⁴⁵ In that case, both Hong Kong's and Shenzhen's authorities would be able to “approximate” the relevant laws – as they are already trying to do on the Qianhai side only. Such approximation consists of drafting rules which implement Qianhai-related provisions, while still fitting into domestic rulemaking. Legal practitioners in both systems have significant experience in drafting such approximations of foreign law for domestic use.⁴⁶ Figure 2 shows an example of the legal instrument into which policymakers on both sides of the border can place

³⁹ For a discussion, see Mei-li Niu, Alfred Ho and Jun Ma, Performance-Based Budgeting In China: A Case Study of Guangdong, *Network of Asia-Pacific Schools and Institutes of Public Administration and Governance (NAPSIPAG) Annual Conference 2005*, 2005, available [online](#).

⁴⁰ “Ironically” because (as we discussed in the previous section), Mainland laws about Qianhai consist of policy goals rather than the delineation of rights and responsibilities typically associated with legal instruments. For more on the weaknesses of the Mainland performance-based budgeting system, see Jun-sheng Li, PERFORMANCE BUDGETING REFORM IN CHINA, available [online](#).

⁴¹ See Yan-xia Qi and Yaw Mensah, *An Empirical Analysis of the Effects of Performance-Based Budgeting on State Government Expenditures*, 2012, available [online](#).

⁴² Hong Kong academics have discussed the possible adoption of performance-based budgeting in select areas of government administration – without much success to date. See F. Yik, W. Lee, K Chan, and W Wong, *The Key Issues to the Development of a Performance-Based Building Energy Code for Hong Kong*, 9 TRANS. H.K. INST. OF ENGIN. 3, 2002, available [online](#).

⁴³ See Law Drafting Division Department of Justice, *Drafting Legislation in Hong Kong: A Guide to Styles and Practices*, 2012, available [online](#). For a more personal description of such drafting in Hong Kong, see Tony Yen, *Bilingual Drafting in Hong Kong*, *CALC Conference in Hong Kong*, 2009, available [online](#).

⁴⁴ Such a format would keep the one country, two systems arrangement in place while still promoting legal harmonisation in both jurisdictions.

⁴⁵ Though scholars have started questioning that assumption as well. See Bryane Michael, *Can the Hong Kong ICAC Help Reduce Corruption on the Mainland?*, CHIN. J. OF COMP. L., 2014, available [online](#).

⁴⁶ Albeit governments adapt such approximation for international treaties and norms rather than to implement the rules of a partner jurisdiction. For an example and discussion in the Chinese context, see Sebastian Heilmann and Nicole Schulte-Kulmann, *The Limits of Policy Diffusion: Introducing International Norms of Anti-Money Laundering into China's Legal System*, 24 GOV. 4, 2011, available [online](#).

such provisions. In all likelihood the existing rules governing legal cooperation around Qianhai can be moved into this piece of quasi-legislation.⁴⁷ **Yet, except as noted below, the direct effect of Hong Kong’s law would remove the need for Shenzhen’s byzantine Qianhai-related regulations, without creating the need for much more legal drafting.**

Figure 2: Major Provisions of a “Optimal” Qianhai Agreement*

Chapter 1: Direct effect of Selected Hong Kong law

Outlines the provisions (in detailed list form) the provisions from Hong Kong’s commercially-related law applicable in Qianhai as well as any restrictions or limitations. Restrictions should be kept to a minimum.

Chapter 2: Approximation and Qianhai Administrative Law

Describes specifically (in detail without abstract principles) how authorities in Hong Kong and Shenzhen will redraft local ordinances (regulations) in areas where Hong Kong commercial law can not apply directly.

Chapter 3: Privatisation (or Regulations for) the Qianhai Authority**

Describes the method of privatisation, interim measures and areas where government still regulates the Authority (in case for political reasons the Authority becomes a regulated body/ QUANGO). As an Appendix, experts may attach a pro-forma business plan for the Authority. In case privatization proves completely impossible, this section might provide for performance-based regulations and a clear delineation of the Authority’s competencies and sources of revenue.

Chapter 4: Innovation-Exemptions for GEM Connect Hong Kong-Shenzhen

Numerous scholarly works have identified areas of excessive regulation of start-ups and innovative companies in Hong Kong. These provisions would work like the JOBS Act in the US, fixing the existing problems of the current Connect scheme before implementing with Shenzhen. Light regulation of assets sold through the Connect platform may make venture capital easier to get. Disclosure requirements will help ensure the freedom of information necessary to operate a disclosure-based market.

⁴⁷ Legal cooperation related to Qianhai relates to opening professional services markets in both jurisdictions to each other’s lawyers as well as to drafting laws after considering the laws in place in the other jurisdiction. We do not discuss cooperation on the free movement of lawyerly practice in the Qianhai region.

**Figure 2: Major Provisions in a Qianhai Agreement
(continued)**

Chapter 5: Dispute Resolution and Quasi-Judicial Review

Provisions allowing businesspersons in Qianhai recourse to Hong Kong's courts (as a substitute for the Mainland's current inefficient court system). These provisions might also allow for the review of Qianhai-related lawmaking and administrative decisions in Qianhai as well as in Hong Kong.

Chapter 6: Performance-Based Measures for Qianhai (and Hong Kong) Innovation Bureaux

As discussed in the main paper, lack of profit motive crumples innovation agencies on both sides of the border. This chapter could link Qianhai's performance targets with those of innovation agencies in Hong Kong and Shenzhen. In case of continued public funding and refusal to accept profits as a target, the chapter could also require that innovation-promotion entities generate more tax revenue than they cost – or else scale back.

Chapter 7: Work Plan for Annex 6 of the CEPA (Trade and Investment Facilitation)

The current annex states many laudable and abstract ideals. The revisions should take into account specific cooperation on Qianhai (and other projects).

* “optimal” refers to provisions which maximise the likely profits coming from Qianhai, irregardless of the political acceptability of these provisions. We ignore the likely or realistic likely outcome of such lawmaking in order to focus on our question about the optimal Qianhai design.

** As we discuss in the main text, the first-best solution for ensuring the Qianhai Authority's profit-focused impact consists of privatising it. As government administrators with an interest in the Authority would resist such privatization, the second-best outcome might consist of adopting more specific, concrete regulations governing the Authority's action.

Other legal provisions could help ensure the Qianhai Authority actually promotes innovation. We discuss the privatisation of the Authority in the next section. We do not discuss expanding the Connect scheme to Shenzhen because of significant work already underway on the scheme.⁴⁸ The law would not set up the Connect system. Instead, the optimal provisions from the Qianhai Agreement would contain exemptions from reporting, disclosure and other requirements for start-ups seeking to raise capital.⁴⁹ We would not discuss in more detail chapter 5, as significant effort already exists on facilitating arbitration, conflict resolution in the Qianhai region.⁵⁰ Even before

⁴⁸ Most of the available information about the Scheme consists of journalistic reporting. Kasyan provides one of the few academic studies so far of the Connect scheme. See Enoch Yiu, *International Investors Welcome Shenzhen and Hong Kong Connect*, SCMP 24 MARCH, 2016, available [online](#). See also Ravi Kashyap, *Hong Kong-Shanghai Connect/Hong Kong-Beijing Disconnect (?)*, *Scaling the Great Wall of Chinese Securities Trading Costs*, available [online](#).

⁴⁹ Michael *et al.* provide a detailed list of potential changes, along with proposed text for new legal drafts. See Bryane Michael, Simon Zhao and Dariusz Wojick, *What Role Can an International Financial Centre's Law Play in the Development of a Sunrise Industry? The Case of Hong Kong and Solar Powered Investments*, *U. of H.K. Fac. of L. RP No. 2014/034*, available [online](#).

⁵⁰ Cheung and co-authors provide a discussion of such arrangements; while Fei talks about the enforcement of these agreements. See Esther Cheung, Albert Chan, Patrick Lam, Daniel Chan, Yong-jian Ke, *A Comparative Study of*

talking about extending judicial review to Qianhai, such review of administrative law remains a sensitive issue in Hong Kong itself.⁵¹ Chapter 7 (on cooperation for trade and investment) represents the only other part of the instrument worth expanding on. The terms guiding/governing Hong Kong/Mainland cooperation on investment come from Annex 6 of the Closer Economic Partnership Arrangement (CEPA) and other agreements.⁵² As previously noted, these agreements represent general statements of goals and principles. To take one example, article 3.2.1 requires parties to “notify and publicize their respective policies and regulations on external trade and foreign investment promotion, with a view to achieving information sharing.”⁵³ **Subsidiary publicly available work plans and regulations would help ensure that government officials implement the abstract principles contained in regional agreements in order to help companies innovate more profitably.**⁵⁴

Privatizing the Qianhai Authority

Many countries have found decided to promote innovation through passing laws which define government’s role in promoting such innovation. India’s 2012 Universities for Research and Innovation Bill envisions the express creation of universities for research and innovation (as opposed to just teaching), the protection of intellectual property rights, and the delegation of authority to the university for self-governance.⁵⁵ In Sweden, the Research and Innovation Bill proposes to provide incentives for universities to profit directly from the commercialization of research.⁵⁶ The Spanish law micro-manages innovation – describing in details how various executive agencies should act.⁵⁷

Hong Kong has neither strategy nor a functioning innovation committee (yet). The new Innovation and Technology Bureau’s website remains vacant – and most of its competencies involve “coordinating” or “studying.”⁵⁸ Any proto-strategy revolves around how the innovation

*Critical Success Factors for Public Private Partnerships (PPP) between Mainland China and the Hong Kong Special Administrative Region, 30 Facilities 13/14, 2012, available [online](#). See also Lan-fang Fei, *Enforcement of Arbitral Awards between Hong Kong and Mainland China: A Successful Model?*, 8 *Chin. J. of Int’l L.* 3, 2009, available [online](#).*

⁵¹ We want to provide the reader with a discussion of judicial review in practice (rather than in theory). As such, in the specific context of reviewing pollution-related regulation, see Price and Ho outline the problems of judicial review in Hong Kong. See Rohan Price and John Ho, *Air Pollution in Hong Kong: The Failure of Judicial Review and the Slight Promise of Recent Cases*, *Sing. J. of Leg. Stud.* 2, 2011.

⁵² See Mainland and Hong Kong Closer Economic Partnership Arrangement (CEPA), Annex 6 : Trade and Investment Facilitation, 2003, available [online](#).

⁵³ *Id* at p. 2.

⁵⁴ We provide an example – in the form of a Gaant chart – later in this section to illustrate the concrete nature of these work programmes.

⁵⁵ Lok Sabha (Indian Parliament), The Universities for Research and Innovation Bill, Bill No. 61 of 2012, available [online](#).

⁵⁶ Swedish Parliament, Research and Innovation Bill, 2012, available [online](#).

⁵⁷ See Science, Technology and Innovation Law, Law 14/2011, 1 June, 2011, available [online](#).

⁵⁸ For the Bureau’s background and place in the government apparatus, see Legislative Council Panel on Commerce and Industry, Proposal to Establish the Innovation and Technology Bureau, *LC Paper CB(1)1236/13-14(07)*, 2014, available [online](#).

and technology committee and bureau will function.⁵⁹ Government only recently accepted the lackluster performance of the Innovation and Technology Fund, coming up with reform proposals to make the Fund more responsive to market forces.⁶⁰ A recent government audit of the Hong Kong Applied Science and Technology Research Institute Company Limited also – while noting the lack of achievement -- encouraged the Company to use more results-based measures to gauge future performance.⁶¹ Academics like Sharif have called Hong Kong’s innovation policy a “rhetorical resource...[whereby] policy makers transform scholarly work and scientific discovery into rhetorical instruments in support of a political agenda.”⁶² Even in Shenzhen, some attempts at channelling resources into strategic sectors has failed – calling into question (as usual) government’s ability to conduct successful industrial policy.⁶³ **Hong Kong has neither an overall research and innovation strategy nor a legislative instrument (ordinance) which can help coordinate government and private sector innovation.**⁶⁴

The design of the Qianhai Authority must provide high-powered profit-motivated incentives to workers in the Authority and outside. The Hong Kong Science and Technology Parks Corporation provides an example of how NOT to model Qianhai. Like Qianhai, these parks basically represent a property development – with scientific equipment and networking sites in a pleasant environment (see Figure 3). The Parks lost money last year (and only made \$68 million on roughly \$730 million in revenue).⁶⁵ Of that amount, exactly 97% of its revenue came from property-related transactions (rental fees, land premia and property management fees). At the same time, 47% of its expenses consisted of administrative/operating expenses and marketing.⁶⁶ Numerous commentators have seen the parks in the past as “white elephants.”⁶⁷ **Such an experience suggests that if Qianhai remains a glorified property development, the area risks reputational damage similar to that of Hong Kong’s own previous developments.**

⁵⁹ For initial thinking on the Bureau’s main activities, see Legislative Council Panel on Information Technology and Broadcasting Panel on Commerce and Industry, The work of the Innovation and Technology Bureau, *LC Paper CB(4)315/15-16(01)*, 2015, available [online](#).

⁶⁰ See Legislative Council Panel on Commerce and Industry, Comprehensive Review of the Innovation and Technology Fund Proposed Improvement Measures, *LC Paper CB(1)885/13-14(03)*, 2014

⁶¹ Audit Commission, Administration of Hong Kong Applied Science and Technology Research Institute Company Limited, 2007, available [online](#).

⁶² See Naubahar Sharif, *Rhetoric of Innovation Policy Making in Hong Kong Using the Innovation Systems Conceptual Approach*, 35 SCI. TECH. HUMAN VALUES 3, 2010, available [online](#).

⁶³ See Chun Yang, *Government Policy Change and Evolution of Regional Innovation Systems in China: Evidence from Strategic Emerging Industries in Shenzhen*, 33 ENV. PLAN. C GOV. POL. 3, 2015, available [online](#).

⁶⁴ Hong Kong does have strategies in particular policy areas (like infrastructure). However, the government has not adopted a broad strategic policy aimed at boosting the profits derived from (and thus investment in) innovative goods and services. See Legislative Council Panel on Commerce and Industry, Promotion of Innovation and Technology in Hong Kong, *LC Paper No. CB(1)1790/11-12(03)*, 2012, available [online](#).

⁶⁵ HKSTP, *HKSTP Annual Report 2014/2015*, 2015, available [online](#).

⁶⁶ Id at p. 117.

⁶⁷ See Charley Lanyon, *Hong Kong's White Elephants? Jury Still Out on Cyberport and Science Park*, SCMP 22 JULY, 2014, available [online](#). Given their performance, work has already started on repurposing land for these parks. See also Jake Van Der Kamp, *Housing - Not Science - Is the Best Use of Land at Science Park's Fourth Phase*, SCMP 9 SEPTEMBER, 2014, available [online](#).

Figure 3: Hong Kong's Non-Governmental Governmental Science Parks

The Hong Kong Science and Technology Parks Corporation Ordinance ordained the creation of several of Hong Kong's science parks. The Corporation – much like the Qianhai Authority – is supposed to be independent.* Yet, legislation created the Corporation – and governs its function with a bespoke, custom-made ordinance. Article 31 of the Ordinance carefully defines its rights for the preservation of secrecy. The Financial Secretary must approve in writing investment plans (art. 19) and may give it instructions at will (art. 8.3(b)). Like any governmental body, the Corporation must report to the LegCo (art.24) and pays no tax (art. 25). Nowhere in the Ordinance does the Corporation need to make a profit**. Lack of a profit motive sends a horrible message to Hong Kong's innovative companies – saying “you need to make a profit, but don't me to the same standard.” The Qianhai Authority clearly follows this ineffective model.

If other countries' experience serves as a guide, Qianhai should operate more like an investment management company than an amorphous incubator. Studies from scholars like Tamasy find that public funding significantly blunts the profit motive of science and technology park managers.⁷⁰ Authors like Lofsten & Lindelof as well as Townsend *et al.* have shown that innovation parks fail to deliver faster growth in profits in a range of settings.⁷¹ Even though science parks might produce “spill-overs” from one firm to the next, little evidence supports the view that these spillovers result in sustainable profitability.⁷² Authors like Wong *et al.* cite Singapore's TEMASEK as a model for incubating innovation.⁷³ TEMASEK invests funds with an eye on profit –as 12% of Singapore's GDP resulted from TEMASEK investments at the turn of the millennium.⁷⁴ If TEMASEK eventually fails, such failure would likely occur due to the perverse incentives resulting from its past successes.⁷⁵ Why can't Qianhai operate much like TEMASEK – with far less government participation than its Singapore peer? Unlike the sovereign wealth fund, Qianhai's initial capitalisation could/would come from investors – with a minority government share. **The Qianhai Authority should be corporatized, privatised (with the possibility of**

* Sec. 3(3) provides that “Corporation is neither a servant nor an agent of the Government and it does not enjoy any status, immunity or privilege of the Government.”

** Art. 6 lists the purposes of the Corporation. The generation of profits does not figure among these purposes.

⁷⁰ See Christine Tamasy, *Rethinking Technology-Oriented Business Incubators: Developing a Robust Policy Instrument for Entrepreneurship, Innovation, and Regional Development?*, 38 GROWTH AND CHANGE 3, 2007, available [online](#).

⁷¹ For the Swedish experience, see Hans Lofsten and Peter Lindelof, *R&D Networks and Product Innovation Patterns—Academic and Non-Academic New Technology-Based Firms on Science Parks*, 25 TECHNOVATION 9, 2005, available [online](#). For a global overview, see Anthony Townsend, Alex Soojung-Kim Pang, and Rick Weddle, *Future Knowledge Ecosystems: The Next Twenty Years of Technology-Led Economic Development*, IFTF REPORT NUMBER SR-12361, 2009, available [online](#).

⁷² See Mariagrazia Squicciarini, *Science Parks: Seedbeds of Innovation? A Duration Analysis of Firms' Patenting Activity*, 32 SMALL BUS. ECON. 2, 2007, available [online](#).

⁷³ See Poh-Kam Wong, Yuen-Ping Ho, Annette Singh, *Industrial Cluster Development and Innovation in Singapore*, In Akifumi Kuchiki and Masatsuga Tsuji (Eds.), FROM AGGLOMERATION TO INNOVATION: UPGRADING INDUSTRIAL CLUSTERS IN EMERGING ECONOMIES, 2010, available [online](#).

⁷⁴ See Anthony Shome, *Singapore's State-Guided Entrepreneurship: A Model for Transitional Economies?*, 11 N. Z. J. OF ASIAN STUD. 1, 2009, at p. 327, available [online](#).

⁷⁵ Carney and Zheng forcefully argue that state-led innovation chokes off more organic start-up growth. See Richard Carney and Loh-Yi Zheng, *Institutional (Dis)Incentives to Innovate: An Explanation for Singapore's Innovation Gap*, 9 J. OF E. ASIAN STUD. 2, 2009, available [online](#).

government share ownership and Board positions) and run like a development financial institution.⁷⁶

The Hong Kong government (and private investors) could participate much more easily in a private Qianhai Authority. If the Financial Secretary allocated funds for 10% of Qianhai's expected future discounted profits, perhaps from the Exchange Fund, such holdings might qualify the Hong Kong government for a Board seat. Government ownership should be enough to encourage patient capitalism without blunting profit incentives too much.⁷⁷ As early as 2002, the available econometric evidence showed that partial government ownership would likely increase firm profitability – giving government high-powered incentives to make the Qianhai Authority and the companies it invests in work well.⁷⁸

A New Agreement on Industry-Academic Research Cooperation

If regulation is anywhere the handmaiden of innovation, it is in regulating the university-business nexus. Indeed, recent evidence notes that, without supporting regulations, University spin-outs generate far less profit than the spinning out of highly trained, talented employees.⁷⁹ Self-regulation by universities, and to a limited extent government regulation, already sets the parameters for university engagement with business.⁸⁰ **Without the significant restraints placed on academics to work part-time with industry, Hong Kong would likely produce as much innovation as the New York or London.**⁸¹ Thus, re-regulation likely serves as the best policy instrument for increasing the likely profitability of the university-business collaboration (and we showed in our literature review that this model best exemplifies the Shenzhen region).

What should regulation of the academic-industry collaboration consist of? Figure 4 shows the possible provisions for an ordinance aimed at maximising Hong Kong's use of Qianhai.⁸² The

⁷⁶ While they are at it, they might as well repeal the Hong Kong Science and Technology Parks Corporation Ordinance and privatize its assets – sending the right signal to the private sector. Real estate developers like Wharf have developed Qianhai-esque projects in the past. As a listed company, Wharf provides private investors the change to study its investment prospects and to share in the profits its good decisions generate.

⁷⁷ Arner and colleagues provide an overview of the Exchange Fund and the way these resources could help grow credit and other markets in Hong Kong. See Douglas Arner, *Assessing Hong Kong as an International Financial Centre*, HKU FAC. OF L. RP NO. 2014/012, 2014, available [online](#).

⁷⁸ See Qian Sun, Wilson Tong and Jing Tong, *How Does Government Ownership Affect Firm Performance? Evidence from China's Privatization Experience*, 29 J. OF BUS. FIN. & ACC. 1-2, 2002, available [online](#).

⁷⁹ Recent empirical evidence shows that R&D funding only impacts on innovation in Hong Kong through university education which workers bring to their jobs. See Wan-Hsin Liu, *Do Active Innovation Policies Matter? : Findings from a Survey on the Hong Kong Electronics SMEs*, KIEL WP 1445, 2008, available [online](#).

⁸⁰ We do not wish to give a comprehensive overview of these regulations (often grouped under conflict of interest rules). For a somewhat dated but still relevant discussion in the creative industries context, see Desmond Hui, *Study on the Relationship between Hong Kong's Cultural & Creative Industries and the Pearl River Delta*, 2006, available [online](#). For an almost 50 page example of such regulations from the Hong Kong University of Science and Technology, see Faculty Handbook: Policies Relating to Research and Commercialization, Chap. 24, available [online](#).

⁸¹ Mowery provides an outstanding analysis of the issues involved in industry-university collaboration – including data on the performance of such collaboration. See David Mowery, *University-Industry Collaboration and Technology Transfer in Hong Kong and Knowledge-Based Economic Growth*, HK INNOVATION PROJ. REP. NO. 1, 2012, available [online](#).

⁸² As many of the issues tackled in the figure deal with amending existing ordinance law, a regulatory instrument could not completely accommodate the reforms we propose.

Agreement on Joint Promotion of Hong Kong/Guangdong Industry-Academia-Research Co-operation could provide the legal basis for future lawmaking in this area.⁸³ Indeed, the only use for the raft of agreements between Hong Kong and Shenzhen/Mainland consists of setting the basis for legislating in each jurisdiction.⁸⁴ To keep our analysis focused, we discuss proposed chapters 1-3 (leaving 4 and 5 for another paper).

Figure 4: Provisions of an Ordinance for the Hong Kong/Guangdong Industry-Academia-Research Co-operation

The following outline represents provisions potentially implementing the general agreements in the *Agreement on Joint Promotion of Hong Kong/Guangdong Industry-Academia-Research Co-operation*. Because our paper focuses on the “optimal” rules for Qianhai, we do not consider the practicality or political feasibility of adopting such rules.

Chapter 1: Establishment of a Joint Research Vehicle Legal Structure

Flexible structures – like IP management vehicles -- allow university departments or groups to create limited liability entities aimed at generating profit-related innovations.

Chapter 2: Privatising and Flexibilising Existing Innovation Funding

Creating an explicit investment charter, performance criteria, co-risk takers and making it easier to apply for and use funds as conditions change.

Chapter 3: Implementing provisions for the Patent Reform Ordinance

Develop a flexible original grant patenting system, while encouraging compulsory licensing.

Chapter 4: University-Business Collaboration

Businesses get tax break and universities do not need to show it is academic

Chapter 5: Open wires policy

No censorship for Qianhai-located IP addresses

Chapter 6: Reforming the University of Hong Kong Shenzhen Institute of Research and Innovation (SIRI)

The SIRI looks dead. Make it more like the Harvard iLab.

The figure shows several of the potential provisions related to academic research in the Qianhai region. We do not discuss Chapter 4 or 5 in the text -- as even a political consensus (and no academic work) has not been reached on these issues).

The first chapter could deal with the establishment of a joint research vehicle legal structure. The “joint” refers mandatory participation in the organisation by both academic structures/associations and business ones. Authors like Au and White have argued for looser rules around spinning out (or even keeping within the university) corporate structures which

⁸³ Agreement on Joint Promotion of Hong Kong/Guangdong Industry-Academia-Research Co-operation, 2010, available [online](#).

⁸⁴ Usually, international agreements have priority in domestic law (especially when implemented with supporting legislation). Thus, these agreements could – when combined with political will – result in a coherent pack of innovation laws centred around Qianhai and focused on Hong Kong and Shenzhen.

commercialise innovations.⁸⁵ In other words, a research institute in the University of Hong Kong (for example) could commercialise an innovation (like a new helicopter design) and hold shares in that corporation. The company could thus serve as a future work experience programme for students – in effect giving students work experience and their university education at the same time.⁸⁶ Yet, the legal entities allowing for inventors and investors to profit from innovation need not work like a corporate going concern. Academics need not become businessmen – and deal with the minutiae of everyday business.

Hong Kong's authorities could put these joint research vehicles in place by adopting a version of the "intellectual property management vehicles" increasingly used in other jurisdictions. These corporate vehicles, holding IP rights, can allow disparate investors to share in the cost and benefit of even pure (basic) research.⁸⁷ Hong Kong could help popularise this form of special purpose vehicle – winning first-mover (or at least second-mover) advantages as the preferred and largest market for these securities.⁸⁸ Such securitisation could also help build a constituency of IP owners who would have strong incentives to police IP markets and avoid illegally copying and using IP property.⁸⁹ As China remains extremely lax in its enforcement of IP rights, such a market mechanism could thus reduce IP "wrongs" much more effectively than Chinese (or even Hong Kong's) law enforcement agencies.⁹⁰ **If Hong Kong had securitised vehicles for trading IP property rights, their value would come – at the low end of the estimates -- to around HK\$2.1 trillion.**⁹¹

⁸⁵ Au and White describe these arguments in more detail – and talk about the commercialisation of such innovations in Hong Kong in a venture capital setting. See Kevin Au and Steven White, *Hong Kong's Venture Capital System and the Commercialization of New Technology*, HK INNOVATION PROJ. REP. NO. 5, 2009, available [online](#).

⁸⁶ Sharif and Baark describe the challenges of adopting such a mindset in the Hong Kong higher education context. Mok describes the importance of such a relaxation of existing rules. See Naubahar Sharif and Erik Baark, *The Hong Kong University of Science and Technology: A Case Study in Entrepreneurial University-Led Knowledge-Based Economic Development*, In Poh Wong, *ACADEMIC ENTREPRENEURSHIP IN ASIA: THE ROLE AND IMPACT OF UNIVERSITIES IN NATIONAL INNOVATION SYSTEMS*, 2011, available [online](#). See also Ka Mok, *Questing for Entrepreneurship and Innovation for Enhancing Global Competitiveness in Hong Kong: Academic Reflections*, In John Hawkins and Ka Mok, *RESEARCH, DEVELOPMENT AND INNOVATION IN ASIA PACIFIC HIGHER EDUCATION*, 2015.

⁸⁷ For an overview of this quickly developing area of law, see Dov Solomon and Miriam Bitton, *Intellectual Property Securitization*, 33 *CARDOZO ARTS & ENTERTAINMENT L. J.* 1, 2015.

⁸⁸ Hong Kong already lags in this market. As early as 1999, academics talked about pop hit song writers like David Bowie cashing in on the securitisation of revenue streams attached to his songs. See Jennifer Sylva, *Bowie Bonds Sold for Far More Than a Song: The Securitization of Intellectual Property as a Super-Charged Vehicle for High Technology Financing*, 15 *SANTA CLARA HIGH TECH. L. J.* 1, 1999.

⁸⁹ As even retail investors start holding securities which pay IP-related royalties, the widely dispersed nature of such holdings (and the ease of sharing IP benefits) would naturally give financial incentives to these investors to denounce pirating and refrain from pirating themselves. See Robin Feldman, *Intellectual Property Wrongs*, 18 *STAN. J. OF L. BUS. & FIN.* 2, 2013.

⁹⁰ Gische – like most – remains pessimistic about the extent and enforcement of the Mainland's IP law. Without recourse to a well-functioning system of law enforcement, IP markets may only rely on self-enforcing rules (namely rules which market participants themselves have incentives to police and follow). See Emily Gische, *Repercussions of China's High-Tech Rise: Protection and Enforcement of Intellectual Property Rights in China*, 63 *HASTINGS L. J.* 5, 2012.

⁹¹ We used the ratio of IP rights valuations to GDP in the US as a benchmark for determining their value in Hong Kong. Yet, we know that the value of financial instruments traded in Hong Kong come to many times the value of Hong Kong's own GDP – suggesting that the value of these IP rights, if like other traded property rights – could come to around HK\$8 trillion at the high end (by applying the roughly 40% of the value of IP not to GDP, as the authors of our source study do, but 40% of the value of financial transactions). See *IP Creates Jobs for America*, Global Intellectual Property Centre, 25 May, 2012, available [online](#).

The second part of the regulation deals with the Innovation and Technology Fund and innovation grants more generally).⁹² Shih and Chen note (and as we showed with data previously) that such funding is “short-term-oriented, dispersed and of reactive type focused on the individual programme-specific level.”⁹³ Part of this section would likely outline the conditions under which universities can create research units financed by the private sector and focused on long-term (10 years minimum) research at the sectoral level or for basic research.⁹⁴ The previous regulatory structure required applicants for funding to basically get Legislative Council approval – an almost insurmountable hurdle.⁹⁵ Current regulations also forbid the type of “pivoting” that Silicon Valley is famous for (namely abandoning the preliminary idea and trying something new).⁹⁶ The government disperses funding widely between companies and research bodies – preventing any one from achieving economies of scale in any particular R&D endeavor. **The lack of specific rulemaking about how these funding schemes should work – and the performance targets – lie at the centre of their inefficiency.**⁹⁷

Policymakers can use several methods to get the Innovation and Technology Fund ready to play a larger role in the Qianhai framework. At the very minimum (and if the Government wants to base the Fund in the world of administrative rights and obligations), the Fund (and related funds) should have full internal regulations – including selection criteria and performance targets – online, as well as its administrative rulemaking online.⁹⁸ Having a clear legal framework could even help focus staff on outcomes instead of procedural efficiency, as well as help aggravated applicants from Hong Kong and the wider Qianhai area, to appeal decisions currently made in the dark. Yet, more radical reforms would improve the Fund’s performance much more.

Partial or full privatisation represents the best possible outcome for Innovation and Technology Fund. The limited econometric evidence available (albeit from outside of Hong Kong) shows that state-run venture funding performs worse than privately funded funding – and even crowds out

⁹² We do not review the schemes available – in order to limit our already excessively long study. The most relevant – for our purposes – includes the Innovation and Technology Support Programme (ITSP), Guangdong-Hong Kong Technology Cooperation Funding Scheme (TCFS), and the University-Industry Collaboration Programme (UICP).

⁹³ Chintay Shih and Shin-Hong Chen, *On Reform of Hong Kong’s Public Research Funding System*, HK INNOVATION PROJ. REP. NO. 3, 2009, at p. 17, available [online](#).

⁹⁴ Shih and Chen also note that Hong Kong has no lack of industry-focused research centres which can bring new ideas into the market place. The lack – they say – lies in creating those ideas in the first place. *Id* at p. 24-26.

⁹⁵ *Id* at p. 26. Indeed, they give recommendations at the end of their paper which policymakers might want to consider when drafting this section of the regulation.

⁹⁶ Even more recent thinking about innovation funding excludes allowing funded organisations from radically changing their focus. See Panel on Commerce and Industry, Injection into the Innovation and Technology Fund, *LC Paper No. CB(1)438/14-15(05)*, 2015, available [online](#).

⁹⁷ We could only fund one set of rules governing the Fund – as an addition to the Public Finance Ordinance. Unlike most country’s websites, the Innovation and Technology Commission as well as the Fund’s page itself provide no links to administrative rulemaking. See Legislative Council, Resolution on the Innovation and Technology Fund, L.N. 175 of 1999, available [online](#).

⁹⁸ Rights and obligations lie at the heart of Hong Kong’s (and others’) administrative law. Having a state-administered system (rather than a market-administered one) necessarily implies governance by rule of law – not rule by market. Moreover, the Fund has a selection framework – though it consists of tables made in Microsoft Word. These tables hardly provide a reasonable assessment criteria upon which an aggravated party might launch a complaint. For more on the jurisprudential principles governing Hong Kong’s administrative law, see Swati Jhaveri, Michael Ramsden and Anne-Scully Hill, *HONG KONG ADMINISTRATIVE LAW*, 2013.

private funding.⁹⁹ Econometric evidence shows comparably poor performance of government-owned and operated venture capital.¹⁰⁰ Treating the Innovation and Technology Fund like any venture capital fund would help ensure the long-term focus of the fund. Even a recent audit report focuses on the Fund's procedures – rather than stepping back and assessing the extent to which the Fund actually generates profitable innovation.¹⁰¹ As such, even supposedly independent parties (the auditors) have lost sight of the Fund's real and tangible goal (of producing profits rather than paper). Privatizing the Fund would also help it work with the Qianhai Authority. Whether Shenzhen/Mainland centre government authorities privatize the Authority or not, a private Innovation and Technology Fund would be able to contract with the Qianhai Authority as any normal business. Such a privatisation would thus bypass the serious political and administrative obstacles which prevents one part of the Hong Kong government from working with a part of the Shenzhen government. **The government should obviously privatise the Innovation and Technology Fund.**

The third part of the regulation deals with patent reform. Hong Kong has already taken steps to reform its patent system with the 2015 Patent Amendment Bill.¹⁰² The Bill goes nowhere near far enough to ensure Qianhai's dominance as an innovation hub. If companies want to patent inventions, they must still seek patents elsewhere.¹⁰³ In other words, Hong Kong subsidises the production of IP with tax incentives – yet does not benefit from this expenditure by creating a fixed “stock” of patents which turns intellectual property into profits.¹⁰⁴ More bizarrely, the Mainland has a functioning original grant patenting system despite having much weaker patent-related property rights.¹⁰⁵ On a scale 12 point scale (with a score of 12 representing jurisdictions with the strongest patent rights), Hong Kong scores a 8.1 – compared with the Mainland's 6.2.¹⁰⁶ The strength of China's property rights put its patent protection on par with Botswana, Colombia, and Romania!¹⁰⁷ Thus, **the Mainland has more to gain by Hong Kong developing a globally**

⁹⁹ See Dirk Engel and Diana Heger, *Differences in Public and Private Venture Capital Companies' Activities: Microeconomic Evidence for Germany*, ZEW WP, 2005, available [online](#). See also Fabio Bertoni, Annalisa Croce, and Massimiliano Guerini, *The Attractiveness of Private and Public Venture Capital in Supporting the Investments of European Young High-Tech Companies*, 2011, available [online](#).

¹⁰⁰ See Jerry Cao, Mark Humphery-Jenner and Jo-Ann Suchard, *Government Ownership and Venture Performance: Evidence from China*, PRESENTATION AT THE AUSTRALASIAN FINANCE AND BANKING CONFERENCE, 2013, available [online](#).

¹⁰¹ Hong Kong Audit Commission, Chapter 9, Innovation and Technology Fund: Overall management, 2013, available [online](#).

¹⁰² For a background discussion of the issues addressed in the Bill, Commerce and Economic Development Bureau and Intellectual Property Department, Consultation on Review of the Patent System in Hong Kong, 2011, available [online](#). For details about the Bill's first reading, see LegCo, Patents (Amendment) Bill, 2015, available [online](#) or [online](#).

¹⁰³ For a short and simple description, see Kenny Wong, Is Patent Reform in Hong Kong on the Horizon? INTELLECTUAL PROPERTY MAGAZINE, 2012, available [online](#).

¹⁰⁴ We do not discuss these tax incentives, in order to keep this already long paper from growing too long. See Samuel Chan, *New Tax Relief in Hong Kong for Intellectual Property Rights - Opportunities and Threats*, 38 INT'L TAX J. 2, 2012, available [online](#).

¹⁰⁵ For more details see W. Lesser, *Measuring Intellectual Property strength and Effects: An Assessment of Patent Scoring Systems and Casuality*, 4 J. OF BUS. ENTREP. & L. 345, 2011.

¹⁰⁶ The author constructed this index by using a statistical procedure known as “factor analysis” on four factors related to the strength of patent rights and systems. For the exact description of the index and its construction, see *Id.* at p.357.

¹⁰⁷ *Id.* at p. 359-360.

demanded patent system than Hong Kong has in using and harmonizing with the Mainland patenting system.

The other part of this chapter – which has not yet received wide discussion – involves defining the mechanics of mutual recognition of patents between China and Hong Kong.¹⁰⁸ So far, mutual recognition remains just an idea – without details provided to the public.¹⁰⁹ The Qianhai parties – namely Hong Kong and the relevant central government authorities – have signed agreements to recognise IP and patent-related (as well as other civil and commercial) court decisions and judgements.¹¹⁰ We do not show the same analysis shown previously about the Agreement’s specificity and likely effectiveness. Needless to say though, without full joint participation in a Qianhai-like arrangement, the Agreement will – like many other agreements – remain a declaration of political ideals. The market for patents will determine Hong Kong’s (and thus Qianhai’s) demand for patents (and supply of innovative intellectual property) more than any legal agreements.¹¹¹ Econometric evidence shows that if Hong Kong can develop a globally competitive and used patent registration regime, Hong Kong (and thus Qianhai) can take a significant amount of patent traffic way from the established centres.¹¹² **Qianhai can only succeed when Hong Kong patents become substitutes for EU, US and Mainland patents.** Chapter 6 of the proposed innovation ordinance represents the easiest part of such rulemaking. Many of the supposed collaborative efforts aimed at promoting innovation in the Qianhai region remain underdeveloped. The University of Hong Kong’s Shenzhen Institute of Research and Innovation (SIRI) provides one of the most obvious examples of such work.¹¹³ The Institute

¹⁰⁸ The government, at the time of this writing, is working on some of the regulations. In theory, this section of the regulation could deal with other issues – like the authorisation to hold oneself out as a patent advisor or to define the state of IP litigation in Hong Kong. We do not discuss these minor issues – to keep our discussion focused on the largest and most relevant issues for our research. For a discussion of the litigation issue, see Douglas Clark, *Intellectual Property Litigation in Hong Kong: Are the Courts up to the Challenge?* HONG KONG LAWYER, June, 2014, available [online](#).

¹⁰⁹ For more, see Legislative Council Panel on Commerce and Industry, Updated background brief on review of the patent system in Hong Kong, *LC Paper No. CB(1)743/14-15(04)*, 2015, available [online](#). See also Report of the Advisory Committee, available [online](#).

¹¹⁰ See Arrangement on Reciprocal Recognition and Enforcement of Judgments in Civil and Commercial Matters by the Courts of the Mainland and of the Hong Kong Special Administrative Region Pursuant to Choice of Court Agreements between Parties Concerned, 2006, available [online](#). For the Mainland’s guidance interpretation, see Interpretation by the Supreme People’s Court on the Arrangement on Reciprocal Recognition and Enforcement of Judgments in Civil and Commercial Matters by the Courts of the Mainland and of the Hong Kong Special Administrative Region Pursuant to Choice of Court Agreements between Parties Concerned (Adopted at the 1390th Meeting of the Judicial Committee of the Supreme People’s Court on 12 June 2006) Judicial Interpretation No. 9 of [2008] Time of Promulgation: 06:51:43 04-07-2008, available [online](#).

¹¹¹ Several studies look at the determinants for patent demand geographically. “Gravity” (namely the size of markets and the popularity of a patent registration centre) explains demand for patents from particular jurisdictions far more than the existence of legal agreements. See Giuditta De Prato and Daniel Nepelski, *International Patenting Strategies in ICT*, EU COMM. REP. EUR 25965 EN, 2013, available [online](#). See also Carlo Menon, *Stars and Comets: An Exploration of the Patent Universe*, SERC DISC. P. 37, 2009, available [online](#).

¹¹² Naturally, much patent demand derives from the need to establish patents in different jurisdictions. Namely, even if a firm has a US patent, they may wish to file patents in the EU, Japan and so forth in order to solidify protection claims in court. Hong Kong will always have such demand. Yet, by serving as a jurisdiction-of-choice in a future global system based on the mutual recognition of patent claims, Hong Kong can build up its lead now. For evidence on the effect of patent fees on patent demand, see Gaetan de Rassenfosse and Bruno van Pottelsberghe de la Potterie, *On the Price Elasticity of Demand for Patents*, ECARES WP 31, 2008, available [online](#).

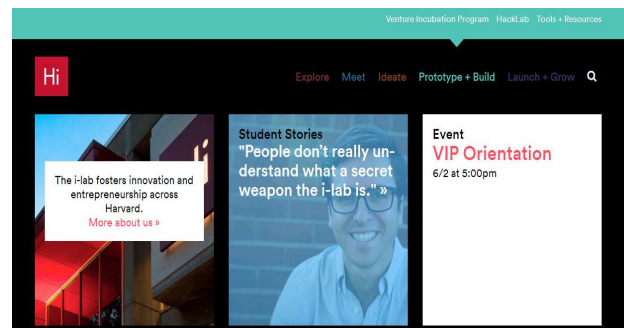
¹¹³ See Shenzhen Institute of Research and Innovation, Introduction, 2016, available [online](#).

received its funding from Shenzhen Municipal Government – an administrative body which can give or not give funding at will.¹¹⁴ Like the results page of the Hong Kong government’s Technology and Innovation Fund, the website reports the number of projects funded – rather than the actual change in profits or marketable ideas.¹¹⁵ Unlike Harvard’s iLab, the Institute only seeks government funding – involving few private sector participants. In contrast, as shown in Figure 29, the iLab focuses on concrete stories, with plenty of opportunities for anyone to participate in activities like its Venture Incubation Program.¹¹⁶ One the closest equivalents, the Hong Kong government funded Impact Incubator, represents a poverty alleviation scheme more than a profit-driven program aimed at commercializing innovation.¹¹⁷ **As such, programmes like the SIRI represent missed opportunities for bringing real, actual marketable innovation into the Qianhai region.**

Figure 5: The iLab is Everything SIRI is Not



The SIRI represents a PR platform for letting people know about large-scale research.



Harvard’s iLab lets anyone participate in innovation, bringing together money and ideas

How can rulemaking help reform academic units like the SIRI? First, government should focus on enabling entrepreneurs and innovations (using platforms like a copy of the iLab) rather than trying to run its own innovation development programmes.¹¹⁸ Second, universities like the University of Hong Kong can put their rules for industry-academic collaboration online, so outsiders as well as staff and students can know the limits of their work with the private sector. Like the SIRI, the Knowledge Exchange website looks more like an advertisement than a place to bring inventors and investors together.¹¹⁹ Third, the Bureau (or Commission) for Education can issue clear regulations about how universities can engage with business.¹²⁰ Working on the

¹¹⁴ *Id.* at line 2.

¹¹⁵ The available funding results (only available in Chinese) consist of a table with one row for 2014 and 3 rows for 2013. See *Id.* at Research Funding, 2016, available [online](#).

¹¹⁶ See Harvard iLab, Venture Incubation Program, 2016, available [online](#).

¹¹⁷ See Impact Incubator, 2016, available [online](#).

¹¹⁸ The minutes from a recent Commission on Strategic Development clearly illustrates the government mindset. Instead of talking about how government has helped specific companies, the minutes only review work of various government institutions and programmes (like the Commission on Technology and Innovation, the Technology and Innovation Fund and so forth). See Summary of Views Expressed at the Fourth Meeting of the Commission on Strategic Development held on 26 November 2015, 2016, available [online](#).

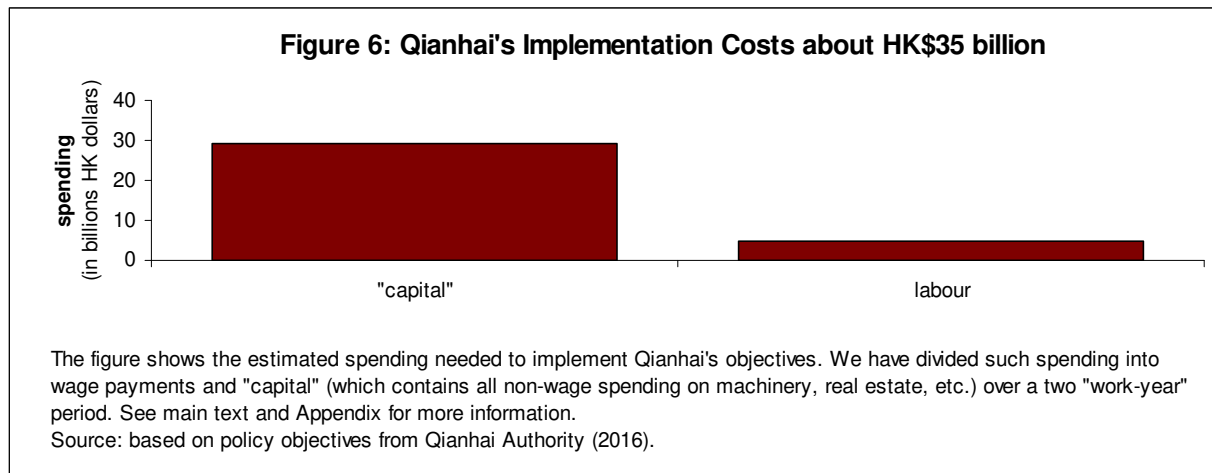
¹¹⁹ University of Hong Kong Knowledge Exchange Office, 2016, available [online](#).

¹²⁰ The Bureau of Education website is hard to navigate and its “policy documents” section only contains copies of international agreements and information on various scholarships and study schemes. The Education Commission’s website seems to contain working group information on education reform only up to 2006. See Education Bureau,

principle of positive administrative silence, these short regulations would allow everything not explicitly forbidden under the regulations.¹²¹ **Allowing for positive administrative silence and light regulation in the ordinance we propose would put industry-university collaboration on a square footing.**

Costing of the Development Plan

How much would the Qianhai project actually cost? By establishing these costs, we can see if the Qianhai plans are realistic and what kind of contribution the Hong Kong government should make. Figure 6 shows expenditure on the roughly 30 distinct objectives given by the Shenzhen Authority.¹²² Readers interested in more details can see our online paper.¹²³ Unsurprisingly, capital expenditure makes up a large share of the total – given the amount of real estate the development will create. Adding up all these costs gives a total cost of around HK\$35 billion (or about US\$4.5 billion). **If Hong Kong really wants to take an equal state as the Mainland in Qianhai’s success, special administration region’s government would need to shell out about HK\$18 billion.**



Yet, as we describe in the next section, showering Qianhai-related projects with money will not raise innovation-led profits half as much as policy reform. We give four main reasons in the next section, which we summarise here. First, by improving the profit impact of each dollar of R&D, fewer (not more) dollars can go toward generating more profits.¹²⁴ Second, multiplier effects and

Education System and Policy > Post-Secondary Education > Policy Documents, 2016, available [online](#). See also Education Commission, Working Groups, 2016, available [online](#).

¹²¹ Anthony describes the evolution of the concept in the UK, underpinning how administrative silence allows bodies like universities to engage in activities which a more regulated system would probably not allow. See Gordon Anthony, ADMINISTRATIVE SILENCE AND UK PUBLIC LAW, 2016, available [online](#).

¹²² See China (Guangdong) Pilot Free Trade Zone, Qianhai & Shekou Area of Shenzhen, 2016, available [online](#).

¹²³ See REMOVED FOR ANONYMOUS REVIEW.

¹²⁴ Authors like Sun and co-authors might describe such an increase in the resource efficiency of R&D to generate profits as a “innovation competence.” In our own model, it simply represents the exponential effect that reform has on R&D as a driver of profits. See Hong-yi Sun, Shui-Yee Wong, Yang-yang Zhao, Richard Yam, A Systematic Model for Assessing Innovation Competence of Hong Kong/China Manufacturing Companies: A Case Study, 29 J. OF ENG. & TECH. MAN. 4, 2012, available [online](#).

feedback loops between profits, R&D and investment/cash available increases the effect of adding resources. The “innovation system” then increases the impact of changes in R&D spending well beyond the effects such R&D would have in isolation.¹²⁵ Systemic reform must fix problems which keep markets for profitable innovation (and R&D) from settling to equilibrium at their socially optimal point.¹²⁶ R&D produces social goods like commercially valuable tacit and codified knowledge – which can help more than just the company producing such knowledge. **Government’s role should not consist of giving away money, but in structural reform which makes it more profitable for companies to engage in large-scale, long-term R&D in the first place.**¹²⁷

If the Qianhai Authority should reallocate resources away from its plans and towards “structural change,” what activities should the Authority fund? Figure 7 shows some of the ways that the Qianhai Authority can increase the innovation-led profitability of companies in the Qianhai region. First, as we previously showed, both the Hong Kong and Shenzhen government spend large amounts of money on subsidizing start-ups, R&D and other supposedly innovative activity. Thus we repeat that government should not give money away.¹²⁸ Second, spending money to police and discourage collusion, abuse of market power, and closed markets would like generate more profits over the longer-run.¹²⁹ As companies in the Qianhai region innovate to survive, these innovations can led to sustained competitive advantage globally.¹³⁰ Third, tax incentives can encourage R&D. Yet, current incentives do not affect the marginal incentive to innovate – only the cost to locate a particular type of company in Qianhai.¹³¹ The more innovations these

¹²⁵ Fu presents econometric evidence showing how such a systemic approach – adopted in the UK and increasingly in China – promotes profitable innovation by taking a “dual role” (educational and commercial). See Xiao-lan Fu, *Chapter 8: The Dual Role of Universities in Industrial Innovation: Comparing China and the UK*, CHINA'S PATH TO INNOVATION, at 201, 2015.

¹²⁶ Nuno describes and quantifies the extent of such a mismatch between the amount of R&D spending which maximises individual firm’s profits and the amount of R&D spending which maximises all firms’ profits. Yet, as we argue – and in complete disagreement with authors like Grossman and co-authors – that government must not subsidize R&D. See Galo Nuno, *Optimal Research and Development Expenditure: A General Equilibrium Approach*, BANK OF SPAIN WP 1009, 2010, available [online](#). See also Volker Grossmann, Thomas Steger, & Timo Trimborn, *Dynamically Optimal R&D Subsidization*, U. OF FREIBURG WP, 2010, available [online](#).

¹²⁷ As we prove in the Appendix, changes in our model’s structural parameters has a larger impact on profits than changes in the levels of the variables themselves.

¹²⁸ See Scott Wallsten, *The Effects of Government-Industry R&D Programs on Private R&D: The Case of the Small Business Innovation Research Program*, 31 RAND J. OF ECON. 1, 2000, available [online](#).

¹²⁹ The World Bank, for example, argues that increased competition implies market access and openness – providing comfort to foreign investors looking to fund innovation and R&D in Chinese companies. Without such openness, they fear expropriation. See Chinese Development Research Center of the State Council and World Bank, *China’s Growth through Technological Convergence and Innovation*, In CHINA 2030: BUILDING A MODERN, HARMONIOUS, AND CREATIVE SOCIETY, 2013, available [online](#).

¹³⁰ Toyota remains one of the best examples of a company innovating to survive. Toyota needed to develop “flexible specialisation” as a response to the US car manufacturers economies of scale and first-mover advantages. Aghion and co-authors provide a more rigorous (less descriptive) description of the link between competition and innovation. See Meine van Dijk, *Flexible Specialisation, the New Competition and Industrial Districts*, 17 SMALL BUS. ECON., 1995, available [online](#). See also Philippe Aghion, Stefan Bechtold, Lea Cassar, and Holger Herz, *The Causal Effects of Competition on Innovation: Experiment Evidence*. HARVARD U. ECON. DEPT. WP, 2014, available [online](#).

¹³¹ “Marginal” refers to the addition of an extra unit of R&D spending (or other money). Qianhai companies working in certain sectors receive preferential tax treatment (and we show these industries in an appendix). Yet, these tax incentives do not apply to increasing larger spending on R&D. Only marginal tax rebates can change companies’ production and investment decisions.

companies can produce, the more likely they will profitably insert themselves in various global value chains.¹³²

Figure 7: A First Look at Costing Optimal Qianhai Spending

The Qianhai Authority will increase profits-led innovation by improving the way that companies make and use their profits. Simply subsidizing work spaces or researchers will have a much shallower impact.

1. Avoid grants. As we showed in the literature review – and as authors like Wallsten show – government grants likely just crowd out private spending. Government should not subsidize companies' R&D.

2. Open markets to competition. Despite a new competition law, oligopolistic producers continue to provide goods and services (building, supermarkets and so forth). On the Shenzhen side, capital controls prevent Chinese money from investing in innovative companies abroad (and taking back what they learn). These controls also prevent these companies learning from the investment of Hong Kong and foreign companies.

3. Encourage shotgun innovation with tax deductions. Chinese innovation represents a threat to Western companies because its companies' ability to test many variants on an idea in parallel. Such massive trial-and-error methods result in predictable serendipity. Companies would engage in more of such spending if such spending helped lower their tax bill.

Sources: see main text for references to the evidence for the points presented above.

Why shouldn't Hong Kong simply free-ride on Shenzhen's spending? In other words, why doesn't Hong Kong simply wait for the Shenzhen municipal government and central government to finish setting up Qianhai, and then benefit from the extra trade and innovation the zone creates? As we have noted already, most academics studying the region see a fundamental difference between Hong Kong's and Shenzhen's (Mainland) policies which would make the functioning of a Qianhai cooperation zone impossible.¹³³ We agree. Without a significant stake in Qianhai's success, the Hong Kong government would have insufficient incentives to cooperate on any Qianhai-related spending. Indeed, if handled correctly, Qianhai could built political support for both governments.¹³⁴ Hong Kong has, and should, serve as a link between Shenzhen and the world.¹³⁵ Yet, **without Hong Kong spending to develop that link between the Mainland and the outside world, the other major commercial centres would likely just bypass Hong Kong.**

¹³² Clark and colleagues note that Chinese companies already do this. Yet, tax incentives can provide marginal incentives to increase their investment in such innovation. See Normal Clark, Joanna Chataway, Rebecca Hanlin, Dinar Kale, Raphael Kaplinsky, Lois Muraguri, Theo Papaioannou, Peter Robbins, and Watu Wamae, *Below the Radar: What Does Innovation in the Asian Driver Economies Have to Offer Other Low Income Economies*. INNOGEN WP 69, 2009, available [online](#).

¹³³ Tsze-wah Gabriel Chan and Simon Zhao, *Advanced Producer Services Industries in Hong Kong and Shenzhen: Struggles Towards Integration*, 53 ASIA-PACIFIC VIEWPOINT 1, 2012, available [online](#).

¹³⁴ Some academics have argued that projects like these aim for mostly at political visibility, rather than actually generating innovation. See Peter Cheung, *The Politics of Regional Cooperation in the Greater Pearl River Delta*, 53 ASIA PACIFIC VIEWPOINT 1, 2012, available [online](#).

¹³⁵ For a description of that relationship, see Simon Xiaobin Zhao, Yingming Chan, Carola B. Ramón-Berjano, *Industrial Structural Changes in Hong Kong, China Under One country, Two Systems Framework*, 22 CHIN. GEO. SCI. 3, 2012, available [online](#).

Getting Hong Kong Ready for Qianhai

The Innovation and Technology Commission operates results-based evaluation system with so simple targets that only a completely incompetent agencies could miss these targets. The Commission has a budget in 2015-15 of HK\$620 million for approximately 200 non-directorate posts (for salary expenditure budgeted at around \$110 million as well as 8 directorate posts).¹³⁶ For these funds, the Commission reports 100% success for 13 objectives as shown in Figure 8. The current government has reassigned two unsuccessful departments from the Commerce and Economic Development Bureau to the new Innovation and Technology Bureau (which serves basically as a secretariat for the IT Commission).¹³⁷ Such a reassignment thus hides these departments from public attention. A recent internal review of the Innovation and Technology Fund (done by the Innovation and Technology Commission itself) unsurprisingly found little wrong with the Fund.¹³⁸ After completely ignoring issues like value-for-money or outcomes-on-long-term innovation, the review makes only marginal suggestions about improving the efficiency of the Fund. Similarly, a 2009 review encourages the “promoting development and research” by simply encouraging the government to “facilitate”, “form” and otherwise “enhance” various aspects of innovation.¹³⁹ As previously described, most of these successes focus on process – rather than on the actual profits which make a centre of innovation sustainable. **Without a shift in focus toward results (like profits, new innovations made, and so forth), Hong Kong will have no leverage to ensure Qianhai’s performance.**

¹³⁶ Government of Hong Kong, Head 155 — Government Secretariat: Innovation and Technology Commission, 2015, available [online](#).

¹³⁷ See Samuel Chan, *Hong Kong's New Innovation and Technology Bureau to Absorb Two Departments from Commerce Bureau: Two Departments under the Remit of Commerce Bureau to be Reassigned*, SCMP 11 NOV, 2015, available [online](#).

¹³⁸ See Innovation and Technology Commission, *Comprehensive Review on the Innovation and Technology Fund, LC Paper CB (1)211/14-15(03)*, 2014, available [online](#).

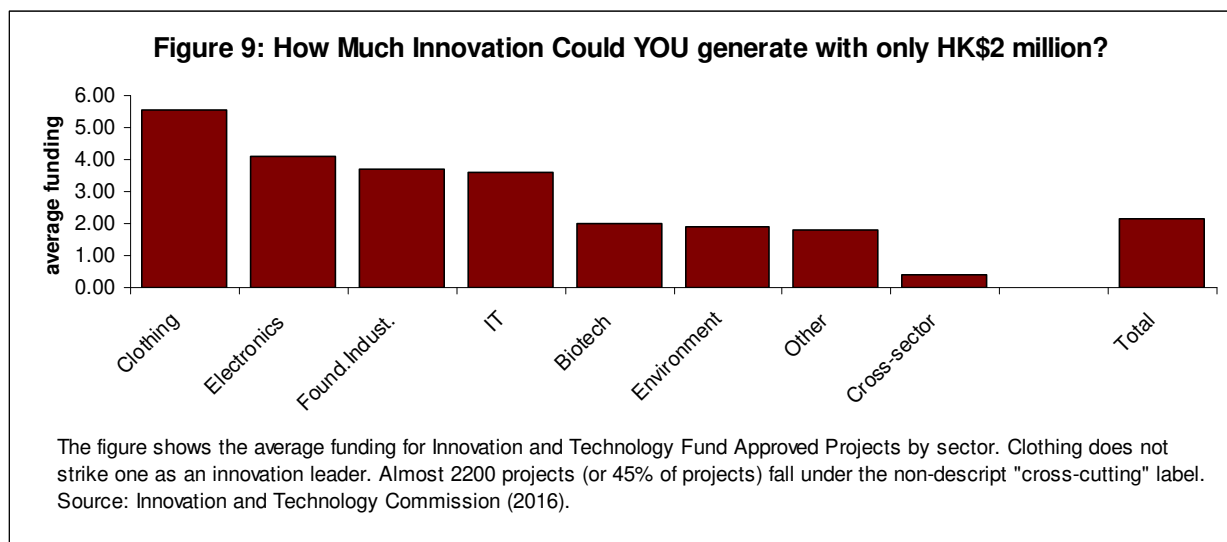
¹³⁹ Legislative Council, Motion on “Promoting Research and Development” Progress Report, 2009, available [online](#).

Figure 8: The Innovation and Technology Commission's Perfect Track Record for Bureaucracy

1. To inform applicants the result of their applications under the University-Industry Collaboration Programme within 30 working days after receipt of full information
2. To inform applicants of the result of their applications under the Internship Programme within 5 working days after receipt of full information.
3. To send out at least 90% of all quotations within 2 working days upon confirmation of calibration requirement (for the Standards and Calibration Laboratory)
4. To complete at least 90% of all calibration jobs within 13 working days upon receipt of customer equipment (for the Standards and Calibration Laboratory).
5. To answer simple technical enquiries within 1 working day upon receipt of the enquiry (for Product Standards Information Bureau),
6. 2. To provide quotation/response on sales of originals or copies of standards within 1 working day upon receipt of the request (for Product Standards Information Bureau),
7. 1. For applications for extension within an existing test category, inspection or certification field, 85% of applicants will receive the assessment report within 60 working days upon receipt of properly completed application and necessary documents (Hong Kong Accreditation Service)
8. 2. For applications for extension within an existing test category, inspection or certification field, 85% of applicants will be granted accreditation within 14 working days from the date that all remedial actions are confirmed to be satisfactory (Hong Kong Accreditation Service).
9. For new applications or applications for extension into a new category, inspection or certification field, 85% of applicants will have the advisory visit conducted within 21 working days upon receipt of properly completed application and necessary documents (Hong Kong Accreditation Service).
10. For new applications or applications for extension into a new category, inspection or certification field, 85% of applicants will receive the assessment report within 76 working days from the date the applicant confirms readiness for formal assessment.
11. For new applications or applications for extension into a new category, inspection or certification field, 85% of applicants will be granted accreditation within 14 working days from the date that all remedial actions are confirmed to be satisfactory.
12. To issue an acknowledgement or an interim reply within 10 calendar days upon receiving a complaint
13. To send a full reply to the complainant within 1 month upon receipt of the complaint (or a detailed explanation for complicated cases which cannot be fully addressed within 1 month)

Source: Innovation and Technology Commission (2016).

Once innovation agencies like the Innovation and Technology Fund, the Innovation and Technology Commission and ultimately the Qianhai Authority focus on profits (rather than bureaucracy), funding can be increased.¹⁴⁰ At present, the Innovation and Technology Fund's resources barely represents a drop in the bucket. Figure 9 shows the Fund's distribution of projects for 2016.¹⁴¹ The most funded sector – clothing – hardly strikes one as a sector of the future. By volume, non-descript “cross-cutting” projects received the most funding – even though their average value remained much smaller than sectoral-specific funding. The average project only received about HK\$2 million in funding – a relatively small amount for incubating world-changing technology. Once the Fund (and Commission) have profit-oriented incentives, such funding can expand exponentially – as such funding has in Hong Kong's competing centres (like San Francisco, Berlin, Sweden, Tel Aviv and so forth).¹⁴² Given the exponential nature of the way cities attract venture capital, those cities with a head-start in developing a private market in venture finance will likely pull resources away from less developed centres like Hong Kong.¹⁴³ **These centres show that the longer Hong Kong delays privatising its venture support, the less future venture capital its innovative companies will receive.**



The final element of preparing Hong Kong for Qianhai may include putting in place regulatory instruments that implement the various agreements between Hong Kong, Shenzhen and the Mainland central government. As noted, most of these agreements consist of abstract wording

¹⁴⁰ Almost every analyst looking at innovation in Hong Kong wrongly recommends increasing public funding for research and development. Simply adding more money to a dysfunctional system does not generate better outcomes. For a general background, see Chintay Shih, Shin-Hong Chen, *Innovation Policy and the Limits of Laissez-faire*, In REFORM OF HONG KONG'S PUBLIC RESEARCH FUNDING SYSTEM, 2010.

¹⁴¹ See Innovation and Technology Commission, Innovation and Technology Fund: Distribution of Approved Projects among Different Industrial Sectors (as at 29/02/2016), 2016, available [online](#).

¹⁴² Many of these agencies work on a public-private network basis – whereby the agency helps bring companies, investors and inventors together – but does not have any large spending or grant-giving power of its own. For a discussion in the French context, see Rabeh Morrar, Faiz Gallouj and Hakim Hammadou, *Public-Private Innovation Networks and Innovation Activities in French Service Firms*, 2 J. OF INNOVATION ECON. & MAN. 10, 2012, available [online](#).

¹⁴³ For evidence and discussion, see Richard Florida and Charlotta Mellander, *Rise of the Startup City: The Changing Geography of the Venture Capital Financed Innovation*, CESIS WP 377, available [online](#).

focused on “encouraging”, “promoting” and “cooperating.” These agreements thus lack the precise definition of the rights and obligations usually associated with administrative legal drafting.¹⁴⁴ Evidence suggests that local policies would still have less of an impact than national policies.¹⁴⁵ Yet, given the complexities of dealing with Mainland central authorities, the least-cost, highest benefit approach probably consists of using already existing agreements at the Guangdong level. As previously mentioned, the Hong Kong-Guangdong Cooperation Framework Agreement probably provides the best basis for establishing concrete, specific rules governing any Qianhai cooperation. Amendments to Annex 6 of the CEPA (Chapter 7 dealing with trade and investment Facilitation) could similarly include the specific provisions that the Hong Kong, Shenzhen and central government did not include in the previous round of negotiations.

Conclusion

Qianhai’s future remains uncertain. It didn’t have to be this way. Originally conceived as a cooperative venture between Hong Kong and Shenzhen, the region’s law makes little to no use of Hong Kong’s legal traditions. Worse still, the component laws of each jurisdiction have serious enough flaws to actively discourage - rather than encourage - innovation in the region. Qianhai’s law undoubtedly needs ‘fixing’ - if policymakers in Hong Kong or the People’s Republic hope to foster world-scale innovation in the new development.

We argue for six major ‘fixes’ to the legal instruments governing Qianhai. First, we argue for making Qianhai’s rulemaking ‘harder.’ Second, we argue for a Hong Kong-Shenzhen Agreement (giving Hong Kong a greater stake and say in the region). Such an agreement might also promisingly import the more useful parts of Hong Kong law. Third, privatize the Qianhai Authority -- giving it a hard profit motive. Fourth, revise Hong Kong law to allow for easier and more profitable university spin-outs. Fifth, retargeting the large subsidies used on the region. Sixth, fix the innovation agencies in the region (most notably Hong Kong’s), partially by making them accountable for their outcomes.

We do not know for sure if these fixes will help. But the alternative is relatively well known already.

¹⁴⁴ Hong Kong understandably shares the British legal and administrative systems’ reliance on administrative discretion and *bon sens* in much of its administrative law (as indeed, “administrative law” in Hong Kong as an academic and applied discipline focuses more on court rulings about executive action more than on the mechanisms and outcomes of resolving previous administrative conflicts. An expert in French or even American administrative law would thus find Hong Kong administrative law relatively underdeveloped.

¹⁴⁵ See Brian Fong, *The Partnership between the Chinese Government and Hong Kong's Capitalist Class: Implications for HKSAR Governance*, 1997–2012, 217 CHINA QUARTERLY, 2014, available [online](#).