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Levy & Spiller's 'Institutional Endowment' Hypothesis After Fifteen Years of Regulatory Reform in Jamaica: Misguided theory, prophets of doom, or an explanation of institutional change?

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Introduction

'Institutions matter'. While much ink has been spent by institutionalists of various stripes to point to the varieties of institutional factors that influence politics and policies, it was in particular the 'economic institutionalism' school that stressed the importance of commitment and credibility for the design of regulatory institutions. Among the key works, not only because of its analytical development, but also its practical significance and application in the development of regulatory institutions in the developing world, has been the work of Brian Levy and Pablo Spiller in an influential article, and subsequent edited book, *Regulations, Institutions and Commitment* (Levy & Spiller 1995, Levy & Spiller 1996). Central to their prescriptive and analytical framework is the concern with designing regulatory institutions that attract private investment and promote efficiency. Their account stresses in particular the importance 'institutional endowment', that is to say, the background of pre-existing patterns of legislative, judicial and administrative arrangements of a country. Interest group structures and social norms are also understood to be part of a country's institutional endowment, although Levy and Spiller (and their co-authors) do not explicitly model the effects of these. Because each country's institutional endowment provides a unique set of constraints and resources that should be taken into account in the design of regulatory incentives and governance arrangements, different solutions are appropriate to different situations. On their analysis, regulatory regimes that appear to be inefficient and inflexible may be appropriate where state capacity is weak or where the regime is otherwise unable effectively to check regulatory discretion. As they see it, 'the institutional realities of regulatory governance in some countries might limit the range of regulatory incentives options to third- or even fourth-best' (Levy & Spiller, 1996: 6). Prescriptively, the key to good regulatory design is to seek the best match between regulatory design and a country's institutional endowment. Where there is a mismatch

between the two, private investment in infrastructure is likely to be low due to the risk to investors of expropriation of their assets.

The emphasis on the contingency of the environment, and the implications of this in organisational design is hardly a new in public administration. When combined with the analytic rigour and predictive power of the new institutional economics framework, however, the contingency approach has much to say in terms of regulatory design that is relevant to policymaking in the real world. It is significant that the work grew out of a World Bank funded study, at a time when the Bank was attempting to move beyond the 'Washington consensus' thinking that it had promoted towards a focus on the preconditions for the 'effective state' (World Bank 1997). *Regulations, Institutions and Commitment*, was subsequently regarded by officials within the Bank as having been influential in moving its collective thinking away from 'one-size-fits-all' approaches to technical assistance.

This paper seeks to assess critically the Levy & Spiller (L&S) framework in the light of the evolving empirical story of Jamaican telecommunications regulation. This is not an exercise of description attempting to outsmart theoretically informed research. Rather, we believe that the evolution of Jamaican telecommunications regulation points to some analytical problems in the L&S framework that should encourage the development of a more comprehensive analytical argument with predictive and prescriptive strength comparable to Levy and Spiller's original analytic account. The rest of this paper proceeds in three steps. First, it points to some difficulties in the basic L&S framework. Second, it briefly highlights the Jamaican telecommunications story to provide an overview. Third, it provides three alternative scenarios through which the 'anomie' between regulatory developments and the Levy & Spiller argument can be assessed. The conclusion returns to the notion of 'institutional endowment' and calls for a more dynamic and less static understanding of institutional endowment when it comes to the 'hardwiring' of regulatory institutions.

Development, private investment and regulatory institutions

The basic assumption (and concern) of the Levy and Spiller framework is to design regulatory institutions that promote private investment and pursue economic efficiency, with a view to encouraging development and modernisation. At one level, such a view seems not problematic: the reduction of slack and uncertainty is most likely to encourage investment and therefore enhanced capacity and quality of services. Further, other goals such as promoting universal service at an affordable price is predicated on access to investment and modern telecommunications technologies.

However, such a view is associated with substantial difficulties for a number of reasons. First, it could be argued that such a perspective takes an overly narrow view of the goals of regulation. While within the literature on the UK and other developed societies it has been argued that utilities regulation is an inappropriate instrument for pursuing 'social' objectives, rather than purely 'economic' objectives (Foster 1992, Chapter 9; for a contending view see Prosser 1997, Chapter 1) the case for pursuing social re-distributive goals through regulation in developing countries is arguably somewhat stronger. As Cook and Kirkpatrick put it:

While economic theory would suggest that distributional objectives should be pursued through the use of fiscal system, in practice LDC policy makers typically operate in a "second-best environment" in which limitations on the use of tax and subsidies measures require them to pursue their redistributive goals by employing other, less direct instruments. (Cook & Kirkpatrick p. ??)

Universal access to telecommunications services at an affordable (usually equal) price, the typical re-distributive goal in telecommunications regulation, depends on the 'economic' goals of securing investment and promoting (productive) efficiency.

However, the two are not necessarily identical, and so some level of trade-off between equity and efficiency is inevitable. Thus regulatory regimes must confront this inherently political issue.

Concern purely for enhancing private investment and for the climate in which such investment is to be attracted, seems overly functional, ignoring decades of regulation research that points not only to the corrupting influences of political institutions (administrative expropriation), but also to the corrupting influences of societal collective action (capture). Related to this point, the L&S framework under-emphasises the idea that the regulatory contract ought to balance credible sanctions on governments to avoid shirking, with the mechanisms and the capacity to prevent shirking by the private investor. This is particularly important in the area of network industries, with their inherent monopoly structures, the presence of incumbent former national monopolies (often operated by powerful transnational corporations) and the necessity for large-scale investment to modernise and expand incipient infrastructures.

The purpose of this paper is not so much to deny the validity of the original assumptions underlying the L&S argument. Rather it is to suggest that their model failed to account for significant deviations at the outset of the 'regulatory contract' between the Jamaican government and C&W. We highlight substantial difficulties that the L&S framework has in accounting for later developments, and suggest three alternative ways in which these difficulties can be resolved.

Developing Jamaican telecommunications regulation

It is now ten years since the research upon which *Regulations, Institutions and Commitment* is based was completed. Since that time, the regulatory governance arrangements in most of the countries they examined has changed fundamentally. Given its influence (at least within a small group of elite policymakers--in terms of its

wider appeal, it sold less than a thousand copies), a retrospective evaluation is in order. The current paper attempts to provide such an evaluation, looking at one of the original country studies, Jamaica. The case is chosen, as Spiller & Sampson's study of this country was foundational in the development of the L&S framework (Levy & Spiller 1996: xi). As a detailed account of regulatory change has been provided elsewhere (Stirton and Lodge 2002), this section will only very briefly survey the regulatory reforms in Jamaican telecommunications over the past two and a half decades.

From the early 1980s, Jamaican economic policy shifted towards promoting inward foreign investment. After negotiations with Cable & Wireless, the Government announced in May 1987 the creation of Telecommunications of Jamaica (ToJ) as a holding company to combine the existing domestic and international telephone service providers (the Jamaica Telephone Company and Jamintel respectively) both of which required substantial investment for network expansion and modernisation. The transfer of government shares to C&W proceeded gradually under the Jamaican Labour Party government, which intended to retain a controlling 40 per cent stake in the company with 21 per cent being sold to the general public (Wint 1996). A new company, Jamaica Digiport Ltd was established as a joint venture between C&W and AT&T to utilise Jamaica's potential to provide low-cost call centres to the North American market.

The initial regulatory arrangements, which attracted praise from World Bank sponsored research, were set out in five licenses issued by the Jamaican government to ToJ in 1988. They were issued for a 25-year period, with the option for the licensee to renew the licences for a further 25 years and were based on a simplified rate-of-return mechanism that guaranteed the company an after-tax return of 17.5 to 20 per cent on equity. The Minister of Public Utilities was required to adjust tariff levels annually to maintain the rate-of-return level, which was mainly financed from the termination of international telephone services profits from which cross-subsidised expansion the domestic telephone network.

Domestically, most aspects of telecommunications regulation were transferred to the Office of Utilities Regulation (OUR) in 1997. This agency was established as part of the government's obligations for obtaining World Bank funding to facilitate the privatisation of the electricity utility (which was abandoned in 1996, but finally pursued in 2001). The OUR, mirroring British 'Of-type' regulatory agencies, assumed cross-sectoral responsibility for economic regulation, telecommunications and water. The Office of Utilities Regulation Act 1995 established regulatory authority over 'approved organisations' without identifying such 'approved organisations'. Thus, until 2000 the OUR lacked formal legal powers, operating in advisory capacity and by 'naming and shaming' utilities. However, the Fair Trading Commission (FTC, established under the Fair Competition Act of 1993) challenged the C&W's exclusivity at the margins, despite political demands for restraint and having decided not to directly challenge the terms of the C&W licences. This led to the partial liberalisation in the market for consumer premises equipment (in 1994), and C&W's 1995 decision to allow Internet Service Providers (ISPs) to interconnect with the public telephone network. This followed action by the FTC and 'Infochannel' (an ISP) starting in 1994. Much later, a settlement between FTC and C&W on C&W's advertisement of 'free' voicemail was reached. Government policy regarding telecommunications policy also changed, endorsing information technology as a crucial aspect of a National Industrial Policy (Government of Jamaica 1996).

The Ministry for Commerce and Technology encouraged competition for C&W utilising Internet-based facilities by issuing five licenses to VSAT operators (under the Radio and Telegraph Control Act 1973). C&W was unsuccessful in its challenge regarding access to the local network.¹ C&W's challenged the legality of issuing VSAT licences to which the Attorney General responded that the Jamaican government had acted

¹ Infochannel Ltd. v. Cable & Wireless Jamaica Ltd., Suit E014/99.

unconstitutionally in granting the 1988 licences. This action before a full court of the Supreme Court was eventually abandoned.

Jamaica also acted in the international regulatory environment. A joint agreement among CARICOM telecommunications ministers in Kingston (Jamaica) in 1997 signalled a change in negotiation tactics of Caribbean governments vis-à-vis C&W and its local subsidiaries. Second, Jamaica utilised the WTO Agreement to signal its intent to liberalise and to modify its legislative framework (while committing itself to honouring its exclusivity agreement until 2013). This broad commitment was followed by a more detailed framework for the implementation of the WTO obligations, although no timetable was given (Ministry of Commerce and Technology 1998). Third, there was the predicted impact stemming from the reduction in international accounting rates following the FCC's 1997 Benchmarks Order. The unilateral decision diminished not only the main source of C&W's profitability in Jamaica, but also the source for network expansion and cross-subsidisation for domestic services.

The impact of these cross-Caribbean challenges on Jamaica set the context for a renegotiation of the licences between C&W and the Jamaican government in 1999. The Agreement contained detailed drafting instructions for the eventual 2000 Telecommunications Act and established a provisional, phased, three-year liberalisation policy (allowing for some ministerial discretion). The OUR obtained legal powers, interconnection arrangements were clarified and universal service provisions adjusted to reflect a liberalised market environment. Furthermore, C&W committed itself to enhance and expand the telecommunications infrastructure. At the same time, the Act also protected C&W during the phased liberalisation period, for example, preventing VSAT operators from engaging in bypass services without a license. Despite continuing legal challenges between C&W and its competitors, the more politically salient dispute between C&W and government was abandoned.

Levy & Spiller's analysis of Jamaican Telecommunications Regulation a Decade and a Half After Privatisation: three possible interpretations

Evaluating Levy & Spiller's model in the light of these subsequent developments in Jamaica points to a significant puzzle. On one (very strict) interpretation, Levy & Spiller are simply wrong: their theory has been falsified by subsequent developments, (and by their misreading of the original regime that in principle could have been prevented by more careful observation at the time). Alternatively, we could argue that in principle Levy & Spiller were (some minor details excepted) correct overall in their assessment of Jamaican regulatory arrangements. In this second case, the Telecommunications Act 2000 and associated reforms should be regarded as an ill-advised mismatch between institutional endowment and regulatory incentives.

The third possibility is that in the period following Levy & Spiller's original work, the background institutional arrangements in Jamaica have changed, strengthening the capacity and autonomy of its administration (in regulatory affairs and more generally). In this case, the move to a system of regulatory incentives based on complex rules should be seen as consistent with Levy & Spiller's general approach and which their model could in principle have predicted. While this approach of treating a country's institutional endowment as endogenous may be attractive theoretically, if this approach is taken the model loses much of its prescriptive power. After all, if the institutional endowment can be altered fundamentally over a decade, then the evaluation that a long exclusivity period of fifty years (not 25 as Levy & Spiller claim!) was appropriate can be questioned. The next section develops these arguments in more detail.

(a) Prior and subsequent developments in Jamaican telecommunications as falsifying evidence to the L&S thesis

Perhaps the most straightforward interpretation of the evidence of Jamaican telecommunications, taking account of evidence accumulated subsequent to Spiller & Sampson's Jamaican case study, as well as evidence that in principal should have been available to them at the time, is that Levy & Spiller's thesis about institutional endowment is simply wrong. The most compelling case for this interpretation is the way that Spiller & Sampson overestimate the extent to which the 1988 licenses were (in the terms in which Levy later summarised their position):

...a precisely specified legally binding license contract...which guaranteed the new private owner a fixed rate-of-return on its investment... [as well as] prevented entry... (Levy 1997: 357)

In fact, the licences were neither precisely specified nor, as it turned out, legally binding. Although Spiller and Sampson argue that the Jamaican government put considerable thought into regulatory design, a case to the opposite effect could equally be made. The divestiture of the government's shares in TOJ took place in five separate sales over three years, and under two separate political administrations.² The process was initiated by the JLP administration of Edward Seaga in 1987, with the sale of shares to Cable & Wireless, with two further sales, one to Cable & Wireless, the second to the general public through the Jamaica Stock Exchange. The PNP administration of Michael Manley, under pressure of a deteriorating economy, transferred the remainder of the Government's shares in two sales in 1989 and 1990. Arguably, the five licenses issued to TOJ in 1988 were drafted under the assumption that the holder of the licenses would be a mixed enterprise, with the government retaining control through its ownership of TOJ.³ In other words, the need for precisely specified license conditions, as the principal means of regulation was not foreseen by the Seaga administration.

² The process of privatisation is described in detail in Wint (1996).

³ Wint (1996: 56) reports that Government in 1988 stated that "the current intention Government is not to reduce its shareholding below the 40% level".

Six licenses were issued by the Jamaican government to TOJ in 1988. Contrary to the view put forward by Spiller and Sampson that these were precisely specified, a number of ambiguities appeared. The licences were silent on the status of value added services, terminal equipment connection and cellular services. In the case of cellular services, interview evidence collected by us suggests that this was because the wireless communications licence issued to TOJ was intended by the Government to be for the provision of 'wireless in the local loop', to extend basic telecommunications services to Jamaica's more remote, mountainous areas. Quite possibly, neither the Government nor C&W predicted the demand for cellular telephony in Jamaica.

Going beyond the *ex facie* ambiguities in the licences, it is significant that no attempt was made at the time to revise the legislative framework for regulation, perhaps as Levy and Spiller assert, because in a two party system in which the executive also controls a legislative majority, statutory provisions have only a weak effect in preventing revision by future legislators. The relevant statutory basis was to be found in the Telephone Act 1893 as well as the Radio and Telegraph Control Act 1973. While the former defined telephone services in terms of wire-based transmission, the latter concerns the ownership and operation of radio equipment, rather than the provision of wireless services *per se*. Faced with these ambiguities, C&W sought subsequent reform of the legislative framework. Prime Minister Michael Manley, mindful of Jamaica's deteriorating economic situation, and wishing to receive a good price for the Government's remaining holding in TOJ, agreed (by letter, dated 2 November 1990) to the introduction of legislation, securing TOJ's monopoly rights. A Telecommunications Bill was introduced to Parliament in 1993, but following public outcry, was abandoned.

Taken together then, the statutory basis of the licences make it implausible to argue, as C&W was later to do, that taken together, the six licences gave rise to a legitimate

expectation on the part of C&W that they had the exclusive right to provide all telecommunications services in, out and through Jamaica.

This claim was never properly tested, because the legal dispute between the Government and C&W was discontinued by agreement in 1999. However, further doubt is cast on this claim by the precedent set by the Privy Council in the *Marpin* case in Dominica. It was held, in this case, that because there was a collusive interest between the government and the monopoly provider, the Court should apply a heightened level of scrutiny in determining whether licence arrangements that restricted communication were consistent with constitutional protection of free speech.⁴

Furthermore, as was noted in the previous section, the Levy & Spiller account stressing certainty of the 'hardwired' regime also fails to take account of the substantial institutional uncertainty which emerged in the context of legal challenges, for example the challenges against the exclusivity agreements by Infochannel or the controlled 'loose cannon' behaviour by the Fair Trade Commission.

In other words, the impressive development of the telecommunications sector in Jamaica that has occurred since 1988, has occurred not because of a clearly specified and legally binding license contract based on simple rules, but rather *in spite of the absence of* such a contract. Whatever the basis for investor confidence, it was not based in the legal protection of property.

More fundamentally, the Levy and Spiller argument fails to take a dynamic perspective (explored below) that takes into account the importance of the international environment for legitimising the domestic regulatory regime. Thus, as was noted above,

⁴ See Privy Council in Cable & Wireless (Domenica) v. Marpin Telecoms and Broadcasting Ltd and another [2001] WLR 1123. This case was later relied on by the Government in its action with Cable & Wireless.

the changing international telecommunications regulatory environment not only fundamentally challenged the financial basis of the initial Jamaican regulatory deal based on cross-subsidies (by the unilateral action of the FCC), but it also made it increasingly costly for a (private) incumbent to maintain a market hegemonic position that was seen as 'inappropriate' on other markets and arguably induced reputational sanctions.

(b) L&S as prophets of doom: subsequent practice as a departure from L&S's prescriptive recommendations

While the above discussion has pointed to the considerable gaps in the initial accounts (and these should not be dismissed as example of necessary parsimony to establish a powerful model as the Jamaican case was paraded by the World Bank as a successful model), it could of course also be argued that the developments in Jamaican telecommunications regulation confirm the worst fears of Levy and Spiller and Spiller and Samspon, namely that over time the government manages to shirk on the initial regulatory contract. There is some evidence of such self-interested action by the government. For example, when it comes to the issuing of VSAT licenses, where legal ambiguity was strategically employed to challenge C&W's incumbency position. Had this not been intended as a strategic device, the government would hardly have allowed C&W to have their (temporary) elimination into the 2000 Telecommunications Act.

The 'prophets of doom' interpretation would also point to the virility of the Jamaican regulatory institutions (besides the OUR). Thus, the ability to utilise the (independent and strong) judicial system to challenge the exclusivity arrangements as well as the self-interested agenda-setting by the FTC may be seen as providing the potential to undermine the regulatory contract.

A third way in which the Jamaican government sought to shirk on the initial agreement (although not explicitly) was through its international engagements, committing itself (against the demands of C&W) to a broad liberalisation agenda and thereby challenging C&W exclusivity.

With this in mind, the L&S framework arguably points to significant threats to the regime established under the Telecommunications Act 2000. While (as discussed in more detail in the next section) the Act contains numerous provisions safeguarding the sunk costs investment of C&W (through eliminating 'bypass', phasing-in liberalisation over time, and the like) the L&S framework would predict that legislation is an inadequate basis for establishing commitment to these policies, given that the executive dominates Parliament, under the Westminster-style two-party system.

It is too early to determine whether the liberalising environment has established the basis for the continuation of telecommunications development that has taken place since 1990 or whether whether the future development will approximate the pattern evident in other Caribbean states with development being biased towards selected markets rather than aimed at enhancing the access of wider shares of the population.

(c) 'Endogenising' institutional endowment: L & S in a dynamic institutional environment

Both (a) and (b) offer important insights into the development of Jamaican telecommunications regulation. However, both remain at best incomplete. Suggesting that Levy and Spiller were simply incomplete and partly 'blind' to certain developments and challenges to their much praised exclusivity agreements makes perhaps too much use of the benefit of hindsight. A more charitable interpretation can be given by looking at changes to the 'institutional endowment' since the 1988 Licences were established. For any given set of changes in background political and

administrative arrangements, changes in the optimal mix of instruments for promoting investment and securing efficiency are predicted with the model, rather than coming as a surprise to it. Such an interpretation extends the original L&S framework by treating institutional endowment as endogenous, making it possible to take account of institutional change over time.

Applied to the 1988 arrangements in Jamaica, the prescriptive dimension of the L&S framework resembles the old adage that when the only instrument available is a hammer, then every problem resembles a nail. Similarly, when the only means of restraining arbitrary action is the use of legally binding contractual arrangements, then a system of simple rules, written into license obligations is the only stable alternative to government ownership. However, if, over time, administrative capabilities have become stronger, then this allows for the 're-negotiation' of the regulatory bargain, towards a regime in which administrative delegation as well as substantive restraints is deployed. Protection against administrative expropriation is consistent with a relatively greater degree of discretion on the part of the regulator. Strengthening administrative capabilities also instils greater confidence in the level of ability to handle complex regulatory problems. Both effects justify a shift from a regime based on simple rules written into licence contracts to more complex rules in which independent regulatory agencies apply more subtle regulatory incentives.

Broadly speaking, the development of the institutional environment of telecommunications regulation in Jamaica supports this view. Since the 1980s Jamaica had shown considerable interest in institutional reform, through the Administrative Reform Programme, and this general trend manifested it within the field of regulation. The establishment of the Fair Trading Commission and the Office of Utilities Regulation, with overlapping jurisdiction arguably made politically motivated intervention more difficult, due to the need to control two separate agencies. Further, the appointment of Winston Hay as the Director-General of the OUR established

credibility in that agency because of his claims to expertise (as a former World Bank energy man) and to impartiality. Under Hay's leadership, the OUR was able to recruit, train and retain competent staff, and thus to build institutional memory. The presence of international technocratic expertise within the institution, provided first by DfID and later by CIDA, the Canadian overseas development agency further enhanced the credibility of the OUR.

The eventual strengthening of formal regulatory authority, as part of the Telecommunications Act 2000 can thus be seen as the culmination of a series of changes that had the effect of enhancing regulatory capability, and allowing the shift towards a more discretionary regulatory regime. The Act vested formal regulatory authority to enforce licence conditions and set price caps with the OUR. The Act also allowed for the progressive establishment of competition, first in the cellular sector, and culminating with full competition in all domestic and international services.

Nonetheless, provisions within the Act also reflect some residual distrust of administrative discretion. For example rules made by the OUR are subject to positive affirmation of Parliament, and a statutory appeals procedure is established. Further, the Act restricted, at least in the short term legally protected the investment of the incumbent, by prohibiting bypass of C&W's international gateway⁵, and by establishing a three-phase transition towards competition, beginning with cellular services, and culminating in the most profitable international services.

The present account of the evolution of the regulatory regime in Jamaica thus supports the analytical aspects of the Levy and Spiller's argument, since changes in regulatory arrangements are 'predicted' by the L&S framework, given the changes in the background institutional conditions. Our criticisms of the prescriptive aspects of their

⁵ Telecommunications Act 2000, S. 51, applied by the Supreme Court in R. v. Office of Utilities Regulation, ex parte World Telenet International Limited Suit M.81/2000

argument remain, however. After all, if the national institutional endowment of a given country can change so rapidly, the endorsement of licence arrangements which (at least as Spiller and Sampson saw it) locked the Jamaican Government into monopoly arrangements for a period of twenty-five or fifty years is absurd. It is arguably only because the licence arrangements were in fact ineffectual in establishing legal exclusivity, as well as declining profits from international call termination, that allowed the Government of Jamaica to evade the restrictions of the 1988 regime and establish a modern telecommunications framework.

Conclusions: Enhancing Regulatory Capacity

There is substantial evidence in support of each of the three interpretations offered, and no conclusive basis for judging between them. While the first two interpretations reveal considerable weaknesses alternatively with the L&S framework, and with subsequent Jamaican practice, the third interpretation, as well as being the most optimistic scenario, points to a way of reconciling the original L&S framework with later developments. Given the predictive and prescriptive power of the original framework, this is therefore an attractive. This interpretation is also 'useful' in that it points clearly to some additional prescriptive implications. In particular, by focussing on the way in which institutional endowment can be varied, this interpretation points to the value of efforts at *enhancing regulatory capacity*. We have discussed at length elsewhere the different measures involved in regulatory capacity-building (Stirton & Lodge 2002). For present purposes it is sufficient to point to the value of such efforts, in enabling the establishment of a modern telecommunications regime. At the same time, our discussion of the first two scenarios illustrates both that the institutional basis of credible regulation is as yet insufficiently understood and that (partly as a consequence) it is all too easy for apparent success stories to be undermined.

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